AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

Federal Register

Friday,
November 29, 2002

Part II

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Klamath River and Columbia River Distinct Population Segments of Bull Trout and Notice of Availability of the Draft Recovery Plan; Proposed Rule and Notice

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AI52

Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Klamath River and Columbia River Distinct Population Segments of Bull Trout

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose designation of critical habitat for the Klamath River and Columbia River distinct population segments of bull trout (*Salvelinus confluentus*) pursuant to the Endangered Species Act of 1973, as amended (Act). For the Klamath River distinct population segment (DPS), the proposed critical habitat designation includes approximately 476 kilometers (km) (296 miles (mi)) of streams and 13,735 hectares (ha) (33,939 acres (ac)) of lakes and marshes in Oregon. For the Columbia River DPS, the proposed critical habitat designation totals approximately 29,251 km (18,175 mi) of streams and 201,850 ha (498,782 ac) of lakes and reservoirs, which includes: approximately 14,416 km (8,958 mi) of streams and 83,219 ha (205,639 ac) of lakes and reservoirs in the State of Idaho; 5,341 km (3,319 mi) of streams and 88,051 ha (217,577 ac) of lakes and reservoirs in the State of Montana; 5,460 km (3,391 mi) of streams and 18,077 ha (44,670 ac) of lakes and reservoirs in the State of Oregon; and 4,034 km (2,507 mi) of streams and 12,503 ha (30,897 ac) of lakes and reservoirs in the State of Washington.

If this proposal is made final, Federal agencies will be required to meet the requirements of section 7(a)(2) of the Act with regard to critical habitat. Specifically, Federal agencies shall, in consultation with us, ensure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The term ''destruction or adverse modification'' means direct or indirect alteration that appreciably diminishes the value of the critical habitat for both the survival and recovery of a listed species (50 CFR 402.02). Section 4(b)(2) of the Act requires our designation of critical habitat to be made on the basis of the best scientific data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat.

We solicit data and comments from the public on all aspects of this proposal, including data on economic and other impacts of the designation. We may revise this proposal prior to final designation to address new information received during the comment period.

DATES: We will consider all comments on this proposed rule received until the close of business on January 28, 2003. We will hold public hearings from 6 p.m. to 8 p.m. at the following locations on the dates specified: Wenatchee, WA, on January 7, 2003; Polson, MT, on January 7, 2003; Salmon, ID, on January 7, 2003; Spokane, WA, on January 9, 2003; Lewiston, ID, on January 9, 2003; Boise, ID, on January 14, 2003; Eugene, OR, on January 14, 2003; Pendleton, OR, on January 16, 2003; and Klamath Falls, OR, on January 22, 2003. (See the Public Hearings section for additional information, including specific addresses for each location.)

ADDRESSES: If you wish to comment, you may submit your comments and materials by any of several methods:

You may submit written comments and information to John Young, Bull Trout Coordinator, U.S. Fish and Wildlife Service, Branch of Endangered Species, 911 NE. 11th Avenue, Portland, Oregon 97232 (telephone 503/231–6131; facsimile 503/231–6243).

You may hand-deliver written comments to our office during normal business hours at the address given above.

You may also send comments by electronic mail (e-mail) to: *R1BullTroutCH@r1.fws.gov.*

See the Public Comments Solicited section below for file format and other information about electronic filing.

Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: John Young, at the above address, (telephone 503/231–6131; facsimile 503/231–6243).

SUPPLEMENTARY INFORMATION:

Background

Bull trout (*Salvelinus confluentus*) are members of the char subgroup of the family Salmonidae and are native to waters of western North America. The historic range of bull trout includes major river basins in the Pacific Northwest from about 41° N to 60° N latitude, extending south to the McCloud River in northern California and the Jarbidge River in Nevada, and north to the headwaters of the Yukon River in Northwest Territories, Canada (Cavender 1978; Bond 1992). To the west, bull trout range includes Puget Sound, various coastal rivers of British Columbia, Canada, and southeast Alaska (Bond 1992). Bull trout are relatively dispersed in the Columbia River and Snake River basins, extending east to headwater streams in Montana and Idaho, and into Canada. Bull trout also occur in the Klamath River basin of south-central Oregon. East of the Continental Divide in Canada, bull trout are found in the headwaters of the Saskatchewan River in Alberta and the MacKenzie River system in Alberta and British Columbia (Cavender 1978; Brewin and Brewin 1997).

Bull trout were first described as *Salmo spectabilis* by Girard in 1856, and subsequently described under various names, such as *Salmo confluentus* and *Salvelinus malma* (Cavender 1978). Bull trout and Dolly Varden (*Salvelinus malma*) previously were considered a single species (Cavender 1978; Bond 1992). However, in 1980, the American Fisheries Society formally recognized bull trout and Dolly Varden as separate species based on various specific physical differences and distributional information (Cavender 1978; Robins *et al.* 1980). Bull trout have an elongated body and large mouth, with the maxilla (jaw) extending beyond the eye and with well-developed teeth on both jaws and head of the vomer (a bone in teleost fishes that forms the front part of the roof of the mouth and often bears teeth). Bull trout have 11 dorsal fin rays, 9 anal fin rays, and the caudal fin is slightly forked. Although they are often olive green to brown with paler sides, color is variable with locality and habitat.

Bull trout exhibit a number of life-history strategies. Stream-resident bull trout complete their entire life cycle in the tributary streams where they spawn and rear. Some bull trout are migratory, spawning in tributary streams where juvenile fish usually rear from 1 to 4 years before migrating to either a larger river (fluvial) or lake (adfluvial) where they spend their adult life, returning to the tributary stream to spawn (Fraley and Shepard 1989). These migratory forms occur in areas where conditions allow for movement from upper watershed spawning streams to larger downstream waters that contain greater foraging opportunities (Dunham and Rieman 1999). Resident and migratory forms may be found together, and either form can produce resident or migratory offspring (Rieman and McIntyre 1993). Bull trout in the Coastal-Puget Sound area are believed to include an

anadromous form which migrates to saltwater to mature, returning to streams to spawn (64 FR 58912).

The size of bull trout is variable depending on life-history strategy. Resident bull trout tend to be small, averaging 200 millimeters (mm) (8 inches (in)) in length and rarely exceeding 305 mm (12 in). Adults that migrate to larger downstream rivers average about 405 mm (16 in), and often exceed 610 mm (24 in) (Goetz 1989). Maximum sizes are reached in large lakes and reservoirs where adults grow over 685 mm (27 in) in length and 10 kilograms (kg) (22 pounds (lbs)) in weight (McPhail and Baxter 1996). The largest recorded bull trout was taken in Lake Pend Oreille, Idaho, in 1949; it was almost 1 meter (m) (39 in) long and weighed 14.6 kg (32 lbs) (Simpson and Wallace 1982).

Under appropriate conditions, bull trout regularly live to 10 years, and under exceptional circumstances, reach ages in excess of 20 years (Fraley and Shepard 1989; McPhail and Baxter 1996). They normally reach sexual maturity in 4 to 7 years.

Bull trout are opportunistic feeders, with food habits that primarily are a function of size and life history strategy. Resident and juvenile migratory bull trout prey on terrestrial and aquatic insects, macro-zooplankton, and small fish (Donald and Alger 1993; McPhail and Baxter 1996). Adult migratory bull trout feed almost exclusively on other fish (Rieman and McIntyre 1993).

Bull trout have more specific habitat requirements than most other salmonids (Rieman and McIntyre 1993). Habitat components that particularly influence their distribution and abundance include water temperature, cover, channel form and stability, spawning and rearing substrate conditions, and migratory corridors (Fraley and Shepard 1989; Goetz 1989; Watson and Hillman 1997).

Relatively cold water temperatures are characteristic of bull trout habitat. Water temperatures above 15 °Celsius (C) (59 °Fahrenheit (F)) are believed to limit their distribution (Fraley and Shepard 1989; Rieman and McIntyre 1996). Although adults have been observed in large rivers throughout the Columbia River basin in water temperatures up to 20 °C (68 °F), Gamett (1999) documented steady and substantial declines in abundance in stream reaches where water temperature ranged from 15 to 20 °C (59 to 68 °F). Thus, water temperature may partially explain the generally patchy distribution of bull trout in a watershed. In large rivers, bull trout are often observed ''dipping'' into the lower reaches of tributary streams, and it is suspected that cooler waters in these tributary mouths may provide important thermal refugia, allowing them to forage, migrate, and overwinter in waters that would otherwise be, at least seasonally, too warm. Spawning areas often are associated with cold-water springs, groundwater infiltration, and the coldest streams in a given watershed (Pratt 1992; Rieman and McIntyre 1993; Rieman *et al.* 1997).

Throughout their lives, bull trout require complex forms of cover, including large woody debris, undercut banks, boulders, and pools (Fraley and Shepard 1989; Watson and Hillman 1997). Juveniles and adults frequently inhabit side channels, stream margins, and pools with suitable cover (Sexauer and James 1997). McPhail and Baxter (1996) reported that newly emerged fry are secretive and hide in gravel along stream edges and in side channels. They also reported that juveniles are found mainly in pools but also in riffles and runs that they maintain focal sites near the bottom, and that they are strongly associated with instream cover, particularly overhead cover. Bull trout have been observed overwintering in deep beaver ponds or pools containing large woody debris (Jakober 1995). Adult bull trout migrating to spawning areas have been recorded as staying two to four weeks at the mouths of spawning tributaries in deeper holes or near log or cover debris (Fraley and Shepard (1989)).

The stability of stream channels and stream flows are important habitat characteristics for bull trout populations (Rieman and McIntyre 1993). The side channels, stream margins, and pools with suitable cover for bull trout are sensitive to activities that directly or indirectly affect stream channel stability and alter natural flow patterns. For example, altered stream flow in the fall may disrupt bull trout during the spawning period, and channel instability may decrease survival of eggs and young juveniles in the gravel during winter through spring (Fraley and Shepard 1989; Pratt 1992; Pratt and Huston 1993).

Watson and Hillman (1997) concluded that watersheds must have specific physical characteristics to provide the necessary habitat requirements for bull trout spawning and rearing, and that the characteristics are not necessarily ubiquitous throughout the watersheds in which bull trout occur. The preferred spawning habitat of bull trout consists of low-gradient stream reaches with loose, clean gravel (Fraley and Shepard 1989). Bull trout typically spawn from August to November during periods of decreasing water temperatures (Swanberg 1997). However, migratory forms are known to begin spawning migrations as early as April, and to move upstream as much as 250 km (155 mi) to spawning areas (Fraley and Shepard 1989; Swanberg 1997). Fraley and Shepard (1989) reported that initiation of spawning by bull trout in the Flathead River system appeared to be related largely to water temperature, with spawning initiated when water temperatures dropped below 9–10 °C (48 to 50 °F). Goetz (1989) reported a temperature range from 4 to 10 °C (39 to 50 °F) (Goetz 1989). Such areas often are associated with cold-water springs or groundwater upwelling (Rieman *et al.* 1997; Baxter *et al.* 1999). Fraley and Shepard (1989) also found that groundwater influence and proximity to cover are important factors influencing spawning site selection. They reported that the combination of relatively specific requirements resulted in a restricted spawning distribution in relation to available stream habitat.

Depending on water temperature, egg incubation is normally 100 to 145 days (Pratt 1992). Water temperatures of 1.2 to 5.4 °C (34.2 to 41.7 °F) have been reported for incubation, with an optimum (best embryo survivorship) temperature reported to be from 2 to 4 °C (36 to 39 °F) (Fraley and Shepard 1989; McPhail and Baxter 1996). Juveniles remain in the substrate after hatching, such that the time from egg deposition to emergence of fry can exceed 200 days. During the relatively long incubation period in the gravel, bull trout eggs are especially vulnerable to fine sediments and water quality degradation (Fraley and Shepard 1989). Increases in fine sediment appear to reduce egg survival and emergence (Pratt 1992). Juveniles are likely similarly affected. High juvenile densities have been reported in areas characterized by a diverse cobble substrate and a low percent of fine sediments (Shepard *et al.* 1984).

The ability to migrate is important to the persistence of local bull trout subpopulations (Rieman and McIntyre 1993; Gilpin 1997; Rieman and Clayton 1997; Rieman *et al.* 1997). Bull trout rely on migratory corridors to move from spawning and rearing habitats to foraging and overwintering habitats and back. Migratory bull trout become much larger than resident fish in the more productive waters of larger streams and lakes, leading to increased reproductive potential (McPhail and Baxter 1996). The use of migratory corridors by bull trout also results in increased dispersion, facilitating gene flow among local populations when individuals

from different local populations interbreed, stray, or return to nonnatal streams. Also, local populations that have been extirpated by catastrophic events may become reestablished as a result of movements by bull trout through migratory corridors (Rieman and McIntyre 1993, Montana Bull Trout Scientific Group (MBTSG) 1998).

While stream habitats have received more attention, lakes and reservoirs also figure prominently in meeting the life cycle requirements of bull trout. For adfluvial bull trout populations, lakes and reservoirs provide an important component of the core foraging, migrating, and overwintering habitat, and are integral to maintaining the adfluvial life history strategy that is commonly exhibited by bull trout. When juvenile bull trout emigrate downstream to a lake or reservoir from the spawning and rearing streams in the headwaters, they enter a more productive lentic environment that allows them to achieve rapid growth and energy storage. Typically, juvenile bull trout are at least two years old and 100 mm (4 inches) or longer upon entry to the lake environment. For the next 2–4 years they grow rapidly. At a typical age of five years or older, when total length normally exceeds 400 mm (16 inches), they reach sexual maturity. The lake environment provides the necessary attributes of food, space, and shelter for the subadult fish to prepare for the rigors of migratory passage upstream to the natal spawning area, a migration that may last as long as six months and cover distances as much as 250 km (155 mi) upriver.

When adfluvial bull trout reach adulthood and complete the spawning migration, mating in the fall in the stream where they originated, they usually return downstream to the lake very rapidly. Adult adfluvial bull trout may live as long as 20 years and can complete multiple migrations between the lake and the spawning stream. In many populations, alternate year spawning is the normal pattern, and adult fish may require as much as 20 months in the lake or reservoir habitat to facilitate adequate energy storage and gamete development before they return to spawn again.

In comparison to streams, lake and reservoir environments are relatively more secure from catastrophic natural events. They provide a sanctuary for bull trout, allowing them to quickly rebound from temporary adverse conditions in the spawning and rearing habitat. For example, if a major wildfire burns a drainage and eliminates most or all aquatic life (a rare occurrence), bull trout subadults and adults that survive in the lake may return the following year to repopulate the system. In this way, lakes and reservoirs provide an important adaptive element of the adfluvial life history strategy.

The construction of reservoirs may have had adverse effects to bull trout, but some reservoirs also have provided unintended benefits. For example, the basin of Hungry Horse Reservoir has functioned adequately for fifty years as a surrogate home for stranded Flathead Lake bull trout trapped upstream of the dam when it was completed. While this is an artificial impoundment, the habitat the reservoir provides and the presence of an enhanced prey base of native minnows, suckers, and whitefish within the reservoir sustain a large adfluvial bull trout population. Additionally, while barriers to migration are often viewed as a negative consequence of dams, the connectivity barrier at Hungry Horse Dam has also served an important, albeit unintended, function in restricting the proliferation of nonnative *Salvelinus* species (brook trout and lake trout) from downstream areas upstream above the dam.

In addition to considering various habitat features and other factors that relate to individuals and populations of bull trout in relatively localized areas, attention also is being given to broader scale considerations of the distribution and abundance of bull trout, based on applying the theories and principles of conservation biology and metapopulation dynamics (Rieman and McIntyre 1993; Kanda 1998). Conservation biology is a scientific discipline that has emerged from a basis in several other sciences (*e.g.*, population genetics, demography, biogeography, and community ecology) and addresses applied problems in conservation, especially diversity, scarcity, and extinction (Noss and Cooperrider 1994). A metapopulation is an interacting network of local subpopulations, in which individual demographics units are connected through dispersal and migration with varying frequencies of gene flow among them (Meefe and Carroll 1994). Metapopulation models are used in conservation biology to describe the structure and dynamics of populations that occur in different locations across a landscape and to identify subpopulations, habitat patches, and links between habitat patches that are of crucial importance to maintaining the overall metapopulation. Under conditions where metapopulation dynamics are functioning, providing an appropriate amount and spatial distribution of habitat to support metapopulations can be crucial to reducing the risk of extinction of a species or population because even though local subpopulations may become extinct, they can be replaced (reestablished) by individuals from other local subpopulations or populations.

One of the key factors influencing the distribution and abundance of bull trout is the extent to which habitat patches in sufficient number and proximity provide for the natural reestablishment of local subpopulations. The rate at which reestablishment might occur is another key factor. Because bull trout exhibit strong homing fidelity when spawning and their rate of straying appears to be low, natural reestablishment of extinct local subpopulations may take a very long time even if habitat connectivity is retained.

Genetic diversity in bull trout is another issue of concern, and is related to the distribution and abundance of bull trout habitat and populations. Habitat alteration, primarily through construction of impoundments, dams, and water diversions, has substantially increased habitat fragmentation, eliminated migratory corridors, and isolated bull trout, often in the headwaters of tributaries (Rieman *et al.* 1997). In their review of the status of bull trout populations in Oregon, Ratliff and Howell (1992) described various factors that have resulted in bull trout populations becoming largely fragmented and isolated in the upper reaches of drainages, with most of the remaining populations being the resident form of bull trout, rather than the migratory forms that would have used the lower stream reaches that now have been altered by various types of developments or by cumulative impacts from upstream areas. Ratliff and Howell specifically noted that habitat fragmentation and the resulting isolation of populations can exacerbate problems facing declining populations, including reduced genetic variability that can lead to inbreeding depression, further lowering productivity and increasing the risk of extinction. They described the loss of fluvial and adfluvial life histories as a major concern for bull trout conservation, noting that these larger fish have greater reproductive potential because of their increased fecundity and also are less likely to hybridize with the smaller brook trout that often co-occur in spawning areas.

Genetic diversity enhances long-term survival of a species by increasing the likelihood that the species is able to survive changing environmental conditions. For instance, a local

population of bull trout may contain individuals with genes that enhance their ability to survive in the prevailing local environmental conditions (Leary *et al.* 1993; Spruell *et al.* 1999; Hard 1995). Individuals with a different genetic complement may persist in the local population in much lower abundance than those with locally adapted genes. However, if environmental conditions change due to natural processes or human activities, the survival of individuals adapted to previous conditions may no longer be enhanced. Individuals with the alternative genetic complement may increase in relative abundance if their survival is enhanced in the altered environmental conditions. Moreover, considerable genetic diversity may be distributed among local populations so that changing environmental conditions could lead to extirpation of a local population of bull trout, but the area could be repopulated by individuals from another local population that possess genes whose survival is enhanced under the new conditions. If the overall genetic diversity distributed across local populations of bull trout is reduced by the loss of local populations, the ability of the species to respond to changing conditions is likewise reduced, leading to a higher likelihood of extinction (Rieman and McIntyre 1993; Leary *et al.* 1993; Spruell *et al.* 1999; Hard 1995; Rieman and Allendorf 2001).

Bull trout populations contain low levels of genetic variability within them compared to relatively high levels of divergence and variability exhibited among populations (Leary *et al.* 1993; Leary and Allendorf 1997; Spruell *et al.* 1999; Taylor *et al.* 1999). For example, Leary *et al.* (1993) state that ''* * * a relatively high amount (40%) of the total genetic variation within the Columbia River drainage is * * * due to genetic differences among samples. This is in striking contrast to the results * * * with rainbow trout and * * * with chinook salmon * * * where only 10% of the total genetic variation was due to genetic differences among populations sampled from a geographical area similar to that of our samples of bull trout.'' This type of genetic structuring indicates limited gene flow among bull trout populations, which may encourage local adaption within individual populations (Spruell *et al.* 1999; Healey and Prince 1995; Hard 1995; Rieman and McIntyre 1993).

Current information on the distribution of genetic diversity within and among bull trout populations is based on molecular characteristics of individual genes. While such analyses are extremely useful, they are not likely to detect variability in adaptive traits that are dependent on both the genotype (molecular genetic characteristics) and phenotype (observable expression, which may be influenced by genotype, the environment, and interactions of both) of an organism (Hard 1995). We may not be able to directly detect or measure the relations among genetic diversity, phenotypes, and adaptive traits of a population. Although the loss of a few populations may have little effect on overall genetic diversity, without conserving suites of populations and their habitats (*i.e.*, core areas and, on a larger scale, recovery units), the loss of phenotypic diversity may be substantial, with negative consequences to the viability of the species (Healey and Prince 1995; Hard 1995; Rieman and McIntyre 1993; Nelson *et al.* 2002; MBTSG 1998; Taylor *et al.* 1999). Therefore, the maintenance of phenotypic variability and plasticity for adaptive traits (*e.g.*, variability in body size and form, foraging efficiency, and timing of migrations, spawning, and maturation) is achieved by conserving populations, their habitats, and opportunities for the species to take advantage of habitat diversity (Healey and Prince 1995; Hard 1995).

Studies to understand the relations among genotypic, phenotypic, and environmental variability relative to bull trout have been conducted. For example, Spruell *et al.* (1999) found that bull trout at five different spawning sites within a tributary drainage of Lake Pend Oreille, Idaho, were differentiated based on genetic analyses (microsatellite DNA), indicating fidelity to spawning sites and relatively low rates of gene flow among sites. Genetic isolation of bull trout and environmental variability of tributary streams in the Lake Pend Oreille system implies that bull trout may be uniquely adapted within and among spawning tributaries in the system. Because bull trout in the coterminous United States are distributed over a wide geographic area consisting of various environmental conditions, and because they exhibit considerable genetic differentiation among populations, the occurrence of local adaptation is expected to be extensive. Some readily observable examples of differentiation between populations include external morphology and behavior (*e.g.*, size and coloration of individuals; timing of spawning and migratory forays). Thus, conserving many populations across the range of the species is crucial to adequately protect genetic and phenotypic diversity of bull trout (Hard 1995; Healey and Prince 1995; Taylor *et al.*1999; Rieman and McIntyre 1993; Spruell *et al.* 1999; Leary *et al.* 1993; Rieman and Allendorf 2001). Changes in habitats and prevailing environmental conditions are increasingly likely to result in extinction of bull trout if genetic and phenotypic diversity is lost.

Scientific evidence also supports the position that maintaining multiple bull trout populations distributed and interconnected throughout their current range will provide a mechanism for reducing the risk of extinction from stochastic events (Rieman and McIntyre 1993; Rieman and Allendorf 2001; Spruell *et al.* 1999; Healey and Prince 1995; Hard 1995). Bull trout have a broad distribution and are relatively secure in some parts of their range. However, declines and local extinctions have occurred. Current patterns in the distribution and other empirical evidence, when interpreted in view of emerging conservation theory, indicate that further declines and local extinctions are likely (Rieman *et al.* 1997; Spruell *et al.* 2002; Rieman and Allendorf 2001; Dunham and Rieman 1999).

The range of the bull trout has decreased in comparison to the known and estimated historic range in the conterminous United States. Bull trout are now extinct in northern California. Elsewhere, populations have been much reduced, fragmented, or eliminated from the main stems of many large river systems.

Historical records for the Klamath River basin suggest that bull trout in this distinct population segment were once widely distributed and exhibited diverse life-history traits in that part of their range (Ziller 1992). Currently, however, bull trout in this basin are almost entirely nonmigratory, resident fish that are confined to headwater streams (Goetz 1989). There currently are nine naturally occurring, nonmigratory populations, and one remnant fluvial population, that still occur in the Upper Klamath Lake, Sprague River, and Sycan Marsh watersheds in Oregon. They represent an estimated 21 percent of the estimated historic range of bull trout in the Klamath River basin (Quigley and Arbelbide 1997). These known remaining local populations are considered to be quite low in abundance; they are highly isolated from one another as a result of natural and human-caused conditions and are at substantial risk of extirpation due to natural disturbance cycles, random events, and other risk factors (Light *et al.* 1996).

The Columbia River population segment includes bull trout residing in

portions of Oregon, Washington, Idaho, and Montana. Bull trout are estimated to have once occupied about 60 percent of the Columbia River basin; they presently are known or predicted to occur in less than half (approximately 45 percent) of watersheds in the historical range (Quigley and Arbelbide 1997), which amounts to approximately 27 percent of the basin. The principal river systems and lakes/reservoirs in the Columbia River basin where bull trout currently are known to occur are as follows: The Willamette River system (in upper tributaries only), Lewis River, Klickitat River, Hood River, Deschutes River, Metolius River, Lake Billy Chinook, Odell Lake, John Day River, Sycan River, Sprague River, Umatilla River, Walla Walla River, Yakima River, Columbia River, Snake River, Tucannon River, Grande Ronde River, Clearwater River, Asotin Creek, Imnaha River, Salmon River, Little Lost River, Malheur River, Powder River, Payette River, Boise River, Weiser River, Wenatchee River, Entiat River, Methow River, Rimrock Lake, Spokane River, Pend Oreille River, Flathead River, Swan River, Clark Fork River, Kootenai River, Bitterroot River, Blackfoot River, Hungry Horse Reservoir, Swan Lake, and Flathead Lake (Bull Trout Draft Recovery Plan (Draft Recovery Plan), USFWS 2002).

Although still relatively widely distributed in the Columbia River basin, bull trout occur in low numbers in many areas, and populations are considered depressed or declining across much of their range (Ratliff and Howell 1992; Schill 1992; Thomas 1992; Buchanan *et al.* 1997; Rieman *et al.* 1997, Quigley and Arbelbide 1997). Another evaluation of the distribution and status of bull trout within the Columbia River and Klamath River basins indicates bull trout are present in about 36 percent of the subwatersheds in their potential range and are estimated to have strong populations in only 6 to 12 percent of the potential range, with most populations considered to be depressed in numbers (Rieman *et al.*1997).

The range of the bull trout is likely to have contracted and expanded over time in relation to natural climate changes; the distribution of the species probably was likely patchy even in pristine environments. However, regardless of uncertainty about the exact historical range, the number and size of historical populations, and the role of natural factors in the status of the species, there is widespread agreement in scientific literature that many factors related to human activities have impacted bull trout and continue to pose significant risks of further extirpations of local populations. Among the many factors that contributed to the decline of bull trout in the Columbia River and Klamath River basins, those which appear to be particularly significant are as follows: (1) Fragmentation and isolation of local populations due to the proliferation of dams and water diversions that have eliminated habitat, altered water flow and temperature regimes, and impeded migratory movements (Rieman and McIntyre 1993; Dunham and Rieman 1999); (2) degradation of spawning and rearing habitat in upper watershed areas, particularly alterations in sedimentation rates and water temperature, resulting from past forest and rangeland management practices and intensive development of roads (Fraley and Shepard 1989; Montana Bull Trout Scientific Group (MBTSG) 1998); and (3) the introduction and spread of nonnative species, particularly brook trout (*Salvelinus fontinalis*) and lake trout (*Salvelinus namaycush*), which compete with bull trout for limited resources and, in the case of brook trout, hybridize with bull trout (Ratliff and Howell 1992; Leary *et al.* 1993).

The ramifications and effects of isolation and habitat fragmentation on various aspects of the life cycle of bull trout are highlighted in much of the scientific literature on this species. Isolation of populations and habitat fragmentation resulting from barriers to migration have negatively impacted affected bull trout in several ways that have important implications for the conservation of the species. These include: (1) Reducing geographical distribution (Rieman and McIntyre 1993, MBTSG 1998); (2) increasing the probability of losing individual local populations (Rieman and McIntyre 1993, Rieman *et al.* 1995, MBTSG 1998, Dunham and Rieman 1999, Nelson *et al.* 2002); (3) increasing the probability of hybridization with introduced brook trout (Rieman and McIntyre 1993); (4) reducing the potential for movements that are necessary to meet developmental, foraging, and seasonal habitat requirements (Rieman and McIntyre 1993, MBTSG 1998); and (5) reducing reproductive capability by eliminating the larger, more fecund migratory form of bull trout from many subpopulations (Rieman and McIntyre 1993, MBTSG 1998).

Introduced brook trout threaten bull trout through competition, hybridization, and possibly predation (Leary *et al.* 1993). Brook trout appear to be better adapted to degraded habitat than bull trout, and brook trout are more tolerant of high water temperatures. Hybridization between brook trout and bull trout has been reported in Montana, Oregon, Washington, and Idaho. In addition, brook trout mature at an earlier age and have a higher reproductive rate than bull trout. This difference appears to favor brook trout over bull trout when they occur together, often leading to the decline or extirpation of bull trout (Leary *et al.* 1993; MBTSG 1998). Nonnative lake trout also negatively affect bull trout. A study of 34 lakes in Montana, Alberta, and British Columbia found that lake trout reduce the distribution and abundance of migratory bull trout in mountain lakes and concluded that lacustrine populations of bull trout usually cannot be maintained if lake trout are introduced (Donald and Alger 1993).

Previous Federal Action

On September 18, 1985, we published an animal Notice of Review in the **Federal Register** (50 FR 37958) designating the bull trout as a category 2 candidate for listing in the coterminous United States. Under the definitions we used at that time, category 2 taxa were those for which we had information indicating that proposing to list was possibly appropriate, but for which persuasive data on biological vulnerability and threat were not currently available to support a proposed rule. We published updated Notices of Review on January 6, 1989 (54 FR 554), and November 21, 1991 (56 FR 58804), reconfirming the bull trout category 2 status. On November 15, 1994 (59 FR 58982), we elevated bull trout in the coterminous United States to a category 1 candidate for Federal listing. Category 1 taxa were those for which we had on file substantial information on biological vulnerability and threats to support preparation of listing proposals.

On June 13, 1997, we published in the **Federal Register** (62 FR 32268) a proposed rule to list the Klamath River population segment of bull trout as an endangered species, and the Columbia River population segment of bull trout as a threatened species. On June 10, 1998, we published a final rule in the **Federal Register** (63 FR 31647) determining the Klamath River and Columbia River population segments of bull trout to have threatened status under the Act. At the time of listing, we made the finding that critical habitat was not determinable for these populations because their habitat needs were not sufficiently well known (63 FR 31647). (For a further summary of previous Federal action, see 64 FR 58916.)

On January 26, 2001, the Alliance for the Wild Rockies, Inc. and Friends of the Wild Swan, Inc. filed a lawsuit in the U.S. District Court of Oregon challenging our failure to designate critical habitat for bull trout. We entered into a settlement agreement on January 14, 2002, which stipulated that we would make critical habitat determinations for the five population segments of bull trout (Civil Case No: CV 01–127–JO). For the Klamath River and Columbia River populations, we agreed to submit for publication in the **Federal Register** a proposed rule for critical habitat designation by October 1, 2002, and a final rule by October 1, 2003. A subsequent agreement resulted in extending the date for the publication of the proposed rule to November 12, 2002.

Critical Habitat

Critical habitat is defined in section 3 of the Act as: (i) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species, and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. ''Conservation'' is defined by the Act as the use of all methods and procedures which are necessary to bring any endangered or a threatened species to the point at which the measures provided pursuant to the Act are no longer necessary.

Critical habitat receives protection under section 7(a)(2) of the Act through the requirement that Federal agencies shall, in consultation with us, ensure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. Section 7(a)(4) requires Federal agencies to confer with us on any agency action which is likely to result in the destruction or adverse modification of proposed critical habitat. The term ''destruction or adverse modification'' is defined at 50 CFR 402.02 as a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

Aside from the added protection that may be provided under section 7, the Act does not provide other forms of protection to lands designated as critical habitat. Because the consultation requirements under section 7 of the Act do not apply to activities on private or other non-Federal lands unless those activities involve a Federal nexus, critical habitat designation on such lands would not afford any additional protections under the Act.

Critical habitat also provides nonregulatory benefits to the species by informing the public and private sectors of areas that are important for species recovery, and where conservation actions would be most effective. Designation of critical habitat can help focus conservation activities for a listed species by identifying areas that contain the physical and biological features essential for the conservation of that species, and can alert the public as well as land-managing agencies to the importance of those areas. Critical habitat also identifies areas that may require special management considerations or protection, and may help provide protection to areas where significant threats to the species have been identified, by helping people to avoid causing accidental damage to such areas.

In order to be included in a critical habitat designation, the habitat must be ''essential to the conservation of the species.'' Critical habitat designations identify, to the extent known, and using the best scientific data available, habitat areas that provide at least one of the physical or biological features essential to the conservation of the species (primary consituent elements, as defined at 50 CFR 424.12(b)). Section 3(5)(C) of the Act specifies that except in those circumstances determined by the Secretary of the Interior (Secretary), critical habitat shall not include the entire geographical areas which can be occupied by the listed species. Regulations at 50 CFR 424.12(e) also state that, ''The Secretary shall designate as critical habitat areas outside the geographical area presently occupied by the species only when a designation limited to its present range would be inadequate to ensure the conservation of the species.''

Section 4(b)(2) of the Act requires that we take into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. We may exclude areas from critical habitat designation if we determine that the benefits of such exclusion outweigh the benefits of including the areas within critical habitat, unless we determine, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species.

Section 4 of the Act requires that we designate critical habitat based on what we know at the time of designation. We recognize that habitat is often dynamic, undergoing naturally-occurring changes that can alter its importance to, and use by, a listed species. Furthermore, we recognize that designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery. Areas that support newly discovered populations in the future, but are outside the critical habitat designation, will continue to be subject to conservation actions implemented under section 7(a)(1) of the Act, to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, and to the section 9 prohibitions, as determined on the basis of the best available information at the time of the action. Federally funded or assisted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Section 4(a)(3) of the Act requires that, to the maximum extent prudent and determinable, we designate critical habitat concurrently with listing a species. In our final listing rule (63 FR 31647), we concluded that the designation of critical habitat for the bull trout was not determinable at that time, explaining that the biological needs of bull trout in the Klamath River and Columbia River population segments were not sufficiently well known to permit identification of areas as critical habitat. Further, the extent of habitat required and specific management measures needed for recovery of these fish had not been identified.

Shortly after the species was listed in 1998, we initiated development of a recovery plan for bull trout and convened 27 individual Recovery Unit Teams throughout five States to begin gathering information on the status and conservation needs of the species. These

teams were composed of experts from the fields of biology, other scientific disciplines such as hydrology and forestry, resource users, and other stakeholders with interest in and knowledge of bull trout and the habitats they depend on for survival. The recovery planning process in general, and the individual Recovery Unit Teams in particular, generated a considerable body of new information on the biological needs of bull trout, the extent of habitat required, and specific management needs. There also have been new scientific publications, and additional information has become available from various State and Federal agencies since the 1998 listing action. As a result, we now find that sufficient information exists to determine critical habitat for the Klamath River and Columbia River bull trout population segments.

Our Policy on Information Standards Under the Endangered Species Act, published on July 1, 1994 (59 FR 34271), provides criteria, establishes procedures, and provides guidance to ensure that the decisions made by the Service represent the best scientific and commercial data available. It requires that our biologists, to the extent consistent with the Act and with the use of the best scientific and commercial data available, use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are critical habitat, a primary source of information should be the listing rule for the species. Additional information may be obtained from a recovery plan, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, unpublished materials, and expert opinions.

Methods

As required by the Act and regulations at 50 CFR 424.12, we used the best scientific data available to determine critical habitat, giving consideration to those physical and biological features that are essential to the conservation of the bull trout. As described at 50 CFR 424.12(b), such requirements include, but are not limited to, the following: (1) Space for individual and population growth and for normal behavior; (2) Food, water, or other nutritional or physiological requirements; (3) Cover or shelter; (4) Sites for breeding, reproduction, rearing of offspring; and generally; (5) Habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

In proposing critical habitat, we reviewed the overall approaches to the conservation of the species undertaken by local, State, and Federal agencies; Tribal governments; and private individuals and organizations since the species was listed in 1998. We relied heavily on information developed by the bull trout Recovery Unit Teams, which were comprised of Federal, State, Tribal, and private biologists, as well as experts from other scientific disciplines such as hydrology and forestry, resource users, and other stakeholders with an interest in bull trout and the habitats they depend on for survival. We reviewed available information concerning bull trout habitat use and preferences, habitat conditions, threats, limiting factors, population demographics, and the known locations, distribution and abundances of bull trout.

During our evaluation of information, we also took into account the relatively low probability of detection of bull trout in traditional fish sampling and survey efforts, as well as the limited extent of such efforts across the range of bull trout. Because of their varied life history strategies, nocturnal habits, and low population densities in many areas, the detectability of bull trout in a given area is highly variable (Rieman and McIntyre 1993). Furthermore, much of the current information on bull trout presence is the product of informal surveys or sampling conducted for other species or other purposes. The primary limitations of informal surveys are that they provide no estimate of certainty (*i.e.*, a measure of the probability of detection), and that they may be inadequate for determining parameters such as the densities and distribution of the population. (The need for a statistically sound bull trout survey protocol has been addressed only recently through the development, by the American Fisheries Society, of a peer-reviewed protocol for determining presence/absence, and potential habitat suitability for juvenile and resident bull trout (Peterson *et al.* 2002).) Consequently, with some exceptions (*e.g.*, areas of Montana where bull trout surveys have been consistently conducted for a decade or more), a lack of bull trout detections does not provide definitive evidence of their absence in a particular stream, lake, or river. Accordingly, we used information gathered during the bull trout recovery planning process, as supplemented by even more recent information developed by State agencies, Tribes, the U.S. Forest Service (USFS), and other entities, in the development of our critical habitat designation proposal. Data concerning habitat conditions or status of primary constituent elements were used when available. To address areas where data gaps exist, we solicited expert opinions from knowledgeable fisheries biologists in the local area.

Important considerations in selecting areas for critical habitat designation include factors specific to each river system, such as size (*e.g.*, stream order), gradient, channel morphology, connectivity to other aquatic habitats, and habitat complexity and diversity, as well as range-wide recovery considerations. This effort was especially assisted by the recovery strategy described in the Draft Recovery Plan (USFWS 2002). We took into account that preferred habitat for bull trout ranges from small headwater streams that are used largely for spawning and rearing, to downstream, mainstem portions of river networks that are used for rearing, foraging, overwintering, and migration.

Our method included consideration of information regarding habitat essential to maintaining the migratory life history forms of bull trout, in light of the repeated emphasis about the importance of such habitat in the scientific literature (Rieman and McIntryre 1993; Hard 1995; Healey and Prince 1995; Rieman *et al.* 1995; MBTSG 1998; Dunham and Rieman 1999; Nelson *et al.* 2002). As explained above (see the Background section), habitat for movement upstream and downstream is important for all life history forms for spawning, foraging, growth, access to rearing and overwintering areas, or thermal refugia (*e.g.*, spring-fed streams in late summer), avoidance of extreme environmental conditions, and other normal behavior. Successful migration requires biologically, physically, and chemically unobstructed routes for movement of individuals. Therefore, our method included considering information regarding habitat that is essential for movement into and out of larger rivers, because of the importance of such areas to the fluvial form of bull trout. We similarly identified habitat that is essential for movement between streams and lakes by adfluvial forms.

Migratory corridors also are important for movement between populations (*e.g.* Fraley and Sehapard 1989; Rieman and McIntyre 1993, Rieman *et al.* 1995, Dunham and Rieman 1999). Thus, in addition to considering areas important for migration within populations, our method also included considering information regarding migration corridors necessary to allow for genetic exchange between local populations. Corridors that provide for such

movements can support eventual recolonization of unoccupied areas or otherwise play a significant role in maintaining genetic diversity and metapopulation viability. (*See* Background section, above, for details.) Because these factors are important in identifying areas that are essential to the conservation of bull trout, our method included consideration of the various roles that migratory corridors have for bull trout.

Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat, we are required to base our proposal on the best scientific data available, and to consider those physical and biological features that are essential to the conservation of the species and that may require special management considerations or protection. These physical and biological features include, but are not limited to: space for individual and population growth, and for normal behavior; food, water, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing of offspring; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species. All areas proposed as critical habitat for bull trout are within the historic geographic range of the species and contain one or more of these physical or biological features essential to the conservation of the species. The regulations also require that we include a list of known primary constituent elements with the critical habitat description. As described in the regulations, the primary constituent elements may include, but are not limited to, features such as spawning sites, feeding sites, and water quality or quantity. Following is a brief summary of information we considered in our identification of primary constituent elements. Additional and more detailed information is available in the administrative record for the proposed rule.

We determined the primary constituent elements for bull trout from studies of their habitat requirements, life-history characteristics, and population biology, as outlined above. These primary constituent elements are:

(1) Permanent water having low levels of contaminants such that normal reproduction, growth and survival are not inhibited;

(2) Water temperatures ranging from 2 to 15 °C (36 to 59 °F), with adequate thermal refugia available for temperatures at the upper end of this range. Specific temperatures within this range will vary depending on bull trout life history stage and form, geography, elevation, diurnal and seasonal variation, shade, such as that provided by riparian habitat, and local groundwater influence;

(3) Complex stream channels with features such as woody debris, side channels, pools, and undercut banks to provide a variety of depths, velocities, and instream structures;

(4) Substrates of sufficient amount, size, and composition to ensure success of egg and embryo overwinter survival, fry emergence, and young-of-the-year and juvenile survival. A minimal amount of fine substrate less than 0.63 cm (0.25 in) in diameter and minimal substrate embeddedness are characteristic of these conditions;

(5) A natural hydrograph, including peak, high, low, and base flows within historic ranges or, if regulated, a hydrograph that demonstrates the ability to support bull trout populations;

(6) Springs, seeps, groundwater sources, and subsurface water connectivity to contribute to water quality and quantity;

(7) Migratory corridors with minimal physical, biological, or chemical barriers between spawning, rearing, overwintering, and foraging habitats, including intermittent or seasonal barriers induced by high water temperatures or low flows;

(8) An abundant food base including terrestrial organisms of riparian origin, aquatic macroinvertebrates, and forage fish; and

(9) Few or no predatory, interbreeding, or competitive nonnative species present.

The areas proposed as critical habitat for the Klamath River and Columbia River Basin DPSs of bull trout are designed to incorporate what is essential for their conservation. An area need not include all nine of the primary constitutent elements to qualify for designation as critical habitat.

Criteria Used To Identify Critical Habitat

The Draft Recovery Plan (USFWS 2002) identifies the specific recovery needs of the species and provides guidance for identifying areas that warrant critical habitat designation. As described below, this Draft Recovery Plan was used as the principal basis for identifying the critical habitat in this proposed designation. Use of the Draft Recovery Plan for this purpose raises significant issues about the scope and impact of this proposed designation. In particular, areas included in this proposal may not meet the statutory definition of critical habitat insofar as they may not be essential to the conservation of bull trout. We will re-evaluate the proposed rule based on public comment, peer review of the proposed rule and the Draft Recovery Plan, the economic analysis of the proposed rule and the public comments on that analysis, and other available information, to ensure that the designation accurately reflects habitat that is essential to the conservation of the species.

The draft recovery strategy focuses primarily on the maintenance (and, where needed, expansion) of existing local populations by: (1) Protecting sufficient amounts of spawning and rearing habitat in upper watershed areas; (2) providing suitable habitat conditions in downstream rivers and lakes to provide foraging and overwintering habitat for fluvial and adfluvial fish; and (3) sustaining (and in some cases reestablishing) movement corridors to maintain migratory routes and the potential for gene flow between local populations by maintaining habitat conditions that allow for fish passage.

Critical habitat units are patterned after recovery units identified in the Draft Recovery Plan (USFWS 2002) for the Klamath River and Columbia River population segments. Using the guidance from that plan, we identified habitat areas needed for the survival and recovery of bull trout. To be included as critical habitat, an area had to provide one or more of the following three functions: (1) Spawning, rearing, foraging, or overwintering habitat to support existing bull trout local populations; (2) movement corridors necessary for maintaining migratory life-history forms; and/or (3) suitable and historically occupied habitat that is essential for recovering existing local populations that have declined, or that is needed to reestablish local populations required for recovery.

Our proposal includes approximately 4,074 km (2,531 mi) of stream reaches and 12,176 ha (30,075 ac) of lake and reservoir surface area habitat determined to be essential to the conservation of the bull trout, but currently not known to be occupied. Although these specific areas are not known to be occupied, they are within the geographical area occupied by bull trout occupy. Areas with low levels of bull trout occupancy or where presence of the species is undetermined were included when they provided connectivity between areas of high-quality habitat, served as important migration corridors for fluvial or adfluvial fish, or were identified in the

Draft Recovery Plan (USFWS 2002) as necessary for local population expansion or reestablishment in order to achieve recovery, so that delisting can occur. Restoration of reproducing bull trout populations to additional portions of their historical range would significantly reduce the likelihood of extinction due to natural or human-caused factors that might otherwise further reduce population size and distribution. Thus, an integral component of the Draft Recovery Plan (USFWS 2002) is the selective reestablishment of secure, self-sustaining populations in certain areas where the species has apparently, but not necessarily conclusively, been extirpated. In this regard, we also note that some habitat areas that would not be considered essential if they were geographically isolated are, in fact, essential to the conservation of the species when situated in locations where they facilitate movement between local populations or otherwise play a significant role in maintaining metapopulation viability (*e.g.*, by providing sources of immigrants to recolonize adjacent habitat patches following periodic extirpation events) (Dunham and Rieman 1999). In addition, populations on the periphery of the species' range, or in atypical environments, are important for maintaining the genetic diversity of the species and could prove essential to the ability of the species to adapt to rapidly changing climatic and environmental conditions (Leary *et al.* 1993; Hard 1995).

A brief discussion of each area proposed for designation is provided in the critical habitat unit descriptions (below). Additional detailed documentation concerning the essential nature of these areas is contained in our administrative record.

Proposed critical habitat for bull trout was delineated using multiple sources including: The StreamNet GIS (Geographic Information System) database for Idaho, Oregon, Washington, and Montana; and State databases of bull trout distribution.

Managed Lands

As part of our process of developing this critical habitat proposal, we evaluated existing management plans to determine whether they provide sufficient protection and management for the bull trout and its habitat such that there is no need for additional special management considerations or protection of areas that otherwise would qualify as critical habitat. Section 3(5)(A)(i) of the Act defines critical habitat as areas on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection. Adequate special management or protection is provided by a legally operative plan that addresses the maintenance and improvement of essential habitat elements and that provides for the long-term conservation of the species. We consider a plan adequate when it: (1) Provides a conservation benefit to the species (*i.e.*, the plan must maintain or provide for an increase in the species' population, or the enhancement or restoration of its habitat within the area covered by the plan); (2) provides assurances that the management plan will be implemented (*i.e.*, those responsible for implementing the plan are capable of accomplishing the objectives, have an implementation schedule, and/or adequate funding for the management plan); and (3) provides assurances the conservation plan will be effective (*i.e.*, it identifies biological goals, has provisions for reporting progress, and is of a duration sufficient to implement the plan and achieve the plan's goals and objectives). If an area provides physical and biological features essential to the conservation of the species, and also is covered by a plan that meets these criteria, then such an area does not constitute critical habitat as defined by the Act because the primary constituent elements found there are not in need of special management.

Federal Public Lands (USFS and Bureau of Land Management)

Within the range of bull trout, the USFS and Bureau of Land Management (BLM) prepare land management plans which generally guide activities on the National Forests and BLM Districts. These plans provide some level of conservation benefit to species and the habitat they are known to occupy. However, current management goals are not sufficient to address areas of unknown occupancy which are proposed as critical habitat because we believe they are essential to conservation of the species.

Federal land management agencies routinely engage in land exchanges with non-Federal entities. These exchanges are often advantageous to both parties by providing, for example, harvestable timber for a private timber company and a consolidation of land holdings that will contribute to efficient future management by the Federal agency. Such exchanges complicate potential critical habitat exclusions based on existing management plans.

USFS Land and Resource Management Plans (LRMPs) and BLM Resource Management Plans (RMPs), as amended by the Interim Strategy for Managing Fish-Producing Watersheds in Eastern Oregon and Washington, Idaho, Western Montana, and Portions of Nevada (INFISH), and the Interim Strategy for Managing Anadromous Fish-Producing Watersheds in Western Oregon and Washington, Idaho, and Portions of California (PACFISH), are fluid documents that may change, or not change as anticipated, as management emphasis and direction changes. For example: (1) PACFISH and INFISH were considered interim for a period of 2 years when they were created in 1998, yet they still are in place in 2002; (2) three National Forests in Idaho are currently engaged in informal consultation with the Service on revisions to their LRMPs with the vision of dropping or modifying PACFISH/INFISH requirements. We are unsure at this point as to the degree of aquatic protections that will be provided under the new plans; and (3) the Aquatic Conservation Strategy and other components of the Northwest Forest Plan (NWFP) contain aspects which are not always fully agreed upon by Federal agencies charged with implementation of the plan. For this reason, as well as to incorporate new information, the NWFP is managed adaptively to respond to new information and, as such, we are unsure as to the specific details of future management direction. Further, LRMPs and RMPs (including the NWFP) are general and programmatic in nature. All of the Federal agencies understand that more specific consultation at the site-specific level is required to determine project effects and meet the requirements of section 7(a)(2) of the Act. Therefore, the current existence and substance of these Federal land management plans do not provide assurances of their future implementation, or that specific project implementation in the future will reflect a comparable level of conservation benefits to bull trout.

Because of these circumstances, we cannot, at this time, find that management on these lands under Federal jurisdiction is adequate to preclude a proposed designation of critical habitat. Therefore, we have included areas within these Federal jurisdictions as part of the critical habitat proposal, and are seeking further information, through the public comment process, as to whether these areas should be retained or excluded from designation in the final rule (see Public Comments Solicited section).

Congressionally Designated Wilderness

Wilderness areas exist because of a Congressional mandate that began with passage of the Wilderness Act in 1964. In partnership with the public, wilderness managers have a responsibility to preserve an enduring resource of wilderness, where natural processes are allowed to operate freely. Non-commercial hunting, fishing, and trapping are allowed in most Bureau of Land Management, Fish and Wildlife Service, and Forest Service wilderness areas, but not those managed by the National Park Service. States are responsible for management of wildlife and fish, working together with the Federal agency land managers. Wildlife species may be introduced and fish species stocked in order to perpetuate or recover a threatened or endangered species, or to restore a native species that has been eliminated or reduced by human influence. Exotic species may not be stocked. Habitat may be manipulated only when it is necessary to correct conditions resulting from human influence or to protect threatened or endangered species. Research and management surveys are permitted if done in a manner compatible with the preservation of the wilderness resource.

Where previously established, livestock grazing is permitted to continue in wilderness, subject to grazing and other resource management requirements. Permittees are required to maintain range improvements necessary to the livestock operation or the protection of the range, such as fences and watering facilities. The use of motorized equipment is permitted where it occurred prior to the establishment of wilderness. Range improvements such as fences and watering holes may be made, when necessary to protect wilderness values and manage the range resource. Prescribed burning, noxious weed control, seeding, irrigation, fertilization, and liming are allowed where each activity was practiced prior to wilderness designation, when absolutely necessary for the livestock grazing operation, and where there would be no serious adverse impacts on wilderness values. Horses and packstock used by commercial outfitters and guides and private individuals are grazed under permit. Feed must be packed in when forage is inadequate, and each wilderness may set regulations on tethering of horses, party size limits, and use of native feed and pellets. Wild horses and burros are considered part of the natural system, where established at the time of designation.

Effective January 1, 1984, the Wilderness Act withdrew minerals within lands designated as wilderness from appropriation under the mining and mineral leasing laws, subject to valid existing rights. Holders of valid mineral leases retain the rights granted by the terms and conditions of the specific leases. Holders of valid mining claims are allowed to conduct operations necessary for the development, production, and processing of the mineral resource. Mechanized equipment, motorized access, and utility corridors may be used. However, these activities and the reclamation of all disturbed lands must minimize the impact on the surrounding wilderness character. Prior to designation as wilderness, mining claims may be made on public lands administered by the Bureau of Land Management. Mining operations may continue after designation, subject to strict regulation to protect wilderness characteristics.

Dams and water development structures in wilderness, other than those necessary for range and wildlife, can only be authorized by the President. However, existing reservoirs, ditches, water catchments, and related facilities for the control or use of water can be maintained or reconstructed if they meet a public need or are part of a valid existing right. Motorized equipment and mechanical transportation for maintenance of water development structure is not allowed unless practiced before the area was designated wilderness. Watershed restoration is permitted only where human activities have caused soil deterioration or other loss of wilderness values, where watershed conditions could cause unacceptable environmental impacts or threaten life or property outside the wilderness, and where natural revegetation is insufficient.

Although wilderness areas generally provide for management complementary with the conservation needs of bull trout, the provisions for mining, water development, and grazing relative to pre-existing claims and usage, and their effects on future site-specific actions that may occur, is not well understood. Because of this uncertainty, we cannot, at this time, determine the effectiveness of wilderness management on bull trout. Therefore, we have included areas within wilderness as part of the critical habitat proposal. We are seeking further information, through the public comment process, as to whether these areas should be retained or excluded from designation in the final rule (see Public Comments Solicited section).

Lands Covered Under Existing Habitat Conservation Plans (HCPs)

Section 10(a)(1)(B) of the Act authorizes the Service to issue to non-Federal entities a permit for the incidental take of endangered and threatened species. This permit allows a non-Federal landowner to proceed with an activity that is legal in all other respects, but that results in the incidental taking of a listed species (*i.e.*, take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity). The Act specifies that an application for an incidental take permit must be accompanied by a conservation plan, and specifies the content of such a plan. The purpose of such a habitat conservation plan, or HCP, is to describe and ensure that the effects of the permitted action on covered species are adequately minimized and mitigated and that the action does not appreciably reduce the survival and recovery of the species.

Within the area covered by Klamath River DPS, there are no HCPs involving bull trout. Within the range of the Columbia River population segment of bull trout, the Service has approved HCPs involving the Plum Creek Timber Company and the Washington Department of Natural Resources (WDNR). The Plum Creek Native Fish, Plum Creek I–90, and the WDNR HCPs have been developed, in part, to provide for the conservation needs of bull trout while also allowing for otherwise lawful timber management activities. The duration of the permits associated with the Plum Creek and WDNR HCPs ranges from 30 to 100 years. The permittees have the option, however, of terminating at any time if they so choose, with a sixty-day notice to the Service. Moreover, the permittees may retain their permits but sell some of their lands covered by an HCP. All of these HCPs contain provisions that allow buyers of lands covered by the HCP to assume the permit if they so desire.

The Plum Creek I–90 HCP includes provisions that: (1) Generally allow for the sale or exchange of lands with the U.S. Forest Service, with some specific limitations relative to implementation of the Northwest Forest Plan; (2) allow for the sale of any lands provided appropriate covenants or assurances are given by the acquiring party that such lands will be managed consistent with the goals and objectives of the HCP; and (3) allow for the sale of parcels not in excess of 640 acres to any private party as long as the cumulative total of all such transactions does not exceed 5

percent of the acreage covered by the permit and the cumulative total of all such transactions in any one township does not exceed 1,920 acres. The Plum Creek Native Fish HCP applies a proportionality ratio to land dispositions relative to three categories of dispositions: Positive, neutral, and negative in terms of conservation benefits to covered species. Plum Creek has committed to manage its land dispositions so that the cumulative total of dispositions stays within a predetermined range of proportionality. If, at the end of the term of the HCP, the proportionality balance is below the predetermined range limits, positive land disposition commitments must be applied to sufficient acreage within the project area to restore the balance.

The WDNR lands are maintained primarily for the purpose of growing and selling timber to finance State government, and the management of these lands also can include purchases, sales, and land exchanges. The WDNR HCP does not include incentives for placing conservation easements on some of the land that WDNR sells. The HCP allows WDNR to dispose of Permit lands at its sole discretion. However, if the cumulative impact of disposed lands would have a significant adverse effect on the covered species, the parties to the HCP are required to mutually amend the HCP to provide replacement mitigation.

We evaluated lands covered by these existing Habitat Conservation Plans to determine whether they are (1) occupied and essential to the conservation of the species; (2) in need of additional special management considerations; and (3) currently not known to be occupied but essential to the conservation of the species. We evaluated each HCP to determine whether it: (1) Provides a conservation benefit to the species; (2) provides assurances that the management plan will be implemented; and (3) provides assurances the plan will be effective. Approved and permitted HCPs are designed to ensure the long-term survival of covered species within the plan area. Where we have an approved HCP, the areas we ordinarily would designate as critical habitat for the covered species will normally be protected through the terms of the HCPs and their implementation agreements. These HCPs and implementation agreements include management measures and protections that are crafted to protect, restore, and enhance their value as habitat for covered species.

The issuance of a permit (under Section 10(a) of the Act) in association with an HCP application is subject to consultation under Section 7(a)(2) of the Act. While these consultations on permit issuance have not specifically addressed the issue of destruction or adverse modification of critical habitat for bull trout, they have addressed the very similar concept of jeopardy to bull trout in the plan area. Since these large regional HCPs address land use within the plan boundaries, habitat issues within the plan boundaries have been thoroughly addressed in the HCP and the consultation on the permit associated with the HCP. Our experience is that, under most circumstances, consultations under the jeopardy standard will reach the same result as consultations under the adverse modification standard. Common to both approaches is an appreciable detrimental effect on both survival and recovery of a listed species, in the case of critical habitat by reducing the value of the habitat so designated. Thus, actions satisfying the standard for adverse modification are nearly always found to also jeopardize the species concerned, and the existence of a critical habitat designation does not materially affect the outcome of consultation. Therefore, additional measures to protect the habitat from adverse modification are not likely to be required.

The Plum Creek I–90 and WDNR HCPs occur mostly in Western Washington, with minimal overlap (*i.e.*, lands adjacent to less than 50 stream miles for each Plan) with proposed critical habitat for the Columbia River DPS. The Plum Creek Native Fish HCP covers approximately 1.6 million acres, all within the range of the Columbia River DPS. Lands within this HCP occur adjacent to less than approximately 500 miles of streams reaches that we identified as proposed critical habitat.

We have reviewed the three HCPs within the Columbia River basin DPS of bull trout and we have determined that they do not require additional special management considerations to conserve bull trout. Therefore, these areas covered by an existing, legally operative incidental take permit issued for bull trout under section 10(a)(1)(B) of the Act are, by definition under Section 3(5)(A) of the Act, not included in this proposed designation of critical habitat.

As noted above, lands within these HCPs are subject to disposal (*e.g.*, through sale or exchange), subject to various sideboards included in each HCP. Proposed critical habitat does not include non-Federal lands covered by an incidental take permit for bull trout issued under section 10(a)(1)(B) of the Act for these HCPs as long as such permit, or a conservation easement providing comparable conservation benefits, remains legally operative on such lands.

We also considered exclusion of HCPs under subsection 4(b)(2) of the Act, which allows us to exclude areas from critical habitat designation where the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species. We believe that in most instances, the benefits of excluding HCPs from critical habitat designations will outweigh the benefits of including them. We believe this is the case in relation to the three HCPs that address bull trout within the Columbia River DPS.

The benefits of including HCP lands in critical habitat are normally small. The principal benefit of any designated critical habitat is that activities in such habitat that may affect it require consultation under section 7 of the Act if such actions involve a Federal nexus (*i.e.*, an action authorized, funded, or carried out by a Federal agency). Such consultation would ensure that adequate protection is provided to avoid adverse modification of critical habitat. Where HCPs are in place, our experience indicates that this benefit is small or non-existent.

Further, HCPs typically provide for greater conservation benefits to a covered species than section 7 consultations because HCPs assure the long term protection and management of a covered species and its habitat. Such assurances are typically not provided by section 7 consultations which, in contrast to HCPs, often do not commit the project proponent to long term special management or protections.

The development and implementation of HCPs provide other important conservation benefits, including the development of biological information to guide conservation efforts and assist in species recovery and the creation of innovative solutions to conserve species while allowing for commercial activity. The educational benefits of critical habitat, including informing the public of areas that are important for the long-term survival and conservation of the species, are essentially the same as those that would occur from the public notice and comment procedures required to establish an HCP, as well as the public participation that occurs in the development of many regional HCPs. For these reasons, then, we believe that designation of critical habitat normally has little benefit in areas covered by HCPs.

The benefits of excluding HCPs from being designated as critical habitat include relieving landowners, communities and counties of any

additional regulatory review that result from such a designation. Many HCPs, particularly large regional HCPs, take many years to develop and, upon completion, become regional conservation plans that are consistent with the recovery of covered species. Imposing an additional regulatory review after HCP completion may jeopardize conservation efforts and partnerships in many areas and could be viewed as a disincentive to those developing HCPs.

A related benefit of excluding HCP areas is that it would encourage the continued development of partnerships with HCP participants, including States, local governments, conservation organizations, and private landowners, that together can implement conservation actions we would be unable to accomplish alone. By excluding areas covered by HCPs from critical habitat designation, we preserve these partnerships and, we believe, set the stage for more effective conservation actions in the future.

In general, we believe the benefits of critical habitat designation to be small in areas covered by approved HCPs. We also believe that the benefits of excluding HCPs from designation are significant. Weighing the small benefits of inclusion against the benefits of exclusion, including the benefits of relieving property owners of an additional layer of approvals and regulation, together with the encouragement of conservation partnerships, would generally result in HCPs being excluded from critical habitat designation under section 4(b)(2) of the Act.

Tribal Lands

Please see the section ''Government-to-Government Relationship With Tribes'' for a discussion of proposed critical habitat in relation to Tribal lands.

Proposed Critical Habitat Designation

Within the geographical areas presently known to be occupied by the Klamath River and Columbia River Basin DPSs, we are proposing for designation only areas currently known to be essential to the conservation of bull trout. These areas already contain features and habitat characteristics that are necessary to sustain the species. We are only proposing designation of areas that currently have one or more of the primary constituent elements that provide essential life-cycle requisites of the species, as defined at 50 CFR 424.12(b). Moreover, certain areas with known occurrences of bull trout have not been proposed for designation as critical habitat. We did not propose critical habitat for some small scattered occurrences or habitats that are in highly fragmented areas or no longer have hydrologic conditions that are sufficient to maintain bull trout habitat, as we do not believe, based on the best available scientific information, that these areas are essential to the conservation of the species.

The proposed critical habitat areas described below constitute our best assessment at this time of the stream reaches, lakes, and reservoirs that are essential to the conservation of the Klamath River and Columbia River bull trout population segments. We are proposing designation of approximately 476 km (296 mi) of streams and 13,735 ha (33,939 ac) of lakes for the Klamath River DPS, and 29,251 km (18,175 mi) of streams and 201,850 ha (498,782 ac) of lakes and reservoirs for the Columbia River DPS. Our proposal includes approximately 4,074 km (2,531 mi) of stream reaches and 12,176 ha (30,075 ac) of lake and reservoir surface area habitat determined to be essential to the conservation of the bull trout, but that are not currently known to be occupied.

The lateral extent of critical habitat, for each proposed stream reach, is the width of the stream channel as defined by its bankfull elevation. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain (Rosgen 1996) and is reached at a discharge which generally has a recurrence interval of 1 to 2 years on the annual flood series (Leopold *et al.* 1992). Critical habitat extends from the bankfull elevation on one side of the stream channel to the bankfull elevation on the opposite side. If bankfull elevation is not evident on either bank, the ordinary high-water line as defined by the U.S. Army Corps of Engineers (Corps) in 33 CFR 329.11 shall be used to determine the lateral extent of critical habitat. Adjacent floodplains are not proposed as critical habitat. However, it should be recognized that the quality of aquatic habitat within stream channels is intrinsically related to the character of the floodplains and associated riparian zones, and human activities that occur outside the river channels can have demonstrable effects on physical and biological features of the aquatic environment. The lateral extent of proposed lakes and reservoirs is defined by the perimeter of the water body as mapped on standard 1:24,000 scale maps (comparable to the scale of a 7.5 minute U.S. Geological Survey Quadrangle topographic map).

The approximate amount of proposed critical habitat in the Klamath River Basin DPS, by State and adjacent landownership, is shown in Table 1.

TABLE 1.—APPROXIMATE LINEAR QUANTITY OF PROPOSED CRITICAL HABITAT (IN STREAM KILOMETERS (KM) AND MILES (MI)) AND SURFACE AREA OF LAKES (IN HECTARES (HA) AND ACRES(AC)), AND ADJACENT LANDOWNERSHIP PERCENTAGES FOR THE KLAMATH RIVER DPS

State	Streams (km)	Lakes (ha)	Federal (percent)	Tribal	Local/state	Private (percent)
OR	476 km (296 mi)	13,735 ha (33,939 ac)	55	n/a	n/a	45

The approximate amount of proposed critical habitat in the Columbia River Basin DPS, by State and adjacent landownership, is shown in Table 2.

TABLE 2.—APPROXIMATE LINEAR QUANTITY OF PROPOSED CRITICAL HABITAT (IN STREAM KLOMETERS (KM) AND MILES (MI)) AND SURFACE AREA OF LAKES AND RESERVOIRS (IN HECTARES (HA) AND ACRES(AC)) BY STATE, AND ADJACENT LANDOWNERSHIP PERCENTAGES FOR THE COLUMBIA RIVER DPS

State	Streams (km)	Lakes and reservoirs (ha)	Federal (percent)	Tribal (percent)	Local/State (percent)	Private (percent)
ID	14,416 km (8,958 mi)	83,219 ha (205,639 ac)	82	1	5	12

TABLE 2.—APPROXIMATE LINEAR QUANTITY OF PROPOSED CRITICAL HABITAT (IN STREAM KLOMETERS (KM) AND MILES (MI)) AND SURFACE AREA OF LAKES AND RESERVOIRS (IN HECTARES (HA) AND ACRES(AC)) BY STATE, AND ADJACENT LANDOWNERSHIP PERCENTAGES FOR THE COLUMBIA RIVER DPS—Continued

State	Streams (km)	Lakes and reservoirs (ha)	Federal (percent)	Tribal (percent)	Local/State (percent)	Private (percent)
MT	5,341 km (3,319 mi)	88,051 ha (217,577 ac)	60	1	5	34
OR	5,460 km (3,391 mi)	18,077 ha (44,670 ac)	49	4	1	46
WA	4,034 km (2,507 mi)	12,503 ha (30,896 ac)	39	3	4	54
Total	29,251 km (18,175 mi)	201,850 ha (498,782 ac).	58	2	4	36

Critical habitat includes bull trout habitat across the species' range in Idaho, Montana, Oregon, and Washington. Lands adjacent to proposed critical habitat are under private, State, Tribal, and Federal ownership, with Federal lands including lands managed by the USFS and BLM. Twenty-five critical habitat units have been delineated. The areas we are proposing as critical habitat, described below, constitute our best assessment of areas essential to the conservation of the Klamath and Columbia River distinct population segments of bull trout.

We are proposing critical habitat in 25 units that correspond to recovery units identified in the Draft Recovery Plan (USFWS 2002). Proposed critical habitat for the Klamath River DPS is entirely within Unit 1. Proposed critical habitat for the Columbia River DPS is in Units 2 though 25. Brief descriptions of each unit and the critical habitat subunits (CHSUs) within them, and the specific areas proposed for designation as critical habitat, are presented below. For ease of reference, the paragraph designations in parentheses at the beginning of each unit correspond with paragraph designations in the amendatory language at the end of this rule, which provide the legal descriptions (latitude and longitude coordinates) for each area proposed for designation (see Proposed Regulation Promulgation section).

The streams, lakes and reservoirs indicated below are generally described from the bottom to the top of a watershed within a proposed critical habitat unit or subunit. For example, river or stream ''A'' would be described from its mouth up to the first major tributary (stream ''B'') that is also being proposed as critical habitat. At that point, tributary stream ''B'' and any of its associated tributaries that are also being proposed would be described, again from the mouth of stream ''B'' upstream to either the next tributary being proposed or to the limit of proposed critical habitat within stream ''B''. Once this description is complete, the text again reverts to river/stream A and continues upstream, either to the next tributary being proposed (*e.g.* stream C) or to the upstream limit of proposed critical habitat in Stream A. This provides a ''roadmap'' that enables the reader to appreciate the extent of the proposal in a particular watershed or stream system, as well as to have the ability to work their way up from a landmark more likely to be familiar (*e.g.*, the mouth of the Tucannon River at its confluence with the Snake River) to locate a particular, generally more obscure tributary in the upper watershed. Together with the maps included with this proposed rule, readers should be able to easily locate where a stream of interest that is being proposed as bull trout critical habitat occurs on the landscape.

The legal descriptions provided in the regulatory portion of this proposed rule (see Proposed Regulation Promulgation) correspond to the critical habitat units and subunits described below. However, the legal descriptions of individual streams and lakes/reservoirs within each subunit paragraph are arranged in alphabetical order by stream or lake/reservoir name within a paragraph, whereas the descriptions within a paragraph in this preamble section are arranged as if one was working their way up from the bottom to the top of a watershed within a proposed stream network.

(5) Unit 1: Klamath River Basin

The Klamath River Basin is located in south-central Oregon and includes three critical habitat subunits: (1) Upper Klamath Lake CHSU in Klamath County; (2) Sycan Marsh CHSU in Klamath County; and (3) Upper Sprague River CHSU in Klamath and Lake counties. Total proposed critical habitat includes 475 km (295 mi) of streams representing 9.4 percent of the total stream lengths in the unit. Proposed critical habitat includes: 224.6 km (139.6 mi) of stream in 13 reaches, and 3,775 ha (9,327 ac) of lake in the Upper Klamath CHSU; 103.8 km (64.5 mi) of stream in 6 reaches, and 9,965 ha (24,625 ac) of marsh in the Sycan Marsh CHSU; and 146 km (91 mi) of stream in 10 reaches in the Upper Sprague CHSU.

(i) Upper Klamath Lake CHSU

Encompassing 170,289 ha (420,792 ac), the Upper Klamath Lake CHSU comprises of Upper Klamath Lake, Agency Lake, and their immediate major and minor tributaries. Landownership comprises: 84 percent Federal lands; 6 percent State or local government land; and 10 percent privately owned lands.

The Upper Klamath Lake CHSU currently supports three local populations of bull trout, with two considered essential to the conservation of the species—Threemile Creek and Sun Creek (USFWS 2002). The third population, Lost Creek in Crater Lake National Park, was established with transplanted fish to provide temporary refuge during restoration actions in the Park. To fully achieve recovery of bull trout in the Klamath Basin, the Draft Recovery Plan (USFWS 2002) requires five to seven local populations in the Upper Klamath Lake CHSU. The following stream segments are included in this critical habitat unit:

(A) Upper Klamath Lake Corridor, comprised of the streams and canals between Agency Straight at the north end of Upper Klamath Lake west to the Westside Road, north to the lower end of the Sevenmile Creek canyon, southeast along Sevenmile Creek and Sevenmile Canal to Agency Lake; and the circumference and body of Agency Lake. This includes the Sevenmile Canal from its confluence with Agency Lake upstream to its confluence with the West Canal and Sevenmile Creek (11.6 km (7.2 mi)); 11.7 km (7.3 mi) of Sevenmile Creek from its confluence with Sevenmile Canal and West Canal upstream to the beginning of the Sevenmile Creek canyon above the beaver ponds; the West Canal from its confluence with Agency Lake to its confluence with Sevenmile Canal (15.0 km (9.3 mi)); Crane Creek from its confluence with Fourmile Creek to its source springs at river kilometer (rkm) 6.1 (river mile (rmi) 3.8); Fourmile Creek from its confluence with the West

Canal to source springs at rkm 4.3 (rmi 2.7); Fourmile Slough from its confluence with the West Canal to its head near Crystal Springs at (3.5 km (2.2 mi)); Crystal Creek from its confluence with Upper Klamath Lake to its source springs at rkm 5.0 (rmi 3.1); Recreation Creek from its confluence with Upper Klamath Lake to its confluence with Crystal Creek at rkm 3.7 (rmi 2.3); and the entire 3,775 ha (9,327 ac) Agency Lake. These areas are essential to restoring migratory forms of bull trout in the Upper Klamath Lake core area and reestablishing connectivity among populations of bull trout in Rock, Cherry, Threemile, and Sevenmile Creeks on the west side of the upper Klamath Basin, and populations of bull trout in the Wood River drainage and Crater Lake National Park.

(B) Rock Creek from the lower limit of permanent water at Penn Creek upstream to its origin at Heavenly Twin Lake (9.2 km (5.7 mi)); and Cherry Creek from its confluence with Fourmile Creek to the upper limit of perennial water (15.5 km (9.6 mi)). This area, which is the focus of restoration and reestablishment efforts under the Draft Recovery Plan, is a key watershed for reintroduction of a bull trout population that is essential to the conservation of the species (USFWS 2002).

(C) Threemile Creek from its confluence with Crane Creek to the upper limit of permanent water (6.9 km (4.3 mi)). This spawning and rearing habitat supports an essential local population and is a source for bull trout colonization of other watersheds (USFWS 2002).

(D) The entire 30.3 km (20.7 mi) length of the Wood River; 12.0 km (7.5 mi) of rooked Creek from its confluence with Agency Lake to its source at rkm 14.5 (rmi 9.0); 5.0 km (3.1 mi) of Fort Creek from its confluence with Wood River upstream to the upper limit of permanent water; Annie Creek from its confluence with Wood River upstream 24.5 km (15.2 mi); and Middle Fork of Annie Creek from its confluence with the mainstem Annie Creek to the headwater springs (6.1 km (3.8 mi)). These are areas of spawning and rearing, and foraging, migratory and overwintering habitat. These areas supported bull trout historically (Buchanan 1997).

(E) Sun Creek from its confluence with Annie Creek at rkm 2.0 (rmi 1.2) to the upper limit of bull trout distribution in Sun Meadow at rkm 21.5 (rmi 13.4) (Ratliff and Howell 1992; Bokenica 1997). This spawning and rearing habitat supports an essential local population and is a source for bull trout colonization of other watersheds (USFWS 2002).

(ii) Sycan Marsh CHSU

Encompassing 81,818 ha (202,175 ac), the Sycan Marsh CHSU comprises the Sycan Marsh, its tributaries, and the Sycan River and its tributaries. Landownership comprises: 56 percent Federal lands and 44 percent privately owned lands.

The Sycan Marsh CHSU currently supports two local populations of bull trout considered essential to the conservation of the species—Long Creek and Coyote Creek (USFWS 2002). To achieve recovery of bull trout in the Klamath Basin, the Draft Recovery Plan (USFWS 2002) requires five to seven local populations in the Sycan Marsh CHSU.

(A) Sycan Marsh and Sycan River includes over 23,944 ha (59,166 ac) of the Sycan Marsh, and 31.0 km (19.3 mi) of the Sycan River from its confluence with the Sycan Marsh to the confluence with Rock Creek at rkm 103.2 (rmi 64.1). Portions of this area are currently occupied and other parts were historically inhabited by bull trout. This area is essential for reestablishing migratory forms of bull trout in the Sycan Marsh core area and reestablishing connectivity among populations in Long Creek, Coyote Creek, Rifle Creek, and Boulder Creek. The Sycan River from the confluence with Rock Creek at rkm 103.2 (rmi 64.1) upstream to its origins (11.7 km (7.3 mi)) supported bull trout historically (Ratliff and Howell 1992; Light *et al.* 1996), and is the focus of efforts to establish additional spawning populations of bull trout that are essential to the conservation of the species.

(B) Long Creek from the confluence with Sycan Marsh upstream to its source at rkm 19.6 (rmi 12.2); and 11.3 km (7.0 mi) of spawning and rearing habitat in Calahan Creek from its confluence with Long Creek at rkm 7.7 (rmi 4.8) to its source at Blue Buck Springs. This area is currently occupied by bull trout (Ratliff and Howell 1992; Light *et al.* 1996). This area is essential for maintaining one of the strongest bull trout populations remaining in the Klamath Basin. The area is the focus of restoration and reestablishment efforts as described in the Draft Recovery Plan, and as a relative ''stronghold,'' this area is a potential source of bull trout for colonization that is essential to restoring populations of other watersheds (USFWS 2002).

(C) Coyote Creek from the confluence with the Sycan Marsh 2.4 km (1.5 mi) below the crossing of USFS Road 27 upstream to the upper limit of permanent water at rkm 11.2 (rmi 7.0). The area supports one of only 10 extant populations of bull trout in the Klamath Basin and one of only two in this CHSU. It is the focus of restoration and reestablishment efforts to achieve recovery for this species (USFWS 2002) and is essential to the conservation of the species.

(D) Rifle Creek from the confluence with the Sycan River at rkm 97.7 (rmi 60.7) upstream 4.0 km (2.5 mi) to its origins; the entire length of Boulder Creek from its confluence with the Sycan River at rkm 109.8 (rmi 68.2) upstream 2.5 km (1.5 mi); and South Fork Sycan River from its confluence with the Sycan River at rkm 108.8 (rmi 67.6) upstream 6.1 km (3.8 mi) to its origins. These areas supported bull trout historically (Ratliff and Howell 1992; Light *et al.* 1996), and are the focus of efforts to establish additional spawning populations of bull trout that are essential to the conservation of the species.

(iii) Upper Sprague River CHSU

Encompassing 83,810 ha (207,099 ac), the Upper Sprague River CHSU comprises the drainages of the North and South Forks of the Sprague River and their tributaries. Landownership comprises: 56 percent Federal lands and 44 percent privately owned lands.

The Upper Sprague River CHSU currently supports five local populations of bull trout considered essential to the conservation of the species: Boulder/Dixon Creek; Sheepy Creek; Deming Creek; Brownsworth Creek; and Leonard Creek. A remnant fluvial population exists in the North Fork of the Sprague River (USFWS 2002). To fully achieve recovery of bull trout in the Klamath Basin, the Draft Recovery Plan (USFWS 2002) calls for a total of 7 to 10 local populations in the Upper Sprague River CHSU.

(A) North Fork Sprague River from ''the Elbow'' 3.7 km (2.3 mi) below the confluence of Yaden Creek at rkm 18.0 (rmi 11.2) upstream to the confluence of Blue Lake Creek (31.6 km (19.6 mi)); Boulder Creek from its confluence with the North Fork Sprague River at rkm 24.1 (rmi 15.0) upstream 7.7 km (4.8 mi); Dixon Creek from its confluence with Boulder Creek at rkm 1.2 (rmi 0.7) upstream to its origin (2.2 km (1.4 mi)); and an unnamed tributary to Dixon Creek from the confluence upstream 1.2 km (0.8 mi) to its origin. Bull trout currently occupy the tributaries and at least one mainstem reach of the river (Oregon Chapter of the American Fisheries Society (OCAFS) 1993, Ratliff and Howell 1992; Light *et al.* 1996, J.

auner, Oregon Department of Fish and Wildlife (ODFW), pers. Comm., 1999; R. Smith, ODFW, pers. Comm. 2001). The area supports one of only 10 extant populations of bull trout in the Klamath Basin and one of only five populations in this CHSU, all of which are essential to the conservation of the species. The area is the focus of restoration and reestablishment efforts as described in the Draft Recovery Plan, and as a relative ''stronghold,'' this area is a potential source of bull trout for colonization that is essential to restoring populations of other watersheds (USFWS 2002).

(B) Sheepy Creek from its confluence with the North Fork Sprague at rkm 26.8 (rmi 16.6) to its source springs (5.3 km (3.3 mi)). The area supports one of only 10 extant populations of bull trout in the Klamath Basin and one of only five populations in this CHSU, all of which are essential to the conservation of the species. The area is the focus of restoration and reestablishment efforts as described in the Draft Recovery Plan, and as a relative ''stronghold,'' this area is a potential source of bull trout for colonization that is essential to restoring populations of other watersheds (USFWS 2002).

(C) Gearhart Creek from its confluence with the North Fork Sprague at rkm 32.6 (rmi 20.2) upstream to Gearhart Marsh (9.0 km (5.6 mi)) (above Gearhart Marsh flows become intermittent; Hole Creek from its confluence with Gearhart Creek at rkm 1.9 (rmi 1.2) upstream to the upper limit of permanent water (3.3 km (2.0 mi)); Nottin Creek from its confluence with Gearhart Creek at rkm 1.7 (rmi 1.1) upstream to the upper limit of permanent water 5.3 km (3.3 m); and School Creek from its confluence with the North Fork Sprague River at rkm 43.4 (rmi 27.0) to its origins (7.0 km (4.3 mi)). This area is the focus of efforts to reestablish additional spawning populations of bull trout essential to the conservation of the species, as described in the Draft Recovery Plan (USFWS 2002).

(D) Dead Cow Creek from its confluence with the North Fork Sprague River at rkm 46.9 (rmi 29.1) upstream 6.6 km (4.1 mi); and Gold Creek from its confluence with Dead Cow Creek at rkm 1.5 (rmi 0.9) upstream 2.9 km (1.8 mi). The Dead Cow drainage (Dead Cow and Gold creeks) supported bull trout historically. This area is the focus of efforts to reestablish additional spawning populations of bull trout essential to the conservation of the species, as described in the Draft Recovery Plan (USFWS 2002).

(E) The entire length of Deming Creek from its confluence with Anderson Field to its headwaters at rkm 7.8 (rmi 4.8). Deming Creek is currently inhabited by bull trout and is the largest remaining local population in the Klamath Basin (Ratliff and Howell 1992; Light *et al.* 1996). The area supports the largest of only 10 populations of bull trout in the Klamath Basin and the largest of only five populations in this CHSU, all of which are essential to the conservation of the species. The area is the focus of restoration and reestablishment efforts as described in the Draft Recovery Plan, and as a relative ''stronghold,'' this area is a potential source of bull trout for colonization that is essential to restoring populations of other watersheds (USFWS 2002).

(F) Lower South Fork Sprague River from the confluence of Brownsworth Creek at rkm 23.0 (rmi 14.3) upstream 21.7 km (13.5 mi) to the confluence of Camp Creek; Camp Creek from its confluence with the South Fork Sprague River at rkm 44.7 (rmi 27.8) to its origin (5.0 km (3.1 mi)); Corral Creek from its confluence with the South Fork Sprague River at rkm 46.3 (rmi 28.8) to its origin (4.5 km (2.8 mi)); Upper South Fork Sprague River from the confluence with Camp Creek at rkm 44.7 (rmi 27.8) upstream to its source at rkm 50.3 (rmi 31.2) (5.6 km (3.5 mi)); and the entire length of Brownsworth Creek from its confluence with the South Fork Sprague River upstream 13.3 km (8.8 mi) to the upper limit of permanent water. These areas are currently occupied by an essential local population (OCASF 1993; Light *et al.* 1996; Buchanan *et al.*1997; USFWS 2002). This area is the focus of efforts to reestablish additional spawning populations of bull trout essential to the conservation of the species, as described in the Draft Recovery Plan (USFWS 2002).

(G) Leonard Creek from its confluence with Brownsworth Creek at rkm 7.0 (rmi 4.3) upstream to its source. Leonard Creek is currently inhabited by bull trout (Ratliff and Howell 1992; Light *et al.* 1996). The area supports one of only 10 extant populations of bull trout in the Klamath Basin and one of only five populations in this CHSU, all of which are essential to the conservation of the species. The area is the focus of restoration and reestablishment efforts as described in the Draft Recovery Plan, and as a relative ''stronghold,'' this area is a potential source of bull trout for colonization that is essential to restoring populations of other watersheds (USFWS 2002).

(6) Unit 2: Clark Fork River Basin

The Clark Fork River Basin unit includes 12 CHSUs, organized primarily on the basis of major watersheds. It includes most of western Montana and the panhandle portion of northern Idaho. The summary of landownership and extent of proposed critical habitat are presented with each CHSU description.

(i) Lake Pend Oreille CHSU

The Lake Pend Oreille CHSU incorporates all waters in the Clark Fork River drainage downstream from Cabinet Gorge Dam (near the Montana/Idaho border), including all direct tributaries to Lake Pend Oreille, the lower portion of the Priest River drainage (downstream from Priest Lake Dam), and the Pend Oreille River (the impounded downstream arm of Lake Pend Oreille) downstream to the crest of Albeni Falls Dam. The CHSU is almost entirely within the State of Idaho in Boundary, Bonner, and Kootenai counties. A total of 286 km (178 mi) of 27 streams and the 38,304 ha (94,650 ac) surface area of Lake Pend Oreille are proposed for designation as critical habitat for bull trout. Landownership along the streams is approximately 36 percent Federal, 14 percent State, and 50 percent private. Lakeshore ownership has not been quantified, but approximately half of it is private with the other half mostly on Federal (National Forest) lands. Bull trout local populations in this CHSU include Lower Priest River, Pack River, Grouse Creek, Trestle Creek, Gold Creek, North Gold Creek, Granite Creek, Johnson Creek, Lightning Creek Complex, Twin Creek, and Clark Fork River, all of which are considered essential for recovery of the species (USFWS 2002).

(A) Lake Pend Oreille totals about 38,304 ha (94,650 ac). The best available scientific information indicates that most bull trout in the Lake Pend Oreille CHSU are migratory and adfluvial, using the lake for a portion of their life cycle (Panhandle Bull Trout Technical Advisory Team (PBTTAT) 1998a).

(B) The lower Priest River from its confluence with the Pend Oreille River (the impounded downstream arm of Lake Pend Oreille) upstream 34.4 km (21.4 mi) to the confluence with the East River provides foraging, migratory, and overwintering (FMO) habitat connecting spawning areas with Lake Pend Oreille. The East River from its confluence with the Priest River upstream 4.0 km (2.5 mi), and the Middle Fork East River from its confluence with the East River upstream 15.5 km (9.6 mi) provide spawning and rearing habitat for primarily migratory forms of bull trout. Tarlac Creek from its confluence with the Middle Fork East River upstream 5.3 km (3.3 mi) to the headwaters, and

Uleda Creek from its confluence with the Middle Fork East River upstream 5.9 km (3.7 mi) provide spawning and rearing habitat for bull trout that are likely resident forms.

(C) The Pack River from its confluence with Lake Pend Oreille upstream 64.1 km (39.8 mi) contains FMO habitat in the lower reaches, and spawning and spawning and rearing habitat in the upper reaches for the Pack River local population of bull trout.

(D) Grouse Creek from its confluence with the Pack River upstream 26.7 km (16.6 mi) to the headwaters contains FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches. North Fork Grouse Creek from its confluence with Grouse Creek upstream 14.8 km (9.2 mi) to the headwaters provides spawning and rearing habitat.

(E) Trestle Creek from its confluence with Lake Pend Oreille upstream 14.4 km (8.9 mi) provides the most productive spawning and rearing habitat in the Lake Pend Oreille CHSU.

(F) Gold Creek from its confluence with Lake Pend Oreille upstream 2.7 km (1.7 mi), West Gold Creek from its confluence with Gold Creek upstream 2.3 km (1.4 mi), and North Gold Creek from its confluence with Lake Pend Oreille upstream 2.0 km (1.3 mi) provide spawning and rearing habitat for the Gold Creek bull trout local population complex. Gold Creek is considered the second most important bull trout spawning stream in the Lake Pend Oreille critical habitat subunit (PBTTAT 1998a)

(G) Granite Creek from its confluence with Lake Pend Oreille upstream 10.1 km (6.3 mi), Sullivan Springs from its confluence with Granite Creek upstream 2.1 km (1.3 mi), and Dry Gulch from its confluence with Granite Creek upstream 1.7 km (1.0 mi) provide spawning and rearing habitat for the Granite Creek population complex.

(H) Johnson Creek from its confluence with the south channel of the Clark Fork River delta at the confluence with Lake Pend Oreille upstream 1.2 km (0.7 mi) provides spawning and rearing habitat for the Johnson Creek local population.

(I) The Clark Fork River from its confluence with Lake Pend Oreille upstream 14.6 km (9.1 mi) to Cabinet Gorge Dam provides FMO habitat between Lake Pend Oreille and upstream local populations in Lightning and Twin creeks.

(J) Lightning Creek from its confluence with the Clark Fork River upstream 29.5 km (18.3 mi) to a barrier falls provides FMO habitat in the lower reaches below the confluence with East Fork Creek, and spawning and rearing habitat in the upper reaches above this point. Morris Creek from its confluence with Lightning Creek upstream 3.3 km (2.1 mi), East Fork Creek from its confluence with Lightning Creek upstream 6.5 km (4.1 mi), Savage Creek from its confluence with East Fork Creek upstream 5.9 km (3.7 mi), Char Creek from its confluence with East Fork Creek upstream 3.4 km (2.1 mi), Porcupine Creek from its confluence with Lightning Creek upstream 3.0 km (1.9 mi), Wellington Creek from its confluence with Lightning Creek upstream 1.0 km (0.6 mi), and Rattle Creek from its confluence with Lightning Creek upstream 6.0 km (3.7 mi) provide spawning and rearing habitat for the Lightning Creek population complex (Lake Pend Oreille Watershed Advisory Group 1999).

(K) Dry Creek from its confluence with the Clark Fork River upstream 0.1 km (0.06 mi) to the confluence with Twin Creek provides a migratory connection between Clark Fork River and Twin Creek. Twin Creek from its confluence with Dry Creek upstream 3.9 km (2.4 mi) provides spawning and rearing habitat for the Twin Creek local population of bull trout.

(ii) Lower Clark Fork River CHSU

The Lower Clark Fork River CHSU includes the three mainstem Clark Fork River impoundments (Cabinet Gorge, Noxon Rapids, and Thompson Falls reservoirs), the Clark Fork River between reservoirs and upstream to the confluence of the Flathead River, the lower Flathead River drainage downstream from Kerr Dam, and all tributaries to these waters. With the exception of the lower boundary at Cabinet Gorge Dam (in Bonner County, Idaho), nearly all the CHSU is located in the northwestern corner of Montana (Sanders, Lake, and Missoula counties).

Major portions of this CHSU, including the entire lower Flathead River drainage, are inside the boundaries of the Flathead Indian Reservation, and fall under the jurisdiction of the Confederated Salish and Kootenai Tribes (CSKT). There are 13 local populations of bull trout in this CHSU: Rock Creek, Bull River, Prospect Creek, Graves Creek, Vermilion River, Fishtrap Creek, West Fork Thompson River, Post Creek, Mission Creek, Dry Creek, and Jocko River, all of which are essential to the conservation of the species.

A total of 503 km (312 mi) of 24 streams and 4,862 ha (12,014 ac) of lake surface area in five reservoirs (Cabinet Gorge, Noxon Rapids, Mission, McDonald, and Tabor) is proposed for designation as critical habitat for bull trout in this CHSU. Landownership along the streams is approximately 31 percent Federal, 1 percent State, 13 percent CSKT Tribal, and 55 percent private. Landownership on the reservoir shoreline has not been determined, but its mostly private land along the two large reservoirs with less than 25 percent as National Forest. The three small reservoirs are completely surrounded by CSKT Tribal Lands.

(A) Cabinet Gorge Reservoir (Clark Fork River), 1,295 ha (3,200 ac) at full pool, provides FMO habitat for the Bull River and Rock Creek local populations of bull trout (Pratt and Huston 1993).

(B) The Bull River from its confluence with Cabinet Gorge Reservoir (Clark Fork River) upstream 14.3 km (8.9 mi) to the confluence with the South and East forks provides FMO habitat for upstream local populations. Copper Creek from its confluence with the Bull River upstream 7.4 km (4.6 mi) to the headwaters provides rearing habitat (MBTSG 1996a). The Bull River East Fork from its mouth upstream 12.8 km (8 mi) and the Bull River South Fork from its mouth upstream 29.8 km (18.6 mi) provide spawning and rearing habitat for the Bull River local population (MBTSG 1996a).

(C) Rock Creek from its confluence with Cabinet Gorge Reservoir (Clark Fork River) upstream 11.4 km (7.1 mi) to a natural barrier provides spawning and rearing habitat for the Rock Creek local population.

(D) Noxon Rapids Reservoir (Clark Fork River), 3,237 ha (8,000 ac) at full pool, provides FMO habitat for low abundance local populations in the reservoir tributaries (Pratt and Huston 1993; MBTSG 1996a).

(E) The Vermilion River from its confluence with Noxon Rapids Reservoir (Clark Fork River) upstream 12.3 km (7.6 mi) to a natural barrier at Vermilion Falls provides important spawning and rearing habitat for the Vermilion River local population. Graves Creek from its confluence with Noxon Rapids Reservoir upstream 5.0 km (3.1 mi) to a natural barrier, Prospect Creek from its confluence with Noxon Rapids Reservoir upstream 12.3 km (7.6 mi), Crow Creek from its confluence with Prospect Creek upstream 2.0 km (1.2 mi), and Crow Creek East Fork from its confluence with Crow Creek upstream 5.5 km (3.4 mi) all provide spawning and rearing habitat as well (Pratt and Huston 1993; MBTSG 1996a).

(F) The Clark Fork River upstream 93.3 km (58.0 mi) from the head of Noxon Rapids Reservoir to the confluence with the Flathead River provides FMO habitat for tributary

populations of bull trout (Pratt and Huston 1993).

(G) The Thompson River from its confluence with the Clark Fork River upstream 32.3 km (20.0 mi) contains FMO habitat. West Fork Thompson River from its mouth upstream 8.0 km (5.0 mi) to the confluence of Lakes Creek; Fishtrap Creek from its confluence with the Thompson River upstream 17.0 km (10.5 mi) to the confluence with Fishtrap Creek West Fork, Beatrice Creek from its confluence with Fishtrap Creek upstream 8.5 km (5.3 mi) to its headwaters, and Fishtrap Creek West Fork from its mouth upstream 10.2 km (6.4 mi) provide spawning and rearing habitat necessary for the recovered distribution of bull trout (USFWS 2002). Bull trout in the West Fork Thompson River are categorized as being among the strongest remaining populations in the Thompson River basin (MBTSG 1996d).

(H) The Flathead River from the confluence with the Clark Fork River (about 60 km (37 mi) upstream from Thompson Falls Dam) upstream to the confluence with Mission Creek is occupied by bull trout at low abundance levels (MBTSG 1996d), and provides FMO habitat necessary for the recovered distribution of bull trout (USFWS 2002), including maintaining populations and the migratory life history form essential to the long-term conservation of bull trout.

(I) The Jocko River from its confluence with the Flathead River upstream 47.0 km (29.2 mi) to the confluence with the North Fork Jocko River provides FMO habitat. The North Fork Jocko River from its mouth upstream 9.9 km (6.1 mi) to a natural barrier, the South Fork Jocko River from its mouth upstream 15.0 km (9.3 mi) to a natural barrier, and the Middle Fork Jocko River from its mouth upstream 14.2 km (8.8 mi) are occupied, and provide spawning and rearing habitat for the Jocko River local population. Together these areas provide habitat necessary for the recovered distribution of bull trout (USFWS 2002), including maintaining populations and the migratory life history form essential to the long-term conservation of bull trout.

(J) Mission Creek from its confluence with the Flathead River upstream 34.8 km (21.7 mi) to Mission Dam, Post Creek from its confluence with Mission Creek upstream 26.1 km (16.2 mi) to a manmade barrier at McDonald Lake, and Dry Creek from its confluence with Mission Creek upstream 14.2 km (8.8 mi) to a manmade barrier at Tabor Reservoir are occupied, at a minimum, by migratory bull trout from the reservoirs and lake (MBTSG 1996d), and provide FMO habitat necessary for the recovered distribution of bull trout (USFWS 2002), including maintaining populations and the migratory life history form essential to the conservation of bull trout. These creeks also provide occupied spawning and rearing habitat above the reservoirs and lake (MBTSG 1996d). Mission Creek spawning and rearing habitat extends upstream approximately 1.6 km (1.0 mi) above Mission Reservoir to a manmade barrier. Post Creek spawning and rearing habitat extends upstream approximately 3.2 km (2 mi) above McDonald Lake to a natural barrier. Dry Creek spawning and rearing habitat extends upstream approximately 0.8 km (0.5 mi) above Tabor Reservoir to a natural barrier. McDonald Reservoir (approximately 101 ha (250 ac), when full), Mission Reservoir (approximately 117 ha (289 ac), when full), and Tabor Reservoir (St. Mary Lake) (approximately 111 ha (274 ac), when full) provide FMO habitat for the Post Creek, Mission Creek, and Dry Creek local populations, respectively (MBTSG 1996d).

(iii) Middle Clark Fork River CHSU

The Middle Clark Fork River CHSU includes the mainstem of the Clark Fork River in western Montana and all tributary watersheds, from the confluence of the Flathead River upstream to the base of Milltown Dam, except for the Bitterroot River drainage. A total of 622 km (386 mi) of 28 streams is proposed for designation as critical habitat for bull trout in this CHSU. Landownership along the streams is approximately 51 percent Federal, 3 percent State, and 46 percent private, all occurring in Mineral and Missoula counties, Montana.

(A) The Clark Fork River from the confluence with the Flathead River upstream approximately 192.1 km (119.4 mi) to Milltown Dam provides historically occupied FMO habitat that is still currently occupied, but at very low abundance levels (Pratt and Huston 1993;MBTSG 1996d). This reach is important to provide for the recovered distribution of bull trout (USFWS 2002), including the maintenance of existing populations and the migratory life history form essential to the conservation of bull trout.

(B) The St. Regis River from its confluence with the Clark Fork River upstream 62.1 km (38.6 mi) to its headwaters provides FMO habitat in the lower reaches up to Twelvemile Creek, and spawning and rearing habitat in the upper reaches. Little Joe Creek from its confluence with the St. Regis River upstream 4.0 km (2.5 mi) to its forks; South Fork Little Joe Creek from its mouth upstream 16.3 km (10.1 mi) to its headwaters; North Fork Little Joe Creek from its mouth upstream 17.2 km (10.7 mi) to its headwaters; Ward Creek from its confluence with the St. Regis River upstream 12.3 km (7.6 mi) to its headwaters; Twelvemile Creek from its confluence with the St. Regis River upstream 21.6 km (13.4 mi) to its headwaters; Deer Creek from its confluence with the St. Regis River upstream 6.6 km (4.1 mi); Big Creek from its confluence with the St. Regis River upstream 5.4 km (3.4 mi) to its forks; East Fork Big Creek from its mouth upstream 9.6 km (5.9 mi) to its headwaters; Middle Fork Big Creek from its mouth upstream 8.0 km (5.0 mi); and West Fork Big Creek from its mouth upstream 9.2 km (5.7 mi) provide spawning and rearing habitat for the St Regis River local population complex of bull trout (MBTSG 1996d).

(C) Cedar Creek from its confluence with the Clark Fork River upstream 24.7 km (15.3 mi), Oregon Gulch from its confluence with Cedar Creek upstream 4.5 km (2.8 mi), and Lost Creek from its confluence with Oregon Gulch upstream 11.4 km (7.1 mi) provide spawning and rearing habitat for the Cedar Creek local population of bull trout (MBTSG 1996d), as well as to provide for the recovered distribution of bull trout (USFWS 2002).

(D) Trout Creek from its confluence with the Clark Fork River upstream 23.6 km (14.7 mi) contains spawning and rearing habitat (MBTSG 1996d) for the Trout Creek local population.

(E) Fish Creek from its confluence with the Clark Fork River upstream 14.7 km (9.1 mi) to its forks provides FMO habitat to upstream bull trout. North Fork Fish Creek from its mouth upstream 16.1 km (10.0 mi); Straight Creek from its confluence with North Fork Fish Creek upstream 13.1 km (8.1 mi) to its headwaters; West Fork Fish Creek from its confluence with Fish Creek upstream 28.2 km (17.5 mi); Indian Creek from its confluence with West Fork Fish Creek upstream 2.1 km (1.3 mi); South Fork Fish Creek from its confluence with Fish Creek upstream 25.1 km (15.6 mi) to its headwaters; Surveyors Creek from its confluence with South Fork Fish Creek upstream 6.6 km (4.1 mi) to its headwaters; Cache Creek from its confluence with South Fork Fish Creek upstream 15.8 km (9.8 mi); Montana Creek from its confluence with Cache Creek upstream 9.2 km (5.7 mi) to its headwaters; and White Creek from its confluence with Cache Creek upstream 7.3 km (4.5 mi) to its headwaters provide spawning and rearing habitat for the Fish Creek local population complex (MBTSG 1996d).

(F) Petty Creek from its confluence with the Clark Fork River upstream 18.6 km (11.6 mi) provides spawning and rearing habitat for the Petty Creek local population (MBTSG 1996d).

(G) Rattlesnake Creek from its confluence with the Clark Fork River upstream 37.5 km (23.3 mi) to the headwaters provides FMO habitat in the lower reaches (up to Mountain Water Company Dam), and spawning and rearing habitat above that point (MBTSG 1996d).

(iv) Upper Clark Fork River CHSU

The Upper Clark Fork River CHSU includes the entire Clark Fork River in western Montana upstream from Milltown Dam (near Missoula), with the exception of the Blackfoot River, Clearwater River, and Rock Creek drainages. A total of 484 km (301 mi) of 13 streams is proposed for designation as critical habitat for bull trout in this CHSU in Missoula, Granite, Powell, and Deer Lodge counties. Landownership adjacent to proposed stream segments is approximately 25 percent Federal, 3 percent State, and 72 percent private.

(A) The Clark Fork River from Milltown Dam upstream approximately 185 km (115 mi) to the headwaters at the confluence with Warm Springs Creek provides FMO habitat for the recovered distribution of bull trout (USFWS 2002). This area is important to provide for the maintenance of existing populations and the migratory life history form essential to the long-term conservation of bull trout.

(B) Harvey Creek from its confluence with the Clark Fork River upstream 25.0 km (15.6 mi) to its headwaters provides FMO habitat below a manmade barrier about 0.4 km (0.2 mi) above the confluence, and spawning and rearing habitat above that point for the resident Harvey Creek local population (MBTSG 1995e).

(C) Flint Creek from its confluence with the Clark Fork River upstream 25.9 km (16.1 mi) to its confluence with Boulder Creek is occupied at low abundance but provides FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches (MBTSG 1995e).

(D) Boulder Creek from its confluence with Flint Creek upstream 22.6 km (14.0 mi), and South Boulder Creek from its confluence with Flint Creek upstream 13.7 km (8.5 mi) provide spawning and rearing habitat (MBTSG 1995e).

(E) The Little Blackfoot River from its confluence with the Clark Fork River upstream 76.8 km (47.7 mi) to its headwaters provides FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches. This river is necessary both to provide for the recovered distribution of bull trout as well as to maintain spawning populations in the upper reaches (MBTSG 1995e; USFWS 2002).

(F) Racetrack Creek from its confluence with the Clark Fork River upstream19.9 km (12.4 mi) to a natural barrier near the junction of Granite Creek provides spawning and rearing habitat for the Racetrack Creek local population (MBTSG 1995e).

(G) Warm Springs Creek from its confluence with the Clark Fork River upstream 52.4 km (32.5 mi) provides FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches to support both the Warm Springs local population complex, and provide for the recovered distribution of bull trout (USFWS 2002), including maintaining existing populations and the migratory life history form essential to the long-term conservation of bull trout. Barker Creek from its confluence with Warm Springs Creek upstream 8.0 km (5.0 mi) to its headwaters at Barker Lake, Foster Creek from its confluence with Warm Springs Creek upstream 15.8 km (9.8 mi) to its headwaters, Twin Lakes Creek from its confluence with Warm Springs Creek upstream16.2 km (10.1 mi) to its headwaters, Cable Creek from its confluence with Warm Springs Creek upstream 5.0 km (3.1 mi) to its headwaters, and Storm Lake Creek from its confluence with Cable Creek upstream17.5 km (10.9 mi) provide spawning and rearing habitat to support the Warm Springs population complex, as well as provide for the recovered distribution of bull trout (MBTSG 1995e; USFWS 2002).

(v) Priest Lakes and River CHSU

The Priest Lakes and River CHSU0 includes the entire drainage of the Priest River upstream from Priest Lake Dam, including Priest and Upper Priest lakes, in Boundary and Bonner counties, Idaho. The extreme headwaters lie in British Columbia, Canada, and the headwaters of several west side drainages are in the State of Washington. A total of 267 km (430 mi) of 19 streams and 9,970 ha (24,636 ac) of lake surface area in Priest and Upper Priest lakes is proposed for designation as critical habitat for bull trout. Landownership along the streams is approximately 58 percent Federal, 33 percent State, and 9 percent private. Landownership along the lake shores has not been quantified, but Priest Lake is approximately 75 percent private land, or leased State or Federal land with cabins and home sites. The rest is undeveloped National Forest, as is the entire shoreline of Upper Priest Lake.

(A) The Upper Priest River from a waterfall approximately 1.0 km (0.6 mi) downstream of the border between Idaho and Canada upstream 31.6 km (19.6 mi) to the confluence with Upper Priest Lake; Rock Creek from the confluence with the Upper Priest River upstream 6.1 km (3.8 mi) to its headwaters; Lime Creek from the confluence with the Upper Priest River upstream 6.4 km (4.0 mi) to its headwaters; and Cedar Creek from the confluence with the Upper Priest River upstream 6.8 km (4.2 mi) to its headwaters provide spawning and rearing habitat for adfluvial bull trout inhabiting Upper Priest Lake (PBTTAT 1998b; USFWS 2002).

(B) Hughes Fork from the confluence with the Upper Priest River upstream 22.7 km (14.1 mi) to its headwaters, and Gold Creek from the confluence with Hughes Fork upstream 12.6 km (7.8 mi) to its headwaters provide spawning and rearing habitat for adfluvial bull trout inhabiting Upper Priest Lake (Hughes Fork local population) (PBTTAT 1998b; USFWS 2002).

(C) Upper Priest Lake (542 ha (1,338 ac)) provides FMO habitat supporting the Upper Priest Lake, Hughes Fork, and Trapper Creek local populations of bull trout (PBTTAT 1998b).

(D) Trapper Creek from the confluence with Upper Priest Lake upstream 12.7 km (7.9 mi) to its headwaters provides spawning and rearing habitat for the Trapper Creek local population (PBTTAT 1998b; USFWS 2002).

(E) Priest River Thorofare, a 4.3 km (2.7 mi) channel between Upper Priest and Priest Lakes provides FMO habitat connecting bull trout populations in the Priest Lakes basin. Priest Lake (9,429 ha (23,300 ac) provides FMO habitat for dwindling numbers of adfluvial bull trout that spawn and rear in the lake's tributaries (Pratt and Huston 1993).

(F) Lion Creek from the confluence with Priest Lake upstream 18.2 km (11.3 mi) to its headwaters, and South Fork Lion Creek from its confluence with Lion Creek upstream 8.0 km (5.0 mi) to its headwaters contain spawning and rearing habitat for the Lion Creek local population of bull trout (PBTTAT 1998b; USFWS 2002).

(G) Two Mouth Creek from the confluence with Priest Lake upstream 15.7 km (9.8 mi) to its headwaters provides spawning and rearing habitat for the Two Mouth Creek local population (PBTTAT 1998b; USFWS 2002).

(H) Granite Creek from the confluence with Priest Lake upstream 17.8 km (11.1 mi) to its forks, South Fork Granite Creek from the confluence with Granite

Creek upstream 22.6 km (14.0 mi) to its headwaters, and North Fork Granite Creek from the confluence with Granite Creek upstream 18.9 km (11.8 mi) to its headwaters provide spawning and rearing habitat for the Granite Creek local population of bull trout (PBTTAT 1998b; USFWS 2002).

(I) Indian Creek from the confluence with Priest Lake upstream 5.2 km (3.2 mi) to its forks, South Fork Indian Creek from its mouth upstream 5.8 km (3.6 mi) to its headwaters, and North Fork Indian Creek from its mouth upstream 11.7 km (7.3 mi) to its headwaters provide spawning and rearing habitat for the Indian Creek local population of bull trout (PBTTAT 1998b; USFWS 2002).

(J) Kalispell Creek from the confluence with Priest Lake upstream 23.3 km (14.5 mi) to its headwaters provides spawning and rearing habitat for the Kalispell Creek local population of bull trout (PBTTAT 1998b; USFWS 2002).

(K) Soldier Creek from the confluence with Priest Lake upstream 23.3 km (14.5 mi) to its headwaters provides spawning and rearing habitat for the Soldier Creek local population of bull trout (PBTTAT 1998b; USFWS 2002).

(vi) Flathead Lake, Flathead River, and 20 Headwater Lakes CHSU

The Flathead Lake CHSU includes the entire Flathead River basin upstream from Kerr Dam (outlet of Flathead Lake), with the exception of the Swan River drainage upstream from Bigfork Dam, and the South Fork Flathead River drainage upstream from Hungry Horse Dam in Flathead and Lake counties, Montana. Flathead Lake is the largest natural freshwater lake west of the Mississippi River in the United States. Twenty other natural glaciated lakes up to 2,800 ha (6,919 ac) in size are occupied by bull trout in this CHSU. The entire south half of Flathead Lake is inside the boundaries of the Flathead Indian Reservation, and falls under the jurisdiction of the Confederated Salish and Kootenai Tribes. A total of 837 km (520 mi) of 57 streams and 56,838 ha (140,449 ac) of lake surface area in 21 lakes is proposed for designation as critical habitat for bull trout in this CHSU. Landownership along the streams is approximately 68 percent Federal, 10 percent State, and 22 percent private. Substantial portions of the Federal lands are in Glacier National Park or Congressionally designated wilderness. Lakeshore ownership is mixed: Flathead Lake (49,575 ha (20,062 ac)) makes up about 87 percent of the lake surface area. The south half of Flathead Lake lies on the Flathead Indian Reservation, though most of the lakeshore is privately owned and developed. The north half of Flathead Lake is also almost entirely private and developed into homes and resorts. Fifteen of the other lakes (5,556 ha (13,729 ac) are in Glacier National Park, though road and campground development exists on most of the larger lakes, and commercial development and some private land occurs along Lake McDonald. The shoreline of 1,356 ha (3,350 ac) Whitefish Lake is almost entirely private and developed. Of the remaining four lakes, three (Upper Whitefish, Upper Stillwater, and Cyclone) are primarily surrounded by State lands that have been logged, but not developed. Only one very small lake, Frozen Lake (12 ha (30 ac)) which spans the International Border with Canada, is located on National Forest land.

(A) The entire basin of Flathead Lake, to the high water mark (49,574 ha (122,500 ac)) provides FMO habitat for tributary populations of bull trout (Fraley and Shepard 1989).

(B) The Flathead River from its confluence with Flathead Lake upstream 85.4 km (53.1 mi) to its forks; the Middle Fork Flathead River from its mouth upstream 140.3 km (87.2 mi) to its headwaters; and the North Fork Flathead River from its mouth upstream 92.9 km (57.7 mi) to the Canadian border provide FMO habitat for multiple local populations of bull trout (MBTSG 1995c; USFWS 2002).

(C) Nyack Creek from its confluence with the Middle Fork Flathead River upstream 11.4 km (7.1 mi) to a naturally de-watered reach provides spawning and rearing habitat for the Nyack Creek local population (MBTSG 1995c; USFWS 2002).

(D) Park Creek from its confluence with the Middle Fork Flathead River upstream 13.7 km (8.5 mi) to the confluence with its' tributary Elk Creek provides spawning and rearing habitat for the Park Creek local population (MBTSG 1995c; USFWS 2002).

(E) Ole Creek from its confluence with the Middle Fork Flathead River upstream 12.6 km (7.9 mi) to a naturally de-watered reach near the trail junction, just upstream of Debris Creek, provides spawning and rearing habitat for the Ole Creek local population (MBTSG 1995c; USFWS 2002).

(F) Bear Creek from its confluence with the Middle Fork Flathead River upstream 17.7 km (11.0 mi) to a barrier at the junction of Skyland Creek provides spawning and rearing habitat for the Bear Creek local population (MBTSG 1995c; USFWS 2002).

(G) Long Creek from its confluence with the Middle Fork Flathead River upstream approximately 8.0 km (5.0 mi) provides spawning and rearing habitat for the Long Creek local population (MBTSG 1995c; USFWS 2002).

(H) Granite Creek from its confluence with the Middle Fork Flathead River upstream 13.1 km (8.1 mi) to its headwaters provides spawning and rearing habitat for the Granite Creek local population (MBTSG 1995c; USFWS 2002).

(I) Morrison Creek from its confluence with the Middle Fork Flathead River upstream 19.8 km (12.3 mi) to the junction with Puzzle Creek; Puzzle Creek from its mouth upstream 4.4 km (2.7 mi) to its headwaters, Lodgepole Creek from its confluence with Morrison Creek upstream 3.1 km (1.9 mi) to its junction with Whistler Creek; and Whistler Creek from its mouth upstream 5.9 km (3.7 mi) to its headwaters provide spawning and rearing habitat for the Morrison Creek local population (MBTSG 1995c; USFWS 2002).

(J) Schafer Creek from its confluence with the Middle Fork Flathead River upstream 5.9 km (3.7 mi) to a natural barrier near the confluence of Rouge Creek, and Dolly Varden Creek from its junction with Schafer Creek upstream 12.1 km (7.5 mi) to Dolly Varden Falls near the confluence of Argosy Creek provide spawning and rearing habitat for the Schafer Creek local population (MBTSG 1995c; USFWS 2002).

(K) Clack Creek from its confluence with the Middle Fork Flathead River upstream 3.9 km (2.4 mi) to a natural barrier approximately one-third the distance up its watershed near the trail junction to Trilobite Lakes provides spawning and rearing habitat for the Clack Creek local population (MBTSG 1995c; USFWS 2002).

(L) Bowl Creek from its confluence with the Middle Fork Flathead River upstream 7.9 km (4.9 mi) to the junction with Basin Creek; Basin Creek from its mouth upstream 10.0 km (6.2 mi) to a natural barrier in its upper reaches; and Scalp Creek from its confluence with Bowl Creek upstream 4.6 km (2.8 mi) to its headwaters provide spawning and rearing habitat for the Bowl Creek local population (MBTSG 1995c; USFWS 2002).

(M) Strawberry Creek from its confluence with the Middle Fork Flathead River upstream 21.2 km (13.2 mi) to its headwaters; Trail Creek from its junction with Strawberry Creek upstream 7.3 km (4.6 mi) to the junction with Jeff Creek; Gateway Creek from its confluence Strawberry Creek upstream 9.3 km (5.8 mi) to its headwaters; and East Fork Strawberry Creek from its confluence Strawberry Creek upstream 5.7 km (3.5 mi) to its headwaters

provide spawning and rearing habitat for the Strawberry Creek local population (MBTSG 1995c; USFWS 2002).

(N) Big Creek from its confluence with the North Fork Flathead River upstream 18.4 km (11.4 mi) to a natural barrier in the headwaters upstream from Nicola Creek; Skookoleel Creek from its confluence with Big Creek upstream 8.2 km (5.1 mi) to its headwaters; Hallowat Creek from its mouth at Big Creek upstream 14,8 km (9.2 mi) to its headwaters; Werner Creek from its mouth at Hallowat Creek upstream 4.0 km (2.5 mi) to its headwaters; and Kletomus Creek from its mouth at Hallowat Creek upstream 8.2 km (5.1 mi) to its headwaters provide spawning and rearing habitat for the Big Creek local population (MBTSG 1995c; USFWS 2002).

(O) Coal Creek from its confluence with the North Fork Flathead River upstream 28.5 km (17.7 mi) to its headwaters; Cyclone Creek from its confluence with Coal Creek upstream 5.0 km (3.1 mi) to Cyclone Lake; South Fork Coal Creek from its mouth upstream10.2 km (6.4 mi) to a natural barrier; and Mathias Creek from its mouth at South Fork Coal Creek upstream 4.6 km (2.9 mi) to a natural barrier provide spawning and rearing habitat for the Coal Creek local population (MBTSG 1995c; USFWS 2002). Approximately 1.0 km (0.6 mi) of Cyclone Creek downstream from Cyclone Lake may also provide spawning and rearing habitat for the Cyclone Lake local population (MBTSG 1995c).

(P) Cyclone Lake (49 ha (121 ac)) provides FMO habitat, and Cyclone Creek from its confluence with Cyclone Lake upstream 8.6 km (5.4 mi) to its headwaters provides spawning and rearing habitat for the Cyclone Creek local population (USFWS 2002).

(Q) Red Meadow Creek from its confluence with the North Fork Flathead River upstream 22.3 km (13.9 mi) to its source at Red Meadow Lake provides spawning and rearing habitat for the Red Meadow Creek local population (MBTSG 1995c; USFWS 2002).

(R) Whale Creek from its confluence with the North Fork Flathead River upstream 23.0 km (14.3 mi) to Whale Creek Falls upstream from Shorty Creek; Shorty Creek from its confluence with Whale Creek upstream 4.4 km (2.7 mi) to the junction of South Fork Shorty Creek; and South Fork Shorty Creek upstream 1.6 km (1.0 mi) to a natural barrier near an unnamed tributary originating in Stoney Basin Lake provide spawning and rearing habitat for the Whale Creek local population (MBTSG 1995c; USFWS 2002).

(S) Trail Creek from its confluence with the North Fork Flathead River upstream 13.3 km (8.3 mi) to a natural barrier near the junction of Thoma Creek provides spawning and rearing habitat for the Trail Creek local population (MBTSG 1995c; USFWS 2002).

(T) Whitefish Lake (1,356 ha (3,351 ac)) provides FMO habitat for the depressed Whitefish Lake local population. Swift Creek from Whitefish Lake upstream 26.5 km (16.5 mi) to the junction of its East and West Forks provides FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches. West Fork Swift Creek from its mouth upstream 13.7 km (8.5 mi) to its headwaters provides spawning and rearing habitat for this local population (MBTSG 1995c; USFWS 2002).

(U) Upper Whitefish Lake (36 ha (89 ac)) provides FMO habitat for the Upper Whitefish Lake local population. East Fork Swift Creek from its confluence with Upper Whitefish Lake upstream 9.5 km (5.9 mi) to its headwaters provides spawning and rearing habitat.

(V) Upper Stillwater Lake (225 ha (556 ac)) provides FMO habitat for the Stillwater Lake local population. The Stillwater River from its mouth at the lake upstream 35.3 km (21.9 mi) to its' headwaters provides FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches. Fitzsimmons Creek from its junction with the Stillwater River upstream 9.4 km (5.9 mi) to its headwaters provides spawning and rearing habitat (MBTSG 1995c; USFWS 2002).

(W) Lake McDonald (2,761 ha (6,823 ac)) provides FMO habitat, and its tributary McDonald Creek upstream 2.6 km (1.6 mi) from the mouth to McDonald Falls provides spawning and rearing habitat for the depressed McDonald Creek local population of bull trout (MBTSG 1995c; USFWS 2002).

(X) Lincoln Lake (16 ha (40 ac)) provides FMO habitat, and Lincoln Creek from its mouth upstream 0.8 km (0.5 mi) to Beaver Chief Falls provides spawning and rearing habitat for the Lincoln Creek local population (MBTSG 1995c; USFWS 2002).

(Y) Harrison Lake (166 ha (410 ac)) provides FMO habitat, and its tributary Harrison Creek from the mouth upstream 6.9 km (4.3 mi) to its headwaters provides spawning and rearing habitat for the Harrison Creek local population (MBTSG 1995c; USFWS 2002).

(Z) Lake Isabel (17 ha (42 ac)) provides FMO habitat and its tributary Park Creek from the mouth upstream 1.4 km (0.9 mi) to its headwaters provides spawning and rearing habitat for the Park Creek local population (MBTSG 1995c; USFWS 2002).

(AA) Trout Lake (86 ha (213 ac)) and Arrow Lake (23 ha (57 ac)) provide FMO habitat, and Camas Creek between Trout and Arrow lakes (approximately 2.1 km (1.3 mi)), as well as upstream of Arrow Lake 4.1 km (1.3 mi) to Camas Lake provide spawning and rearing habitat for the Camas Creek local population (MBTSG 1995c; USFWS 2002).

(BB) Logging Lake (444 ha (1,097 ac)) provides FMO habitat, and its tributary Logging Creek from its junction with the upstream (east) end of the lake upstream 1.8 km (1.1 mi) to the outlet of Grace Lake provides spawning and rearing habitat for the Logging Creek local population (MBTSG 1995c; USFWS 2002).

(CC) Lower Quartz (67 ha (166 ac)) and the Upper Quartz Lakes Complex (Middle Quartz Lake, Quartz Lake, and Cerulean Lake; 399 ha (986 ac) combined) provide FMO habitat. Quartz Creek from the inlet of Lower Quartz Lake upstream 1.5 km (0.9 mi) to Middle Quartz Lake; Quartz Creek from the inlet of Middle Quartz Lake upstream 7.9 km (4.9 mi) to Quartz Lake; and Rainbow Creek from its confluence with Quartz Creek upstream 1.7 km (1.1 mi) to Cerulean Lake provide spawning and rearing habitat for the Quartz Creek local population (MBTSG 1995c; USFWS 2002).

(DD) Bowman Lake (690 ha (1,705 ac)) provides FMO habitat, and its tributary Bowman Creek from the inlet to Bowman Lake upstream 10.6 km (6.6 mi) to its headwaters provides spawning and rearing habitat for the Bowman Creek local population (MBTSG 1995c; USFWS 2002).

(EE) Akokala Lake (9 ha (23 ac)) provides FMO habitat, and its tributary Akokala Creek upstream 1.4 km (0.9 mi) from the lake inlet to its headwaters provides spawning and rearing habitat for the Akokala Creek local population (MBTSG 1995c; USFWS 2002).

(FF) Kintla Lake (687 ha (1,698 ac)) provides FMO habitat and Kintla Creek from its inlet to Kintla Lake upstream 2.6 km (1.6 mi) to a natural barrier provides spawning and rearing habitat for the Kintla Creek local population (MBTSG 1995c; USFWS 2002).

(GG) Upper Kintla Lake (191 ha (472 ac)) provides FMO habitat and Kintla Creek from the inlet to Upper Kintla Lake upstream 9.4 km (5.9 mi) to its headwaters provides spawning and rearing habitat for the Upper Kintla

Creek local population (MBTSG 1995c; USFWS 2002).

(HH) Frozen Lake (12 ha (30 ac)) provides FMO habitat, and Frozen Creek from the lake inlet upstream 4.2 km (2.6 mi) to its headwaters provides spawning and rearing habitat for the Frozen Creek local population (MBTSG 1995c; USFWS 2002).

(vii) Swan CHSU

The Swan CHSU includes the entire Swan River drainage upstream from Bigfork Dam (near the Swan River's confluence with Flathead Lake) in Lake and Missoula counties, Montana. The Swan CHSU is a linear valley bounded by the Swan Range to the west and the Mission Mountains to the east. A total of 212 km (132 mi) of 17 streams and 1,543 ha (3,813 ac) of lake surface area in three lakes is proposed for designation as critical habitat for bull trout in this CHSU. Landownership along the streams is approximately 36 percent Federal, 17 percent State, and 47 percent private. The Swan Lake shoreline is about half private, with extensive home and resort developments, and half surrounded by either National Forest or National Wildlife Refuge lands. Holland Lake is on National Forest land, some of which is leased and developed. Lindbergh Lake is mostly surrounded by National Forest, but a portion of the lakeshore is developed with home sites.

(A) Swan Lake (1,085 ha (2,680 ac)) provides FMO habitat for upstream tributary populations of bull trout (MBTSG 1996b). The Swan River from its upstream inlet to Swan Lake upstream approximately 87.4 km (54.3 mi) provides FMO habitat for tributary populations of bull trout to the confluence with Lindbergh Lake, and provides spawning and rearing habitat above Lindbergh Lake.

(B) Lost Creek from the confluence with the Swan River upstream 2.8 km (1.7 mi) to the junction of the North and South Forks; North Fork Lost Creek from its mouth upstream 7.6 km (4.7 mi) to a barrier falls; and South Fork Lost Creek from its mouth upstream 7.3 km (4.6 mi) to a barrier falls provide spawning and rearing habitat for the Lost Creek local population of bull trout (MBTSG 1996b; USFWS 2002).

(C) Soup Creek from the confluence with the Swan River upstream 11.1 km (6.9 mi) to a natural barrier falls provides spawning and rearing habitat for the Soup Creek local population (MBTSG 1996b; USFWS 2002).

(D) Woodward Creek from the confluence with the Swan River upstream 6.0 km (3.7 mi) to a barrier falls on the northernmost fork, and South Fork Woodward Creek from its junction with Woodward Creek upstream 4.7 km (2.9 mi) to a point where the stream makes a hard turn from its southerly direction to a westerly direction provide spawning and rearing habitat for the Woodward Creek local population (MBTSG 1996b; USFWS 2002).

(E) Goat Creek from the confluence with the Swan River upstream 11.5 km (7.2 mi) to the confluence with Bethal Creek and Squeezer Creek from its junction with Goat Creek upstream 8.6 km (5.3 mi) to a barrier falls provide spawning and rearing habitat for the Goat Creek local population (MBTSG 1996b; USFWS 2002).

(F) Lion Creek from its confluence with the Swan River upstream 11.4 km (7.1 mi) to a natural barrier falls approximately half way up the drainage provides spawning and rearing habitat for the Lion Creek local population (MBTSG 1996b; USFWS 2002).

(G) Piper Creek from its confluence with the Swan River upstream 5.9 km (3.7 mi) to the junction with Moore Creek provides spawning and rearing habitat for the Piper Creek local population (MBTSG 1996b; USFWS 2002).

(H) Jim Creek from its confluence with the Swan River upstream 11.9 km (7.4 mi) to the lowermost Jim Lake provides spawning and rearing habitat for the Jim Creek local population.

(I) Cold Creek from its confluence with the Swan River upstream 10.0 km (6.2 mi) to the junction with North Fork Cold Creek provides spawning and rearing habitat for the Cold Creek local population (MBTSG 1996b; USFWS 2002).

(J) Elk Creek from its confluence with the Swan River upstream 16.9 km (10.5 mi) to the confluence of the North and South Fork Elk Creek provides spawning and rearing habitat for the Elk Creek local population (MBTSG 1996b; USFWS 2002).

(K) Lindbergh Lake (293 ha (725 ac)) provides FMO habitat; approximately 6 km (3.8 mi) of the upper Swan River (previously described in (a), above), and Crystal Creek from its confluence with the upper Swan River upstream approximately 1 km (0.6 mi) to a natural barrier downstream from the outlet of Crystal Lake provide spawning and rearing habitat for the Upper Swan River local population (MBTSG 1996b; USFWS 2002).

(L) Holland Lake provides FMO habitat, and Holland Creek upstream 0.6 km (0.4 mi) from Holland Lake to a natural barrier falls provides spawning and rearing habitat for the Holland Creek local population (MBTSG 1996b; USFWS 2002).

(viii) Hungry Horse Reservoir CHSU

The Hungry Horse Reservoir CHSU includes the entire South Fork Flathead River drainage upstream from Hungry Horse Dam (9.0 km (5.6 mi) upstream from the South Fork's confluence with the mainstem Flathead River) in Flathead, Missoula, Powell, and Lewis and Clark counties, Montana. A total of 336 km (209 mi) of 16 streams; 9,632 ha (23,800 ac) Hungry Horse Reservoir; and two lakes (Big Salmon Lake, 324 ha (800 ac)); Doctor Lake, 32 ha (79 ac) are proposed for designation as critical habitat for bull trout in this CHSU. Landownership along the streams and lake shores is entirely Federal (100 percent), lying in either National Forest or Congressionally designated wilderness.

(A) Hungry Horse Reservoir (9,632 ha (23,800 ac)) and the South Fork Flathead River upstream 93.6 km (58.2 mi) from the full pool level of Hungry Horse Reservoir to its source at the confluence of Youngs and Danaher creeks provide critical FMO habitat for tributary spawning populations of bull trout (MBTSG 1995d).

(B) Wounded Buck Creek from its mouth at Hungry Horse Reservoir upstream 6.0 km (3.7 mi) to a natural barrier falls in the upper reaches of the drainage provides spawning and rearing habitat for the Wounded Buck Creek local population of bull trout (MBTSG 1995d; USFWS 2002).

(C) Wheeler Creek from its mouth at Hungry Horse Reservoir upstream 5.9 km (3.6 mi) to a natural barrier falls just upstream of the junction of Trapper Creek provides spawning and rearing habitat for the Wheeler Creek local population of bull trout (MBTSG 1995d; USFWS 2002).

(D) Sullivan Creek from its mouth at Hungry Horse Reservoir upstream 24.0 km (14.9 mi) to its headwaters and its tributary Quintonkon Creek from its mouth upstream 5.2 km (3.3 mi) to a natural barrier falls approximately half way up the drainage provide spawning and rearing habitat for the Sullivan Creek local population of bull trout (MBTSG 1995d; USFWS 2002).

(E) The Spotted Bear River from its confluence with the South Fork Flathead River upstream 32.8 km (20.4 mi) to Dean Falls, just upstream from the confluence of Slim Creek, provides spawning and rearing habitat for the Spotted Bear River local population (MBTSG 1995d; USFWS 2002).

(F) Bunker Creek from its confluence with the South Fork Flathead River upstream 17.9 km (11.1 mi) to a barrier

falls just upstream of the junction with String Creek provides spawning and rearing habitat for the Bunker Creek local population (MBTSG 1995d; USFWS 2002).

(G) Little Salmon Creek from its confluence with the South Fork Flathead River upstream 28.7 km (17.8 mi) to its source provides spawning and rearing habitat for the Little Salmon Creek local population (MBTSG 1995d; USFWS 2002).

(H) Big Salmon Lake (324 ha (800 ac)) provides FMO habitat, and Big Salmon Creek upstream 7.4 km (4.6 mi) from Big Salmon Lake to a barrier falls just upstream from the junction of Spud Creek provides spawning and rearing habitat for the Big Salmon Creek local population (MBTSG 1995d; USFWS 2002).

(I) The White River from its confluence with the South Fork Flathead River upstream 13.1 km (8.1 mi) to Needle Falls (approximately 3 km (1.9 mi) upstream from the junction of the South Fork White River) provides spawning and rearing habitat for the White River local population (MBTSG 1995d; USFWS 2002).

(J) Gordon Creek from its confluence with the South Fork Flathead River upstream 23.4 km (14.5 mi) to a barrier falls near the confluence with George Creek provides spawning and rearing habitat for the Gordon Creek local population (MBTSG 1995d; USFWS 2002).

(K) Doctor Lake 32 ha (79 ac) provides FMO habitat, and the entire length (5.2 km (3.3 mi)) of Doctor Creek occurring both upstream and downstream of Doctor Lake provides spawning and rearing habitat for the Doctor Creek local population (MBTSG 1995d; USFWS 2002).

(L) Youngs Creek from its confluence with the headwaters of the South Fork Flathead River upstream 28.7 km (17.8 mi) to the junction of Ross Creek near its headwaters, and Babcock Creek (a tributary to Youngs Creek) from its mouth upstream 7.3 km (4.5 mi) to the confluence with Otis Creek provide spawning and rearing habitat for the Youngs Creek local population (MBTSG 1995d; USFWS 2002).

(M) Danaher Creek from its confluence with the headwaters of the South Fork Flathead River upstream 33.5 km (20.8 mi) to its source, and Rapid Creek (a tributary to Danaher Creek) from its mouth upstream2.9 km (1.8 mi) to the confluence of Fiction Creek provide spawning and rearing habitat for the Danaher Creek local population (MBTSG 1995d; USFWS 2002).

(ix) Bitterroot CHSU

The Bitterroot CHSU includes the entire Bitterroot River drainage on the western border of Montana, upstream from its' confluence with the Clark Fork River in Missoula and Ravalli counties, Montana. A total of 799 km (496 mi) of 43 streams and 265 ha (655 ac) of Painted Rocks Reservoir is proposed for designation as critical habitat for bull trout in this CHSU. Landownership along the streams is approximately 64 percent Federal, 1 percent State, and 35 percent private. Painted Rocks Reservoir is mostly on National Forest with some private development. In this CHSU, nearly all headwaters are on National Forest lands, and the vast majority of the Bitterroot Valley, including lower ends of tributary drainages and the entire mainstem of the Bitterroot River are privately owned and extensively developed with ranches, home sites, and businesses.

(A) The Bitterroot River from its junction with the Clark Fork River upstream 135.8 km (84.3 mi) to the confluence of its East and West Forks provides FMO habitat for tributary populations of bull trout (MBTSG 1995a; USFWS 2002).

(B) Burnt Fork Creek from its confluence with the Bitterroot River upstream 41.2 km (25.6 mi) to its headwaters; Gold Creek from its mouth at Burnt Fork Creek upstream 10.8 km (6.7 mi) to its headwaters; and Little Burnt Fork Creek from its mouth upstream 5.5 km (3.4 mi) to its source provide spawning and rearing habitat for the Burnt Fork Creek local population (MBTSG 1995a; USFWS 2002).

(C) Fred Burr Creek from its confluence with the Bitterroot River upstream 14.3 km (8.9 mi) to Fred Burr Reservoir provides FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches. Its tributary Mill Creek, from its mouth upstream 19.5 km (12.1 mi) to a natural barrier just upstream of the Wilderness Boundary, provides spawning and rearing habitat supporting the Fred Burr Creek local population (MBTSG 1995a; USFWS 2002).

(D) Blodgett Creek from its confluence with the Bitterroot River upstream 30.7 km (19.0 mi) to its headwaters provides spawning and rearing habitat for the Blodgett Creek local population (MBTSG 1995a; USFWS 2002).

(E) Skalkaho Creek from its confluence with the Bitterroot River upstream 40.4 km (25.1 mi) to its headwaters; Daly Creek from its confluence with Skalkaho Creek upstream 12.2 km (7.6 mi) to Skalkaho Falls; Railroad Creek from its confluence with Skalkaho Creek upstream 8.4 km (5.2 mi); and Weasel Creek from its confluence with Skalkaho Creek upstream 5.3 km (3.3 mi) to its source provide spawning and rearing habitat for the Skalkaho Creek local population (MBTSG 1995a; USFWS 2002).

(F) Sleeping Child Creek from its confluence with the Bitterroot River upstream 38.5 km (23.9 mi) to its headwaters; Two Bear Creek from its confluence with Sleeping Child Creek upstream 10.7 km (6.6 mi) to its source; Divide Creek from its confluence with Sleeping Child Creek upstream 14.8 km (9.2 mi) to its source; and Switchback Creek from its confluence with Divide Creek upstream 1.0 km (0.6 mi) to a natural barrier provide spawning and rearing habitat for the Sleeping Child Creek local population (MBTSG 1995a; USFWS 2002).

(G) The West Fork of the Bitterroot River from its confluence with the Bitterroot River upstream 35.2 km (21.9 mi) to Painted Rocks Reservoir and Painted Rocks Reservoir (265 ha (655 ac)) provide FMO habitat for tributary populations of bull trout. The West Fork of the Bitterroot River from Painted Rocks Reservoir upstream 27.9 km (17.3 mi); Slate Creek from the confluence with Painted Rocks Reservoir upstream 17.3 km (10.8 mi) to its source; Blue Joint Creek from the confluence with Painted Rocks Reservoir upstream 28.0 km (17.4 mi) to a natural barrier; Overwhich Creek from its confluence with the West Fork Bitterroot River upstream 23.2 km (14.4 mi) to a natural barrier; Straight Creek from its confluence with Overwhich Creek upstream 5.4 km (3.3 mi) to its headwaters; Hughes Creek from its confluence with the West Fork Bitterroot River upstream 28.4 km (17.6 mi) to its source; Chicken Creek from its confluence with the West Fork Bitterroot River upstream 8.2 km (5.1 mi) to its forks; Deer Creek from its confluence with the West Fork Bitterroot River upstream 20.1 km (12.5 mi) to its headwaters; Woods Creek from its confluence with the West Fork Bitterroot River upstream 11.0 km (6.8 mi) to its headwaters; Johnson Creek from its confluence with the West Fork Bitterroot River upstream 7.4 km (4.6 mi) to its source; Beaver Creek from its confluence with the West Fork Bitterroot River upstream 7.4 km (4.6 mi) to its source; and Sheep Creek from its confluence with the West Fork Bitterroot River upstream 5.0 km (3.1 mi) to its headwaters provide spawning and rearing habitat for the West Fork Bitterroot River population complex of

bull trout (MBTSG 1995a; USFWS 2002).

(H) The East Fork Bitterroot River from its mouth upstream 59.4 km (36.9 mi) provides FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches. Meadow Creek from its confluence with the East Fork Bitterroot River upstream 15.6 km (9.7 mi) to its headwaters; Swift Creek from its mouth on Meadow Creek upstream 3.2 km (2.0 mi) to a natural barrier falls; Bugle Creek from its confluence with Meadow Creek upstream 6.2 km (3.9 mi) to its source; Moose Creek from its confluence with the East Fork Bitterroot River upstream 10.6 km (6.6 mi) to a natural barrier; Martin Creek from its mouth on Moose Creek upstream 18.8 mi (11.7 mi) to its headwaters; Bush Creek from its confluence with Martin Creek upstream 6.5 km (4.0 mi) to its source; Lick Creek from its junction with Moose Creek upstream 5.9 km (3.6 mi) to its headwaters; Reynolds Creek from its junction with Moose Creek upstream 6.4 km (4.0 mi) to its source; Sign Creek from its junction with Moose Creek upstream 4.2 km (2.6 mi) to its source; and Buck Creek from its confluence with the East Fork Bitterroot River upstream 1.6 km (1.0 mi) to its headwaters provide spawning and rearing habitat for the East Fork Bitterroot River population complex of bull trout (MBTSG 1995a; USFWS 2002).

(I) Warm Springs Creek from its confluence with the East Fork Bitterroot River upstream 19.3 km (12.0 mi); Fire Creek from its confluence with Warm Springs Creek upstream 2.4 km (1.5 mi); Wiles Creek from its confluence with Warm Springs Creek upstream 8.8 km (5.5 mi) to its source; Fault Creek from its mouth at Wiles Creek upstream 5.3 km (3.3 mi) to its source; Porcupine Creek from its junction with Warm Springs Creek upstream 7.2 km (4.5 mi); and Prayer Creek from its junction with Warm Springs Creek upstream 4.4 km (2.7 mi) provide spawning and rearing habitat for the Warm Springs Creek local population of bull trout (MBTSG 1995a; USFWS 2002).

(x) Blackfoot River CHSU

The Blackfoot River CHSU includes the entire Blackfoot River drainage in western Montana in Missoula, Powell, and Lewis and Clark counties, with the exception of its' tributaries in the Clearwater River CHSU. A total of 436 km (270 mi) of 12 streams is proposed for designation as critical habitat for bull trout in this CHSU. Landownership along the streams proposed for designation as critical habitat is approximately 34 percent Federal, 8 percent State, and 58 percent private.

(A) The Blackfoot River from its confluence with the Clark Fork River at Milltown upstream 191.0 km (118.7 mi) to the confluence of Alice Creek provides FMO habitat for tributary populations of bull trout (MBTSG 1995b).

(B) Gold Creek from its junction with the Blackfoot River upstream 19.4 km (12.1 mi) to a barrier falls near the National Forest boundary; the West Fork of Gold Creek from its mouth upstream13.1 km (8.1 mi) to its headwaters; and Daisy Creek from its confluence with the West Fork of Gold Creek upstream 6.2 km (3.9 mi) to its source provide spawning and rearing habitat for the Gold Creek local population of bull trout (MBTSG 1995b; USFWS 2002).

(C) Belmont Creek from its junction with the Blackfoot River upstream 16.9 km (10.5 mi) to its source provides spawning and rearing habitat for the Belmont Creek local population of bull trout (MBTSG 1995b; USFWS 2002).

(D) Cottonwood Creek from its junction with the Blackfoot River upstream 23.8 km (14.8 mi) to its source at Cottonwood Lake provides spawning and rearing habitat for the Cottonwood Creek local population (MBTSG 1995b; USFWS 2002).

(E) Monture Creek from its junction with the Blackfoot River upstream 47.3 km (29.4 mi) to its headwaters; Dunham Creek from its confluence with Monture Creek upstream 23.3 km (14.4 mi) to its headwaters; and Lodgepole Creek from its junction with Dunham Creek upstream 11.7 km (7.2 mi) to its source provide spawning and rearing habitat for the Monture Creek local population (MBTSG 1995b; Pierce *et al.* 1997; USFWS 2002).

(F) The North Fork Blackfoot River from its confluence with the Blackfoot River upstream 41.0 km (25.5 mi) to a natural barrier at North Fork Falls provides spawning and rearing habitat for the North Fork Blackfoot River local population (MBTSG 1995b; Pierce *et al.* 1997; USFWS 2002).

(G) The Landers Fork from its confluence with the Blackfoot River upstream17.9 km (11.2 mi) to a barrier falls near the junction of Byrnes Creek (just downstream from the Scapegoat Wilderness), and Copper Creek from its junction with Landers Fork upstream 24.0 km (14.9 mi) to its headwaters provide spawning and rearing habitat for the Landers Fork local population (MBTSG 1995b; Pierce *et al.* 1997; USFWS 2002).

(xi) Clearwater River and Lake Chain CHSU

The Clearwater River and Lake Chain CHSU includes the Clearwater River, a tributary to the Blackfoot River, drainage in Missoula and Powell counties, Montana. A total of 157 km (97 mi) of 9 streams, and 1,460 ha (3,608 ac) of lake surface area in seven lakes is proposed for designation as critical habitat for bull trout in this CHSU. Landownership along the streams is approximately 51 percent Federal, 5 percent State, and 44 percent private.

(A) Salmon Lake (263 ha (650 ac)) provides FMO habitat for tributary populations of bull trout (MBTSG 1995b).

(B) The Clearwater River from its confluence with Salmon Lake upstream 39.1 km (24.3 mi) to its headwaters at Clearwater Lake provides habitat for bull trout. FMO habitat for tributary bull trout populations occurs below the confluence with the East Fork Clearwater River. Upstream from the junction with the East Fork Clearwater River spawning and rearing habitat for the Clearwater River local population complex of bull trout occurs (MBTSG 1995b; USFWS 2002).

(C) Owl Creek from its confluence with the Clearwater River upstream 6.6 km (4.1 mi) to its origin at Placid Lake, and Placid Lake (463 ha (187 ac)) provide FMO habitat for tributary populations. Placid Creek from its junction with Placid Lake upstream17.1 km (10.7 mi) to its headwaters, and its tributary Finley Creek from its mouth upstream 8.3 km (5.2 mi) to its source provide spawning and rearing habitat for the Placid Creek local population of bull trout (MBTSG 1995b; USFWS 2002).

(D) Morrell Creek from its confluence with the Clearwater River upstream 29.4 km (18.2 mi) provides spawning and rearing habitat for the Morrell Creek local population of bull trout (MBTSG 1995b; USFWS 2002).

(E) Seeley Lake (415 ha (1,025 ac)) provides FMO habitat, and Deer Creek from its junction with Seeley Lake upstream 16.5 km (10.2 mi) to its headwater provides spawning and rearing habitat for the Deer Creek local population of bull trout (MBTSG 1995b; USFWS 2002).

(F) The West Fork Clearwater River from its confluence with the Clearwater River upstream 23.1 km (14.3 mi) to its headwaters provides FMO habitat in the lower reaches, and spawning and rearing habitat for the West Fork Clearwater River local population in the upper reaches (MBTSG 1995b; USFWS 2002).

(G) Lake Inez (119 ha (294 ac)), Lake Alva (121 ha (299 ac)), Rainy Lake (28 ha (69 ac)), and Clearwater Lake (51 ha (126 ac)) provide FMO habitat for tributary populations of bull trout (MBTSG 1995b).

(H) Colt Creek from its confluence with the Clearwater River upstream 8.8 km (5.4 mi) to its headwaters, and the East Fork Clearwater River from its confluence with the Clearwater River upstream 7.9 km (4.9 mi) provide spawning and rearing habitat for the Clearwater River local population complex (MBTSG 1995b; USFWS 2002).

(xii) Rock Creek CHSU

The Rock Creek CHSU includes the entire watershed of Rock Creek in Missoula and Granite counties, Montana, from its junction with the Clark Fork River to its headwaters. A total of 487 km (302 mi) of 28 streams are proposed for designation as critical habitat for bull trout in this CHSU. Landownership along the streams is approximately 73 percent Federal, 1 percent State, and 26 percent private.

(A) Rock Creek from its confluence with the Clark Fork River near the town of Clinton upstream 83.3 km (51.7 mi) to its forks provides FMO habitat for tributary populations of bull trout (MBTSG 1995e).

(B) Gilbert Creek from its confluence with Rock Creek upstream 13.5 km (8.4 mi) to its headwaters provides spawning and rearing habitat for the Gilbert Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(C) Brewster Creek from its confluence with Rock Creek upstream 11.4 km (7.1 mi) to its source provides spawning and rearing habitat for the Brewster Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(D) Ranch Creek from its confluence with Rock Creek upstream 16.8 km (10.4 mi) to its headwaters provides spawning and rearing habitat for the Ranch Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(E) Welcome Creek from its confluence with Rock Creek upstream 11.9 km (7.4 mi) to its source provides spawning and rearing habitat for the Welcome Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(F) Butte Cabin Creek from its confluence with Rock Creek upstream 10.2 km (6.3 mi) to its headwaters provides spawning and rearing habitat for the Butte Cabin Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(G) Wahlquist Creek from its confluence with Rock Creek upstream 7.5 km (4.7 mi) to its headwaters provides spawning and rearing habitat for the Wahlquist Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(H) Cougar Creek from its confluence with Rock Creek upstream 7.7 km (4.8 mi) to its source provides spawning and rearing habitat for the Cougar Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(I) Hogback Creek from its confluence with Rock Creek upstream 7.3 km (4.5 mi) to its headwaters provides spawning and rearing habitat for the Hogback Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(J) Wyman Creek from its confluence with Rock Creek upstream 13.7 km (8.5 mi) to its headwaters provides spawning and rearing habitat for the Wyman Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(K) Stony Creek from its confluence with Rock Creek upstream 18.1 km (11.2 mi) to its source provides spawning and rearing habitat for the Stony Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(L) Upper Willow Creek from its confluence with Rock Creek upstream 31.2 km (19.4 mi) to its headwaters, and its tributary Beaver Creek from its mouth upstream 6.3 km (3.9 mi) to its source provide spawning and rearing habitat for the Upper Willow Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(M) West Fork Rock Creek from its confluence with Rock Creek upstream 38.4 km (23.9 mi) to its headwaters; North Fork Rock Creek from its confluence with West Fork Rock Creek upstream 7.8 km (4.8 mi) to its headwaters; Sand Basin Creek from its confluence with West Fork Rock Creek upstream 10.7 km (6.7 mi) to its source; and Bowles Creek from its confluence with West Fork Rock Creek upstream 6.8 km (4.2 mi) to its headwaters provide spawning and rearing habitat for the West Fork Rock Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(N) Ross Fork Rock Creek from its confluence with West Fork Rock Creek upstream 36.7 km (22.8 mi) to its headwaters; Moose Meadow Creek from its confluence with Ross Fork Rock Creek upstream 9.4 km (5.8 mi) to its source; and South Fork Ross Fork Rock Creek from its confluence with Ross Fork Rock Creek upstream 10.0 km (6.2 mi) to its headwaters provide spawning and rearing habitat for the Ross Fork Rock Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(O) East Fork Rock Creek from its confluence with Rock Creek upstream 25.8 km (16.0 mi) to its headwaters and Meadow Creek from its confluence with East Fork Rock Creek upstream 7.9 km (4.9 mi) to a barrier cascade at the confluence of Dexter Creek provide spawning and rearing habitat for the East Fork Rock Creek local population of bull trout. East Fork Reservoir (170 ha (420 ac) at full pool) provides FMO habitat for this local population (MBTSG 1995e; USFWS 2002).

(P) Middle Fork Rock Creek from its confluence with East Fork Rock Creek upstream 38.3 km (23.8 mi) to its source; Copper Creek from its confluence with Middle Fork Rock Creek upstream 19.2 km (11.9 mi) to its headwaters; Green Canyon Creek from its confluence with Copper Creek upstream 6.1 km (3.8 mi) to its headwaters; Lutz Creek from its confluence with Copper Creek upstream 8.3 km (5.1 mi) to its headwaters; Meyers Creek from its confluence with Middle Fork Rock Creek upstream 8.2 km (5.1 mi); and Carpp Creek from its confluence with Middle Fork Rock Creek upstream 14.3 km (8.9 mi) provide spawning and rearing habitat for the Middle Fork Rock Creek local population of bull trout (MBTSG 1995e; USFWS 2002).

(7) Unit 3: Kootenai River Basin

The Kootenai unit is located upstream and downstream from Libby Dam, in Montana, on the Kootenai River. It includes the northwestern corner of Montana and the northeastern tip of the panhandle of Idaho. The Kootenai River has a unique configuration, entering the U.S. from British Columbia, Canada and then returning to British Columbia where it joins the upper Columbia River drainage. This unit includes two CHSUs: the Kootenai River and Bull Lake CHSU lies in Boundary County, Idaho and Lincoln County, Montana. The Lake Koocanusa and Sophie Lake CHSU lies in Lincoln County, Montana.

We are proposing to designate critical habitat for bull trout in portions of 27 streams, 2 lakes, and 1 reservoir in this unit. The total stream distance is about 528 km (328 mi) in Montana, and 95 km (59 mi) in Idaho, for a total of 623 km (387 mi). The lakes and reservoir have a surface coverage of about 19,418 ha (47,982 ac), about 97 percent of which is the Lake Koocanusa reservoir. Landownership associated with the proposed critical habitat designations in waterways includes approximately 53 percent Federal land, 44 percent private lands, and 3 percent State land. The Draft Recovery Plan (USFWS 2002) identified 10 local populations of bull trout in this unit as essential to recovery.

(i) Kootenai River and Bull Lake CHSU

The Kootenai River and Bull Lake CHSU includes the entire Kootenai River drainage downstream from Libby Dam, and the Callahan Creek, O'Brien Creek, Quartz Creek, Pipe Creek, Libby Creek, Fisher River, and Keeler Creek local populations. The following stream segments are included in this CHSU.

(A) The Kootenai River from the Canadian border with Idaho upstream 184.2 km (114.4 mi) to Libby Dam provides FMO habitat.

(B) Callahan Creek from its confluence with the Kootenai River upstream 12.3 km (7.7 mi) to its headwaters provides spawning and rearing habitat. July Creek from its confluence with Callahan Creek upstream 1.6 km (1.0 mi) to its headwaters, Goat Creek from its confluence with Callahan Creek upstream 7.4 km (4.6 mi) to its headwaters, North Fork Callahan Creek from its confluence with Callahan Creek upstream 20.4 km (12.7 mi) to its headwaters, and South Fork Callahan Creek from its confluence with Callahan Creek upstream 19.6 km (12.2 mi) to its headwaters also provides spawning and rearing habitat for the Callahan Creek local population.

(C) O'Brien Creek from its confluence with the Kootenai River upstream 17.7 km (11.0 mi) to its headwaters provides spawning and rearing habitat for the O'Brien Creek local population.

(D) Quartz Creek from its confluence with the Kootenai River upstream 17.7 km (11.0 mi) to its headwaters, and West Fork Quartz Creek from its confluence with Quartz Creek upstream 10.0 km (6.2 mi) to its headwaters provide spawning and rearing habitat for the Quartz Creek local population.

(E) Pipe Creek from its confluence with the Kootenai River upstream 39.6 km (24.6 mi) to its headwaters, and East Fork Pipe Creek from its confluence with Pipe Creek upstream 13.5 km (8.4 mi) to its headwaters provide spawning and rearing habitat for the Pipe Creek local population.

(F) Libby Creek from its confluence with the Kootenai River upstream 48.1 km (29.9 mi) to its headwaters provides spawning and rearing habitat. Bear Creek from its confluence with Libby Creek upstream 13.2 km (8.2 mi) to its headwaters, Poorman Creek from its confluence with Libby Creek upstream 8.8 km (5.5 mi) to its headwaters, and Ramsey Creek from its confluence with Libby Creek upstream 9.7 km (6.0 mi) to its headwaters also provide spawning and rearing habitat for the Libby Creek local population.

(G) The Fisher River from its confluence with the Kootenai River upstream 47.3 km (29.4 mi) provides FMO habitat. West Fisher Creek from its confluence with the Fisher River upstream 21.4 km (13.3 mi) provides spawning and rearing habitat for the Fisher River local population.

(H) Bull Lake and associated tributaries contain a bull trout population that is isolated from the Kootenai River by Troy Dam, built in 1917. This population is unusual in that the adult spawners run downstream from Bull Lake, using Lake Creek as a corridor to access spawning areas in Keeler Creek. Downstream spawning migration is uncommon amongst bull trout populations. Bull Lake 506 ha (1,250 ac) and Lake Creek, a tributary to Bull Lake upstream from the confluence 13.0 km (8.1 mi), provide FMO habitat. Keeler Creek from the confluence with Lake Creek upstream 13.4 km (8.3 mi), and North Fork Keeler Creek from the confluence with Keeler Creek upstream 10.6 km (6.6 mi) provide spawning and rearing habitat for the Bull Lake local population.

(ii) Lake Koocanusa and Sophie Lake CHSU

This CHSU includes the entire Kootenai River drainage in Montana upstream from Libby Dam and includes the Grave Creek, Wigwam River, and Phillips Creek local populations. Fluvial populations of bull trout in the upper Kootenai watershed were converted to an adfluvial life history pattern by the addition of the large reservoir (Lake Koocanusa) behind Libby Dam, which backs up water some 69 km (43 mi) and into Canada.

(A) Lake Koocanusa, 18,818 ha (46,499 ac) in size of which most occurs within the United States, provides FMO habitat for the Grave Creek and Wigwam River local populations. The entire U.S. portion of the reservoir is proposed for designation as critical habitat for bull trout.

(B) The Tobacco River from its confluence with Lake Koocanusa upstream 21.7 km (13.5 mi) provides FMO habitat. Grave Creek from its confluence with the Tobacco River upstream 25.4 km (15.8 mi), Clarence Creek from its confluence with Grave Creek upstream 8.5 km (5.3 mi), and Blue Sky Creek from its confluence with Grave Creek upstream 2.1 km (1.3 mi) provide spawning and rearing habitat for the Grave Creek local population.

(C) The upper 7.1 km (4.4 mi) of the Wigwam River, which lies within the United States, provides spawning and rearing habitat for the Wigwam River local population.

(D) Sophie Lake, 94 ha (232 ac) in size, provides FMO habitat and Phillips Creek, from the confluence with Sophie Lake upstream 5.5 km (3.4 mi), provides spawning and rearing habitat for the Phillips Creek local population. This population of migratory (adfluvial) bull trout are isolated in a closed basin, with no active outlet stream (MBTSG 1996e).

(8) Unit 4: Willamette River Basin

The Willamette River Basin Unit includes 337 km (209 mi) of stream and 1,600 ha (3,954 ac) of lake habitat in the McKenzie River and Middle Fork Willamette River subbasins of western Oregon. The unit is located primarily within Lane County, but also extends into Linn County. Landownership within the CHSU is 46 percent Federal and 54 percent private. Currently, there are three known bull trout local populations in the McKenzie River subbasin, and one potential bull trout local population in the Middle Fork Willamette River subbasin. All four of these populations are identified as essential for bull trout recovery in the Draft Recovery Plan (USFWS 2002). The stream segments that make up the Willamette River Unit are described below. With the exception of the mainstem Willamette River, the lower Middle Fork Willamette River, and Lost Creek, all segments proposed as critical habitat are currently occupied by bull trout, and all segments are essential to the conservation of the species, as they are essential to supporting populations that meet recovery criteria in the Draft Recovery Plan (USFWS 2002).

(i) The Willamette River from its confluence with the McKenzie River at rkm 282.0 (rmi 175.1) upstream 19 km (11.8 mi) to its confluence with the Middle Fork Willamette River at rkm 301.0 (187.0). This segment provides for the maintenance of the migratory life history form of bull trout that is essential to the long-term conservation of the species, and is essential for providing connectivity between the McKenzie River and Middle Fork Willamette River local populations.

(ii) The McKenzie River and side channels from its confluence with the Willamette River upstream 136 km (84.5 mi) to Trail Bridge Dam, including Trail Bridge Reservoir (23 ha (57 ac) at full pool), and continuing upstream beyond the reservoir for 3.2 km (2 mi) to Tamolitch Falls. Three bull trout local populations have been identified on the McKenzie River: (1) the Trail Bridge population includes the McKenzie River and tributaries above Trail Bridge Dam; (2) the McKenzie River population includes the McKenzie River and tributaries downstream of Trail Bridge Dam; and, (3) the South Fork McKenzie River population includes the South

Fork McKenzie River and tributaries above Cougar Dam. The following McKenzie River tributaries (and associated reservoirs) are included: the Blue River from its confluence with the McKenzie River upstream 2.8 km (1.7 mi) to Blue River Lake Dam; the South Fork McKenzie River from its confluence with the McKenzie River upstream 7.2 km (4.5 mi) to Cougar Reservoir, including Cougar Reservoir (560 ha (1,384 ac) at full pool), and continuing upstream beyond the reservoir for 25.6 km (15.9 mi) to the Three Sisters Wilderness Area boundary, and also extending 5 km (3.1 mi) up Roaring River; Horse Creek and West Fork Horse Creek for a total of 18.5 km (11.5 mi) from the confluence with the McKenzie River upstream to Separation Creek, including side channels, and extending 3.1 km (2 mi) up Separation Creek; Lost Creek from its confluence with the McKenzie River upstream 5.8 km (3.6 mi) to a headwater spring; Deer Creek from its confluence with the McKenzie River upstream for a distance of 4.6 km (2.9 mi); Olallie Creek from its confluence with the McKenzie River upstream 3.2 km (2 mi) to a natural barrier; Anderson Creek from its confluence with the McKenzie River upstream 2.6 km (1.6 mi) to a natural barrier; and Sweetwater Creek from its inlet to Trail Bridge Reservoir upstream 1.9 km (1.2 mi) to a natural barrier.

(iii) The Middle Fork Willamette River from its confluence with the Willamette River upstream 48 km (29.9 mi) to Hills Creek Reservoir and including Dexter Reservoir (343 ha (848 ac)), Lookout Point Reservoir (1,617 ha (3,996 ac)), and Hills Creek Reservoir (1,060 ha (2,619 ac) at full pool), and continuing upstream from Hills Creek Reservoir for 32.2 km (20 mi) to the Paddy's Valley/Chuckle Springs area. Bull trout currently occur in the upper portion of the Middle Fork Willamette River as a result of transplanted fry from Anderson Creek in the McKenzie River, and this is considered a rehabilitated local population. The following Middle Fork tributaries are included: Swift Creek from its confluence with the Middle Fork Willamette River upstream 14.7 km (9.1 mi) to its headwaters; and Bear Creek from its confluence with Swift Creek upstream 3.2 km (2 mi).

(9) Unit 5: Hood River Basin

The Hood River unit includes the mainstem Hood River and three major tributaries: the Clear Branch Hood River, West Fork Hood River, and East Fork Hood River. A total of 178.0 km (110.3 mi) of stream, representing 21 percent of the total stream lengths in this unit, is proposed for critical habitat. Although the recovery unit includes the Sandy River, which is known to be occupied based on recent sightings, there is insufficient information at present to identify local populations, or describe bull trout habitat use in the Sandy River subbasin; therefore no critical habitat is proposed for designation in this subbasin. Portions of the mainstem Columbia River utilized by Hood River bull trout are considered in the mainstem Columbia River section of this document.

The Hood River unit, located on the western slopes of the Cascades Mountains in northwest Oregon, lies entirely within Hood River County, Oregon. Landownership adjacent to stream reaches proposed for critical habitat within the Hood River unit includes: 48 percent Federal land, 1 percent State land, and 51 percent private land. Currently, there are two local populations (Clear Branch Hood River above Clear Branch Dam, and Hood River and tributaries below Clear Branch Dam) identified as essential to recovery (USFWS 2002). Also identified are two additional areas (West Fork Hood River and East Fork Hood River), where additional local populations essential for bull trout recovery are recommended to be established. Presently, bull trout in the Hood River basin are believed to be at substantial risk, numbering less than 300 adult fish, emphasizing the need to establish additional local populations (USFWS 2002).

(i) Hood River from the Columbia River upstream 23.7 km (14.7 mi) to its confluence with the east and middle forks provides FMO habitat as well as connectivity with the mainstem Columbia River.

(ii) West Fork Hood River from the Hood River confluence upstream 23.2 km (14.4 mi) to the confluence with Elk and McGee creeks provides FMO habitat. Current occupancy is confirmed from sightings at the fish ladder on Punchbowl Falls and from trap information (USFWS 2002). This habitat is essential for establishing additional reproducing local population(s) in the west fork (and east fork), which is essential to the long-term conservation of the species (USFWS 2002).

(iii) Lake Branch Hood River from the confluence with the west fork upstream 4.2 km (2.6 mi) to the confluence with Laurel Creek. Establishing additional local population(s) in the west and east fork is identified as an action necessary to achieve recovery (USFWS 2002). Lake Branch would serve as FMO habitat linking Laurel and Divers creeks, both of which were identified in U.S. Forest Service (USFS1996a) as having suitable water temperatures to provide spawning habitat. Divers Creek from the Lake Branch confluence upstream approximately 5.6 km (3.5 mi) to its headwaters is essential to provide spawning habitat to support additional local populations necessary to achieve recovery, as identified in the Draft Recovery Plan (USFWS 2002). Laurel Creek from the Lake Branch confluence upstream approximately 5.8 km (3.6 mi) to its headwaters is essential to provide potential spawning habitat for supporting additional local populations in this unit (USFWS 2002).

(iv) Red Hill Creek from the west fork confluence upstream approximately 5.5 km (3.4 mi) to its headwaters is essential to provide spawning habitat to support additional local populations, identified as essential to recovery (USFWS 2002). Elk Creek from the west fork confluence upstream 6.6 km (4.1 mi) to its headwaters also provides potential spawning habitat to support a population that is identified in the Draft Recovery Plan as essential to achieve recovery (USFWS 2002).

(v) East Fork Hood River from the Hood River confluence upstream 44.1 km (27.4 mi) to its headwaters is essential to provide FMO habitat to support additional local populations necessary to achieve long-term conservation of the species (USFWS 2002). Streams with habitat conditions for expanding bull trout spawning and rearing habitat have yet to be identified in the east fork subwatershed. Griswell Creek from the confluence with the east fork upstream 0.6 km (0.4 mi) to the Evans Creek confluence provides FMO habitat between Evans Creek, which is known to be occupied (Buchanan *et al.* 1997; USFWS 2002), and the East Fork Hood River, and potentially with spawning habitat essential to establish additional local populations necessary for recovery (USFWS 2002). Evans Creek from the confluence with Griswell Creek upstream 12.9 km (8.0 mi) to its headwaters is known to be occupied (Buchanan *et al.* 1997; USFWS 2002), and provides FMO habitat at a minimum, and possibly spawning and/or juvenile rearing habitat.

(vi) Middle Fork Hood River from the Hood River confluence upstream 15.4 km (9.6 mi) to the confluence with Coe Branch provides spawning and rearing habitat for the Hood River local population. Bear Creek from the Middle Fork Hood River confluence upstream 1.3 km (0.8 mi) to the confluence with an unnamed tributary is occupied and provides spawning and rearing habitat for the Hood River local population. Elliot Creek from the Middle Fork Hood

River confluence upstream 1.3 km (0.8 mi) to the confluence with Elliot Ditch is occupied and provides spawning and rearing habitat for the Hood River local population. Coe Branch from the Middle Fork Hood River confluence upstream 3.9 km (2.4 mi) to the confluence with Compass Creek is currently occupied, provides FMO habitat for the Hood River local population, and provides connectivity between spawning and rearing habitat in Compass Creek and the Middle Fork Hood River. Compass Creek from the confluence with Coe Branch upstream 4.3 km (2.7 mi) to the headwaters provides spawning and rearing habitat for the Hood River local population.

(vii) Clear Branch from the confluence with the Middle Fork Hood River upstream 1.4 km (0.9 mi) to Clear Branch Dam provides FMO habitat. Clear Branch above Laurance Lake upstream 5.0 km (3.1 mi) to the confluence with two unnamed tributaries is occupied habitat providing spawning and rearing habitat for the Clear Branch local population. Laurance Lake, with an area of 37 ha (91 ac) provides rearing habitat for the Clear Branch local population. Pinnacle Creek from the confluence with Laurance Lake upstream 3.25 km (2.02 mi) to a gradient barrier is occupied and provides spawning and rearing habitat for the Clear Branch local population.

(10) Unit 6: Deschutes River Basin

Two CHSUs, the lower Deschutes and the upper Deschutes, separated by Big Falls, an impassible barrier on the Deschutes River at rkm 211.4 (rmi 131.4) (Stuart *et al.* 1997), comprise this unit.

(i) Lower Deschutes CHSU

The Lower Deschutes CHSU is in Wasco, Sherman, Jefferson, Deschutes, and Crook Counties in central Oregon. Approximately 576 km (358 mi) of stream in the lower Deschutes River basin is proposed for critical habitat designation. Approximately 23 percent of the proposed streams are located on Federal lands, 44 percent on private lands, 32 percent on Confederated Tribes of Warm Springs Reservation of Oregon lands, and 1 percent on State lands. There are five known local populations in the lower Deschutes basin; all are identified as essential to the long-term conservation of the species (USFWS 2002). Local populations of bull trout that occupy this area include the Warm Springs, Shitike Creek, Whitewater River, Jefferson/Candle/Abbot complex, and Canyon/Jack/Heising/mainstem Metolious complex. The following stream segments are included in this CHSU.

(A) The Deschutes River from its mouth at the Columbia River at rkm 329.8 (rmi 204.8) upstream 211.6 km (131.5 mi) provides FMO habitat for bull trout (Buchanan *et al.* 1997). The Deschutes River is important migration habitat connecting the local populations in the lower portion of the river, as well as providing rearing and foraging habitat. Pelton Reservoir (70 ha (174 ac)), Lake Simtustus (84.65 ha (236.6 ac)), and Lake Billy Chinook (1,543 ha (3,813 ac)) are created reservoirs on the Deschutes River, and are included as FMO habitat. Currently, there is no operating fish passage through the dams. Creation of a fish passage mechanism is being planned for future operation of the dams. Lake Billy Chinook provides important foraging and overwintering habitat for an adfluvial population which spawns in the Metolius River.

(B) Warm Springs River from its confluence with the Deschutes River at rkm 134.2 upstream 45.4 km (28.2 mi) contains FMO habitat. From rkm 45.5 upstream 28.0 km (17.4 mi) to its confluence with Dry Creek at rkm 73.6 spawning and rearing habitat occurs. This reach is interspersed with reaches on the Warm Springs Indian Reservation that are not included as proposed critical habitat due to their management as ''Conditional Use Areas,'' such that special management considerations or protections are not necessary. Bunchgrass Creek provides spawning and rearing habitat from its confluence with the Warm Spring River at rkm 62.8 upstream 10 km (6.2 mi) to its source at Cold Spring (Buchanan *et al.* 1997).

(C) Shitike Creek from its confluence with the Deschutes River at rkm 155.0 upstream 14.6 km (9.1 mi) provides FMO habitat. From rkm 14.6 upstream 36.8 km (22.9 mi) is spawning and rearing habitat (Buchanan *et al.* 1997).

(D) Crooked River from its confluence with Lake Billy Chinook at rkm 189.9 upstream 1 km (0.62 mi) to Opal Springs Dam contains FMO habitat known to be occupied. From Opal Springs dam upstream 62.5 km (38.8 mi) to the city of Prineville, FMO habitat of unknown occupancy exists. A few records of bull trout have been made (Buchanan *et al.* 1997) and at least in part due to cold water springs along the length of Crooked River Gorge, the habitat is currently adequate for bull trout. Fish passage was not provided when the dam was enlarged in 1983, so there has been no record of bull trout above the dam since that time (Buchanan *et al.* 1997). However, habitat connectivity and habitat for migration in the Crooked River, which can be established by creating fish passage through Opal Springs Dam, is essential for the long-term conservation of the species (USFWS 2002).

(E) Metolius River from its confluence with Lake Billy Chinook at rkm 195.3 upstream 37.2 km (23.1 mi) to the confluence with Jack Creek contains FMO habitat (Buchanan *et al.* 1997).

(F) Whitewater River from its confluence with the Metolius River at rkm 9.2 (rmi 5.7) upstream 17 km (10.6 mi) to its source provides spawning and rearing habitat (Buchanan *et al.* 1997).

(G) Jefferson Creek from its confluence with the Metolius River at rkm 25.5 (rmi 15.8) upstream 14.5 km (9 mi) to an impassable waterfall (Buchanan *et al.* 1997); an unnamed tributary to Jefferson Creek at rkm 10.4 (rmi 6.5) upstream 0.8 km (0.5 mi) to its source; Parker Creek from its confluence with Jefferson Creek at rkm 12.3 (rmi 7.6) upstream 0.6 km (0.4 mi); Candle Creek from its confluence with the Metolius River at rkm 25.7 (rmi 16.0) upstream 6.1 km (3.8 mi) to Cabot Creek; and Abbot Creek from its confluence with the Metolius River at rkm 26.3 (rmi 16.3) upstream 5.3 km (3.3 mi) to its source spring on the south east side of Abbot Butte contain spawning and rearing habitat (ODFW 2002).

(H) Metolius River from its confluence with Jack Creek upstream 7.2 km (4.5 mi) to the two springs at its source; Canyon Creek from its confluence with the Metolius River at rkm 36.1 (rmi 22.4) upstream 8.8 km (5.5 mi) to USFS road 1235; an unnamed tributary to Canyon Creek which is east of, and parallel to, Brush Creek upstream 3.4 km (2.1 mi); Brush Creek from its confluence with Canyon Creek at rkm 1.5 (rmi 0.9) upstream 6.1 km (3.8 mi) to USFS road 1230; Roaring Creek from its confluence with Canyon Creek at rkm 3.9 (rmi 2.4) upstream 2.9 km (1.8 mi) to two forks; up the north fork to the source springs and up the west fork to the intersection of USFS roads 1260 and 1230; Jack Creek from its confluence with the Metolius River at rkm 37.3 (rmi 23.2) upstream 7.4 km (4.6 mi) to its source springs (Buchanan *et al.* 1997); and Heising Spring from its confluence with the Metolius River near the mouth of Jack Creek upstream 0.2 km (0.12 mi) to its source (ODFW 2002) contain spawning and rearing habitat.

(I) The Lake Creek stream system is composed of a reverse dendritic (branching like a tree) pattern: As Lake Creek flows downstream, it splits into the North Fork, Middle Fork, and South Fork; the North Fork flows directly into the Metolius River; the South Fork and

Middle Fork flow back together again before entering the Metolius River. Lake Creek, including North Fork Lake Creek from its confluence with the Metolius River at rkm 41.8 (rmi 26.0) upstream 5.6 km (3.5 mi) to its confluence with Lake Creek; Middle Fork Lake Creek from its confluence with the Metolius River at rkm 42.3 (rmi 26.3) upstream 5.6 km (3.5 mi) to Lake Creek; South Fork Lake Creek from its confluence with Middle Fork Lake Creek at rkm 2.5 (rmi 15.5) upstream 4 km (2.5 mi) to Lake Creek; Lake Creek form its confluence with North, Middle, and South Fork Lake Creek upstream 2.4 km (1.5 mi) to Suttle Lake; and Suttle Lake (105 ha (259 ac)) contain FMO habitat of unknown occupancy. Link Creek from Suttle Lake upstream 1 km (0.6 mi) to Blue Lake is suitable spawning and rearing habitat of unknown occupancy; Blue Lake (22 ha (55 ac)) is FMO habitat of unknown occupancy. Together, these streams and lakes are identified as habitat essential to supporting an additional bull trout population necesssary to provide for the recovered distribution of bull trout (USFWS 2002).

(J) Squaw Creek from its confluence with the Deschutes River at rkm 195.8 (rmi 121.6) upstream 2.4 km (1.5 mi) to Alder Spring provides FMO habitat (Buchanan *et al.* 1997). Restoring connectivity is an essential element for the long-term conservation of the species (USFWS 2002).

(ii) Upper Deschutes CHSU

The upper Deschutes River CHSU is located in Deschutes, Crook, and Klamath counties in central Oregon. Approximately 225.4 km (140.1 mi) of stream in the upper Deschutes River basin is proposed for critical habitat designation. Approximately 64 percent of the proposed streams are located on Federal lands, 35 percent on private lands, and 1 percent are on State lands. Bull trout are not currently known to occur in this area. Preliminary investigations and historic information indicate that habitat for bull trout is currently present (Riehle and Nolte 1992). The Draft Recovery Plan (USFWS 2002) identifies the historic habitat in the upper Deschutes basin as core habitat (*i.e.*, habitat that contains the essential physical elements for bull trout to persist and that is deemed critical to recovery), and as a priority one recovery need, but does not identify the number of local populations needed for recovery. The plan calls for a study to determine the feasibility of re-introduction of bull trout in the upper Deschutes River basin. The following stream segments are included in the proposed critical habitat designation because a designation limited to the areas currently occupied would be inadequate to ensure the conservation of the species (50 CFR 242.12(e).

(A) The Deschutes River from Wickiup Reservoir upstream 12.4 km (7.7 mi) to its source at Lava Lake; Little Deschutes River from its confluence with Crescent Creek at rkm 59.6 (rmi 37.0) upstream 31.5 km (19.6 mi) to the intersection with Highway 58, and from there upstream 23.7 km (14.7 mi) to its source at rkm 114.9 (rmi 71.4); ; Crescent Creek from its confluence with the Little Deschutes River upstream 25.4 km (15.8 mi) to the intersection with USFS road 61; Big Marsh Creek from its confluence with Crescent Creek at rkm 31.9 (rmi 19.8) upstream 12.9 km (8 mi) through the marsh at rkm 9.4 (rmi 5.8), and from the marsh upstream 10 km (6.2 mi) to its source at rkm 22.8 (rmi 14.2); ; Crescent Lake (1,488 ha (3,676 ac)); Wickiup Reservoir (4,103 ha (10,139 ac)); Crane Prairie Reservoir (1,675 ha (4,139 ac)); Little Lava Lake (53 ha (130 ac)); and Lava Lake (139 ha (344 ac)) contain FMO habitat not currently known to be occupied (Buchanan *et al.* 1997) but deemed essential to the long-term conservation of the species (USFWS 2002;).

(B) Crescent Creek from the intersection with USFS road 61 at rkm 25.5 (rmi 15.8) upstream 15.8 km (9.8 mi) to Crescent Lake; Cold Creek from its confluence with Crescent Creek upstream 3.9 km (2.4 mi) to its spring source near the railroad tracks; Whitefish Creek from its confluence with Crescent Lake upstream 8.2 km (5.1 mi) to a water fall; and Refrigerator Creek from its confluence with Big Marsh Creek upstream 6.1 km (3.8 mi) to its source contain spawning and rearing habitat not currently known to be occupied but deemed essential to the long-term conservation of the species (USFWS 2002).

(C) Hemlock Creek from its confluence with the Little Deschutes River upstream 8.9 km (5.5 mi) to its source; Spruce Creek from its confluence with Hemlock Creek upstream 6.3 km (3.9 mi) to its source; and Fall River from its confluence with the Little Deschutes River upstream 14.2 km (8.8 mi) to its source contains spawning and rearing habitat not currently known to be occupied but deemed essential to the long-term conservation of the species (USFWS 2002).

(D) North Davis Creek from its confluence with Wickiup Reservoir upstream 1 km (0.6 mi) to its source; Browns Creek from its confluence with Wickiup Reservoir upstream 19.8 km (12.3 mi) to its spring source; Quin River from its confluence with Crane Prairie Reservoir upstream 0.3 km (0.2 mi) to its spring source; Cultus River from its confluence with Crane Prairie Reservoir upstream 13.5 km (8.4 mi) to its spring source; and Snow Creek from its confluence with the Deschutes River at rkm 375.4 (rmi 233.1) upstream 7.4 km (4.6 mi) to its spring source contain spawning and rearing habitat not currently known to be occupied but deemed essential to the long-term conservation of the species (USFWS 2002).

(11) Unit 7: Odell Lake

The Odell Lake Unit lies entirely within the Deschutes National Forest in Deschutes and Klamath counties. Total proposed critical habitat in this unit includes approximately 2,675 ha (6,611 ac) of lakes and 18.1 km (11.3 mi) of streams. The following lake area and stream segments are included in this critical habitat unit:

(i) Odell Lake, approximately 1,457 ha (3,600 ac) in surface area within the lake shoreline as depicted on a 1:24,000 scale map. Odell Lake is the primary FMO habitat for this adfluvial bull trout population.

(ii) Trapper Creek from its mouth at the confluence with Odell Lake to rkm 4.0 (rmi 2.5) at the confluence of two spring-fed tributaries which form its headwaters. Trapper Creek is the only tributary to Odell Lake where bull trout spawning and rearing is currently known to occur.

(iii) Crystal Creek from its mouth at the confluence with Odell Lake to its headwater springs at approximately rkm 2.4 (rmi 1.5). Crystal Creek historically supported bull trout spawning and maintains many of the habitat elements essential to the conservation of bull trout. Establishment of an appropriate additional spawning population in the area at Crystal Creek is essential to the long-term conservation of the species (USFWS 2002).

(iv) Odell Creek from its confluence with Odell Lake downstream 11.7 km (7.3 mi) to its confluence with Davis Lake. This area is included in this proposal because it currently is foraging habitat for the population that spawns in Trapper Creek that is essential to the long-term conservation of the species, and also because it provides additional spawning habitat that is essential to the long-term conservation of the species (USFWS 2002).

(v) Davis Lake (1,218 ha; 3,011 ac) is historical habitat that may currently provide FMO habitat for bull trout, and is essential to supporting a larger, more resilient bull trout population that is essential to the conservation of the

species (T. Wise, ODFW, pers. Comm., 2002; N. Dachtler, USFS, pers. Comm., 2002).

(12) Unit 8: John Day River Basin

The John Day River unit in the John Day River Basin in eastern Oregon includes portions of the mainstem John Day River, the North Fork John Day River, the Middle Fork John Day River and their tributary streams in Wheeler, Grant, and Umatilla counties, Oregon. A total of 1,080 km (671 mi) of stream is proposed for critical habitat. Landownership along the stream reaches proposed for critical habitat within the John Day River critical habitat unit includes approximately 54 percent Federal land, less than 1 percent State land, and 46 percent privately owned land.

Currently, there are three subpopulations recognized in the basin (Buchanan *et al.* 1997): the upper John Day basin including tributary streams; the North Fork John Day River including tributary streams; and the Middle Fork John Day and its tributary. The three subpopulation areas all flow together with no physical barriers between them, except for barriers as a seasonal consequence of low flow and high stream temperatures during summer that may limit the seasonal distribution of individuals. All proposed critical habitat designations are essential to the long-term conservation of the species (USFWS 2002). The following stream segments are included in this unit.

(i) Upper John Day River from its confluence with the North Fork John Day River at rkm 290.9 (rmi 180.6) to its confluence with Reynolds Creek at rkm 424.7 (rmi 263.7) provides FMO habitat. From Reynolds Creek upstream 20.4 km (12.7 mi) to its source there is occupied spawning and rearing habitat (Buchanan *et al.*1997; Hemmingsen *et al.* 2001a,b,c,d). Canyon Creek from its confluence with the John Day River at rkm 389.8 (rmi 242.1) upstream 43.8 km (27.2 mi) to its source, and Pine Creek from its confluence with the John Day River at rkm 401.9 (rmi 249.6) upstream 16.7 km (10.4 mi) to its source, are habitat areas that provide for expansion of bull trout populations in the upper sub-basin, which is essential for long-term conservation of the species (USFWS 2002). Indian Creek from its confluence with the John Day River at rkm 404.2 (rmi 251.0) upstream 19.2 km (11.9 mi) to its source contains spawning and rearing habitat. Bull trout are known to occur in Indian Creek (Claire and Gray, unpublished 1993; Buchanan *et al.* 1997), but a large fire in the Indian Creek watershed in 1996 may have negatively impacted the bull trout population. Reestablishing this population is essential to the long-term conservation of the species (USFWS 2002). Strawberry Creek from its confluence with the John Day River at rkm 413.1 (rmi 256.5) upstream 13.7 km (8.5 mi) to the USFS boundary contains suitable FMO habitat, and from the USFS boundary upstream 7.6 km (4.7 mi) to its source contains suitable spawning and rearing habitat. Strawberry Creek is identified as stream habitat to allow for expansion of bull trout populations in the upper watershed, an action deemed essential to the long-term conservation of the species (USFWS 2002). Reynolds Creek from its confluence with the John Day River at rkm 424.7 (rmi 263.7) upstream 14.8 km (9.2 mi) to its source, and North Fork Reynolds Creek from its confluence with Reynolds Creek at rkm 6.4 (4.0 mi) upstream 11.9 km (7.4 mi) to its source contain occupied spawning and rearing habitat (Buchanan *et al.* 1997). Deardorff Creek from its confluence with the John Day River at rkm 426.8 (rmi 265.0) upstream 15.4 km (9.6 mi) to its source (Buchanan *et al.* 1997; Hemmingsen *et al.* 2001a,b,c,d), Rail Creek from its confluence with the John Day River at rkm 432.1 (rmi 268.3) upstream 11.4 km (7.1 mi) to its source (Buchanan *et al.* 1997), Roberts Creek from its confluence with the John Day River at rkm 432.2 (rmi 268.4) upstream 8.8 km (5.5 mi) to its source (Buchanan *et al.* 1997; Hemmingsen *et al.* 2001a,b,c,d), and Call Creek from its confluence with the John Day River at rkm 436.2 (rmi 270.9) upstream 5.9 km (3.7 mi) to its source (Buchanan *et al.* 1997; Hemmingsen *et al.* 2001a,b,c,d) contain occupied spawning and rearing habitat.

(ii) North Fork John Day River from the confluence with the John Day River at rkm 290.9 (rmi 180.6) upstream 137 km (85 mi) to Granite Creek contains occupied FMO habitat. From Granite Creek upstream 38.5 km (23.9 mi) to its source contains occupied spawning and rearing habitat. West Fork Meadow Brook Creek from its confluence with North Fork John Day River at rkm 93.8 (rmi 58.2) upstream 4.5 km (2.8 mi) to East Fork Meadow Brook Creek contains occupied FMO habitat. East Fork Meadow Brook Creek from its confluence with the West Fork Meadow Brook Creek upstream 18 km (11.2 mi) to its source is occupied spawning and rearing habitat (ODFW 1996; Buchanan *et al.* 1997). Desolation Creek from its confluence with North Fork John Day River at rkm 94.5 (rmi 58.7) upstream 8.7 km (5.4 mi) is known FMO habitat. From this point upstream 24.6 km (15.3 mi) to its source contains occupied spawning and rearing habitat (ODFW 1996; Buchanan *et al.* 1997). North Fork Desolation Creek from its confluence with Desolation Creek at rkm 33.3 (rmi 20.7) upstream 10.5 km (6.5 mi) to its source is historic spawning and rearing habitat from which bull trout have probably been extirpated (Buchanan *et al.* 1997; ODFW 2001). This reach is identified as habitat essential for the long-term conservation of bull trout (USFWS 2002). South Fork Desolation Creek from its confluence with Desolation Creek at rkm 33.3 (rmi 20.7) upstream 14.0 km (8.7 mi) to its source contains occupied spawning and rearing habitat (Buchanan *et al.* 1997). Big Creek from its confluence with the North Fork John Day River at rkm 119.3 (rmi 74.1) upstream 2.1 km (1.3 mi) to its confluence with Winom Creek provides occupied spawning and rearing habitat (ODFW 1996). Winom Creek from its confluence with Big Creek at rkm 2.0 (rmi 1.2) upstream 12.0 km (7.4 mi) to its source contains occupied spawning and rearing habitat (ODFW 1996). Granite Creek from its confluence with North Fork John Day River at rkm 136.7 (rmi 84.9) upstream 25.4 km (15.8 mi) to its source is known historic spawning and rearing habitat (Buchanan *et al.* 1997) identified as essential for the long-term conservation of bull trout (USFWS 2002). Clear Creek from its confluence with the Granite Creek at rkm 12.0 (rmi 7.5) upstream 33.0 km (20.5 mi) to its source, and Lightning Creek from its confluence with Clear Creek upstream 4.8 km (3.0 mi) to its source contain spawning and rearing habitat (ODFW 1996). West Fork Clear Creek from its confluence with Lightning Creek at rkm 2.7 (rmi 1.7) upstream 7.2 km (4.5 mi) to its source, and Salmon Creek from its confluence with Lightning Creek at rkm 4.9 (rmi 3.0) upstream 3.2 km (2.0 mi) contain spawning and rearing habitat (ODFW 1996; Buchanan *et al.* 1997). Bull Run Creek from its confluence with Granite Creek at rkm 14.9 (rmi 9.3) upstream 20.6 km (12.8 mi) to its source provides occupied FMO habitat (ODFW 1996; ODFW 2001). Boundary Creek from its confluence with Bull Run Creek at rkm 16.4 (rmi 10.2) upstream 4.0 km (2.5 mi) to its source, and Deep Creek from its confluence with Bull Run Creek at rkm 7.2 (rmi 4.5) upstream 5.6 km (3.5 mi) to its source contain spawning and rearing habitat (ODFW 1996; ODFW 2001). Boulder Creek from its confluence with Granite Creek at rkm 16.4 (rmi 10.2) upstream 8.2 km (5.1 mi) to its source provides spawning and rearing habitat (Buchanan *et al.* 1997;

ODFW 2001). Crane Creek from its confluence with North Fork John Day River at rkm 147.7 (rmi 91.7) upstream 20.9 km (13.0 mi) provides FMO habitat. From this point upstream 12.7 km (7.9 mi) to its source, there is spawning and rearing habitat (ODFW 1996; Buchanan *et al.* 1997; ODFW 2001). Trail Creek from its confluence with the North Fork John Day River at rkm 156.9 (rmi 97.4) upstream 2.9 km (1.8 mi) to its confluence with North Trail Creek, and South Trail Creek contains FMO habitat (ODFW 1996; Buchanan *et al.* 1997), with bull trout presence documented both above and below this reach. South Trail Creek from its confluence with Trail Creek at rkm 2.9 (rmi 1.8) upstream 10.5 km (6.5 mi) to its source provides spawning and rearing habitat (ODFW 1996; Buchanan *et al.* 1997; ODFW 2001). Onion Creek from its confluence with the North Fork John Day River at rkm 157.5 (rmi 97.8) upstream to its source contains spawning and rearing habitat (ODFW 1996; Buchanan *et al.* 1997). Baldy Creek from its confluence with the North Fork John Day River at rkm 164.8 (rmi 102.3) upstream 7.9 km (4.9 mi), including a fork to the east and to its spring source, contains spawning and rearing habitat. Crawfish Creek from its confluence with North Fork John Day River at rkm 166.6 (rmi 103.5) upstream 8.4 km (5.2 mi) to its source provides spawning and rearing habitat (ODFW 1996; Buchanan *et al.* 1997; ODFW 2001). Cunningham Creek from its confluence with North Fork John Day River at rkm 169.7 (rmi 105.4) upstream 2.9 km (1.8 mi) to its source contains spawning and rearing habitat (ODFW 1996; Buchanan *et al.* 1997).

(iii) Middle Fork John Day River from its confluence with the North Fork John Day River at rkm 50.4 (rmi 31.3) to its source is known FMO habitat (Buchanan *et al.* 1997). Indian Creek from its confluence with the Middle Fork John Day River at rkm 54.8 (rmi 34.0) upstream 21.7 km (13.5 mi) to its source is known historic spawning and rearing habitat, but is suspected to be currently unoccupied (Buchanan *et al.* 1997). This reach is necessary to provide for the recovered distribution of bull trout (USFWS 2002). Big Creek from its confluence with the Middle Fork John Day River at rkm 60.4 (rmi 37.5) upstream 20.6 km (12.8 mi) to its source, and Deadwood Creek from its confluence with Big Creek at rkm 7.4 (rmi 4.6) upstream approximately 7.1 km (4.4 mi) contain occupied spawning and rearing habitat (Buchanan *et al.* 1997). Big Boulder Creek from its confluence with the Middle Fork John Day River at rkm 83.8 (rmi 52.0) upstream 10.3 km (6.4 mi) to its source is known historic spawning and rearing habitat, suspected to be currently unoccupied (Buchanan *et al.* 1997), and necessary to provide for the recovered distribution of bull trout (USFWS 2002). Granite Boulder Creek from its confluence with the Middle Fork John Day River at rkm 89.4 (rmi 55.5) upstream 13 km (8.1 mi) to a barrier falls is occupied spawning and rearing habitat (Buchanan *et al.* 1997). Butte Creek from its confluence with the Middle Fork John Day River at rkm 90.4 (rmi 56.1) upstream 7.7 km (4.8 mi) to its source is historic spawning and rearing habitat and is identified as essential habitat for the long-term conservation of bull trout (USFWS 2002). Davis Creek from its confluence with the Middle Fork John Day River at rkm 101.3 (rmi 62.9) upstream 10.8 km (6.7 mi) also contains spawning and rearing habitat essential for the long-term conservation of bull trout (USFWS 2002). Vinegar Creek from its confluence with the Middle Fork John Day River at rkm 102.5 (rmi 63.7) upstream to its source is occupied spawning and rearing habitat ((Seals, unpublished 2000), and also is identified as habitat essential for the long-term conservation of bull trout (USFWS 2002). Clear Creek from its confluence with the Middle Fork John Day River at rkm 104.8 (rmi 65.1) upstream 20.1 km (12.5 mi) to its source is occupied spawning and rearing habitat (Buchanan *et al.* 1997).

(iv) Dry Creek from its confluence with Pine Creek at rkm 9.59 (rmi 5.96) upstream 8.7 km (5.4 mi) to its source is spawning and rearing habitat for an isolated resident group of bull trout (ODFW 1996).

(v) Hideaway Creek from its confluence with Camas Creek at rkm 32.7 (rmi 20.3) upstream to its source is historic habitat (Buchanan *et al.* 1997) that is identified as essential to provide for the recovered distribution of bull trout (USFWS 2002). Cable Creek from its confluence with Camas Creek at rkm 28.3 (rmi 17.6) upstream 11.3 km (7.0 mi) to its source is habitat essential for the recovered distribution of bull trout (USFWS 2002).

(13) Unit 9: Umatilla-Walla Walla River Basins

The Umatilla and Walla Walla Rivers Unit is located in northeastern Oregon and southeastern Washington. The unit includes 636 km (395 mi) of stream extending across portions of Umatilla, Union, and Wallowa counties in Oregon, and Walla Walla and Columbia counties in Washington. Currently, there are four known bull trout local populations in this unit, three in the Walla Walla River Basin, and one in the Umatilla River Basin. The Draft Recovery Plan (USFWS 2002) indicates the need to maintain these four local populations to provide for the recovered distribution of bull trout. Landownership patterns are discussed in the individual CHSU descriptions.

(i) Umatilla CHSU

Approximately 284 km (176.4 mi) of stream has been proposed as critical habitat for bull trout in the Umatilla basin. Landownership within the CHSU is 37 percent Federal, 44 percent private, and 19 percent Tribal. Approximately 55 km (34 mi) of stream within the Umatilla Indian Reservation are proposed as critical habitat. The stream segments that make up the Umatilla CHSU are described below.

(A) The Umatilla River from its confluence with the Columbia River upstream 141.3 km (87.8 mi) to the confluence with the North and South Forks of the Umatilla, and extending 5.8 km (3.6 mi) up Squaw Creek, and 3.2 km (2.0 mi) up Ryan Creek. The lower 120 km (75 mi) of the Umatilla River below Squaw Creek provides important habitat for foraging, overwintering, and seasonal subadult rearing for an existing bull trout local population that spawn in upper portions of the Umatilla and Meacham Creek drainages. It also serves as a corridor for movement to the Columbia River. Subadult rearing, and potentially spawning, occurs in Squaw Creek, Ryan Creek, and the Umatilla River above Squaw Creek.

(B) Meacham Creek from its confluence with the Umatilla River upstream 34.5 km (21.4 mi) and extending up the following tributaries: North Fork Meacham Creek for a distance of 16 km (10 mi), including 4.8 km (3.0 mi) of Pot Creek, and East Fork Meacham Creek for a distance of 3.8 km (2.4 mi). Lower portions of Meacham and North Fork Meacham Creeks provide foraging and overwintering habitat, as well as a migratory corridor to the Umatilla River. Spawning and rearing has been documented in upper portions of North Fork Meacham Creek, and in the identified reach of Pot Creek. Suitable spawning and rearing habitat exists in the upper portion of Meacham Creek and in East Fork Meacham Creek, but bull trout have not been observed there in recent years (Germond *et al.* 1996).

(C) The North Fork Umatilla River from its confluence with the South Fork upstream 16.6 km (10.3 mi) to its headwaters and extending 1.6 km (1.0 mi) up Coyote Creek and 1.6 km (1.0 mi)

up Woodward Creek. This area supports the highest concentrations of spawning bull trout in the Umatilla Basin (Germond *et al.* 1996; Buchanan *et al.* 1997).

(D) The South Fork Umatilla River from its confluence with the North Fork upstream 17.4 km (10.8 mi) to its headwaters and extending 11.1 km (6.9 mi) up Buck Creek, 8.8 km (5.5 mi) up Thomas Creek, 8.2 km (5.1 mi) up Spring Creek, and 9.2 km (5.7 mi) up Shimmiehorn Creek. These drainages are used by rearing and resident bull trout and spawning was observed in the South Fork Umatilla in the early 1990s (Germond *et al.* 1996).

(ii) Walla Walla CHSU

Approximately 351.6 km (218.5 mi) of stream has been proposed as critical habitat to support the three bull trout local populations in the Walla Walla basin. Landownership within the CHSU is approximately 28 percent Federal, 69 percent private, and 3 percent State. The stream segments that make up the Walla Walla CHSU are described below.

(A) The Walla Walla River from its confluence with Mill Creek upstream 27.3 km (17.0 mi) to the confluence with the North and South Forks of the Walla Walla. Lower sections provide foraging and overwintering habitat, and a migratory connection to Mill Creek, and spawning and rearing habitat is present from above the town of Milton-Freewater to the forks.

(B) The North Fork Walla Walla River from its confluence with the South Fork upstream 29.7 km (18.4 mi) to its headwaters. This reach provides suitable spawning and rearing habitat, and evidence of bull trout spawning was observed there in 2000 (T. Bailey, ODFW, pers. comm., 2002).

(C) The South Fork Walla Walla River from its confluence with the North Fork upstream 42.7 km (26.5 mi) to its headwaters and extending 2.6 km (1.6 mi) up Skiphorton Creek, 3.6 km (2.2 mi) up Reser Creek, 2.2 km (1.4 mi) up Husky Spring Creek, and 1.8 km (1.1 mi) up an unnamed tributary that forks off the South Fork Walla Walla River at rkm 117.9 (rmi 73.2). These stream reaches contain occupied spawning and rearing habitat that supports the upper Walla Walla local population.

(D) Mill Creek from its confluence with the Walla Walla River upstream 54.7 km (32.0 mi) to its headwaters; Yellowhawk Creek from its confluence with Mill Creek upstream 13.6 km (8.4 mi); Garrison Creek from its confluence with Mill Creek upstream 15.4 km (9.6 mi); Low Creek from its confluence with Mill Creek upstream 3.2 km (2.0 mi); Paradise Creek from its confluence with Mill Creek upstream for a distance of 2.2 km (1.4 mi); North Fork Mill Creek from its confluence with Mill Creek upstream 0.8 km (0.5 mi); Deadman Creek from its confluence with North Fork Mill Creek upstream for a distance of 0.5 km (0.3 mi); Burnt Fork Creek from its confluence with North Fork Mill Creek upstream for a distance of 1.6 km (1.0 mi); Green Fork Creek from its confluence with North Fork Mill Creek upstream for a distance of 0.8 km (0.5 mi); and Bull Creek from its confluence with North Fork Mill Creek upstream for a distance of 0.7 km (0.4 mi). The lower 44 km (27 mi) of Mill Creek, Yellowhawk Creek, and Garrison Creek provide foraging and overwintering habitat for adult bull trout, as well as providing connectivity to the Walla Walla River. Upper Mill Creek and the other tributaries named above are occupied spawning and rearing areas.

(E) The Touchet River from its confluence with Coppei Creek at rkm 69.2 (rmi 43.0) upstream 21.1 km (13.1 mi) to the confluence with the North and South Forks of the Touchet. This reach provides foraging and overwintering habitat for fluvial bull trout that spawn upstream.

(F) North Fork Touchet River from its confluence with the South Fork upstream 31.7 km (19.7 mi) to its headwaters; Wolf Fork Touchet River from its confluence with the North Fork Touchet River upstream 25.3 km (15.7 mi) and extending up into Robinson Creek for a distance of 17.3 km (10.7 mi); Lewis Creek from its confluence with the North Fork Touchet River upstream 7.9 km (4.9 mi); and Spangler Creek from its confluence with the North Fork Touchet River upstream 6.6 km (4.1 mi). The lower 6 km (3.7 mi) of the North Fork, the lower 12 km (7.5 mi) of the Wolf Fork, and Robinson Creek are utilized by bull trout for foraging and overwintering; they also provide connectivity to the South Fork. The North Fork above its confluence with the Wolf Fork, and portions of the Wolf Fork above Whitney Creek are documented spawning and rearing areas. Lewis and Spangler creeks also contain occupied spawning and rearing habitat.

(G) South Fork Touchet River from its confluence with the North Fork upstream 24.6 km (15.3 mi) to its headwaters; Griffin Fork from its confluence with the South Fork Touchet River upstream 6.2 km (3.9 mi) and including 3.2 km (2.0 mi) of an unnamed tributary that enters Griffin Fork from the north; and Burnt Fork from its confluence with the South Fork Touchet River upstream 4.3 km (2.7 mi). Bull trout are known to spawn in Griffin Fork and Burnt Fork and utilize the South Fork for foraging and overwintering habitat as well as passage to the North Fork Touchet River.

(14) Unit 10: Grande Ronde River Basin

The Grande Ronde Unit extends across Union, Wallowa, and Umatilla counties in northeastern Oregon, and Asotin, Columbia, and Garfield counties in southeastern Washington. Approximately 1,030 km (640 mi) of stream in the Grande Ronde River basin is proposed for critical habitat designation. The unit includes the Grande Ronde River from its headwaters to the confluence with the Snake River and a number of its tributaries, the largest being the Wallowa River. Five bull trout local populations are associated with streams that branch directly off the Grande Ronde River, and three local populations are associated with streams flowing into the Wallowa River. One local population in the upper Little Minam River is isolated by a barrier falls and is not connected to either of the main rivers. The Draft Recovery Plan (USFWS 2002) identifies all nine existing local populations as necessary for recovery, and our proposed critical habitat reflects that need. Approximately 52 percent of the stream miles in the Grande Ronde Unit are on Federal lands, less than 1 percent are on State lands, and 48 percent are on private lands. Of the 537 km (334 mi) of stream proposed for designation on Federal lands, 44 percent are within designated wilderness areas. The stream segments that make up the Grande Ronde Unit are described below.

(i) The Grande Ronde River extending from its confluence with the Snake River upstream 265 km (165 mi) to Meadow Brook Creek provides key foraging, rearing, and overwintering habitat for sub-adult and adult fluvial bull trout and is an important migratory corridor. It is the primary artery that supports and links eight local populations in the Grande Ronde River and Wallowa River basins (Baxter 2002; P. Boehne, USFS, pers. comm., 2002). The Upper Grande Ronde River from the junction with Meadow Brook Creek upstream 19.3 km (12.0 mi) is utilized for spawning and rearing.

(ii) The Wenaha River from its confluence with the Grande Ronde River upstream 34.8 km (21.6 mi) to the junction of the North Fork and South Fork Wenaha River; Crooked Creek from its confluence with the Wenaha River upstream 12.4 km (7.7 mi) to the confluence with Third Creek, extending up First Creek 2.1 km (1.3 mi) to the confluence with Willow Creek, and up Third Creek 5.3 km (3.3 mi) to the

confluence with Trout Creek; Butte Creek from its confluence with the Wenaha River upstream 11.3 km (7.0 mi) to the confluence with East Fork and West Fork Butte Creek; West Fork Butte Creek form its mouth upstream 4.8 km (3 mi) to the confluence with Rainbow Creek; Beaver Creek from its confluence with the Wenaha River upstream 2.5 km (1.5 mi); the North Fork Wenaha River from its junction with the Wenaha River upstream 18.2 km (11.3 mi); South Fork Wenaha River from its junction with the Wenaha River upstream 13.0 km (8.1 mi); and Milk Creek from its mouth at the South Fork Wenaha River upstream 5.2 km (3.2 mi). Collectively, these stream segments support the Wenaha River local population, which is the largest bull trout population in the Grande Ronde basin. The lower 16 km (10 mi) of the Wenaha River provides FMO habitat for fluvial bull trout as well as a migratory connection to the Grande Ronde River. Spawning and rearing has been documented in the upper Wenaha and all of the identified tributary streams (Buchanan *et al.* 1997; ODFW, unpublished 2000; Baxter 2002; B. Knox, ODFW, pers. comm., 2002).

(iii) Lookingglass Creek from its confluence with the Grande Ronde River upstream 24.1 km (15.0 mi) to a barrier falls and extending up Little Lookingglass Creek to the confluence with Buzzard Creek (9.3 km (5.8 mi)), up Mottet Creek for 5.7 km (3.6 mi), and up Summer Creek for 0.6 km (0.3 mi). The Lookingglass Creek system supports a local population and bull trout spawn and rear throughout the identified stream reaches (J. Zakel, ODFW, pers. comm., 2001; D. Groat, USFS, pers. comm., 2002). Lower portions of Lookingglass Creek also provide probable foraging habitat for fluvial fish and a migratory connection to the Grande Ronde River (T. Walters, ODFW, pers. comm., 2002).

(iv) Indian Creek from its confluence with the Grande Ronde River upstream for a distance of 32.6 km (20.3 mi) and extending up two tributary streams: Camp Creek for a distance of 1.2 km (0.7 mi), and East Fork Indian Creek for a distance of 3.1 km (1.9 mi). Indian Creek currently supports a bull trout local population, with spawning and rearing occurring in the upper 15.1 km (9.4 mi) portion of Indian Creek and the identified reaches of Camp Creek and East Fork Indian Creek (Buchanan *et al.* 1997; ODFW, unpublished 2000). The lower section of Indian Creek potentially provides foraging and overwintering habitat for fluvial bull trout as well as a migratory connection to the Grande Ronde River. Bull trout occupancy has not been documented in lower Indian Creek below the National Forest boundary (the lower 17.5 km (10.9 mi); Draft Recovery Plan (USFWS 2002) guidance for this area is to restore riparian zones associated with bull trout habitat below the National Forest boundary to facilitate expansion and stabilization of this bull trout local population, which is essential for the long-term conservation of the species (USFWS 2002).

(v) Catherine Creek from the confluence with the Grande Ronde River upstream for a distance of 81.6 km (50.7 mi) to the junction of North Fork and South Fork Catherine Creek; North Fork Catherine Creek from its mouth at Catherine Creek upstream a distance of 13.8 km (8.6 mi); Middle Fork Catherine Creek form its junction with North Fork Catherine Creek upstream 4.3 km (2.7 mi) to the confluence with Squaw Creek; South Fork Catherine Creek from its junction with Catherine Creek upstream 12.3 km (7.7 mi); Pole Creek from its mouth at South Fork Catherine Creek upstream 5.1 km (3.2 mi) to its headwaters; Sand Pass Creek from its mouth at South Fork Catherine Creek upstream 4.4 km (2.8 mi) to its headwaters; and Collins Creek from its junction with South Fork Catherine Creek upstream 3 km (1.9 mi) to its headwaters. Catherine Creek currently supports a bull trout local population, with spawning and rearing occurring in each of the identified tributary streams and the upper 24.7 km (15.3 mi) of Catherine Creek (Buchanan *et al.* 1997; ODFW, unpublished 2000; P. Boehne, pers. comm. , 2002; J. Zakel, pers. comm., 2002). The lower portion of Catherine Creek is utilized as FMO habitat; bull trout have been observed throughout the mainstem and migratory fluvial fish are present (Buchanan *et al.* 1997; ODFW, unpublished 2000; USFWS 2002).

(vi) Five Points Creek from its confluence with the Grande Ronde River upstream for 21.7 km (13.5 mi) and extending up Middle Fork Five Points Creek for 2.6 km (1.6 mi); Tie Creek from its confluence with Middle Fork Five Points Creek upstream 0.8 km (0.5 mi); Fiddlers Hell Creek from its junction with Middle Fork Five Points Creek upstream (0.8 mi); Mount Emily Creek from its junction with Middle Fork Five Points Creek upstream 2.1 km (1.3 mi); Fly Creek from its confluence with the Grande Ronde River upstream 13.4 km (8.3 mi) to Lookout Creek; Lookout Creek from its mouth upstream 8.5 km (5.3 mi); Sheep Creek from its confluence with the Grande Ronde River upstream 17.1 km (10.6 mi); East Fork Sheep Creek from its mouth upstream 7.4 km (4.6 mi); Chicken Creek from its confluence with Sheep Creek upstream 8.5 km (5.3 mi); Indiana Creek from its mouth at Chicken Creek upstream 3.4 km (2.1 mi); Limber Jim Creek from its confluence with the Grande Ronde River upstream 13.0 km (8.1 mi); Marion Creek form its junction with Limber Jim Creek upstream 3.4 km (2.1 mi); Clear Creek from its confluence with the Grande Ronde River upstream 11.5 km (7.1 mi); and an unnamed tributary which branches off Clear Creek at rkm 6.3 (rmi 3.9) upstream approximately 7.0 km (4.4 mi). The Grande Ronde River above Meadow Brook Creek is utilized for spawning and rearing. The lower portion of Five Points Creek provides FMO habitat. Upper sections of Five Points Creek and the identified tributary streams provide high quality spawning and rearing habitat (P. Boehne, pers. comm., 2002; J. Zakel, pers. comm., 2002) and are identified in the Draft Recovery Plan (USFWS 2002) as areas essential to the long-term conservation of the species. Fly Creek provides FMO habitat for bull trout which spawn and rear in Lookout Creek (P. Boehne, pers. comm., 2002; J. Zakel, pers. comm., 2002). Bull trout have been observed in Lookout Creek up to approximately 0.6 km (1 mi) above USFS Road 5160 (P. Boehne, pers. comm., 2002). Lower portions of Sheep Creek provide needed FMO habitat for fluvial bull trout that spawn and rear in its upper end and its identified tributaries (P. Boehne, pers. comm., 2002; J. Zakel, pers. comm., 2002). The lower portion of Limber Jim Creek provides FMO habitat up to a potentially impassable falls, and occupied spawning and rearing habitat occurs above the falls and in Marion Creek (ODFW, unpublished 2000; P. Boehne, pers. comm., 2002; J. Zakel, pers. comm., 2002). The lower portion of Clear Creek provides FMO habitat and spawning and rearing occurs in the upper portion and in the unnamed tributary (P. Boehne, pers. comm., 2002).

(vii) The Wallowa River from the confluence with the Grande Ronde River upstream for 66.6 km (41.4 mi) to the confluence of Hurricane Creek provides FMO habitat for sub-adult and adult fluvial bull trout, and is an essential migratory corridor for movement from upper watershed spawning streams to the Grande Ronde River. Fluvial fish that spawn in the Lostine, Deer, Minam, Bear, and upper Hurricane Rivers utilize the Wallowa River to move to and from foraging and overwintering habitat in the Grande Ronde and Snake Rivers (USFWS 2002).

(viii) Minam River from the confluence with the Wallowa River upstream 72.9 km (35.3 mi) and extending up the North Minam River for a distance of 2.1 km (1.3 mi), up Elk Creek for 2.6 km (1.6 mi), and up East Fork Elk Creek for 0.5 km (0.3 mi). The Minam River currently supports a bull trout local population with spawning and rearing occurring in each of the identified tributary streams and the upper 54 km (33 mi) of the Minam River (Buchanan *et al.* 1997; ODFW, unpublished 2000). Lower sections of the Minam River are utilized as FMO habitat; bull trout have been observed throughout the mainstem and migratory fluvial fish are present (P. Sankovich, ODFW, pers. comm., 2002).

(ix) Little Minam River from its confluence with the Minam River upstream 23.8 km (14.7 mi) and extending up Boulder Creek for 0.7 km (0.4 mi) and up Dobbin Creek for a distance of 5.1 km (3 mi) (P. Sankovich, ODFW, pers. comm., 6/11/02). A barrier falls occurs at approximately rkm 8.0 (rmi 5.0) of the Little Minam River, effectively preventing upstream movement of fish beyond that point. An isolated, resident bull trout local population exists above the barrier falls in portions of the Little Minam River, Boulder Creek, and Dobbin Creek (Buchanan *et al.* 1997). This resident population does not experience immigration of bull trout from other areas. The 8.0 km (5.0 mi) stretch of the Little Minam River below the barrier falls is proposed for designation because of the presence of bull trout in this reach, high water quality, and the potential importance that emigrants from the Little Minam local population area may provide to other downstream populations (P. Sankovich, ODFW, pers. comm., 6/11/02; USFWS 2002). All of the Little Minam River and its tributaries are within the Eagle Cap Wilderness Area.

(x) Deer Creek from the confluence with the Wallowa River upstream 25.8 km (16 mi) and extending up the tributary Sage Creek for a distance of 2.7 km (1.7 mi). Bull trout currently spawn in the upper 11 km (6.9 mi) of Deer Creek and have been observed at the mouth of Sage Creek (B. Knox, pers. comm., 2002). Sage Creek above the mouth is not known to be occupied, however, it is identified in the Draft Recovery Plan (USFWS 2002) as an area that may be essential to the long-term conservation of the species. Lower Deer Creek is FMO habitat; bull trout have been observed throughout the mainstem and fluvial fish are present. Deer Creek bull trout are considered to be part of the Minam River local population (USFWS 2002).

(xi) Bear Creek from its confluence with the Wallowa River upstream 33.6 km (20.9 mi) and extending up Little Bear Creek for a distance of 10.8 km (6.8 mi) and up Goat Creek for 1.7 km (1.1 mi). Bull trout spawn and rear in upper portions of Bear Creek, Little Bear Creek, and the identified reach of Goat Creek (B. Knox, pers. comm., 2002). Foraging and overwintering habitat is present in lower portions of Bear Creek and Little Bear Creek and fluvial bull trout have been observed in these reaches (USFWS 2002). Bull trout in the Bear Creek system are considered to be part of the Lostine River local population, so movement between these two drainages, via the Wallowa River, may be important to population viability. The lower portions of both Bear Creek and Little Bear Creek are essential to the long-term conservation of the species.

(xii) The Lostine River from its confluence with the Wallowa River upstream for 40.2 km (24.9 mi) to the mouth of the East Lostine River, and extending up Silver Creek 0.5 km (0.3 mi) to Hunter Falls and up Lake Creek for a distance of 1.2 km (0.7 mi). Bull trout spawn and rear in upper portions of the Lostine River, primarily upstream of Silver Creek, and in both Silver Creek and Lake Creek (Buchanan *et al.* 1997; B. Knox, pers. comm., 2002). The Lostine River downstream of Silver Creek is utilized as FMO habitat; fluvial bull trout have been observed in the lower Lostine River and are believed to travel down into the Wallowa and Grande Ronde Rivers, and potentially all the way down to the Snake River (P. Sankovich, ODFW, pers. comm. *in* USFWS 2002).

(xiii) Hurricane Creek from its confluence with the Wallowa River upstream 20.1 km (12.5 mi) to Slick Rock Creek. Hurricane Creek supports a distinct local population; bull trout spawn and rear in the upper 8 km (5 mi) of the identified reach and utilize the lower portion as FMO habitat (P. Sankovich, ODFW, pers. comm. *in* USFWS 2002).

(15) Unit 11: Imnaha/Snake River Basins

The Imnaha/Snake Unit extends across Wallowa, Baker, and Union counties in northeastern Oregon and Adams and Idaho counties in western Idaho. The unit contains approximately 306 km (190 mi) of proposed critical habitat and consists of two CHSUs: The Imnaha River basin and the Snake River basin from the Imnaha confluence upstream to Hells Canyon Dam. Seven bull trout local populations are identified in this unit, two in the Snake River CHSU (Sheep Creek and Granite Creek), and five in the Imnaha River CHSU: (1) Mainstem Imnaha; (2) Big Sheep Creek above the Wallowa Valley Irrigation Canal (WVIC); (3) Big Sheep Creek below the WVIC; (4) Little Sheep Creek; and (5) McCully Creek. The Draft Recovery Plan (USFWS 2002) identifies all seven existing local populations as necessary for recovery, and our proposed critical habitat reflects that need. Approximately 49 percent of the unit is located on private land and 51 percent is on Federal land.

(i) Snake River CHSU

(A) Sheep Creek from its confluence with the Snake River at rkm 370.0 (rmi 292.2) upstream 9.5 km (5.0 mi) to the confluence of the West and East forks of Sheep Creek. Fluvial bull trout are known to occur in this stream reach (Idaho Department of Environmental Quality 1998).

(B) Granite Creek from its confluence with the Snake River at rkm 386.6 (rmi 240.1) upstream approximately 10.9 km (6.8 mi) provides FMO habitat (Idaho Department of Environmental Quality 1998).

(ii) Imnaha River CHSU

(A) The Imnaha River from its confluence with the Snake River at rkm 309 (rmi 191.9) upstream approximately 115.3 km (71.6 mi) to the confluence of the North Fork Imnaha and South Fork Imnaha Rivers. Bull trout occur year-round upstream of approximately rkm 64.5 (rmi 40). In fall, winter, and spring fluvial bull trout utilize the Imnaha River below this approximate location for feeding, migration, and overwintering (Buchanan *et al.* 1997). The North Fork Imnaha River from the confluence of the North Fork and South Fork Imnaha upstream approximately 9.7 km (6 mi). This reach is used for spawning and rearing by resident bull trout. The Middle Fork Imnaha from the confluence of the Middle Fork with the North Fork upstream approximately 1.3 km (0.8 mi) to a barrier falls provides spawning and rearing habitat for resident bull trout. The South Fork Imnaha River from the confluence of the South Fork with the North Fork upstream approximately 9.2 km (5.7 mi). This reach is used for spawning and rearing by resident bull trout. Soldier Creek from the confluence with the South Fork Imnaha upstream approximately 0.4 km (0.3 mi). This reach is utilized for spawning, rearing, and foraging (Buchanan *et al.* 1997). Bear Creek from the confluence with the South Fork Imnaha upstream

approximately 0.4 km (0.3 mi). This reach is utilized for spawning, rearing, and foraging (Buchanan *et al.* 1997). Blue Creek from the confluence with the South Fork Imnaha upstream approximately 0.4 km (0.3 mi). This reach is utilized for spawning, rearing, and foraging (Buchanan *et al.* 1997). Cliff Creek from the confluence with the South Fork Imnaha upstream to the headwaters approximately 6.7 km (4.2 mi). This reach is also utilized for spawning, rearing, and foraging (Buchanan *et al.* 1997; Sausen *et al.* 2001).

(B) Big Sheep Creek from the confluence with the Imnaha River upstream approximately 62 km (38.4 mi) to the confluence with North Fork Big Sheep Creek and Middle Fork Big Sheep Creek; and Middle Fork big Sheep Creek form the confluence with Big Sheep Creek upstream 3.5 km (2.2 mi) to the headwaters near Bonny Lakes. Bull trout occur year-round from Owl Creek at approximately rkm 46.1 (rmi 28.6) and upstream. In fall, winter, and spring fluvial bull trout are present below this approximate location utilizing FMO habitat down to the confluence with the Imnaha River (Buchanan *et al.* 1997). Lick Creek from the confluence with Big Sheep Creek upstream approximately 15.1 km (9.4 mi) to the headwaters. This reach provides spawning, rearing, and foraging habitat (Buchanan *et al.* 1997; Sausen *et al.* 2001). Salt Creek from the confluence with Big Sheep Creek upstream approximately 1.9 km (1.2 mi) to the point where the stream goes sub-surface (downslope from the WVIC), and then continuing approximately 0.5 km (0.3 mi) above the intersection with the WVIC. These reaches provide spawning, rearing, and foraging habitat (Buchanan *et al.* 1997; Sausen *et al.* 2001).

(C) Little Sheep Creek from the confluence with Big Sheep Creek upstream approximately 41.7 km (25.9 mi) to where Little Sheep Creek is intercepted by the WVIC, and extending upstream from the WVIC approximately 0.9 km (0.6 mi). The reach of Little Sheep Creek below the WVIC is used as FMO habitat by fluvial bull trout during fall, winter, and spring. Spawning, rearing, and foraging occur upstream of the WVIC (Buchanan *et al.* 1997). Redmont Creek upstream 1.8 km (1.1 mi) from the confluence with Little Sheep Creek to approximately 0.5 km (0.3 mi) above the WVIC. These reaches are used for spawning, rearing, and foraging (Buchanan *et al.* 1997). Cabin Creek from the confluence with Little Sheep Creek upstream 0.4 km (0.25 mi). This reach is used for spawning and/or rearing (Buchanan *et al.* 1997).

(D) McCully Creek upstream from the WVIC approximately 10.8 km (6.7 mi) to the headwaters. This reach is used as spawning and rearing habitat (Buchanan *et al.* 1997).

(16) Unit 12: Hells Canyon Complex

The Hells Canyon Complex Unit encompasses basins in Idaho and Oregon draining into the Snake River and its associated reservoirs, from Hells Canyon Dam upstream to the confluence of the Weiser River. It includes the Indian Creek and Wildhorse River basins in west-central Idaho and the Pine Creek, Powder River, and Burnt River basins in northeastern Oregon.

The Hells Canyon Complex unit includes a total of approximately 1,000 km (621 mi) of stream proposed as critical habitat and contains two CHSUs: the Pine-Indian-Wildhorse CHSU and the Powder River CHSU. The Pine-Indian-Wildhorse CHSU is located within Adams and Washington counties in western Idaho, and Baker and Wallowa counties in northeastern Oregon. A total of 390 km (242 mi) of streams within this CHSU are proposed for critical habitat designation. This CHSU contains seven known local populations of bull trout and two potential local populations. Approximate percentages of landownership associated with the streams proposed for designation are 65 percent Federal, 35 percent private, and less than 1 percent State of Idaho. The Powder River CHSU is located within Baker, Union, and Wallowa counties in northeastern Oregon. A total of approximately 610 km (379 mi) of streams within the Powder River CHSU are proposed for critical habitat designation. This CHSU contains 10 known local populations of bull trout and one potential local population. Approximate percentages of landownership associated with the streams proposed for designation are 64 percent private, 36 percent Federal, and less than 1 percent State of Oregon. The stream segments that make up the Hells Canyon Complex Unit are described below.

(i) Pine-Indian-Wildhorse CHSU

(A) Pine Creek from the confluence with the west bank of Hells Canyon Reservoir on the Snake River (rkm 434 (rmi 269.5)) upstream approximately 52.7 km (32.7 mi) to the joint confluence of West Fork Pine Creek and Middle Fork Pine Creek. Pine Creek provides FMO habitat in the lower reaches, as well as spawning and rearing habitat in the headwaters. North Pine Creek from the confluence with Pine Creek upstream approximately 22.3 km (13.8 mi) to the Baker and Wallowa counties boundary. North Pine Creek is currently occupied FMO habitat from the confluence with Pine Creek upstream to the confluence with Elk Creek. East Fork Pine Creek from the confluence with Pine Creek upstream approximately 7.2 km (4.5 mi) to the perennial headwaters. West Fork Pine Creek from the confluence with Pine Creek upstream approximately 3.8 km (2.4 mi) to the perennial headwaters. Middle Fork Pine Creek from the confluence with Pine Creek upstream approximately 3.7 km (2.3 mi) to the perennial headwaters. These creeks are essential for maintaining the upper Pine Creek local population, maintaining connectivity among all local populations within the Pine Creek Basin, and also maintaining connectivity to Hells Canyon Reservoir on the Snake River (USFWS 2002). The upper reach of North Pine Creek is also FMO habitat to provide connectivity essential to the long-term conservation of bull trout. (USFWS 2002).

(B) Elk Creek from the confluence with North Pine Creek upstream approximately 15.2 km (9.4 mi) to the perennial headwaters. Elk Creek provides spawning and rearing habitat for the Elk Creek local population, as well as FMO habitat for migratory bull trout from Hells Canyon Reservoir and the Indian Creek (Idaho) local population. Little Elk Creek from the confluence with North Pine Creek upstream approximately 9.9 km (6.2 mi) to the perennial headwaters. Fall Creek from the confluence with North Pine Creek upstream approximately 7.1 km (4.4 mi) to the perennial headwaters. These tributaries provide spawning, rearing, and/or foraging habitat for expansion of existing (Elk Creek) and potential (Lake Fork and Duck Creek) local populations associated with North Pine Creek. Habitat for expansion of distribution within existing local populations and establishment of potential local populations is essential for the long-term conservation of bull trout (USFWS 2002). Aspen Creek from the confluence with Elk Creek upstream approximately 2.5 km (1.6 mi) to the perennial headwaters. Cabin Creek from the confluence with Elk Creek upstream approximately 2 km (1.2 mi) to the perennial headwaters. Big Elk Creek from the confluence with Elk Creek upstream approximately 3.3 km (2.1 mi) to the perennial headwaters. Cabin, Big Elk, and Aspen creeks provide spawning and rearing habitat for the Elk Creek local population.

(C) Lake Fork Creek (also termed Lake Fork of Elk Creek or Lake Creek) from

the confluence with Elk Creek upstream approximately 16.7 km (10.4 mi) to the perennial headwaters. Lake Fork Creek is habitat for establishing a local population of bull trout that is essential for the long-term conservation of the species (USFWS 2002).

(D) Duck Creek from the confluence with North Pine Creek upstream approximately 9.7 km (6 mi) to the perennial headwaters. Duck Creek is habitat for establishing a local population of bull trout essential for the long-term conservation of the species (USFWS 2002). Fish Creek from the confluence with Pine Creek upstream approximately 20.5 km (12.8 mi) to the perennial headwaters. This stream is historical habitat for bull trout and may provide spawning, rearing, and/or foraging habitat for expansion of existing (Elk Creek) and potential (Lake Fork and Duck Creek) local populations associated with North Pine Creek. Expansion of distribution within local populations is essential for the long-term conservation of bull trout.(USFWS 2002)

(E) East Pine Creek from the confluence with Pine Creek upstream approximately 30.1 km (18.7 mi) to the perennial headwaters. Lower East Pine Creek provides FMO habitat necessary to maintain connectivity among local populations within the Pine Creek Basin. Spawning and rearing habitat for the East Pine Creek local population occurs in the headwaters. Okanogan Creek from the confluence with East Pine Creek upstream approximately 4 km (2.5 mi) to the perennial headwaters. Trinity Creek from the confluence with East Pine Creek upstream approximately 4.8 km (3 mi) to the perennial headwaters. These creeks are historical habitat for bull trout and provide spawning and rearing habitat for expansion of existing local populations. Habitat for expansion of distribution within local populations is essential for the long-term conservation of bull trout (USFWS 2002). An unnamed western tributary to East Pine Creek (located between Trinity Creek and East Fork of East Pine Creek) from the confluence with East Pine Creek upstream approximately 2.5 km (1.6 mi) to the perennial headwaters. East Fork of East Pine Creek from the confluence with East Pine Creek upstream approximately 2.5 km (1.6 mi) to the perennial headwaters. The unnamed tributary and the East Fork of East Pine Creek provide spawning and rearing habitat for the East Pine Creek local population.

(F) Clear Creek from the confluence with Pine Creek upstream approximately 26.1 km (16.2 mi) to the perennial headwaters. Meadow Creek from the confluence with Clear Creek upstream approximately 5.3 km (3.3 mi) to the perennial headwaters. Trail Creek from the confluence with Clear Creek upstream approximately 6.8 km (4.2 mi) to the perennial headwaters. These creeks provide spawning and rearing habitat for the Clear Creek local population. Lower Clear Creek also provides FMO habitat necessary to maintain connectivity among local populations within the Pine Creek Basin.

(G) Indian Creek from the confluence with the east bank of the Snake River within the Oxbow Bypass (rkm 436.0 (rmi 270.8)) upstream approximately 29.6 km (18.4 mi) to the perennial headwaters. Camp Creek from the confluence with Indian Creek upstream approximately 3.7 km (2.3 mi) to the perennial headwaters. Indian Creek supports both resident and migratory bull trout. Lower Indian Creek provides FMO habitat to maintain connectivity with Hells Canyon Reservoir; spawning and rearing habitat is present in the headwaters of Indian Creek and Camp Creek for the Indian Creek (Idaho) local population.

(H) Bear Creek from the confluence with the Crooked River at the head of the Wildhorse River upstream approximately 30 km (18.6 mi) to the perennial headwaters. Bear Creek provides spawning and rearing habitat for the Bear Creek local population, one of only two local populations of bull trout in the Wildhorse River Basin. Lick Creek from the confluence with Bear Creek upstream approximately 21.8 km (13.6 mi) to the perennial headwaters. Current occupancy is unknown, but Lick Creek provides habitat for expansion of distribution of the Bear Creek local population; such expansion is essential for the long-term conservation of the species (USFWS 2002). Wildhorse River from the confluence with the east bank of Oxbow Reservoir on the Snake River (rkm 455 (rmi 282.6)) upstream approximately 22.4 km (13.9 mi) to the joint confluence of Bear Creek and the Crooked River. The extent of current occupancy is unknown, but bull trout have recently used the Wildhorse River as migratory habitat. The Wildhorse River provides FMO habitat and connectivity between two local populations (Bear Creek and Crooked River), which is essential to the long-term conservation of the species (USFWS 2002).

(I) Crooked River from the confluence with Bear Creek at the head of the Wildhorse River upstream approximately 23.7 km (14.7 mi) to the perennial headwaters. The Crooked River is habitat for one of only two local populations of bull trout in the Wildhorse River Basin and is essential for the long-term conservation of the species.

(ii) Powder River CHSU

(A) The Powder River from confluence with the west bank of Brownlee Reservoir on the Snake River upstream approximately 235 km (146 mi) to the joint confluence of the McCully Fork and Cracker Creek. There are historical (1960s) observations of bull trout in the Powder River downstream of Baker City, Oregon, and upstream of Mason Dam (Buchanan *et al.* 1997) but the extent of current occupancy is unknown. Bull trout can utilize Phillips Reservoir above Mason Dam for FMO habitat in the fall, winter, and spring. The mainstem Powder River will provide FMO habitat when two-way fish passage at Thief Valley and Mason dams is restored, and habitat for connectivity among local populations in the upper Powder and North Powder rivers and Eagle Creek is essential for the long-term conservation of the species (USFWS 2002).

(B) Eagle Creek from the confluence with the Powder River Arm of Brownlee Reservoir on the Snake River upstream approximately 61 km (37.9 mi) to the perennial headwaters. East Fork Eagle Creek from the confluence with Eagle Creek upstream approximately 24.2 km (15 mi) to the perennial headwaters. West Eagle Creek from the confluence with Eagle Creek upstream approximately 15.1 km (9.4 mi) to the perennial headwaters. These creeks are historical habitat for bull trout, but the extent of current occupancy is unknown. Reestablishing a local population in the Eagle Creek watershed is essential for the conservation of bull trout (USFWS 2002).

(C) Wolf Creek from the confluence with the Powder River upstream approximately 31.6 km (19.6 mi) to the perennial headwaters. Wolf Creek provides spawning and rearing habitat for the Wolf Creek local population. When two-way fish passage at Wolf Creek Dam is restored, lower Wolf Creek will provide FMO habitat and connectivity with other local populations in the Powder River Basin, and habitat for such connectivity is essential for the conservation of bull trout (USFWS 2002).

(D) North Powder River from the confluence with the Powder River upstream approximately 75.0 km (46.6 mi) to the perennial headwaters. The North Powder River provides spawning and rearing habitat for the North Powder River local population. The lower North Powder River downstream of the

confluence with Anthony Creek likely provides FMO habitat and is essential for connectivity among local populations in the Powder River Basin (USFWS 2002).

(E) Anthony Creek from the confluence with the North Powder River upstream approximately 25.8 km (16 mi) to a barrier waterfall located approximately 10 km (6.2 mi) upstream from the confluence with Indian Creek (Oregon). Anthony Creek provides spawning and/or rearing habitat for the Anthony Creek local population, identified as essential for recovery (USFWS 2002). North Fork Anthony Creek from the confluence with Anthony Creek upstream approximately 8.5 km (5.3 mi) to the perennial headwaters. North Fork Anthony Creek provides spawning and/or rearing habitat for the Anthony Creek local population.

(F) Indian Creek from the confluence with Anthony Creek upstream approximately 8.4 km (5.2 mi) to the perennial headwaters. Indian Creek provides rearing habitat for the Indian Creek local population identified as essential for recovery (USFWS 2002).

(G) Big Muddy Creek from the confluence with the Powder River upstream approximately 17.3 km (10.7 mi) to the perennial headwaters. Big Muddy Creek provides spawning and rearing habitat for the Big Muddy Creek local population of bull trout, which is essential for recovery (USFWS 2002).

(H) Rock Creek from the confluence with the Powder River upstream approximately 20.2 km (12.6 mi) to the perennial headwaters. Rock Creek provides spawning and rearing habitat for the Rock Creek local population (USFWS 2002).

(I) Salmon Creek from the confluence with the Powder River upstream approximately 19.6 km (2.2 mi) to the perennial headwaters. Salmon Creek provides spawning and rearing habitat for the essential Salmon Creek local population.

(J) Pine Creek from the confluence with Salmon Creek upstream approximately 16.9 km (10.5 mi) to Pine Creek Dam. Pine Creek provides spawning and rearing habitat for the Pine Creek local population, which is essential for recovery (USFWS 2002).

(K) Lake Creek from the confluence with Deer Creek upstream to the perennial headwaters. Lake Creek provides spawning and rearing habitat for the Lake Creek local population, which is essential for recovery (USFWS 2002). Deer Creek from the confluence with the north bank of Phillips Reservoir on the Powder River upstream approximately 9.2 km (5.7 mi) to the confluence with Lake Creek. Current occupancy is unknown, but Deer Creek is essential to provide FMO habitat for the Lake Creek local population and connectivity with other bull trout populations in the Powder River Basin (USFWS 2002).

(L) Cracker Creek from the confluence with the McCully Fork at the head of the Powder River upstream approximately 13.6 km (8.4 mi) to the perennial headwaters. Cracker Creek provides connectivity for bull trout in two tributaries (Silver and Little Cracker creeks) within the upper Powder River local population, and with other local populations within the Powder River Basin via lower Cracker Creek. Silver Creek from the confluence with Cracker Creek upstream approximately 9.8 km (6.1 mi) to the perennial headwaters. Silver Creek provides spawning and rearing habitat for the upper Powder River local population. Fruit Creek from the confluence with Silver Creek upstream approximately 7.3 km (4.5 mi) to the perennial headwaters. Fruit Creek is historical bull trout habitat, but current occupancy is unknown. Passage barriers in Fruit Creek are identified as recovery tasks in the Draft Recovery Plan (USFWS 2002), which will allow for potential natural expansion of distribution within the upper Powder River local population. Fruit Creek is also being considered as a site for transplanting bull trout to help provide for the long-term conservation of the species. Little Cracker Creek from the confluence with Cracker Creek upstream approximately 3.1 km (1.9 mi) to the perennial headwaters. Little Cracker Creek currently provides bull trout rearing habitat for the upper Powder River local population.

(17) Unit 13: Malheur River Basin

The Malheur Unit is in the Malheur River Basin in eastern Oregon in Grant, Baker, Harney, and Malheur counties. A total of 389 km (241 mi) of streams and two reservoirs are proposed for critical habitat. Landownership along the waterways proposed for critical habitat are approximately 63 percent Federal land, 3 percent State land, and 34 percent private land. There are two local bull trout populations (upper Malheur (a) and North Fork Malheur (b)), and four potential local populations (Bosonberg Creek, McCoy Creek, Corral Basin Creek, and the Little Malheur River) that are identified as essential to recovery in the Draft Recovery Plan (USFWS 2002).

(i) Malheur River upstream 95.6 km (59.4 mi) from Warm Springs Dam, including Warm Springs Reservoir (1,658 ha; 4,098 ac), to the confluence with Big Creek at rkm 229 in Logan Valley provides FMO habitat for bull trout which migrate downstream from spawning and rearing habitat in the Logan Valley area (USFWS 2002).

(ii) The North Fork Malheur River from Agency Valley Dam upstream 36.5 km (22.7 mi) to the headwaters, including Beulah Reservoir (712 ha; 1,759 ac), provides FMO habitat below rkm 69 and spawning and rearing habitat above that point (Burns Paiute Tribe 1998–2000). Sheep Creek from the confluence with North Fork Malheur River at rkm 83.2 upstream 6.7 km (4.2 mi) to its source provides spawning and rearing habitat (Buchanan *et al.* 1997; Perkins, unpublished 1996–2001; Burns Paiute Tribe 1998–2000). Cow Creek from the confluence with North Fork Malheur River upstream 5.7 km (3.5 mi) to its source provides rearing habitat. Swamp Creek from the confluence with North Fork Malheur River at rkm 84.4 upstream 8.1 km (5.0 mi) to its source contains spawning and rearing habitat (Buchanan *et al.* 1997; Perkins, unpublished 1996–2001; Burns Paiute Tribe 1998–2000). Flat Creek from its confluence with North Fork Malheur River at rkm 86.0 upstream to rkm 1.2 at the first tributary confluence provides FMO habitat (Buchanan *et al.* 1997). Horseshoe Creek from the confluence with the North Fork Malheur River at rkm 88.4 upstream 4.5 km (2.8 mi) to its source contains spawning and rearing habitat (Buchanan *et al.* 1997; Perkins, unpublished 1996–2001; Burns Paiute Tribe 1998–2000).

(iii) The Little Malheur River from its confluence with the North Fork Malheur River upstream 31.2 km (19.4 mi) to Camp Creek provides potential FMO habitat in the lower reaches and potential spawning and rearing habitat in the upper reaches. Crane Creek from its confluence with the North Fork Malheur River at rkm 69.5 upstream 1.8 km (1.1 mi) to the confluence with Little Crane Creek contains suitable migratory and rearing habitat (Burns Paiute Tribe 1998, 1999). Little Crane Creek from the confluence with Crane Creek upstream 15.2 km (9.4 mi) to its spring fed sources provides suitable spawning and rearing habitat (Buchanan *et al.* 1997; Perkins, unpublished 1996–2001; Burns Paiute Tribe 1998–2000). An unnamed stream at rkm 9.6 of Little Crane Creek also provides suitable spawning and rearing habitat from the confluence upstream 2.6 km (1.6 mi) to its headwaters (A. Mauer, USFWS, pers. comm., 2002). Elk Creek from the confluence with the North Fork Malheur River at rkm 79.3 upstream 1.6 km (1.0 mi) to its confluence with the North Fork and South Fork Elk Creek, South Fork Elk

Creek from the confluence with Elk Creek upstream 5.9 km (3.7 mi) to its source, and North Fork Elk Creek from the confluence with Elk Creek upstream 7.7 km (4.8 mi) to its source provide spawning and rearing habitat (Buchanan *et al.* 1997; Perkins, unpublished 1996–2001; Burns Paiute Tribe 1998–2000). The Little Malheur River is essential to providing for the recovered distribution of bull trout (USFWS 2002).

(iv) Summit Creek from the confluence with the Malheur River at rkm 292.0 upstream 22.8 km (14.2 mi) to its source; Big Creek from the confluence with the Malheur River at rkm 299.0 upstream 19.0 km (11.8 mi) to its source; Meadow Fork Big Creek from the confluence with Big Creek at rkm 9.8 upstream 6.7 km (4.2 mi) to its source; Snowshoe Creek from the confluence with Big Creek at rkm 11.7 upstream 3.4 km (2.1 mi) to its source; Lake Creek from the confluence with the Malheur River at rkm 299.0 upstream 20.3 km (12.6 mi) to its source; and Crooked Creek from the confluence with Lake Creek at rkm 1.2 upstream 13.5 km (8.4 mi) to its source provide spawning and rearing habitat for the upper Malheur River local population (Buchanan *et al.* 1997; Perkins, unpublished 1996–2001; Burns Paiute Tribe 1998–2000).

(v) McCoy Creek from the confluence with Lake Creek at rkm 4.0 upstream 14.6 km (9.1 mi) to its source contains potential spawning and rearing habitat. McCoy Creek is identified as an area for range expansion in the Draft Recovery Plan, and is essential for the long-term conservation of the species (USFWS 2002).

(vi) Bosonberg Creek from the confluence with the Malheur River at rkm 298.0 upstream 5.8 km (3.6 mi) to its source contains potential habitat for bull trout. Restoration of the habitat in Bosonberg Creek to provide for population expansion is essential to the long-term conservation of the species (USFWS 2002).

(vii) Corral Basin Creek from the confluence with Big Creek at rkm 8.3 (rmi 5.2) upstream to its source is historic habitat necessary to provide for population expansion that is essential to the conservation of the species (USFWS 2002).

(18) Unit 14: Coeur d'Alene Lake Basin

(i) Coeur d'Alene Lake CHSU

The Coeur d'Alene Lake CHSU lies within Kootenai, Shoshone, Benewah and Bonner counties, Idaho. Landownership along stream proposed as critical habitat for bull trout include approximately 63 percent Federal, 30 percent private, and 6 percent State. The stream reaches proposed as designated critical habitat were identified by the Coeur d'Alene Lake Basin Recovery Unit Team as the best of the best remaining suitable habitats within a matrix of habitats generally considered unsuitable for support of spawning and rearing bull trout (USFS, unpublished 1994, 1998a, 1998b). The areas proposed as critical habitat all presently contain multiple primary constituent elements and reflect habitat essential to support populations of bull trout identified as necessary for the long-term conservation of bull trout (USFWS 2002). In total, there are approximately 6,903 km (4,290 mi) of streams comprising 502 named streams in the Coeur d'Alene Lake basin. Of this, 30 stream reaches or tributaries comprising 677 km (421 mi) are proposed as critical habitat. This equals approximately 6 percent of all streams and less than 10 percent of total stream length in the basin. Lakes comprising 12,727 ha (31,450 ac) of surface area are also being proposed as critical habitat.

(A) Coeur d'Alene Lake, approximately 12,727 ha (31,450 ac) in size, provides FMO habitat for the almost entirely migratory (adfluvial and fluvial) forms present in this CHSU.

(B) Coeur d'Alene River from the mouth upstream 59.4 km (36.9 mi) to the confluence of the North Fork and South Fork of the Coeur d'Alene River provides FMO habitat necessary for the conservation of the species (USFWS 2002). Any adfluvial bull trout that either currently exist, or those local populations of bull trout to be reestablished in the future in portions of the North Fork Coeur d'Alene River, would migrate through this section of river. North Fork Coeur d'Alene River, from its confluence with the South Fork Coeur d'Alene River upstream 140.2 km (87.1 mi) to the headwaters, is FMO habitat necessary for the long-term conservation of the species. (**Note:** we found discrepancies between USGS, STREAMNET, and other maps for this area, and specifically for the designation of the North Fork Coeur d'Alene River; we relied on the Idaho Panhandle National Forest, Fernan and Wallace Ranger District maps.)

(C) Cougar Creek from the confluence with the North Fork Coeur d'Alene River upstream 15.3 km (9.5 mi) provides spawning and rearing habitat to provide for the recovered distribution of bull trout (USFWS 2002). This portion of Cougar Creek has been identified as a priority stream for restoration and recovery activities as it has been determined to provide habitat elements necessary for long term security, or have a reasonable potential to be restored and provide elements for long-term security of bull trout in the near future. This watershed maintains good populations of westslope cutthroat trout, as well as sculpin species, indicative of potential bull trout habitat (USFS 1992, 1998a; E. Lider, USFS, pers. comm., 2002).

(D) Steamboat Creek (including the East and West Forks) from the confluence with the North Fork Coeur d'Alene River upstream 25.4 km (15.8 mi) to the headwaters provides spawning and rearing habitat essential for the conservation of the species. This portion of Steamboat Creek has been identified as a priority stream for restoration and recovery activities (USFWS 2002) as it has been determined to provide habitat elements necessary for long term security or have a reasonable potential to be restored and provide elements for long-term security of bull trout in the near future. This area maintains good populations of westslope cutthroat trout (*Oncorhynchus clarki*), as well as sculpin (*Cottus sp.*) species, indicative of potentially suitable bull trout habitat (USFS 1992, 1998a).

(E) Prichard Creek from the confluence with the North Fork Coeur d'Alene River upstream 4.7 km (2.9 mi) to the confluence with Eagle Creek contains FMO habitat. This reach is considered a priority water body for restoration and recovery activities as it is essential as a migratory corridor for adfluvial bull trout, and to maintain connectivity between all local populations within Coeur d'Alene Lake basin to provide for conservation of the species (USFWS 2002).

(F) Eagle Creek from the confluence with Prichard Creek upstream 1.6 km (1.0 mi) to the confluence with the West Fork Eagle Creek provides FMO habitat. This portion of Eagle Creek has been identified as a priority water body for restoration and recovery activities as it is essential as a migratory corridor for adfluvial bull trout, and to maintain connectivity between all local populations within Coeur d'Alene Lake basin (USFWS 2002). Any adfluvial bull trout that would utilize the West Fork Eagle Creek for spawning and rearing would have to migrate through this short section of Eagle Creek. West Fork Eagle Creek from the confluence with Eagle Creek upstream 15.0 km (9.3 mi) to the headwaters provides spawning and rearing habitat. This portion of the West Fork Eagle Creek has been identified as a priority stream for restoration and recovery activities as it has been determined to provide habitat elements necessary for long term

security, or have a reasonable potential to be restored and provide elements for long-term security of bull trout in the near future (USFWS 2002). In order to meet the recovery criteria of reestablishing at least 300 spawners within the North Fork Coeur d'Alene recovery CHSU, previously occupied and currently suitable habitat in the West Fork of Eagle Creek needs to be maintained, and if possible, enhanced, to provide additional areas of spawning and rearing essential to the conservation of the species.

(G) Tepee Creek from the confluence with the North Fork Coeur d'Alene River upstream 14.2 km (8.8 mi) to the confluence with Trail Creek contains FMO habitat. This portion of Tepee Creek, and the associated tributaries discussed below, have been identified as priority water bodies for restoration activities necessary as migratory corridors for adfluvial bull trout, to maintain connectivity between all local populations within Coeur d'Alene Lake basin, and to provide spawning and rearing habitat, all of which are essential to the conservation of the species (USFWS 2002). Tepee Creek has a variety of stream habitat types (size, flow, complexity) that appear to provide fish with diverse habitat that will allow for long term persistence within the watershed. Previous habitat restoration activities have created larger and deeper pools and runs in several reaches of this stream (E. Lider, USFS, pers. comm., 2002). Independence Creek from the confluence with Tepee Creek upstream 25.0 km (15.5 mi) to the headwaters provides FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches. This watershed is especially valuable within the Coeur d'Alene River basin to provide refugia essential to the conservation of bull trout (USFS 1998a). Trail Creek from the confluence with Tepee Creek upstream 10.0 km (6.2 mi) to the headwaters contains spawning and rearing habitat. In order to meet the recovery criteria of reestablishing at least 300 spawners within the North Fork Coeur d'Alene CHSU essential to the conservation of the species, previously occupied and currently suitable habitat such as that in Trail Creek needs to be maintained, and if possible, enhanced to provide additional areas of spawning and rearing.

(H) Buckskin Creek from the confluence with the North Fork Coeur d'Alene River upstream 6.9 km (4.3 mi) to the headwaters provides spawning and rearing habitat. This portion of Buckskin Creek has been identified as a priority stream for restoration and recovery activities as it has been determined to provide habitat elements necessary for long term security, or have a reasonable potential to be restored and provide elements for conservation of bull trout in the near future (USFWS 2002). Forage base for bull trout is abundant as the population of westslope cutthroat trout in Buckskin Creek is very healthy, and had some of the highest densities relative to over 70 other streams that were surveyed in 1994 and 1995 throughout the Coeur d'Alene River basin (Dunnigan 1997). Stream habitat in Buckskin Creek is very good as very little management has occurred within the watershed (E. Lider, USFS, pers. comm., 2002).

(ii) St. Joe River CHSU

The St. Joe River CHSU includes an estimated 3,574 km (2,221 mi) of streams encompassing over 254 named tributaries (Streamnet 2002) in Shoshone, Benewah, and Latah counties, Idaho. The high elevation and cold water temperatures inherent to this area results in natural conditions that favor bull trout persistence (PBTTAT 1998c). In addition, the processes within the upper portion of this CHSU have been minimally altered by human management actions. Landownership adjacent to aquatic areas proposed as critical habitat for bull trout include approximately 52 percent Federal, 41 percent private, and 7 percent State lands.

The Coeur d'Alene Lake Basin Recovery Unit Team established recovery criteria of reestablishing at least eight local populations in the St. Joe River CHSU with an average of 100 spawners annually per local population. The streams identified below either currently provide habitat elements necessary for long term security, or have a reasonable potential to be restored and provide elements for long-term security of bull trout in the near future. Proposed critical habitat reflects those areas necessary to support populations of bull trout identified as necessary to provide for the long-term conservation of bull trout in the Draft Recovery Plan (USFWS 2002).

(A) The lower St. Joe River from the confluence with Coeur d'Alene Lake upstream 156.4 km (97.2 mi) to the confluence with Simmons Creek provides FMO habitat. Mainstem channel habitat conditions are essential to the long term viability of bull trout due to the over-wintering habits of these migratory fish. Adult migratory bull trout from Coeur d'Alene Lake travel upstream through these lower mainstem reaches in the spring and early summer to natal streams, where they typically spawn during the first few weeks of September (Idaho Department of Fish and Game (IDFG), unpublished 1999), and then return downstream. Upper St. Joe River from the confluence of Simmons Creek upstream 71.8 km (44.6 mi) to Rambikur Falls (just below St. Joe Lake) provides spawning, rearing, and FMO habitat. This portion of upper St. Joe River, and the associated streams described below, has been identified as a priority area for restoration and recovery activities (USFWS 2002). Bull trout are currently known to spawn and rear within this portion of the St. Joe River basin.

(B) Eagle Creek from the confluence with the St. Joe River upstream 10.6 km (6.6 mi) to the headwaters provides, at a minimum, foraging habitat. Additionally, Eagle Creek and the associated streams described below have been identified as priority streams for restoration and recovery activities (USFWS 2002) with many of the habitat characteristics that are essential to the conservation of bull trout (USFS 1998b). Mosquito Creek from the confluence with the St. Joe River upstream 2.1 km (1.3 mi) to a barrier falls provides spawning and rearing habitat. This portion of Mosquito Creek has been identified as a priority stream for restoration and recovery activities and is essential to the conservation of bull trout (USFWS 2002). Gold Creek from the confluence with the St. Joe River upstream 15.4 km (9.6 mi) to the headwaters provides spawning and rearing habitat. Simmons Creek from the confluence with the St. Joe River upstream 18.7 km (11.6) mi to the headwaters contains spawning and rearing habitat.

(C) Fly Creek from the confluence with the St. Joe River upstream 9.8 km (6.1 mi) to its headwaters at Twin Lakes contains spawning and rearing habitat. Beaver Creek from the confluence with the St. Joe River upstream 10.6 km (6.6 mi) to its headwaters contains spawning and rearing habitat. Red Ives Creek from the confluence with the St. Joe River upstream 9.2 km (5.7 mi) to the headwaters provides spawning and rearing habitat. Adult bull trout implanted with radio transmitters have been tracked into Red Ives Creek, presumably to spawn. Surveys have documented bull trout of various age classes as well as redds in this stream (USFS 1993).

(D) Timber Creek from the confluence with the St. Joe River upstream 8.5 km (5.3 mi) to the headwaters contains spawning and rearing habitat. Surveys have documented spawning and bull trout of various age classes in this stream. Ruby Creek from the confluence

with the St. Joe River upstream 6.8 km (4.2 mi) to the headwaters contains documented spawning and rearing habitat. Bean Creek from the confluence with the St. Joe River upstream 7.2 km (4.5 mi) to the headwaters contains documented spawning and rearing habitat.

(E) Heller Creek from the confluence with the St. Joe River upstream 6.0 km (3.7 mi) to the headwaters provides documented spawning and rearing habitat. Sherlock Creek from the confluence with Heller Creek upstream 7.4 km (4.6 mi) to the headwaters provides spawning and rearing habitat. Yankee Bar Creek from the confluence with the St. Joe River upstream 3.2 km (2.0 mi) to the headwaters contains spawning and rearing habitat.

(F) California Creek from the confluence with the St. Joe River upstream 4.7 km (2.9 mi) to the headwaters contains spawning and rearing habitat. Medicine Creek from the confluence with the St. Joe River upstream 4.7 km (2.9 mi) to the headwaters provides habitat where bull trout are known to spawn. Wisdom Creek from the confluence with the St. Joe River upstream 6.1 km (3.8 mi) to the headwaters provides habitat where bull trout are currently known to spawn and rear. A steep cascade, which was believed to form a barrier to migratory fish, occurs at approximately rkm 4.0 (rmi 2.2). However, during redd surveys in 2001, multiple redds and bull trout were documented above the cascade (J. Dupont, IDFG, pers. comm., 2002).

(19) Unit 15: Clearwater River Basin

The Clearwater River Unit includes 3,063 km (1,904 mi) of streams and 6,722 ha (16,611 ac) of lakes proposed to be designated as critical habitat for bull trout within the Clearwater River basin in north-central Idaho. This large basin covers an area of approximately 2,423,691 ha (5,989,052 ac) and extends from the Snake River confluence at Lewiston on the west to headwaters in the Bitterroot Mountains along the Idaho/Montana border on the east. This unit is divided into seven CHSUs. These CHSUs include: Lower/Middle Fork Clearwater River, North Fork Clearwater River, Fish Lake (North Fork), South Fork Clearwater River, Lochsa River, Fish Lake (Lochsa), and Selway River. Habitat areas to support all local populations within this unit are essential to the conservation of bull trout (USFWS 2002).

(i) Lower/Middle Fork Clearwater River CHSU

The Lower/Middle Fork Clearwater River CHSU lies within a drainage basin of approximately 660,012 ha (1,630,919 ac) that includes the mainstem and Middle Fork of the Clearwater River, plus all watersheds tributary to these large channels except for the North Fork Clearwater above Dworshak Dam and the South Fork Clearwater, Lochsa and Selway drainages. Located within Idaho's Nez Perce, Latah, Lewis, Clearwater, and Idaho counties, the basin has a diverse mix of private (76 percent), Federal (14 percent), State (8 percent), and Nez Perce Tribal (2 percent) ownership. The Lower/Middle Fork Clearwater River CHSU includes 293.7 km (182.6 mi) of streams proposed to be designated as critical habitat.

(A) The Clearwater River from its confluence with the Snake River upstream 119.5 km (74.3 mi) to the confluence with the South Fork Clearwater River, the Middle Fork Clearwater River from the confluence with the South Fork upstream 36.8 km (22.9 mi) to its origin at the confluence of the Lochsa River and Selway River, provide FMO habitat (Clearwater Basin Bull Trout Technical Advisory Team (CBBTTAT) 1998a,b). They also provide functional migratory corridors that may allow fluvial bull trout to move between local populations within and outside this CHSU. The North Fork Clearwater River from its confluence with the Clearwater River upstream 2.6 km (1.6 mi) to the base of Dworshak Dam provides important thermal refuge during summer.

(B) Lolo Creek from its confluence with the Clearwater River upstream 72.9 km (45.3 mi) to the headwaters provides rearing and migratory habitat (CBBTTAT 1998a; USFS 1999a).

(C) Clear Creek from its confluence with the Middle Fork Clearwater River upstream 34.7 km (21.5 mi) to the headwaters is occupied habitat (CBBTTAT 1998d), Middle Fork Clear Creek from its mouth upstream 10.8 km (6.7 mi) to the headwaters, and South Fork Clear Creek from its mouth upstream 15.9 km (9.9 mi) to the headwaters are areas where occupancy is unknown. These areas are essential to maintaining the existing bull trout distribution, and to expand habitat as essential for the conservation of bull trout (USFWS 2002).

(ii) North Fork Clearwater River CHSU

The North Fork Clearwater River CHSU lies within a drainage basin of approximately 632,348 ha (1,562,561 ac) that includes the entire North Fork Clearwater River system above Dworshak Dam, excluding the small portion of the Lake Creek drainage upstream of Japanese Creek. Located within Clearwater, Idaho, and Shoshone counties, the basin landownership is a mixture of Federal (67 percent), State (12 percent), and private (21.0 percent). The areas proposed for designation as critical habitat in this CHSU include a total of 918.9 km (571.1 mi) of streams, and the full 6,656 ha (16,441 ac) pool of Dworshak Reservoir.

(A) Dworshak Reservoir (6,656 ha (16,441 ac)), the North Fork Clearwater River from the head of the reservoir upstream 164.8 km (102.4 mi) to Kelly Forks, Freeman Creek from the confluence with Dworshak Reservoir upstream 2.5 km (1.6 mi) to an unnamed tributary, Breakfast Creek from its confluence with Little North Fork Clearwater River upstream 6.1 km (3.8 mi) to the mouth of Stony Creek, and Stony Creek from its mouth upstream 5.9 km (3.7 mi) to the mouth of Glover Creek provide FMO habitat for upstream bull trout populations. Floodwood Creek from its confluence with Breakfast Creek upstream 21.8 km (13.6 mi) to an unnamed tributary provides FMO habitat (D. Schiff, IDFG, pers. comm., 2002), and West Fork Floodwood Creek from its mouth upstream 6.7 km (4.2 mi) to an unnamed tributary provides rearing habitat (CBBTTAT 1998c).

(B) The Little North Fork Clearwater River from Dworshak Reservoir upstream 72.5 km (45.1 mi) to a gradient break near the headwaters provides FMO and rearing habitat (CBBTTAT 1998c). Sawtooth Creek from its confluence with the Little North Fork Clearwater River upstream 13.4 km (8.3 mi) to an unnamed tributary is historic habitat (USFS 1935) and is adjacent to habitat known to be occupied, and provides habitat necessary for the recovered distribution of bull trout (Skille 1991; USFWS 2002). Canyon Creek from its confluence with the Little North Fork Clearwater River upstream 15.5 km (9.7 mi) to an unnamed tributary is occupied habitat (D. Schiff, IDFG, pers. comm., 2002). Montana Creek from its confluence with the Little North Fork Clearwater River upstream 5.5 km (3.4 mi) to an unnamed tributary provides spawning and rearing habitat (CBBTTAT 1998c). Butte Creek from its confluence with the Little North Fork Clearwater River upstream 3.0 km (1.8 mi) to an unnamed tributary provides spawning and rearing habitat (D. Schiff, IDFG, pers. comm., 2002). Rutledge Creek from its confluence with the Little North Fork Clearwater River upstream 5.2 km (3.2 mi) to an unnamed tributary; Jungle Creek from its confluence with the Little North Fork Clearwater River upstream 4.3 km (2.7 mi) to an unnamed tributary; Adair Creek from its confluence with the Little North Fork Clearwater River upstream 4.7 km (2.9

mi) to a break in stream gradient; Lund Creek from its confluence with the Little North Fork Clearwater River upstream 4.3 km (2.7 mi) to a break in stream gradient; and Little Lost Lake Creek from its confluence with the Little North Fork Clearwater River upstream 6.1 km (3.8 mi) to the headwaters provide spawning and rearing habitat (CBBTTAT 1998c). Lost Lake Creek from the mouth upstream 5.7 km (3.6 mi) to the headwaters is occupied (D. Schiff, IDFG pers. comm., 2002), but the habitat usage type is unknown. Another Butte Creek, this one a tributary to the North Fork Clearwater River between the confluence with the Little North Fork Clearwater River and the confluence with Isabella Creek, upstream 2.2 km (1.3 mi) from the mouth is occupied habitat of unknown usage (D. Weigel, U.S. Bureau of Reclamation (BOR), pers. comm., 2002).

(C) Isabella Creek from its confluence with the North Fork Clearwater River upstream 11.6 km (7.2 mi) to the confluence with Falls Creek is occupied rearing habitat (Platts *et al.* 1993) and above that point fish have been found (D. Weigel, pers. comm., 2002; E. Kee, Clearwater National Forest, pers. comm., 2002) of an age class that indicate spawning and rearing is likely occurring.

(D) Beaver Creek from its confluence with the North Fork Clearwater River upstream 4.2 km (2.6 mi) to Sourdough Creek is occupied habitat of unknown usage (D. Schiff, IDFG, pers. comm., 2002). Sneak Creek from its confluence with the North Fork Clearwater River upstream 0.3 km (0.2 mi) to a barrier falls provides spawning and rearing habitat (CBBTTAT 1998c).

(E) Skull Creek from its confluence with the North Fork Clearwater River upstream 24.3 km (15.1 mi) to the headwaters, and Collins Creek from its confluence with Skull Creek upstream 16.2 km (10.0 mi) to a gradient break near the headwaters provide spawning and rearing habitat (CBBTTAT 1998c; E. Kee, pers. comm., 2002). Roaring Creek from its confluence with Skull Creek upstream 4.3 km (2.7 mi) to Frost Creek is of unknown occupancy (*i.e.*, bull trout surveys have not been conducted), but appropriate habitat conditions in Skull Creek (C. Huntington, Clearwater BioStudies, Inc. (CBI), pers. comm., 2002) and the presence of rearing juvenile bull trout in nearby streams support its inclusion as proposed critical habitat necessary to provide spawning and rearing areas to support local population viability and genetic integrity. Frost Creek from its confluence with Roaring Creek upstream 2.7 km (1.7 mi) to the headwaters provides, at a minimum, rearing habitat (E. Kee, pers. comm., 2002).

(F) Quartz Creek from its confluence with the North Fork Clearwater River upstream 19.7 km (12.2 mi) to Henry Creek provides rearing and migratory habitat (CBBTTAT 1998c; D. Schiff, IDFG, pers. comm., 2002).

(G) Rock Creek from its confluence with the North Fork Clearwater River upstream 10.2 km (6.2 mi) to the abandoned road crossing at approximately rkm 10.2 (rmi 6.2), and Lightning Creek from its confluence with Rock Creek upstream 0.8 km (0.5 mi) to an unnamed tributary provide occupied habitat of unknown usage (CBBTTAT 1998c).

(H) Four streams entering the North Fork Clearwater River between Rock Creek and Weitas Creek including Larson Creek from its mouth upstream 1.0 km (0.6 mi) to an unnamed tributary; Little Washington Creek from its mouth upstream 1.7 km (1.1 mi) to Swanson Creek; Washington Creek from its mouth upstream 2.3 km (1.4 mi) to a potential migration barrier; and Orogrande Creek from its mouth upstream 1.6 km (1.0 mi) to a potential migration barrier are likely to be at least seasonally occupied (CBBTTAT 1998c) and provide habitat necessary for the recovered distribution of bull trout (USFWS 2002).

(I) Weitas Creek from its confluence with the North Fork Clearwater River upstream 43.0 km (26.7 mi) to a gradient break near the headwaters provides FMO habitat in the lower reaches and spawning and rearing habitat in the upper reaches. Johnny Creek from its confluence with Weitas Creek upstream 7.2 km (4.5 mi) to a barrier falls provides FMO habitat (D. Weigel, pers. comm., 2002) and possibly spawning and rearing habitat in the upper reaches (E. Kee, pers. comm., 2002). Middle Creek from its confluence with Weitas Creek upstream 15.5 km (9.7 mi) to Beaver Dam Creek, and Little Weitas Creek from its confluence with Weitas Creek upstream 3.8 km (2.4 mi) to Middle Ridge Creek are likely to be at least seasonally occupied (CBBTTAT 1998c) and provide habitat necessary for the recovered distribution of bull trout (USFWS 2002). Johnagan Creek from its confluence with Weitas Creek upstream 4.4 km (2.7 mi) to an unnamed tributary (E. Kee, pers. comm., 2002), Windy Creek from its confluence with Weitas Creek upstream 13.2 km (8.2 mi) to the headwaters (D. Weigel, pers. comm., 2002; CBI 2000), and Liz Creek from its confluence with Weitas Creek upstream 6.2 km (3.8 mi) to the headwaters (D. Weigel, pers. comm., 2002) provide rearing habitat. Corral Creek from its confluence with Weitas Creek upstream 7.1 km (4.4 mi) to the headwaters, and Fro Creek from its confluence with Weitas Creek upstream 1.9 km (1.2 mi) to Bald Mountain Lake Creek are likely to be at least seasonally occupied (P. Murphy, USFS, pers. comm., 2002) and provide habitat necessary for the recovered distribution of bull trout (USFWS 2002).

(J) Death Creek from its confluence with the North Fork Clearwater River upstream 1.0 km (0.6 mi) to a break in channel gradient, Fisher Creek from its confluence with the North Fork Clearwater River upstream 1.2 km (0.7 mi) to a break in channel gradient, and Trail Creek from its confluence with the North Fork Clearwater River upstream 1.8 km (1.1 mi) to an unnamed tributary are likely to be at least seasonally occupied (CBBTTAT 1998c), provide seasonal thermal refuge, and provide habitat necessary for the recovered distribution of bull trout (USFWS 2002).

(K) Fourth of July Creek from its confluence with the North Fork Clearwater River upstream 21.7 km (13.5 mi) to the headwaters is occupied (Platts *et al.* 1993) with spawning and rearing habitat in the upper reaches (CBBTTAT 1998c). Shot Creek from its confluence with Fourth of July Creek upstream 8.0 km (5.0 mi) to the headwaters, and Bill Creek from its confluence with Fourth of July Creek upstream 7.5 km (4.7 mi) to the headwaters are likely to be at least seasonally occupied (P. Murphy, pers. comm., 2002) and provide habitat necessary for the recovered distribution of bull trout (USFWS 2002).

(L) Cold Springs Creek from the confluence with the North Fork Clearwater River upstream to a break in channel gradient at km 4.7 (mi 2.9), and Cool Creek from its confluence with the North Fork Clearwater River upstream 1.2 km (0.8 mi) to an unnamed tributary provide habitat necessary to support additional populations of bull trout identified as essential to the conservation of bull trout (USFWS 2002).

(M) Kelly Creek. from the confluence with the North Fork Clearwater River upstream 41.3 km (25.6 mi) to North Fork Kelly Creek provides migratory habitat in the lower reaches (D. Schiff, IDFG, pers. comm., 2002), and spawning and rearing habitat in the upper reaches (CBBTTAT 1998c). Junction Creek from its confluence with Kelly Creek upstream to an unnamed tributary at km 2.7 (mi 1.7), and Barnard Creek from its confluence with Kelly Creek upstream 8.3 km (5.2 mi) to the headwaters are likely to be at least seasonally occupied (P. Murphy, pers. comm., 2002) and

provide habitat necessary for the recovered distribution of bull trout (USFWS 2002). Bear Creek from its confluence with Kelly Creek upstream 6.1 km (3.8 mi) to a gradient break (D. Weigel, pers. comm., 2002), South Fork Kelly Creek from its confluence with Kelly Creek upstream 4.3 km (2.7 mi) to Williams Creek (CBBTTAT 1998c), Middle Fork Kelly Creek from its confluence with Kelly Creek upstream 5.1 km (3.2 mi) to Kid Lake Creek (P. Murphy, pers. comm., 2002), Kid Lake Creek from its confluence with Middle Fork Kelly Creek upstream to the USFS Trail 567 crossing at rkm 2.9 (rmi 1.8) (P. Murphy, pers. comm., 2002), and North Fork Kelly Creek from its confluence with Kelly Creek upstream 6.2 km (3.8 mi) to an unnamed tributary (CBBTTAT 1998c) are occupied and provide habitat necessary for the recovered distribution of bull trout (USFWS 2002).

(N) Moose Creek from its confluence with Kelly Creek upstream 15.9 km (9.5 mi) to a gradient break near the headwaters (D. Schiff, IDFG, pers. comm., 2002; CBBTTAT 1998c) and its tributaries Ruby Creek from its mouth upstream 2.7 km (1.7 mi) to a break in channel gradient (CBI 1999), Little Moose Creek from its mouth upstream 16.2 km (10.0 mi) to a break in channel gradient near section line 25/26 (D. Schiff, IDFG, pers. comm., 2002), Osier Creek from the mouth upstream 13.0 km (8.1 mi) to the headwaters (D. Schiff, IDFG, pers. comm., 2002), and Swamp Creek from its confluence with Osier Creek upstream 8.7 km (5.4 mi) to an unnamed tributary provide migratory and spawning and rearing habitat. Sugar Creek from its confluence with Moose Creek upstream 6.4 km (4.0 mi) to the headwaters provides habitat necessary for the expansion of bull trout populations that are essential for conservation of the species (USFWS 2002). Pollock Creek from its confluence with Swamp Creek upstream to a barrier falls near rkm 2.7 (rmi 1.7) contains excellent habitat necessary to support the recovered distribution of bull trout (C. Huntington, CBI, pers. comm., 2002; USFWS 2002).

(O) Cayuse Creek from its confluence with Kelly Creek upstream 52.7 km (32.8 mi) to a break in channel gradient near the headwaters provides rearing habitat (CBBTTAT 1998c). Toboggan Creek from its confluence with Cayuse Creek upstream 13.0 km (8.0 mi) to an unnamed tributary (Platts *et al.* 1993; C. Huntington, CBI, pers. comm., 2002), and Monroe Creek from its from its confluence with Cayuse Creek upstream 2.1 km (1.3 mi) to an unnamed tributary (Platts *et al.* 1993; CBBTTAT 1998c) provide, at a minimum, migratory habitat. Gravey Creek from its confluence with Cayuse Creek upstream 14.3 km (8.9 mi) to the headwaters is historic habitat (CBBTTAT 1998c) that is targeted for restoration efforts to provide for the recovered distribution of bull trout (USFWS 2002). Mae Creek from its confluence with Gravey Creek upstream 0.7 km (0.4 mi) to the USFS Road 107A crossing, and Marten Creek from its confluence with Gravey Creek upstream 7.2 km (4.5 mi) to the headwaters area targeted for restoration efforts to provide for the recovered distribution of bull trout (USFWS 2002). Tributaries to Gravey Creek, Howard Creek from its mouth upstream 10.1 km (6.3 mi) to the headwaters, Weasel Creek from its mouth upstream to a break in channel gradient near rkm 2.9 (rmi 1.8), Mink Creek from its mouth upstream to a break in gradient near rkm 3.4 (rmi 2.1), and Silver Creek from its mouth upstream 5.4 km (3.4 mi) to a break in gradient are likely to be at least seasonally occupied, contain excellent bull trout habitat (P. Murphy, pers. comm., 2002) and provide habitat essential to the conservation of bull trout (USFWS 2002).

(P) North Fork Clearwater River from Kelly Forks at rkm 164.8 (rmi 102.4) upstream 47.8 km (29.7 mi) to the headwaters provides FMO habitat. Pete Ott Creek from its confluence with the North Fork Clearwater River upstream 0.7 km (0.5 mi) to an unnamed tributary, and Elizabeth Creek from its confluence with the North Fork Clearwater River upstream 1.2 km (0.7 mi) to an unnamed tributary provide FMO habitat (Platts *et al.* 1993; CBBTTAT 1998c). Hidden Creek from its confluence with the North Fork Clearwater River upstream 3.7 km (2.3 mi) to an unnamed tributary provides rearing habitat (CBBTTAT 1998c). Deception Gulch from its confluence with the North Fork Clearwater River upstream 8.4 km (5.2 mi) to the headwaters is suspected to be occupied (P. Murphy, pers. comm., 2002; CBBTTAT 1998c) and is targeted for restoration efforts and is essential to provide for the conservation of bull trout (USFWS 2002). Lake Creek from its confluence with the North Fork Clearwater River upstream 12.3 km (7.7 mi) to Japanese Creek; Goose Creek from its confluence with Lake Creek upstream 8.2 km (5.1 mi) to an unnamed tributary; Long Creek from its confluence with the North Fork Clearwater River upstream 11.3 km (7.0 mi) to an unnamed tributary; Short Creek from its confluence with Long Creek upstream 3.7 km (2.3 mi) to a break in channel gradient; Rawhide Creek from its confluence with Long Creek upstream 5.5 km (3.4 mi) to a break in channel gradient; Slate Creek from its confluence Long Creek upstream 4.0 km (2.5 mi) to the headwaters; an unnamed Long Creek tributary from its mouth upstream 1.5 km (0.9 mi) to an unnamed tributary; Meadow Creek from its confluence with the North Fork Clearwater River upstream 20.3 km (12.6 mi) to the headwaters; Vanderbilt Gulch from its confluence with the North Fork Clearwater River upstream 9.4 km (5.9 mi) to the headwaters; Chamberlain Creek from its confluence with the North Fork Clearwater River upstream 5.4 km (3.3 mi) to the headwaters; Placer Creek from its confluence with the North Fork Clearwater River upstream 3.6 km (2.3 mi) to the headwaters; Bostonian Creek from its confluence with the North Fork Clearwater River upstream 8.0 km (5.0 mi) to the headwaters; Niagra Gulch from its confluence with the North Fork Clearwater River upstream 1.9 km (1.2 mi) to an unnamed tributary; Boundary Creek from its confluence with the North Fork Clearwater River upstream 3.0 km (1.9 mi) to a break in channel gradient; and Graves Creek from its from its confluence with the North Fork Clearwater River upstream 3.1 km (1.9 mi) to a break in channel gradient provide FMO and spawning and rearing habitat (CBBTTAT 1998c; D. Weigel, pers. comm., 2002 ; CBI 1994; D. Schiff, IDFG, pers. comm., 2002).

(iii) Fish Lake (North Fork) CHSU

The Fish Lake (North Fork) CHSU lies within a small headwater basin of approximately 1,433 ha (3,541 ac) that is situated upstream of Japanese Creek in the Lake Creek drainage of the North Fork Clearwater River system. Located in Clearwater County and entirely within the Clearwater National Forest, the basin is dominated by Fish Lake, the largest mountain lake in north-central Idaho.

(A) Lake Creek (a tributary to the North Fork Clearwater River) from Fish Lake downstream 6.1 km (3.8 mi) to Japanese Creek provides spawning and rearing habitat (CBBTTAT 1998c; D. Weigel, pers. comm., 2002). Fish Lake (47 ha (16 ac) in size) provides FMO habitat. Four unnamed and unmapped inlets that enter Fish Lake on the eastern end of the lake, and a fifth unnamed inlet on the north side from their confluence with Fish Lake upstream to their source(s) provide spawning and rearing habitat (USFWS 2002).

(iv) South Fork Clearwater River CHSU

The South Fork Clearwater River CHSU lies within a drainage basin of approximately 304,516 ha (752,474 ac) that includes the entire stream network of the South Fork Clearwater River located within Idaho and Nez Perce counties. Landownership in the basin is a mixture of Federal (70 percent), private (30 percent), State (less than 1 percent), and Tribal (less than 1 percent), with private lands dominant in the lower portion of the area. However, streams proposed for critical habitat designation are primarily associated with Federal lands. Of 522.7 km (324.8 mi) of streams proposed for designation as critical bull trout habitat, 85 percent are on Federal land, less than 1 percent on State land, less than 1 percent on Tribal land, and 15 percent on private lands.

(A) The South Fork Clearwater River from its mouth on the mainstem Clearwater River upstream 100.3 km (62.3 mi) to its origin at the confluence of the Red River and the American River provides FMO habitat (CBBTTAT 1998d). It also provides a migratory corridor that allows fluvial bull trout to move between local populations within this CHSU and provides the opportunity for genetic exchange between local populations.

(B) Mill Creek from its confluence with the South Fork Clearwater River upstream 13.6 km (8.5 mi) to Merton Creek, and Merton Creek from its mouth upstream 1.6 km (1.0 mi) to an unnamed tributary provide rearing habitat (W. Paradis, USFS, pers. comm., 2002) as well as habitat essential to the conservation of bull trout (USFWS 2002).

(C) Johns Creek from its confluence with the South Fork Clearwater River upstream approximately 30.9 km (19.3 mi) to a gradient break near the headwaters; Gospel Creek from its confluence with Johns Creek upstream 3.1 km (2.0 mi) to Moores Lake Creek; Moores Lake Creek from its confluence with Gospel Creek upstream 3.4 km (2.1 mi) to the USFS Trail 305 crossing; Open Creek from its confluence with Johns Creek upstream 1.5 km (0.9 mi) to a break in channel gradient; Moores Creek from its confluence with Johns Creek upstream 8.2 km (5.1 mi) to a barrier; Twin Lakes Creek from its confluence with Johns Creek upstream 1.9 km (1.5 mi) to Hagen Creek; Hagen Creek from its mouth upstream to an unnamed tributary at rkm 2.3 (rmi 1.5); and Taylor Creek from its confluence with Johns Creek upstream 2.7 km (1.7 mi) to an unnamed tributary provide spawning and rearing habitat (Spangler 1997; CBBTTAT 1998d).

(D) Silver Creek from its confluence with the South Fork Clearwater River upstream 0.2 km (0.1 mi) to a barrier falls; Wing Creek from its confluence with the South Fork Clearwater River upstream 0.3 km (0.2 mi) to a barrier falls; and Twentymile Creek from its confluence with the South Fork Clearwater upstream 0.2 km (0.1 mi) to a barrier falls are positioned between bull trout strongholds in Johns Creek (see above) and Tenmile Creek (see below) and provides foraging and thermal refuge habitat (USFS 1999b).

(E) Tenmile Creek from the confluence with the South Fork Clearwater River upstream 22.6 km (14.0 mi) to a break in channel gradient above Wiseboy Creek; Sixmile Creek from its confluence with Tenmile Creek upstream 1.4 km (0.9 mi) to a barrier falls; Williams Creek from its confluence with Tenmile Creek upstream 8.4 km (5.2 mi) to the headwaters; and Wiseboy Creek from its confluence with Tenmile Creek upstream 0.9 km (0.6 mi) to an unnamed tributary provide spawning and rearing habitat (Spangler 1997; CBBTTAT 1998d; (W. Paradis, USFS, pers. comm., 2002; D. Mays, USFS, pers. comm., 2002).

(F) Buckhorn Creek from its confluence with the South Fork Clearwater River upstream 0.3 km (0.2 mi) to an unnamed tributary foraging and thermal refuge habitat (D. Mays, USFS, pers. comm., 2002).

(G) Newsome Creek from its confluence with the South Fork Clearwater River upstream 25.2 km (15.7 mi) to the headwaters; West Fork Newsome Creek from its confluence with Newsome Creek upstream 8.0 km (5.0 mi) to a migration barrier; and Bear Creek from its confluence with Newsome Creek upstream 2.7 km (1.6 mi) to an unnamed tributary provide spawning and/or rearing habitat (D. Mays, USFS, pers. comm., 2002; CBBTTAT 1998d). Beaver Creek from its confluence with Newsome Creek upstream 8.0 km (5.0 mi) to the headwaters is suspected to provide spawning and rearing habitat (CBBTTAT 1998d) and is essential to the conservation of bull trout (USFWS 2002). Pilot Creek from its confluence with Newsome Creek upstream 9.6 km (5.9 mi) to the headwaters; an unnamed Pilot Creek tributary from its mouth upstream 1.3 km (0.8 mi) to another unnamed tributary; a second unnamed Pilot Creek tributary from its mouth upstream 0.6 km (0.4 mi) to a gradient break near the headwaters; Baldy Creek from its confluence with Newsome Creek upstream 6.0 km (3.8 mi) to an unnamed tributary; and Mule Creek from its confluence with Newsome Creek upstream 0.9 km (0.6 mi) to an unnamed tributary provide spawning and rearing habitat (CBBTTAT 1998d; IDFG, unpublished 2001; D. Mays, USFS, pers. comm., 2002).

(H) Crooked River from its confluence with the South Fork Clearwater River upstream 18.8 km (11.7 mi) to the confluence of the East and West Forks; Relief Creek from its confluence with the West Fork Crooked River upstream 2.2 km (1.3 mi) to East Fork Relief Creek; West Fork Crooked River from its confluence with the East Fork Crooked River upstream approximately 5.4 km (3.4 mi) to a barrier falls; an unnamed tributary to the West Fork Crooked River from its mouth upstream approximately 1.0 km (0.6 mi) to a break in channel gradient; and East Fork Crooked River from its confluence with the West Fork upstream approximately 2.7 km (1.7 mi) to the distribution limit of bull trout provide spawning and rearing habitat (J. Brostrom, IDFG, pers. comm., 2002; D. Mays, USFS, pers. comm., 2002; CBBTTAT 1998d).

(I) Red River from its confluence with the Crooked River and American River upstream 45.9 km (28.5 mi) to the headwaters; Red Horse Creek from its confluence with the Red River upstream 9.1 km (5.6 mi) to an unnamed tributary; Siegel Creek from its confluence with the Red River upstream 2.7 km (1.7 mi) to Boyer Creek; Dawson Creek from its confluence with the Red River upstream 3.7 km (2.3 mi) to the headwaters; Little Moose Creek from its confluence with the Red River upstream 3.0 km (1.8 mi) to an unnamed tributary; Moose Butte Creek from its confluence with the Red River upstream 7.4 km (4.6 mi) to an unnamed tributary; South Fork Red River from its confluence with the Red River upstream 18.7 km (11.7 mi) to the headwaters; Trapper Creek from its confluence with the South Fork Red River upstream 10.6 km (6.6 mi) to the headwaters; West Fork of South Fork Red River from its mouth upstream 4.9 km (3.0 mi) to an unnamed tributary; Middle Fork of South Fork Red River from its mouth upstream 6.1 km (3.8 mi) to the headwaters; Ditch Creek from its confluence with the Middle Fork of South Fork Red River upstream 6.3 km (3.9 mi) to the headwaters; Soda Creek from its confluence with the Red River upstream 1.8 km (1.1 mi) to the limit of known use by bull trout; Baston Creek from its confluence with the Red River upstream 3.6 km (2.2 mi) to the headwaters; Otterson Creek from its confluence with the Red River upstream 5.6 km (3.5 mi) to the headwaters; and

Bridge Creek from its confluence with the Red River upstream 6.4 km (4.0 mi) to the headwaters provide FMO and spawning and rearing habitat (CBBTTAT 1998d; USFS 1999b; IDFG, unpublished 2001; D. Mays, USFS, pers. comm., 2002).

(J) American River from its confluence with the Red River and the South Fork Clearwater River upstream 27.4 km (17.0 mi) to the mouth of Limber Luke Creek provides FMO habitat (CBBTTAT 1998d). Elk Creek from its confluence with the American River upstream 3.8 km (2.3 mi) to Big Elk Creek, and Big Elk Creek from its mouth upstream 15.5 km (9.6 mi) to the headwaters provide habitat that is essential to supporting the recovered distribution of bull trout (USFWS 2002). Little Elk Creek from its confluence with Elk Creek upstream 14.8 km (9.2 mi) to the headwaters is occupied (USFS 1999b) and provides habitat for the recovered distribution of bull trout (USFWS 2002). Kirks Fork of American River from its mouth upstream 2.1 km (1.3 mi) to Wigwam Creek; East Fork American River from its mouth upstream 10.5 km (6.5 mi) to the headwaters; and Flint Creek from its confluence with the East Fork American River upstream 3.0 km (1.9 mi) to an unnamed tributary are likely to be occupied (CBBTTAT 1998d; USFS 1999b) and provide habitat essential to the conservation of bull trout (USFWS 2002). West Fork American River from its mouth upstream 8.0 km (5.0 mi) to the headwaters and Lick Creek from its confluence with the American River upstream 6.0 km (3.7 mi) to the headwaters provide habitat essential to the conservation of bull trout (USFWS 2002).

(v) Lochsa River CHSU

The Lochsa River CHSU lies within a drainage basin of about 303,019 ha (748,773 ac) that includes the entire stream network of the Lochsa River system other than that portion of the Lake Creek drainage upstream of California Creek. Located within Idaho County, landownership is predominantly Federal (95 percent, all in the Clearwater National Forest), but also includes some private property (5 percent).

(A) The mainstem Lochsa River from its confluence with the Selway River upstream 110.5 km (68.7 mi) to its origin at the confluence of Crooked Fork and Colt Killed Creek provides FMO habitat (CBBTTAT 1998b), as well as a migratory corridor that provides an opportunity for bull trout to move between local populations within and outside this CHSU.

(B) Canyon Creek from its confluence with the Lochsa River upstream 1.0 km (0.6 mi) to South Fork. Canyon Creek; Deadman Creek from its confluence with the Lochsa River upstream 3.4 km (2.1 mi) to East Fork. Deadman Creek; Coolwater Creek from its confluence with the Lochsa River upstream 2.2 km (1.4 mi) to an unnamed tributary; Bimerick Creek from its confluence with the Lochsa River upstream 0.7 km (0.4 mi) to a barrier falls; and Fire Creek from its confluence with the Lochsa River upstream 1.2 km (0.8 mi) to an unnamed tributary. Bull trout have been recently noted in Deadman, Coolwater, Fire Creeks (CBI 1992; Platts *et al.* 1993; IDFG Clearwater Data Base, unpublished 2002a). These tributaries provide biologically important opportunities for foraging and thermal refuge along a section of river known for summer water temperatures stressful to salmonids.

(C) Split Creek from its confluence with the Lochsa River upstream 11.3 km (7.0 mi) to the headwaters is occupied (CBI 1992; IDFG Clearwater Data Base, unpublished 2002a) and provides habitat essential to the conservation of bull trout (USFWS 2002).

(D) Old Man Creek from its confluence with the Lochsa River upstream 11.4 km (7.1 mi) to Chimney Creek provides habitat essential to the long-term conservation of bull trout (USFWS 2002).

(E) Fish Creek from its confluence with the Lochsa River upstream 32.5 km (20.2 mi) to the headwaters, and Hungry Creek from its confluence with Fish Creek upstream 21.8 km (13.5 mi) to the headwaters are occupied (Platts *et al.* 1993; CBBTTAT 1998b) and provide habitat essential to the recovered distribution of bull trout (USFWS 2002).

(F) Boulder Creek from its confluence with the Lochsa River upstream 9.8 km (6.1 mi) to Thimble Creek, the approximate location of an apparent migration barrier, is likely occupied (Platts *et al.* 1993; CBBTTAT 1998b) and provides habitat essential to the conservation of bull trout (USFWS 2002).

(G) Bald Mountain Creek from its confluence with the Lochsa River upstream 2.3 km (1.4 mi) to an unnamed tributary, and Stanley Creek from its confluence with the Lochsa River upstream 2.0 km (1.2 mi) to an unnamed tributary are suspected to be at least seasonally occupied (CBBTTAT 1998b). It also provides subadult or adult bull trout opportunities for foraging and thermal refuge along a section of river where mid-summer water temperatures are well above those preferred by the species.

(H) Indian Grave Creek from its confluence with the Lochsa River upstream 7.7 km (4.8 mi) to the headwaters appears to be at least seasonally occupied (Platts *et al.* 1993; CBBTTAT 1998b) and provides habitat essential to the conservation of bull trout (USFWS 2002).

(I) Weir Creek from its confluence with the Lochsa River upstream 9.5 km (5.9 mi) to the headwaters is occupied (CBBTTAT 1998b) and provides habitat essential to the conservation of bull trout (USFWS 2002).

(J) Lake Creek from its mouth at the Lochsa River upstream 16.2 km (10.0 mi) to California Creek; Freezeout Creek from its confluence with Lake Creek upstream 7.3 km (4.6 mi) to the headwaters; and California Creek from its mouth upstream 3.0 km (1.9 mi) to a break in channel gradient provide habitat essential to the conservation of bull trout (USFWS 2002).

(K) Postoffice Creek from its confluence with the Lochsa River upstream 8.9 km (5.5 mi) to a break in channel gradient, and West Fork Postoffice Creek from its mouth upstream 3.6 km (2.2 mi) to an unnamed tributary provide habitat essential to the conservation of bull trout (USFWS 2002). Postoffice Creek is also known to be occupied (IDFG Clearwater Data Base, unpublished 2002a; CBBTTAT 1998b).

(L) Warm Springs Creek from its confluence with the Lochsa River upstream 5.8 km (3.6 mi) to a barrier falls, and Cooperation Creek from its confluence with Warm Springs Creek upstream 5.5 km (3.4 mi) to a break in channel gradient provide spawning and rearing habitat for the Warm Spring local population (USFWS 2002; D. Weigel, pers. comm., 2002).

(M) Fishing (Squaw) Creek from its confluence with the Lochsa River upstream 10.1 km (6.3 mi) to a seasonally dry channel segment; Doe Creek from its confluence with Fishing (Squaw) Creek upstream 8.8 km (5.5 mi) to an unnamed tributary; West Fork Fishing Creek from its mouth upstream 4.2 km (2.6 mi) to an unnamed tributary; Spring Creek from its confluence with West Fork Fishing Creek upstream 1.6 km (1.0 mi); and East Fork Fishing Creek from its mouth upstream 1.5 km (0.9 mi) to a small unnamed tributary provide spawning and rearing habitat for the Fishing (Squaw) Creek local population (USFWS 2002).

(N) Badger Creek from its confluence with the Lochsa River upstream 1.5 km (0.9 mi) to an unnamed tributary, and Wendover Creek from its mouth upstream 1.6 km (1.0 mi) to West Fork Wendover Creek have suitable habitat.

Wendover Creek is likely to be currently occupied, at least seasonally (Platts *et al.* 1993; CBBTTAT 1998b). Badger Creek is identified for high priority restoration activities (*i.e.*, barrier removal at the mouth) and is essential to the conservation of bull trout (USFWS 2002).

(O) Legendary Bear (Papoose) Creek from its confluence with the Lochsa River upstream 3.0 km (1.9 mi) to West Fork Legendary Bear Creek; Parachute Creek from its confluence with Legendary Bear (Papoose) Creek upstream 0.4 km (0.3 mi) to a potential barrier; West Fork Legendary Bear Creek from its mouth upstream 7.3 km (4.5 mi) to an unnamed tributary; and East Fork Legendary Bear Creek from its mouth upstream 4.2 km (2.6 mi) to an unnamed tributary provide spawning and rearing habitat for the Legendary Bear (Papoose) Creek local population of bull trout (CBBTTAT 1998b; USFWS 2002).

(P) Walton Creek from its mouth upstream 4.4 km (2.7 mi) to a break in channel gradient provides spawning and rearing habitat for the Walton Creek local population of bull trout (USFWS 2002).

(Q) Colt Killed Creek from its mouth upstream 33.8 km (21.0 mi) to Garnet Creek; Big Flat Creek from its confluence with Colt Killed Creek upstream 13.5 km (8.4 mi) to its headwaters; Beaver Creek from its mouth at Colt Killed Creek upstream 12.2 km (7.6 mi) to the headwaters; Storm Creek from its mouth at Colt Killed Creek upstream 17.0 km (10.6 mi) to North Fork Storm Creek; and Maud Creek from its confluence with Storm Creek upstream 10.1 km (6.3 mi) to the headwaters provide spawning and rearing habitat for the Colt Killed Creek local population of bull trout (CBI 1989; CBI 1996; P. Murphy, pers. comm., 2002; USFWS 2002).

(R) Crooked Fork from its confluence with the Lochsa River upstream 21.7 km (13.5 mi) to Boulder Creek provides FMO and rearing habitat (CBBTTAT 1998b). Haskell Creek from its confluence with Crooked Fork upstream 4.5 km (2.8 mi) to the headwaters; Rock Creek from its confluence with Crooked Fork upstream 1.8 km (1.1 mi) to a small unnamed tributary; Shotgun Creek from its confluence with Crooked Fork upstream 7.6 km (4.7 mi) to the headwaters; Boulder Creek from its confluence with Crooked Fork upstream 10.5 km (6.5 mi) to an unnamed tributary; Fox Creek from its mouth at Boulder Creek upstream 5.6 km (3.5 mi) to a gradient break near the headwaters; Williams Lake Creek from its confluence with Boulder Creek upstream 4.2 km (2.6 mi) to an unnamed tributary; Crooked Fork Creek from its confluence with Boulder Creek upstream 12.4 km (7.7 mi) to a gradient break near the headwaters; Hopeful Creek from its confluence with Crooked Fork Creek upstream 7.4 km (4.6 mi) to the headwaters; and an unnamed Hopeful Creek tributary from its mouth upstream 4.7 km (2.9 mi) to the headwaters provide spawning and rearing habitat for the Crooked Fork local population (Watson and Hillman 1997; CBI 1997; CBBTTAT 1998b; USFWS 2002).

(S) Brushy Fork Creek from the confluence with the Crooked Fork upstream 16.2 km (10.0 mi) to Spruce Creek; Twin Creek from its confluence with Brushy Fork Creek upstream 4.7 km (2.9 mi) to a barrier falls; Spruce Creek from its confluence with Brushy Fork Creek upstream 5.6 km (3.5 mi) to South Fork Spruce Creek; Shoot Creek from its confluence with Spruce Creek upstream 3.4 km (2.1 mi) to a break in channel gradient; South Fork Spruce Creek from its mouth upstream 6.4 km (4.0 mi) to a break in channel gradient; and North Fork Spruce Creek from its mouth upstream 4.0 km (2.5 mi) to an unnamed tributary provide spawning and rearing habitat for the Brushy Fork Creek local population (CBBTTAT 1998b; USFWS 2002; D. Weigel, pers. comm., 2002).

(vi) Fish Lake (Lochsa) CHSU

The Fish Lake (Lochsa) CHSU lies within a 2,131 ha (5,267 ac) glacially formed drainage basin in the headwaters of Lake Creek, a major tributary to the Lochsa River. It is in Idaho County and is situated entirely within a portion of the Selway-Bitterroot Wilderness Area administered by the Clearwater National Forest. This area supports one of only two naturally adfluvial bull trout populations within the entire Clearwater River unit.

(A) Lake Creek from California Creek upstream 5.8 km (3.6 mi) to Fish Lake, all 22 ha (54 ac) of Fish Lake, and Lake Creek from Fish Lake upstream 2.3 km (1.5 mi) to a break in channel gradient near the headwaters constitutes all habitat thought to be used by the Fish Lake Creek local population. Bull trout spawn in Lake Creek both below and above Fish Lake (P. Murphy, pers. comm., 2002), and grow to adulthood in the lake itself (USFWS 2002).

(vii) Selway River CHSU

The Selway River CHSU lies within a 520,232 ha (1,285,516 ac) drainage basin that includes the Selway River and all of its tributaries. Located in Idaho and Clearwater counties, 85 percent of this basin is within the boundaries of the Selway-Bitterroot and Frank Church-River of No Return wilderness areas (USFS 2001b). Virtually all of the Selway River CHSU is administered by three National Forests: the Nez Perce, Bitterroot, and Clearwater (USFS 1999b). A total of approximately 780.8 km (485.3 mi) of stream are proposed for critical habitat designation as part of the Selway River CHSU. The proposed designations are comprised of Federal land (nearly 100 percent) and private lands (less than 1 percent).

(A) The Selway River from its confluence with the Lochsa River upstream 146.4 km (88.5 mi) to Wilkerson Creek provides FMO habitat for fluvial bull trout (CBBTTAT 1998b), and a highly functional migratory corridor that provides an opportunity for bull trout to move between multiple local populations within and outside this CHSU. Recent field sampling indicates that above the Little Clearwater River confluence, at rkm 121.3 (rmi 75.3), the Selway River is also used as rearing habitat by juvenile bull trout (General Parr Monitoring database 2002). Goddard Creek, a tributary to the Selway River between the mouth and O'Hara Creek, from its mouth upstream 0.8 km (0.5 mi) to an unnamed tributary, is likely to be at least seasonally occupied by foraging adults (CBBTTAT 1998b) and provides habitat essential to the conservation of bull trout (USFWS 2002).

(B) O'Hara Creek from its confluence with the Selway River upstream 12.4 km (7.7 mi) to its origin at the confluence of the East and West Forks of O'Hara Creek; East Fork O'Hara Creek from its mouth upstream 8.1 km (5.0 mi) to the headwaters; and West Fork O'Hara Creek from its mouth upstream 9.3 km (5.8 mi) to the headwaters are known to be occupied in the lower reaches (IDFG General Parr Monitoring database, unpublished 2002b) and provide habitat essential to the conservation of bull trout (USFWS 2002).

(C) Four tributaries to the Selway River between O'Hara Creek and Gedney Creek, Rackliff Creek from its mouth upstream 2.2 km (1.4 mi) to an unnamed tributary; Boyd Creek from its mouth upstream 1.9 km (1.2 mi) to a break in channel gradient; Glover Creek from its mouth upstream 1.5 km (0.9 mi) to an unnamed tributary; and Falls Creek from its mouth upstream 1.4 km (0.9 mi) to a break in channel gradient are suspected to provide at least seasonal habitat for foraging bull trout (CBBTTAT 1998b), are prioritized for restoration efforts (Boyd Creek), and provide habitat essential to the conservation of bull trout (USFWS 2002).

(D) Gedney Creek from its confluence with the Selway River upstream 12.5 km (7.8 mi) to an unnamed tributary and West Fork Gedney Creek from its mouth upstream 2.0 km (1.2 mi) to a barrier falls are occupied. Spawning and rearing is suspected (A. Byrne, IDFG, pers. comm., 2002) and this area provides habitat essential to the conservation of bull trout (USFWS 2002).

(E) Meadow Creek from its confluence with the Selway River upstream 67.9 km (42.2 mi) to an unnamed tributary; Schwar Creek from its confluence with Meadow Creek upstream 3.5 km (2.2 mi) to a barrier falls; and East Fork Meadow Creek from its mouth upstream 11.1 km (6.9 mi) to the headwaters provide spawning and rearing habitat for the Meadow Creek local population (CBBTTAT 1998b; IDFG/FIS database, unpublished 2002c).

(F) Two tributaries to the Selway River between Meadow Creek and Mink Creek, Otter Creek from its confluence with the Selway River upstream 1.0 km (0.6 mi) to a barrier falls (suspected to be occupied (CBBTTAT 1998b)), and Three Links Creek from its confluence with the Selway River upstream 6.5 km (4.0 mi) to West Fork Three Links Creek (documented as occupied (USFWS 2002)) provide habitat essential to the conservation of bull trout (USFWS 2002).

(G) Mink Creek from its confluence with the Selway River upstream 11.9 km (7.4 mi) to an unnamed tributary is suspected to be occupied (CBBTTAT 1998b) and provides habitat essential to the conservation of bull trout (USFWS 2002).

(H) Marten Creek from its confluence with the Selway River upstream 18.3 km (11.4 mi) to a break in channel gradient near the headwaters is occupied (CBBTTAT 1998b) and provides habitat essential to the conservation of bull trout (USFWS 2002).

(I) Moose Creek from its confluence with the Selway River upstream 6.1 km (3.8 mi) to the confluence of North Fork Moose Creek and East Fork Moose Creek; North Fork Moose Creek from its mouth upstream 19.4 km (12.0 mi) to an unnamed tributary; Rhoda Creek from its confluence with North Fork Moose Creek upstream 5.0 km (3.1 mi) to Wounded Doe Creek; Wounded Doe Creek from its mouth upstream 11.4 km (7.1 mi) to an unnamed tributary; East Fork Moose Creek from its mouth upstream 26.7 km (16.6 mi) to a potential barrier falls; and Cedar Creek from its mouth at East Fork Moose Creek upstream 10.1 km (6.3 mi) to an unnamed tributary provide spawning and rearing habitat (CBBTTAT 1998b; USFS 2001b; IDFG Clearwater database, unpublished 2002a).

(J) Pettibone Creek from its confluence with the Selway River upstream 5.3 km (3.3 mi) to an unnamed tributary is suspected to be occupied (CBBTTAT 1998b) and provides habitat essential to the conservation of bull trout (USFWS 2002).

(K) Bear Creek from its confluence with the Selway River upstream 33.2 km (20.7 mi) to an unnamed tributary; Cub Creek from its confluence with Bear Creek upstream 15.0 km (9.3 mi) to a barrier falls; Paradise Creek from its confluence with CubCreek upstream 20.1 km (12.5 mi) to a break in channel gradient near the headwaters; and Brushy Fork Creek from its confluence with Cub Creek upstream 11.3 km (7.0 mi) to a break in channel gradient near the headwaters are known to be used by the Bear Creek local population for foraging, as well as spawning and rearing (CBBTTAT 1998b; USFS 2001b). A small juvenile fish sampled low in the system (IDFG General Parr Monitoring database, unpublished 2002b) suggests spawning activity occurring in upper portions of the watershed.

(L) Running Creek from its confluence with the Selway River upstream 31.4 km (19.5 mi) to an unnamed tributary; Eagle Creek from its confluence with Running Creek upstream 18.9 km (11.7 mi) to a gradient break near the headwaters; Lynx Creek from its confluence with Running Creek upstream 4.1 km (2.6 mi) to an unnamed tributary; and South Fork Running Creek from its mouth upstream 3.3 km (2.0 mi) to an unnamed tributary provide spawning and rearing habitat for the Running Creek local population (CBBTTAT 1998b; USFS 2001b; IDFG General Parr Monitoring database, unpublished 2002b). Tom Creek from its confluence with Running Creek upstream 6.1 km (3.8 mi) to the headwaters provides high quality habitat to provide for the recovered distribution of the Running Creek local population, and is essential to the conservation ofbull trout (USFWS 2002).

(M) White Cap Creek from its confluence with the Selway River upstream 39.0 km (24.2 mi) to a gradient break near the headwaters and Canyon Creek from its confluence with White Cap Creek upstream 17.8 km (11.1 mi) to an unnamed tributary provide spawning and rearing habitat for the White Cap Creek local population (CBBTTAT 1998b; M. Jakober, USFS, pers. comm., 2002).

(N) Indian Creek from its confluence with the Selway River upstream 17.3 km (10.8 mi) to an unnamed tributary; Schofield Creek from its confluence with Indian Creek upstream 8.4 km (5.2 mi) to an unnamed tributary; and Burnt Strip Creek from its confluence with Schofield Creek upstream 4.3 km (2.7 mi) to the headwaters provide spawning and rearing habitat for the Indian Creek local population (CBBTTAT 1998b; M. Jakober, USFS, pers. comm., 2002).

(O) Little Clearwater River from its confluence with the Selway River upstream 19.9 km (12.3 mi) to an unnamed tributary; Flat Creek from its confluence with the Little Clearwater River upstream 8.7 km (5.4 mi) to an unnamed tributary; Salamander Creek from its confluence with the Little Clearwater River upstream 7.7 km (4.8 mi) to an unnamed tributary; and Burnt Knob Creek from its confluence with the Little Clearwater River upstream 4.7 km (2.9 mi) to an unnamed tributary provide spawning and rearing habitat for the Little Clearwater River local population (CBBTTAT 1998b; M. Jakober, USFS, pers. comm., 2002).

(P) Magruder Creek from its confluence with the Selway River upstream 2.6 km (1.7 mi) provides spawning and rearing habitat.

(Q) Deep Creek from its confluence with the Selway River upstream 21.3 km (13.3 mi) to a break in channel gradient; Cayuse Creek from its mouth upstream 10.4 km (6.5 mi) to the headwaters; Vance Creek from its mouth upstream 0.9 km (0.6 mi) to an unnamed tributary; and Slow Gulch Creek from its mouth upstream 2.2 km (1.3 mi) to Lazy Creek. Deep, Vance and Slow Gulch creeks provide spawning and rearing habitat for the Deep Creek local population (USFS 2001b; M. Jakober, USFS, pers. comm., 2002). Cayuse Creek is likely to be occupied based on habitat quality (M. Jakober, USFS, pers. comm., 2002), it provides habitat that is essential for the recovered distribution of the Deep Creek local population.

(R) Upper Selway River from Wilkerson Creek upstream 20.1 km (12.5 mi) to the headwaters; Wilkerson Creek from its confluence with the Selway River upstream 12.8 km (8.0 mi) to a break in channel gradient near the headwaters; Storm Creek from its confluence with Wilkerson Creek upstream 10.1 km (6.3 mi) to a gradient break near the headwaters; French Creek from its confluence with Wilkerson Creek upstream 3.0 km (1.9 mi) to an unnamed tributary; Swet Creek from its confluence with the Selway River upstream 13.7 km (8.5 mi) to the headwaters; Surprise Creek from its confluence with the Selway River upstream 7.6 km (4.7 mi) to the headwaters; and South Fork Surprise Creek from its mouth upstream 6.9 km (4.3 mi) to the headwaters provide

spawning and rearing habitat for the Upper Selway River local population (M. Jakober, USFS, pers. comm., 2002).

(20) Unit 16: Salmon River Basin

The Salmon River basin extends across central Idaho from the Snake River to the Montana border. The critical habitat unit includes 7,688 km (4,777 mi) of stream extending across portions of Adams, Blaine, Custer, Idaho, Lemhi, Nez Perce, and Valley counties in Idaho. There are 10 CHSUs: Little-Lower Salmon River, Middle Salmon River Chamberlain, South Fork Salmon River, Middle Fork Salmon River, Middle Salmon River-Panther Creek, Opal Lake, Lemhi River, Lake Creek, Pahsimeroi River, and Upper Salmon River. Currently, there are 125 known bull trout local populations in this unit. The Draft Recovery Plan (USFWS 2002) indicates the need to maintain all known local populations and identifies the establishment of nine additional populations as necessary for bull trout recovery. The areas proposed as critical habitat within this unit are essential to maintaining the known populations and supporting the additional populations, all of which are essential to the conservation of bull trout.

(i) Little-Lower Salmon CHSU

Approximately 494 km (307 mi) of stream is proposed as critical habitat in drainages associated with the Little Salmon River and the Salmon River downstream of French Creek (rkm 166.0 (rmi 103.1)). Landownership within the CHSU is approximately 77 percent Federal, 21 percent private, and 1 percent State. This CHSU supports seven existing bull trout local populations, and locations for three additional local populations essential for bull trout recovery were identified in the Draft Recovery Plan (USFWS 2002). The stream segments proposed for designation as critical habitat in the Little-Lower Salmon CHSU are described below.

(A) The Salmon River from its confluence with the Snake River upstream 166 km (103.2 mi) to the confluence with French Creek. This stretch of the Salmon River provides foraging and overwinter habitat, and connectivity between the bull trout local populations in this area. This stretch also provides a migratory corridor for movement from upstream portions of the Salmon River to the Snake River.

(B) Slate Creek from its confluence with the Salmon River (at rkm 106.4 (rmi 66.1)) upstream 21.4 km (13.3 mi) to the confluence with Little Slate Creek and extending into Little Slate Creek for a distance of 14.4 km (9.0 mi), Van Buren Creek from the confluence with Little Slate Creek upstream 8.5 km (5.3 mi), Deadhorse Creek from its mouth upstream 9.2 km (5.7 mi); and Willow Creek from its junction with Little Slate Creek upstream 2.3 km (1.4 mi) to its headwaters.

(C) John Day Creek from its confluence with the Salmon River at rkm 116.5 (rmi 72.3) upstream 13.8 km (8.6 mi) to its headwaters and extending up East Fork John Day Creek for a distance of 6.4 km (4 mi).

(D) The Little Salmon River from its confluence with the Salmon River at rkm 139.5 (rmi 86.6) upstream 33.8 km (21.0 mi) to a barrier.

(E) Rapid River from its confluence with the Little Salmon River at rkm 6.8 (rmi 4.2) upstream 36.5 km (22.7 mi) to its headwaters and extending 16.6 km (10.3 mi) up the West Fork Rapid River, 6.9 km (4.3 mi) up the Lake Fork Rapid River, and 5 km (3.1 mi) up the Granite Fork of the Lake Fork.

(F) Boulder Creek from its confluence with the Little Salmon River at rkm 28.5 (rmi 17.7) upstream 30 km (18.7 mi) to its headwaters and extending up Yellow Jacket Creek for a distance of 2.9 km (1.8 mi).

(G) Hazard Creek from the confluence with the Little Salmon River at rkm 31.4 (rmi 19.5) upstream 17.5 km (15.8 mi) to a headwater lake and extending up Hard Creek for a distance of 7.6 km (4.7 mi) to a barrier falls. A natural bedrock falls on Hazard Creek at rkm 6.1 (rmi 3.8) is a barrier to upstream fish movement. Hard Creek enters downstream of the barrier falls and a fluvial bull trout local population has been documented in Hard and lower Hazard Creeks (CBBTTAT 1998e).

(H) Lake Creek from its confluence with the Salmon River at rkm 149.7 (rmi 93.0) upstream for 14 km (8.7 mi) to its headwaters.

(I) Partridge Creek from its confluence with the Salmon River at rkm 159.6 (rmi 99.1) upstream for 18.7 km (11.6 mi) to its headwaters.

(J) Elkhorn Creek from its confluence with the Salmon River at rkm 162.7 (rmi 101.0) upstream for 17.7 km (11 mi) to its headwaters.

(K) French Creek from its confluence with the Salmon River at rkm 166.0 (rmi 103.1) upstream for 33.6 km (20.9 mi) to its headwaters and extending up North Creek for 6.1 km (3.8 mi).

(ii) Middle Salmon-Chamberlain CHSU

Approximately 528 km (328 mi) of stream is proposed as critical habitat in drainages associated with the section of the Salmon River from French Creek (rkm 166.0 (rmi 103.1)) upstream to Chamberlain Creek (rkm 281.9 (rmi 175.1)). Landownership within the CHSU is approximately 98 percent USFS, 1 percent BLM, and 1 percent private. This CHSU supports nine existing bull trout local populations, and the Draft Recovery Plan (USFWS 2002) identifies all of them as essential for conservation of bull trout. It also identifies a drainage where the establishment of an additional population is essential to the conservation of the species. The stream segments that make up the Middle Salmon-Chamberlain CHSU are described below.

(A) The Salmon River from its confluence with French Creek upstream 111.9 km (69.5 mi) to the confluence with Chamberlain Creek. This stretch of the Salmon River provides foraging and overwintering habitat, as well as connectivity between the bull trout local populations in this area. This stretch also provides a migratory corridor for movement from upstream portions of the Salmon River to the Snake River. All other stream segments in this CHSU are tributaries of the Salmon River and primarily provide spawning and rearing habitat.

(B) Fall Creek from its confluence with the Salmon River at rkm 172.5 (rmi 107.1) upstream 14.6 km (9.1 mi) to its headwaters and extending up East Fork Fall Creek for a distance of 7.2 km (4.5 mi).

(C) Wind River from its confluence with the Salmon River at rkm 176.9 (rmi 109.9) upstream 22.5 km (14.0 mi) to the headwaters.

(D) Sheep Creek from its confluence with the Salmon River at rkm 187.6 (rmi 116.5) upstream 23.8 km (14.8 mi) to its headwaters.

(E) California Creek from its confluence with the Salmon River at rkm 189.9 (rmi 117.9) upstream 19.5 km (12.1 mi) to its headwaters.

(F) Crooked Creek from its confluence with the Salmon River at rkm 200.5 (rmi 124.5) upstream 34.3 km (21.3 mi) to the headwaters and extending up Lake Creek for a distance of 21.1 km (13.1 mi).

(G) Warren Creek from its confluence with the Salmon River at rkm 208.6 (rmi 129.5) upstream 31.1 km (19.3 mi) to the headwaters and extending up the following Warren Creek tributaries: Schissler Creek for a distance of 6.8 km (4.2 mi); Guard Creek for a distance of 3.9 km (2.4 mi); Slaughter Creek for a distance of 7.7 km (4.8 mi); Mayflower Creek for a distance of 5.6 km (3.5 mi); and Webfoot Creek for a distance of 3.5 km (2.2 mi).

(H) Rhett Creek from its confluence with the Salmon River at rkm 230.0 (rmi

142.8) upstream 1.2 km (0.8 mi) to a barrier falls.

(I) Little Mallard Creek from its confluence with the Salmon River at rkm 244.6 (rmi 151.9) upstream 0.8 km (0.5 mi) to a falls.

(J) Big Mallard Creek from its confluence with the Salmon River at rkm 247.0 (rmi 153.4) upstream 1.1 km (0.7 mi) to Mallard Creek Falls.

(K) Bargamin Creek from its confluence with the Salmon River at rkm 255.2 (rmi 158.5) upstream 37.5 km (23.3 mi) to its headwaters.

(L) Sabe Creek from its confluence with the Salmon River at rkm 271.6 (rmi 168.7) upstream 24.5 km (15.2 mi) to its headwaters.

(M) Big Harrington Creek from its confluence with the Salmon River at rkm 278.2 (rmi 172.8) upstream 13.5 km (8.4 mi) to its headwaters.

(N) Chamberlain Creek from its confluence with the Salmon River at rkm 281.9 (rmi 175.1) upstream 43.8 km (27.2 mi) to its headwaters and extending up the following tributaries: McCalla Creek for a distance of 25.6 km (15.9 mi) from its mouth to to its headwaters; Whimstick Creek from its junction with McCalla Creek upstream 17.4 km (10.8 mi); West Fork Chamberlain Creek from its mouth upstream14.6 km (9.1 mi) to its headwaters; Game Creek from its mouth on West Fork Chamberlain Creek upstream 8.4 km (5.2 mi); Moose Creek from its mouth upstream10 km (6.2 mi) to its headwaters; South Fork Chamberlain Creek from its mouth upstream 7.2 km (4.5 mi) to its headwaters; and Rim Creek from its junction with Chamberlain Creek upstream 8.4 km (5.2 mi) to its headwaters.

(iii) South Fork Salmon River CHSU

Approximately 834 km (518 mi) of stream is proposed as critical habitat in drainages associated with the South Fork of the Salmon River. Landownership within the CHSU is 96 percent Federal land, 1 percent State land, and 3 percent private land. This CHSU supports 28 existing bull trout local populations and one potential local population, all of which are identified as essential for bull trout recovery in the Draft Recovery Plan (USFWS 2002). The stream segments proposed for critical habitat that make up the South Fork Salmon River CHSU are described below.

(A) South Fork Salmon River from its confluence with the Salmon River upstream 141.6 km (88 mi) to its headwaters. Most of this stretch provides FMO habitat, and allows for the maintenance of genetic exchange by local and potential local populations both within and between CHSUs. The upper 13.3 km (8.3 mi) is known to support bull trout spawning and/or early rearing, and is considered to be a distinct local population. All other stream segments in this CHSU are tributaries of the South Fork Salmon River and primarily provide spawning and rearing habitat.

(B) Pony Creek from its confluence with the South Fork Salmon River upstream 14.7 km (9.1 mi) to its headwaters.

(C) Elk Creek from its confluence with the South Fork Salmon River upstream 14.3 km (8.9 mi) to its headwater and extending up West Fork Elk Creek for a distance of 10.7 km (6.6 mi), and up South Fork Elk Creek for a distance of 4.4 km (2.7 mi).

(D) The Secesh River from its confluence with South Fork Salmon River upstream 45.3 km (28.1 mi) to Lake Creek. The lower 39 km (24 mi) stretch of this river is used primarily as FMO habitat (IDFG/FIS database, unpublished 2002c). The uppermost 6 km (4 mi) is known to support bull trout spawning and/or early rearing (IDFG/FIS database, unpublished 2002c; USFWS, *in litt.,* 2002b). A number of bull trout local populations are associated with tributaries of the Secesh River; each of the following streams are known to support bull trout spawning and/or early rearing (USFWS, *in litt.,* 2002b; (IDFG/FIS database, unpublished 2002c): Lick Creek from its confluence with the Secesh River upstream 16.3 km (10.2 mi) and extending up Hum Creek for a distance of 3 km (1.9 mi); Loon Creek from its confluence with the Secesh River upstream for a distance of 15.8 km (9.8 mi); Victor Creek from its confluence with the Secesh River upstream 11.2 km (6.9 mi) to its headwaters and extending up Willowbasket Creek for a distance of 6.6 km (4.1 mi); Grouse Creek from its confluence with the Secesh River upstream 7.2 km (4.5 mi) and extending up Flat Creek for a distance of 6.7 km (4.1 mi) and up Sand Creek for 4.1 km (2.6 mi); Ruby Creek from its confluence with the Secesh River upstream 9.4 km (5.8 mi) to its headwaters; Summit Creek from its confluence with the Secesh River upstream 15.6 km (9.7 mi) to its headwaters and extending up Josephine Creek for a distance of 4 km (2.5 mi); Lake Creek from its confluence with the Secesh River upstream 21.7 km (13.5 mi) to its headwaters and extending up Nethker Creek for 6.1 km (3.8 mi), Threemile Creek for 5.8 km (3.6 mi), and Willow Creek for 9 km (5.6 mi).

(E) East Fork South Fork Salmon River from its confluence with South Fork Salmon River upstream 52.2 km (32.4 mi) to its headwaters. Downstream of Fiddle Creek (rkm 42.7 (rmi 26.5)), the East Fork is occupied FMO habitat; above Fiddle Creek it is occupied spawning and rearing habitat. A number of bull trout local populations extend up tributaries of the upper East Fork South Fork Salmon River; each of the following streams are known to support bull trout spawning and/or early rearing (USFWS, *in litt.,* 2002b; IDFG/FIS database, unpublished 2002c): Quartz Creek for a distance of 12.6 km (7.8 mi) to its headwaters; Profile Creek for a distance of 13.2 km (8.2 mi) to its headwater and extending up Missouri Creek for 4.8 km (3.0 mi); Tamarack Creek for a distance of 11.9 km (7.4 mi) and including 5.8 km (3.6 mi) of Burn Creek; Salt Creek for a distance of 3.8 km (2.4 mi); Sugar Creek for a distance 11.5 km (7.1 mi) and including 5.5 km (3.4 mi) of Cinnabar Creek and 4.2 km (2.6 mi) of Cane Creek; and Meadow Creek for a distance of 7.7 km (4.8 mi).

(F) Johnson Creek from its confluence with East Fork South Fork Salmon River upstream 61.8 km (38.4 mi) to its headwater. Downstream of Sand Creek (rkm 46.4 (rmi 28.8)), Johnson Creek is occupied FMO habitat; the 15.4 km (9.6 mi) above Sand Creek is potential spawning and rearing habitat containing many of the primary constituent elements. Upper Johnson Creek is identified in the Draft Recovery Plan (USFWS 2002) as a potential local population with a number of known bull trout local populations extending up tributaries of Johnson Creek. Each of the following streams and lakes are known to support bull trout: Riordan Creek for a distance of 13.9 km (8.6 mi) above and below Riordan Lake, and including the 30 ha (75 ac) lake; Trapper Creek for a distance of 14.5 km (9.0 mi) and including 4.0 km (2.5 mi) of an unnamed tributary on the south side of Trapper Creek; and Burntlog Creek for a distance of 22.7 km (14.1 mi) and including 7.3 km (4.5 mi) of Buck Creek, 10.5 km (6.5 mi) of East Fork Burntlog Creek, and an unnamed tributary to East Fork Burntlog Creek from its mouth, approximately 4.4 km (2.8 mi) upstream of the confluence of Burntlog and East Fork Burntlog creeks, upstream 3.2 km (2 mi) to its headwaters.

(G) The following tributaries of the South Fork Salmon River that enter the river upstream of the East Fork South Fork Salmon River are known to support bull trout local populations and are proposed as critical habitat: Fitsum Creek from its confluence with South Fork Salmon River upstream for a distance of 3.7 km (2.3 mi) and including 13.0 km (8.1 mi) of North

Fork Fitsum Creek; Buckhorn Creek from its confluence with South Fork Salmon River upstream for a distance of 16.6 km (10.3 mi) and extending 7.7 km (4.8 mi) up Little Buckhorn Creek and 6.1 km (3.8 mi) up South Fork Buckhorn Creek; Cougar Creek from its confluence with South Fork Salmon River upstream for a distance of 13.8 km (8.6 mi); Fourmile Creek from its confluence with South Fork Salmon River upstream for a distance of 12.1 km (7.5 mi); Blackmare Creek from its confluence with South Fork Salmon River upstream for a distance of 9.1 km (5.6 mi) and extending 7.4 km (4.6 mi) up South Fork Blackmare Creek; Six Bit Creek from its confluence with South Fork Salmon River upstream for a distance of 10 km (6.2 mi); Warm Lake Creek from its confluence with South Fork Salmon River upstream for a distance of 4.5 km (2.8 mi) up to and including Warm Lake (167 ha (412 ac), and extending 6.5 km (4.1 mi) up Cabin Creek and 5.1 km (3.2 mi) up Reeves Creek; Curtis Creek from its confluence with South Fork Salmon River upstream for a distance of 12.2 km (7.6 mi), including two unnamed tributaries to Curtis Creek upstream approximately 1.7 km (1 mi) in each, and extending 7.2 km (4.5 mi) up Trail Creek, including 1.6 km (1 mi) of an unnamed tributary to Trail Creek; Bear Creek from its confluence with South Fork Salmon River upstream for a distance of 8.5 km (5.3 mi); Tyndall Creek from its confluence with South Fork Salmon River upstream for a distance of 5.8 km (3.6 mi); Rice Creek from its confluence with South Fork Salmon River upstream for a distance of 10.2 km (6.3 mi) and extending 1.4 km (0.9 mi) up an unnamed tributary; an unnamed tributary to South Fork Salmon River (just below Yellowjacket Creek) from its confluence with the South Fork upstream 2.0 km (1.3 mi); and Mormon Creek from its confluence with South Fork Salmon River upstream for a distance of 4.8 km (3.0 mi).

(iv) Middle Fork Salmon River CHSU

Approximately 1,905 km (1,184 mi) of stream is proposed as critical habitat in drainages associated with the Middle Fork of the Salmon River. Landownership within the CHSU is approximately 98 percent USFS, 2 percent private, and less than 1 percent State. This CHSU supports 28 existing bull trout local populations, all of which are identified as essential for bull trout recovery in the Draft Recovery Plan (USFWS 2002). The stream segments that comprise proposed critical habitat in this CHSU are described below.

(A) Middle Fork Salmon River from its confluence with the Salmon River upstream for a distance of 168.4 km (104.6 mi) to Bear Valley Creek. The Middle Fork provides FMO habitat, and allows for the maintenance of genetic exchange by local and potential local populations both within and between CHSU. All other stream segments in this CHSU are tributaries of the Middle Fork Salmon River and primarily provide spawning and rearing habitat (Southwest Basin Native Fish Technical Advisory Group (SBNFTG) 1998; USFWS, in *litt.,* 2002b).

(B) Big Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 74.2 km (46.1 mi) to its headwater and extending up the following tributaries: Rush Creek for a distance of 27.4 km (17 mi) and including 7.8 km (4.9 mi) of South Fork Rush Creek; Cabin Creek for a distance of 14.4 km (8.9 mi); Cave Creek for a distance of 19.4 km (12 mi); Monumental Creek for a distance of 41.1 km (25.6 mi) and including 12.8 km (7.9 mi) of Snowslide Creek, and 12.7 km (7.9 mi) of West Fork Monumental Creek; Crooked Creek for a distance of 11.1 km (6.9 mi); Big Ramey Creek for a distance of 18.8 km (11.7 mi) and including 5.8 km (3.6 mi) of East Fork Big Ramey Creek; Beaver Creek for a distance of 18.8 km (11.7 mi) and including 11.2 km (7.0 mi) of Hand Creek and 5.8 km (3.6 mi) of Boulder Creek; Smith Creek for a distance of 10 km (6.2 mi) and including 3.8 km (2.4 mi) of Middle Fork Smith Creek and 4.9 km of South Fork Smith Creek; Logan Creek for a distance of 13.4 km (8.3 mi); and Belvidere Creek for a distance of 4.7 km (2.9 mi).

(C) Wilson Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 24.2 km (15.1 mi).

(D) Soldier Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 14.4 km (8.9 mi).

(E) Brush Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 10.7 km (6.6 mi).

(F) Sheep Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 16.3 km (10.1 mi).

(G) Camas Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 51 km (31.7 mi) and extending up the following tributaries: Yellow Jacket Creek for a distance of 36.5 km (22.7 mi) and including 6.5 km (4.0 mi) of Lake Creek, 13.6 km (8.4 mi) of Hoodoo Creek, 8.4 km (5.2 mi) of Little Jacket Creek, and 5.2 km (3.2 mi) of Shovel Creek; Woodtick Creek for a distance of 9.6 km (6 mi); West Fork Camas Creek for a distance of 14.7 km (3.1 mi) and including 7.8 km (4.8 mi) of Pole Creek; Silver Creek for a distance of 29.1 km (18.1 mi) and including 7.8 km (4.8 mi) of Arrastra Creek, 6.9 km (4.3 mi) of Birdseye Creek, and 3.5 km (2.2 mi) of Blue Fork Silver Creek; Castle Creek for a distance of 15.0 km (9.3 mi); Furnace Creek for a distance of 12.9 km (8.0 mi); White Goat Creek for a distance of 7.1 km (4.4 mi); South Fork Camas Creek for a distance of 13.2 km (8.2 mi); Fly Creek for a distance of 6.2 km (3.9 mi); and J Fell Creek for a distance of 8.5 km (5.3 mi).

(H) Norton Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 12.8 km (8.0 mi).

(I) Loon Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 54.5 km (33.9 mi) and extending up into the following tributaries: Cache Creek for a distance of 11.5 km (7.1 mi); Bear Creek for a distance of 4.3 km (2.7 mi); Cold Spring Creek for a distance of 5.8 km (3.6 mi); Jack Creek for a distance of 3.1 km (1.9 mi); Indian Creek for a distance of 8.7 km (5.4 mi); Cabin Creek for a distance of 10.6 km (6.6 mi); Rock Creek for a distance of 13.0 km (8.1 mi); Warm Spring Creek for a distance of 30.1 km (18.7 mi) and extending 2.1 km (1.3 mi) up Fir Creek, 2.8 km (1.7 mi) up Cat Creek, 4.5 km (2.8 mi) up MaHoney Creek, 3.2 km (2 mi) up Parker Creek, 5.5 km (3.4 mi) up Wickiup Creek, 7.0 km (4.3 mi) up Trapper Creek, 3.8 km (2.4 mi) up McKee Creek, 3.7 km (2.3 mi) up Rush Creek, and 1.4 km (0.9 mi) up South Fork Warm Spring Creek; Cottonwood Creek for a distance of 8.9 km (5.5 mi) and extending 4.3 km (2.7 mi) up South Fork Cottonwood Creek; Shell Creek for a distance of 3.6 km (2.2 mi); Rat Creek for a distance of 2.5 km (1.6 mi); Canyon Creek for a distance of 3.3 km (2.0 mi); Mayfield Creek for a distance of 5.1 km (3.3 mi) and extending 4.9 km (3.0 mi) up Nelson Creek, 11.2 km (7.0 mi) up West Fork Mayfield Creek, and 20.2 km (12.5 mi) up East Fork Mayfield Creek; Deer Creek for a distance of 3.3 km (2.0 mi); Trail Creek for a distance of 10.1 km (6.3 mi); and Pioneer Creek for a distance of 11 km (6.8 mi).

(J) Little Loon Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 18.5 km (11.5 mi) and extending up West Fork Little Loon Creek for 6.2 km.

(K) Little Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 3.9 km (2.4 mi).

(L) Thomas Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 1.8 km (1.1 mi), and extending 3.8 km (2.4 mi) up West Fork Thomas Creek and 4.8 km (3 mi) up East Fork Thomas Creek.

(M) Marble Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 35.9 km (22.3 mi) and extending up into the following tributaries: Trail Creek for a distance of 15.5 km (9.6 mi); Dynamite Creek for a distance of 13.2 km (8.2 mi); Buck Creek for a distance of 6.9 km (4.3 mi); Little Cottonwood Creek for a distance of 6.5 km (4.0 mi); and Big Cottonwood Creek for a distance of 12.2 km (7.6 mi).

(N) Indian Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 32.7 km (20.3 mi) and extending up into the following tributaries: Middle Fork Indian Creek for a distance of 8.7 km (5.4 mi); Cultus Creek for a distance of 4.9 km (3.0 mi); Papoose Creek for a distance of 5.9 km (3.7 mi); Little Indian Creek for a distance of 7.7 km (4.8 mi); and Big Chief Creek for a distance of 8.2 km (5.5 mi).

(O) Pistol Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 29.4 km (18.3 mi) and extending up into the following tributaries: Little Pistol Creek for a distance of 22.1 km (13.7 mi) and including 6.0 km (3.7 mi) of Springfield Creek, 5.5 km (3.4 mi) of West Fork Springfield Creek, and 5.5 km (3.4 mi) of Browning Creek; Forty-Five Creek for a distance of 9.6 km (6.0 mi); Lugar Creek for a distance of 8.8 km (5.5 mi); and Thirty-Eight Creek for a distance of 5.4 km (3.4 mi).

(P) Rapid River from its confluence with the Middle Fork Salmon River upstream for a distance of 27.7 km (17.2 mi) and extending up into the following tributaries: Sheep Creek for a distance of 16.3 km (10.1 mi) and extending 5.1 km (3.2 mi) up North Fork Sheep Creek and 7.2 km (4.5 mi) up South Fork Sheep Creek; Sulfur Creek for a distance of 7.9 km (4.9 mi); Float Creek for a distance of 11.4 km (7.1 mi); Vanity Creek for a distance of 9.6 km (6 mi) and extending 5.4 km (3.4 mi) up Seafoam Creek, and 5.9 km (3.7 mi) up Baldwin Creek; and Duffield Creek for a distance of 10.9 km (6.8 mi).

(Q) Greyhound Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 8.3 km (5.2 mi).

(R) Soldier Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 12.6 km (7.8 mi).

(S) Elkhorn Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 11.9 km (7.4 mi) and extending 7.9 km (4.9 mi) up North Fork Elkhorn Creek, and 6.8 km (4.2 mi) up Middle Fork Elkhorn Creek.

(T) Sulphur Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 29.4 km (18.3 mi) and extending 6.3 km (3.9 mi) up North Fork Sulphur Creek.

(U) Dagger Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 12.4 km (7.7 mi).

(V) Marsh Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 22 km (13.7 mi) and extending up into the following tributaries: Lola Creek for a distance of 6.3 km (3.9 mi); Beaver Creek for a distance of 27.3 km (17.0 mi) and extending 6.5 km (4.0 mi) up Bear Creek and 11.4 km (7.1 mi) up Winnemucca Creek; Cape Horn Creek for a distance of 15.1 km (9.4 mi) and extending 11.5 km (7.1 mi) up Banner Creek; and Knapp Creek for a distance of 24.8 km (15.4 mi).

(W) Bear Valley Creek from its confluence with the Middle Fork Salmon River upstream for a distance of 49.7 km (30.9 mi) and extending up into the following tributaries: Fir Creek for a distance of 11 km (6.8 mi); Cold Creek for a distance of 6.8 km (4.2 mi); Wyoming Creek for a distance of 10 km (6.2 mi); Poker Creek for a distance of 4 km (2.5 mi); an unnamed Tributary entering Bear Valley Creek from the north approximately 0.5 km (0.3 mi) upstream of Poker Creek, for a distance of 2.6 km (1.6 mi); Elk Creek for a distance of 25.5 km (15.8 mi) and extending 9.8 km (6.1 mi) up Cook Creek, 13.6 km (8.6 mi) up Bearskin Creek, 6.3 km (3.9 mi) up Little Beaver Creek, 9.9 km (6.1 mi) up Porter Creek, 5.1 km (3.2 mi) up Little East Fork Elk Creek, 6.4 km (4 mi) up West Fork Elk Creek, 5.2 km (3.2 mi) up North Fork Elk Creek, and 10.2 km (6.3 mi) up East Fork Elk Creek; Pole Creek for a distance of 3.1 km (1.9 mi); Sack Creek for a distance of 8.9 km (5.5 mi); Cache Creek for a distance of 12.3 km (7.6 mi) and extending 3.2 km (2 mi) up an unnamed tributary that enters Cache Creek from the east approximately 4.5 km (2.8 mi) upstream of Bear Valley Creek; Sheeptrail Creek for a distance of 3.6 km (2.2 mi); Cub Creek for a distance of 4.2 km (2.6 mi); and Casner Creek for a distance of 4.4 km (2.7 mi).

(v) Middle Salmon-Panther CHSU

Approximately 1,097 km (682 mi) of stream is proposed as critical habitat in drainages associated with the middle section of the Salmon River, from its confluence with the Middle Fork Salmon River upstream to its confluence with the Pahsimeroi River. Landownership within the CHSU is approximately 79 percent Federal and 11 percent private. This CHSU supports 20 existing bull trout local populations, all of which are identified as essential for bull trout recovery in the Draft Recovery Plan (USFWS 2002). The stream segments proposed for critical habitat designation in this CHSU are described below.

(A) The Salmon River from its confluence with Chamberlain Creek upstream 208 km (129 mi) to its confluence with the Pahsimeroi River. This stretch of the Salmon River provides FMO habitat and connectivity between the bull trout local populations in this area. This stretch also provides a migratory corridor for movement from upstream portions of the Salmon River to the Snake River. All other stream segments in this CHSU are tributaries of the Salmon River and primarily provide spawning and rearing habitat.

(B) Horse Creek from its confluence with the Salmon River upstream 40.9 km 25.4 mi) to its headwaters and extending 4.7 km (2.9 mi) up Cayuse Creek, and 3.9 km (2.4 mi) up Woods Fork Horse Creek.

(C) Owl Creek from its confluence with the Salmon River upstream 23.1 km (14.3 mi).

(D) Panther Creek from its confluence with the Salmon River upstream 73.1 km (45.4 mi) and extending up into the following tributaries: Clear Creek for a distance of 27.7 km (17.2 mi); Beaver Creek for a distance of 15.5 km (9.6 mi); Trail Creek for a distance of 8.8 km (5.5 mi); Napias Creek for a distance of 23.5 km (14.6 mi) and extending 10.9 km (6.8 mi) up Moccasin Creek, 11.5 km (7.1 mi) up Phelan Creek, 12.6 km (7.8 mi) up Arnett Creek, and 8.3 km (5.2 mi) up Rapps Creek; Deep Creek for a distance of 19.5 km (12.1 mi) and extending 13.6 km (8.4 mi) up Little Deep Creek, and 3.2 km (2 mi) up an unnamed tributary that enters Deep Creek from the northeast approximately 11 km (6.8 mi) upstream from Panther Creek; West Fork Blackbird Creek from upstream of the tailings pond 9.1 km (5.7 mi) to its headwaters; Woodtick Creek for a distance of 14.1 km (8.8 mi); Musgrove Creek for a distance of 17.6 km (10.9 mi); Porphyry Creek for a distance of 11.5 km (7.1 mi) and extending 3.8 km (2.4 mi) up South Fork Porphyry Creek; Fourth of July Creek for a distance of 6.0 km (3.7 mi); Opal Creek for a distance of 3.3 km (2.0 mi); Weasel Creek for a distance of 2.8 km (1.7 mi); and Otter Creek for a distance of 5.7 km (3.5 mi).

(E) Pine Creek from its confluence with the Salmon River upstream 17.6 km (10.9 mi).

(F) Boulder Creek from its confluence with the Salmon River upstream 14.5 km (9.0 mi).

(G) Spring Creek from its confluence with the Salmon River upstream 10.6 km (6.6 mi).

(H) Squaw Creek from its confluence with the Salmon River upstream 14.9 km (9.3 mi).

(I) Indian Creek from its confluence with the Salmon River upstream 18.6 km (11.4 mi) and extending 5.6 km (3.5 mi) up West Fork Indian Creek, 7.6 km (4.7 mi) up Corral Creek, and 9.2 km (5.7 mi) up McConn Creek.

(J) North Fork Salmon River from its confluence with the Salmon River upstream 39.4 km (24.5 mi) and extending up into the following tributaries: Hughes Creek for a distance of 18.2 km (11.3 mi); Sheep Creek for a distance of 10.9 km (6.8 mi) and extending 5.2 km (3.2 mi) up South Fork Sheep Creek and 9.2 km (5.7 mi) up North Fork Sheep Creek; Dahlonega Creek for a distance of 12.7 km (7.9 mi); Twin Creek for a distance of 11.9 km (7.4 mi); Vine Creek for a distance of 4.4 km (2.7 mi); Pierce Creek for a distance of 6.7 km (4.2 mi); West Fork, North Fork Salmon River Creek for a distance of 3.1 km (1.9 mi); and Moose Creek for a distance of 5.0 km (3.1 mi).

(K) Fourth of July Creek from its confluence with the Salmon River upstream 17.8 km (11.1 mi).

(L) Carmen Creek from its confluence with the Salmon River upstream 24.2 km (15.0 mi) and extending 1.5 km (0.9 mi) up Freeman Creek.

(M) Williams Creek from its confluence with the Salmon River upstream 9.9 km (6.1 mi) and extending 8.2 km (5.1 mi) up South Fork Williams Creek.

(N) Twelvemile Creek from its confluence with the Salmon River upstream 14.1 km (8.8 mi).

(O) Iron Creek from its confluence with the Salmon River upstream 20.6 km (12.8 mi) and extending 11.7 km (7.3 mi) up North Fork Iron Creek, 8.8 km (up South Fork Iron Creek, and 7.7 km (4.8 mi) up West Fork Iron Creek.

(P) McKim Creek from its confluence with the Salmon River upstream 10.1 km (6.3 mi) and extending 9.8 km (6.1 mi) up North Fork McKim Creek.

(Q) Hat Creek from its confluence with the Salmon River upstream 17.6 km (10.9 mi) and extending 6.6 km (4.1 mi) up Big Hat Creek, 6.6 km (4.4 mi) up Middle Fork Hat Creek, and 7.2 km (4.5 mi) up North Fork Hat Creek.

(R) Allison Creek from its confluence with the Salmon River upstream 10.9 km (6.8 mi).

(S) Cow Creek from its confluence with the Salmon River upstream 15 km (9.3 mi).

(vi) Lemhi River CHSU

Approximately 1,232 km (766 mi) of stream is proposed as critical habitat in drainages associated with the Lemhi River. Landownership within the CHSU is approximately 65 percent Federal, 32 percent private, and 3 percent State. This CHSU supports six existing bull trout local populations and three potential local populations, all of which are identified as essential for bull trout recovery in the Draft Recovery Plan (USFWS 2002). The stream segments proposed for critical habitat designation in this CHSU are described below.

(A) The Lemhi River from its confluence with the Salmon River upstream 93.6 km (58.2 mi) to its headwaters (the confluence of Texas Creek and Eighteen Mile Creek). This segment provides FMO habitat, and provides connectivity between the local populations in the Lemhi watershed. All other stream segments in this CHSU are tributaries of the Lemhi River and primarily provide spawning and rearing habitat.

(B) Geerston Creek from the point where an irrigation ditch turns west towards Kirtley Creek, upstream 7.7 km (4.8 mi) in the irrigation ditch to the point of diversion then upstream in Geertson Creek a total of 15.7 km (9.6 mi) to the outlet of a headwater lake for a total of 23.4 km (14.5 mi).

(C) Bohannon Creek from its confluence with the Lemhi River upstream 16.4 km (10.2 mi).

(D) Kenney Creek from its confluence with the Lemhi River upstream 15.7 km (9.7 mi) and extending 7.0 km (4.3 mi) up East Fork Kenney Creek.

(E) Pattee Creek from its confluence with the Lemhi River upstream 21.0 km (13.0 mi).

(F) Hayden Creek from its confluence with the Lemhi River upstream 31.8 km (19.7 mi) and extends up into the following tributaries: Bear Valley Creek for a distance of 14.4 km (8.9 mi) and extending 8.0 km (5.0 mi) up Kadletz Creek, 8.5 km (5.3 mi) up Wright creek, 2.9 km (1.8 mi) up Short Creek, and 12.6 km (7.8 mi) up Deer Creek; East Fork Hayden Creek for a distance of 13.8 km (8.6 mi); Cooper Creek for a distance of 6.7 km (4.2 mi); West Fork Hayden Creek from its mouth upstream 1 km (0.6 mi) and Bray Creek for a distance of 5.2 km (3.3 mi).

(G) Mill Creek from the point where it is diverted for irrigation upstream 17.9 km (11.1 mi) to where it flows from a lake.

(H) Big Springs Creek from its confluence with the Lemhi River upstream to its source and including historic portions of the stream channel now used to divert irrigation water for a total of 18.8 km (11.7 mi).

(I) Little Eight Mile Creek from its confluence with the Lemhi River upstream 13.1 km (8.1 mi).

(J) Big Eight Mile Creek from its confluence with the Lemhi River upstream 24.1 km (15.0 mi) and extending 4.1 km (2.5 mi) up Dairy Creek.

(K) Big Timber Creek from its confluence with the Lemhi River upstream 34.1 km (21.2 mi) and extending 6.7 km (4.2 mi) up Little Timber Creek and 10.2 km (6.3 mi) of Middle Fork Little Timber Creek.

(L) Canyon Creek from its confluence with the Lemhi River upstream 24.2 km (15.0 mi) and extending up the following tributaries: Cruikshank Creek for a distance of 11.3 km (7.0 mi); and unnamed segments from four springs (Hood Gulch) from where it is diverted for irrigation then upstream about 2 km (1.2 mi) in a single waterway. Then Hood Gulch is spread out in a series of four springs/channels that each flow for a few kilometers up to their spring source. The entire network of springs and channels to the point of diversion totals 19.8 km (12.3 mi).

(M) Eighteen Mile Creek from its confluence with the Lemhi River upstream 43.2 km (26.8 mi) and extending up the following tributaries: Deer Creek, a tributary to Texas Creek, for a distance of 9.3 km (5.8 mi); Hawley Creek for a distance of 14.9 km (9.3 mi) to the point where Reservoir Creek and Big Bear Creek meet, and extending up Reservoir Creek for 9.1 km (5.6 mi), up Big Bear Creek for 11.1 km (6.9 mi), and up Meadow Creek for 2.8 km (1.7 mi).

(vii) Opal Lake CHSU

Proposed critical habitat in the Opal Lake CHSU consists of 6 ha (14 ac) Opal Lake and 4 km (2.5 mi) of upper Opal Creek that feeds into the lake. The CHSU is entirely on USFS land and supports one existing bull trout local population that is identified as essential for bull trout recovery in the Draft Recovery Plan (USFWS 2002). Opal Lake has no known outlet, so this bull trout population is isolated from other populations. Good spawning habitat is located upstream of the lake in upper Opal Creek, however, positive identification of redds has been unavailable to date (B. Roberts, USFS, *in litt.*, 2000a).

(viii) Lake Creek CHSU

Proposed critical habitat in the Lake Creek CHSU consists of 10.6 km (6.6 mi) of Lake Creek, 4.3 km (2.7 mi) of North Fork Lake Creek, and Williams Lake (72 ha (177 ac)). This unit supports one existing bull trout local population that is identified as essential for recovery in the Draft Recovery Plan (USFWS 2002). Williams Lake has no known surface outlet, so this bull trout population is isolated from other populations. Good spawning habitat is located upstream of the lake in Lake Creek, and its north fork and bull trout have been observed in these streams (T. Curet, IDFG, pers. comm., 2002). Landownership in this CHSU is approximately 86 percent Federal and 13 percent private.

(ix) Pahsimeroi River CHSU

Approximately 362 km (225 mi) of stream is proposed as critical habitat in drainages associated with the Pahsimeroi River. Landownership within the CHSU is 66 percent Federal, 31 percent private, and 3 percent State. This CHSU supports eight existing bull trout local populations, all of which are identified as essential for bull trout recovery in the Draft Recovery Plan (USFWS 2002). The stream segments proposed for critical habitat designation in this CHSU are described below.

(A) The Pahsimeroi River from its confluence with the Salmon River upstream 85 km (53.3 mi) to its headwaters. This segment provides FMO habitat, and provides connectivity between the local populations in the Pahsimeroi watershed. All other stream segments in this CHSU are tributaries of the Pahsimeroi River and are primarily spawning and rearing habitat.

(B) Morgan Creek from its confluence with the Pahsimeroi River upstream 8.7 km (5.4 mi) and extending 9.7 km (6.0 mi) up the North Fork Morgan Creek and 6.8 km (4.2 mi) up the East Fork Morgan Creek.

(C) Tater Creek from its confluence with the Pahsimeroi River upstream 13.8 km (8.6 mi) and including the irrigation ditches currently used to divert water at rkm 8.6 (rmi 5.3).

(D) Morse Creek from its confluence with the Pahsimeroi River upstream 20 km (12.4 mi).

(E) Falls Creek from its confluence with the Pahsimeroi River upstream 24.1 km (15.0 mi).

(F) Patterson Creek from its confluence with the Pahsimeroi River upstream 43.2 km (26.8 mi) and extending 5.2 km (3.2 mi) up Inyo Creek.

(G) Big Creek from its confluence with the Pahsimeroi River upstream 19.9 km (12.4 mi) to the confluence of North Fork Big Creek and South Fork Big Creek, and extending 14.2 km (8.8 mi) up the South Fork and 13.4 km (8.3 mi) up the North Fork.

(H) Goldberg Creek from its confluence with the Pahsimeroi River upstream 27.3 km (17.0 mi) to the confluence of Big Gulch and Ditch Creeks and extending 11.2 km (7.0 mi) up Big Gulch and 10.7 km (6.6 mi) up Ditch Creek.

(I) Burnt Creek from its confluence with the Pahsimeroi River upstream 17.2 km (10.7 mi) to the East Fork Burnt Creek confluence and extending 4.0 km (2.5 mi) up East Fork Burnt Creek.

(J) Mahogany Creek from its confluence with the Pahsimeroi River upstream 14.7 km (9.1 mi).

(K) West Fork Pahsimeroi River from its confluence with the Pahsimeroi River upstream 9.1 km (5.7 mi).

(L) East Fork Pahsimeroi River from its confluence with the Pahsimeroi River upstream 10.8 km (6.7 mi).

(x) Upper Salmon River CHSU

Approximately 1,220 km (758 mi) of stream is proposed as critical habitat in drainages associated with the Upper Salmon River. Landownership within the CHSU is approximately 79 percent Federal and 14 percent private. This CHSU supports 18 existing bull trout local populations, all of which are identified as essential for bull trout recovery in the Draft Recovery Plan (USFWS 2002). The stream segments proposed for critical habitat designation in this CHSU are described below.

(A) The Salmon River from its confluence with the Pahsimeroi River upstream 195 km (121 mi) to its headwaters. This stretch of the Salmon River primarily provides foraging and overwinter habitat, and connectivity between the bull trout local populations in this area, as well as a migratory corridor for movement to downstream portions of the Salmon River. The uppermost 31 km (19 mi) above the confluence with Alturas Lake Creek also supports spawning and rearing. All other stream segments in this CHSU are tributaries of the Salmon River and primarily provide spawning and rearing habitat.

(B) Morgan Creek from its confluence with the Salmon River upstream 31.7 km (19.7 mi) to its headwaters and extending up the following tributaries: West Fork Morgan Creek for a distance of 14.2 km (8.8 mi); Lick Creek for a distance of 9.4 km (5.8 mi); Van Horn Creek for a distance of 9.6 km (6.0 mi); Corral Creek for a distance of 12.7 km (7.9 mi) and extending 5.5 km (3.4 mi) up an unnamed tributary that enters Corral Creek from the east; and Alder Creek for a distance of 4.4 km (2.7 mi).

(C) Challis Creek from its confluence with the Salmon River upstream 22.6 km (14.0 mi) to its headwaters and extending up the following tributaries: Mill Creek for a distance of 23.9 km (14.8 mi); Bear Creek for a distance of 8.9 km (5.5 mi); and Lodgepole Creek for a distance of 6.4 km (4.0 mi).

(D) Garden Creek from its confluence with the Salmon River upstream 22.6 km (14.0 mi) to its headwaters.

(E) East Fork Salmon River from its confluence with the Salmon River upstream 58.2 km (36.1 mi) to its headwaters and extending up the following tributaries: Herd Creek for a distance of 14.3 km (8.9 mi) and extending 4.2 km (2.6 mi) up East Pass Creek, 10 km (6.2 mi) up East Fork Herd Creek, 9.4 km (5.8 mi) up West Fork Herd Creek and 2.8 km (1.7 mi) up Meridian Creek; Big Boulder Creek for a distance of 18.9 km (11.7 mi); Little Boulder Creek for a distance of 10.1 km (6.3 mi); Wickiup Creek for a distance of 10.8 km (6.7 mi); Germania Creek for a distance of 23.4 km (14.5 mi) and extending up Chamberlain Creek for 8.3 km (5.2 mi); Bowery Creek for a distance of 8.0 km (5 mi) and extending 6.5 km (4.0 mi) up Long Tom Creek and 3.9 km (2.4 mi) up North Fork Bowery Creek; West Pass Creek for a distance of 13.5 km (8.4 mi) and extending 4.8 km (3.0 mi) up Roaring Creek; Ibex Creek for a distance of 6.1 km (3.8 mi); West Fork East Fork Salmon River for a distance of 8.6 km (5.3 mi); and South Fork East Fork Salmon River for a distance of 10.1 km (6.3 mi).

(F) Kinnikinic Creek from its confluence with the Salmon River upstream 13.8 km (8.6 mi) to its headwaters.

(G) Squaw Creek from its confluence with the Salmon River upstream 25.7 km (16.0 mi) to its headwaters and extending 8.3 km (5.2 mi) up Martin Creek and 5.2 km (3.2 mi) up Willow Creek.

(H) Thompson Creek from its confluence with the Salmon River upstream 19.6 km (12.2 mi) to its headwaters.

(I) Slate Creek from its confluence with the Salmon River upstream 13.3 km (8.3 mi) to its headwaters and extending 8.4 km (5.2 mi) up Silver Rule Creek and 5.9 km (3.7 mi) up Livingston Creek.

(J) Warm Springs Creek from its confluence with the Salmon River upstream 34.4 km (21.4 mi) to its headwaters and extending 9.1 km (5.7 mi) up Martin Creek, and 1.2 km (0.7 mi) up Pigtail Creek.

(K) Yankee Fork Salmon River from its confluence with the Salmon River upstream 46.7 km (29.0 mi) to its headwaters and extending up the following tributaries: West Fork Yankee Fork for a distance of 21.1 km (13.1 mi) and extending 6.5 km (4.0 mi) up Deadwood Creek, 12.7 km (7.9 mi) up Lightning Creek, and 8.3 km (5.2 mi) up Cabin Creek; Jordan Creek for a distance of 12.6 km (7.8 mi); Fivemile Creek for a distance of 7.6 km (4.7 mi); Sixmile Creek for a distance of 7 km (4.3 mi); Eightmile Creek for a distance of 10.8 km (6.7 mi); Ninemile Creek for a distance of 4.5 km (2.8 mi); Tenmile Creek for a distance of 6.7 km (4.2 mi); Elevenmile Creek for a distance of 4.6 km (2.9 mi); Twelvemile Creek for a distance of 5.8 km (3.6 mi); and McKay Creek for a distance of 7.5 km (4.7 mi) and extending 4.4 km (2.7 mi) up an unnamed tributary that enters McKay Creek from the south.

(L) Basin Creek from its confluence with the Salmon River upstream 23.4 km (14.5 mi) to its headwaters and extending up the following tributaries: East Basin Creek for a distance of 10.1 km (6.3 mi) and extending 3.3 km (2.0 mi) up an unnamed tributary that enters East Basin from the northwest; Short Creek for a distance of 3 km (1.9 mi); and Sunday Creek for a distance of 5.7 km (3.5 mi).

(M) Valley Creek from its confluence with the Salmon River upstream 39.6 km (24.6 mi) to a headwater lake and extending up the following tributaries: Goat Creek for a distance of 8.3 km (5.2 mi); Iron Creek for a distance of 10.1 km (6.3 mi); Crooked Creek for a distance of 6.1 km (3.8 mi); Job Creek for a distance of 0.1 km (0.06 mi); Elk Creek for a distance of 20.2 km (12.5 mi); Meadow Creek for a distance of 4 km and extending 8.8 km (5.5 mi) up Trap Creek; East Fork Valley Creek for a distance of 7.5 km (4.7 mi); and Prospect Creek for a distance of 4.7 km (2.9 mi).

(N) Redfish Lake Creek from its confluence with the Salmon River upstream 4.2 km (2.6 mi) to Little Redfish Lake and including: Little Redfish Lake (26 ha (64 ac)); Redfish Lake (612 ha (1,512 ac)); Redfish Lake Creek for 0.2 km (0.1 mi) upstream of Redfish Lake; and Fishhook Creek for a distance of 6.6 km (4.1 mi).

(O) Fourth of July Creek from its confluence with the Salmon River upstream 19.9 km (12.4 mi) to its headwaters.

(P) Alturas Lake Creek from its confluence with the Salmon River upstream 12.5 km (7.8 mi) to Alturas Lake and including the following tributaries and lakes: Yellowbelly Creek for 3.5 km (2.2) from Alturas Lake Creek upstream to Yellowbelly Lake and for 5.4 km (3.4 mi) from Yellowbelly Lake upstream to Farley Lake outlet; Yellowbelly Lake (79 ha (195 ac)); Pettit Lake Creek for 1.9 km (1.2 mi) between Alturas Lake Creek and Pettit Lake and for 3.1 km (1.9 mi) upstream of Pettit Lake; Pettit Lake (152 ha (376 ac)); Cabin Creek for 4.0 km (2.5 mi) from Alturas Lake Creek to its headwaters; Alturas Lake (334 ha (825 ac)); Alturas Lake Creek from Alturas Lake upstream 13.4 km (8.3 mi) to its headwater; Alpine Creek for 8.6 km (5.3 mi) from Alturas Lake Creek to its headwaters; Pole Creek from its confluence with the Salmon River upstream 16.9 km (10.5 mi) to its headwaters.

(Q) Beaver Creek from its confluence with the Salmon River upstream 14.4 km (8.9 mi) to its headwaters.

(R) Smiley Creek from its confluence with the Salmon River upstream 16.9 km (10.5 mi) to its headwaters.

(S) Frenchman Creek from its confluence with the Salmon River upstream 11.5 km (7.1 mi) to its headwaters.

(21) Unit 17: Southwest Idaho River Basins

The Southwest Idaho Unit includes a total of approximately 2,792 km (1,735 mi) of stream in the Boise, Payette, and Weiser River basins (Ada, Adams, Boise, Camas, Canyon, Elmore, Gem, Payette, Valley, and Washington counties) proposed for designation as critical habitat. The Boise River basin contains the Arrowrock, Anderson Ranch, and Lucky Peak critical habitat CHSUs. The Payette River Basin contains the upper South Fork Payette River, Deadwood River, Middle Fork Payette River, North Fork Payette River and Squaw Creek CHSUs; and the Weiser River basin contains the Weiser River CHSU. All proposed critical habitat designations are associated with populations of bull trout identified as essential to recovery in the Draft Recovery Plan (USFWS 2002), and are essential to the conservation of the species.

(i) Anderson Ranch CHSU

This CHSU includes the South Fork Boise River watershed upstream of Anderson Ranch Dam. There are 15 local populations identified within this CHSU, all of which are considered essential for recovery of bull trout (USFWS 2002). Approximate landownership is as follows: 87 percent Federal, 11 percent private, 2 percent State. Proposed critical habitat in this CHSU includes the 1,865 ha (4,608 ac) Anderson Ranch Reservoir. Critical habitat within the Anderson Ranch CHSU includes the stream segments and water body described below that provide FMO habitat, and allow for the maintenance of genetic exchange by local and potential local populations both within and between CHSUs.

(A) South Fork Boise River from the Anderson Ranch CHSU boundary 8.7 km (5.4 mi) downstream of Anderson Ranch Reservoir upstream to and including the Reservoir, and upstream 77.6 km (48.2 mi) to the point 6.4 km (4.0 mi) above the confluence with Bear Creek is migratory habitat (Partridge *et al.* 2000), and the 6.4 km reach above Bear Creek is suspected to support bull trout spawning and early rearing (C. Reighn, USFWS, *in litt.*, 2002). Dog Creek from the confluence with South Fork Boise River upstream 9.0 km (5.6 mi) to the headwaters is spawning and early rearing habitat (Corley 1997; Boise National Forest (BNF), unpublished 2002).

(B) Feather River from the confluence with South Fork Boise River upstream 10.3 km (6.4 mi) to the confluence of Feather River and Elk Creek is suspected to provide bull trout FMO habitat, as well as to support bull trout spawning and early rearing (C. Reighn, USFWS, *in litt.*, 2002). The Feather River is essential to providing for the recovered distribution of bull trout (USFWS 2002).

(C) Elk Creek from the confluence with the Feather River upstream 11.4 km (7.1 mi) to the headwaters of Elk Creek is spawning and early rearing habitat (Corley 1997; BNF, unpublished 2002). East Fork Elk Creek from the confluence with Elk Creek upstream 4.7 km (2.9 mi) to the headwaters of East Fork Elk Creek is spawning and early rearing habitat (C. Reighn, USFWS, *in litt.*, 2002).

(D) Willow Creek from the confluence with the South Fork Boise River upstream 19.3 km (12.0 mi) to the headwaters of Willow Creek is spawning and early rearing habitat (Corley 1997; Partridge *et al.* 2000; BNF, unpublished 2002).

(E) Big Water Gulch from the confluence with the South Fork Boise River upstream 10.2 km (6.3 mi) to the headwaters of Big Water Gulch is spawning and early rearing habitat (Corley 1997; BNF, unpublished 2002).

(F) Deadwood Creek from the confluence with the South Fork Boise River upstream 6.9 km (4.3 mi) to the headwaters of Deadwood Creek is known to support bull trout spawning and early rearing (Corley 1997; BNF, unpublished 2002).

(G) Skeleton Creek from the confluence with South Fork Boise River upstream 15.0 km (9.3 mi) to the

headwaters of Skeleton Creek (Corley 1997; Partridge *et al.* 2000; BNF, unpublished 2002), Burnt Log Creek from the confluence with Skeleton Creek upstream 4.0 km (2.5 mi) (Partridge *et al.* 2000), West Fork Skeleton Creek from the confluence with Skeleton Creek upstream 5.0 km (3.1 mi) to the headwaters (Corley 1997; BNF, unpublished 2002), and East Fork Skeleton Creek from the confluence with West Fork Skeleton Creek upstream 4.8 km (3.0 mi) (D. Kenney, USFS, *in litt.*, 2002) are known to support bull trout spawning and early rearing.

(H) Boardman Creek from the confluence with South Fork Boise River upstream 14.4 km (8.9 mi) to the headwaters is spawning and early rearing habitat (Corley 1997; BNF, unpublished 2002; (Partridge *et al.* 2000; D. Kenney, *in litt.*, 2002). Smoky Dome Canyon from the confluence with Boardman Creek upstream 5.3 km (3.3 mi) to the headwaters is spawning and early rearing habitat (Corley 1997; BNF, unpublished 2002; D. Kenney, *in litt.*, 2002).

(I) Big Smoky Creek from the confluence with South Fork Boise River upstream 18.1 km (11.3 mi) to the confluence of Big Smoky Creek and North Fork Big Smoky Creek is known to provide bull trout FMO habitat (Partridge *et al.* 2000). Salt Creek from the confluence with Big Smoky Creek upstream 8.4 km (5.2 mi) to the headwaters is bull trout spawning and early rearing habitat (BNF, unpublished 2002). Little Smoky Creek from the confluence with Big Smoky Creek upstream 9.5 km (5.9 mi) to the confluence of Little Smoky Creek and Five Points Creek is known to provide bull trout FMO habitat (Sawtooth National Forest, *in litt.*, 2001; D. Kenney, *in litt.*, 2002), and from this point upstream 25.4 km (15.8 mi) to the headwaters is spawning and early rearing habitat (D. Kenney, *in litt.*, 2002). Carrie Creek from the confluence with Little Smoky Creek upstream 11.4 km (7.1 mi) to the headwaters is essential to providing for the recovered distribution of bull trout (USFWS 2002), and is also recently discovered to support bull trout spawning and early rearing (D. Kenney, *in litt.*, 2002). Big Peak Creek from the confluence with Big Smoky Creek upstream 7.4 km (4.6 mi) to the headwaters is essential to providing for the recovered distribution of bull trout (USFWS 2002), and has also recently been identified as supporting bull trout spawning and early rearing (Partridge *et al.* 2000). Big Smoky Creek from the confluence with North Fork Big Smoky Creek upstream 17.3 km (10.8 mi) to the headwaters is spawning and early rearing habitat (Partridge *et al.* 2000). North Fork Big Smoky Creek from the confluence with Big Smoky Creek upstream 4.4 km (2.7 mi) to the confluence of North Fork Big Smoky Creek and Snowslide Creek is FMO habitat (Partridge *et al.* 2000; D. Kenney, *in litt.*, 2002). Snowslide Creek from the confluence with North Fork Big Smoky Creek upstream 4.2 km (2.6 mi) to the headwaters is spawning and early rearing habitat (Partridge *et al.* 2000). Bluff Creek from the confluence with Big Smoky Creek upstream 7.0 km (4.4 mi) to the headwaters of Bluff Creek is known to support bull trout spawning and early rearing (Corley 1997; BNF, unpublished 2002). West Fork Big Smoky Creek from the confluence with Big Smoky Creek upstream 10.7 km (6.7 mi) to the headwaters of West Fork Big Smoky Creek is spawning and early rearing habitat (Corley 1997; Partridge *et al.* 2000; BNF, unpublished 2002). Loggy Creek from the confluence with West Fork Big Smoky Creek upstream 4.5 km (2.8 mi) to the headwaters is spawning and early rearing habitat (Partridge *et al.* 2000; D. Kenney, *in litt.*, 2002).

(J) Bear Creek from the confluence with South Fork Boise River upstream 10.1 km (6.3 mi) to the headwaters, and Goat Creek from the confluence with Bear Creekupstream 2.8 km (1.8 mi) to the headwaters are bull trout spawning and early rearing habitat (Corley 1997; Partridge *et al.* 2000; BNF, unpublished 2002).

(K) Emma Creek from the confluence with South Fork Boise River upstream 9.5 km (5.9 mi) to the headwaters of Emma Creek is known to support bull trout spawning and early rearing (Corley 1997; Partridge *et al.* 2000; BNF, unpublished 2002; D. Kenney, *in litt.*, 2002). An unnamed creek from its confluence with Emma Creek (4.5 km (2.8 mi) upstream of the confluence of Emma Creek with South Fork Boise River) upstream 1.8 km (1.1 mi) to its headwaters is known to support bull trout spawning and early rearing (BNF, *in litt.* 2002; Corley 1997).

(L) Ross Fork Creek from the confluence with South Fork Boise River upstream 6.0 km (3.7 mi) to the headwaters, Little Bear Creek from the confluence with Ross Fork Creek upstream 5.4 km (3.3 mi) to the headwaters (Partridge *et al.* 2000; D. Kenney, *in litt.*, 2002), and Bass Creek from the confluence with Ross Fork Creek upstream 6.5 km (4.0 mi) to the headwaters are spawning and early rearing habitat (Corley 1997; Partridge *et al.* 2000; BNF, unpublished 2002). South Fork Ross Fork Creek from the confluence with Ross Fork Creek upstream 8.4 km (5.2 mi) to the headwaters (Corley 1997; BNF, unpublished 2002), and North Fork Ross Fork Creek from the confluence with Ross Fork Creek upstream 7.6 km (4.7 mi) to the headwaters are spawning and early rearing habitat (Corley 1997).

(M) Johnson Creek from the confluence with South Fork Boise River upstream 11.9 km (7.4 mi) to the headwaters, and Vienna Creek from the confluence with Johnson Creek upstream 6.1 km (3.8 mi) to the headwaters are bull trout spawning and early rearing habitat (Corley 1997; Partridge *et al.* 2000; BNF, unpublished 2002; D. Kenney, *in litt.*, 2002).

(ii) Arrowrock CHSU

The Arrowrock CHSU includes the Boise River watersheds upstream of Arrowrock Dam, including the North Fork Boise River, Middle Fork Boise River, and South Fork Boise River downstream of Anderson Ranch Dam. There are 15 local populations identified within the Arrowrock CHSU. Landownership in this CHSU is approximately as follows: 91 percent Federal (USFS, BLM, BOR), 6 percent private, and 3 percent State. Proposed critical habitat includes Arrowrock Reservoir (3,489 ha (8,617 ac).

(A) Arrowrock Reservoir provides bull trout FMO habitat (Flatter 1998; Salow 2001), as does the South Fork Boise River from Arrowrock Reservoir upstream 39.0 km (24.2 mi) to Anderson Ranch Dam (Flatter 1998).

(B) Rattlesnake Creek from the confluence of Rattlesnake Creek and South Fork Boise River upstream 26.4 km (16.4 mi) to the headwaters (Flatter 1998; BNF, unpublished 2002), and Russell Gulch from the confluence of Russell Gulch and Rattlesnake Creek upstream 4.0 km (2.5 mi) to the headwaters comprise bull trout spawning and early rearing habitat (Steed *et al.* 1998).

(C) Sheep Creek from the confluence of Sheep Creek and the Boise River upstream 6.9 km (4.3 mi) to the confluence of Sheep Creek and Devils Creek is FMO habitat (Flatter 1998). Sheep Creek from the confluence of Sheep Creek and Devils Creek upstream to the headwaters is spawning and early rearing habitat (BNF, unpublished 2002). Devils Creek from the confluence of Devils Creek and Sheep Creek upstream 5.88 km (3.8 mi) to the headwaters is known to support bull trout spawning and early rearing (Steed *et al.* 1998). East Fork Sheep Creek from the confluence of East Fork Sheep Creek and Sheep Creek upstream 5.76 km (3.6

mi) to the headwaters is spawning and early rearing habitat (Steed *et al.* 1998).

(D) Middle Fork Boise River from the confluence with the Boise River upstream 55.1 km (34.2 mi) is bull trout FMO habitat (Flatter 1998; Salow 2001). Middle Fork Boise River from the confluence of Middle Fork Boise River and Yuba River upstream 24.1 km (15.0 mi) to the headwaters. This reach contains primary constituent elements for bull trout (BNF, unpublished 2002), has recently been occupied by bull trout due to the installation of a fish ladder completed in 1999 (B. Flatter, IDFG, pers. comm., 2002), and provides for population expansion essential to conservation of the species (USFWS 2002).

(E) Roaring River from the confluence of Roaring River and Middle Fork Boise River upstream to the headwaters support bull trout spawning and early rearing (Flatter 1998; BNF, unpublished 2002). East Fork Roaring River from the confluence of East Fork Roaring River and Roaring River upstream 12.0 km (7.4 mi) to the headwaters (Flatter 1998; BNF, unpublished 2002), and Middle Fork Roaring River from the confluence of Middle Fork Roaring River and East Fork Roaring River upstream 8.6 km (5.4 mi) to the headwaters constitute spawning and early rearing habitat (Steed *et al.* 1998).

(F) Buck Creek from the confluence of Buck Creek and the Middle Fork Boise River upstream 11.6 km (7.2 mi) to the headwaters is spawning and early rearing habitat (Steed *et al.* 1998).

(G) Black Warrior Creek from the confluence of Black Warrior Creek and the Middle Fork Boise River upstream 18.8 km (11.6 mi) (BNF, unpublished 2002), and West Warrior Creek from the confluence of West Warrior Creek and Black Warrior Creek upstream 8.6 km (5.3 mi) to the headwaters (Steed *et al.* 1998) are spawning and early rearing habitats. An unnamed creek (SI–A–17) from the confluence with Black Warrior Creek (8.8 km (5.4 mi) upstream of the confluence of Black Warrior Creek with Middle Fork Boise River) upstream 3.0 km (1.9 mi) to the headwaters is spawning and early rearing habitat (BNF, unpublished 2002).

(H) Bald Mountain Creek from the confluence with the Middle Fork Boise River upstream 10.0 km (6.2 mi) to the headwaters is essential habitat for expanding distribution of bull trout (USFWS 2002), and is also recently known to support bull trout spawning and early rearing (BNF, unpublished 2002).

(I) Queens River from the confluence of Queens River and the Middle Fork Boise River upstream 23.4 km (14.6 mi) to the headwaters (Flatter 1998; Steed *et al.* 1998; BNF, unpublished 2002), Little Queens River from the confluence of Little Queens River and Queens River upstream 14.8 km (9.2 mi) to the headwaters (Flatter 1998; BNF, unpublished 2002), and Scott Creek from the confluence of Scott Creek and Little Queens River upstream 2.5 km (1.5 mi) to the headwaters (Steed *et al.* 1998), are known to support bull trout spawning and early rearing. Tripod Creek from the confluence of Tripod Creek and Little Queens River upstream 3.1 km (1.9 mi) to the headwaters (Steed *et al.* 1998), and Scenic Creek from the confluence of Scenic Creek and Little Queens River upstream 4.2 km (2.6 mi) to the headwaters (BNF, unpublished 2002) support bull trout spawning and early rearing.

(J) Yuba River from the confluence of the Yuba River and Middle Fork Boise River upstream 14.0 km (8.7 mi) to the headwaters, Decker Creek from the confluence of Decker Creek and the Yuba River upstream 12 km (7.5 mi) to the headwaters, and Grouse Creek from the confluence of Grouse Creek and Decker Creek upstream 5.7 km (3.5 mi) upstream to the headwaters are known to support bull trout spawning and early rearing (BNF, unpublished 2002). Sawmill Creek from the confluence of Sawmill Creek and Grouse Creek upstream 6.5 km (4.1 mi) to the headwaters is also spawning and early rearing habitat (BNF, unpublished 2002).

(K) Trail Creek from the confluence with the Yuba River upstream 7.5 km (4.7 mi) to the headwaters is known to support bull trout spawning and early rearing (BNF, unpublished 2002).

(L) Mattingly Creek from the confluence with the Middle Fork Boise River upstream 9.7 km (6.0 mi) to the headwaters is known to contain primary constituent elements as identified for bull trout (BNF, unpublished 2002) and is essential to provide for the conservation of bull trout (USFWS 2002).

(M) North Fork Boise River from the confluence with the Middle Fork Boise River upstream 57.8 km (35.9 mi) to the confluence with Johnson Creek provides FMO habitat (Flatter 1998; BNF, unpublished 2002). Rabbit Creek from the confluence with the North Fork Boise River upstream 1.3 km (0.8 mi) to the confluence with First Creek and Hungarian Creek from the confluence with the North Fork Boise River upstream 0.8 km (0.5 mi) provide thermal refugia habitat for migratory bull trout in the North Fork Boise River (Flatter 1998; BNF, unpublished 2002).

(N) North Fork Boise River from the confluence with Johnson Creek upstream 7.0 km (4.3 mi) provides FMO and spawning and early rearing habitat (Flatter 1998; BNF, unpublished 2002); from the confluence of the North Fork Boise River and Big Silver Creek upstream to the headwaters supports spawning and early rearing (BNF, unpublished 2002). Crooked River from the confluence with the North Fork Boise River upstream 26.5 km (16.4 mi) to the confluence of Crooked River and an unnamed creek 2.5 km (1.6 mi) upstream of Willow Creek, and Ski Creek from the confluence with the Crooked River upstream 3.6 km (2.2 mi) to the headwaters provide habitat essential to provide for the recovery of bull trout (USFWS 2002), and are also recently known to provide bull trout FMO habitat, as well as to support spawning and early rearing (Salow 2001; BNF, unpublished 2002). Crooked River from the confluence with an unnamed creek 2.5 km (1.6 mi) upstream of Willow Creek upstream to the headwaters provides spawning and early rearing habitat (Salow 2001; BNF, unpublished 2002). Pikes Fork Creek from the confluence with the Crooked River upstream 14.1 km (8.8 mi) to the headwaters and Banner Creek from the confluence with Pikes Fork Creek upstream 1.9 km (1.2 mi) are recently known to support bull trout spawning and early rearing (Steed *et al.* 1998; BNF, unpublished 2002) and provide habitat essential for the conservation of bull trout (USFWS 2002).

(O) Bear River from the confluence with the North Fork Boise River upstream 6.2 km (3.8 mi) to the confluence of Bear River and Bear Creek provides both FMO and spawning and early rearing habitat (Flatter 1998). Bear River from the confluence with Bear Creek upstream 15.9 km (9.9 mi), and Louise Creek from the confluence with Bear River upstream 3.4 km (2.1 mi) to the headwaters, support bull trout spawning and early rearing (Steed *et al.* 1998; BNF, unpublished 2002). Cub Creek from the confluence with the Bear River upstream 4.8 km (3.0 mi) to the headwaters, and South Fork Cub Creek from the confluence with Cub Creek upstream 3.5 km (2.2 mi) to the headwaters, are known to support bull trout spawning and early rearing (Steed *et al.* 1998; Salow 2001; BNF, unpublished 2002). Bear Creek, from the confluence with the Bear River upstream 13.2 km (8.2 mi) to the headwaters, provides spawning and early rearing habitat (Salow 2001; BNF, unpublished 2002).

(P) Trail Creek from the confluence with the North Fork Boise River

upstream approximately 0.8 km (0.5 mi) provides thermal refugia for migratory bull trout in the North Fork Boise River (BNF, unpublished 2002).

(Q) Lodgepole Creek from the confluence with the North Fork Boise River upstream 5.6 km (3.5 mi) to the headwaters provides spawning and early rearing habitat (Flatter 1998; Salow 2001; BNF, unpublished 2002).

(R) Johnson Creek from the confluence with the North Fork Boise River upstream 20.0 km (12.4 mi) to the headwaters provides spawning and early rearing habitat (Flatter 1998; Salow 2001; BNF, unpublished 2002).

(S) Big Silver Creek from the confluence with the North Fork Boise River upstream 7.0 km (4.3 mi) to the headwaters, and Little Silver Creek from the confluence with Big Silver Creek upstream 4.1 km (2.6 mi) to the headwaters, provide spawning and early rearing habitat (Salow 2001; BNF, unpublished 2002).

(T) Cow Creek from the confluence with the North Fork Boise River upstream 7.5 km (4.6 mi) to the headwaters is bull trout spawning and early rearing habitat (BNF, unpublished 2002).

(U) Ballentyne Creek from the confluence with the North Fork Boise River upstream 9.9 km (6.2 mi) to the headwaters of Ballentyne Creek provides spawning and early rearing habitat (Flatter 1998; Salow 2001; BNF, unpublished 2002).

(V) West Fork Creek from the confluence with the North Fork Boise River upstream 3.3 km (2.1 mi) to the headwaters supports bull trout spawning and early rearing (BNF, unpublished 2002).

(W) McLeod Creek from the confluence with the North Fork Boise River upstream 5.9 km (3.6 mi) to the headwaters provides spawning and early rearing habitat (Flatter 1998; BNF, unpublished 2002).

(X) McPhearson Creek from the confluence with the North Fork Boise River upstream 5.5 km (3.4 mi) to the headwaters provides bull trout spawning and early rearing habitat (BNF, unpublished 2002).

(iii) Lucky Peak CHSU

The Lucky Peak CHSU includes Lucky Peak Reservoir and tributaries entering it, namely the Mores Creek watershed. Migratory bull trout in Lucky Peak Reservoir are entrained from Arrowrock Dam, and some may also be produced in the Mores Creek watershed. Bull trout were located in Mores Creek in 2000 (T. Burton, BNF, *in litt.*, 2000) and this is the only known local population in this CHSU. Approximate landownership in this CHSU is as follows: 57 percent Federal, 18 percent State, and 25 percent private.

(A) Lucky Peak Reservoir (3,234 ha (7,911 ac)) and Mores Creek from its mouth in Lucky Peak Reservoir upstream approximately 55 km (34 mi) to a culvert on Highway 21 where Hayfork Creek enters the system provide FMO habitat (BOR 2000; H. Roerick, USFS, pers. comm., 2002). Mores Creek from this point upstream 7 km (4.4 mi) to the headwaters supports bull trout spawning and early rearing (BNF, unpublished 2002).

(iv) Deadwood River CHSU

This CHSU includes all watersheds in the Deadwood River drainage upstream of Deadwood Dam. There are five local and seven potential local populations identified within this CHSU. Approximate landownership is as follows: 95 percent Federal and 5 percent private.

(A) Deadwood Reservoir (1,640 ha (4,054 ac)) provides FMO habitat (Allen 1998). The Deadwood River from Deadwood Dam upstream 40 km (25 mi) to the confluence with the East Fork Deadwood River provides FMO habitat.

(B) Trail Creek from the confluence with the Deadwood River upstream 13 km (8 mi) to the headwaters and Daisy Creek from the confluence with Trail Creek upstream 4.9 km (3 mi) to the headwaters provide bull trout spawning and early rearing habitat (Allen 1998; Jimenez and Zaroban 1998; Burton 1999a; BNF, unpublished 2002).

(C) South Fork Beaver Creek from the confluence with the Deadwood River upstream 6 km (3.8 mi) to the headwaters is habitat essential to providing for the recovery of bull trout (USFWS 2002), and has recently been found to provide spawning and early rearing habitat (Allen 1998; BNF, unpublished 2002). An unnamed creek from the confluence with South Fork Beaver Creek (at approximately 2.8 km (1.7 mi) upstream of the confluence of South Fork Beaver Creek with the Deadwood River) upstream 4.4 km (2.7 mi) to the headwaters is known to contain primary constituent elements as identified for bull trout (Jimenez and Zaroban 1998; Burton 1999a) and is habitat necessary to provide for expansion of bull trout populations necessary for recovery (USFWS 2002).

(D) Beaver Creek from the confluence with the Deadwood River upstream 7.8 km (4.9 mi) to the headwaters provides spawning and early rearing habitat (Allen 1998). An unnamed creek from the confluence with Beaver Creek (2.8 km (1.7 mi) upstream of the confluence of Beaver Creek with the Deadwood River) upstream 3.5 km (2.2 mi) to the headwaters is habitat necessary to provide for expansion of bull trout populations necessary for recovery (USFWS 2002), and is known to contain primary constituent elements as identified for bull trout (Jimenez and Zaroban 1998; Burton 1999a).

(E) Habit Creek from the confluence with Beaver Creek upstream 6 km (3.7 mi) to the headwaters is habitat essential to providing for the recovery of bull trout (USFWS 2002), and has also recently been found to currently provide spawning and early rearing habitat (Allen 1998).

(F) Basin Creek from the confluence with Beaver Creek upstream 3 km (1.9 mi) to the headwaters provides spawning and rearing habitat.

(G) Wild Buck Creek from the confluence with the Deadwood River upstream 6.3 km (3.9 mi) to the headwaters provides spawning and early rearing habitat (Allen 1998; Jimenez and Zaroban 1998; Burton 1999a; BNF, unpublished 2002).

(H) Deer Creek from the confluence with the Deadwood River upstream 16.5 km (10 mi) to the headwaters contains spawning and early rearing habitat (Allen 1998; Jimenez and Zaroban 1998; Burton 1999a; BNF, unpublished 2002). An unnamed creek from the confluence with Deer Creek (3.3 km (2.0 mi) upstream of the confluence of Deer Creek with the Deadwood River) upstream 2.0 km (1.3 mi) to the headwaters provides bull trout spawning and early rearing habitat (BNF, unpublished 2002). An unnamed creek from the confluence with Deer Creek (5.8 km (3.6 mi) upstream of the confluence of Deer Creek with the Deadwood River) upstream 2.0 km (1.3 mi) to the headwaters provides spawning and rearing habitat (BNF, unpublished 2002). North Fork Deer Creek from the confluence with Deer Creek upstream 5.5 km (3.4 mi) to the headwaters contains spawning and early rearing habitat (Allen 1998; Jimenez and Zaroban 1998; Burton 1999a; BNF, unpublished 2002). An unnamed creek from the confluence with Deer Creek (7.8 km (4.8 mi) upstream of the confluence of Deer Creek with the Deadwood River) upstream 1.8 km (1.1 mi) to the headwaters supports spawning and rearing habitat (Jimenez and Zaroban 1998; Burton 1999a; BNF, unpublished 2002).

(I) Goat Creek from the confluence with the Deadwood River upstream 6.4 km (4.0 mi) to the headwaters provides spawning and early rearing habitat (BNF, unpublished 2002) and is habitat essential to the conservation of bull trout (USFWS 2002).

(J) Bitter Creek from the confluence with the Deadwood River upstream 6.0 km (3.7 mi) to the headwaters is habitat necessary to provide for expansion of bull trout populations (USFWS 2002), and is known to contain primary constituent elements for bull trout (Jimenez and Zaroban 1998; Burton 1999a).

(K) Stratton Creek from the confluence with the Deadwood River upstream 5.3 km (3.3 mi) to the headwaters provides spawning and early rearing habitat (Allen 1998) and is essential to the conservation of bull trout (USFWS 2002).

(L) East Fork Deadwood River from the confluence with the Deadwood River upstream 0.4 km (0.2 mi) to a waterfall barrier is habitat necessary to provide for expansion of bull trout populations (USFWS 2002), and is known to contain primary constituent elements for bull trout (Jimenez and Zaroban 1998; Burton 1999a).

(v) Middle Fork Payette River CHSU

This CHSU includes the watersheds upstream from the confluence with the Payette River. There are one local and five potential local populations identified within the Middle Fork Payette River CHSU. Approximate landownership in this CHSU is as follows: 90 percent Federal, 7 percent private, and 3 percent State.

(A) The Middle Fork Payette River from its confluence with the South Fork Payette River upstream 56.3 km (35.0 mi) to the confluence with Bull Creek provides FMO habitat (Jimenez and Zaroban 1998). Middle Fork Payette River from the confluence with Bull Creek upstream 6.8 km (4.2 mi) to the confluence with Ligget Creek provides FMO habitat and may provide spawning and rearing habitat (Jimenez and Zaroban 1998; USFS 2000b, 2002; J. Roy, USFWS, *in litt.*, 2002). From Ligget Creek upstream 10.8 km (6.7 mi) to the headwaters the Middle Fork Payette River provides bull trout spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 2000b, 2002; BNF, unpublished 2002; J. Roy, *in litt.*, 2002). An unnamed creek from its confluence with the Middle Fork Payette River (71.5 km (44.4 mi) upstream of the confluence of the Middle Fork Payette River and the South Fork Payette River) upstream 7.2 km (4.5 mi) to the headwaters is known to support bull trout spawning and early rearing (Jimenez and Zaroban 1998; USFS 2000b, 2002; BNF, unpublished 2002; J. Roy, *in litt.,* 2002). An unnamed creek from its confluence with the Middle Fork Payette River (72.5 km (45.0 mi) upstream of the confluence of the Middle Fork Payette River and the South Fork Payette River) upstream 3.2 km (2.0 mi) to the headwaters provides occupied spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 2000b, 2002; BNF, unpublished 2002; J. Roy, *in litt.,* 2002). An unnamed creek from its confluence with the Middle Fork Payette River (73.3 km (45.5 mi) upstream of the confluence of the Middle Fork Payette River and the South Fork Payette River) upstream 3.2 km (2.0 mi) to its headwaters provides spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 2002; BNF, *in litt.*, 2002; J. Roy, *in litt.*, 2002).

(B) Lightning Creek from the confluence with the Middle Fork Payette River upstream 21.7 km (13.4 mi) to the headwaters, and Onion Creek from the confluence with Lightning Creek upstream 7.9 km (4.9 mi) to the headwaters of Onion Creek is known to contain primary constituent elements for bull trout (Jimenez and Zaroban 1998; USFS 2000b), and is essential to habitat to provide for expansion of populations essential to the conservation of the species (USFWS 2002).

(C) Silver Creek from the confluence with the Middle Fork Payette River upstream to the headwaters; Peace Creek from the confluence with Silver Creek upstream 6.8 km (4.2 mi) to the headwaters; Valley Creek from the confluence with Peace Creek upstream 8.5 km (5.3 mi) to the headwaters; Ucon Creek from the confluence with Silver Creek upstream 5.0 km (3.1 mi) to the headwaters, and Long Fork Silver Creek from the confluence with Silver Creek upstream 8.5 km (5.3 mi), all are known to contain primary constituent elements for bull trout (Jimenez and Zaroban 1998; USFS 2000b) and are required for expanded bull trout populations that are essential to the conservation of the species (USFWS 2002).

(D) Bull Creek from the confluence with the Middle Fork Payette River upstream 19.5 km (12 mi) to the headwaters provides FMO habitat in the lower reaches and spawning and rearing habitat in the upper areas (Jimenez and Zaroban 1998; USFS 2000b, 2002; J. Roy, *in litt.*, 2002). Oxtail Creek from the confluence with Bull Creek upstream 4.5 km (2.8 mi) to the headwaters provides spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 2000b, 2002; J. Roy, *in litt.*, 2002). Sixteen-to-one Creek from the confluence with Bull Creek upstream 7.8 km (4.8 mi) to the headwaters contains spawning and early rearing habitat (J. Roy, USFWS, *in litt.*, 2002; USFS 2002b).

(vi) Weiser River CHSU

The Weiser River CHSU in Washington and Adams counties in southwestern Idaho includes all watersheds upstream of and including the Little Weiser River watershed. There are five local and seven potential local populations identified within the CHSU. Approximate landownership in the CHSU is as follows: 53 percent Federal, 39 percent private, and 8 percent State.

(A) The Weiser River from the confluence with the Little Weiser River upstream 64.5 km (40.0 mi) to the confluence of the East Fork Weiser River provides connectivity between the Upper Hornet Creek and East Fork Weiser River local populations, and the Pine Creek, Rush Creek, West Fork Weiser River, and Lost Creek potential local populations. The Little Weiser River from the confluence with the Weiser River upstream 55.6 km (34.5 mi) to the confluence with Anderson Creek provides connectivity between the Upper Little Weiser River, Anderson Creek, and Sheep Creek local populations, and the Weiser River and its associated local and potential local populations. The upper Little Weiser River from the confluence with Anderson Creek upstream 16.2 km (10.0 mi) to the headwaters support bull trout spawning and early rearing (DuPont and Kennedy 2000).

(B) Anderson Creek from the confluence with the Little Weiser River upstream 11.2 km (7.0 mi) to the headwaters provides spawning and early rearing habitat (Adams 1994; DuPont and Kennedy 2000).

(C) Sheep Creek from the confluence with Anderson Creek upstream 16.2 km (10.0 mi) to the headwaters provides spawning and early rearing habitat (Adams 1994; DuPont and Kennedy 2000).

(D) East Fork Pine Creek from the confluence with Pine Creek upstream 17.1 km (10.6 mi) to the headwaters contains primary constituent elements for bull trout (DuPont and Kennedy 2000; McGee *et al.* 2001) and is essential to the conservation of bull trout (USFWS 2002).

(E) Rush Creek from the confluence with the Weiser River upstream 30.0 km (18.6 mi) to the headwaters contains primary constituent elements for bull trout (Veach *et al.* 1998; DuPont and Kennedy 2000) and Williams and Veach (1999) identify Rush Creek as a watershed where bull trout spawning and rearing is likely to occur, although it has not yet been documented. This habitat is essential to the conservation of bull trout (USFWS).

(F) The Middle Fork Weiser River from its confluence with the Weiser River upstream 40.9 km (25.4 mi) contains primary constituent elements for bull trout, although brook trout presence is problematic (D. Burns, USFS, pers. comm., 2002), and is essential to provide for the recovered distribution of bull trout (USFWS 2002).

(G) Hornet Creek from the confluence with the Weiser River upstream 24.7 km (15.3 mi) to the confluence with Disappointment Creek is suspected to provide FMO habitat (J. DuPont, Idaho Department of Lands, *in litt.*, 2000), and is essential to providing connectivity within the Weiser River CHSU. Hornet Creek from the confluence with Disappointment Creek upstream 7.8 km (4.8 mi) to the headwaters provides spawning and early rearing habitat (J. DuPont, *in litt.*, 2000). Olive Creek from the confluence of Olive Creek and Hornet Creek upstream 8.4 km (5.2 mi) to the headwater provides FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches (J. DuPont, *in litt.*, 1998). An unnamed creek from the confluence with Olive Creek (3.3 km (2.0 mi) upstream of the confluence of Olive Creek with Hornet Creek) upstream 1.8 km (1.1 mi) to the headwaters provides spawning and early rearing habitat (J. DuPont, *in litt.*, 2000). An unnamed creek from the confluence with Olive Creek (5.3 km (3.3 mi) upstream of the confluence of Olive Creek with Hornet Creek) upstream 2.6 km (1.6 mi) to the headwaters is habitat essential to provide for the recovered distribution of bull trout (USFWS 2002). It is suspected to provide bull trout FMO habitat below 1,524 m (5,000 feet (ft)) in elevation, and habitat suitable for spawning and rearing above 1,524 m (5,000 ft) in elevation (J. DuPont, *in litt.*, 2000). Placer Creek from the confluence with Hornet Creek upstream 5.1 km (3.2 mi) to the headwaters provides bull trout spawning and rearing habitat (J. DuPont, *in litt.* 2000). North Creek from the confluence with Placer Creek upstream 3.4 km (2.1 mi) to the headwaters provides spawning and rearing habitat (J. DuPont, *in litt.*, 2000). Disappointment Creek from the confluence with Hornet Creek upstream 4.2 km (2.6 mi) to the headwaters is habitat essential to provide for the recovered distribution of bull trout (USFWS 2002), and is suspected to provide bull trout FMO habitat below 1,524 m (5,000 ft) in elevation, and habitat suitable for spawning and rearing above 1,524 m (5,000 ft) (J. DuPont, *in litt.,* 2000). Grouse Creek from the confluence with Hornet Creek upstream 5.2 km (3.2 mi) to the headwaters is habitat essential to provide for the recovered distribution of bull trout (USFWS 2002), and is suspected to provide bull trout FMO habitat below 1,524 m (5,000 ft) in elevation, and habitat suitable for spawning and rearing above 1,524 m (5,000 ft) in elevation (J. DuPont, *in litt.,* 2000). Mill Creek from the confluence with Hornet Creek upstream to the confluence with West Fork Mill Creek is suspected to provide bull trout FMO habitat (J. DuPont, *in litt.,* 2000). Above that point, upstream 4.3 km (2.7 mi) is habitat essential to provide for the recovered distribution of bull trout (USFWS 2002), and is suspected to provide bull trout FMO habitat below 1,524 m (5,000 ft) in elevation, and habitat suitable for spawning and rearing above 1,524 m (5,000 ft) in elevation (J. DuPont, *in litt.,* 2000).

(H) West Fork Weiser River from the confluence with the Weiser River upstream 13.8 km (8.6 mi) to the confluence with Lost Creek is essential habitat for providing connectivity within the Weiser River CHSU (USFWS 2002). Above this point, upstream to the headwaters is habitat known to contain primary constituent elements for bull trout (DuPont and Kennedy 2000; McGee *et al.* 2001) and essential to the recovered distribution of bull trout (USFWS 2002).

(I) Lost Creek from the confluence with the West Fork Weiser River upstream 34.5 km (21.5 mi) to the headwaters is habitat essential to provide for the recovered distribution of bull trout (USFWS 2002), and is known to contain primary constituent elements as identified for bull trout (DuPont and Kennedy 2000; D. Olson, USFS, pers. comm., 2002). Lost Valley Reservoir (296 ha; 732 ac) provides connectivity between potential spawning and rearing habitats; bull trout are not known to currently occupy the reservoir.

(J) East Fork Weiser River from the confluence with the Weiser River upstream 24.6 km (15.3 mi) to the headwaters is spawning and rearing habitat (Adams 1994; DuPont and Kennedy 2000; McGee *et al.* 2001). Dewey Creek from the confluence with the East Fork Weiser River to the headwaters provides spawning and rearing habitat (Adams 1994; DuPont and Kennedy 2000; McGee *et al.* 2001).

(vii) Upper South Fork Payette River CHSU

The Upper South Fork Payette River CHSU in Boise and Valley counties in southwestern Idaho includes all watersheds upstream of Big Falls on the South Fork Payette River, including the Deadwood River drainage downstream of Deadwood Dam. There are nine local populations identified within this CHSU. Approximate landownership in the CHSU is as follows: nearly 100 percent Federal, and less than 1 percent private.

(A) The South Fork Payette River from its confluence with the Middle Fork Payette River upstream 96.8 km (60.1 mi) to the confluence with Baron Creek provides FMO habitat and connectivity between the Scott Creek, Whitehawk Creek, Clear Creek, Eightmile Creek, Wapiti Creek, Canyon Creek, Tenmile Creek, Chapman Creek, and Upper South Fork Payette River local populations, as well as a migratory connection between populations in the South Fork Payette River and Middle Fork Payette River CHSUs (Jimenez and Zaroban 1998; USFS 1999c; Stovall 2001; J. Jimenez, USFS, pers. comm., 2002). Deadwood River from the confluence with the South Fork Payette River upstream 36.6 km (22.7 mi) to Deadwood Dam provides FMO habitat and connectivity between other local populations (Jimenez and Zaroban 1998; USFS 1999c; Stovall 2001). South Fork Payette River from the confluence with Baron Creek upstream 8.5 km (5.2 mi) to the confluence of South Fork Payette River and an unnamed creek provides FMO habitat, and may also support bull trout spawning and early rearing. (Jimenez and Zaroban 1998; USFS 1999c). South Fork Payette River from point upstream 14.5 km (9.0 mi) to the confluence with Benedict Creek contains spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). Baron Creek from the confluence with the South Fork Payette River upstream 12.3 km (7.6 mi) to the confluence with an unnamed creek provides spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). North Fork Baron Creek from the confluence with Baron Creek upstream 2.7 km (1.7 mi) contains spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002).

(B) Scott Creek from the confluence with Deadwood River upstream 12.2 km (7.6 mi) to the headwaters provides FMO habitat in the lower reaches (USFS 1999c; Jimenez and Zaroban 1998), and spawning and early rearing habitat in the upper reaches (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). South Fork Scott Creek from the confluence with Scott Creek upstream 5.7 km (3.5 mi) to the headwaters provides spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002).

Smith Creek from the confluence with Scott Creek upstream 4.6 km (2.9 mi) to the headwaters contains bull trout spawning and rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002).

(C) Ninemile Creek from the confluence with the Deadwood River upstream 9.2 km (5.7 mi) is known to contain primary constituent elements for bull trout (Jimenez and Zaroban 1998; USFS 1999c) and is essential to provide for the recovered distribution of bull trout (USFWS 2002).

(D) An unnamed creek from its confluence with the Deadwood River (29.0 km (18.0 mi) upstream of the confluence of the Deadwood River with the South Fork Payette River) upstream 2.2 km (1.3 mi) to the headwaters, No Man Creek from the confluence with the Deadwood River upstream 4.7 km (2.9 mi) to the confluence with an unnamed creek, and another unnamed creek, from the confluence with the Deadwood River (34.0 km (21.1 mi) upstream of the confluence of the Deadwood River with the South Fork Payette River) upstream 1.8 km (1.1 mi) are known to contain primary constituent elements for bull trout (Jimenez and Zaroban 1998; USFS 1999c) and provide habitat essential to the conservation of bull trout (USFWS 2002)

(E) Whitehawk Creek from the confluence with Deadwood River to the confluence of Whitehawk Creek and an unnamed creek 8.3 km (5.2 mi) upstream from the confluence of Whitehawk Creek and Deadwood River (for 8.3 km (5.2 mi)). Whitehawk Creek lies within Valley County. Whitehawk Creek is known to contain primary constituent elements as identified for bull trout (Jimenez and Zaroban 1998; USFS 1999c). North Fork Whitehawk Creek from the confluence with Whitehawk Creek to the headwaters of North Fork Whitehawk Creek (for 5.3 km (3.3 mi)). North Fork Whitehawk Creek lies within Valley County. North Fork Whitehawk Creek is known to contain primary constituent elements as identified for bull trout (Jimenez and Zaroban 1998; USFS 1999c).

(F) Warm Springs Creek from the confluence with the Deadwood River upstream 11.4 km (7.1 mi) to the headwaters provides FMO habitat, and may also support spawning and rearing in the lower reaches, and spawning and rearing habitat in the upper reaches (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). East Fork Warm Springs Creek from the confluence with Warm Springs Creek upstream 8.8 km (5.5 mi) to the headwaters provides spawning and rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). An unnamed creek from the confluence with East Fork Warm Springs Creek (5.0 km (3.1 mi) upstream of the confluence of East Fork Warm Springs Creek with Warm Springs Creek) upstream 1.9 km (1.2 mi) to the headwaters contains spawning and rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). Middle Fork Warm Springs Creek from the confluence with Warm Springs Creek upstream 4.3 km (2.7 mi) to the supports bull trout spawning and earing (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). An unnamed creek from the confluence with Middle Fork Warm Springs Creek (1.8 km (1.1 mi) upstream of the confluence of Middle Fork Warm Springs Creek with Warm Springs Creek) upstream 4.0 km (2.5 mi) to the headwaters supports spawning and early rearing (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002).

(G) Wilson Creek from the confluence with Deadwood Reservoir upstream 16.9 km (10.5 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002).

(H) Clear Creek from the confluence with the South Fork Payette River upstream 12.5 km (7.8 mi) to the confluence with O'Keefe Creek provides FMO habitat (Jimenez and Zaroban 1998; USFS 1999c; Stovall 2001). Clear Creek from the confluence with O'Keefe Creek upstream 18.2 km (11.3 mi) to the confluence of Clear Creek, and an unnamed creek, support bull trout spawning and early rearing (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). Long Creek from the confluence with Clear Creek upstream 5.1 km (3.2 mi) to the confluence with an unnamed creek contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002). An unnamed creek 5.1 km (3.2 mi) upstream from the confluence with Long Creek, and Clear Creek upstream 1.7 km (1 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002). South Fork Clear Creek from the confluence with Clear Creek upstream 7.5 km (4.7 mi) to the headwaters supports bull trout spawning and early rearing (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002).

(I) Kettle Creek from the confluence with the South Fork Payette River upstream 5.2 km (3.3 mi) to the headwaters provides spawning and rearing habitat (BNF, unpublished 2002).

(J) Eightmile Creek from the confluence with the South Fork Payette River upstream 7.4 km (4.6 mi) to the confluence with an unnamed creek provides FMO habitat (Jimenez and Zaroban 1998; USFS 1999c); above this point upstream to the headwaters contains spawning and rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). East Fork Eightmile Creek from the confluence with Eightmile Creek upstream to the confluence with an unnamed creek 4.2 m (2.6 mi) from the confluence of East Fork Eightmile Creek with Eightmile Creek provides FMO habitat (Jimenez and Zaroban 1998; USFS 1999c). East Fork Eightmile Creek from this point upstream to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002). An unnamed creek from the confluence with Eightmile Creek (4.5 km (2.8 mi) upstream of the confluence of Eightmile Creek with the South Fork Payette River) upstream 4.8 km (3.0 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002). Another unnamed creek from its confluence with Eightmile Creek (7.3 km (4.5 mi) upstream of the confluence of Eightmile Creek with the South Fork Payette River) upstream 3.7 km (2.3 mi) to the headwaters provides spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). Another unnamed creek from the confluence with Eightmile Creek (7.5 km (4.7 mi) upstream of the confluence of Eightmile Creek with the South Fork Payette River) upstream 3.4 km (2.1 mi) to the headwaters contains spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002)

(K) Tenmile Creek from the confluence with the South Fork Payette River upstream 7.2 km (4.5 mi) to the confluence with an unnamed creek provides FMO habitat (Jimenez and Zaroban 1998; USFS 1999c), and above this point to the headwaters is a combination of FMO and spawning and rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002). An unnamed creek from the

confluence with Tenmile Creek (9.8 km (6.1 mi) upstream of the confluence of Tenmile Creek with the South Fork Payette River) upstream 3.4 km (2.1 mi) to the headwaters is habitat essential to the recovered distribution of bull trout (USFWS 2002), and contains primary constituent elements for bull trout (Jimenez and Zaroban 1998; USFS 1999c). An unnamed creek from the confluence with Tenmile Creek (11.5 km (7.1 mi) upstream of the confluence of Tenmile Creek with the South Fork Payette River) upstream 2.5 km (1.5 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002). Another unnamed creek from the confluence with Tenmile Creek (13.3 km (8.2 mi) upstream of the confluence of Tenmile Creek with the South Fork Payette River) upstream 2.7 km (1.7 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002).

(L) Chapman Creek from the confluence with the South Fork Payette River upstream 6.1 km (3.8 mi) to the headwaters of Chapman Creek supports bull trout spawning and early rearing (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002).

(M) Warm Springs Creek from the confluence with the South Fork Payette River upstream 4.8 km (3 mi) to the confluence with Bush Creek provides FMO habitat. Upstream 14.3 km (8.9 mi) of this point to the confluence with Gates Creek is habitat essential to the recovered distribution of bull trout (USFWS 2002), and is known to contain primary constituent elements as identified for bull trout (Jimenez and Zaroban 1998; USFS 1999c). Gates Creek from the confluence with Warm Springs Creek upstream 6.8 km (4.3 mi) to the headwaters is habitat essential to the recovered distribution of bull trout (USFWS 2002), and has recently been found to support bull trout spawning and early rearing (BNF, unpublished 2002).

(N) Canyon Creek from the confluence with the South Fork Payette River upstream 17.1 km (10.6 mi) to the headwaters provides spawning and rearing habitat (BNF, unpublished 2002). South Fork Canyon Creek from the confluence with Canyon Creek upstream 2.4 km (1.5 mi) to the confluence of South Fork Canyon Creek and an unnamed creek supports bull trout spawning and rearing (BNF, unpublished 2002). North Fork Canyon Creek from the confluence with Canyon Creek upstream 1.9 km (1.2 mi) to the confluence with an unnamed creek provides spawning and early rearing habitat (BNF, unpublished 2002). An unnamed creek from the confluence with North Fork Canyon Creek (2 km (1.2 mi) upstream of the confluence of North Fork Canyon Creek with Canyon Creek) upstream 4.6 km (2.8 mi) contains spawning and rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002).

(O) Wapiti Creek from the confluence with the South Fork Payette River upstream 5.5 km (3.4 mi) to the confluence of Wapiti Creek and an unnamed creek contains spawning and early rearing habitat (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002).

(P) Trail Creek from the confluence with the South Fork Payette River upstream 5.8 km (3.6 mi) to the confluence with an unnamed creek supports bull trout spawning and early rearing (Jimenez and Zaroban 1998; USFS 1999c; BNF, unpublished 2002).

(viii) North Fork Payette River CHSU

The North Fork Payette River CHSU in Valley County in southwestern Idaho includes the North Fork Payette River watershed upstream of Cascade Dam. There are one local and six potential local populations identified within the North Fork Payette River CHSU, all of which are essential for recovery (USFWS 2002). The CHSU includes 229.76 km (142.77 mi) of streams that are proposed as critical habitat, which represents approximately 17.28 percent of the total stream miles in the North Fork Payette River CHSU. Approximate landownership is as follows: 47 percent Federal, 34 percent private, and 10 percent State. Critical habitat includes all stream segment units described below which provide FMO habitat, and allow for the maintenance of genetic exchange by local and potential local populations both within and between CHSUs.

(A) Gold Fork River from the confluence with Davis Creek upstream 20.2 km (12.5 mi) to the confluence with the North and South Forks Gold Fork River. This reach provides migratory habitat and connectivity between the Gold Fork local population and the Kennally Creek potential local population. South Fork Gold Fork River from the confluence with the Gold Fork River upstream 7.4 km (4.6 mi) to the headwaters provides spawning and rearing habitat (Steed 1999; USFS 2000c). North Fork Gold Fork River from the confluence with the Gold Fork River upstream 15.9 km (9.9 mi) to the headwaters provides spawning and rearing habitat (Steed 1999; USFS 2000c). Foolhen Creek from the confluence with Gold Fork River upstream 8.6 km (5.3 mi) to the headwaters, and Spruce Creek from the confluence with Gold Fork River upstream 2.8 km (1.75 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998), and is essential to provide for the recovered distribution of the species (USFWS 2002). Lodgepole Creek from the confluence with Gold Fork River upstream 5.0 km (3.1 mi) to the headwaters and an unnamed creek from the confluence with Gold Fork River (7.8 km (4.8 mi) upstream of the confluence of the North Fork Gold Fork River with Gold Fork River) upstream 3.1 km (1.9 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002). An unnamed creek from the confluence with the North Fork Gold Fork River (8.6 km (5.3 mi) upstream of the confluence of the North Fork Gold Fork River with Gold Fork River) upstream 2.9 km (1.8 mi) to the headwaters provides spawning and rearing habitat and is suspected to support bull trout spawning and early rearing (Steed 1999; Roy, *in litt.,* 2002). An unnamed creek from the confluence with the North Fork Gold Fork River (9.0 km (5.6 mi) upstream of the confluence of the North Fork Gold Fork River with Gold Fork River) upstream 3.2 km (2.0 mi) to the headwaters supports bull trout spawning and early rearing (Steed 1999; USFS 2000c). An unnamed creek from the confluence with the the North Fork Gold Fork River (9.3 km (5.7 mi) upstream of the confluence of the North Fork Gold Fork River with Gold Fork River) upstream 4.7 km (2.9 mi) to the headwaters provides spawning and early rearing habitat (Steed 1999; USFS 2000c).

(B) Kennally Creek from the confluence with the Gold Fork River upstream 21.3 km (13.2 mi) to the confluence with the North and South Forks, and Rapid Creek from the confluence with Kennally Creek upstream 17.0 km (10.6 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the conservation of the species (USFWS 2002).

(C) Cascade Reservoir (7,246 ha (17,905 ac)) will provide FMO habitat for Gold Fork River bull trout, and connectivity between the Gold Fork local population and the Lake Fork, North Fork Lake Fork, and South Fork

Lake Fork potential local populations as recovery actions are implemented (J. Roy, *in litt.*, 2002; USFWS 2002). Bull trout are currently entrained through an irrigation diversion on Gold Fork River into Cascade Reservoir.

(D) North Fork Payette River from the confluence with Cascade Reservoir upstream 1.4 km (0.9 mi) to the confluence with Mud Creek. As recovery actions are implemented, the North Fork Payette River will provide FMO habitat and connectivity between the Gold Fork local population, and the Lake Fork, North Fork Lake Fork, and South Fork Lake Fork potential local populations (USFWS 2002). Lake Fork from the confluence with Mud Creek upstream 68.6 km (42.6 mi) to the confluence with Little Payette Lake. As recovery actions are implemented, this reach will provide FMO habitat and connectivity between the Gold Fork local population, and the Lake Fork, North Fork Lake Fork, and South Fork Lake Fork potential local populations (USFWS 2002). Little Payette Lake (582 ha (1,439 ac)) will provide FMO habitat for Lake Fork, North Fork Lake Fork, and South Fork Lake Fork potential local populations, and will provide connectivity between these potential local populations and the Gold Fork local population as recovery actions are implemented (USFWS 2002). Lake Fork from the confluence with Little Payette Lake upstream 16.9 km (10.5 mi) to the confluence with the North and South Forks Lake Fork provides habitat essential to the recovered distribution for bull trout (USFWS 2002) and is known to contain primary constituent elements as identified for the species (USFS 1998c; 2001c). North Fork Lake Fork from the confluence with Lake Fork upstream 16.3 km (10.1 mi) to the headwaters provides suitable habitat for bull trout spawning and rearing (USFS 1998c, 2001c). South Fork Lake Fork from the confluence with Lake Fork upstream 5.7 km (3.5 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002).

(ix) Squaw Creek CHSU

The Squaw Creek CHSU in Gem, Boise, and Valley counties in southwestern Idaho includes all watersheds in Squaw Creek upstream from its confluence with the Payette River. Bull trout in this CHSU are primarily resident fish, although they have recently been found in the lower reaches of Squaw Creek, suggesting a migratory component (Steed 1999). There are two local and three potential local populations identified within the Squaw Creek CHSU. Approximate landownership is as follows: 48 percent Federal, 47 percent private, and 5 percent State. We are proposing critical habitat designation of 192.41 km (119.56 mi) of stream, which represents approximately 28 percent of the total stream miles in the Squaw Creek CHSU. Critical habitat within the Squaw Creek CHSU includes all stream segment units described below which provide FMO habitat, and allow for the maintenance of genetic exchange by local and potential local populations both within and between CHSUs.

(A) Squaw Creek from its confluence with the Payette River upstream 75.9 km (47.2 mi) to the confluence with Cold Spring Creek provides connectivity between the Squaw Creek and Third Fork Squaw Creek local populations, and the Second Fork Squaw Creek, and Sagehen Creek potential local populations. Squaw Creek from the confluence with Cold Spring Creek upstream 19.1 km (11.9 mi) to the headwaters contains spawning and early rearing habitat (Steed 1999). Pole Creek from the confluence with Squaw Creek upstream 4.1 km (2.5 mi) to the headwaters also provides spawning and rearing habitat (Steed 1999). An unnamed creek from the confluence with Squaw Creek (83.8 km (52.0 mi) upstream of the confluence of Squaw Creek with the Payette River) upstream 2.6 km (1.6 mi) to the headwaters provides spawning and early rearing habitat (Steed 1999). Another unnamed creek from the confluence with Squaw Creek (86.0 km (53.0 mi) upstream of the confluence of Squaw Creek with the Payette River) upstream 3.6 km (2.2 mi) to the headwaters also provides spawning and rearing habitat (Burton 1999b; 1999; Steed 1999). An unnamed creek from the confluence with the previous unnamed creek (0.5 km (0.3 mi) upstream of the confluence of the previous unnamed creek with Squaw Creek) upstream to the headwaters provides habitat essential to the recovered distribution of bull trout (USFWS 2002), and is known to contain primary constituent elements as identified for bull trout (Burton 1999b; Steed 1999). Poison Creek from the confluence with Squaw Creek upstream 2.7 km (1.7 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002).

(B) Third Fork Squaw Creek from the confluence with Squaw Creek upstream 10.6 km (6.6 mi) to the confluence with an unnamed creek provides FMO habitat (Steed 1999). From this point upstream 6.6 km (4.1 mi) Third Fork Squaw Creek provides spawning and early rearing habitat (Burton 1999b; Steed 1999). An unnamed creek from the confluence with Third Fork Squaw Creek (10.8 km (6.7 mi) upstream of the confluence of Third Fork Squaw Creek with Squaw Creek) upstream 7.3 km (4.5 mi) to the headwaters provides spawning and early rearing habitat (Burton 1999b; Steed 1999). Another unnamed creek from the confluence with the previous unnamed creek (1.8 km (1.1 mi) upstream of the confluence of the previous unnamed creek with Third Fork Squaw Creek) upstream 4.0 km (2.5 mi) to the headwaters also provides spawning and rearing habitat (Burton 1999b). Another unnamed creek from the confluence with the previously described unnamed creek (2.8 km (1.7 mi) upstream of the confluence of the previous unnamed creek with Third Fork Squaw Creek) upstream 1.8 km (1.1 mi) to the headwaters contains bull trout primary constituent elements (Jimenez and Zaroban 1998; USFS 1999c), and is essential to provide for the recovered distribution of the species (USFWS 2002). An unnamed creek from the confluence with Third Fork Squaw Creek (12 km (7.5 mi) upstream of the confluence of Third Fork Squaw Creek with Squaw Creek) upstream 3.2 km (2.0 mi) to the headwaters provides spawning and rearing habitat (Burton 1999b; Steed 1999). Second Fork Squaw Creek from the confluence with Squaw Creek upstream 11.3 km (7.0 mi) to the confluence with Sage Hen Creek provides FMO habitat (Steed 1999), and from this point upstream 6.7 km (4.2 mi) to the headwaters provides habitat essential to the recovered distribution of bull trout (USFWS 2002), and is known to contain primary constituent elements for the species (Burton 1999b; Steed 1999). Renwick Creek from the confluence with Second Fork Squaw Creek upstream 6.1 km (3.8 mi) to the headwaters and Antelope Creek from the confluence with Second Fork Squaw Creek upstream 6.1 km (3.8 km) to the headwaters provides habitat essential to the recovered distribution of bull trout (USFWS 2002), and is known to contain primary constituent elements for the species (Burton 1999b; Steed 1999).

(C) Sage Hen Creek from the confluence with Second Fork Squaw Creek upstream 5.2 km (3.2 mi) to the dam on Sage Hen Reservoir provides FMO habitat (Steed 1999). Sage Hen Creek from the dam on Sage Hen Reservoir upstream 7.4 km (4.6 mi) to the headwaters provides habitat

essential to the recovered distribution of bull trout (USFWS 2002), and is known to contain primary constituent elements for bull trout (Burton 1999b; Steed 1999). An unnamed creek from the confluence with Sage Hen Creek (5.3 km (3.3 mi) upstream of the confluence of Sage Hen Creek with Second Fork Squaw Creek) upstream 2.9 km (1.4 mi) to the headwaters provides habitat essential to the recovered distribution of bull trout (USFWS 2002), and is known to contain primary constituent elements for the species (Burton 1999b; Steed 1999). Joes Creek from the confluence with Sage Hen Creek upstream 5.3 km (3.3 mi) to the headwaters of Joes Creek provides habitat essential to the recovered distribution of bull trout (USFWS 2002), and is known to contain primary constituent elements for bull trout (Burton 1999b; Steed 1999). Sage Hen Reservoir (96 ha; 238 ac) provides suitable FMO habitat (Steed 1999; Burton 1999) to provide for the recovered distribution of bull trout (USFWS 2002).

(22) Unit 18: Little Lost River Basin

The Little Lost River Unit is within Butte, Custer, and Lemhi counties in east-central Idaho. Approximately 184.6 km (115.4 mi) of stream in the Little Lost River Basin is proposed for critical habitat designation. Approximately 76 percent of the unit is located on Federal land (BLM and USFS), 22 percent is on private land, and 2 percent is on State land. There are 10 known local populations in the Little Lost River Basin and the Draft Recovery Plan (USFWS 2002) states that the persistence of all 10 populations is needed for species' recovery. The following stream segments are proposed for designation as critical habitat in the Little Lost River unit:

(i) The Little Lost River, beginning at the flood control structure at rkm 18.4 (rmi 11.4) and continuing upstream for 84.3 km (52.4 mi) to source springs at rkm 102.7 (rmi 63.8). The river from the flood control structure to Iron Creek (at rkm 93.3 (rmi 57.9)) is an important migratory corridor, as well as a key foraging and rearing area for sub-adult and adult fluvial bull trout associated with upstream local populations (Gamett 1999). The Little Lost River headwaters above Iron Creek, including 0.8 km (0.5 mi) of the Right Fork Little Lost River and 2.1 km (1.3 mi) of Firebox Creek, are occupied spawning and rearing habitat and collectively support a local population. (**Note:** USGS and STREAMNET maps show the Little Lost River transforming into Sawmill Creek in its upstream reaches. However, the USFS Lost River Ranger District maps show the Little Lost River continuing under that name up to its headwaters. We have described proposed critical habitat in accordance with the latter).

(ii) Badger Creek from its confluence with the Little Lost River (at rkm 45.6 (rmi 28.3)) upstream 11.7 km (7.3 mi) to its source springs and including the Bunting Canyon Creek tributary. There is a headcut on Bunting Canyon Creek approximately 300 m (984 ft) upstream of its mouth that forms a small barrier. Badger Creek and Bunting Canyon Creek below the headcut provide spawning and rearing habitat for a known bull trout local population (Gamett 1999). The 3.1 km (1.9 mi) segment of Bunting Canyon Creek above the headcut is not currently known to be occupied, but is identified in the Draft Recovery Plan (USFWS 2002) as essential to providing for the recovered distribution of bull trout.

(iii) Williams Creek from its confluence with the Little Lost River (at rkm 54.1) upstream 5.1 km (3.2 mi) to the confluence with an unnamed tributary. The unnamed tributary from its confluence with Williams Creek upstream 1.1 km (0.7 mi) to its source springs. A local bull trout population exists in Williams Creek above an irrigation diversion at rkm 1.3 (rmi 0.8) and spawning and rearing occurs from rkm 3.4 to rkm 5.1 as well as in the entire length of the unnamed tributary (Gamett 1999). The Draft Recovery Plan (USFWS 2002) identifies the 1.3 km (0.8 mi) stream reach below the diversion as important to restoring connectivity to this local population, and providing additional habitat needed to achieve target population levels in this area.

(iv) Wet Creek from its confluence with the Little Lost River (at rkm 56.8 (rmi 35.3)) upstream for a distance of 28.8 km (18.0 mi) to a barrier falls above Hilts Creek, and including 7.0 km (4.4 mi) of the Big Creek tributary. Wet Creek currently supports a local bull trout population, with spawning and rearing occurring in the uppermost 3.2 km (2.0 mi). Although bull trout have not been recently documented in Big Creek, spawning and rearing habitat has been identified in its upper reaches (Gamett 1999).

(v) Warm Creek from its confluence with the Little Lost River (at rkm 81.9 (rmi 50.9)) upstream for 3.4 km (2.1 mi) to its source springs. This stream supports a known bull trout local population, and spawning and rearing occurs in the upper 2.7 km (1.3 mi) (Gamett 1999).

(vi) Squaw Creek from its confluence with the Little Lost River (at rkm 86.2 (rmi 53.5)) upstream for 6.6 km (4.1 mi) to its source spring and including 0.6 km (0.4 mi) of the North Fork Squaw Creek, and 3.0 km (1.9 mi) of an unnamed tributary that joins Squaw Creek at rkm 4.2 (rmi 2.6). These streams are currently occupied and collectively are considered a distinct local population (USFWS 2002); all but the lowest 0.2 km (0.1 mi) of Squaw Creek contain spawning and rearing habitat.

(vii) Mill Creek from its confluence with the Little Lost River (at rkm 89.6 (rmi 55.6)) upstream for 4.5 km (2.8 mi) to a barrier falls. This stream supports a known bull trout local population and all but the lowest 0.2 km (0.1 mi) is spawning and rearing habitat (Gamett 1999).

(viii) Iron Creek from its confluence with the Little Lost River (at rkm 93.3 (rmi 57.9)) upstream for 3.2 km (2.0 mi) and including the following tributaries: 1.0 km (0.6 mi) of Left Fork Iron Creek, 0.3 km (0.2 mi) of Right Fork Iron Creek, all 2.2 km (1.4 mi) of Jackson Creek, and all 2.2 km (1.4 mi) of Hawley Creek. These streams are currently occupied and collectively form a distinct local population (USFWS 2002); the entire area contains spawning and rearing habitat (Gamett 1999).

(ix) Timber Creek from its confluence with the Little Lost River (at rkm 95.4 (rmi 59.2)) upstream for 5.8 km (3.6 mi) to its source springs and including the following tributaries: 1.3 km (0.8 mi) of Camp Creek, 1.1 km (0.7 mi) of Redrock Creek, and 0.5 km (0.3 mi) of Slide Creek. These streams are currently occupied and collectively form a distinct local population (USFWS 2002); the entire area contains spawning and rearing habitat (Gamett 1999).

(x) Smithie Fork Creek from its confluence with the Little Lost River (at rkm 99.5 (rmi 61.8)) upstream for 5.0 km (3.1 mi) to its source springs. This stream supports a known bull trout local population. The entire area contains spawning and rearing habitat (Gamett 1999).

(23) Unit 19: Lower Columbia River Basin

The Lower Columbia Unit consists of portions of the Lewis, White Salmon, and Klickitat Rivers, and associated tributaries in southwestern and south-central Washington. The unit extends across Clark, Cowlitz, Kilickitat, Skamania, and Yakima counties. Approximately 340 km (210 mi) of stream and 3 reservoirs covering 5,054 ha (12,488 ac) are proposed for critical habitat designation. Currently, there are three bull trout local populations in the Lewis River watershed and one in the Klickitat River. The Draft Recovery Plan

(USFWS 2002) indicates it is essential to the conservation of the species to maintain those four local populations and establish four additional populations within the Lewis River watershed, and one in the White Salmon.

(i) Lewis River CHSU

Proposed critical habitat in the Lewis River CHSU covers 179 km (110 mi) of stream and 5,054 ha (12,488 ac) of lake habitat. The CHSU is approximately 64 percent private land, 29 percent Federal land, 7 percent State land. Proposed critical habitat for this CHSU is described below.

(A) The lower Lewis River from its confluence with the Columbia River upstream 31.4 km (19.5 mi) to Merwin Dam. Bull trout are occasionally observed below Merwin Dam (PacifiCorps and Cowlitz County PUD 2001), and the reach provides important foraging and overwintering habitat, and connectivity to the Columbia River once fish passage at Merwin, Yale, and Swift Dams is restored. Restoring connectivity among local populations and to the Columbia River is necessary to maintain opportunities for genetic exchange, refound local populations, and provide access to additional foraging and overwintering habitat (Rieman and McIntyre 1993; USFWS 2002).

(B) Merwin Reservoir, which when full, covers 1,620 ha (4,000 ac) along approximately 23.8 km (14.8 mi) of the Lewis River from rkm 31.4 (rmi 19.5) to rkm 55.2 (rmi 34.3), and including Speelyai Creek from its confluence with the lake upstream 5.1 km (3.2 mi) to a chute barrier. Merwin Reservoir is the lowest reservoir on the Lewis River; bull trout currently found in this lake are believed to be coming through the Yale Dam spillway and turbines (USFWS 2002). Merwin Reservoir provides foraging and overwintering habitat to allow maturation of bull trout trapped below Yale Dam until they can be transported to Cougar Creek as spawners. The lake also provides habitat to support establishment of a local population in Speelyai Creek. This creek is identified in the Draft Recovery Plan (USFWS 2002) as spawning and rearing habitat that could support an additional local population. Springs and seeps in lower Speelyai Creek, below a diversion canal to Yale Reservoir, currently supply cold water to the Speelyai Fish Hatchery. Establishing fish passage at the hatchery would allow bull trout to access suitable spawning and rearing habitat above the hatchery.

(C) Yale Reservoir, which covers 1,539 ha (3,800 ac) along approximately 21.4 km (13.3 mi) of the Lewis River from rkm 55.2 (rmi 34.3) to rkm 76.6 (rmi 47.6), and including the following stream reaches which flow into it: Cougar Creek from its confluence with the lake upstream 2.7 km (1.7 mi) to a lava tube barrier; the 4.3 km (2.3 mi) Swift Bypass reach; Ole Creek from its confluence with the Swift bypass reach upstream 1.3 km (0.8 mi) to a barrier falls and extending up Rain Creek 1.4 km (0.9 mi). Yale Reservoir is currently occupied and provides essential foraging and overwintering habitat for the local population that spawns and rears in Cougar Creek. The Swift Bypass Reach is essential as a site for establishing an additional local population, and to provide bull trout access to Rain and Ole Creeks for establishing an additional local population (Recovery Criteria 1 and 4 in the Lower Columbia Unit Chapter, USFWS 2002). Ole Creek, together with Rain Creek, is identified as suitable spawning and rearing habitat where an additional local population could be established (USFWS 2002).

(D) Swift Creek Reservoir, which when full covers 1,895 ha (4,680 ac) along approximately 18.5 km (11.5 mi) of the Lewis River from rkm 76.6 (rmi 47.6) to rkm 95.1 (rmi 59.1), and extending up 0.5 km (0.3 mi) of Swift Creek from the end of the Swift Arm segment of the reservoir to a barrier falls, and 2.0 km (1.3 mi) up an unnamed tributary (identified as S15 in PacifiCorp and Cowlitz County PUD 2000) that enters the reservoir from the south at rkm 84.5 (rmi 52.5). This area is currently occupied and provides important foraging and overwintering habitat for the two bull trout local populations that spawn in Rush and Pine Creek.

(E) Upper Lewis River from the eastern edge of Swift Creek Reservoir (rkm 95.1 (rmi 59.1)) upstream 43.6 km (27.1 mi) to Twin Falls and including the following tributaries: Pine Creek from its confluence with the Lewis River at rkm 95.8 (rmi 59.5) upstream 12.9 km (8.0 mi) to its headwaters, and extending 1.8 km (1.1 mi) up an unnamed tributary which branches off Pine Creek at rkm 4.7 (rmi 2.9) (identified as P7 in PacifiCorp and Cowlitz County PUD 2000), 6.7 km (4.2 mi) up another unnamed tributary (identified as P8 in PacifiCorp and Cowlitz County PUD 2000) which branches off Pine Creek at rkm 6.0 (rmi 3.7), and 0.4 km (0.3 mi) up another unnamed tributary (identified as P10 in PacifiCorp and Cowlitz County PUD 2000) which branches off Pine Creek at rkm 8.4 (rmi 5.2); Rush Creek from its confluence with the Lewis River at rkm 104.0 (rmi 64.6) upstream 2.7 km (1.7 mi) to a barrier falls; the upper Lewis River from the east end of Swift Creek Reservoir up to a barrier falls at rkm 116.2 (rmi 72.2) is currently occupied, providing foraging and overwintering habitat for bull trout that spawn in Pine and Rush Creeks, and providing connectivity to the reservoir. Bull trout are known to occupy the identified reaches of Pine and Rush Creeks and the ''P7'' unnamed tributary of Pine Creek. Current occupancy is unknown in the ''P8'' and ''P10'' Pine Creek tributaries; however they both are reported to be ''very good salmonid habitat'' (PacifiCorp and Cowlitz County PUD 2000) and are considered essential to provide for continued recovery of bull trout in Pine Creek, which was severely impacted by the eruption of Mount St. Helens in 1980. Current occupancy is also unknown for the 22.5 km (14.0 mi) of the Lewis River from the barrier falls at rkm 116.2 (rmi 72.2) to Twin Falls. This stretch is identified in the Draft Recovery Plan (USFWS 2002) as an area suitable for establishing an additional local population. The multiple falls reach, from rkm 116.2 (rmi 72.2) to rkm 120.4 (rmi 74.8), is included to maintain connectivity between a possible existing, or possible eventual (re)introduced, resident local population above the falls and existing bull trout populations below the falls.

(ii) White Salmon River CHSU

(A) Proposed critical habitat in this CHSU consists of 25.7 km (16.0 mi) of the White Salmon River and is approximately 98 percent private land, 2 percent Federal land, and less than 1 percent State land. The White Salmon River flows from the southwestern slope of Mount Adams to the Columbia River (Bonneville pool). Condit Dam currently forms Northwestern Lake. The scheduled removal of Condit Dam in 2006–2007 will result in removal of the reservoir and restoration of the White Salmon river to its former river channel. The White Salmon River is a historic bull trout locality, but no recent spawning has been observed in this drainage. However, suitable habitat exists and recovery criteria call for the reestablishment of a local population in this drainage (USFWS 2002). The 5.3 km (3.3 mi) reach of the White Salmon from the confluence with the Columbia River upstream to Condit Dam will provide an important corridor to the Columbia River when fish passage at Condit Dam is restored. The 2.4 km-long (1.5 mi-long) reservoir behind Condit Dam, Northwestern Lake, currently provides foraging and overwintering habitat for a remnant population of bull trout and/or to support establishment of

a spawning population in the upper watershed. Following the removal of Condit Dam, the critical habitat designation in this stream segment will be restricted to the restored river channel of the section of the White Salmon River that is currently contained within Northwestern Lake. This restored section of the White Salmon River will provide FMO habitat for a restored bull trout population (USFWS 2002). The 18.0 km (11.2 mi) stretch of the White Salmon River from the upper edge of Northwestern Lake to BZ Falls is also suitable foraging and overwintering habitat. With the restoration of the White Salmon river in the Northwestern Lake segment, designated critical habitat will include the White Salmon river for 26 km (16 mi) from the confluence with the Columbia River to BZ falls. Given the lack of specific information on conditions in upper tributary streams, no potential spawning and rearing habitat is being proposed as critical habitat.

(iii) Klickitat River CHSU

Proposed critical habitat in the Klickitat CHSU covers 135.5 km (84.2 mi) of stream. Approximately 42 percent of the CHSU is within the Yakama Nation Reservation, 35 percent is private land, 17 percent is State land, and 6 percent is Federal land. Tribal lands need to be included as critical habitat in this area because the West Fork Klickitat River, and its tributaries within the Yakama Reservation, supports the only known bull trout local population in the Klickitat drainage.

(A) Klickitat River from its confluence with the Columbia River upstream 103.3 km (64.2 mi) to Castile Falls. This section of the Klickitat River is currently occupied foraging and overwintering habitat, and is essential for maintaining connectivity with the Columbia River. The West Fork Klickitat River from its confluence with the Klickitat River at rkm 101.5 (rmi 63.0) upstream 7.2 km (4.5 mi) to the junction of Little Muddy Creek and Fish Lake Stream. The West Fork Klickitat River below the falls at rkm 0.5 (rmi 0.3) provides foraging and overwintering habitat for bull trout in the mainstem Klickitat River. Above the falls, the West Fork Klickitat River and the identified tributaries contain occupied spawning and rearing habitat (Washington Department of Fish and Wildlife (WDFW) 1998; Byrne *et al.*, unpublished 2000). Maintaining the resident bull trout population in the West Fork Klickitat River and its tributaries is essential because it is the only known local population in the Klickitat drainage.

(B) Little Muddy Creek for a distance of 3.4 km (2.1 mi) to the confluence with Crawford Creek and extending 1.3 km (0.8 mi) up Clearwater Creek and 3.4 km (2.1 mi) up Trappers Creek.; Fish Lake Stream for a distance of 9.7 km (6.0 mi) to the confluence with Two Lakes Stream and extending 6.9 km (4.3 mi) up an unnamed tributary that meets Fish Lake Stream at rkm 8.0 (rmi 5.0) and also extending 1.3 km (0.8 mi) up Two Lakes Stream.

(24) Unit 20: Middle Columbia River Basin

The Middle Columbia River unit encompasses the entire Yakima River basin located in south central Washington, draining approximately 15,900 square km (6,155 square mi). The basin occupies most of Yakima and Kittitas counties, about half of Benton County, and a small portion of Klickitat County. Thirteen local populations of bull trout occur in this unit: the mainstem Yakima River (Keechelus to Easton Reach); Ahtanum Creek; American River; Rattlesnake Creek; Crow Creek; South Fork Tieton River; Indian Creek; Deep Creek; North Fork Teanaway River; Box Canyon Creek; Upper Kachess River; Gold Creek; and the Cle Elum River, all of which are essential to recovery. The Draft Recovery Plan (USFWS 2002) recommends the establishment of three other local populations in the North Fork Tieton River, Middle Fork Teanaway River, and Taneum Creek. Approximately 846 km (529 mi) of stream habitat and 6,066 ha (14986 ac) of lake and reservoir surface area are proposed as critical habitat within this unit. Of the stream segments proposed as critical habitat, approximately 44 percent are bordered by Federal land, 40 percent by private land, 9 percent by State land, and 7 percent by the Yakama Nation.

(i) Yakima River from the confluence of Ahtamum Creek at rkm 172.1 (rmi 106.9) upstream 155.9 km (96.9 mi) to Easton Diversion Dam is currently occupied FMO habitat (Pearson *et al.* 1998; M. Johnston, Yakama Nation, pers. comm., 2002) that is essential to maintain connectivity between all local populations within the Middle Columbia River unit. The Yakima River from the Easton Diversion Dam at rkm 326.0 (rmi 202.4) upstream 18.8 km (11.7 mi) to Keechelus Dam at rkm 345.3 (rmi 214.4) is currently occupied FMO and spawning and rearing habitat (WDFW 1998, 2002) for the Yakima River local population, as well as a migratory corridor to other local populations within the unit if passage is provided at Keechelus Dam as specified in the Draft Recovery Plan (USFWS 2002).

(ii) Ahtanum Creek from the confluence with the Yakima River upstream 37.2 km (23.1 mi) to the confluence of the North and South Forks Ahtanum Creek provides currently occupied (WDFW 1998) FMO habitat for the Ahtanum Creek local population. South Fork Ahtanum Creek from the confluence with Ahtanum Creek upstream 23.5 km (14.6 mi) to the headwaters is currently occupied (WDFW 2002), and provides spawning and rearing habitat for the Ahtanum Creek local population. North Fork Ahtanum Creek from the confluence with Ahtanum Creek upstream 33.3 km (20.7 mi) to the headwaters is currently occupied (Dunham and Chandler 2001; WDFW 2002) and provides essential spawning and rearing habitat for the Ahtanum Creek local population. Middle Fork Ahtanum Creek from the confluence with North Fork Ahtanum Creek upstream 15.1 km (9.4 mi) to the headwaters is currently occupied (Dunham and Chandler 2001; WDFW 2002) and provides essential spawning and rearing habitat for the Ahtanum Creek local population. Shellneck Creek from the confluence with North Fork Ahtanum Creek upstream 2.9 km (1.8 mi) to the headwaters is currently occupied (WDFW 2002) and provides spawning and rearing habitat for the Ahtanum Creek local population.

(iii) Naches River from the confluence with the Yakima River upstream 71.8 km (44.6 mi) to the confluence of the Little Naches and Bumping Rivers is currently occupied (WDFW 1998) and provides FMO habitat for the American River, Rattlesnake Creek, and Crow Creek local populations.

(iv) Tieton River from the confluence with the Naches River upstream 34.3 km (21.3 mi) to Tieton Dam is currently occupied (J. Thomas, USFWS, pers. comm., 2002) and provides FMO habitat for local bull trout populations in the Naches River Basin. Bull trout in this reach may be from any one of the three isolated local populations that inhabit Rimrock Reservoir. These fish are often entrained into the Tieton River as water within Rimrock Reservoir is withdrawn (James 2001). This reach will provide a migratory corridor to other local populations if passage is provided at Tieton Dam as specified in the Draft Recovery Plan (USFWS 2002).

(v) Rimrock Reservoir (987 ha (2,438 ac)) and North Fork Tieton River upstream 1.4 km (0.9 mi) to Clear Lake Dam is currently occupied (WDFW 1998), and provides FMO habitat for the South Fork Tieton River and Indian Creek local populations. This reach will

also provide a migratory corridor to other local populations within the Yakima Basin if passage is provided at Tieton Dam and Clear Lake Dam as specified in the Draft Recovery Plan (USFWS 2002).

(vi) South Fork Tieton River from the confluence with Rimrock Reservoir upstream 27.0 km (16.8 mi) to a natural barrier is currently occupied (WDFW 2002) and provides spawning and rearing habitat for the South Fork Tieton River local population. Short and Dirty Creek from the confluence with the South Fork Tieton River upstream approximately 0.2 km (0.1 mi) to a natural barrier is currently occupied (WDFW 1998) rearing habitat for the South Fork Tieton River local population. Spruce Creek from the confluence with the South Fork Tieton River upstream approximately 0.8 km (0.5 mi) to a natural barrier is currently occupied and provides spawning and rearing habitat for the South Fork Tieton River local population (WDFW 1998). Grey Creek from the confluence with the South Fork Tieton River upstream approximately 0.4 km (0.2 mi) to a natural barrier is currently occupied and provides spawning and rearing habitat for the South Fork Tieton River local population (WDFW 1998). Bear Creek from the confluence with the South Fork Tieton River upstream approximately 1.8 km (1.1 mi) to a natural barrier is currently occupied and contains spawning and rearing habitat for the South Fork Tieton River local population (WDFW 2002).

(vii) Indian Creek from the confluence with Rimrock Reservoir upstream 8.1 km (5.0 mi) to a natural barrier is currently occupied and provides spawning and rearing habitat for the Indian Creek local population (WDFW 2002). Three springs which enter Indian Creek at rkm 3.5 (rmi 2.2), rkm 4.3 (rmi 2.7), and rkm 5.2 (rmi 3.2), respectively, also provide spawning and rearing habitat.

(viii) Clear Lake Reservoir (91 ha (225 ac)) may be currently occupied in very small numbers (E. Anderson, WDFW, *in litt.*, 2002) and will provide FMO habitat for the recovered distribution of bull trout (USFWS 2002). The North Fork Tieton River from the confluence with Clear Lake Reservoir upstream 19.1 km (11.9 mi) to a natural barrier is currently occupied (Craig 1997), likely in low numbers, and provides spawning and rearing habitat essential to the recovered distribution of bull trout (USFWS 2002).

(ix) Rattlesnake Creek from the confluence with the Naches River upstream 40.2 km (25.0 mi) to the headwaters is currently occupied (WDFW 2002) and provides essential FMO and spawning and rearing habitat for the Rattlesnake Creek local population of bull trout. Dog Creek from the confluence with Rattlesnake Creek upstream 1.1 km (0.7 mi) to the confluence with Lookout Creek; Hindoo Creek from the confluence with Dog Creek upstream 1.8 km (1.1 mi) to a natural barrier; and Little Wildcat Creek from the confluence with Rattlesnake Creek upstream 5.8 km (3.6 mi) to the headwaters provide currently occupied (WDFW 2002) spawning and rearing habitat for the Rattlesnake Creek local population.

(x) Little Naches River from the confluence with the Naches River upstream 5.0 km (3.1 mi) to the confluence with Crow Creek is occupied FMO habitat supporting local populations in the Naches River Basin, particularly the Crow Creek local population (WDFW 1998).

(xi) Crow Creek from the confluence with the Little Naches River upstream 15.1 km (9.4 mi) to the confluence with Falls Creek contains occupied spawning and rearing habitat for the Crow Creek local population (WDFW 2002).

(xii) Bumping River from the confluence with the Naches River upstream 24.8 km (15.4 mi) to Bumping Dam contains occupied FMO habitat (Kalin and Ackerman 2002) for the local populations within the Naches River Basin. This reach will also provide a migratory corridor to other local populations within the Yakima River Core Area if passage is provided at Bumping Dam as specified in the Draft Recovery Plan (USFWS 2002). Bumping Reservoir (532 ha (1,314 ac)) is occupied (WDFW 1998) and provides foraging and rearing habitat for the Deep Creek local population.

(xiii) Deep Creek from the confluence with Bumping Reservoir upstream 5.6 km (3.5 mi) to a natural barrier approximately 305 m (1,000 ft) upstream from USFS Road 2008 crossing provides spawning and rearing habitat for the Deep Creek local population (WDFW 2002).

(xiv) American River from the confluence with the Bumping River upstream 27.0 km (16.8 mi) to the confluence with Morris Creek provides spawning and rearing habitat for the American River local population (WDFW 2002). This reach also provides essential FMO habitat for the American River local population and other local populations within the Naches River Basin. Kettle Creek from the confluence with the American River upstream 3.2 km (2.0 mi) to a natural barrier, Union Creek from the confluence with the American River upstream 0.8 km (0.5 mi) to a natural barrier, and Timber Creek from the confluence with the American River upstream 0.8 km (0.5 mi) to a natural barrier provide spawning and rearing habitat for the American River local population (WDFW 2002).

(xv) Taneum Creek from the confluence with the Yakima River upstream 20.4 km (12.7 mi) to the confluence with the North and South Forks of Taneum Creek is not currently known to be occupied, but will provide FMO habitat for the recovered distribution of bull trout (USFWS 2002). North Fork Taneum Creek from the confluence with Taneum Creek upstream 19.0 km (11.8 mi) to the headwaters, and South Fork Taneum Creek from the confluence with Taneum Creek upstream 13.8 km (8.6 mi) to the headwaters are not currently known to be occupied, but will provide FMO habitat for the recovered distribution of bull trout (USFWS 2002).

(xvi) Teanaway River from the confluence with the Yakima River upstream 19.5 km (12.1 mi) to the confluence of the Middle and West Forks Teanaway River provides FMO habitat for the Teanaway River local populations (Pearson *et al.* 1998). North Fork Teanaway River from the confluence with the Teanaway River upstream 30.7 km (19.1 mi) to the headwaters contains essential FMO and spawning and rearing habitat for the North Fork Teanaway River local population (Pearson *et al.* 1998; WDFW 2002). Jack Creek from the confluence with the North Fork Teanaway River upstream 10.9 km (6.8 mi) to the headwaters; Jungle Creek from the confluence with the North Fork Teanaway River upstream 6.4 km (4.0 mi) to the headwaters; and DeRoux Creek from the confluence with the North Fork Teanaway River upstream 4.7 km (2.9 mi) to the headwaters provide spawning and rearing habitat for the North Fork Teanaway River local population (Pearson *et al.*1998; WDFW 1998, 2002).

(xvii) Middle Fork Teanaway River from the confluence with the Teanaway River upstream 25.5 km (15.9 mi) to the headwaters is of unknown occupancy but provides suitable FMO and spawning and rearing habitat (E. Anderson, *in litt.*, 2002) necessary for the recovered distribution of bull trout (USFWS 2002).

(xviii) Cle Elum River from the confluence with the Yakima River upstream 13.2 km (8.2 mi) to Cle Elum Dam was historically occupied by bull trout (WDFW 1998), but the extent of current occupancy is unknown. This reach may provide essential FMO habitat for the mainstem Yakima River

population, and will provide a migratory corridor to other local populations upstream if passage is provided at Cle Elum Dam as stipulated in the Draft Recovery Plan (USFWS 2002).

(xix) Cle Elum Reservoir (1,770 ha (4,375 ac)) provides FMO habitat for the Upper Cle Elum River local population (WDFW 1998), and will provide a migratory corridor between other local populations within the Yakima Basin if passage is provided at Cle Elum Dam, as stipulated in the Draft Recovery Plan (USFWS 2002). The Cle Elum River from the confluence with the Cle Elum Reservoir upstream 34.8 km (21.6 mi) to the headwaters provides spawning and rearing habitat for the Cle Elum River local population (P. James, Central Washington University, pers. comm., 2002; WDFW 2002) and may also provide FMO habitat as well. The Cooper River from the confluence with the Cle Elum River upstream 22.7 km (14.1 mi) to the headwaters is currently of unknown occupancy, but would provide both FMO and spawning and rearing habitat for the recovered distribution of the Cle Elum River local population (USFWS 2002). The Waptus River from the confluence with the Cle Elum River upstream 21.2 km (13.2 mi) to its headwaters provides spawning, rearing, and FMO habitat for the Upper Cle Elum River local population (WDFW 1998; Hisata 1999). Fortune Creek from the confluence with the Cle Elum River upstream 7.2 km (4.5 mi) to the headwaters provides spawning and rearing habitat (T. Mayo, USFS, pers. comm., 2002).

(xx) Kachess River from the confluence with the Yakima River upstream 1.4 km (0.9 mi) to Kachess Dam is of unknown occupancy, but likely provides FMO habitat for the mainstem Yakima River local population and will provide a migratory corridor to other local populations within the Yakima Basin if passage is provided at Kachess Dam (USFWS 2002).

(xxi) Kachess Reservoir (1,734 ha (4,260 ac)) provides FMO habitat for the Box Canyon and Upper Kachess River local populations (WDFW 2002), and will provide a migratory corridor to other local populations within the Yakima River Core Area if passage is provided at Kachess Dam (USFWS 2002). Box Canyon Creek from the confluence with Kachess Reservoir upstream 2.6 km (1.6 mi) to a natural barrier provides spawning and rearing habitat for the Box Canyon Creek local population (WDFW 2002). Kachess River upstream of Kachess Reservoir from the confluence with Kachess Reservoir upstream 3.2 km (2.0 mi) to a natural barrier provides essential spawning and rearing habitat for the Upper Kachess River local population (Meyer 2002; WDFW 2002). Mineral Creek from the confluence with the Kachess River upstream 1.0 km (0.6 mi) to a natural barrier provides rearing habitat for the Upper Kachess River local population (Meyer 2002; WDFW 2002).

(xxii) Keechelus Reservoir (961 ha (2,374 ac)) provides FMO habitat for the Gold Creek local population, and will provide a migratory corridor to other local populations within the Yakima Basin, if passage is provided at Kachess Dam, as stipulated in the Draft Recovery Plan (USFWS 2002). Gold Creek from Keechelus Reservoir upstream 11.4 km (7.1 mi) to a natural barrier contains essential spawning and rearing habitat for the Gold Creek local population (WDFW 2002).

(25) Unit 21: Upper Columbia River Basin

The Upper Columbia River Basin includes three CHSUs in central and northern Washington on the east slopes of the Cascade Mountains: (1) Wenatchee River CHSU in Chelan County; (2) Entiat River CHSU in Chelan County; and (3) Methow River CHSU in Okanogan County. A total of 909.7 km (565.4 mi) of streams and 1,010 ha (2,497 ac) of lake surface area are proposed for critical habitat.

Proposed critical habitat includes 364 km (226.1 mi) of stream in 21 stream reaches and one lake (990 ha; 2,445 ac) in the Wenatchee River CHSU, 78.5 km (48.8 mi) of stream in three stream reaches in the Entiat River CHSU, and 486.3 km (302.2 mi) of stream in 26 stream reaches and three lakes that total 22.6 ha (55.9 ac) in the Methow River CHSU.

(i) Wenatchee River CHSU

This CHSU contains the largest known populations of bull trout in the Upper Columbia River Basin, and includes the mainstem Wenatchee River and tributaries from the Columbia River up to their headwaters. Landownership along the stream reaches proposed for critical habitat is 59 percent Federal land and 41 percent private land. The ownership of the shoreline of the lake proposed for critical habitat is 40 percent Federal land and 60 percent private land. Currently, there are six migratory local populations in the Wenatchee River core area: Peshastin Creek (including Ingalls Creek), Chiwaukum Creek, Chiwawa River (including Chikamin, Rock, Phelps, James, Alpine, and Buck Creeks), Nason Creek (including Mill Creek), Little Wenatchee River (below the falls), and White River (including Canyon and Panther Creeks). There is also a resident bull trout population in Icicle Creek above the barrier falls.

(A) Wenatchee River from the confluence with the Columbia River upstream 87.2 km (54.2 mi) to Lake Wenatchee provides FMO habitat (Kreiter 2001, 2002) for at least four of the six local migratory bull trout populations upstream. Lake Wenatchee (approximately 990 ha (2,445 ac) provides FMO habitat (USFWS 2002) for the Chiwawa River, Little Wenatchee River, White River, and likely the Nason Creek local populations.

(B) Peshastin Creek from the confluence with the Wenatchee River upstream 17.4 km (10.8 mi) to the confluence with Negro Creek provides FMO habitat for the Peshastin Creek local population (USFWS 1997a; 1998). Ingalls Creek from its mouth on Peshastin Creek upstream 16.3 km (10.1 mi) to a barrier falls provides essential spawning and rearing habitat for the Peshastin Creek local population (USFWS 1997a).

(C) Icicle Creek from its mouth on the Wenatchee River upstream 8.8 km (5.5 mi) to a potential barrier (complex boulder area) provides essential FMO habitat for migratory bull trout. Spawning and rearing habitat occurs from this point upstream to the falls at rkm 48.3. This area is occupied by a resident population that has been isolated since 1940 by a fish barrier at the Leavenworth National Fish Hatchery, and possibly longer if the boulder area at rkm 8.8 poses an absolute barrier. Jack Creek from its mouth on Icicle Creek at rkm 27.7 (rmi 17.2) upstream 11.4 km (7.1 mi) to a barrier falls provides essential spawning and rearing habitat for the Icicle Creek local population (USFWS 1997a). French Creek from its mouth on Icicle Creek at rkm 34.8 (rmi 21.6) upstream 8.8 km (5.5 mi) to a barrier falls also provides spawning and rearing habitat for bull trout in the Icicle Creek local population.

(D) Chiwaukum Creek from its mouth on the Wenatchee River at rkm 57.8 upstream 10.5 km (6.5 mi) to a barrier falls provides spawning and rearing habitat for bull trout in the Chiwaukum Creek population (USFWS, *in litt.,* 2002).

(E) Chiwawa River from its confluence with the Wenatchee River upstream 53.3 km (33.1 mi) to a barrier falls provides essential FMO habitat up to Grouse Creek at rkm 31.2, and spawning and rearing habitat from that point upstream to rkm 53.3 (Hillman

and Miller 2002). The Chiwawa River local population is the largest population in the Wenatchee Basin. Chikamin Creek from its mouth on the Chiwawa River at rkm 22.2 upstream 13.4 km (8.4 mi) to its headwaters (Hillman and Miller 2002), Rock Creek from its mouth on the Chiwawa River at rkm 34.3 upstream 9.3 km (5.8 mi) to a barrier falls (USFS 2002a), Phelps Creek from its mouth on the Chiwawa River at rkm 48.6 upstream 1.6 km (1.0 mi) to a barrier falls, James Creek from its mouth on the Chiwawa River at rkm 50.2 upstream 0.5 km (0.3 mi) to a gradient barrier (USFWS, *in litt.,* 2001), Alpine Creek from its mouth on the Chiwawa River at rkm 51.0 upstream to a gradient barrier at rkm 0.2 (USFWS, *in litt.,* 2001), and Buck Creek from its mouth on the Chiwawa River at rkm 53.1 upstream 0.6 km (0.4 mi) to a barrier falls (USFWS, *in litt.,* 2001) provide essential spawning and rearing habitat for the Chiwawa River local population.

(F) Nason Creek from its mouth on the Wenatchee River at rkm 86.2 (rmi 53.5) upstream 34.9 km (21.7 mi) to a barrier falls provides FMO habitat in the lower reaches to the confluence with Whitepine Creek at rkm 24.8, and spawning and rearing habitat in the upper reaches (USFWS 2002). Mill Creek from its mouth on Nason Creek at rkm 33.0 (rmi 20.5) upstream to barrier falls at rkm 1.0 provides the only other known spawning and rearing habitat for the Nason Creek local population (USFWS 2002).

(G) Little Wenatchee River from its mouth at the upper end of Lake Wenatchee upstream to a barrier (falls) at rkm 12.6 contains spawning and rearing habitat for the Little Wenatchee local population (J. DeLaVergne, USFWS, pers. comm., 2001). In addition to providing spawning and rearing habitat, it appears to provide a foraging area for bull trout using Lake Wenatchee (USFWS 2002).

(H) White River from its mouth at the upper end of Lake Wenatchee upstream to a barrier falls at rkm 23.0 provides one of only two main spawning areas for the White River local population (USFWS 2002). In addition to providing spawning and rearing habitat, it appears to provide a foraging area for bull trout using Lake Wenatchee (USFWS 2002). Canyon Creek from its mouth on the White River at rkm 15.2 upstream to its headwaters at rkm 6.3 is at least seasonally occupied (J. DeLaVergne, USFWS, pers. comm., 2002), and provides potential spawning and rearing habitat for the recovered distribution of bull trout (USFWS 2002). The Napeequa River from its mouth on the White River at rkm 15.2 (rmi 9.4) upstream 3.5 km (2.2 mi) to a barrier falls is at least seasonally occupied (J. DeLaVergne, USFWS pers. comm., 2002), may provide spawning and rearing habitat (WDFW 1992), and may also provide valuable foraging habitat due to the presence of spawning sockeye salmon (Oncorhynchus nerka) and their progeny. Panther Creek from its mouth on the White River at rkm 21.1 (rmi 13.1) upstream 1.1 km (0.7 mi) to a barrier falls provides occupied spawning and rearing habitat (USFWS 2002) and is probably the main spawning area for the White River local population.

(ii) Entiat River CHSU

The Entiat River CHSU includes the Entiat River and its tributaries. The apex of the watershed is at the Cascade crest and water flows east towards the Columbia Plateau. The Entiat River drains into the Columbia River near the city of Entiat. Landownership along the stream reaches proposed for critical habitat within the Entiat River CHSU is approximately 47 percent Federal land and 53 percent private land. There are two local populations in the Entiat CHSU: Entiat River and Mad River (including Tillicum Creek).

(A) Entiat River from confluence with the Columbia River at rkm 778.3 (rmi 483.3) upstream to a barrier falls at rkm 47.0 (rmi 29.2) is occupied and provides FMO habitat (Kreiter 2001, 2002) in the lower reaches (up to about rkm 25.7 (rmi 16.0)), and spawning and rearing habitat from that point upstream to the falls (USFWS 1997b, 1999c, 2000b, 2002).

(B) Mad River from the confluence with the Entiat River upstream 31.5 km (19.6 mi) to a barrier cascades is occupied (WDFW 1992), provides essential FMO habitat in the lower reaches (Kreiter 2001, 2002), and spawning a rearing habitat from that point upstream to the barrier (USFS 2002a). The Mad River provides the majority of the known spawning and rearing habitat in the Entiat CHSU. Tillicum Creek from the confluence with the Mad River upstream 4.7 km (2.9 mi) to a barrier falls contains habitat of unknown occupancy, but that is suspected to support bull trout spawning and rearing (WDFW 1998), and that is necessary to provide for the recovered distribution of bull trout (USFWS 2002).

(iii) Methow River CHSU

The Methow River CHSU is located on the eastern slopes of the Cascade Mountains in northern Washington. The Methow River drains into the Columbia River near the town of Pateros. The CHSU includes the mainstem Methow River and tributaries from the Columbia River up to their headwaters. Landownership along the stream reaches proposed for critical habitat within this CHSU is 59 percent Federal land and 41 percent private land. The three lakes are entirely surrounded by Federal land. Currently, there are eight local populations of bull trout identified (USFWS 2002) in the Methow CHSU: Gold Creek (including Crater Creek), Twisp River (including Buttermilk, Bridge, Reynolds, and North creeks), Chewuch River (including Lake Creek), Wolf Creek, Early Winters Creek, Upper Methow River, Lost River, and Goat Creek. Adfluvial, fluvial, and resident forms of bull trout are all present.

(A) Methow River from the confluence with the Columbia River at rkm 843.0 (rmi 523.5) upstream to its confluence with the Lost River at rkm 117.5 is occupied and provides essential FMO habitat (Kreiter 2001, 2002) to facilitate bull trout migration between the Columbia River, Methow River and the eight local populations. The Methow River from the confluence with the Lost River upstream to the West Fork of the Methow River at rkm 133.2 (rmi 82.7) provides essential spawning and rearing habitat for the Upper Methow River local population. Robinson Creek from its confluence with the Methow River upstream to its headwaters, and Rattlesnake Creek from its confluence with the Methow River upstream to a barrier falls at rkm 1.9, are of unknown occupancy, but may be accessible in their lower reaches and may provide essential spawning and rearing habitat for the recovered distribution of the Upper Methow River local population (USFWS 2002). Trout Creek from its confluence with the Methow River upstream 11.6 km (7.2 mi) to its headwaters provides occupied spawning and rearing habitat for the Upper Methow River local population (WDFW 1998).

(B) Gold Creek from the confluence with the Methow River upstream 1.8 km (1.1 mi) to the confluence of the North Fork and South Fork of Gold Creek, and the North Fork of Gold Creek from the confluence of the North Fork and South Fork of Gold Creek upstream 8.4 km (5.2 mi) to the confluence with Crater Creek, are all of unknown occupancy by bull trout, but provide essential FMO habitat to connect bull trout that spawn and rear in Crater Creek with foraging habitat in the Methow River, as well as to provide habitat for the recovered distribution of bull trout (USFWS 2002). Crater Creek from the confluence with North Fork Gold Creek upstream 4.7 km (2.9 mi) to a barrier falls is currently

occupied and provides essential spawning and rearing habitat for the Gold Creek local population.

(C) Beaver Creek from confluence with the Methow River at rkm 56.6 (rmi 35.1) upstream to the confluence with Blue Buck Creek provides historical FMO habitat (WDFW 1998) to restore connectivity of isolated resident bull trout populations in Blue Buck Creek with the Methow River and its associated bull trout populations. Addressing human-made barriers and habitat restoration are necessary to allow migratory bull trout to utilize this area to provide for the recovered distribution of bull trout (USFWS 2002). Blue Buck Creek from its confluence with Beaver Creek upstream to a barrier falls at rkm 3.5 is currently occupied by a resident population of bull trout that is thought to have historically included a migratory component (WDFW 1998).

(D) Twisp River from the confluence with the Methow River at rkm 64.7 (rmi 40.2) upstream 47.5 km (29.5 mi) to the confluence of the North Fork and South Fork provides FMO habitat (Kreiter 2001, 2002) from the mouth up to the confluence with Little Bridge Creek at rkm 15.0 and spawning and rearing habitat (USFS 2002b) from that point upstream to the confluence of the North Fork and South Fork. Little Bridge Creek from the confluence with the Twisp River upstream 15.8 km (9.8 mi) to its headwaters provides habitat necessary for the recovered distribution of bull trout (USFWS 2002). Buttermilk Creek from the confluence with the Twisp River upstream 4.0 km (2.5 mi) to the East and West Forks of Buttermilk Creek is at least seasonally occupied (Kreiter 2001, 2002) and provides FMO habitat. The East Fork of Buttermilk Creek from the confluence with Buttermilk Creek upstream 4.8 km (3.0 mi) to a series of falls that form a barrier, and the West Fork of Buttermilk Creek from the confluence with Buttermilk Creek upstream 14.5 km (9.0 mi) to its headwaters, are currently occupied and provide spawning and rearing habitat for the Twisp River local population (J. DeLaVergne, pers. comm., 2001; USFS 2002b). Reynolds Creek from the confluence with the Twisp River at rkm 33.6 upstream 1.1 km (0.7 mi) to a barrier falls, and North Creek from the confluence with the Twisp River at rkm 42.0 upstream 1.3 km (0.8 mi) to a barrier falls are currently occupied and provide essential spawning and rearing habitat for the Twisp River local population (WDFW 1998; USFS 2002b).

(E) Chewuch River from the confluence with the Methow River at rkm 80.6 upstream 52.0 km (32.3 mi) to a barrier falls provides FMO habitat up to the confluence with Lake Creek at rkm 38.1 and spawning and rearing habitat from that point up to the barrier falls (J. DeLaVergne, pers. comm., 2001). Lake Creek from its confluence with the Chewuch River upstream 12.6 km (7.8 mi) to the upper limits of Black Lake, and including Black Lake, is currently occupied FMO habitat. From Black Lake upstream to a barrier falls (15.8 km (9.8 mi)) above the confluence with the Chewuch River is where spawning and rearing habitat occurs (USFS 1994b, 1995a; 2002b).

(F) Wolf Creek from the confluence with the Methow River at rkm 85.0 (rmi 52.8) upstream 17.1 km (10.6 mi) to a barrier falls provides essential FMO habitat from its mouth up to the wilderness boundary at rkm 7.4 (rmi 4.6), and essential spawning and rearing habitat from that point up to the barrier falls (WDFW 1998; USFS 2002b).

(G) Goat Creek from its confluence with the Methow River at rkm 103.0 upstream 20.4 km (12.7 mi) to its headwaters is currently occupied by both resident and fluvial bull trout (WDFW 1998), provides FMO habitat up to Vanderpool Crossing at rkm 10.9 (rmi 6.8), and spawning and rearing habitat from there up to its headwaters (J. DeLaVergne, pers. comm., 2001; B. Kelly Ringel, USFS, pers. comm., 2002).

(H) Early Winters Creek from the confluence with the Methow River at rkm 108.3 upstream 26.5 km (16.5 mi) to its headwaters contains both FMO habitat and the primary spawning and rearing habitat for this local population. Fluvial bull trout are found downstream of a falls at rkm 12.9, and resident bull trout are found upstream of this point (WDFW 1998; USFS 2002b). Recently, some migratory sized bull trout have also been noted above the falls (J. DeLaVergne, pers. comm., 2001). Cedar Creek from its confluence with Early Winters Creek upstream 4.0 km (2.4 mi) to a barrier falls also provides spawning and rearing habitat for the Early Winters Creek local population (USFS 2002b). Huckleberry Creek from its confluence with Cedar Creek at rkm 3.5 upstream 7.1 km (4.4 mi) to its headwaters contains suitable spawning and rearing habitat necessary to provide for the recovered distribution of bull trout (USFWS 2002).

(I) The Lost River from its confluence with the Methow River upstream to the confluence with Monument Creek at rkm 12.4 provides FMO habitat. The Lost River from approximately rkm 20.4 (rmi 12.7) upstream to rkm 31.7 (rmi 19.7), about 1 km (0.6 mi) below Cougar Lake, contains the primary bull trout spawning and rearing habitat in this basin (WDFW 1998). From Cougar Lake at rkm 32.7 (rmi 20.3) upstream to Middle Hidden Lake at rkm 36.2 (rmi 22.5) contains FMO and spawning and rearing habitat as well (USFS 2000b; B. Hallock, USFWS, pers. comm., 2002). Female size at maturity has shown the Lost River bull trout population to be composed of resident fish, though there may be some exchange with the Cougar Lake adfluvial stock (WDFW 1998). Both resident populations and adfluvial bull trout from Cougar Lake spawn and rear in the Lost River (WDFW 1998; USFS 2002b). Access to spawning and rearing habitat in this drainage is naturally disrupted by rock slides across the river at rkm11.6 (rmi 7.2) and rkm19.3 (rmi 12.0) that both appear to be comparatively recent barriers. The Lost River also flows subsurface for about 6 to 8 km (4 to 5 mi) between Drake Creek (at rkm 18.8 (rmi 11.7)) and Monument Creek (at rkm 12.4 (rmi 7.7)), and for about 1.0 km (0.6 mi) below Cougar Lake (at rkm 32.7 (rmi 20.3)) (Washington State Conservation Commission (WSCC) 2000). Monument Creek from the confluence with the Lost River upstream to its headwaters provides essential spawning and rearing habitat for the Lost River local population. Cougar Lake (approximately 7.6 ha (18.7 ac)), First Hidden Lake (approximately 7.3 ha (18 ac)), and Middle Hidden Lake (approximately 7.7 ha (19.1 ac)) provide FMO and rearing habitat for adfluvial bull trout (WDFW 1998).

(J) The West Fork of the Methow River from the confluence with the Methow River upstream 14.5 km (9.0 mi) to a barrier falls provides the primary spawning and rearing habitat for the Upper Methow River local population (USFS 2002b).

(26) Unit 22: Northeast Washington River Basins

The Northeast Washington unit includes bull trout above Chief Joseph Dam on the Columbia River. Major tributaries in the unit include the Sanpoil, Spokane, Kettle, Colville, and Pend Oreille Rivers. A total of 373.1 km (231.9 mi) of streams and 1,166 ha (2,880 ac) of lake surface area are proposed as critical habitat within this unit.

(i) Pend Oreille River CHSU

The Pend Oreille River CHSU is in the northeast corner of Washington State and includes the Pend Oreille River and all tributaries from Boundary Dam upstream to Albeni Falls Dam in Idaho. Only about 4.0 km (2.5 mi) of the Pend Oreille River and tributary waters within this CHSU are located in Idaho (Bonner County), with the remainder of

the CHSU within Pend Oreille County, Washington (Northwest Power Planning Council (NPPC) 2001). The basin encompasses 279,720 ha (691,200 ac) of which approximately 58 percent is public land managed by the USFS (Colville National Forest); 4 percent is State land, 1 percent is Tribal land, and 37 percent private lands. The USFWS also manages a small parcel of land as a unit of the Little Pend Oreille National Wildlife Refuge (Cusick Unit) near Cusick, Washington. Of the approximately 3,553 km (2,208 mi) of tributary streams that occur in this CHSU, 255.5 km (158.8 mi) are proposed for bull trout critical habitat, as well as approximately 117.6 km (73.1 mi) of the Pend Oreille River from Boundary Dam to Albeni Falls Dam, for a total 373.1 km (231.9 mi) of proposed critical habitat for this CHSU.

(A) The Pend Oreille River from Boundary Dam upstream 117.6 km (73.1 mi) to Albeni Falls Dam provides FMO habitat for the recovered distribution of bull trout (USFWS 2002). This reach includes Box Canyon Reservoir with a surface area of 2,983 ha (7,371 ac). Bull trout are at least occasionally present in this reach (Bennett and Liter 1991; M. Liter, IDFG, pers. comm., 2002; C. Donnelly, WDFW, pers. comm., 2002). Boundary Reservoir, a 27.4 km (17.0 mi) impoundment with a surface area of 664 ha (1,640 ac) at full pool elevation is also included in this reach. Bull trout are present in this reach (R2 Resource Consultants, Inc. 1998, citing C. Vail, WDFW, pers. comm., 1996; R2 Resource Consultants 1998, 2000). The mouths of tributaries provided localized zones of well defined cool water refugia in Boundary Reservoir in 1996. Small areas of cold water that provide refugia for bull trout were identified at the mouths of Sullivan, Flume, Slate, and Pee Wee Creeks (R2 Resource Consultants, Inc. 1998).

(B) Slate Creek from its confluence with the Pend Oreille River upstream 16.3 km (10.1 mi) to its headwaters provides spawning and rearing habitat necessary for the recovered distribution of bull trout (USFWS 2002). Reproduction is not currently known to occur within Slate Creek, but several bull trout have been captured at or near the mouth of Slate Creek in recent years (USFS 1999d; Terrapin Environmental 2000), including two migratory-sized individuals caught by angling in the early 1990s, indicating the presence of migratory bull trout using Slate Creek (T. Shuhda, USFS, pers. comm., 2002). Habitat capable of supporting strong and significant populations of native salmonids, particularly bull trout, exists throughout the Slate Creek watershed (USFS 1999d).

(C) Sullivan Creek from its confluence with the Pend Oreille River upstream 35.3 km (22.0 mi) to its headwaters, provides FMO habitat in the lower reaches and spawning and rearing habitat in the upper reaches necessary for the recovered distribution of bull trout (USFWS 2002). Reproduction is not currently known to occur in Sullivan Creek; only one large adfluvial bull trout has been documented in these waters in recent years (USFS 1999e), and the 5.2 km (3.2 mi) reach from Mill Pond Dam down to the stream's confluence with Boundary Reservoir is believed to contain fewer than 50 adult bull trout (USFS 1999e). Outlet Creek from the confluence with Sullivan Creek upstream 19.3 km (12.0 mi) to the uppermost extent of the waters in Sullivan Lake provides FMO habitat necessary for the recovered distribution of bull trout (USFWS 2002). Establishing fish passage at both Mill Pond Dam and Sullivan Lake Dam is identified as an important bull trout recovery task (USFWS 2002). The entire area 502 ha (1,240 ac) of Sullivan Lake, which is a natural, deep, oligotrophic (deficient in plant nutrients) lake with a maximum depth of 95 m (312 ft) (T. Shuhda, pers. comm., 2002). It contains a strong forage base of kokanee salmon (*O. nerka*) and provides cold water refugia during summer months due to well developed thermal stratification. Harvey Creek from its confluence with Sullivan Lake upstream 18.3 km (11.4 mi) to its headwaters at Bunch Grass Lake provides spawning and rearing habitat necessary for the recovered distribution of bull trout (USFWS 2002). Harvey Creek has permanent water flow and provides good quality habitat for bull trout and other native salmonids (USFS 1999e). This stream has no migration barriers and is a stronghold for native westslope cutthroat trout populations in the Sullivan Creek watershed.

(D) Cedar Creek from its confluence with the Pend Oreille River upstream 16.1 km (10.0 mi) to its headwaters provides spawning and rearing habitat necessary for the recovered distribution of bull trout (USFWS 2002). Additionally, in September 1995, one bull trout measuring 460 mm (18 in) in length was observed above the Ione Municipal Dam during stream surveys conducted by the Kalispel Tribe (J. Maroney, Kalispell Tribe, pers. comm., 2002). There is no information on the origin or life history form of this fish, but the USFS suggests that this bull trout must have been a product of a spawning population above Ione Municipal Dam (USFS 1999f).

(E) Ruby Creek from its confluence with the Pend Oreille River upstream 21.1 km (13.1 mi) to its headwaters provides FMO habitat in the lower reaches and spawning and rearing habitat necessary for the recovered distribution of bull trout in the upper reaches (USFWS 2002). Bull trout are not currently known to occupy Ruby Creek.

(F) LeClerc Creek from the confluence with the Pend Oreille River upstream 1.9 km (1.2 mi) to the confluence of the West Branch of LeClerc Creek and the East Branch of LeClerc Creek is currently occupied FMO habitat (S. Toth, Plum Creek Timber Company, *in litt.,* 1993), and also provides habitat necessary for the recovered distribution of bull trout (USFWS 2002). The West Branch of LeClerc Creek from the confluence with the Pend Oreille River upstream 24.8 km (15.4 mi) to its headwaters is occupied and provides spawning and rearing habitat for the LeClerc Creek bull trout population complex (T. Shuhda, pers. comm., 2002). East Branch of LeClerc Creek from the confluence with the Pend Oreille River upstream 20.8 km (12.9 mi) to the headwaters is occupied and provides spawning and rearing habitat for the LeClerc Creek population complex. Fourth of July Creek from its confluence with the East Branch of LeClerc Creek upstream 6.1 km (3.8 mi) to the headwaters provides spawning and rearing habitat, as well as habitat necessary to provide for the recovered distribution of bull trout (USFWS 2002). Bull trout have been noted at the mouth of this creek (J. Maroney, Kalispel Tribe, pers. comm., 2001), although spawning activity has not been confirmed. Water temperatures in Fourth of July Creek are cooler than water temperatures in the East Branch of LeClerc Creek, and habitat is suitable for bull trout spawning and rearing (T. Shuhda, pers. comm., 2002).

(G) Mill Creek from its confluence with the Pend Oreille River upstream 2.1 km (1.3 mi) to a barrier falls is occupied by bull trout (J. Maroney, Kalispel Tribe pers. comm., 2001), and also provides spawning and rearing habitat necessary to provide for the recovered distribution of bull trout (USFWS 2002).

(H) Tacoma Creek from its confluence with the Pend Oreille River, the North Fork of the South Fork of Tacoma Creek from the confluence with the South Fork Tacoma Creek, and the South Fork of Tacoma Creek from the confluence with Tacoma Creek upstream a total of 61.7 km (38.3 mi) to their respective

headwaters, provide FMO and spawning and rearing habitat necessary to provide for the recovered distribution of bull trout (USFWS 2002). These creeks are not currently known to be occupied by bull trout, but provide suitable habitat (T. Shuhda, pers. comm., 2002).

(I) Calispell Creek from its confluence with the Pend Oreille River upstream 4.2. km (2.6 mi) to the confluence with Smalle Creek is not currently known to be occupied by bull trout but provides FMO habitat necessary to provide for the recovered distribution of bull trout (USFWS 2002). Smalle Creek from its confluence with Calispell Creek upstream 10.6 km (6.6 mi) to a barrier falls, and East Fork of Smalle Creek from its confluence with Smalle Creek upstream 6.8 km (4.2 mi) to a barrier falls are not currently known to be occupied by bull trout, but provide suitable spawning and rearing habitat necessary to provide for the recovered distribution of bull trout (T. Shuhda, pers. comm., 2002; USFWS 2002).

(J) Indian Creek from its confluence with the Pend Oreille River upstream 8.5 km (5.3 mi) to the headwaters provides spawning and rearing habitat that may be currently utilized, but is also necessary to provide for the recovered distribution of bull trout (USFWS 2002). A gravid (pregnant) female bull trout has been documented in Indian Creek in recent years (J. Maroney, Kalispell Tribe, pers. comm., 2000). Indian Creek has 21.5 square meters per kilometer of suitable bull trout spawning habitat (Kalispel Natural Resource Department and WDFW 1995).

(27) Unit 23: Snake River Basin in Washington

The Snake River Washington Unit includes two critical habitat subunits (CHSU) located in southeast Washington: (1) the Tucannon River CHSU located in Columbia and Garfield counties, and (2) the Asotin Creek CHSU within Garfield and Asotin counties. A total of 326 km (203 mi) of stream reaches are proposed as critical habitat within this unit.

(i) Tucannon River CHSU

The Tucannon River CHSU encompasses the Tucannon River, Little Tucannon River, and Pataha Creek watersheds and their immediate major and minor tributaries. Landownership in the Tucannon River CHSU is comprised of 71 percent Federal lands; 23 percent State or local government lands, and 6 percent privately owned lands. The Tucannon River CHSU currently contains eight streams supporting local bull trout populations, and three streams identified in the draft Bull Trout Recovery Plan (USFWS 2002) as essential streams to meet recovery criteria population goals. Proposed critical habitat in the Tucannon River CHSU includes a total of rkm 167.5 (rmi 104.1) in 12 streams within the subunit.

(A) Tucannon River from its confluence with the Snake River upstream 91.9 km (57.1 mi) to the waterfall below Buckley Ridge (approximately 4.8 km (3.0 mi) above the confluence of Bear Creek with the Tucannon River) provides FMO habitat in the lower reaches, and spawning and rearing habitat in the upper reaches for the Tucannon River local population (USFS, unpublished 1992a, unpublished 2001a; Martin *et al.* 1992; Underwood *et al.* 1995; WDFW 1997). The lower Tucannon River is also an important migratory corridor to spawning areas upstream in the watershed (G. Mendel, WDFW, pers. comm., 2002).

(B) Cummings Creek from the confluence with the Tucannon River upstream approximately 17.1 km (10.6 mi) to the point where water from Little Bear Wallow Spring enters Cummings Creek provides spawning and rearing habitat (WDFW 1997; USFS, unpublished 1992b) necessary for the recovered distribution for bull trout (USFWS 2002).

(C) Hixon Creek from the confluence with the Tucannon River upstream approximately 4.0 km (2.5 mi) to its headwaters was historically occupied (M. Schuck, WDFW, pers. comm., 2002), and provides spawning and rearing habitat necessary for the recovered distribution of bull trout (USFWS 2002).

(D) Little Tucannon River from its confluence with the Tucannon River upstream approximately 8.5 km (5.25 mi) to its headwaters has been documented as providing habitat for bull trout (USFS, unpublished 1992c), and provides spawning and rearing habitat necessary for the recovered distribution of bull trout (USFWS 2002).

(E) Panjab Creek from its confluence with the Tucannon River upstream 11.3 km (7 mi) to its headwaters provides spawning and rearing habitat for the Panjab Creek local population (USFS, unpublished 1992d).

(F) Meadow Creek from its confluence with Panjab Creek upstream 10.5 km (6.5 mi) to its headwaters at Godman Spring provides spawning and rearing habitat for the Meadow Creek local population (USFS, unpublished 1992e).

(G) Turkey Creek from its confluence with Panjab Creek upstream 5.2 km (3.25 mi) to its headwaters provides spawning and rearing habitat for the Turkey Creek local population (USFS, unpublished 1992f).

(H) Little Turkey Creek from the confluence with Meadow Creek upstream 5.5 km (3.4 mi) to its headwaters provides spawning and rearing habitat for the Little Turkey Creek local population (USFS, *in litt.,* 2002).

(I) Cold Creek from the confluence with the Tucannon River upstream 3.2 km (2 mi) to a 3 m (10 ft) water fall provides spawning and rearing habitat for the Cold Creek local population (USFS, unpublished 1992h, *in litt.,* 2002).

(J) Sheep Creek from the confluence with the Tucannon River upstream 0.8 km (0.5 mi) to a 6.6 m (22 ft) waterfall provides spawning and rearing habitat for the Sheep Creek local population (USFS, unpublished 1992i, *in litt.,* 2002).

(K) Bear Creek from the confluence with the Tucannon River upstream 4.8 km (3 mi) to a 3 m (10 ft) waterfall provides spawning and rearing habitat for the Bear Creek local population (USFS, *in litt.,* 2002).

(ii) Asotin Creek CHSU

Asotin Creek is a tributary to the Snake River located in Asotin and Garfield counties, Washington. Asotin Creek drains a portion of the northern slopes of the Blue Mountains of southeastern Washington State and enters the Snake River upstream of Clarkston, Washington at rkm 233.5 (rmi 145.0). The Asotin Creek watershed landownership is approximately 31 percent Federally owned land, 8 percent State and local government owned land, and 61 percent privately owned land. Bull trout in Asotin Creek are currently known to occur in headwater locations only, and may be primarily resident fish. Historically, bull trout distribution in the Asotin Creek CHSU was thought to be much more extensive and contain both resident and migratory bull trout (WDFW 1997; USFS 1998e). The streams or stream reaches in the Asotin Creek CHSU proposed for designation as critical habitat are those identified by the Recovery Unit Team as containing bull trout populations, or those that may not be known to be currently occupied, but contain necessary constituent elements to support spawning and rearing. The Asotin Creek CHSU currently contains two streams which support local bull trout populations, and eight streams that have potential to support spawning populations and are identified in the draft Snake River Washington Bull Trout Recovery Plan as essential streams to meet recovery criteria goals (USFWS 2002).

(A) Asotin Creek from the confluence with the Snake River upstream 24.0 km

(14.9 mi) to the confluence with the North Fork and the South Fork of Asotin Creek provides FMO habitat (WDFW 1997).

(B) George Creek from the confluence with Asotin Creek upstream 34.6 km (21.5 mi) to its headwaters at Seven Sisters Spring provides spawning and rearing habitat (USFS, unpublished 1993b) that may be currently occupied, and provides habitat necessary for the recovered distribution of bull trout (USFWS 2002).

(C) Wormell Creek from the confluence with George Creek upstream 6.4 km (4.0 mi) to its headwaters provides habitat of unknown occupancy by bull trout, but is necessary for the recovered distribution of bull trout (USFWS 2002).

(D) Hefflefinger Creek from the confluence with George Creek upstream 6.0 km (3.7 mi) to its headwaters provides spawning and rearing habitat that may currently support bull trout (G. Mendel, pers. comm., 2002b), and is necessary for the recovered distribution of bull trout (USFWS 2002).

(E) Coombs Creek from the confluence with George Creek upstream 10.1 km (6.3 mi) to its headwaters at Hostetler Spring provides spawning and rearing habitat of unknown occupancy, but is essential habitat for the recovered distribution of bull trout (USFWS 2002).

(F) Charley Creek from the confluence with Asotin Creek upstream 26.6 km (16.5 mi) was recently noted to be occupied by bull trout (USFS, unpublished 1993b; D. Groat, USFS, pers. comm., 2002e), provides FMO and spawning and rearing habitat, and provides habitat essential for the recovered distribution of bull trout (USFWS 2002).

(G) North Fork of Asotin Creek from the confluence of the North Fork of Asotin Creek and the South Fork of Asotin Creek where the streams combine and form the mainstem of Asotin Creek upstream 28.3 km (17.6 mi) to the headwaters at Dodge Spring, provides spawning and rearing habitat for the North Fork Asotin Creek local population (USFS, unpublished 1992g; WDFW 1997; G. Mendel, pers. comm., 2002c).

(H) South Fork of the North Fork of Asotin Creek from the confluence with the North Fork of Asotin Creek upstream 9.3 km (5.8 mi) to the headwaters at 3 C Spring is an area recently known to be occupied by bull trout (USFS, unpublished 1993d), and provides habitat necessary for the recovered distribution of bull trout (USFWS 2002).

(I) Middle branch of the North Fork of Asotin Creek from the confluence with the North Fork of Asotin Creek upstream 8.0 km (5.0 mi) to the headwaters provides occupied spawning and rearing habitat for the North Fork Asotin Creek local population (USFS, unpublished 1993d).

(J) Cougar Creek from the confluence with the North Fork of Asotin Creek upstream 5.2 km (3.2 mi) to the headwaters below USFS Road 4027–015 provides spawning and rearing habitat for the Cougar Creek local population (USFS, *in litt.,* 2002).

(28) Unit 24: Columbia River

This unit is located in the States of Oregon and Washington and includes Clatsop, Columbia, Multnomah, Hood River, Wasco, Sherman, Gilliam, Morrow, and Umatilla counties in Oregon and Pacific, Wahkiakum, Cowlitz, Clark, Skamania, Klickitat, Benton, Walla Walla, Franklin, Yakima, Grant, Kittitas, Chelan, Douglas, and Okanogan counties in Washington. Landownership adjacent to reaches of the Columbia River proposed for bull trout critical habitat designation are approximately 39 percent Federal and 61 percent non-Federal.

The north shore of the Columbia River between Chief Joseph Dam and the Okanogan River is within the Colville Indian Reservation. Lands along the south shore are owned by private parties and the State of Washington. Lands in the mid-Columbia hydroelectric project reach from Wells Dam to Wanapum Dam are a mixture of private and State-owned lands. Much of the State-owned land is within wildlife areas managed by the Washington Department of Fish and Wildlife. The western shore between Wanapum and Priest Rapids dams is within the Yakima Firing Center Military Reservation. The eastern shore is under private and State (wildlife area) ownership.

A 72.5 km (45 mi) reach of the Columbia River from a point about 6.4 km (4 mi) downstream of Priest Rapids Dam to the head of McNary Reservoir, about 3.2 km (2 mi) upstream from the Richland city limits, is within the Hanford Reach National Monument (Monument). The 78,914-ha (195,000-ac) Monument includes diverse riparian, riverine, and upland habitats, as well as cultural and historic resources. The Monument is under jurisdiction of both the Department of Energy (DOE) and the Service. The DOE administers 12,141 ha (30,000 ac) of the Monument, while the Service's Division of Wildlife Refuges administers 66,773 ha (165,000 ac). The Department of the Interior established a Federal Planning Advisory Committee (Committee) for the Monument in January, 2001. The Committee is presently working to provide advice to the DOE and the Service on a Monument management plan and Environmental Impact Statement. The management plan is expected to be completed by 2005.

Lands downstream to the mouth of the Columbia River are under a mix of private, State, and Federal ownership. National wildlife refuges are present at several locations along the river from the confluence with the Snake River to the Pacific Ocean. The Columbia Gorge National Scenic Area extends for 133.5 km (83.0 mi) from mouth of the Sandy River at about rkm 196.3 (rm 122.0) east to the confluence of the Deschutes River at about rkm 329.8 (rm 204.8). Management of this area is under jurisdiction of the USFS and Columbia Gorge Commission, a regional commission of local, State, and Federal interests. Management of the Columbia Gorge National Scenic Area is primarily directed toward upland areas adjacent to the Columbia River and not to aquatic habitat of the river itself.

(i) The Columbia River from the Pacific Ocean at rkm 0 (rmi 0) upstream to Chief Joseph Dam at rkm 877.0 (rmi 544.6) provides FMO habitat for tributary populations of bull trout. Critical habitat includes the free flowing reaches of the Columbia River and the reservoirs to the ordinary high water elevations and normal operating pool elevations, respectively.

(29) Unit 25: Snake River

The lower Snake River is located within the State of Washington from its mouth to the confluence with the Clearwater River at the cities of Clarkston, Washington and Lewiston, Idaho. The Snake River is within Franklin, Walla Walla, Columbia, Whitman, and Asotin counties in Washington State. The Snake River is the border between Washington and Idaho from Clarkston/Lewiston upstream to the Oregon border at rkm 223.7 (rm 139.0). The Snake River forms the boundary between Idaho and Oregon from that point upstream to the upper limit of this critical habitat unit. This portion of the proposed critical habitat reach of the Snake River is within Nez Perce, Idaho, Adams, and Washington counties in Idaho, and Wallowa, Baker, and Malheur counties in Oregon. Landownership adjacent to reaches of the Snake River proposed for bull trout critical habitat designation are approximately 50 percent Federal and 50 percent non-Federal.

The major features in Hells Canyon Hydroelectric Complex reach of the Snake River are Hells Canyon, Oxbow, and Brownlee dams and their reservoirs.

These projects are owned and operated by the Idaho Power Company to produce electrical power. Landownership in the major tributary watersheds and along the Snake River is a mixture of Federal (USFS and BLM), State (Idaho and Oregon), and private owners.

Downstream from Hells Canyon Dam to the Oregon-Washington border, the Snake River is designated Wild and Scenic. It is also within the Hells Canyon National Recreation Area (NRA) and the Hells Canyon Wilderness which are administered by the USFS. The Hells Canyon NRA includes about 264,058 ha (652,500 ac) within its boundaries. The Hells Canyon NRA was established preserve the natural beauty, and historical and archaeological values of the Hells Canyon area, and to enhance the recreational and ecologic values and public enjoyment of the area. Management of this area is not directed at protecting bull trout in the Snake River.

Almost all of the lower Snake River corridor is privately owned. The only public lands are Federal lands associated with the lower Snake River dams and reservoirs and isolated parcels owned by the State of Washington.

(i) The mainstem Snake River from the confluence with the Columbia River upstream to the head of Brownlee Reservoir at rkm 552 (rmi 343) provides FMO habitat for tributary populations of bull trout. Proposed critical habitat includes the free flowing reaches of the Snake River and the reservoirs to the ordinary high water elevations and normal operating pool elevations, respectively.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to result in the destruction or adverse modification of critical habitat. The term ''destruction or adverse modification'' is defined at 50 CFR 402.02 as meaning: ''* * * a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.'' Individuals, organizations, States, local and Tribal governments, and other non-Federal entities are affected by the designation of critical habitat only if their actions occur on Federal lands; require a Federal permit, license, or other authorization; or involve Federal funding.

Section 7(a) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened, and with respect to its critical habitat, if any is proposed or designated. Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The conservation recommendations in a conference report are advisory. Regulations implementing these interagency cooperation provisions of the Act are codified at 50 CFR part 402.

We may issue a formal conference opinion, if requested by a Federal agency. Formal conference reports include an opinion that is prepared according to 50 CFR 402.14, as if the species was listed or critical habitat designated. We may adopt the formal conference report as the biological opinion when the species is listed or critical habitat designated, if no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)).

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with us. Through this consultation, we would ensure that the permitted actions do not destroy or adversely modify critical habitat.

When we issue a biological opinion concluding that a project is likely to result in the destruction or adverse modification of critical habitat, we also provide ''reasonable and prudent alternatives'' to the project, if any are identifiable. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid resulting in the destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions under certain circumstances, including instances where critical habitat is subsequently designated, and the Federal agency has retained discretionary involvement, or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation or conferencing with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat or adversely modify or destroy proposed critical habitat.

Activities on Federal lands that may affect the bull trout or its critical habitat will require consultation under section 7 of the Act. Activities on private, State, county, or lands under local jurisdictions requiring a permit from a Federal agency, such as a permit from the Corps under section 404 of the Clean Water Act, or some other Federal action, including funding (*e.g.*, Federal Highway Administration (FHA), Federal Aviation Administration (FAA), or Federal Emergency Management Agency (FEMA)), will continue to be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat, and actions on non-Federal lands that are not Federally funded or permitted, do not require section 7 consultation.

To properly portray the effects of critical habitat designation, we must first compare the requirements pursuant to section 7 of the Act for actions that may affect critical habitat with the requirements for actions that may affect a listed species. Section 7 of the Act prohibits actions funded, authorized, or carried out by Federal agencies from jeopardizing the continued existence of a listed species or destroying or adversely modifying the listed species' critical habitat. Actions likely to ''jeopardize the continued existence'' of a species are those that would appreciably reduce the likelihood of the species' survival and recovery. Actions likely to ''destroy or adversely modify'' critical habitat are those that would appreciably reduce the value of critical habitat for the survival and recovery of the listed species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any

proposed or final regulation that designates critical habitat, those activities involving a Federal action that may adversely modify such habitat, or that may be affected by such designation. Activities that may destroy or adversely modify critical habitat include those that appreciably reduce the value of critical habitat for the conservation of the bull trout. Within critical habitat, this pertains only to those areas containing the primary constituent elements. We note that such activities may also jeopardize the continued existence of the species.

A number of Federal activities have the potential to destroy or adversely modify critical habitat for the bull trout. These activities may include land and water management actions of Federal agencies (*e.g.*, Corps, BOR, USFS, BLM, Natural Resources Conservation Service, and Bureau of Indian Affairs) and related or similar actions of other Federally regulated projects (*e.g.*, road and bridge construction activities by the FHA; dredge and fill projects, sand and gravel mining, and bank stabilization activities conducted or authorized by the Corps; and, National Pollutant Discharge Elimination System permits authorized by the Environmental Protection Agency (EPA)).

Specifically, activities that may destroy or adversely modify critical habitat are those that alter the primary constituent elements to an extent that the value of critical habitat for both the survival and recovery of the bull trout is appreciably reduced. Activities that, when carried out, funded, or authorized by a Federal agency, may destroy or adversely modify critical habitat for bull trout include, but are not limited to:

(1) Significant and detrimental altering of the minimum flow or the natural flow regime of any of the proposed stream segments. Possible actions would include groundwater pumping, impoundment, water diversion, and hydropower generation. We note that such flow alterations resulting from actions affecting tributaries of the proposed stream reaches may also destroy or adversely modify critical habitat;

(2) Alterations to the proposed stream segments that could indirectly cause significant and detrimental effects to bull trout habitat. Possible actions include vegetation manipulation, timber harvest, road construction and maintenance, prescribed fire, livestock grazing, off-road vehicle use, powerline or pipeline construction and repair, mining, and urban and suburban development. Riparian vegetation profoundly influences instream habitat conditions by providing shade, organic matter, root strength, bank stability, and large woody debris inputs to streams. These characteristics influence water temperature, structure and physical attributes (useable habitat space, depth, width, channel roughness, cover complexity), and food supply (Gregory *et al.* 1991; Sullivan *et al.* in Naiman *et al.* 2000). The importance of riparian vegetation and channel bank condition for providing rearing habitat for salmonids in general is well documented (*e.g.*, Bossu 1954 and Hunt 1969, cited in Beschta and Platts 1987; MBTSG 1998);

(3) Significant and detrimental altering of the channel morphology of any of the proposed stream segments. Possible actions would include channelization, impoundment, road and bridge construction, deprivation of substrate source, destruction and alteration of aquatic or riparian vegetation, reduction of available floodplain, removal of gravel or floodplain terrace materials, excessive sedimentation from mining, livestock grazing, road construction, timber harvest, off-road vehicle use, and other watershed and floodplain disturbances. We note that such actions in the upper watershed (beyond the riparian area) may also destroy or adversely modify critical habitat. For example, timber harvest activities and associated road construction in upland areas can lead to changes in channel morphology by altering sediment production, debris loading, and peak flows;

(4) Significant and detrimental alterations to the water chemistry in any of the proposed stream segments. Possible actions would include release of chemical or biological pollutants into the surface water or connected groundwater at a point source or by dispersed release (non-point);

(5) Activities that are likely to result in the introduction, spread, or augmentation of nonnative aquatic species in any of the proposed stream segments. Possible actions would include fish stocking for sport, aesthetics, biological control, or other purposes; use of live bait fish; aquaculture; construction and operation of canals; and interbasin water transfers; and

(6) Activities that are likely to create significant instream barriers to bull trout movement. Possible actions would include water diversions, impoundments, and hydropower generation where effective fish passage facilities are not provided.

If you have questions regarding whether specific activities will likely constitute destruction or adverse modification of critical habitat, contact the Field Supervisor of the nearest Fish and Wildlife Ecological Services Office. Requests for copies of the regulations on listed wildlife, and inquiries about prohibitions and permits may be addressed to the Division of Endangered Species, U.S. Fish and Wildlife Service, 911 NE 11th Avenue, Portland, OR 97232–4181 (telephone 503/231–6158; facsimile 503/231–6243).

Relationship to Habitat Conservation Plans and Other Planning Efforts

Section 3(5)(A) of the Act defines critical habitat, in part, as those areas requiring special management considerations or protection. Section 10(a)(1)(B) of the Act authorizes us to issue permits for the take of listed species incidental to otherwise lawful activities. This permit allows a non-Federal landowner to proceed with an activity that is legal in all other respects, but that results in the incidental taking of a listed species. An incidental take permit application must be supported by an HCP that identifies conservation measures that the permittee agrees to implement for the species to minimize and mitigate the impacts of the permitted incidental take. The purpose of the HCP is to describe and ensure that the effects of the permitted action on covered species are adequately minimized and mitigated, and that the action does not appreciably reduce the survival and recovery of the species.

No approved HCPs include bull trout as a covered species within the range of the Klamath River population segment. Within the range of the Columbia River population segment, there are three: the Plum Creek Native Fish HCP, the Plum Creek I–90 HCP, and the WDNR HCP. Based on our evaluation of the these HCPs we have concluded, pursuant to section 3(5)(A) of the Act, that areas within these HCPs do not require additional special management considerations or protection, and consequently we have not included areas within them as proposed critical habitat. (See the Managed Lands section, above, for a discussion of the factors considered).

In the event that future HCPs covering the bull trout are developed within the boundaries of designated critical habitat, we will work with applicants to ensure that the HCPs provide for protection and management of habitat areas essential for the conservation of the bull trout by either directing development and habitat modification to nonessential areas, or appropriately modifying activities within essential habitat areas so that such activities will not adversely modify the primary constituent elements. The HCP

development process provides an opportunity for more intensive data collection and analysis regarding the use of particular habitat areas by bull trout. The process also enables us to conduct detailed evaluations of the importance of such lands to the long-term survival of the species in the context of constructing a biologically configured system of interlinked habitat areas.

We will provide technical assistance and work closely with applicants throughout the development of future HCPs to identify lands essential for the long-term conservation of bull trout and appropriate management for those lands. The take minimization and compensation measures provided under these HCPs are expected to protect the essential habitat lands proposed as critical habitat in this rule. Furthermore, we will complete intra-Service consultation on our issuances of section 10(a)(1)(B) permits for these HCPs to ensure permit issuance will not destroy or adversely modify critical habitat. If an HCP that addresses the bull trout as a covered species is ultimately approved, we may reassess the critical habitat boundaries in light of the HCP.

Economic Analysis

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial information available, and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species.

We will conduct an analysis of the economic impacts of designating these areas as critical habitat prior to making a final determination. When completed, we will announce the availability of the draft economic analysis with a notice in the **Federal Register**, and we will open a public comment period on the draft economic analysis at that time.

Public Comments Solicited

We intend that any final action resulting from this proposal to be as accurate and effective as possible. Therefore, we solicit comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act, including any areas should be excluded under section 4(b)(2) of the Act;

(2) Specific information on the amount and distribution of bull trout habitat; what habitat is essential to the conservation of this species and why; and, in light of our use of the Draft Recovery Plan as the basis for identifying many of the areas we are proposing as critical habitat, whether the areas identified in the Draft Recovery Plan as necessary for the survival and recovery of bull trout are also essential to the conservation of the species, and therefore are appropriately included in our proposed designation of critical habitat.

(3) Land use practices and current or planned activities in the subject areas and their possible impacts on proposed critical habitat, including, but not limited to, whether areas do or do not meet the definition of critical habitat in section 3(5)(A)(i) of the Act with respect to requiring special management considerations or protection;

(4) Any foreseeable economic or other impacts resulting from the proposed designation of critical habitat, in particular, any impacts on small entities, families, and private landowners;

(5) Economic and other values associated with designating critical habitat for bull trout; and

(6) Whether our approach to critical habitat designation, including, but not limited to, our methods and criteria used to identify critical habitat, could be improved or modified in any way to ensure the use of the best available scientific information or to provide for greater public participation and understanding, or to assist us in accommodating public concern and comments.

To further a complete understanding of this proposed rule, the draft critical habitat proposal, maps, fact sheets, photographs, and other materials relating to this proposal can be found on the USFWS Pacific Region's bull trout website at *http://species.fws.gov/bulltrout.*

If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods: (1) You may submit written comments and information to John Young at the address provided in the **ADDRESSES** section above; (2) You may comment via the electronic mail (e-mail) to *R1BullTroutCH@r1.fws.gov;* and (3) You may hand-deliver comments to our Regional Office (*see* **ADDRESSES** section above). Please submit e-mail comments as an ASCII file avoiding the use of special characters and any form of encryption. Please also include ''Attn: RIN 1018–AI52'' and your name and return address in your e-mail message. If you do not receive a confirmation from the system that we have received your e-mail message, contact us directly by calling our Regional Office at telephone number 503/872–2766.

Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address, which we will honor to the extent allowable by law. In some circumstances, we would withhold from the rulemaking record a respondent's identity, as allowable by law. If you wish us to withhold your name or address, you must state this request prominently at the beginning of your comment. However, we will not consider anonymous comments. To the extent consistent with applicable law, we will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

Peer Review

In accordance with our policy published on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of such review is to ensure listing decisions are based on scientifically sound data, assumptions, and analyses. We will send these peer reviewers copies of this proposed rule immediately following publication in the **Federal Register**. We will invite these peer reviewers to comment, during the public comment period, on the specific assumptions and conclusions regarding the proposed designation of critical habitat.

We will consider all comments and information received during the public comment period on this proposed rule during preparation of a final rulemaking. Accordingly, the final decision may differ from this proposal.

Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. Requests for public hearings must be made at least 15 days prior to the close of the public comment period.

Given the large geographic extent covered by this proposal, we already have scheduled nine public hearings.

Public hearings will be held at:

1. Wenatchee, WA, on January 7, 2003, at the West Coast Wentachee Center Hotel, 201 North Wenatchee Avenue;
2. Polson, MT, on January 7, 2003, at the KwaTaqNuq Resort, 303 U.S. Highway 93;
3. Salmon, ID, on January 7, 2003, at the Salmon Valley Center Meeting Room, 200 Main Street;
4. Spokane, WA, on January 9, 2003, at the West Coast Grand Hotel, 303 West North River Drive;
5. Lewiston, ID, on January 9, 2003, at the Red Lion Hotel, 621 21st Street;
6. Boise, ID, on January 14, 2003, at the AmeriTel Inn/Boise Spectrum, 7499 West Overland Road;
7. Eugene, OR, on January 14, 2003, at the Hilton Eugene and Conference Center, 66 East Sixth Avenue;
8. Pendleton, OR, on January 16, 2003, at the Red Lion Hotel, 304 S.E. Nye Avenue; and
9. Klamath Falls, OR, on January 22, 2003, at the Shilo Inn, 2500 Almond Street.

All of these public hearings will be held from 6 p.m. to 8 p.m., and the Service will be available from 1 to 3 p.m. prior to each hearing to provide information and to answer questions.

Persons needing reasonable accommodations in order to attend and participate in a public hearing should contact John Young at the address or phone number provided in the **ADDRESSES** section above, as soon as possible. In order to allow sufficient time to process requests, please call no later than 1 week before the hearing.

Clarity of the Rule

Executive Order 12866 requires each agency to write regulations that are easy to understand. We invite your comments on how to make this rule easier to understand including answers to questions such as the following: (1) Are the requirements in the rule clearly stated? (2) Does the rule contain technical language or jargon that interferes with the clarity? (3) Does the format of the rule (grouping and order of sections, use of headings, paragraphing, etc.) aid or reduce its clarity? (4) Is the description of the rule in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the rule? What else could we do to make the rule easier to understand?

Send a copy of any comments that concern how we could make this rule easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, NW., Washington, DC 20240. You may e-mail your comments to this address: *Exsec@ios.doi.gov*

Required Determinations

Section 4(b)(2) of the Act requires us to designate critical habitat ''* * * on the basis of the best scientific data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat.'' Following the publication of this proposed critical habitat designation, we will prepare a draft economic analysis to estimate the potential economic effect of the proposed designation. This draft analysis will be made available for public review and comments on it will be accepted. The preparation of this draft economic analysis and the comments we receive about it will assist us in further reviewing the required determinations listed below. We specifically request that the public review and provide comments on each of these required determinations. (*See* Public Comments Solicited section.)

Regulatory Planning and Review

In accordance with Executive Order 12866, this document is a significant rule and was reviewed by the Office of Management and Budget (OMB). As explained above, we are preparing a draft economic analysis of this proposed action. We will use this analysis to meet the requirement of section 4(b)(2) of the Act to determine the economic consequences of designating the specific areas as critical habitat. We also will use it to help determine whether to exclude any area from critical habitat, as provided for under section 4(b)(2), if we determine that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless we determine, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species. This analysis will be available for public comment before finalizing this designation. The availability of the draft economic analysis will be announced in the **Federal Register** and in local newspapers.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

This discussion is based upon the information regarding potential economic impact that is available to us at this time. Due to legally binding dates for publication of this proposed rule, it has not been possible to conduct an economic assessment of the proposed designation of critical habitat to use as a basis for making this required evaluation under the Regulatory Flexibility Act. This assessment of economic effect is subject to modification prior to final rulemaking based upon development and review of the economic analysis being prepared pursuant to section 4(b)(2) of the Endangered Species Act and Executive Order 12866. The assessment presented here is for the purposes of compliance with the Regulatory Flexibility Act and does not reflect our position on the type of economic analysis required by *New Mexico Cattle Growers Assn.* v. *U.S. Fish & Wildlife Service*, 248 F.3d 1277 (10th Cir. 2001).

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare, and make available for public comment, a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the Regulatory Flexibility Act (RFA) to require Federal agencies to provide a statement of the factual basis for certifying that the rule will not have a significant economic effect on a substantial number of small entities. SBREFA also amended the RFA to require a certification statement. Based on current information, the Service is certifying that this proposed rule will not have a significant effect on a substantial number of small entities. The following discussion explains our rationale.

We must determine whether the proposed rulemaking will affect a substantial number of small entities. According to the Small Business Administration, small entities include small organizations, such as independent non-profit organizations, and small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents, as well as small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail

and service businesses with less than $5 million in annual sales, general and heavy construction businesses with less than $27.5 million in annual business, special trade contractors doing less than $11.5 million in annual business, and agricultural businesses with annual sales less than $750,000.

In determining whether this rule could ''significantly affect a substantial number of small entities'', we consider whether critical habitat could potentially affect a ''substantial number'' of small entities in counties supporting critical habitat areas. While SBREFA does not explicitly define ''substantial number,'' the Small Business Administration, as well as other Federal agencies, have interpreted this to represent an impact on 20 percent or greater of the number of small entities in any industry. In estimating the numbers of small entities potentially affected, we also considered whether their activities have any Federal involvement. Designation of critical habitat is accompanied by legal requirements under the Act only for activities authorized, funded, or carried out by Federal agencies. We note that approximately forty-five percent of the proposed critical habitat for the Klamath River DPS, and approximately forty-two percent of the proposed critical habitat for the Columbia River DPS, is on non-Federal lands. Some activities on these non-Federal lands will not have any Federal involvement and so will not be affected by critical habitat designation. However, there may be indirect effects from the designation. If such effects are identified in the economic analysis or public comments on the proposed determination, we will revisit this conclusion.

In areas occupied by bull trout, Federal agencies funding, permitting, or implementing activities are already required, through consultation with us under section 7 of the Act, to avoid jeopardizing the continued existence of bull trout. If this critical habitat designation is finalized, section 7 further requires Federal agencies to ensure, also through consultation with us, that their activities are not likely to result in the destruction or adverse modification of designated critical habitat. However, in areas where bull trout are present, we do not believe this will result in any additional regulatory burden on Federal agencies or their applicants beyond the duty to avoid jeopardizing the species, because, although adverse modification and jeopardy are two different standards, the substantive outcome of a consultation under each is commonly the same.

Where bull trout are not present, designation of critical habitat could trigger additional review of Federal activities under section 7 of the Act. However, outside the existing developed areas, land use on the majority of the proposed critical habitat is agricultural, such as livestock grazing and farming. Should a Federally funded, permitted, or implemented project be proposed that may affect designated critical habitat that is not occupied by bull trout, we will work with the Federal action agency and any applicant, through section 7 consultation, to identify ways to implement the proposed project while minimizing or avoiding any adverse effect to the species or critical habitat. In our experience, the vast majority of such projects can be successfully implemented, with at most, minor changes that avoid significant economic impacts to project proponents.

Even if the duty to avoid adverse modification does not trigger additional regulatory impacts in areas where these species are present, designation of critical habitat could result in an additional economic burden on small entities due to the requirement to reinitiate consultation for ongoing Federal activities. The Columbia River and Klamath River populations of bull trout were Federally listed as threatened in June 1998. In fiscal years 1998 through 2002, we have conducted several hundred informal and approximately 108 formal section 7 consultations with other Federal agencies to ensure that their actions will not jeopardize the continued existence of the bull trout. As a result, based on the information currently available, we do not believe that the requirement to reinitiate consultation for ongoing projects with a Federal nexus, as a result of the designation of critical habitat, will not affect a substantial number of small entities. As with other aspects of this assessment, however, we will have an opportunity to confirm or, if necessary, revise this conclusion prior to the final designation of critical habitat based on the results of the economic analysis, public comments, and other information developed in response to this proposed rule.

Within the proposed critical habitat units, the types of Federal actions or authorized activities that we have identified as potential concerns are:

(1) Regulation of activities affecting waters of the United States by the Corps under section 404 of the Clean Water Act;

(2) Regulation of water flows, damming, diversion, and channelization implemented or licensed by Federal agencies;

(3) Regulation of timber harvest, grazing, mining, and recreation by the USFS and BLM;

(4) Road construction and maintenance, right-of-way designation, and regulation of agricultural activities;

(5) Hazard mitigation and post-disaster repairs funded by the FEMA; and

(6) Activities funded by the EPA, U.S. Department of Energy, or any other Federal agency.

In general, two different mechanisms in section 7 consultations could lead to additional regulatory requirements. First, if we conclude, in a biological opinion issued as part of formal consultation under section 7, that a proposed action is likely to jeopardize the continued existence of a species or adversely modify its critical habitat, we can offer ''reasonable and prudent alternatives.'' Reasonable and prudent alternatives are alternative actions that can be implemented in a manner consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid jeopardizing the continued existence of listed species or resulting in adverse modification of critical habitat. A Federal agency and an applicant may elect to implement a reasonable and prudent alternative associated with a biological opinion that has found jeopardy or adverse modification of critical habitat. An agency or applicant could alternatively choose to seek an exemption from the requirements of the Act or proceed without implementing the reasonable and prudent alternative. However, unless an exemption were obtained, the Federal agency or applicant would be at risk of violating section 7(a)(2) of the Act if it chose to proceed without implementing the reasonable and prudent alternatives.

Second, if we find that a proposed action is not likely to jeopardize the continued existence of a listed animal species, we may identify reasonable and prudent measures designed to minimize the amount or extent of take and require the Federal agency or applicant to implement such measures through non-discretionary terms and conditions. We may also identify discretionary conservation recommendations designed to minimize or avoid the adverse effects of a proposed action on listed species or critical habitat, help implement recovery plans, or to develop information that could contribute to the recovery of the species.

Based on our experience over many years with consultations pursuant to

section 7 of the Act for all listed species, virtually all projects—including those that, in their initial proposed form, would likely have resulted in jeopardy or adverse modification determinations in section 7 consultations—can be implemented successfully with, at most, the adoption of reasonable and prudent alternatives. Under the Act and its implementing regulations at 50 CFR 402.02, these measures, by definition, must be economically feasible and within the scope of authority of the Federal agency involved in the consultation. The kinds of actions that may be included if future reasonable and prudent alternatives become necessary include conservation set-asides, management of competing non-native species, restoration of degraded habitat, and regular monitoring. These are based on our understanding of the needs of the species and the threats it faces, as described in the final listing rule and this proposed critical habitat designation.

In summary, we have considered whether this proposed rule would result in a significant economic effect on a substantial number of small entities. We have preliminarily determined, for the above reasons and based on currently available information, that it is not likely to affect a substantial number of small entities. Federal involvement, and thus section 7 consultations, would be limited to a subset of the area proposed. The most likely Federal involvement could include Corps permits, permits we may issue under section 10(a)(1)(B) of the Act, FHA funding for road improvements, hydropower licenses issued by the Federal Energy Regulatory Commission, and regulation of timber harvest, grazing, mining, and recreation by the USFS and BLM.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 804(2))

In the economic analysis, we will determine whether designation of critical habitat would cause: (a) Any effect on the economy of $100 million or more, (b) any increases in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions, or (c) any significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises.

Executive Order 13211

On May 18, 2001, the President issued an Executive Order on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This proposed rule is a significant regulatory action under Executive Order 12866.

Currently available information on the potential effects of this proposal on energy supply, distribution, and use is very limited and does not provide a basis for the Service to reach a definitive conclusion regarding such effects at this time. We will conduct an analysis of the potential economic impacts of this proposed critical habitat designation, as required under section 4(b)(2) of the Act. The economic assessment will include consideration of information relevant to effects on energy supply, distribution, and use. We will make the economic analysis available for public review and comment before completing a final designation. We also expect to obtain information on this topic as a result of public comments on the proposed rule. Should such economic analysis, public comments, or other information indicate that this rule will significantly affect energy supply, distribution, and use, we will take any actions that are appropriate.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

We will use the economic analysis to evaluate consistency with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*).

Takings

We will use the economic analysis and comments received on the proposed rule to evaluate whether the proposed rule poses significant takings implications and to evaluate it for consistency with Executive Order 12630, (''Government Actions and Interference with Constitutionally Protected Private Property Rights'').

Based on that evaluation, we will take any actions that are appropriate.

Federalism

In accordance with Executive Order 13132, we have coordinated the development of the scientific basis for the proposal of critical habitat for bull trout with the appropriate State agencies. If the economic analysis, public comments, or other information relative to the evaluation of this proposed rule indicates that there would be significant federalism effects, we will take any actions that are appropriate.

Civil Justice Reform

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the proposal would not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are proposing to designate critical habitat in accordance with the provisions of the Act. The rule uses standard aquatic (stream and lake) descriptions and identifies the primary constituent elements within the designated units to assist Federal agencies and the public in understanding the habitat and conservation needs of the bull trout.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This proposed rule would not impose any new requirements for collection of information that require approval by the OMB under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). This proposed rule will not impose new recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. We may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number. This rule references permits for HCPs which contain information collection activity. The Fish and Wildlife Service has OMB approval for that collection under OMB Control Number 1018–0094.

National Environmental Policy Act

We have determined that we do not need to prepare an Environmental Assessment and/or an Environmental Impact Statement as defined by the National Environmental Policy Act of 1969 in connection with regulations adopted pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination on October 25, 1983 (48 FR 49244). This proposed designation does not constitute a major Federal action significantly affecting the quality of the human environment.

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951), Executive Order 13175, and 512 DM 2, we are coordinating with Federally recognized Tribes on a Government-to-Government basis. Further, Secretarial Order 3206, ''American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act'' (1997) provides that critical habitat should not be designated in an area that may impact Tribal trust resources unless it is determined to be essential to the conservation of a listed species. The

Secretarial Order further states that in designating critical habitat, ''the Service shall evaluate and document the extent to which the conservation needs of a listed species can be achieved by limiting the designation to other lands.''

During our development of this critical habitat proposal for the Columbia River and Klamath River populations of bull trout, we evaluated Tribal lands to determine if they are essential to the conservation of the species. We have proposed critical habitat for portions of Shitike Creek, Jefferson Creek, and the Deschutes, Warm Springs, and Metolius Rivers that are within the Warm Springs Reservation; the Klickitat River and South Fork Ahtanum Creek within the Yakama Reservation; the Umatilla River, Meacham Creek, and Squaw Creek within the Umatilla Reservation; Lake Coeur d'Alene within the Coeur d'Alene Reservation; the Pend Oreille River within the Kalispell Reservation; the Clearwater River, North Fork Clearwater River, Middle Fork Clearwater River, South Fork Clearwater River, Lolo Creek, Clear Creek, and Dworshak Reservoir within the Nez Perce Reservation; portions of Flathead Lake, the lower Flathead River, and the Jocko River watershed on the Flathead Reservation; and portions of the Jocko River watershed, Mission Creek, and Post Creek on the Confederated Salish and Kootenai Tribal Lands on the Flathead Reservation. A total of approximately 1,200 km (750 mi) of stream segments and approximately 70,081 ha (178,070 ac) of lakes and reservoirs on Tribal lands is included in our proposed designation of critical habitat.

Currently, the Yakama Nation, Coeur d'Alene, Kalispell, Nez Perce, Confederated Salish and Kootenai, and Umatilla tribes do not have resource management plans that provide protection or conservation for the bull trout and its habitat. The Confederated Salish and Kootenai Tribes have a resource management plan addressing bull trout conservation that is being applied in the Jocko River watershed. However, as a result of our meetings with the tribes on September 26, 2002, we mutually agreed to include habitat within the Jocko River watershed in this proposed rule for designating critical habitat (Notes of Government-to-Government meeting, September 26, 2002, in our administrative record files).

We met with the Confederated Tribes of the Warm Springs Reservation (CTWSR) in Oregon on August 28, 2002, to discuss the extent to which the waterways of the Reservation provide bull trout habitat that is essential to the conservation of the species, and the degree to which Tribal management of those waterways and adjacent lands adequately protects those habitats (Notes of Government-to-Government meeting, August 28, 2002, in our administrative record files). As a result of that meeting, we reviewed the existing Integrated Resource Management Plans (CTWSR IRMP I and II) to determine whether the plans provide adequately for the conservation of the species. In conducting this analysis, we considered the level of certainty that the identified management would be implemented, and whether the management measures would be effective in protecting habitat essential to bull trout conservation.

Our analysis determined that management within Warm Springs Tribal ''Conditional Use Areas'' (CUAs) provides a sufficient level of protection and certainty of implementation such that additional special management considerations or protection is not required. Therefore, on the basis of section 3(5)(A)(i) of the Act, we did not include 63 km (39 mi) of streams within the CUAs as part of our proposed designation of critical habitat. An exception to our general finding regarding CUAs was made with respect to CUAs on the Reservation's southern and southeastern boundaries, where the boundary is defined by the Metolius and Deschutes Rivers. Here, there is uncertainty as to the ability of the Tribal management plans to adequately protect the entire waterway (*i.e.*, the rivers to the bankfull elevation on either shore), because the opposite shore is not part of the Reservation and is not managed as part of a CUA. Therefore, we have included the Metolius and Deschutes Rivers, from bank to bank along the Reservation boundary, as part of our proposed designation of critical habitat. We welcome comments on this issue (*see* below).

With regard to areas outside the CUAs, we found that management regimes for the Warm Springs Reservation lands and waterways that are essential to the conservation of bull trout do require additional special management considerations or protection, and consequently have included such areas in our proposed designation of critical habitat. We recognize that the CTWSR plans have the potential to be adequate if they are further developed to include measures specific to the conservation needs of bull trout. Of particular concern are the grazing management standards in the CTWSR Integrated Resource Management Plan II. The CTWSR IRMP II is an umbrella plan that provides general guidance. To date, only two of six grazing district plans (the more detailed and landscape-specific guidance documents under the umbrella plan) are nearing completion. The Service will work closely with the CTWSR staff to analyze the ability of any current or draft Tribal management plan to protect essential bull trout habitat. Our goal in doing so will be to limit the final designation of critical habitat for bull trout within the boundaries of the Reservation to the minimum amount of aquatic habitat that is essential to the conservation of the species. We believe this approach to be consistent with our Tribal Trust responsibilities. We welcome comments on this situation (see below).

We are committed to maintaining a positive working relationship with all of the Tribes, and will work with them on developing resource management plans for Tribal lands that include conservation measures for bull trout. We were required to prepare this critical habitat proposal based on our analysis of whether habitat within these Tribal reservation lands is essential to the conservation of the species and may require special management considerations or protection. If, prior to issuing a final determination, any Tribes complete management plans that address areas on Tribal lands that are included in this proposed designation of critical habitat, we will consider excluding those areas based on the conservation measures provided for the species.

We invite comments and additional information regarding the management of bull habitat on Tribal lands within the areas encompassed by the Klamath River and Columbia River DPSs, and our proposed designation of critical habitat in relation to such lands (see Public Comments Solicited section). This includes, but is not limited to, comments as to whether the areas on Tribal lands that we have proposed for designation should be retained in, or excluded from, the final rule designating critical habitat. We specifically seek comments regarding whether we should retain or exclude, in the final designation of critical habitat, those segments of the Metolious and Deschutes Rivers along the boundary of the CTWSR, where the shores opposite the Reservation are not part of the CTWSR, and there is uncertainty about the ability of the Tribal management plans to protect the entire waterway in those areas.

References Cited

A complete list of all references cited in this proposed rule is available on

request from the U.S. Fish and Wildlife Service, Branch of Endangered Species Office, Portland, OR (see **ADDRESSES** section).

Authors

The primary authors of this proposed rule are: John Young, Regional Office, Portland, Oregon; John Stephenson, Central Oregon Office, Bend, Oregon; Mike Faler, Idaho Fishery Resource Office, Ahsahka, Idaho; Marilyn Hemker, Kendra Womack and Johnna Roy, Snake River Basin Office, Boise, Idaho; Wade Fredenberg, Creston Fish and Wildlife Center, Kalispell, Montana; Selena Werdon, Nevada State Office, Reno, Nevada; Alan Mauer, Central Oregon Office, Bend, Oregon; Kathy Barry, John Davis, and Steve Wille, Oregon State Office, Portland, Oregon; John Bowerman, Klamath Basin Office, Klamath Falls, Oregon; Ron Rhew, Columbia River Fisheries Resources Office, Vancouver, Washington; Steve Croci and Barb Kelly-Ringel, Mid-Columbia Fishery Office, Leavenworth, Washington; Scott Deeds and Bob Hallock, Upper Columbia River Basin Office, Spokane, Washington; Karolee Owens, Western Washington Office, Lacey, Washington; and Rowan Baker, Regional Office, Portland, Oregon.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.11(h) revise the entry for ''Trout, bull'' under ''FISHES'' to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*		*
FISHES							
*	*	*	*	*	*		*
Trout, bull	*Salvelinus confluentus*.	U.S.A. (AK, Pacific NW into CA, ID, NV, MT), Canada (NW Territories).	U.S.A, coterminous (lower 48 states).	T	637, 639E, 659, 670	17.95(e)	17.44(w) 17.44(x)
*	*	*	*	*	*		*

3. Amend § 17.95(e) by adding critical habitat for the bull trout (Salvelinus confluentus) in the same alphabetical order as this species occurs in § 17.11(h).

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(e) * * *

Bull Trout (Salvelinus confluentus)

(1) Critical habitat is depicted for Adams, Benewah, Blaine, Boise, Bonner, Boundary, Butte, Clearwater, Custer, Idaho, Kootenai, Lemhi, Latah, Lewis, Nez Perce, Pend Oreille, Shoshone, Valley, and Washington counties, Idaho; Flathead, Lake, Lewis and Clark, Lincoln, Mineral, Missoula, Powell, Ravalli, and Sanders counties, Montana; Baker, Columbia, Crook, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lane, Linn, Malheur, Morrow, Multnomah, Sherman, Umatilla, Union, Wallowa, Wasco, and Wheeler counties, Oregon; and Asotin, Benton, Chelan, Columbia, Clark, Cowlitz, Douglas, Garfield, Franklin, Kittitas, Klickitat, Okanogan, Pacific, Pend Oreille, Skamania, Wahkiakum, Walla Walla, Whitman, and Yakima counties, Washington, on the maps and as described below.

(2) Critical habitat includes the stream channels within the proposed stream reaches indicated on the maps below, and includes a lateral extent from the bankfull elevation on one bank to the bankfull elevation on the opposite bank. Bankfull elevation is the level at which water begins to leave the channel and move into the floodplain and is reached at a discharge that generally has a recurrence interval of 1 to 2 years on the annual flood series. If bankfull elevation is not evident on either bank, the ordinary high-water line as defined by the U.S. Army Corps of Engineers (33 CFR 329.11) shall be used to determine the lateral extent of critical habitat. The lateral extent of proposed lakes and reservoirs is defined by the perimeter of the water body as mapped on standard 1:24,000 scale topographic maps.

(3) Within these areas, the primary constituent elements for the bull trout are those habitat components that are essential for the primary biological needs of foraging, reproducing, rearing of young, dispersal, genetic exchange, or sheltering. Existing human-constructed features and structures within the critical habitat boundary, such as buildings, powerlines, roads, railroads, urban development, and other paved areas will not contain one or more of the primary constituent elements; consequently, Federal actions limited to those areas would not trigger a consultation under section 7 of the Act unless they affect the species and/or primary constituent elements in adjacent critical habitat. The primary constituent elements are:

(i) Permanent water having low levels of contaminants such that normal reproduction, growth and survival are not inhibited;

(ii) Water temperatures ranging from 2 to 15 °C (36 to 59 °F), with adequate thermal refugia available for temperatures at the upper end of this range. Specific temperatures within this range will vary depending on bull trout life-history stage and form, geography, elevation, diurnal and seasonal variation, shade, such as that provided by riparian habitat, and local groundwater influence;

(iii) Complex stream channels with features such as woody debris, side channels, pools, and undercut banks to provide a variety of depths, velocities, and instream structures;

(iv) Substrates of sufficient amount, size, and composition to ensure success of egg and embryo overwinter survival, fry emergence, and young-of-the-year and juvenile survival. A minimal amount of fine substrate less than 0.63 mm (0.25 in) in diameter and minimal substrate embeddness are characteristic of these conditions;

(v) A natural hydrograph, including peak, high, low and base flows within historic ranges or, if regulated, a hydrograph that demonstrates the ability to support bull trout populations;

(vi) Springs, seeps, groundwater sources, and subsurface water connectivity to contribute to water quality and quantity;

(vii) Migratory corridors with minimal physical, biological or chemical barriers between spawning, rearing, overwintering, and foraging habitats, including intermittent or seasonal barriers induced by high water temperatures or low flows;

(viii) An abundant food base including terrestrial organisms of riparian origin, aquatic macroinvertebrates, and forage fish; and

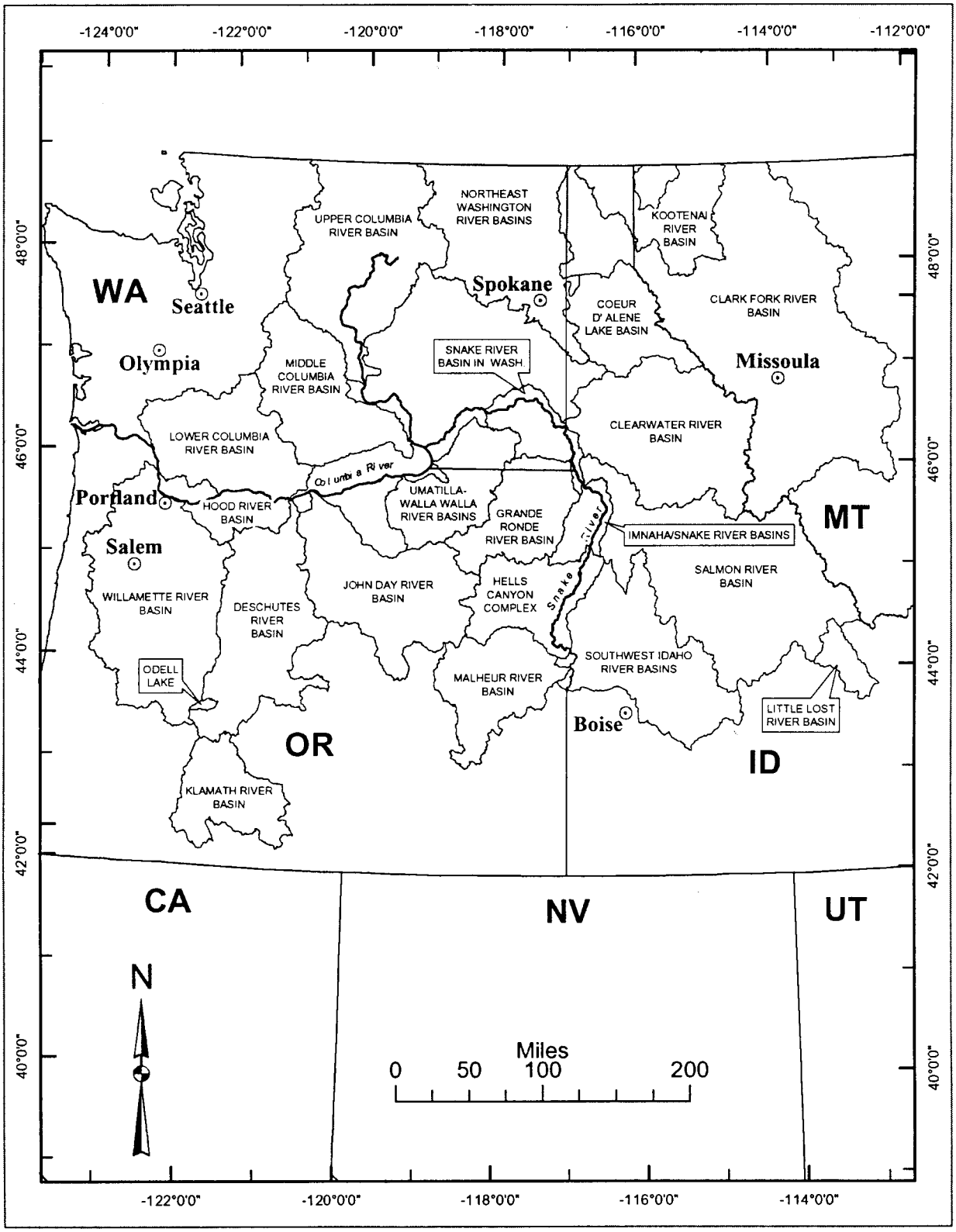
(ix) Few or no predatory, interbreeding, or competitive nonnative species present.

(4) Proposed critical habitat does not include non-Federal lands covered by an incidental take permit for the Columbia River distinct population segment of bull trout issued under section 10(a)(1)(B) of the Act on or before the date of publication of this proposed rule, as long as such permit, or a conservation easement providing comparable conservation benefits, remains legally operative on such lands.

Note: Index map follows:

BILLING CODE 4310–55–P

Index Map -- Units of Proposed Critical Habitat for the Klamath River and Columbia River Distinct Population Segments of Bull Trout



BILLING CODE 4310–55–C

(5) Unit 1—Klamath River Basin.

(i) Critical Habitat Subunit—Upper Klamath Lake.

(A) Agency Lake centered at 42.541 degrees latitude, and −121.963 degrees longitude. Crane Creek from a lower point located at 42.628 degrees latitude, and −122.068 degrees longitude to an upper point located at 42.661 degrees latitude, and −122.085 degrees longitude. Crystal Creek from a lower point located at 42.463 degrees latitude, and −122.075 degrees longitude to an upper point located at 42.575 degrees latitude, and −122.081 degrees longitude. Fourmile Creek from a lower point located at 42.539 degrees latitude, and −122.002 degrees longitude to an upper point located at 42.633 degrees latitude, and −122.076 degrees longitude. Fourmile Slough from a lower point located at 42.607 degrees latitude, and −122.046 degrees longitude to an upper point located at 42.535 degrees latitude, and −122.075 degrees longitude. Recreation Creek from a lower point located at 42.477 degrees latitude, and −122.085 degrees longitude to an upper point located at 42.506 degrees latitude, and −122.074 degrees longitude. Sevenmile Canal from a lower point located at 42.582 degrees latitude, and −121.97 degrees longitude to an upper point located at 42.646 degrees latitude, and −122.05 degrees longitude. Sevenmile Creek from a lower point located at 42.646 degrees latitude, and −122.05 degrees longitude to an upper point located at 42.69 degrees latitude, and −122.15 degrees longitude. West Canal from a lower point located at 42.531 degrees latitude, and −122.004 degrees longitude to an upper point located at 42.646 degrees latitude, and −122.05 degrees longitude.

(B) Cherry Creek from a lower point located at 42.631 degrees latitude, and −122.073 degrees longitude to an upper point located at 42.615 degrees latitude, and −122.2 degrees longitude. Rock Creek from a lower point located at 42.554 degrees latitude, and −122.079 degrees longitude to an upper point located at 42.567 degrees latitude, and −122.186 degrees longitude.

(C) Threemile Creek from a lower point located at 42.642 degrees latitude, and −122.065 degrees longitude to an upper point located at 42.64 degrees latitude, and −122.138 degrees longitude.

(D) Annie Creek from a lower point located at 42.722 degrees latitude, and −121.988 degrees longitude to an upper point located at 42.864 degrees latitude, and −122.155 degrees longitude. Crooked Creek from a lower point located at 42.599 degrees latitude, and −121.945 degrees longitude to an upper point located at 42.687 degrees latitude, and −121.964 degrees longitude. Fort Creek from a lower point located at 42.672 degrees latitude, and −121.979 degrees longitude to an upper point located at 42.695 degrees latitude, and −121.967 degrees longitude. Middle Fork Annie Creek from a lower point located at 42.838 degrees latitude, and −122.127 degrees longitude to an upper point located at 42.886 degrees latitude, and −122.123 degrees longitude. Wood River from a lower point located at 42.577 degrees latitude, and −121.94 degrees longitude to an upper point located at 42.747 degrees latitude, and −121.984 degrees longitude.

(E) Sun Creek from a lower point located at 42.735 degrees latitude, and −122.008 degrees longitude to an upper point located at 42.898 degrees latitude, and −122.096 degrees longitude.

(ii) Critical Habitat Subunit—Sycan Marsh.

(A) Sycan Marsh centered at 42.811 degrees latitude, and −121.113 degrees longitude. Sycan River from a lower point located at 42.78 degrees latitude, and −121.048 degrees longitude to an upper point located at 42.647 degrees latitude, and −120.734 degrees longitude.

(B) Calahan Creek from a lower point located at 42.838 degrees latitude, and −121.266 degrees longitude to an upper point located at 42.924 degrees latitude, and −121.291 degrees longitude. Long Creek from a lower point located at 42.826 degrees latitude, and −121.209 degrees longitude to an upper point located at 42.933 degrees latitude, and −121.338 degrees longitude.

(C) Coyote Creek from a lower point located at 42.854 degrees latitude, and −121.158 degrees longitude to an upper point located at 42.893 degrees latitude, and −121.246 degrees longitude.

(D) Boulder Creek from a lower point located at 42.66 degrees latitude, and −120.783 degrees longitude to an upper point located at 42.674 degrees latitude, and −120.761 degrees longitude. Rifle Creek from a lower point located at 42.694 degrees latitude, and −120.88 degrees longitude to an upper point located at 42.682 degrees latitude, and −120.845 degrees longitude. South Fork Sycan River from a lower point located at 42.663 degrees latitude, and −120.793 degrees longitude to an upper point located at 42.633 degrees latitude, and −120.795 degrees longitude.

(iii) Critical Habitat Subunit—Upper Sprague River.

(A) Boulder Creek from a lower point located at 42.517 degrees latitude, and −120.951 degrees longitude to an upper point located at 42.495 degrees latitude, and −120.884 degrees longitude. Dixon Creek from a lower point located at 42.518 degrees latitude, and −120.937 degrees longitude to an upper point located at 42.532 degrees latitude, and −120.923 degrees longitude. North Fork Sprague River from a lower point located at 42.497 degrees latitude, and −121.008 degrees longitude to an upper point located at 42.557 degrees latitude, and −120.839 degrees longitude. Unnamed creek—off Dixon Creek from a lower point located at 42.523 degrees latitude, and −120.93 degrees longitude to an upper point located at 42.521 degrees latitude, and −120.921 degrees longitude.

(B) Sheepy Creek from a lower point located at 42.534 degrees latitude, and −120.931 degrees longitude to an upper point located at 42.514 degrees latitude, and −120.89 degrees longitude.

(C) Gearhart Creek from a lower point located at 42.566 degrees latitude, and −120.886 degrees longitude to an upper point located at 42.51 degrees latitude, and −120.871 degrees longitude. Hole Creek from a lower point located at 42.567 degrees latitude, and −120.869 degrees longitude to an upper point located at 42.541 degrees latitude, and −120.86 degrees longitude. Nottin Creek from a lower point located at 42.57 degrees latitude, and −120.87 degrees longitude to an upper point located at 42.532 degrees latitude, and −120.85 degrees longitude. School Creek from a lower point located at 42.604 degrees latitude, and −120.846 degrees longitude to an upper point located at 42.618 degrees latitude, and −120.806 degrees longitude.

(D) Dead Cow Creek from a lower point located at 42.59 degrees latitude, and −120.835 degrees longitude to an upper point located at 42.562 degrees latitude, and −120.779 degrees longitude. Gold Creek from a lower point located at 42.59 degrees latitude, and −120.818 degrees longitude to an upper point located at 42.606 degrees latitude, and −120.794 degrees longitude.

(E) Deming Creek from a lower point located at 42.448 degrees latitude, and −120.953 degrees longitude to an upper point located at 42.486 degrees latitude, and −120.885 degrees longitude.

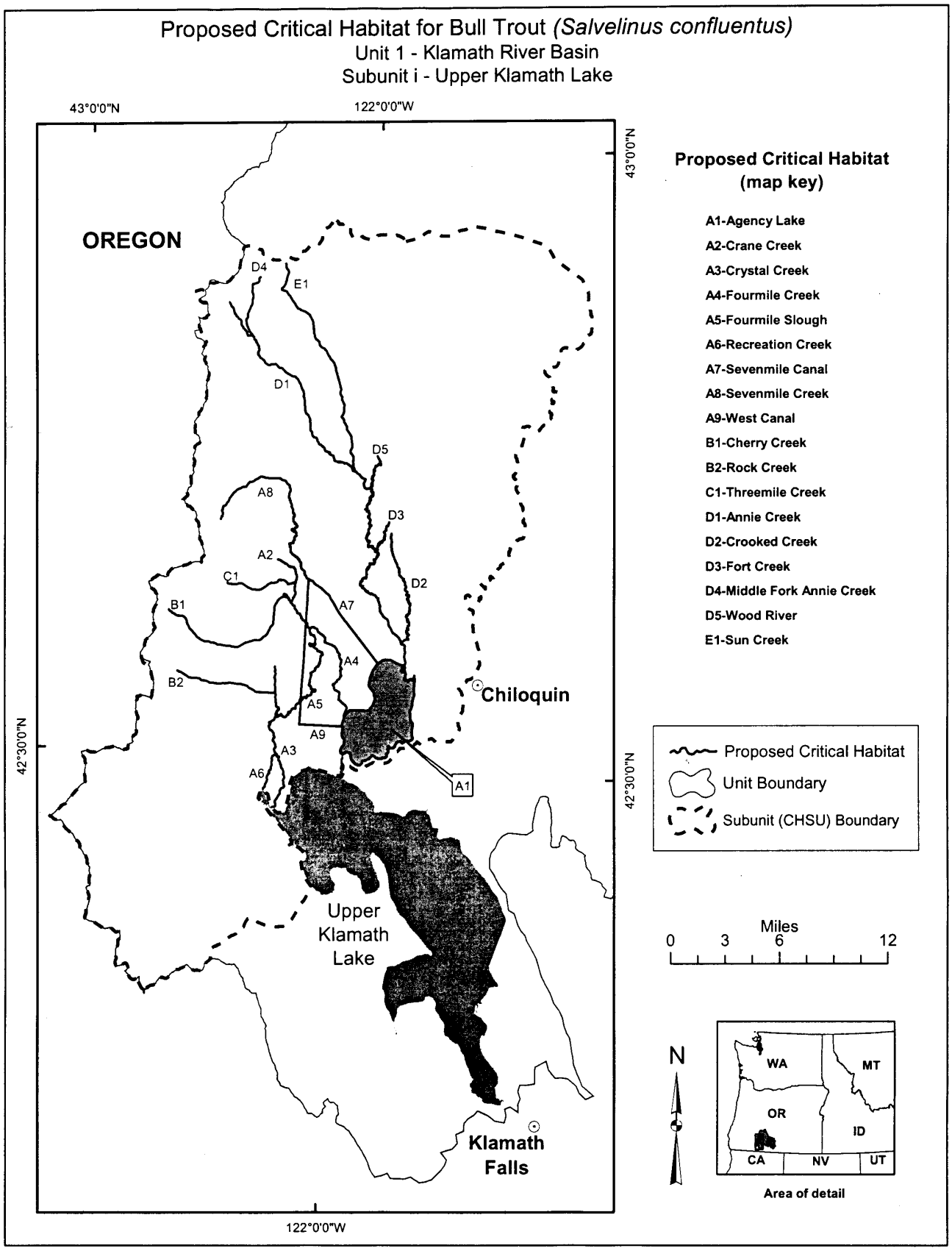
(F) Brownsworth Creek from a lower point located at 42.392 degrees latitude, and −120.913 degrees longitude to an upper point located at 42.469 degrees latitude, and −120.854 degrees longitude. Camp Creek from a lower point located at 42.445 degrees latitude, and −120.794 degrees longitude to an upper point located at 42.471 degrees latitude, and −120.837 degrees longitude. Corral Creek from a lower

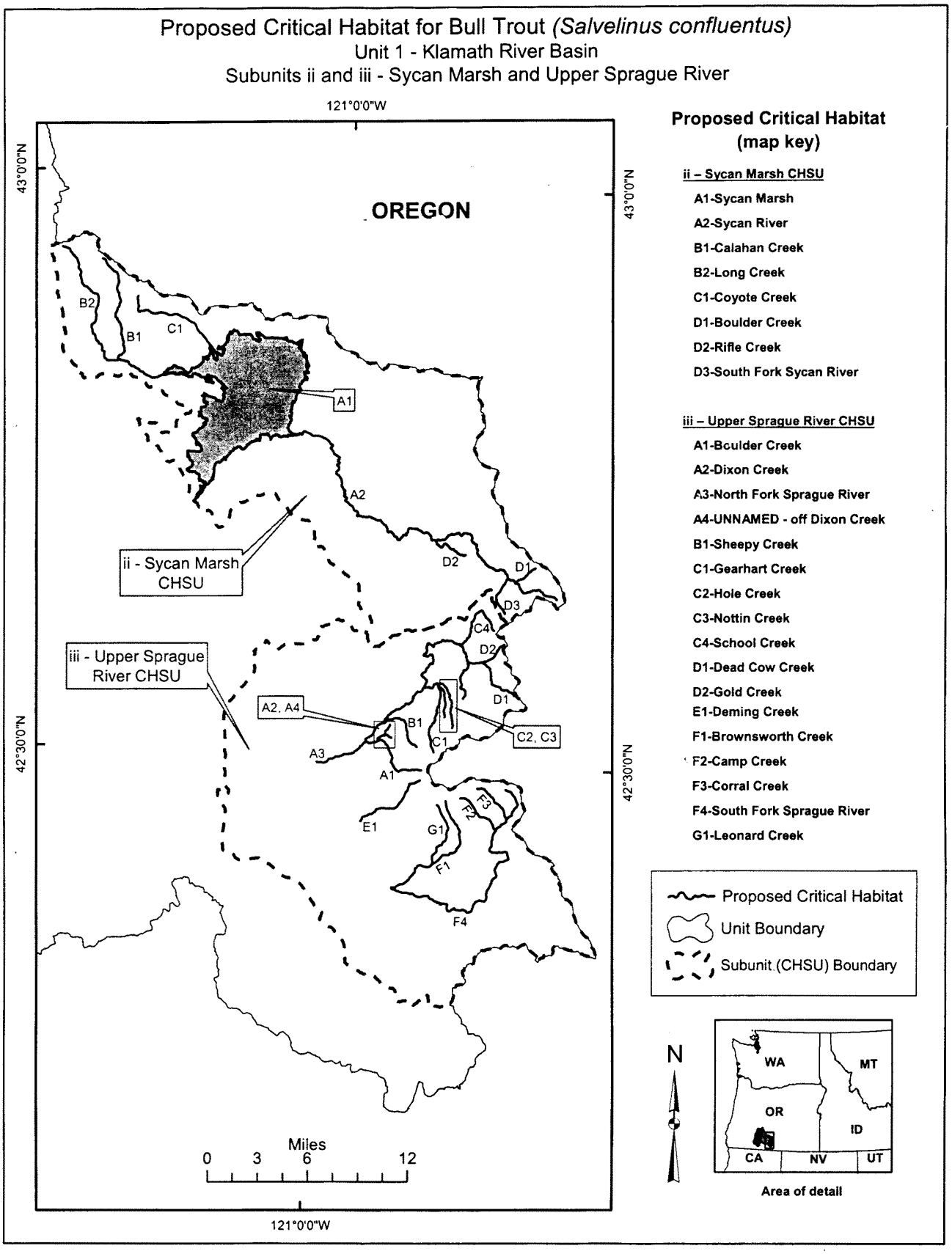
point located at 42.455 degrees latitude, and −120.782 degrees longitude to an upper point located at 42.481 degrees latitude, and −120.817 degrees longitude. South Fork Sprague River from a lower point located at 42.392 degrees latitude, and −120.913 degrees longitude to an upper point located at 42.481 degrees latitude, and −120.784 degrees longitude.

(G) Leonard Creek from a lower point located at 42.413 degrees latitude, and −120.867 degrees longitude to an upper point located at 42.465 degrees latitude, and −120.864 degrees longitude.

Note: Maps follow for Unit 1, Subunit i and Unit 1, Subunits ii and iii.

BILLING CODE 4310–55–P


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 1 - Klamath River Basin
Subunit i - Upper Klamath Lake
43°0'0"N
122°0'0"W
42°30'0"N
OREGON
D4
E1
D1
D5
A8
D3
A2
C1
D2
B1
A7
A4
B2
A5
A9
A3
A6
A1
Chiloquin
Upper Klamath Lake
Klamath Falls
Proposed Critical Habitat (map key)
A1-Agency Lake
A2-Crane Creek
A3-Crystal Creek
A4-Fourmile Creek
A5-Fourmile Slough
A6-Recreation Creek
A7-Sevenmile Canal
A8-Sevenmile Creek
A9-West Canal
B1-Cherry Creek
B2-Rock Creek
C1-Threemile Creek
D1-Annie Creek
D2-Crooked Creek
D3-Fort Creek
D4-Middle Fork Annie Creek
D5-Wood River
E1-Sun Creek
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Miles
0 3 6 12
N
WA
MT
OR
ID
CA
NV
UT
Area of detail



BILLING CODE 4310–55–C

(6) Unit 2—Clark Fork River Basin.

(i) Critical Habitat Subunit—Lake Pend Oreille.

(A) Lake Pend Oreille centered at 48.158 degrees latitude, and −116.438 degrees longitude.

(B) East River from a lower point located at 48.353 degrees latitude, and −116.852 degrees longitude to an upper point located at 48.371 degrees latitude, and −116.819 degrees longitude. Middle Fork East River from a lower point located at 48.371 degrees latitude, and −116.819 degrees longitude to an upper point located at 48.362 degrees latitude, and −116.659 degrees longitude. Priest River from a lower point located at 48.178 degrees latitude, and −116.892 degrees longitude to an upper point located at 48.353 degrees latitude, and −116.852 degrees longitude. Tarlac Creek from a lower point located at 48.393 degrees latitude, and −116.737 degrees longitude to an upper point located at 48.349 degrees latitude, and −116.717 degrees longitude. Uleda Creek from a lower point located at 48.388 degrees latitude, and −116.707 degrees longitude to an upper point located at 48.339 degrees latitude, and −116.694 degrees longitude.

(C) Pack River from a lower point located at 48.32 degrees latitude, and −116.382 degrees longitude to an upper point located at 48.613 degrees latitude, and −116.634 degrees longitude.

(D) Grouse Creek from a lower point located at 48.403 degrees latitude, and −116.477 degrees longitude to an upper point located at 48.483 degrees latitude, and −116.228 degrees longitude. North Fork Grouse Creek from a lower point located at 48.452 degrees latitude, and −116.373 degrees longitude to an upper point located at 48.502 degrees latitude, and −116.265 degrees longitude.

(E) Trestle Creek from a lower point located at 48.283 degrees latitude, and −116.352 degrees longitude to an upper point located at 48.352 degrees latitude, and −116.234 degrees longitude.

(F) Gold Creek from a lower point located at 47.971 degrees latitude, and −116.454 degrees longitude to an upper point located at 47.954 degrees latitude, and −116.451 degrees longitude. North Gold Creek from a lower point located at 47.974 degrees latitude, and −116.452 degrees longitude to an upper point located at 47.975 degrees latitude, and −116.426 degrees longitude. West Gold Creek from a lower point located at 47.954 degrees latitude, and −116.451 degrees longitude to an upper point located at 47.944 degrees latitude, and −116.477 degrees longitude.

(G) Dry Gulch from a lower point located at 48.089 degrees latitude, and −116.357 degrees longitude to an upper point located at 48.087 degrees latitude, and −116.337 degrees longitude. Granite Creek from a lower point located at 48.087 degrees latitude, and −116.427 degrees longitude to an upper point located at 48.06 degrees latitude, and −116.329 degrees longitude. Sullivan Springs from a lower point located at 48.088 degrees latitude, and −116.411 degrees longitude to an upper point located at 48.084 degrees latitude, and −116.387 degrees longitude.

(H) Johnson Creek from a lower point located at 48.139 degrees latitude, and −116.229 degrees longitude to an upper point located at 48.131 degrees latitude, and −116.225 degrees longitude.

(I) Clark Fork River from a lower point located at 48.142 degrees latitude, and −116.202 degrees longitude to an upper point located at 48.089 degrees latitude, and −116.048 degrees longitude.

(J) Char Creek from a lower point located at 48.262 degrees latitude, and −116.067 degrees longitude to an upper point located at 48.291 degrees latitude, and −116.073 degrees longitude. East Fork Creek from a lower point located at 48.241 degrees latitude, and −116.112 degrees longitude to an upper point located at 48.262 degrees latitude, and −116.039 degrees longitude. Lightning Creek from a lower point located at 48.14 degrees latitude, and −116.191 degrees longitude to an upper point located at 48.353 degrees latitude, and −116.175 degrees longitude. Morris Creek from a lower point located at 48.224 degrees latitude, and −116.117 degrees longitude to an upper point located at 48.208 degrees latitude, and −116.08 degrees longitude. Porcupine Creek from a lower point located at 48.267 degrees latitude, and −116.123 degrees longitude to an upper point located at 48.253 degrees latitude, and −116.156 degrees longitude. Rattle Creek from a lower point located at 48.326 degrees latitude, and −116.172 degrees longitude to an upper point located at 48.314 degrees latitude, and −116.1 degrees longitude. Savage Creek from a lower point located at 48.248 degrees latitude, and −116.096 degrees longitude to an upper point located at 48.226 degrees latitude, and −116.028 degrees longitude. Wellington Creek from a lower point located at 48.29 degrees latitude, and −116.162 degrees longitude to an upper point located at 48.295 degrees latitude, and −116.173 degrees longitude.

(K) Dry Creek from a lower point located at 48.094 degrees latitude, and −116.129 degrees longitude to an upper point located at 48.089 degrees latitude, and −116.122 degrees longitude. Twin Creek from a lower point located at 48.089 degrees latitude, and −116.122 degrees longitude to an upper point located at 48.063 degrees latitude, and −116.151 degrees longitude.

(ii) Critical Habitat Subunit—Lower Clark Fork River.

(A) Cabinet Gorge Reservoir centered at 48.036 degrees latitude, and −115.872 degrees longitude.

(B) Bull River from a lower point located at 48.036 degrees latitude, and −115.844 degrees longitude to an upper point located at 48.109 degrees latitude, and −115.782 degrees longitude. Copper Creek from a lower point located at 48.088 degrees latitude, and −115.773 degrees longitude to an upper point located at 48.078 degrees latitude, and −115.685 degrees longitude. East Fork Bull River from a lower point located at 48.109 degrees latitude, and −115.782 degrees longitude to an upper point located at 48.091 degrees latitude, and −115.645 degrees longitude. South Fork Bull River from a lower point located at 48.109 degrees latitude, and −115.782 degrees longitude to an upper point located at 48.152 degrees latitude, and −115.784 degrees longitude.

(C) Rock Creek from a lower point located at 47.975 degrees latitude, and −115.742 degrees longitude to an upper point located at 48.04 degrees latitude, and −115,676 degrees longitude.

(D) Noxon Rapids Reservoir centered at 47.892 degrees latitude, and −115.705 degrees longitude.

(E) Crow Creek from a lower point located at 47.539 degrees latitude, and −115.557 degrees longitude. Crow Creek, East Fork, from a lower point located at 47.525 degrees latitude, and −115.557 degrees longitude to an upper point located at 47.48 degrees latitude, and −115.542 degrees longitude. Graves Creek from a lower point located at 47.682 degrees latitude, and −115.409 degrees longitude to an upper point located at 47.718 degrees latitude, and −115.38 degrees longitude. Prospect Creek from a lower point located at 47.592 degrees latitude, and −115.358 degrees longitude to an upper point located at 47.569 degrees latitude, and −115.676 degrees longitude. Vermilion River from a lower point located at 47.833 degrees latitude, and −115.535 degrees longitude to an upper point located at 47.869 degrees latitude, and −115.409 degrees longitude.

(F) Clark Fork River from a lower point located at 47.813 degrees latitude, and −115.53 degrees longitude to an upper point located at 47.366 degrees latitude, and −114.776 degrees longitude.

(G) Beatrice Creek from a lower point located at 47.794 degrees latitude, and −115.102 degrees longitude to an upper

point located at 47.765 degrees latitude, and −115.201 degrees longitude. Fishtrap Creek from a lower point located at 47.713 degrees latitude, and −115.058 degrees longitude to an upper point located at 47.817 degrees latitude, and −115.144 degrees longitude. Fishtrap Creek, West Fork from a lower point located at 47.817 degrees latitude, and −115.144 degrees longitude to an upper point located at 47.769 degrees latitude, and −115.243 degrees longitude. Thompson River from a lower point located at 47.576 degrees latitude, and −115.24 degrees longitude to an upper point located at 47.713 degrees latitude, and −115.058 degrees longitude. Thompson River, West Fork, from a lower point located at 47.65 degrees latitude, and −115.173 degrees longitude to an upper point located at 47.708 degrees latitude, and −115.208 degrees longitude.

(H) Flathead River from a lower point located at 47.366 degrees latitude, and −114.776 degrees longitude to an upper point located at 47.354 degrees latitude, and −114.285 degrees longitude.

(I) Jocko River from a lower point located at 47.322 degrees latitude, and −114.304 degrees longitude to an upper point located at 47.201 degrees latitude, and −113.924 degrees longitude. Jocko River, Middle Fork, from a lower point located at 47.201 degrees latitude, and −113.924 degrees longitude to an upper point located at 47.203 degrees latitude, and −113.761 degrees longitude. Jocko River, North Fork, from a lower point located at 47.201 degrees latitude, and −113.924 degrees longitude to an upper point located at 47.226 degrees latitude, and −113.816 degrees longitude. Jocko River, South Fork, from a lower point located at 47.195 degrees latitude, and −113.852 degrees longitude to an upper point located at 47.104 degrees latitude, and −113.766 degrees longitude.

(J) Dry Creek from a lower point located at 47.305 degrees latitude, and −114.064 degrees longitude to an upper point located at 47.259 degrees latitude, and −113.903 degrees longitude. McDonald Lake centered at 47.421 degrees latitude, and −113.977 degrees longitude. Mission Creek from a lower point located at 47.354 degrees latitude, and −114.285 degrees longitude to an upper point located at 47.32 degrees latitude, and −113.988 degrees longitude. Mission Reservoir centered at 47.319 degrees latitude, and −114.007 degrees longitude. Post Creek from a lower point located at 47.36 degrees latitude, and −114.168 degrees longitude to an upper point located at 47.41 degrees latitude, and −113.935 degrees longitude. Saint Mary's Lake centered at 47.261 degrees latitude, and −113.922 degrees longitude.

(iii) Critical Habitat Subunit—Middle Clark Fork River.

(A) Clark Fork River from a lower point located at 47.366 degrees latitude, and −114.776 degrees longitude to an upper point located at 46.87 degrees latitude, and −113.889 degrees longitude.

(B) Big Creek from a lower point located at 47.378 degrees latitude, and −115.384 degrees longitude to an upper point located at 47.364 degrees latitude, and −115.444 degrees longitude. Big Creek, East Fork, from a lower point located at 47.362 degrees latitude, and −115.429 degrees longitude to an upper point located at 47.284 degrees latitude, and −115.455 degrees longitude. Big Creek, Middle Fork, from a lower point located at 47.364 degrees latitude, and −115.444 degrees longitude to an upper point located at 47.312 degrees latitude, and −115.492 degrees longitude. Big Creek, West Fork from a lower point located at 47.364 degrees latitude, and −115.444 degrees longitude to an upper point located at 47.35 degrees latitude, and −115.544 degrees longitude. Deer Creek from a lower point located at 47.377 degrees latitude, and −115.359 degrees longitude to an upper point located at 47.326 degrees latitude, and −115.389 degrees longitude. Little Joe Creek from a lower point located at 47.297 degrees latitude, and −115.12 degrees longitude to an upper point located at 47.27 degrees latitude, and −115.14 degrees longitude. Little Joe Creek, North Fork from a lower point located at 47.27 degrees latitude, and −115.14 degrees longitude to an upper point located at 47.186 degrees latitude, and −115.285 degrees longitude. Little Joe Creek, South Fork from a lower point located at 47.27 degrees latitude, and −115.14 degrees longitude to an upper point located at 47.154 degrees latitude, and −115.234 degrees longitude. St. Regis River from a lower point located at 47.297 degrees latitude, and −115.089 degrees longitude to an upper point located at 47.427 degrees latitude, and −115.741 degrees longitude. Twelvemile Creek from a lower point located at 47.35 degrees latitude, and −115.291 degrees longitude to an upper point located at 47.465 degrees latitude, and −115.324 degrees longitude. Ward Creek from a lower point located at 47.312 degrees latitude, and −115.233 degrees longitude to an upper point located at 47.274 degrees latitude, and −115.364 degrees longitude.

(C) Cedar Creek from a lower point located at 47.178 degrees latitude, and −114.862 degrees longitude to an upper point located at 47.049 degrees latitude, and −115.043 degrees longitude. Lost Creek from a lower point located at 47.128 degrees latitude, and −115.012 degrees longitude to an upper point located at 47.101 degrees latitude, and −115.126 degrees longitude. Oregon Gulch from a lower point located at 47.144 degrees latitude, and −114.967 degrees longitude to an upper point located at 47.128 degrees latitude, and −115.012 degrees longitude.

(D) Trout Creek from a lower point located at 47.143 degrees latitude, and −114.829 degrees longitude to an upper point located at 47.004 degrees latitude, and −114.992 degrees longitude.

(E) Cache Creek from a lower point located at 46.814 degrees latitude, and −114.639 degrees longitude to an upper point located at 46.726 degrees latitude, and −114.758 degrees longitude. Fish Creek from a lower point located at 47.004 degrees latitude, and −114.699 degrees longitude to an upper point located at 46.927 degrees latitude, and −114.696 degrees longitude. Fish Creek, North Fork, from a lower point located at 46.907 degrees latitude, and −114.805 degrees longitude to an upper point located at 46.929 degrees latitude, and −114.944 degrees longitude. Fish Creek, South Fork, from a lower point located at 46.927 degrees latitude, and −114.696 degrees longitude to an upper point located at 46.753 degrees latitude, and −114.571 degrees longitude. Fish Creek, West Fork, from a lower point located at 46.927 degrees latitude, and −114.696 degrees longitude to an upper point located at 46.812 degrees latitude, and −114.89 degrees longitude. Indian Creek from a lower point located at 46.855 degrees latitude, and −114.835 degrees longitude to an upper point located at 46.838 degrees latitude, and −114.834 degrees longitude. Montana Creek from a lower point located at 46.8 degrees latitude, and −114.654 degrees longitude to an upper point located at 46.808 degrees latitude, and −114.762 degrees longitude. Straight Creek from a lower point located at 46.91 degrees latitude, and −114.815 degrees longitude to an upper point located at 46.86 degrees latitude, and −114.937 degrees longitude. Surveyors Creek from a lower point located at 46.846 degrees latitude, and −114.683 degrees longitude to an upper point located at 46.823 degrees latitude, and −114.757 degrees longitude. White Creek from a lower point located at 46.797 degrees latitude, and −114.659 degrees longitude to an upper point located at 46.753 degrees latitude, and −114.614 degrees longitude.

(F) Petty Creek from a lower point located at 46.992 degrees latitude, and

−114.446 degrees longitude to an upper point located at 46.85 degrees latitude, and −114.438 degrees longitude.

(G) Rattlesnake Creek from a lower point located at 46.867 degrees latitude, and −113.985 degrees longitude to an upper point located at 47.098 degrees latitude, and −113.909 degrees longitude.

(iv) Critical Habitat Subunit—Upper Clark Fork River.

(A) Clark Fork River from a lower point located at 46.87 degrees latitude, and −113.889 degrees longitude to an upper point located at 46.21 degrees latitude, and −112.767 degrees longitude.

(B) Harvey Creek from a lower point located at 46.707 degrees latitude, and −113.372 degrees longitude to an upper point located at 46.581 degrees latitude, and −113.573 degrees longitude.

(C) Flint Creek from a lower point located at 46.654 degrees latitude, and −113.145 degrees longitude to an upper point located at 46.478 degrees latitude, and −113.237 degrees longitude.

(D) Boulder Creek from a lower point located at 46.478 degrees latitude, and −113.237 degrees longitude to an upper point located at 46.343 degrees latitude, and −113.076 degrees longitude. South Boulder Creek from a lower point located at 46.441 degrees latitude, and −113.214 degrees longitude to an upper point located at 46.33 degrees latitude, and −113.219 degrees longitude.

(E) Little Blackfoot River from a lower point located at 46.515 degrees latitude, and −112.797 degrees longitude to an upper point located at 46.341 degrees latitude, and −112.465 degrees longitude.

(F) Racetrack Creek from a lower point located at 46.285 degrees latitude, and −112.729 degrees longitude to an upper point located at 46.279 degrees latitude, and −112.949 degrees longitude.

(G) Barker Creek from a lower point located at 46.163 degrees latitude, and −113.115 degrees longitude to an upper point located at 46.1 degrees latitude, and −113.115 degrees longitude. Cable Creek from a lower point located at 46.172 degrees latitude, and −113.18 degrees longitude to an upper point located at 46.196 degrees latitude, and −113.213 degrees longitude. Foster Creek from a lower point located at 46.164 degrees latitude, and −113.12 degrees longitude to an upper point located at 46.283 degrees latitude, and −113.109 degrees longitude. Storm Lake Creek from a lower point located at 46.169 degrees latitude, and −113.153 degrees longitude to an upper point located at 46.075 degrees latitude, and −113.267 degrees longitude. Twin Lakes Creek from a lower point located at 46.169 degrees latitude, and −113.152 degrees longitude to an upper point located at 46.056 degrees latitude, and −113.226 degrees longitude. Warm Springs Creek from a lower point located at 46.21 degrees latitude, and −112.767 degrees longitude to an upper point located at 46.261 degrees latitude, and −113.137 degrees longitude.

(v) Critical Habitat Subunit—Priest Lakes and River.

(A) Cedar Creek from a lower point located at 48.88 degrees latitude, and −116.959 degrees longitude to an upper point located at 48.909 degrees latitude, and −116.885 degrees longitude. Lime Creek from a lower point located at 48.894 degrees latitude, and −116.964 degrees longitude to an upper point located at 48.938 degrees latitude, and −116.929 degrees longitude. Rock Creek from a lower point located at 48.906 degrees latitude, and −116.97 degrees longitude to an upper point located at 48.954 degrees latitude, and −116.945 degrees longitude. Upper Priest River from a lower point located at 48.799 degrees latitude, and −116.911 degrees longitude to an upper point located at 49 degrees latitude, and −116.936 degrees longitude.

(B) Gold Creek from a lower point located at 48.821 degrees latitude, and −116.973 degrees longitude to an upper point located at 48.807 degrees latitude, and −117.112 degrees longitude. Hughes Fork from a lower point located at 48.805 degrees latitude, and −116.923 degrees longitude to an upper point located at 48.946 degrees latitude, and −117.023 degrees longitude.

(C) Upper Priest Lake centered at 48.785 degrees latitude, and −116.888 degrees longitude.

(D) Trapper Creek from a lower point located at 48.796 degrees latitude, and −116.896 degrees longitude to an upper point located at 48.877 degrees latitude, and −116.846 degrees longitude.

(E) Priest Lake centered at 48.588 degrees latitude, and −116.864 degrees longitude. The Thorofare from a lower point located at 48.74 degrees latitude, and −116.842 degrees longitude to an upper point located at 48.766 degrees latitude, and −116.864 degrees longitude.

(F) Lion Creek from a lower point located at 48.736 degrees latitude, and −116.831 degrees longitude to an upper point located at 48.725 degrees latitude, and −116.672 degrees longitude. South Fork Lion Creek from a lower point located at 48.743 degrees latitude, and −116.797 degrees longitude to an upper point located at 48.716 degrees latitude, and −116.718 degrees longitude.

(G) Two Mouth Creek from a lower point located at 48.688 degrees latitude, and −116.836 degrees longitude to an upper point located at 48.674 degrees latitude, and −116.676 degrees longitude.

(H) Granite Creek from a lower point located at 48.639 degrees latitude, and −116.863 degrees longitude to an upper point located at 48.7 degrees latitude, and −117.029 degrees longitude. North Fork Granite Creek from a lower point located at 48.7 degrees latitude, and −117.029 degrees longitude to an upper point located at 48.77 degrees latitude, and −117.142 degrees longitude. South Fork Granite Creek from a lower point located at 48.7 degrees latitude, and −117.029 degrees longitude to an upper point located at 48.761 degrees latitude, and −117.147 degrees longitude.

(I) Indian Creek from a lower point located at 48.61 degrees latitude, and −116.836 degrees longitude to an upper point located at 48.634 degrees latitude, and −116.789 degrees longitude. North Fork Indian Creek from a lower point located at 48.634 degrees latitude, and −116.789 degrees longitude to an upper point located at 48.627 degrees latitude, and −116.691 degrees longitude. South Fork Indian Creek from a lower point located at 48.634 degrees latitude, and −116.789 degrees longitude to an upper point located at 48.624 degrees latitude, and −116.716 degrees longitude.

(J) Kalispell Creek from a lower point located at 48.567 degrees latitude, and −116.921 degrees longitude to an upper point located at 48.626 degrees latitude, and −117.134 degrees longitude.

(K) Soldier Creek from a lower point located at 48.503 degrees latitude, and −116.838 degrees longitude to an upper point located at 48.547 degrees latitude, and −116.698 degrees longitude.

(vi) Critical Habitat Subunit—Flathead Lake, Flathead River and 20 Headwater lakes.

(A) Flathead Lake centered at 47.886 degrees latitude, and −114.133 degrees longitude.

(B) Flathead River from a lower point located at 48.061 degrees latitude, and −114.127 degrees longitude to an upper point located at 48.468 degrees latitude, and −114.069 degrees longitude. Flathead River, Middle Fork from a lower point located at 48.468 degrees latitude, and −114.069 degrees longitude to an upper point located at 47.996 degrees latitude, and −113.057 degrees longitude. Flathead River, North Fork from a lower point located at 48.468 degrees latitude, and −114.069 degrees longitude to an upper point located at 49 degrees latitude, and −114.474 degrees longitude.

(C) Nyack Creek from a lower point located at 48.452 degrees latitude, and −113.796 degrees longitude to an upper point located at 48.489 degrees latitude, and −113.7 degrees longitude.

(D) Park Creek from a lower point located at 48.31 degrees latitude, and −113.613 degrees longitude to an upper point located at 48.369 degrees latitude, and −113.49 degrees longitude.

(E) Ole Creek from a lower point located at 48.283 degrees latitude, and −113.598 degrees longitude to an upper point located at 48.315 degrees latitude, and −113.463 degrees longitude.

(F) Bear Creek from a lower point located at 48.234 degrees latitude, and −113.566 degrees longitude to an upper point located at 48.296 degrees latitude, and −113.384 degrees longitude.

(G) Long Creek from a lower point located at 48.157 degrees latitude, and −113.529 degrees longitude to an upper point located at 48.094 degrees latitude, and −113.496 degrees longitude.

(H) Granite Creek from a lower point located at 48.145 degrees latitude, and −113.376 degrees longitude to an upper point located at 48.226 degrees latitude, and −113.332 degrees longitude.

(I) Lodgepole Creek from a lower point located at 48.115 degrees latitude, and −113.264 degrees longitude to an upper point located at 48.123 degrees latitude, and −113.233 degrees longitude. Morrison Creek from a lower point located at 48.11 degrees latitude, and −113.31 degrees longitude to an upper point located at 48.22 degrees latitude, and −113.272 degrees longitude. Puzzle Creek from a lower point located at 48.22 degrees latitude, and −113.272 degrees longitude to an upper point located at 48.187 degrees latitude, and −113.247 degrees longitude. Whistler Creek from a lower point located at 48.123 degrees latitude, and −113.233 degrees longitude to an upper point located at 48.169 degrees latitude, and −113.226 degrees longitude.

(J) Dolly Varden Creek from a lower point located at 48.066 degrees latitude, and −113.244 degrees longitude to an upper point located at 47.995 degrees latitude, and −113.184 degrees longitude. Schafer Creek from a lower point located at 48.071 degrees latitude, and −113.25 degrees longitude to an upper point located at 48.038 degrees latitude, and −113.269 degrees longitude.

(K) Clack Creek from a lower point located at 48.012 degrees latitude, and −113.089 degrees longitude to an upper point located at 47.988 degrees latitude, and −113.104 degrees longitude.

(L) Basin Creek from a lower point located at 47.966 degrees latitude, and −112.995 degrees longitude to an upper point located at 47.935 degrees latitude, and −113.073 degrees longitude. Bowl Creek from a lower point located at 47.996 degrees latitude, and −113.057 degrees longitude to an upper point located at 47.966 degrees latitude, and −112.995 degrees longitude. Scalp Creek from a lower point located at 47.982 degrees latitude, and −113.041 degrees longitude to an upper point located at 47.957 degrees latitude, and −113.081 degrees longitude.

(M) Gateway Creek from a lower point located at 48.03 degrees latitude, and −113.021 degrees longitude to an upper point located at 48.046 degrees latitude, and −112.958 degrees longitude. Strawberry Creek from a lower point located at 47.996 degrees latitude, and −113.057 degrees longitude to an upper point located at 48.132 degrees latitude, and −113.033 degrees longitude. Strawberry Creek, East Fork, from a lower point located at 48.064 degrees latitude, and −113.03 degrees longitude to an upper point located at 48.089 degrees latitude, and −112.983 degrees longitude. Trail Creek from a lower point located at 48.014 degrees latitude, and −113.019 degrees longitude to an upper point located at 48.012 degrees latitude, and −112.946 degrees longitude.

(N) Big Creek from a lower point located at 48.604 degrees latitude, and −14.163 degrees longitude to an upper point located at 48.551 degrees latitude, and −114.335 degrees longitude. Hallowat Creek from a lower point located at 48.575 degrees latitude, and −114.316 degrees longitude to an upper point located at 48.615 degrees latitude, and −114.456 degrees longitude. Kletomus Creek from a lower point located at 48.602 degrees latitude, and −114.413 degrees longitude to an upper point located at 48.644 degrees latitude, and −114.413 degrees longitude. Skookoleel Creek from a lower point located at 48.571 degrees latitude, and −114.313 degrees longitude to an upper point located at 48.522 degrees latitude, and −114.295 degrees longitude. Werner Creek from a lower point located at 48.594 degrees latitude, and −114.364 degrees longitude to an upper point located at 48.585 degrees latitude, and −114.413 degrees longitude.

(O) Coal Creek from a lower point located at 48.69 degrees latitude, and −114.193 degrees longitude to an upper point located at 48.698 degrees latitude, and −114.494 degrees longitude. Coal Creek, South Fork from a lower point located at 48.68 degrees latitude, and −114.345 degrees longitude to an upper point located at 48.674 degrees latitude, and −114.471 degrees longitude. Cyclone Creek from a lower point located at 48.665 degrees latitude, and −114.238 degrees longitude to an upper point located at 48.712 degrees latitude, and −114.391 degrees longitude. Mathias Creek from a lower point located at 48.669 degrees latitude, and −114.422 degrees longitude to an upper point located at 48.647 degrees latitude, and −114.471 degrees longitude.

(P) Cyclone Lake centered at 48.705 degrees latitude, and −114.3 degrees longitude.

(Q) Red Meadow Creek from a lower point located at 48.805 degrees latitude, and −114.324 degrees longitude to an upper point located at 48.753 degrees latitude, and −114.565 degrees longitude.

(R) Shorty Creek from a lower point located at 48.851 degrees latitude, and −114.593 degrees longitude to an upper point located at 48.818 degrees latitude, and −114.613 degrees longitude. Shorty Creek, South Fork, from a lower point located at 48.818 degrees latitude, and −114.613 degrees longitude to an upper point located at 48.804 degrees latitude, and −114.613 degrees longitude. Whale Creek from a lower point located at 48.849 degrees latitude, and −114.352 degrees longitude to an upper point located at 48.851 degrees latitude, and −114.593 degrees longitude.

(S) Trail Creek from a lower point located at 48.924 degrees latitude, and −114.386 degrees longitude to an upper point located at 48.934 degrees latitude, and −114.534 degrees longitude.

(T) Swift Creek from a lower point located at 48.481 degrees latitude, and −114.424 degrees longitude to an upper point located at 48.654 degrees latitude, and −114.55 degrees longitude. Swift Creek, West Fork from a lower point located at 48.654 degrees latitude, and −114.55 degrees longitude to an upper point located at 48.723 degrees latitude, and −114.667 degrees longitude. Whitefish Lake centered at 48.451 degrees latitude, and −114.381 degrees longitude.

(U) Swift Creek, East Fork from a lower point located at 48.687 degrees latitude, and −114.582 degrees longitude to an upper point located at 48.756 degrees latitude, and −114.583 degrees longitude. Upper Whitefish Lake centered at 48.687 degrees latitude, and −114.578 degrees longitude.

(V) Fitzsimmons Creek from a lower point located at 48.735 degrees latitude, and −114.733 degrees longitude to an upper point located at 48.752 degrees latitude, and −114.618 degrees longitude. Stillwater River from a lower point located at 48.604 degrees latitude, and −114.655 degrees longitude to an upper point located at 48.789 degrees

latitude, and −114.685 degrees longitude. Upper Stillwater Lake centered at 48.588 degrees latitude, and −114.636 degrees longitude.

(W) Lake McDonald centered at 48.584 degrees latitude, and –113.925 degrees longitude. McDonald Creek from a lower point located at 48.632 degrees latitude, and –113.868 degrees longitude to an upper point located at 48.646 degrees latitude, and –113.847 degrees longitude.

(X) Lincoln Creek from a lower point located at 48.592 degrees latitude, and –113.766 degrees longitude to an upper point located at 48.595 degrees latitude, and –113.758 degrees longitude. Lincoln Lake centered at 48.591 degrees latitude, and –113.77 degrees longitude.

(Y) Harrison Creek from a lower point located at 48.529 degrees latitude, and –113.75 degrees longitude to an upper point located at 48.574 degrees latitude, and –113.701 degrees longitude. Harrison Lake centered at 48.516 degrees latitude, and –113.77 degrees longitude.

(Z) Lake Isabel centered at 48.422 degrees latitude, and –113.493 degrees longitude. Park Creek from a lower point located at 48.422 degrees latitude, and –113.496 degrees longitude to an upper point located at 48.421 degrees latitude, and –113.505 degrees longitude.

(AA) Arrow Lake centered at 48.706 degrees latitude, and –113.884 degrees longitude. Camas Creek from a lower point located at 48.69 degrees latitude, and –113.901 degrees longitude to an upper point located at 48.738 degrees latitude, and –113.883 degrees longitude. Trout Lake centered at 48.68 degrees latitude, and –113.909 degrees longitude.

(BB) Logging Creek from a lower point located at 48.784 degrees latitude, and –114.002 degrees longitude to an upper point located at 48.776 degrees latitude, and –114.019 degrees longitude. Logging Lake centered at 48.758 degrees latitude, and –114.074 degrees longitude.

(CC) Cerulean Lake centered at 48.872 degrees latitude, and –114.056 degrees longitude. Lower Quartz Lake centered at 48.807 degrees latitude, and –114.171 degrees longitude. Middle Quartz Lake centered at 48.822 degrees latitude, and –114.141 degrees longitude. Quartz Creek from a lower point located at 48.815 degrees latitude, and –114.165 degrees longitude to an upper point located at 48.839 degrees latitude, and –114.003 degrees longitude. Quartz Lake centered at 48.828 degrees latitude, and –114.095 degrees longitude. Rainbow Creek from a lower point located at 48.855 degrees latitude, and –114.053 degrees longitude to an upper point located at 48.869 degrees latitude, and –114.052 degrees longitude.

(DD) Bowman Creek from a lower point located at 48.906 degrees latitude, and –114.117 degrees longitude to an upper point located at 48.974 degrees latitude, and –114.063 degrees longitude. Bowman Lake centered at 48.872 degrees latitude, and –114.153 degrees longitude.

(EE) Akokala Creek from a lower point located at 48.881 degrees latitude, and –114.198 degrees longitude to an upper point located at 48.892 degrees latitude, and –114.191 degrees longitude. Akokala Lake centered at 48.879 degrees latitude, and –114.198 degrees longitude.

(FF) Kintla Creek from a lower point located at 48.975 degrees latitude, and –114.25 degrees longitude to an upper point located at 48.986 degrees latitude, and –114.063 degrees longitude. Kintla Lake centered at 48.959 degrees latitude, and –114.306 degrees longitude.

(GG) Upper Kintla Lake centered at 48.976 degrees latitude, and –114.175 degrees longitude.

(HH) Frozen Creek from a lower point located at 48.999 degrees latitude, and –114.685 degrees longitude to an upper point located at 48.99 degrees latitude, and –114.737 degrees longitude. Frozen Lake centered at 48.999 degrees latitude, and –114.68 degrees longitude.

(vii) Critical Habitat Subunit—Swan.

(A) Swan Lake centered at 47.945 degrees latitude, and –113.878 degrees longitude. Swan River from a lower point located at 47.928 degrees latitude, and –113.88 degrees longitude to an upper point located at 47.295 degrees latitude, and –113.782 degrees longitude.

(B) Lost Creek from a lower point located at 47.873 degrees latitude, and –113.824 degrees longitude to an upper point located at 47.87 degrees latitude, and –113.848 degrees longitude. Lost Creek, North Fork from a lower point located at 47.873 degrees latitude, and –113.824 degrees longitude to an upper point located at 47.897 degrees latitude, and –113.737 degrees longitude. Lost Creek, South Fork from a lower point located at 47.873 degrees latitude, and –113.824 degrees longitude to an upper point located at 47.869 degrees latitude, and –113.736 degrees longitude.

(C) Soup Creek from a lower point located at 47.837 degrees latitude, and –113.843 degrees longitude to an upper point located at 47.812 degrees latitude, and –113.751 degrees longitude.

(D) Woodward Creek from a lower point located at 47.777 degrees latitude, and –113.845 degrees longitude to an upper point located at 47.767 degrees latitude, and –113.879 degrees longitude. Woodward Creek, South Fork from a lower point located at 47.754 degrees latitude, and –113.857 degrees longitude to an upper point located at 47.717 degrees latitude, and –113.857 degrees longitude.

(E) Goat Creek from a lower point located at 47.749 degrees latitude, and –113.828 degrees longitude to an upper point located at 47.773 degrees latitude, and –113.694 degrees longitude. Squeezer Creek from a lower point located at 47.75 degrees latitude, and –113.815 degrees longitude to an upper point located at 47.717 degrees latitude, and –113.727 degrees longitude.

(F) Lion Creek from a lower point located at 47.681 degrees latitude, and –113.815 degrees longitude to an upper point located at 47.67 degrees latitude, and –113.71 degrees longitude.

(G) Piper Creek from a lower point located at 47.675 degrees latitude, and –113.815 degrees longitude to an upper point located at 47.637 degrees latitude, and –113.844 degrees longitude.

(H) Jim Creek from a lower point located at 47.648 degrees latitude, and –113.792 degrees longitude to an upper point located at 47.575 degrees latitude, and –113.856 degrees longitude.

(I) Cold Creek from a lower point located at 47.584 degrees latitude, and –113.756 degrees longitude to an upper point located at 47.562 degrees latitude, and –113.81 degrees longitude.

(J) Elk Creek from a lower point located at 47.544 degrees latitude, and –113.741 degrees longitude to an upper point located at 47.48 degrees latitude, and –113.856 degrees longitude.

(K) Crystal Creek from a lower point located at 47.336 degrees latitude, and –113.767 degrees longitude to an upper point located at 47.334 degrees latitude, and –113.775 degrees longitude. Lindbergh Lake centered at 47.379 degrees latitude, and –113.739 degrees longitude.

(L) Holland Creek from a lower point located at 47.451 degrees latitude, and –113.572 degrees longitude to an upper point located at 47.451 degrees latitude, and –113.58 degrees longitude. Holland Lake centered at 47.448 degrees latitude, and –113.597 degrees longitude.

(viii) Critical Habitat Subunit—Hungry Horse Reservoir.

(A) Flathead River, South Fork from a lower point located at 47.445 degrees latitude, and –113.183 degrees longitude to an upper point located at 48.001 degrees latitude, and –113.571 degrees longitude. Hungry Horse Reservoir centered at 48.2 degrees latitude, and –113.771 degrees longitude.

(B) Wounded Buck Creek from a lower point located at 48.28 degrees

latitude, and –113.935 degrees longitude to an upper point located at 48.235 degrees latitude, and –113.962 degrees longitude.

(C) Wheeler Creek from a lower point located at 48.096 degrees latitude, and –113.729 degrees longitude to an upper point located at 48.067 degrees latitude, and –113.776 degrees longitude.

(D) Quintonkon Creek from a lower point located at 48.026 degrees latitude, and –113.707 degrees longitude to an upper point located at 48.013 degrees latitude, and –113.766 degrees longitude. Sullivan Creek from a lower point located at 48.044 degrees latitude, and –113.689 degrees longitude to an upper point located at 47.879 degrees latitude, and –113.656 degrees longitude.

(E) Spotted Bear River from a lower point located at 47.924 degrees latitude, and –113.526 degrees longitude to an upper point located at 47.878 degrees latitude, and –113.212 degrees longitude.

(F) Bunker Creek from a lower point located at 47.83 degrees latitude, and –113.415 degrees longitude to an upper point located at 47.829 degrees latitude, and –113.581 degrees longitude.

(G) Little Salmon Creek from a lower point located at 47.655 degrees latitude, and –113.36 degrees longitude to an upper point located at 47.588 degrees latitude, and –113.61 degrees longitude.

(H) Big Salmon Creek from a lower point located at 47.586 degrees latitude, and –113.419 degrees longitude to an upper point located at 47.567 degrees latitude, and –113.495 degrees longitude. Big Salmon Lake centered at 47.602 degrees latitude, and –113.386 degrees longitude.

(I) White River from a lower point located at 47.588 degrees latitude, and –113.298 degrees longitude to an upper point located at 47.611 degrees latitude, and –113.203 degrees longitude.

(J) Gordon Creek from a lower point located at 47.479 degrees latitude, and –113.224 degrees longitude to an upper point located at 47.424 degrees latitude, and –113.437 degrees longitude.

(K) Doctor Creek from a lower point located at 47.388 degrees latitude, and –113.482 degrees longitude to an upper point located at 47.429 degrees latitude, and –113.458 degrees longitude. Doctor Lake centered at 47.404 degrees latitude, and –113.48 degrees longitude.

(L) Babcock Creek from a lower point located at 47.366 degrees latitude, and –113.269 degrees longitude to an upper point located at 47.359 degrees latitude, and –113.351 degrees longitude. Youngs Creek from a lower point located at 47.445 degrees latitude, and –113.183 degrees longitude to an upper point located at 47.282 degrees latitude, and –113.313 degrees longitude.

(M) Danaher Creek from a lower point located at 47.445 degrees latitude, and –113.183 degrees longitude to an upper point located at 47.275 degrees latitude, and –113.014 degrees longitude. Rapid Creek from a lower point located at 47.372 degrees latitude, and –113.054 degrees longitude to an upper point located at 47.382 degrees latitude, and –113.026 degrees longitude.

(ix) Critical Habitat Subunit—Bitterroot.

(A) Bitterroot River from a lower point located at 46.861 degrees latitude, and –114.118 degrees longitude to an upper point located at 45.944 degrees latitude, and –114.128 degrees longitude.

(B) Burnt Fork Creek from a lower point located at 46.542 degrees latitude, and –114.099 degrees longitude to an upper point located at 46.304 degrees latitude, and –113.837 degrees longitude. Gold Creek from a lower point located at 46.398 degrees latitude, and –113.903 degrees longitude to an upper point located at 46.324 degrees latitude, and –113.904 degrees longitude. Little Burnt Fork Creek from a lower point located at 46.322 degrees latitude, and –113.808 degrees longitude to an upper point located at 46.287 degrees latitude, and –113.831 degrees longitude.

(C) Fred Burr Creek from a lower point located at 46.348 degrees latitude, and –114.152 degrees longitude to an upper point located at 46.357 degrees latitude, and –114.315 degrees longitude. Mill Creek from a lower point located at 46.372 degrees latitude, and –114.127 degrees longitude to an upper point located at 46.312 degrees latitude, and –114.286 degrees longitude.

(D) Blodgett Creek from a lower point located at 46.312 degrees latitude, and –114.145 degrees longitude to an upper point located at 46.248 degrees latitude, and –114.453 degrees longitude.

(E) Daly Creek from a lower point located at 46.168 degrees latitude, and –113.911 degrees longitude to an upper point located at 46.25 degrees latitude, and –113.823 degrees longitude. Railroad Creek from a lower point located at 46.158 degrees latitude, and –113.885 degrees longitude to an upper point located at 46.188 degrees latitude, and –113.803 degrees longitude. Skalkaho Creek from a lower point located at 46.22 degrees latitude, and –114.162 degrees longitude to an upper point located at 46.057 degrees latitude, and –113.807 degrees longitude. Weasel Creek from a lower point located at 46.129 degrees latitude, and –113.854 degrees longitude to an upper point located at 46.152 degrees latitude, and –113.799 degrees longitude.

(F) Divide Creek from a lower point located at 46.064 degrees latitude, and –113.967 degrees longitude to an upper point located at 46.043 degrees latitude, and –113.818 degrees longitude. Sleeping Child Creek from a lower point located at 46.162 degrees latitude, and –114.159 degrees longitude to an upper point located at 46.033 degrees latitude, and –113.814 degrees longitude. Switchback Creek from a lower point located at 46.059 degrees latitude, and –113.933 degrees longitude to an upper point located at 46.066 degrees latitude, and –113.925 degrees longitude. Two Bear Creek from a lower point located at 46.111 degrees latitude, and –114.009 degrees longitude to an upper point located at 46.094 degrees latitude, and –113.897 degrees longitude.

(G) Beaver Creek from a lower point located at 45.528 degrees latitude, and –114.318 degrees longitude to an upper point located at 45.507 degrees latitude, and –114.393 degrees longitude. Bitterroot River, West Fork from a lower point located at 45.944 degrees latitude, and –114.128 degrees longitude to an upper point located at 45.461 degrees latitude, and –114.341 degrees longitude. Blue Joint Creek from a lower point located at 45.696 degrees latitude, and –114.314 degrees longitude to an upper point located at 45.6 degrees latitude, and –114.518 degrees longitude. Chicken Creek from a lower point located at 45.601 degrees latitude, and –114.313 degrees longitude to an upper point located at 45.621 degrees latitude, and –114.403 degrees longitude. Deer Creek from a lower point located at 45.595 degrees latitude, and –114.321 degrees longitude to an upper point located at 45.57 degrees latitude, and –114.509 degrees longitude. Hughes Creek from a lower point located at 45.621 degrees latitude, and –114.303 degrees longitude to an upper point located at 45.667 degrees latitude, and –114.021 degrees longitude. Johnson Creek from a lower point located at 45.538 degrees latitude, and –114.319 degrees longitude to an upper point located at 45.494 degrees latitude, and –114.268 degrees longitude. Overwhich Creek from a lower point located at 45.675 degrees latitude, and –114.307 degrees longitude to an upper point located at 45.717 degrees latitude, and –114.08 degrees longitude. Painted Rocks Reservoir centered at 45.701 degrees latitude, and –114.293 degrees longitude. Sheep Creek from a lower point located at 45.52 degrees latitude, and –114.319 degrees longitude to an upper point located at 45.482 degrees latitude, and

–114.304 degrees longitude. Slate Creek from a lower point located at 45.698 degrees latitude, and –114.286 degrees longitude to an upper point located at 45.734 degrees latitude, and –114.183 degrees longitude. Straight Creek from a lower point located at 45.677 degrees latitude, and –114.099 degrees longitude to an upper point located at 45.683 degrees latitude, and –114.04 degrees longitude. Woods Creek from a lower point located at 45.564 degrees latitude, and –114.321 degrees longitude to an upper point located at 45.512 degrees latitude, and –114.402 degrees longitude.

(H) Bitterroot River, East Fork from a lower point located at 45.944 degrees latitude, and –114.128 degrees longitude to an upper point located at 45.911 degrees latitude, and –113.595 degrees longitude. Buck Creek from a lower point located at 45.903 degrees latitude, and –113.631 degrees longitude to an upper point located at 45.891 degrees latitude, and –113.633 degrees longitude. Bugle Creek from a lower point located at 45.878 degrees latitude, and –113.786 degrees longitude to an upper point located at 45.835 degrees latitude, and –113.776 degrees longitude. Bush Creek from a lower point located at 45.944 degrees latitude, and –113.733 degrees longitude to an upper point located at 46 degrees latitude, and –113.731 degrees longitude. Lick Creek from a lower point located at 45.938 degrees latitude, and –113.717 degrees longitude to an upper point located at 45.944 degrees latitude, and –113.656 degrees longitude. Martin Creek from a lower point located at 45.93 degrees latitude, and –113.723 degrees longitude to an upper point located at 46.03 degrees latitude, and –113.778 degrees longitude. Meadow Creek from a lower point located at 45.908 degrees latitude, and –113.78 degrees longitude to an upper point located at 45.798 degrees latitude, and –113.782 degrees longitude. Moose Creek from a lower point located at 45.922 degrees latitude, and –113.727 degrees longitude to an upper point located at 46.01 degrees latitude, and –113.708 degrees longitude. Reynolds Creek from a lower point located at 45.947 degrees latitude, and –113.717 degrees longitude to an upper point located at 45.957 degrees latitude, and –113.646 degrees longitude. Sign Creek from a lower point located at 45.97 degrees latitude, and –113.711 degrees longitude to an upper point located at 45.993 degrees latitude, and –113.678 degrees longitude. Swift Creek from a lower point located at 45.891 degrees latitude, and –113.776 degrees longitude to an upper point located at 45.874 degrees latitude, and –113.753 degrees longitude.

(I) Fault Creek from a lower point located at 45.76 degrees latitude, and –114.108 degrees longitude to an upper point located at 45.724 degrees latitude, and –114.081 degrees longitude. Fire Creek from a lower point located at 45.791 degrees latitude, and –114.065 degrees longitude to an upper point located at 45.788 degrees latitude, and –114.038 degrees longitude. Porcupine Creek from a lower point located at 45.756 degrees latitude, and –114.056 degrees longitude to an upper point located at 45.723 degrees latitude, and –114.003 degrees longitude. Prayer Creek from a lower point located at 45.756 degrees latitude, and –114.055 degrees longitude to an upper point located at 45.726 degrees latitude, and –114.026 degrees longitude. Warm Springs Creek from a lower point located at 45.86 degrees latitude, and –114.025 degrees longitude to an upper point located at 45.726 degrees latitude, and –114.057 degrees longitude. Wiles Creek from a lower point located at 45.766 degrees latitude, and –114.075 degrees longitude to an upper point located at 45.726 degrees latitude, and –114.142 degrees longitude.

(x) Critical Habitat Subunit—Blackfoot River.

(A) Blackfoot River from a lower point located at 46.87 degrees latitude, and –113.889 degrees longitude to an upper point located at 47.011 degrees latitude, and –112.476 degrees longitude.

(B) Daisy Creek from a lower point located at 47.02 degrees latitude, and –113.772 degrees longitude to an upper point located at 47.055 degrees latitude, and –113.822 degrees longitude. Gold Creek from a lower point located at 46.919 degrees latitude, and –113.676 degrees longitude to an upper point located at 47.058 degrees latitude, and –113.743 degrees longitude. Gold Creek, West Fork from a lower point located at 46.996 degrees latitude, and –113.685 degrees longitude to an upper point located at 47.032 degrees latitude, and –113.827 degrees longitude.

(C) Belmont Creek from a lower point located at 46.954 degrees latitude, and −113.569 degrees longitude to an upper point located at 47.061 degrees latitude, and −113.681 degrees longitude.

(D) Cottonwood Creek from a lower point located at 47.025 degrees latitude, and −113.281 degrees longitude to an upper point located at 47.161 degrees latitude, and −113.345 degrees longitude.

(E) Dunham Creek from a lower point located at 47.103 degrees latitude, and −113.155 degrees longitude to an upper point located at 47.238 degrees latitude, and −113.316 degrees longitude. Lodgepole Creek from a lower point located at 47.183 degrees latitude, and −113.202 degrees longitude to an upper point located at 47.229 degrees latitude, and −113.27 degrees longitude. Monture Creek from a lower point located at 47.02 degrees latitude, and −113.235 degrees longitude to an upper point located at 47.301 degrees latitude, and −113.249 degrees longitude.

(F) Blackfoot River, North Fork from a lower point located at 46.985 degrees latitude, and −113.129 degrees longitude to an upper point located at 47.197 degrees latitude, and −112.886 degrees longitude.

(G) Copper Creek from a lower point located at 47.007 degrees latitude, and −112.555 degrees longitude to an upper point located at 47.06 degrees latitude, and −112.752 degrees longitude. Landers Fork from a lower point located at 46.965 degrees latitude, and −112.562 degrees longitude to an upper point located at 47.099 degrees latitude, and −112.566 degrees longitude.

(xi) Critical Habitat Subunit—Clearwater River and Lake Chain.

(A) Salmon Lake centered at 47.091 degrees latitude, and −113.4 degrees longitude.

(B) Clearwater River from a lower point located at 47.107 degrees latitude, and −113.427 degrees longitude to an upper point located at 47.39 degrees latitude, and −113.561 degrees longitude.

(C) Finley Creek from a lower point located at 47.125 degrees latitude, and −113.56 degrees longitude to an upper point located at 47.12 degrees latitude, and −113.649 degrees longitude. Owl Creek from a lower point located at 47.115 degrees latitude, and −113.441 degrees longitude to an upper point located at 47.115 degrees latitude, and −113.502 degrees longitude. Placid Creek from a lower point located at 47.116 degrees latitude, and −113.541 degrees longitude to an upper point located at 47.187 degrees latitude, and −113.692 degrees longitude. Placid Lake centered at 47.119 degrees latitude, and −113.524 degrees longitude.

(D) Morrell Creek from a lower point located at 47.141 degrees latitude, and −113.46 degrees longitude to an upper point located at 47.342 degrees latitude, and −113.471 degrees longitude.

(E) Deer Creek from a lower point located at 47.208 degrees latitude, and −113.529 degrees longitude to an upper point located at 47.249 degrees latitude, and −113.688 degrees longitude. Seeley Lake centered at 47.194 degrees latitude, and −113.509 degrees longitude.

(F) Clearwater RIver, West Fork from a lower point located at 47.256 degrees latitude, and −113.55 degrees longitude to an upper point located at 47.287 degrees latitude, and −113.744 degrees longitude.

(G) Clearwater Lake centered at 47.386 degrees latitude, and −113.559 degrees longitude. Lake Alva centered at 47.314 degrees latitude, and −113.582 degrees longitude. Lake Inez centered at 47.282 degrees latitude, and −113.566 degrees longitude. Rainy Lake centered at 47.339 degrees latitude, and −113.594 degrees longitude.

(H) Clearwater River, East Fork from a lower point located at 47.352 degrees latitude, and −113.581 degrees longitude to an upper point located at 47.343 degrees latitude, and −113.495 degrees longitude. Colt Creek from a lower point located at 47.328 degrees latitude, and −113.589 degrees longitude to an upper point located at 47.361 degrees latitude, and −113.658 degrees longitude.

(xii) Critical Habitat Subunit—Rock Creek.

(A) Rock Creek from a lower point located at 46.725 degrees latitude, and −113.682 degrees longitude to an upper point located at 46.223 degrees latitude, and −113.521 degrees longitude.

(B) Gilbert Creek from a lower point located at 46.682 degrees latitude, and −113.666 degrees longitude to an upper point located at 46.648 degrees latitude, and −113.818 degrees longitude.

(C) Brewster Creek from a lower point located at 46.612 degrees latitude, and −113.653 degrees longitude to an upper point located at 46.582 degrees latitude, and −113.587 degrees longitude.

(D) Ranch Creek from a lower point located at 46.583 degrees latitude, and −113.678 degrees longitude to an upper point located at 46.468 degrees latitude, and −113.577 degrees longitude.

(E) Welcome Creek from a lower point located at 46.566 degrees latitude, and −113.7 degrees longitude to an upper point located at 46.613 degrees latitude, and −113.806 degrees longitude.

(F) Butte Cabin Creek from a lower point located at 46.52 degrees latitude, and −113.767 degrees longitude to an upper point located at 46.482 degrees latitude, and −113.684 degrees longitude.

(G) Wahlquist Creek from a lower point located at 46.501 degrees latitude, and −113.776 degrees longitude to an upper point located at 46.531 degrees latitude, and −113.843 degrees longitude.

(H) Cougar Creek from a lower point located at 46.455 degrees latitude, and −113.768 degrees longitude to an upper point located at 46.47 degrees latitude, and −113.675 degrees longitude.

(I) Hogback Creek from a lower point located at 46.41 degrees latitude, and −113.702 degrees longitude to an upper point located at 46.44 degrees latitude, and −113.625 degrees longitude.

(J) Wyman Creek from a lower point located at 46.396 degrees latitude, and −113.688 degrees longitude to an upper point located at 46.308 degrees latitude, and −113.771 degrees longitude.

(K) Stony Creek from a lower point located at 46.348 degrees latitude, and −113.603 degrees longitude to an upper point located at 46.283 degrees latitude, and −113.771 degrees longitude.

(L) Beaver Creek from a lower point located at 46.472 degrees latitude, and −113.493 degrees longitude to an upper point located at 46.468 degrees latitude, and −113.555 degrees longitude. Upper Willow Creek from a lower point located at 46.331 degrees latitude, and −113.542 degrees longitude to an upper point located at 46.566 degrees latitude, and −113.522 degrees longitude.

(M) Bowles Creek from a lower point located at 46.192 degrees latitude, and −113.747 degrees longitude to an upper point located at 46.207 degrees latitude, and −113.812 degrees longitude. Rock Creek, North Fork from a lower point located at 46.212 degrees latitude, and −113.696 degrees longitude to an upper point located at 46.244 degrees latitude, and −113.772 degrees longitude. Rock Creek, West Fork from a lower point located at 46.223 degrees latitude, and −113.521 degrees longitude to an upper point located at 46.144 degrees latitude, and −113.721 degrees longitude. Sand Basin Creek from a lower point located at 46.197 degrees latitude, and −113.703 degrees longitude to an upper point located at 46.151 degrees latitude, and −113.712 degrees longitude.

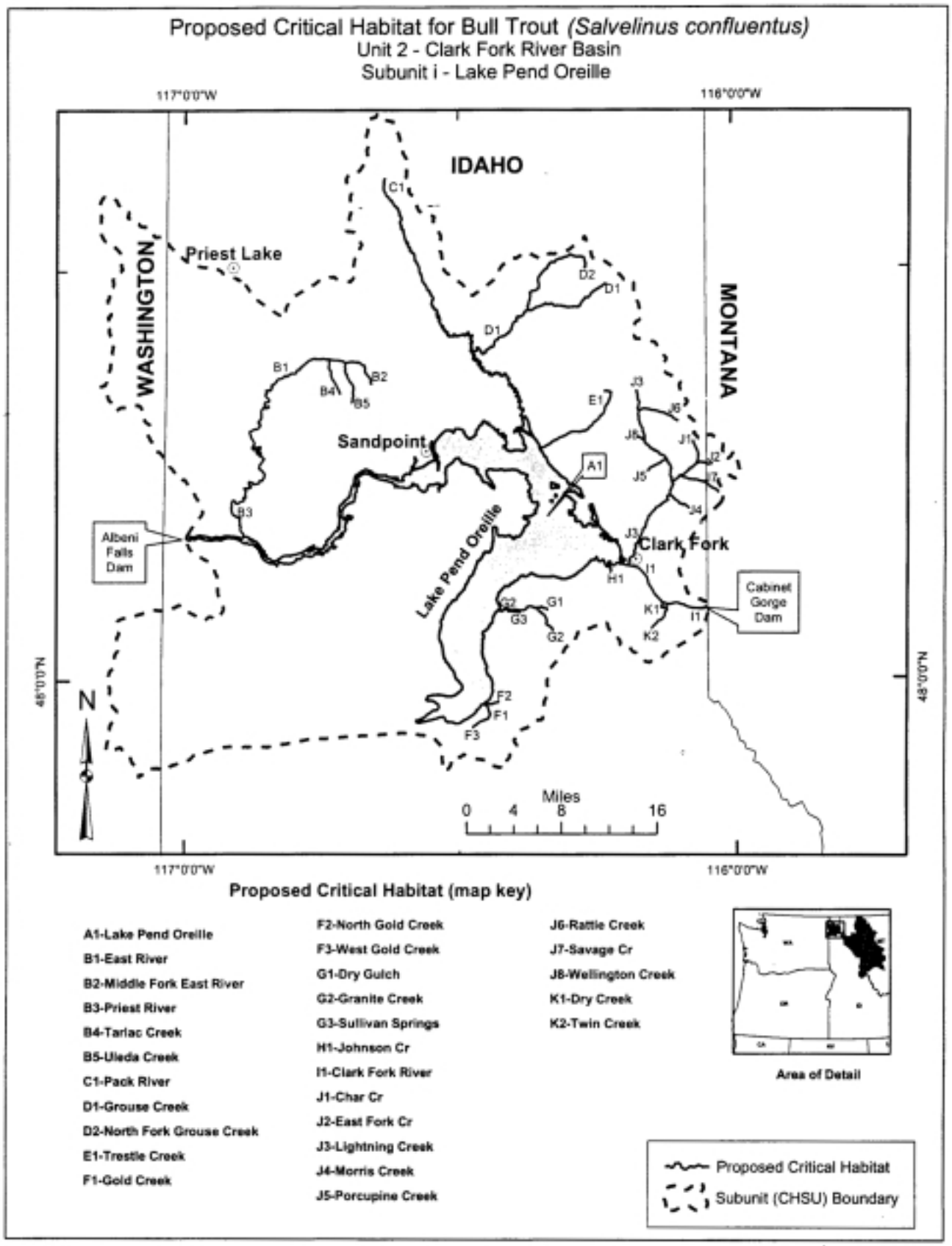
(N) Moose Meadow Creek from a lower point located at 46.139 degrees latitude, and −113.591 degrees longitude to an upper point located at 46.078 degrees latitude, and −113.635 degrees longitude. Rock Creek, Ross Fork from a lower point located at 46.224 degrees latitude, and −113.525 degrees longitude to an upper point located at 46.034 degrees latitude, and −113.779 degrees longitude. Rock Creek, Ross Fork, South Fork from a lower point located at 46.113 degrees latitude, and −113.66 degrees longitude to an upper point located at 46.038 degrees latitude, and −113.698 degrees longitude.

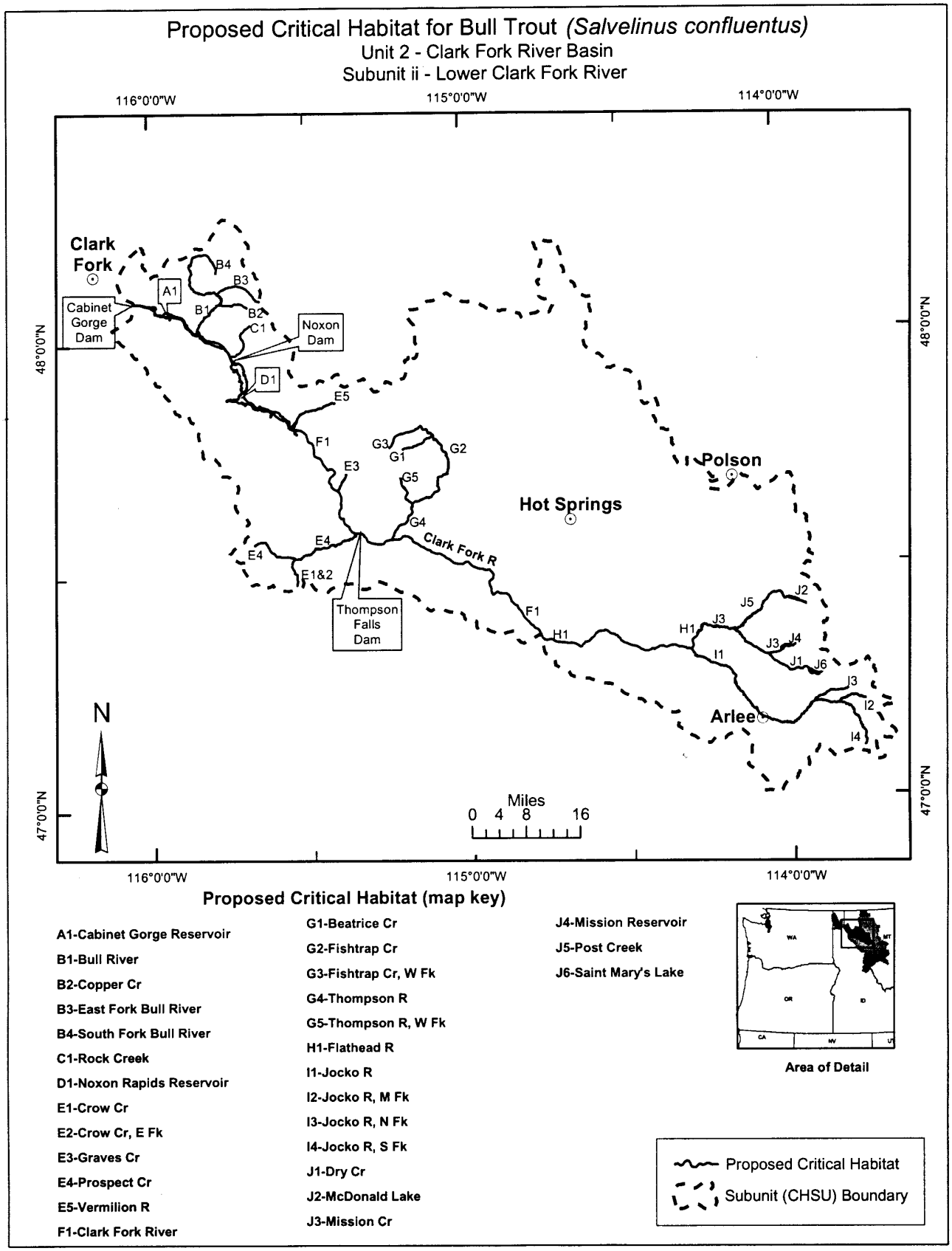
(O) East Fork Reservoir centered at 46.118 degrees latitude, and −113.374 degrees longitude. Meadow Creek from a lower point located at 46.157 degrees latitude, and −113.439 degrees longitude to an upper point located at 46.092 degrees latitude, and −113.443 degrees longitude. Rock Creek, East Fork from a lower point located at 46.2 degrees latitude, and −113.499 degrees longitude to an upper point located at 46.021 degrees latitude, and −113.319 degrees longitude.

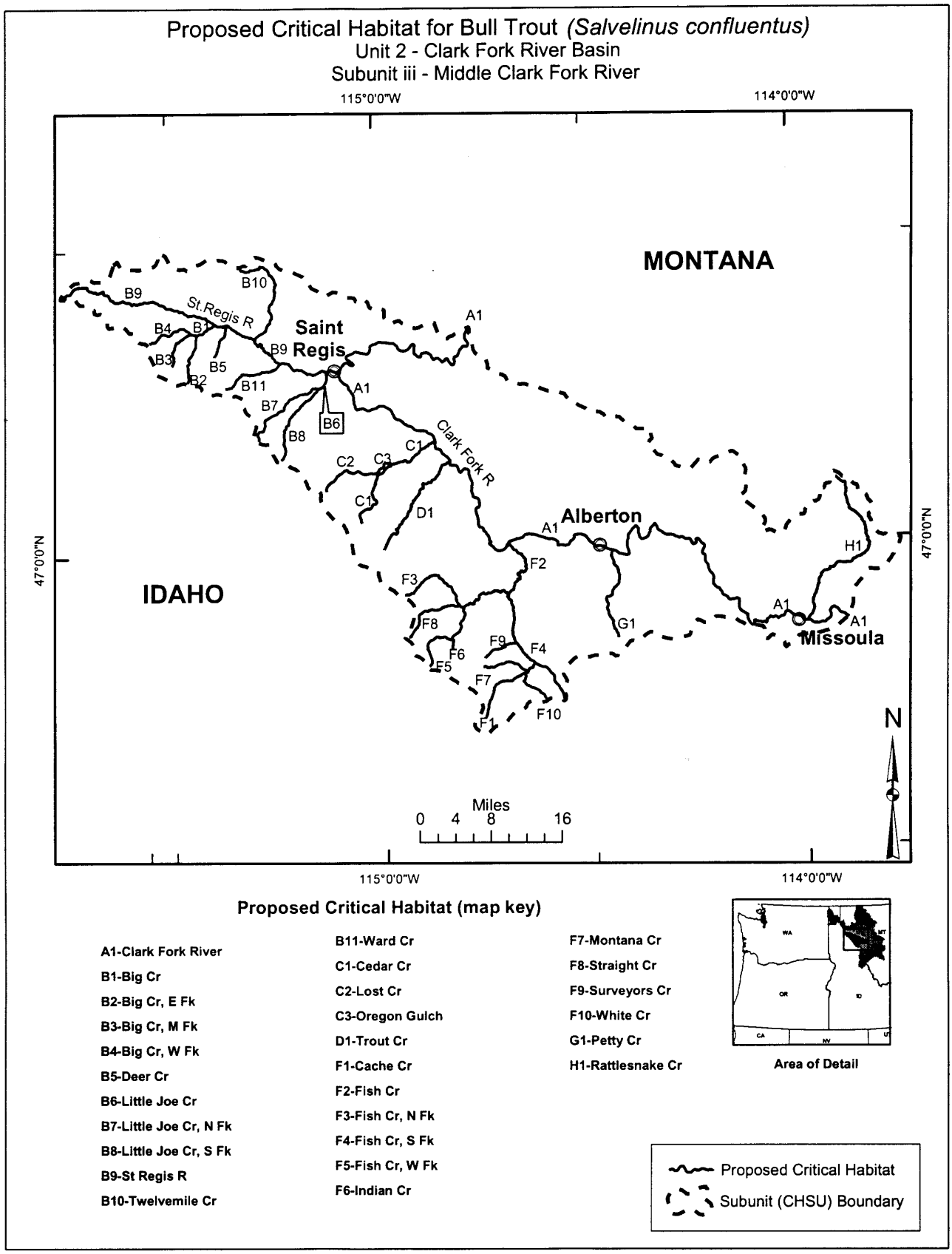
(P) Carpp Creek from a lower point located at 46.032 degrees latitude, and −113.524 degrees longitude to an upper point located at 45.985 degrees latitude, and −113.446 degrees longitude. Copper Creek from a lower point located at 46.068 degrees latitude, and −113.538 degrees longitude to an upper point located at 45.949 degrees latitude, and −113.569 degrees longitude. Green Canyon Creek from a lower point located at 46.05 degrees latitude, and −113.578 degrees longitude to an upper point located at 46.065 degrees latitude, and −113.646 degrees longitude. Lutz Creek from a lower point located at 46.031 degrees latitude, and −113.61 degrees longitude to an upper point located at 46.051 degrees latitude, and −113.655 degrees longitude. Meyers Creek from a lower point located at 46.052 degrees latitude, and −113.537 degrees longitude to an upper point located at 45.988 degrees latitude, and −113.57 degrees longitude. Rock Creek, Middle Fork from a lower point located at 46.223 degrees latitude, and −113.521 degrees longitude to an upper point located at 45.949 degrees latitude, and −113.523 degrees longitude.

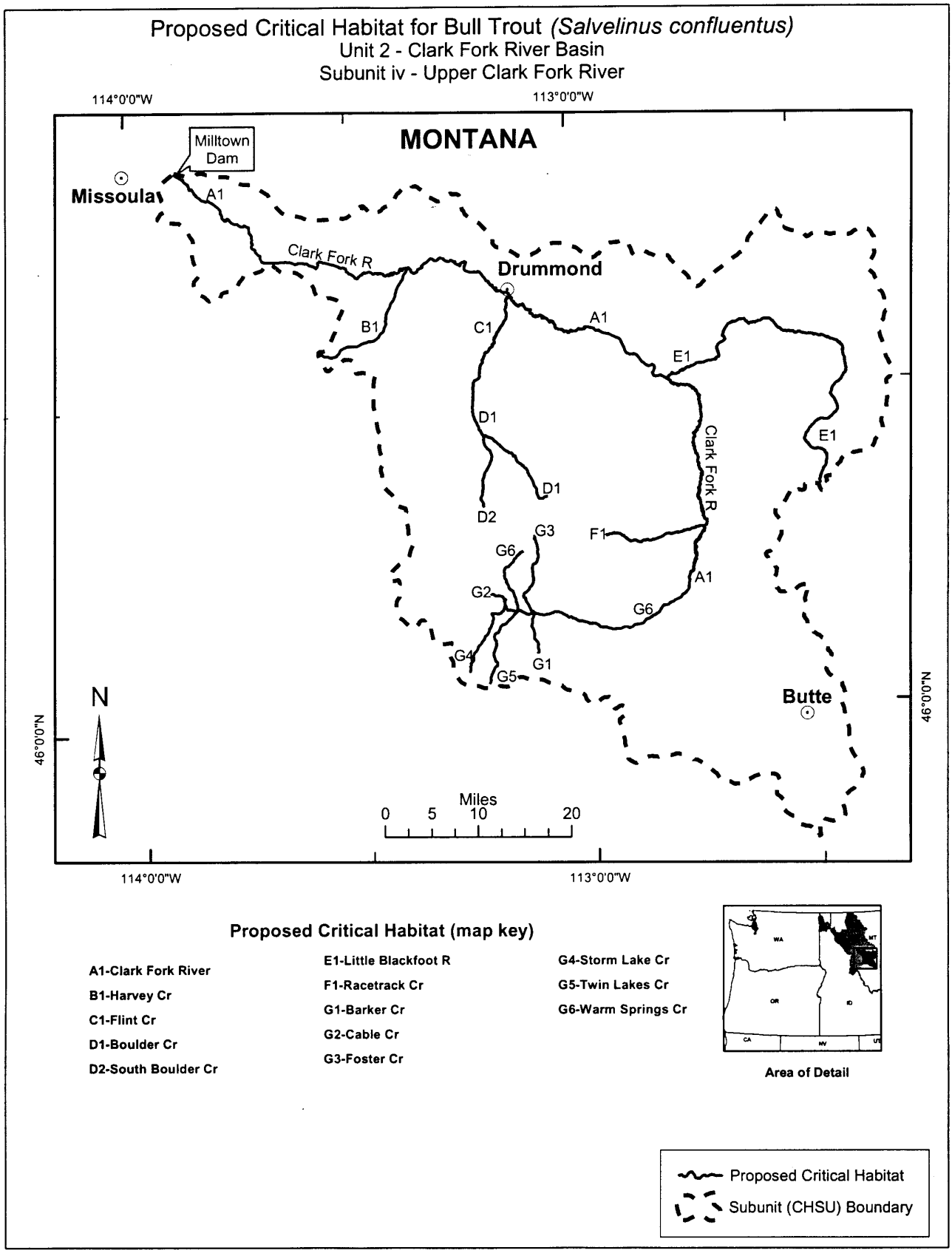
Note: Maps follow for Unit 2, Subunits i–xii.

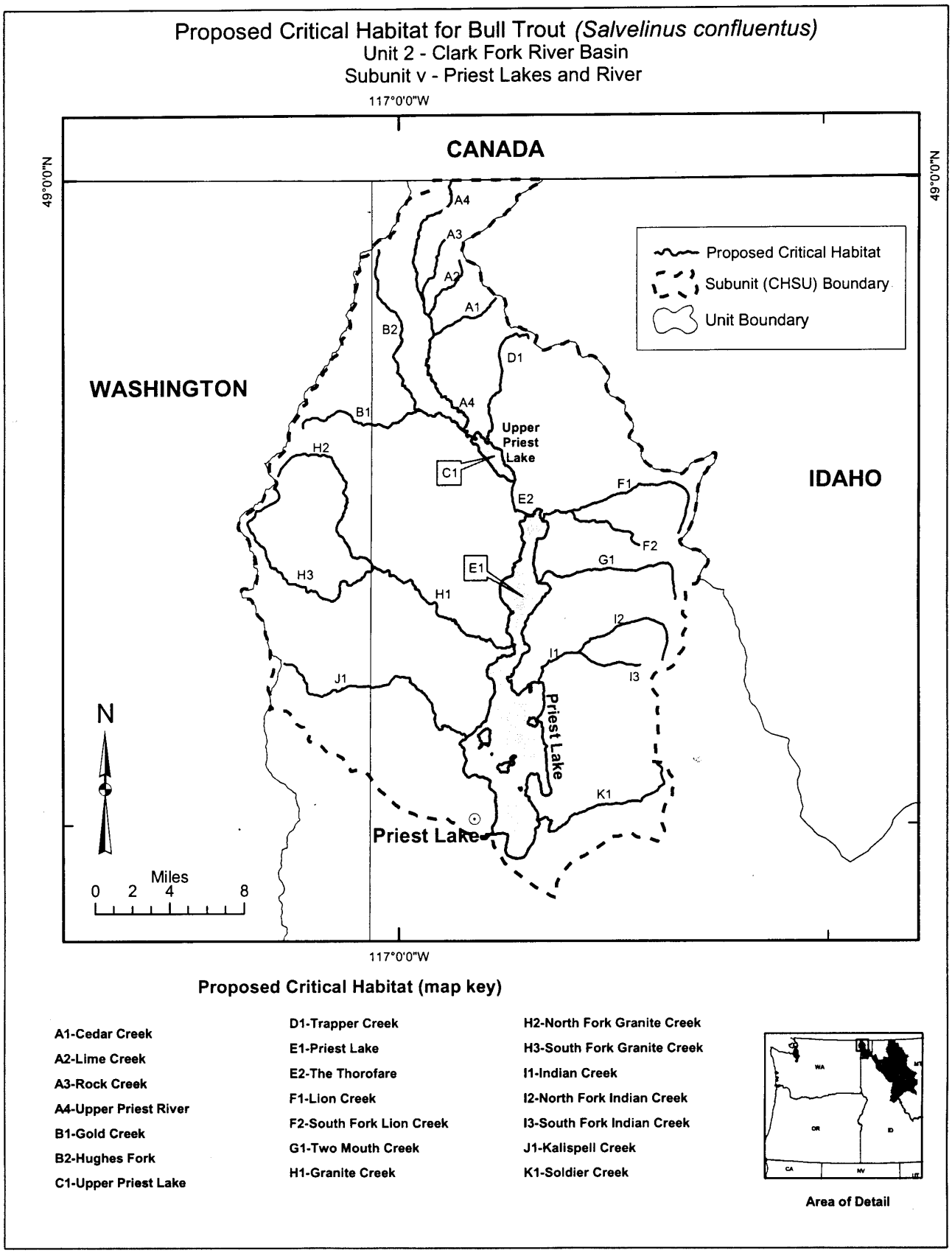
BILLING CODE 4310–55–P

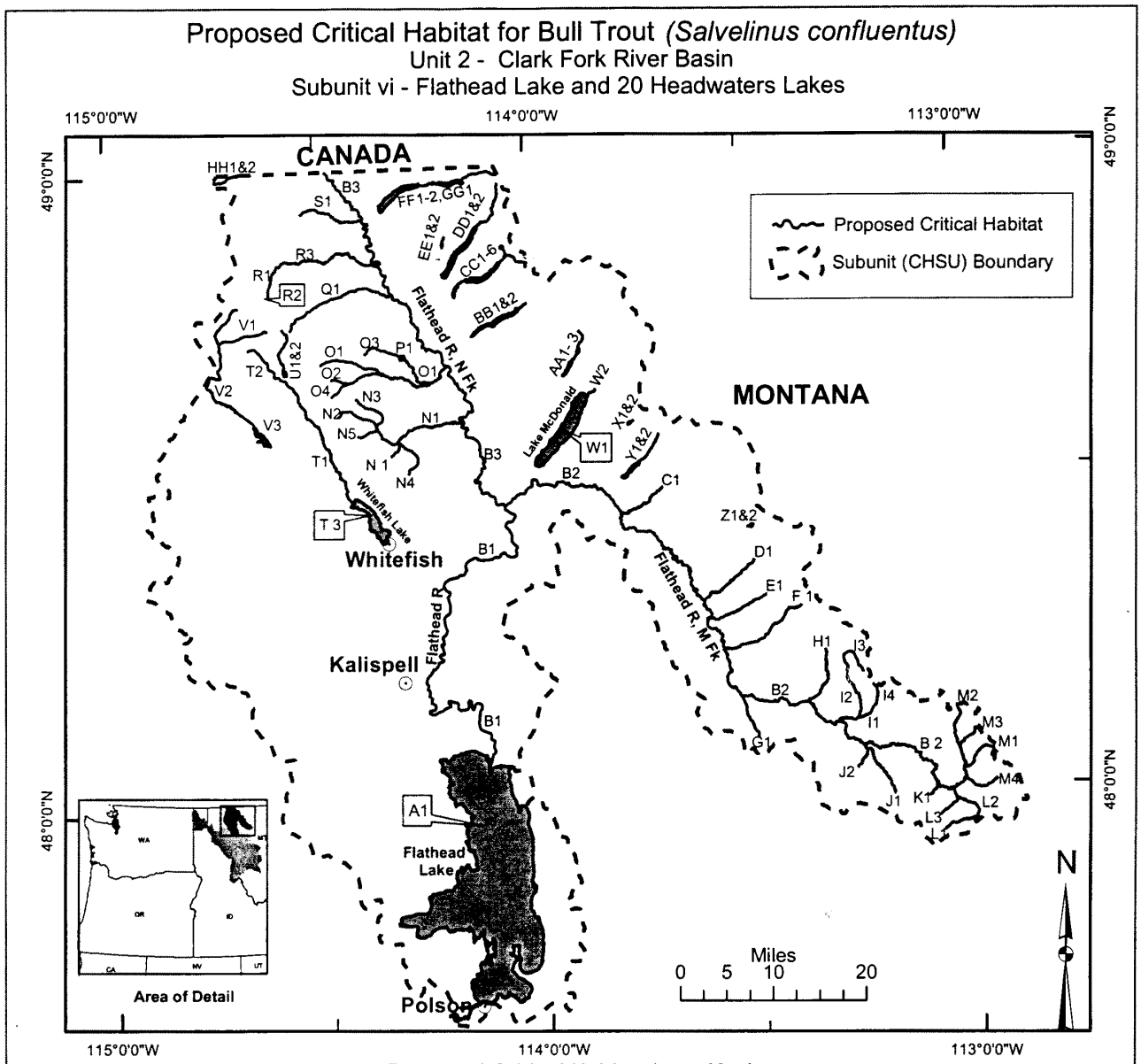

Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 2 - Clark Fork River Basin
Subunit i - Lake Pend Oreille
117°0'0"W
116°0'0"W
48°0'0"N
IDAHO
WASHINGTON
MONTANA
Priest Lake
Sandpoint
Lake Pend Oreille
Clark Fork
Albeni Falls Dam
Cabinet Gorge Dam
A1
B1
B2
B3
B4
B5
C1
D1
D2
E1
F1
F2
F3
G1
G2
G3
H1
I1
I4
J1
J2
J3
J4
J5
J6
J7
J8
K1
K2
N
Miles
0 4 8 16
Proposed Critical Habitat (map key)
A1-Lake Pend Oreille
B1-East River
B2-Middle Fork East River
B3-Priest River
B4-Tarlac Creek
B5-Uleda Creek
C1-Pack River
D1-Grouse Creek
D2-North Fork Grouse Creek
E1-Trestle Creek
F1-Gold Creek
F2-North Gold Creek
F3-West Gold Creek
G1-Dry Gulch
G2-Granite Creek
G3-Sullivan Springs
H1-Johnson Cr
I1-Clark Fork River
J1-Char Cr
J2-East Fork Cr
J3-Lightning Creek
J4-Morris Creek
J5-Porcupine Creek
J6-Rattle Creek
J7-Savage Cr
J8-Wellington Creek
K1-Dry Creek
K2-Twin Creek
Area of Detail
Proposed Critical Habitat
Subunit (CHSU) Boundary


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 2 - Clark Fork River Basin
Subunit ii - Lower Clark Fork River
116°0'0"W
115°0'0"W
114°0'0"W
48°0'0"N
47°0'0"N
Clark Fork
Cabinet Gorge Dam
Noxon Dam
Thompson Falls Dam
Hot Springs
Polson
Arlee
Clark Fork R
A1
B1
B2
B3
B4
C1
D1
E1&2
E3
E4
E5
F1
G1
G2
G3
G4
G5
H1
I1
I2
I4
J1
J2
J3
J4
J5
J6
N
Miles
0 4 8 16
Proposed Critical Habitat (map key)
A1-Cabinet Gorge Reservoir
B1-Bull River
B2-Copper Cr
B3-East Fork Bull River
B4-South Fork Bull River
C1-Rock Creek
D1-Noxon Rapids Reservoir
E1-Crow Cr
E2-Crow Cr, E Fk
E3-Graves Cr
E4-Prospect Cr
E5-Vermilion R
F1-Clark Fork River
G1-Beatrice Cr
G2-Fishtrap Cr
G3-Fishtrap Cr, W Fk
G4-Thompson R
G5-Thompson R, W Fk
H1-Flathead R
I1-Jocko R
I2-Jocko R, M Fk
I3-Jocko R, N Fk
I4-Jocko R, S Fk
J1-Dry Cr
J2-McDonald Lake
J3-Mission Cr
J4-Mission Reservoir
J5-Post Creek
J6-Saint Mary's Lake
WA
MT
OR
ID
CA
NV
UT
Area of Detail
Proposed Critical Habitat
Subunit (CHSU) Boundary


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 2 - Clark Fork River Basin
Subunit iii - Middle Clark Fork River
115°0'0"W
114°0'0"W
47°0'0"N
MONTANA
IDAHO
Saint Regis
Alberton
Missoula
St.Regis R
Clark Fork R
B9
B10
B4
B1
B3
B5
B2
B11
B7
B8
B6
A1
C1
C2
C3
D1
F2
F3
F8
F6
F5
F9
F4
F7
F1
F10
G1
H1
N
Miles
0 4 8 16
Proposed Critical Habitat (map key)
A1-Clark Fork River
B1-Big Cr
B2-Big Cr, E Fk
B3-Big Cr, M Fk
B4-Big Cr, W Fk
B5-Deer Cr
B6-Little Joe Cr
B7-Little Joe Cr, N Fk
B8-Little Joe Cr, S Fk
B9-St Regis R
B10-Twelvemile Cr
B11-Ward Cr
C1-Cedar Cr
C2-Lost Cr
C3-Oregon Gulch
D1-Trout Cr
F1-Cache Cr
F2-Fish Cr
F3-Fish Cr, N Fk
F4-Fish Cr, S Fk
F5-Fish Cr, W Fk
F6-Indian Cr
F7-Montana Cr
F8-Straight Cr
F9-Surveyors Cr
F10-White Cr
G1-Petty Cr
H1-Rattlesnake Cr
Area of Detail
Proposed Critical Habitat
Subunit (CHSU) Boundary

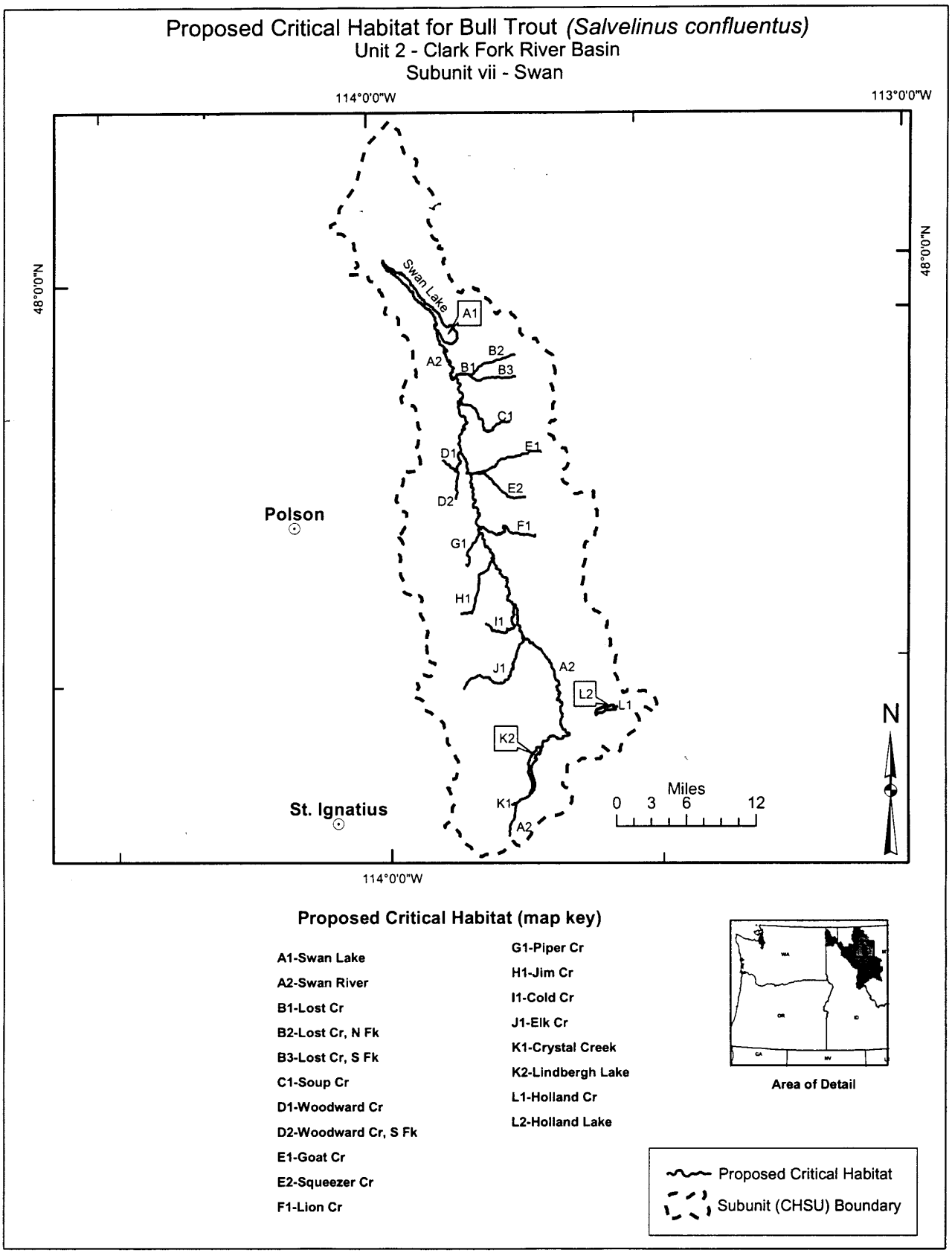

Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 2 - Clark Fork River Basin
Subunit iv - Upper Clark Fork River
114°0'0"W
113°0'0"W
MONTANA
Milltown Dam
Missoula
A1
Clark Fork R
Drummond
B1
C1
A1
E1
D1
Clark Fork R
E1
D1
D2
G3
F1
G6
A1
G2
G6
G4
G1
G5
Butte
46°0'0"N
46°0'0"N
N
Miles
0 5 10 20
114°0'0"W
113°0'0"W
Proposed Critical Habitat (map key)
A1-Clark Fork River
B1-Harvey Cr
C1-Flint Cr
D1-Boulder Cr
D2-South Boulder Cr
E1-Little Blackfoot R
F1-Racetrack Cr
G1-Barker Cr
G2-Cable Cr
G3-Foster Cr
G4-Storm Lake Cr
G5-Twin Lakes Cr
G6-Warm Springs Cr
Area of Detail
Proposed Critical Habitat
Subunit (CHSU) Boundary


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 2 - Clark Fork River Basin
Subunit v - Priest Lakes and River
117°0'0"W
CANADA
49°0'0"N
WASHINGTON
IDAHO
Proposed Critical Habitat
Subunit (CHSU) Boundary
Unit Boundary
A1
A2
A3
A4
B1
B2
C1
D1
E1
E2
F1
F2
G1
H1
H2
H3
I1
I2
I3
J1
K1
Upper Priest Lake
Priest Lake
Priest Lake
N
Miles
0 2 4 8
Proposed Critical Habitat (map key)
A1-Cedar Creek
A2-Lime Creek
A3-Rock Creek
A4-Upper Priest River
B1-Gold Creek
B2-Hughes Fork
C1-Upper Priest Lake
D1-Trapper Creek
E1-Priest Lake
E2-The Thorofare
F1-Lion Creek
F2-South Fork Lion Creek
G1-Two Mouth Creek
H1-Granite Creek
H2-North Fork Granite Creek
H3-South Fork Granite Creek
I1-Indian Creek
I2-North Fork Indian Creek
I3-South Fork Indian Creek
J1-Kalispell Creek
K1-Soldier Creek
Area of Detail

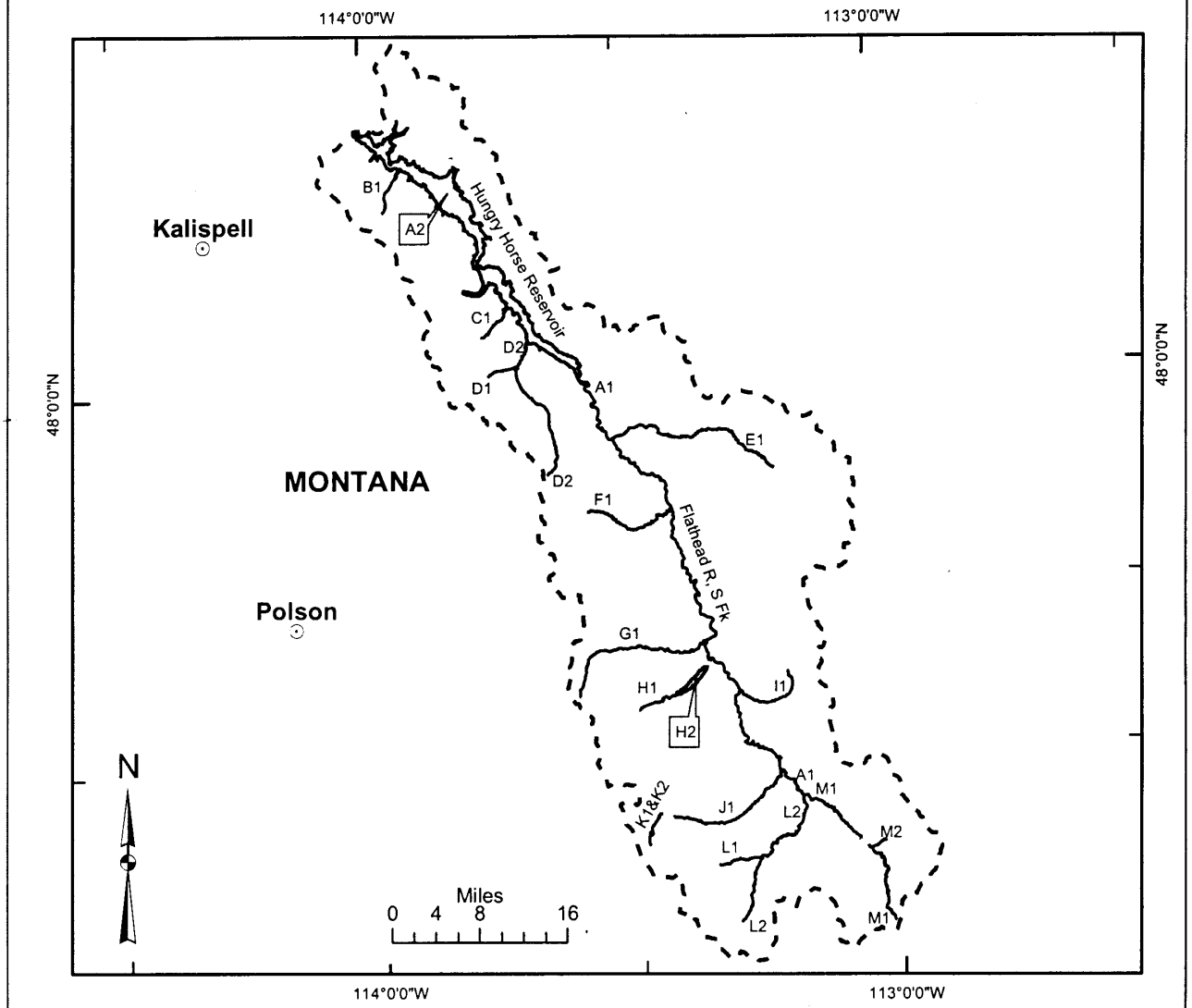


Proposed Critical Habitat (map Key)

A1-Flathead Lake	I4-Whistler Cr	N3-Kletomus Cr	T1-Swift Cr	Y1-Harrison Cr	CC4-Quartz Cr
B1-Flathead R	J1-Dolly Varden Cr	N4-Skookoleel Cr	T2-Swift Cr, W Fk	Y2-Harrison Lake	CC5-Quartz Lake
B2-Flathead R, M Fk	J2-Schafer Cr	N5-Werner Cr	T3-Whitefish Lake	Z1-Lake Isabel	CC6-Rainbow Cr
B3-Flathead R, N Fk	K1-Clack Cr	O1-Coal Cr	U1-Swift Cr, E Fk	Z2-Park Cr	DD1-Bowman Cr
C1-Nyack Cr	L1-Basin Cr	O2-Coal Cr, S Fk	U2-Upper Whitefish Lake	AA1-Arrow Lake	DD2-Bowman Lake
D1-Park Cr	L2-Bowl Cr	O3-Cyclone Cr	V1-Fitzsimmons Cr	AA2-Camas Cr	EE1-Akokala Cr
E1-Ole Cr	L3-Scalp Cr	O4-Mathias Cr	V2-Stillwater R	AA3-Trout Lake	EE2-Akokala Lake
F1-Bear Creek	M1-Gateway Cr	P1-Cyclone Lake	V3-Upper Stillwater Lake	BB1-Logging Cr	FF1-Kintla Cr
G1-Long Creek	M2-Strawberry Cr	Q1-Red Meadow Cr	W1-Lake McDonald	BB2-Logging Lake	FF2-Kintla Lake
H1-Granite Cr	M3-Strawberry Cr, E Fk	R1-Shorty Cr	W2-McDonald Cr	CC1-Cerulean Lake	GG1-Upper Kintla Lake
I1-Lodgepole Cr	M4-Trail Cr	R2-Shorty Cr, S Fk	X1-Lincoln Cr	CC2-Lower Quartz Lake	HH1-Frozen Cr
I2-Morrison Cr	N1-Big Cr	R3-Whale Cr	X2-Lincoln Lake	CC3-Middle Quartz Lake	HH2-Frozen Lake
I3-Puzzle Cr	N2-Hallowat Cr	S1-Trail Cr			

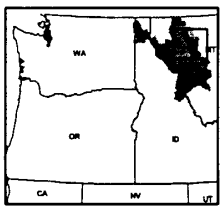

Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 2 - Clark Fork River Basin
Subunit vii - Swan
114°0'0"W
113°0'0"W
48°0'0"N
Swan Lake
A1
A2
B1
B2
B3
C1
D1
D2
E1
E2
F1
G1
H1
I1
J1
K1
K2
L1
L2
Polson
St. Ignatius
Miles
0 3 6 12
N
Proposed Critical Habitat (map key)
A1-Swan Lake
A2-Swan River
B1-Lost Cr
B2-Lost Cr, N Fk
B3-Lost Cr, S Fk
C1-Soup Cr
D1-Woodward Cr
D2-Woodward Cr, S Fk
E1-Goat Cr
E2-Squeezer Cr
F1-Lion Cr
G1-Piper Cr
H1-Jim Cr
I1-Cold Cr
J1-Elk Cr
K1-Crystal Creek
K2-Lindbergh Lake
L1-Holland Cr
L2-Holland Lake
Area of Detail
Proposed Critical Habitat
Subunit (CHSU) Boundary

Proposed Critical Habitat for Bull Trout *(Salvelinus confluentus)*
Unit 2 - Clark Fork River Basin
Subunit viii - Hungry Horse Reservoir



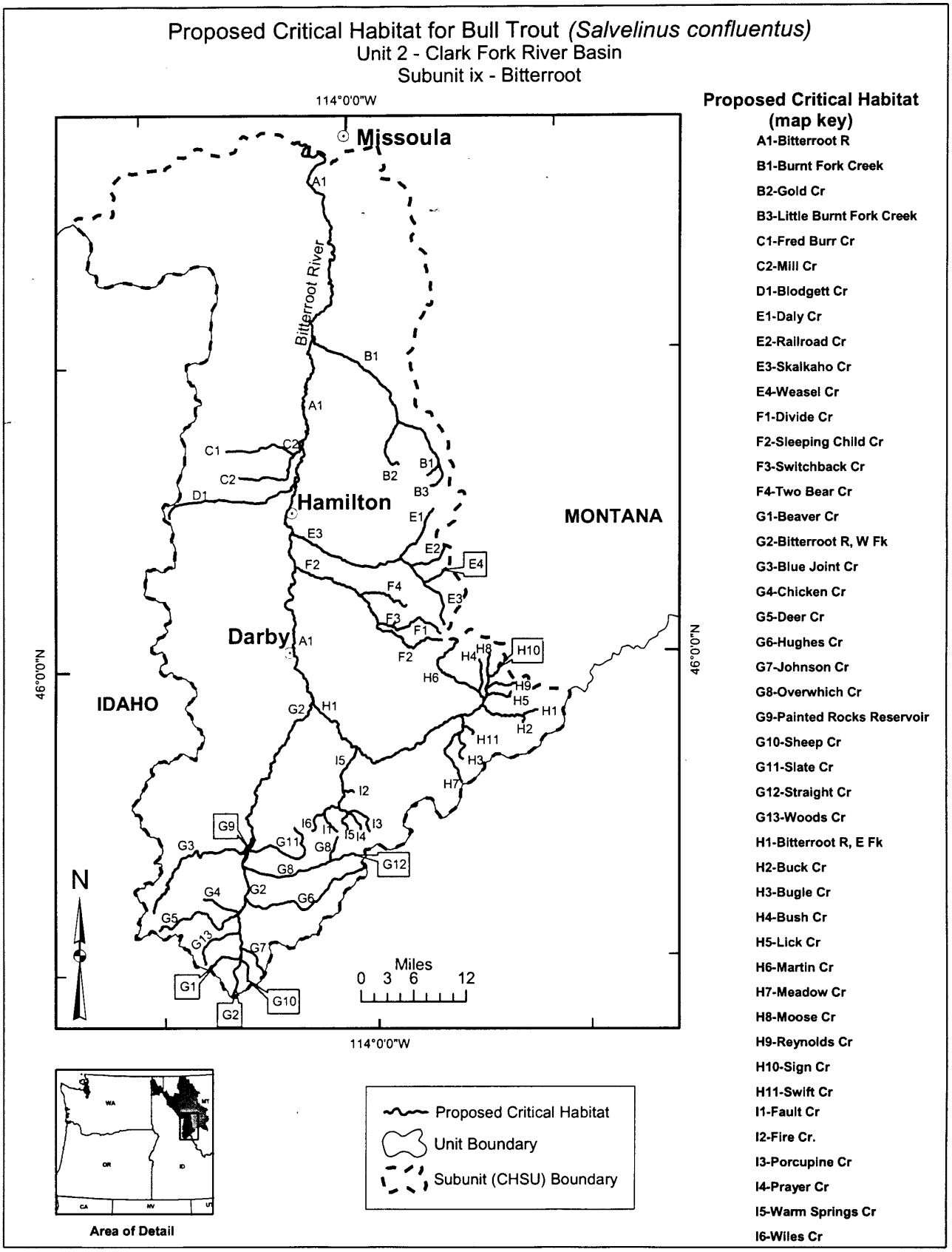
Proposed Critical Habitat (map key)

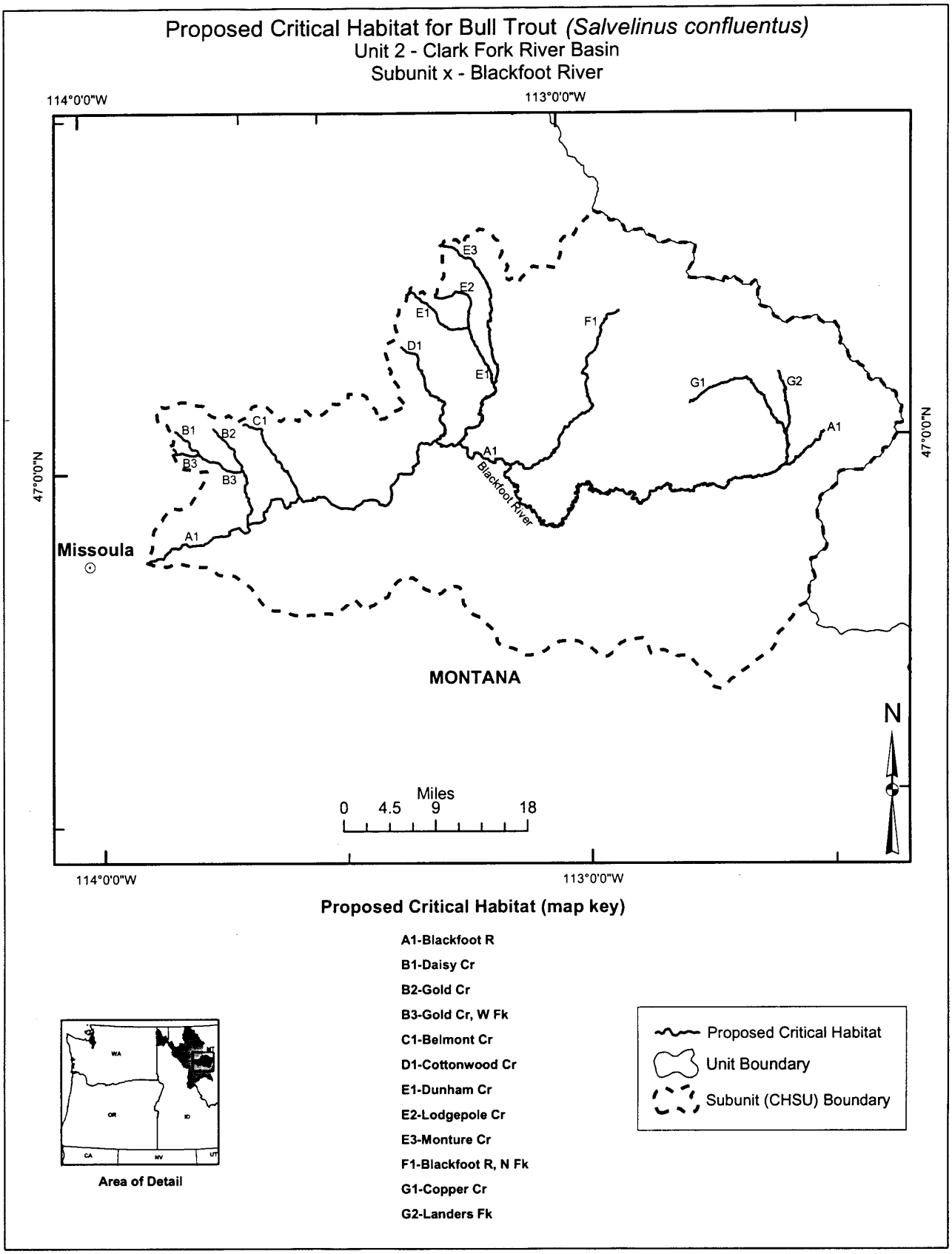
A1-Flathead R, S Fk
A2-Hungry Horse Reservoir
B1-Wounded Buck Cr
C1-Wheeler Cr
D1-Quintonkon Cr
D2-Sullivan Cr
E1-Spotted Bear R
F1-Bunker Cr
G1-Little Salmon Cr
H1-Big Salmon Cr
H2-Big Salmon Lake
I1-White R
J1-Gordon Cr
K1-Doctor Cr
K2-Doctor Lake
L1-Babcock Cr
L2-Youngs Cr
M1-Danaher Cr
M2-Rapid Cr



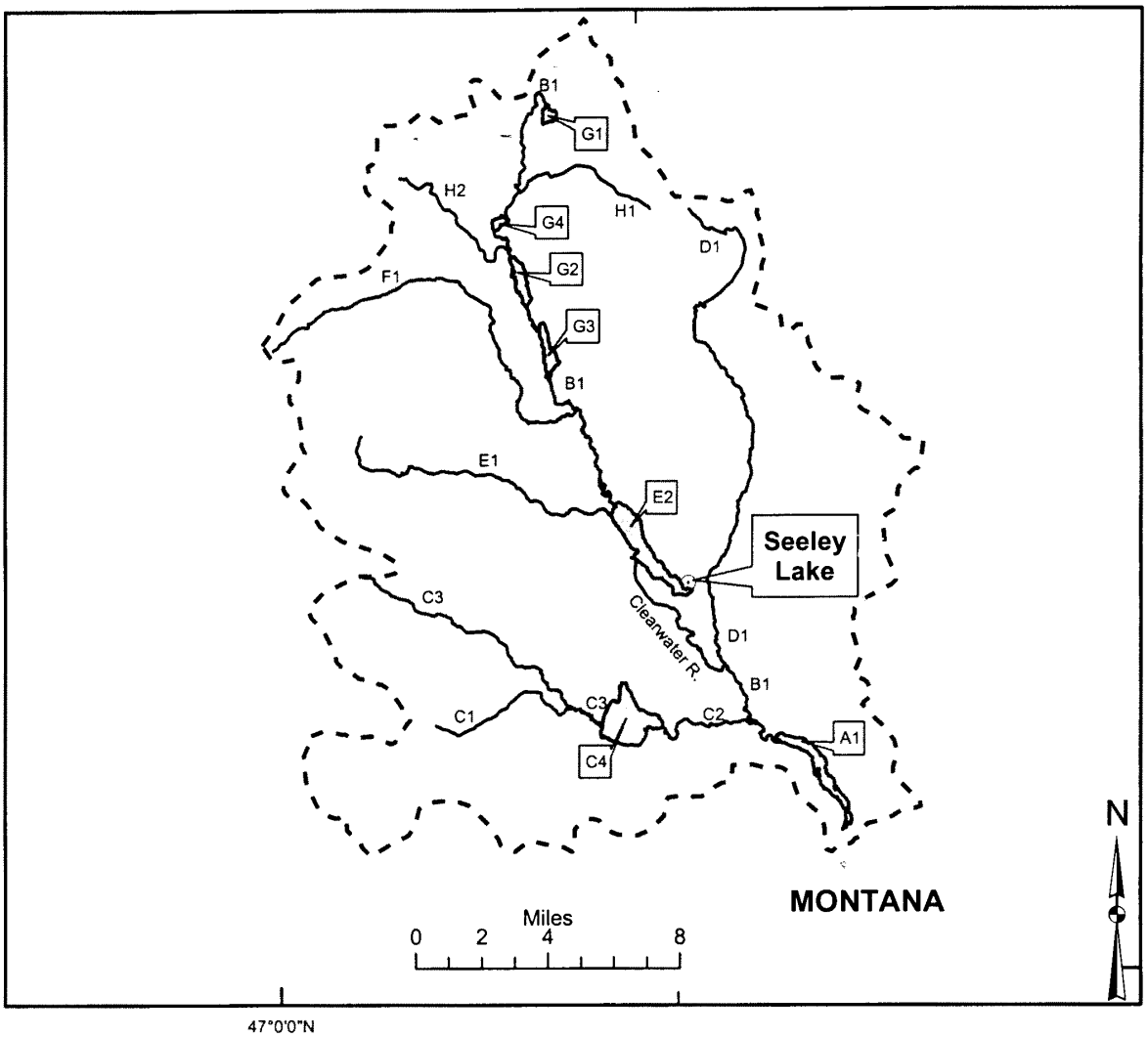
Area of Detail

Proposed Critical Habitat
Subunit (CHSU) Boundary


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 2 - Clark Fork River Basin
Subunit ix - Bitterroot
114°0'0"W
Missoula
Bitterroot River
Hamilton
Darby
MONTANA
IDAHO
46°0'0"N
N
Miles
0 3 6 12
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Area of Detail
Proposed Critical Habitat (map key)
A1-Bitterroot R
B1-Burnt Fork Creek
B2-Gold Cr
B3-Little Burnt Fork Creek
C1-Fred Burr Cr
C2-Mill Cr
D1-Blodgett Cr
E1-Daly Cr
E2-Railroad Cr
E3-Skalkaho Cr
E4-Weasel Cr
F1-Divide Cr
F2-Sleeping Child Cr
F3-Switchback Cr
F4-Two Bear Cr
G1-Beaver Cr
G2-Bitterroot R, W Fk
G3-Blue Joint Cr
G4-Chicken Cr
G5-Deer Cr
G6-Hughes Cr
G7-Johnson Cr
G8-Overwhich Cr
G9-Painted Rocks Reservoir
G10-Sheep Cr
G11-Slate Cr
G12-Straight Cr
G13-Woods Cr
H1-Bitterroot R, E Fk
H2-Buck Cr
H3-Bugle Cr
H4-Bush Cr
H5-Lick Cr
H6-Martin Cr
H7-Meadow Cr
H8-Moose Cr
H9-Reynolds Cr
H10-Sign Cr
H11-Swift Cr
I1-Fault Cr
I2-Fire Cr.
I3-Porcupine Cr
I4-Prayer Cr
I5-Warm Springs Cr
I6-Wiles Cr

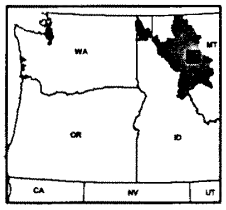

Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 2 - Clark Fork River Basin
Subunit x - Blackfoot River
114°0'0"W
113°0'0"W
47°0'0"N
Missoula
MONTANA
Blackfoot River
A1
B1
B2
B3
C1
D1
E1
E2
E3
F1
G1
G2
N
Miles
0 4.5 9 18
Proposed Critical Habitat (map key)
A1-Blackfoot R
B1-Daisy Cr
B2-Gold Cr
B3-Gold Cr, W Fk
C1-Belmont Cr
D1-Cottonwood Cr
E1-Dunham Cr
E2-Lodgepole Cr
E3-Monture Cr
F1-Blackfoot R, N Fk
G1-Copper Cr
G2-Landers Fk
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Area of Detail

Proposed Critical Habitat for Bull Trout *(Salvelinus confluentus)*
Unit 2 - Clark Fork River Basin
Subunit xi - Clearwater River and Lake Chain



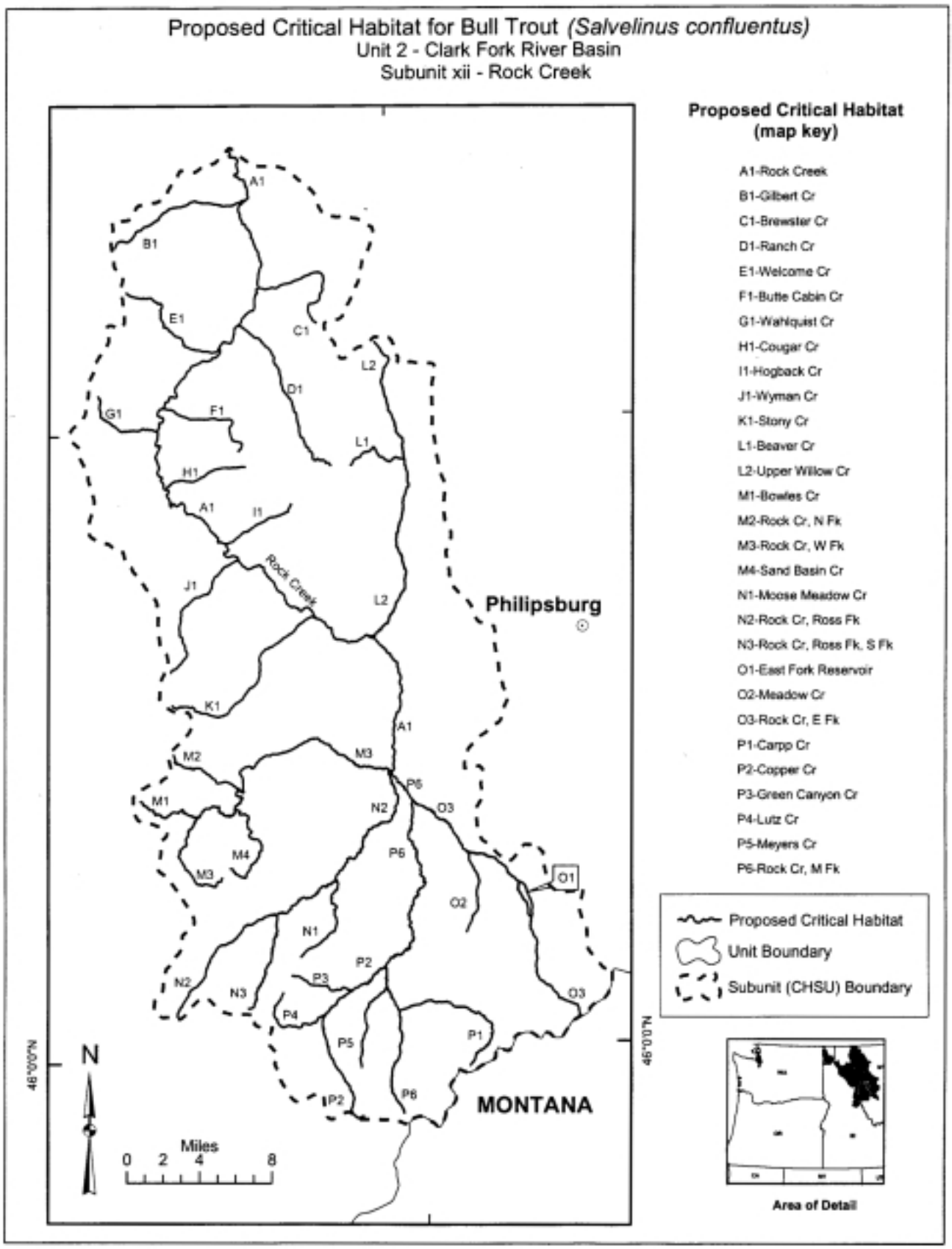
Proposed Critical Habitat (map key)

A1-Salmon Lake
B1-Clearwater R
C1-Finley Cr
C2-Owl Cr
C3-Placid Cr
C4-Placid Lake
D1-Morrell Cr
E1-Deer Cr
E2-Seeley Lake
F1-Clearwater R, W Fk
G1-Clearwater Lake
G2-Lake Alva
G3-Lake Inez
G4-Rainy Lake
H1-Clearwater R, E Fk
H2-Colt Cr



Area of Detail

Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary



BILLING CODE 4310–55–C

(7) Unit 3—Kootenai River Basin.

(i) Critical Habitat Subunit—Kootenai River and Bull Lake.

(A) Kootenai River from a lower point located at 49 degrees latitude, and –116.503 degrees longitude to an upper point located at 48.411 degrees latitude, and –115.314 degrees longitude.

(B) Callahan Creek from a lower point located at 48.435 degrees latitude, and –116.012 degrees longitude to an upper point located at 48.458 degrees latitude, and –115.881 degrees longitude. Callahan Creek, North Fork from a lower point located at 48.435 degrees latitude, and –116.012 degrees longitude to an upper point located at 48.506 degrees latitude, and –116.191 degrees longitude. Callahan Creek, South Fork from a lower point located at 48.435 degrees latitude, and –116.012 degrees longitude to an upper point located at 48.434 degrees latitude, and –116.168 degrees longitude. Goat Creek from a lower point located at 48.435 degrees latitude, and –116 degrees longitude to an upper point located at 48.381 degrees latitude, and –116.038 degrees longitude. July Creek from a lower point located at 48.435 degrees latitude, and –115.916 degrees longitude to an upper point located at 48.423 degrees latitude, and –115.919 degrees longitude.

(C) O'Brien Creek from a lower point located at 48.448 degrees latitude, and –115.866 degrees longitude to an upper point located at 48.557 degrees latitude, and –115.862 degrees longitude.

(D) Quartz Creek from a lower point located at 48.438 degrees latitude, and –115.638 degrees longitude to an upper point located at 48.573 degrees latitude, and –115.689 degrees longitude. Quartz Creek, West Fork from a lower point located at 48.479 degrees latitude, and –115.653 degrees longitude to an upper point located at 48.523 degrees latitude, and –115.749 degrees longitude.

(E) Pipe Creek from a lower point located at 48.424 degrees latitude, and –115.606 degrees longitude to an upper point located at 48.674 degrees latitude, and –115.647 degrees longitude. Pipe Creek, East Fork from a lower point located at 48.616 degrees latitude, and –115.618 degrees longitude to an upper point located at 48.692 degrees latitude, and –115.593 degrees longitude.

(F) Bear Creek from a lower point located at 48.184 degrees latitude, and –115.507 degrees longitude to an upper point located at 48.162 degrees latitude, and –115.653 degrees longitude. Libby Creek from a lower point located at 48.393 degrees latitude, and –115.537 degrees longitude to an upper point located at 48.112 degrees latitude, and –115.552 degrees longitude. Poorman Creek from a lower point located at 48.149 degrees latitude, and –115.526 degrees longitude to an upper point located at 48.123 degrees latitude, and –115.631 degrees longitude. Ramsey Creek from a lower point located at 48.139 degrees latitude, and –115.534 degrees longitude to an upper point located at 48.091 degrees latitude, and –115.617 degrees longitude.

(G) Fisher River from a lower point located at 48.366 degrees latitude, and –115.323 degrees longitude to an upper point located at 48.07 degrees latitude, and –115.374 degrees longitude. West Fisher Creek from a lower point located at 48.07 degrees latitude, and –115.374 degrees longitude to an upper point located at 48.05 degrees latitude, and –115.594 degrees longitude.

(H) Bull Lake centered at 48.236 degrees latitude, and –115.844 degrees longitude. Keeler Creek from a lower point located at 48.36 degrees latitude, and –115.851 degrees longitude to an upper point located at 48.331 degrees latitude, and –116.006 degrees longitude. Keeler Creek, North Fork from a lower point located at 48.342 degrees latitude, and –115.896 degrees longitude to an upper point located at 48.364 degrees latitude, and –116.015 degrees longitude. Lake Creek from a lower point located at 48.36 degrees latitude, and –115.851 degrees longitude to an upper point located at 48.283 degrees latitude, and –115.858 degrees longitude.

(ii) Critical Habitat Subunit—Lake Koocanusa and Sophie Lake.

(A) Lake Koocanusa centered at 48.593 degrees latitude, and –115.231 degrees longitude.

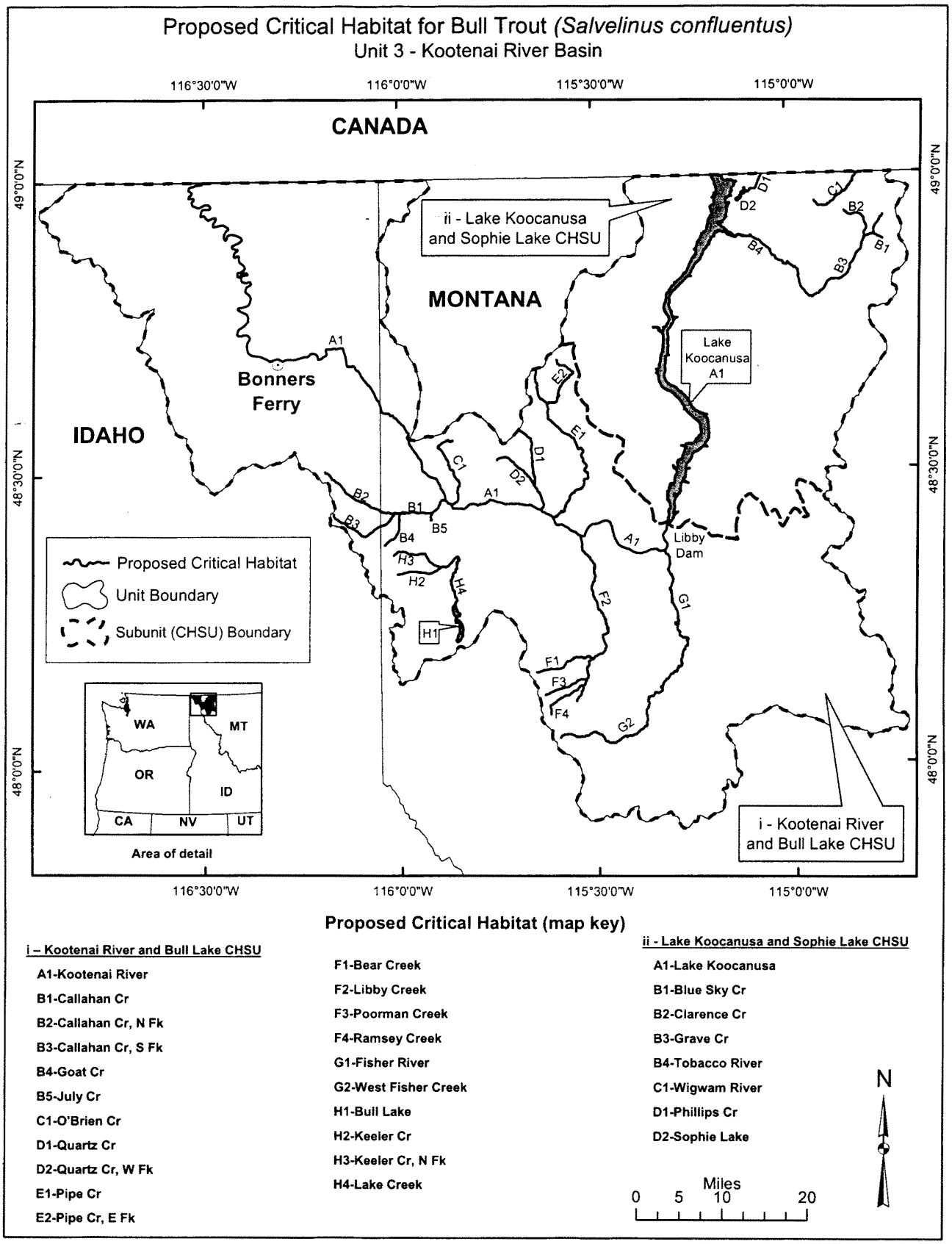
(B) Blue Sky Creek from a lower point located at 48.895 degrees latitude, and –114.775 degrees longitude to an upper point located at 48.887 degrees latitude, and –114.751 degrees longitude. Clarence Creek from a lower point located at 48.889 degrees latitude, and –114.798 degrees longitude to an upper point located at 48.936 degrees latitude, and –114.85 degrees longitude. Grave Creek from a lower point located at 48.798 degrees latitude, and –114.952 degrees longitude to an upper point located at 48.927 degrees latitude, and –114.75 degrees longitude. Tobacco River from a lower point located at 48.897 degrees latitude, and –115.126 degrees longitude to an upper point located at 48.798 degrees latitude, and –114.952 degrees longitude.

(C) Wigwam River from a lower point located at 49 degrees latitude, and –114.801 degrees longitude to an upper point located at 48.953 degrees latitude, and –114.927 degrees longitude.

(D) Phillips Creek from a lower point located at 48.971 degrees latitude, and –115.104 degrees longitude to an upper point located at 49 degrees latitude, and –115.062 degrees longitude. Sophie Lake centered at 48.964 degrees latitude, and –115.115 degrees longitude.

Note: Map follows for Unit 3.

BILLING CODE 4310–55–P



Proposed Critical Habitat (map key)

i – Kootenai River and Bull Lake CHSU

- A1-Kootenai River
- B1-Callahan Cr
- B2-Callahan Cr, N Fk
- B3-Callahan Cr, S Fk
- B4-Goat Cr
- B5-July Cr
- C1-O'Brien Cr
- D1-Quartz Cr
- D2-Quartz Cr, W Fk
- E1-Pipe Cr
- E2-Pipe Cr, E Fk
- F1-Bear Creek
- F2-Libby Creek
- F3-Poorman Creek
- F4-Ramsey Creek
- G1-Fisher River
- G2-West Fisher Creek
- H1-Bull Lake
- H2-Keeler Cr
- H3-Keeler Cr, N Fk
- H4-Lake Creek

ii - Lake Koocanusa and Sophie Lake CHSU

- A1-Lake Koocanusa
- B1-Blue Sky Cr
- B2-Clarence Cr
- B3-Grave Cr
- B4-Tobacco River
- C1-Wigwam River
- D1-Phillips Cr
- D2-Sophie Lake

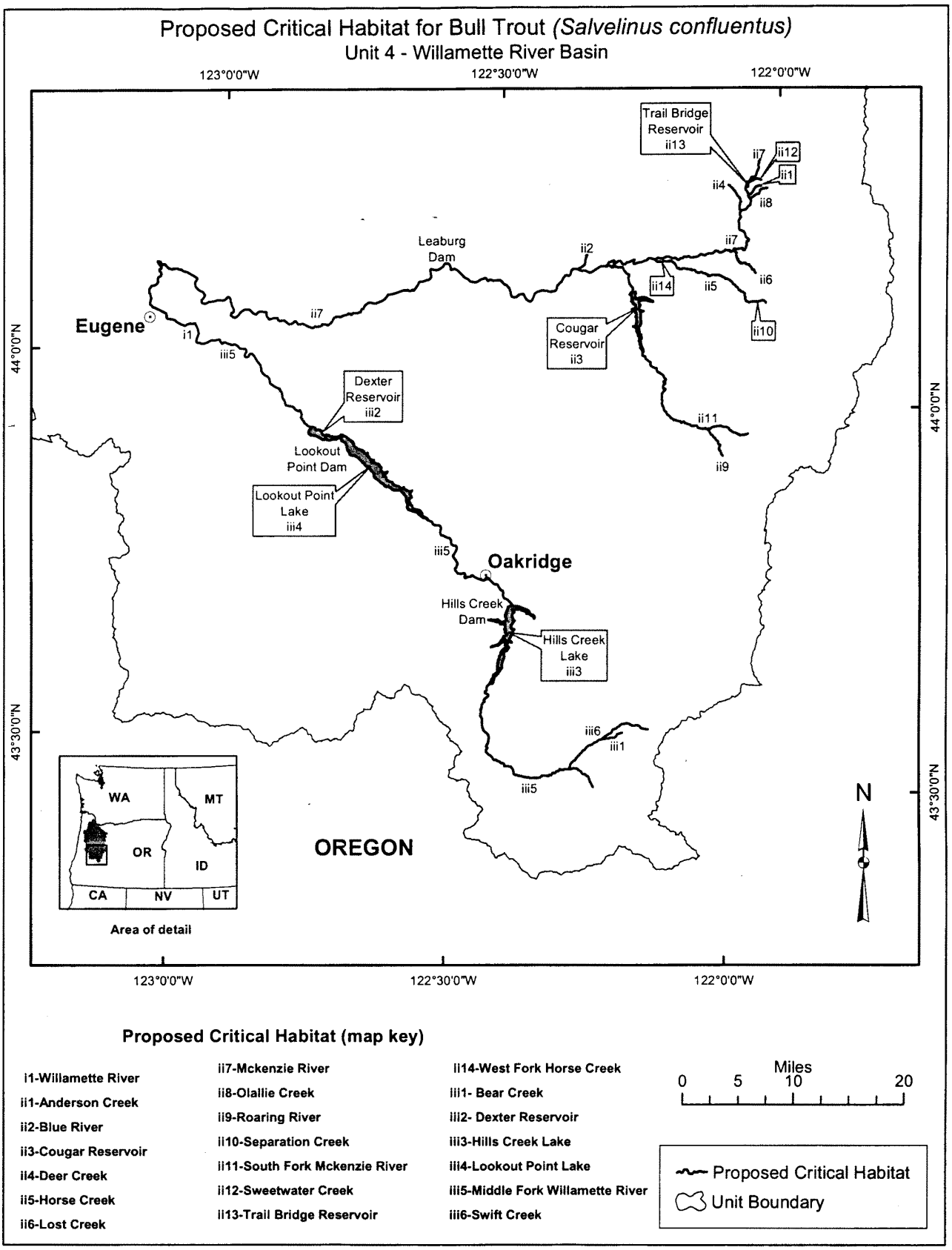
(8) Unit 4—Willamette River Basin.

(i) Willamette River from a lower point located at 44.126 degrees latitude, and –123.106 degrees longitude to an upper point located at 44.023 degrees latitude, and –123.017 degrees longitude.

(ii) Anderson Creek from a lower point located at 44.262 degrees latitude, and –122.045 degrees longitude to an upper point located at 44.276 degrees latitude, and –122.022 degrees longitude. Blue River from a lower point located at 44.153 degrees latitude, and –122.342 degrees longitude to an upper point located at 44.172 degrees latitude, and –122.328 degrees longitude. Cougar Reservoir centered at 44.101 degrees latitude, and –122.229 degrees longitude. Deer Creek from a lower point located at 44.241 degrees latitude, and –122.056 degrees longitude to an upper point located at 44.274 degrees latitude, and –122.082 degrees longitude. Horse Creek from a lower point located at 44.17 degrees latitude, and –122.174 degrees longitude to an upper point located at 44.125 degrees latitude, and –122.036 degrees longitude. Lost Creek from a lower point located at 44.19 degrees latitude, and –122.066 degrees longitude to an upper point located at 44.162 degrees latitude, and –122.022 degrees longitude. McKenzie River from a lower point located at 44.126 degrees latitude, and –123.106 degrees longitude to an upper point located at 44.309 degrees latitude, and –122.028 degrees longitude. Olallie Creek from a lower point located at 44.257 degrees latitude, and –122.041 degrees longitude to an upper point located at 44.273 degrees latitude, and –122.011 degrees longitude. Roaring River from a lower point located at 43.956 degrees latitude, and –122.09 degrees longitude to an upper point located at 43.922 degrees latitude, and –122.06 degrees longitude. Separation Creek from a lower point located at 44.125 degrees latitude, and –122.036 degrees longitude to an upper point located at 44.125 degrees latitude, and –122 degrees longitude. South Fork McKenzie River from a lower point located at 44.159 degrees latitude, and –122.295 degrees longitude to an upper point located at 43.953 degrees latitude, and –122.017 degrees longitude. Sweetwater Creek from a lower point located at 44.279 degrees latitude, and –122.044 degrees longitude to an upper point located at 44.283 degrees latitude, and –122.023 degrees longitude. Trail Bridge Reservoir centered at 44.277 degrees latitude, and –122.047 degrees longitude. West Fork Horse Creek from a lower point located at 44.172 degrees latitude, and –122.206 degrees longitude to an upper point located at 44.17 degrees latitude, and –122.174 degrees longitude.

(iii) Bear Creek from a lower point located at 43.544 degrees latitude, and –122.242 degrees longitude to an upper point located at 43.554 degrees latitude, and –122.207 degrees longitude. Dexter Reservoir centered at 43.915 degrees latitude, and –122.788 degrees longitude. Hills Creek Lake (reservoir) centered at 43.672 degrees latitude, and –122.426 degrees longitude. Lookout Point Lake (reservoir) centered at 43.872 degrees latitude, and –122.681 degrees longitude. Middle Fork Willamette River from a lower point located at 44.023 degrees latitude, and –123.017 degrees longitude to an upper point located at 43.481 degrees latitude, and –122.254 degrees longitude. Swift Creek from a lower point located at 43.502 degrees latitude, and –122.299 degrees longitude to an upper point located at 43.56 degrees latitude, and –122.162 degrees longitude.

Note: Map follows for Unit 4.


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 4 - Willamette River Basin
123°0'0"W
122°30'0"W
122°0'0"W
44°0'0"N
43°30'0"N
Trail Bridge Reservoir ii13
ii7
ii12
ii1
ii4
ii8
Leaburg Dam
ii2
ii7
ii14
ii5
ii6
ii10
Eugene
i1
iii5
ii7
Cougar Reservoir ii3
Dexter Reservoir iii2
ii11
ii9
Lookout Point Dam
Lookout Point Lake iii4
iii5
Oakridge
Hills Creek Dam
Hills Creek Lake iii3
iii6
iii1
iii5
WA
MT
OR
ID
CA
NV
UT
Area of detail
OREGON
N
Proposed Critical Habitat (map key)
i1-Willamette River
ii1-Anderson Creek
ii2-Blue River
ii3-Cougar Reservoir
ii4-Deer Creek
ii5-Horse Creek
ii6-Lost Creek
ii7-Mckenzie River
ii8-Olallie Creek
ii9-Roaring River
ii10-Separation Creek
ii11-South Fork Mckenzie River
ii12-Sweetwater Creek
ii13-Trail Bridge Reservoir
ii14-West Fork Horse Creek
iii1- Bear Creek
iii2- Dexter Reservoir
iii3-Hills Creek Lake
iii4-Lookout Point Lake
iii5-Middle Fork Willamette River
iii6-Swift Creek
Miles
0 5 10 20
Proposed Critical Habitat
Unit Boundary

(9) Unit 5—Hood River Basin.

(i) Hood River from a lower point located at 45.721 degrees latitude, and –121.506 degrees longitude to an upper point located at 45.575 degrees latitude, and –121.626 degrees longitude.

(ii) West Fork Hood River from a lower point located at 45.605 degrees latitude, and –121.632 degrees longitude to an upper point located at 45.456 degrees latitude, and –121.781 degrees longitude.

(iii) Divers Creek from a lower point located at 45.544 degrees latitude, and –121.736 degrees longitude to an upper point located at 45.573 degrees latitude, and –121.787 degrees longitude. Lake Branch Hood River from a lower point located at 45.549 degrees latitude, and –121.699 degrees longitude to an upper point located at 45.539 degrees latitude, and –121.742 degrees longitude. Laurel Creek from a lower point located at 45.539 degrees latitude, and –121.742 degrees longitude to an upper point located at 45.513 degrees latitude, and –121.788 degrees longitude.

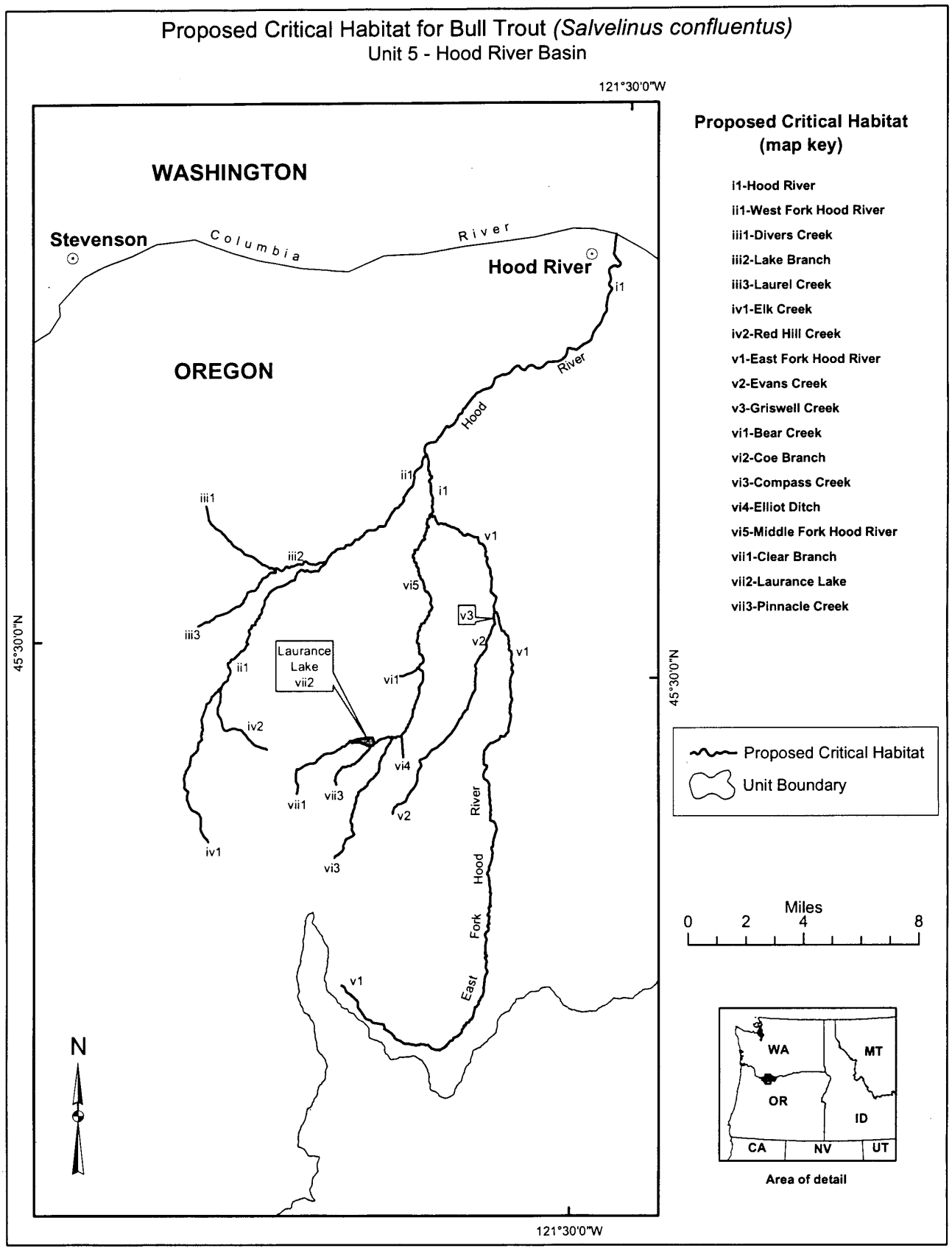
(iv) Elk Creek from a lower point located at 45.456 degrees latitude, and –121.781 degrees longitude to an upper point located at 45.405 degrees latitude, and –121.772 degrees longitude. Red Hill Creek from a lower point located at 45.483 degrees latitude, and –121.769 degrees longitude to an upper point located at 45.453 degrees latitude, and –121.734 degrees longitude.

(v) East Fork Hood River from a lower point located at 45.575 degrees latitude, and –121.626 degrees longitude to an upper point located at 45.338 degrees latitude, and –121.671 degrees longitude. Evans Creek from a lower point located at 45.522 degrees latitude, and –121.576 degrees longitude to an upper point located at 45.425 degrees latitude, and –121.642 degrees longitude. Griswell Creek from a lower point located at 45.529 degrees latitude, and –121.577 degrees longitude to an upper point located at 45.522 degrees latitude, and –121.576 degrees longitude.

(vi) Bear Creek from a lower point located at 45.499 degrees latitude, and –121.629 degrees longitude to an upper point located at 45.494 degrees latitude, and –121.642 degrees longitude. Coe Branch from a lower point located at 45.463 degrees latitude, and –121.645 degrees longitude to an upper point located at 45.434 degrees latitude, and –121.667 degrees longitude. Compass Creek from a lower point located at 45.434 degrees latitude, and –121.667 degrees longitude to an upper point located at 45.401 degrees latitude, and –121.681 degrees longitude. Elliot Creek from a lower point located at 45.464 degrees latitude, and –121.639 degrees longitude to an upper point located at 45.453 degrees latitude, and –121.637 degrees longitude. Middle Fork Hood River from a lower point located at 45.575 degrees latitude, and –121.626 degrees longitude to an upper point located at 45.463 degrees latitude, and –121.645 degrees longitude.

(vii) Clear Branch from a lower point located at 45.463 degrees latitude, and –121.645 degrees longitude to an upper point located at 45.432 degrees latitude, and –121.711 degrees longitude. Laurance Lake centered at 45.46 degrees latitude, and –121.664 degrees longitude. Pinnacle Creek from a lower point located at 45.458 degrees latitude, and –121.66 degrees longitude to an upper point located at 45.438 degrees latitude, and –121.683 degrees longitude.

Note: Map follows for Unit 5.


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 5 - Hood River Basin
121°30'0"W
WASHINGTON
OREGON
Stevenson
Columbia River
Hood River
Hood River
East Fork Hood River
Laurance Lake vii2
i1
ii1
iii1
iii2
iii3
iv1
iv2
v1
v2
v3
vi1
vi2
vi3
vi4
vi5
vii1
vii3
45°30'0"N
N
Proposed Critical Habitat (map key)
i1-Hood River
ii1-West Fork Hood River
iii1-Divers Creek
iii2-Lake Branch
iii3-Laurel Creek
iv1-Elk Creek
iv2-Red Hill Creek
v1-East Fork Hood River
v2-Evans Creek
v3-Griswell Creek
vi1-Bear Creek
vi2-Coe Branch
vi3-Compass Creek
vi4-Elliot Ditch
vi5-Middle Fork Hood River
vii1-Clear Branch
vii2-Laurance Lake
vii3-Pinnacle Creek
Proposed Critical Habitat
Unit Boundary
Miles
0 2 4 8
WA
MT
OR
ID
CA
NV
UT
Area of detail

(10) Unit 6—Deschutes River Basin.

(i) Critical Habitat Subunit—Lower Deschutes.

(A) Deschutes River from a lower point located at 45.639 degrees latitude, and –120.914 degrees longitude to an upper point located at 44.373 degrees latitude, and –121.291 degrees longitude. Lake Billy Chinook centered at 44.597 degrees latitude, and –121.285 degrees longitude. Lake Simtustus centered at 44.656 degrees latitude, and –121.259 degrees longitude. Pelton Reservoir centered at 44.714 degrees latitude, and –121.241 degrees longitude.

(B) Bunchgrass Creek from a lower point located at 44.982 degrees latitude, and –121.629 degrees longitude to an upper point located at 45.058 degrees latitude, and –121.673 degrees longitude. Warm Springs River 1 from a lower point located at 44.997 degrees latitude, and –121.067 degrees longitude to an upper point located at 44.942 degrees latitude, and –121.43 degrees longitude. Warm Springs River 2 from a lower point located at 44.97 degrees latitude, and –121.477 degrees longitude to an upper point located at 44.97 degrees latitude, and –121.584 degrees longitude. Warm Springs River 3 from a lower point located at 44.991 degrees latitude, and –121.667 degrees longitude to an upper point located at 44.993 degrees latitude, and –121.68 degrees longitude. Warm Springs River 4 from a lower point located at 44.997 degrees latitude, and –121.715 degrees longitude to an upper point located at 45.003 degrees latitude, and –121.74 degrees longitude.

(C) Shitike Creek from a lower point located at 44.762 degrees latitude, and −121.227 degrees longitude to an upper point located at 44.727 degrees latitude, and −121.786 degrees longitude.

(D) Crooked River from a lower point located at 44.501 degrees latitude, and −121.285 degrees longitude to an upper point located at 44.31 degrees latitude, and −120.868 degrees longitude.

(E) Metolius River from a lower point located at 44.619 degrees latitude, and −121.468 degrees longitude to an upper point located at 44.434 degrees latitude, and −121.637 degrees longitude.

(F) Whitewater River from a lower point located at 44.67 degrees latitude, and −121.545 degrees longitude to an upper point located at 44.704 degrees latitude, and −121.727 degrees longitude.

(G) Abbot Creek from a lower point located at 44.57 degrees latitude, and −121.619 degrees longitude to an upper point located at 44.544 degrees latitude, and −121.67 degrees longitude. Candle Creek from a lower point located at 44.576 degrees latitude, and −121.618 degrees longitude to an upper point located at 44.583 degrees latitude, and −121.677 degrees longitude. Jefferson Creek from a lower point located at 44.577 degrees latitude, and −121.619 degrees longitude to an upper point located at 44.64 degrees latitude, and −121.734 degrees longitude. Unnamed creek—off Jefferson Creek from a lower point located at 44.626 degrees latitude, and −121.69 degrees longitude to an upper point located at 44.634 degrees latitude, and −121.698 degrees longitude.

(H) Brush Creek from a lower point located at 44.504 degrees latitude, and −121.658 degrees longitude to an upper point located at 44.544 degrees latitude, and −121.706 degrees longitude. Canyon Creek from a lower point located at 44.501 degrees latitude, and −121.642 degrees longitude to an upper point located at 44.503 degrees latitude, and −121.741 degrees longitude. Heising Spring from a lower point located at 44.494 degrees latitude, and −121.648 degrees longitude to an upper point located at 44.491 degrees latitude, and −121.651 degrees longitude. Jack Creek from a lower point located at 44.493 degrees latitude, and −121.647 degrees longitude to an upper point located at 44.472 degrees latitude, and −121.725 degrees longitude. Roaring Creek from a lower point located at 44.508 degrees latitude, and −121.686 degrees longitude to an upper point located at 44.527 degrees latitude, and −121.708 degrees longitude. Unnamed creek off Canyon Creek from a lower point located at 44.505 degrees latitude, and −121.657 degrees longitude to an upper point located at 44.527 degrees latitude, and −121.678 degrees longitude.

(I) Blue Lake centered at 44.413 degrees latitude, and −121.768 degrees longitude. Lake Creek from a lower point located at 44.436 degrees latitude, and −121.702 degrees longitude to an upper point located at 44.426 degrees latitude, and −121.726 degrees longitude. Link Creek from a lower point located at 44.419 degrees latitude, and −121.754 degrees longitude to an upper point located at 44.415 degrees latitude, and −121.764 degrees longitude. Middle Fork Lake Creek from a lower point located at 44.453 degrees latitude, and −121.642 degrees longitude to an upper point located at 44.436 degrees latitude, and −121.702 degrees longitude. North Fork Lake Creek from a lower point located at 44.457 degrees latitude, and −121.642 degrees longitude to an upper point located at 44.436 degrees latitude, and −121.702 degrees longitude. South Fork Lake Creek from a lower point located at 44.442 degrees latitude, and −121.661 degrees longitude to an upper point located at 44.436 degrees latitude, and −121.704 degrees longitude. Suttle Lake centered at 44.422 degrees latitude, and −121.74 degrees longitude.

(J) Squaw Creek from a lower point located at 44.46 degrees latitude, and −121.335 degrees longitude to an upper point located at 44.445 degrees latitude, and −121.346 degrees longitude.

(ii) Critical Habitat Subunit—Upper Deschutes.

(A) Big Marsh Creek from a lower point located at 43.483 degrees latitude, and −121.907 degrees longitude to an upper point located at 43.318 degrees latitude, and −121.993 degrees longitude. Crane Prairie Reservoir centered at 43.786 degrees latitude, and −121.8 degrees longitude. Crescent Creek from a lower point located at 43.529 degrees latitude, and −121.651 degrees longitude to an upper point located at 43.501 degrees latitude, and −121.972 degrees longitude. Crescent Lake centered at 43.478 degrees latitude, and −121.989 degrees longitude. Deschutes River from a lower point located at 43.742 degrees latitude, and −121.779 degrees longitude to an upper point located at 43.901 degrees latitude, and −121.76 degrees longitude. Lava Lake centered at 43.921 degrees latitude, and −121.772 degrees longitude. Little Deschutes River from a lower point located at 43.529 degrees latitude, and −121.651 degrees longitude to an upper point located at 43.301 degrees latitude, and −121.994 degrees longitude. Little Lava Lake centered at 43.91 degrees latitude, and −121.757 degrees longitude. Wickiup Reservoir centered at 43.679 degrees latitude, and −121.732 degrees longitude.

(B) Cold Creek from a lower point located at 43.521 degrees latitude, and −121.951 degrees longitude to an upper point located at 43.515 degrees latitude, and −122 degrees longitude. Refrigerator Creek from a lower point located at 43.452 degrees latitude, and −121.935 degrees longitude to an upper point located at 43.419 degrees latitude, and −121.989 degrees longitude. Whitefish Creek from a lower point located at 43.468 degrees latitude, and −122.031 degrees longitude to an upper point located at 43.527 degrees latitude, and −122.07 degrees longitude.

(C) Fall River from a lower point located at 43.768 degrees latitude, and −121.632 degrees longitude to an upper point located at 43.788 degrees latitude, and −121.514 degrees longitude. Hemlock Creek from a lower point located at 43.365 degrees latitude, and −121.825 degrees longitude to an upper

point located at 43.334 degrees latitude, and −121.917 degrees longitude. Spruce Creek from a lower point located at 43.352 degrees latitude, and −121.857 degrees longitude to an upper point located at 43.369 degrees latitude, and −121.922 degrees longitude.

(D) Browns Creek from a lower point located at 43.721 degrees latitude, and −121.791 degrees longitude to an upper point located at 43.727 degrees latitude, and −121.954 degrees longitude. Cultus River from a lower point located at 43.809 degrees latitude, and −121.796 degrees longitude to an upper point located at 43.899 degrees latitude, and −121.858 degrees longitude. Quinn River from a lower point located at 43.784 degrees latitude, and −121.835 degrees longitude to an upper point located at 43.782 degrees latitude, and −121.836 degrees longitude. Snow Creek from a lower point located at 43.814 degrees latitude, and −121.776 degrees longitude to an upper point located at 43.879 degrees latitude, and −121.767 degrees longitude.

(11) Unit 7—Odell Lake.

(i) Odell Lake centered at 43.572 degrees latitude, and −122 degrees longitude.

(ii) Trapper Creek from a lower point located at 43.585 degrees latitude, and −122.046 degrees longitude to an upper point located at 43.537 degrees latitude, and −122.075 degrees longitude.

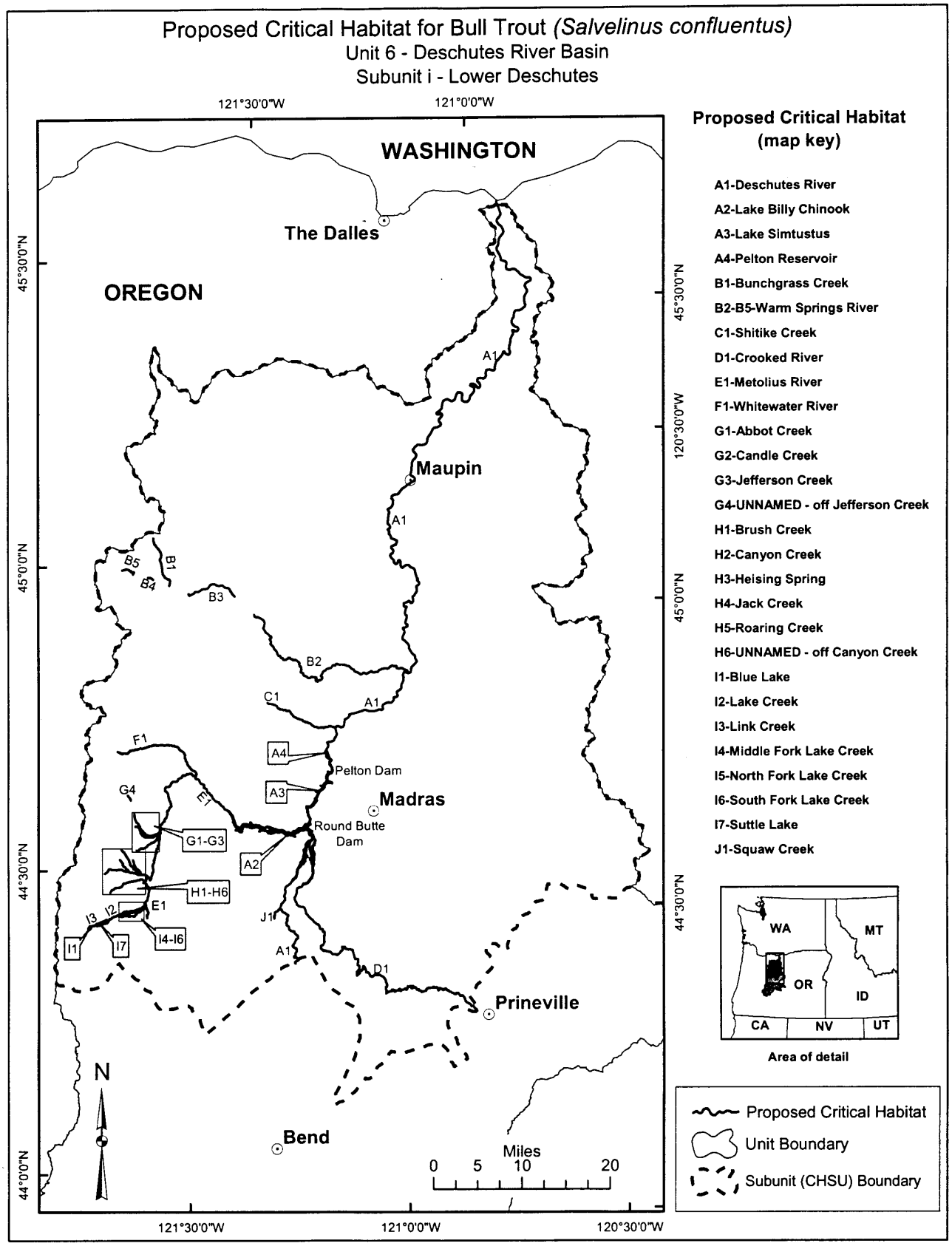
(iii) Crystal Creek from a lower point located at 43.572 degrees latitude, and −122.021 degrees longitude to an upper point located at 43.566 degrees latitude, and −122.05 degrees longitude.

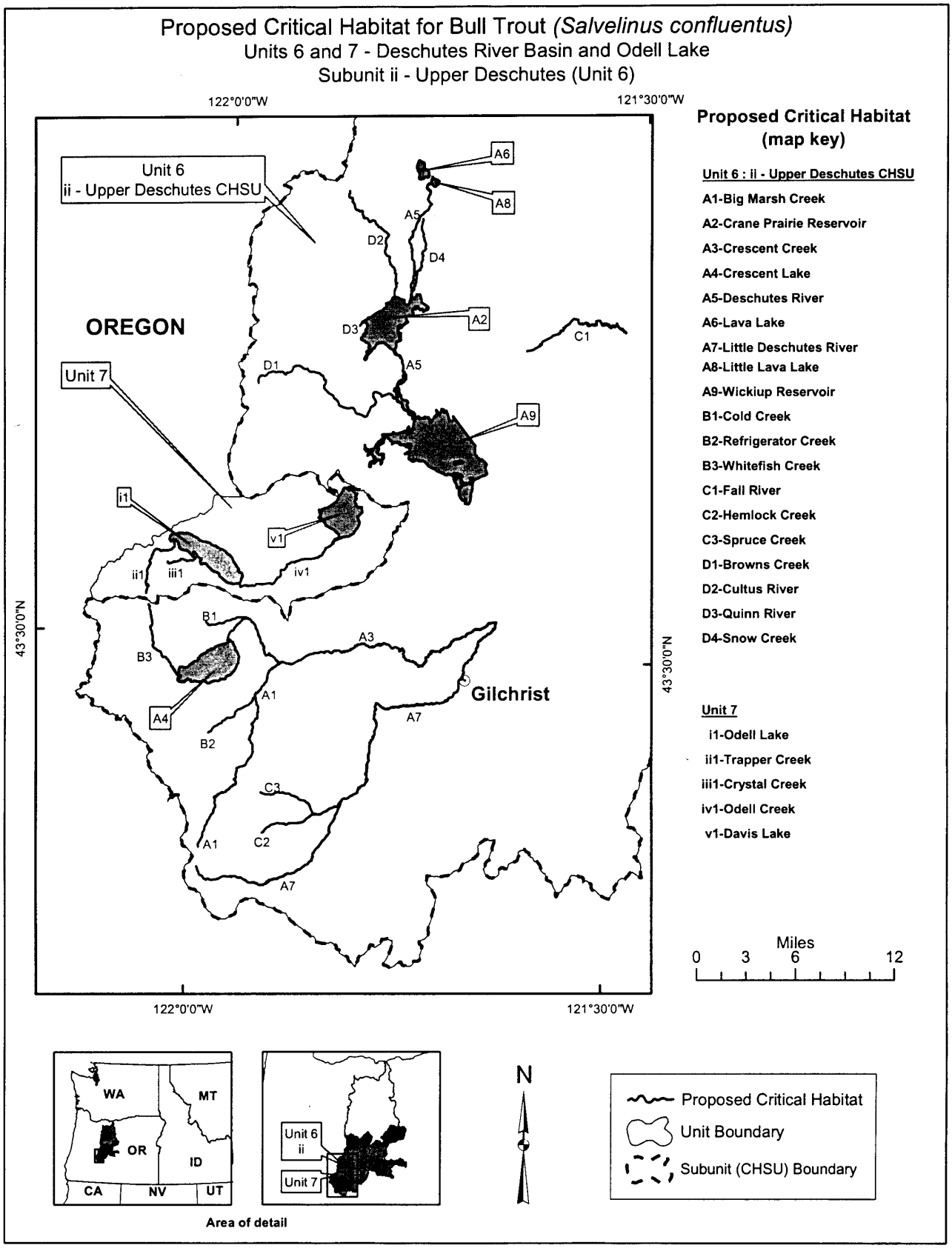
(iv) Odell Creek from a lower point located at 43.591 degrees latitude, and −121.853 degrees longitude to an upper point located at 43.55 degrees latitude, and −121.963 degrees longitude.

(v) Davis Lake centered at 43.616 degrees latitude, and −121.843 degrees longitude.

Note: Maps follow for Unit 6, Subunit i; and for Unit 6, Subunit ii and Unit 7.

BILLING CODE 4310–55–P


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 6 - Deschutes River Basin
Subunit i - Lower Deschutes
121°30'0"W
121°0'0"W
120°30'0"W
45°30'0"N
45°0'0"N
44°30'0"N
44°0'0"N
WASHINGTON
OREGON
The Dalles
Maupin
Pelton Dam
Madras
Round Butte Dam
Prineville
Bend
A1
A2
A3
A4
B1
B2
B3
B4
B5
C1
D1
E1
F1
G1-G3
G4
H1-H6
I1
I2
I3
I4-I6
I7
J1
N
Miles
0 5 10 20
Proposed Critical Habitat (map key)
A1-Deschutes River
A2-Lake Billy Chinook
A3-Lake Simtustus
A4-Pelton Reservoir
B1-Bunchgrass Creek
B2-B5-Warm Springs River
C1-Shitike Creek
D1-Crooked River
E1-Metolius River
F1-Whitewater River
G1-Abbot Creek
G2-Candle Creek
G3-Jefferson Creek
G4-UNNAMED - off Jefferson Creek
H1-Brush Creek
H2-Canyon Creek
H3-Heising Spring
H4-Jack Creek
H5-Roaring Creek
H6-UNNAMED - off Canyon Creek
I1-Blue Lake
I2-Lake Creek
I3-Link Creek
I4-Middle Fork Lake Creek
I5-North Fork Lake Creek
I6-South Fork Lake Creek
I7-Suttle Lake
J1-Squaw Creek
WA
MT
OR
ID
CA
NV
UT
Area of detail
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary



BILLING CODE 4310–55–C

(12) Unit 8—John Day River Basin.

(i) Call Creek from a lower point located at 44.32 degrees latitude, and −118.556 degrees longitude to an upper point located at 44.286 degrees latitude, and −118.506 degrees longitude. Canyon Creek from a lower point located at 44.423 degrees latitude, and −118.958 degrees longitude to an upper point located at 44.27 degrees latitude, and −118.731 degrees longitude. Deardorff Creek from a lower point located at 44.395 degrees latitude, and −118.576 degrees longitude to an upper point located at 44.383 degrees latitude, and −118.422 degrees longitude. Indian Creek from a lower point located at 44.443 degrees latitude, and −118.799 degrees longitude to an upper point located at 44.295 degrees latitude, and −118.735 degrees longitude. John Day River from a lower point located at 44.755 degrees latitude, and −119.638 degrees longitude to an upper point located at 44.25 degrees latitude, and −118.526 degrees longitude. North Reynolds Creek from a lower point located at 44.423 degrees latitude, and −118.516 degrees longitude to an upper point located at 44.43 degrees latitude, and −118.424 degrees longitude. Pine Creek from a lower point located at 44.438 degrees latitude, and −118.826 degrees longitude to an upper point located at 44.315 degrees latitude, and −118.797 degrees longitude. Rail Creek from a lower point located at 44.349 degrees latitude, and −118.573 degrees longitude to an upper point located at 44.297 degrees latitude, and −118.489 degrees longitude. Reynolds Creek from a lower point located at 44.414 degrees latitude, and −118.595 degrees longitude to an upper point located at 44.405 degrees latitude, and −118.439 degrees longitude. Roberts Creek from a lower point located at 44.348 degrees latitude, and −118.574 degrees longitude to an upper point located at 44.276 degrees latitude, and −118.574 degrees longitude. Strawberry Creek from a lower point located at 44.459 degrees latitude, and −118.7 degrees longitude to an upper point located at 44.293 degrees latitude, and −118.699 degrees longitude.

(ii) Baldy Creek from a lower point located at 44.91 degrees latitude, and −118.317 degrees longitude to an upper point located at 44.85 degrees latitude, and −118.304 degrees longitude. Big Creek from a lower point located at 44.961 degrees latitude, and −118.682 degrees longitude to an upper point located at 44.977 degrees latitude, and −118.671 degrees longitude. Boulder Creek from a lower point located at 44.82 degrees latitude, and −118.414 degrees longitude to an upper point located at 44.841 degrees latitude, and −118.332 degrees longitude. Boundary Creek from a lower point located at 44.787 degrees latitude, and −118.374 degrees longitude to an upper point located at 44.811 degrees latitude, and −118.342 degrees longitude. Bull Run Creek from a lower point located at 44.808 degrees latitude, and −118.424 degrees longitude to an upper point located at 44.768 degrees latitude, and −118.29 degrees longitude. Clear Creek from a lower point located at 44.821 degrees latitude, and −118.449 degrees longitude to an upper point located at 44.758 degrees latitude, and −118.509 degrees longitude. Crane Creek from a lower point located at 44.894 degrees latitude, and −118.477 degrees longitude to an upper point located at 44.869 degrees latitude, and −118.329 degrees longitude. Crawfish Creek from a lower point located at 44.915 degrees latitude, and −118.297 degrees longitude to an upper point located at 44.931 degrees latitude, and −118.233 degrees longitude. Cunningham Creek from a lower point located at 44.911 degrees latitude, and −118.266 degrees longitude to an upper point located at 44.92 degrees latitude, and −118.234 degrees longitude. Deep Creek from a lower point located at 44.78 degrees latitude, and −118.347 degrees longitude to an upper point located at 44.815 degrees latitude, and −118.305 degrees longitude. Desolation Creek from a lower point located at 44.998 degrees latitude, and −118.935 degrees longitude to an upper point located at 44.82 degrees latitude, and −118.688 degrees longitude. East Fork Meadow Brook from a lower point located at 44.969 degrees latitude, and −118.965 degrees longitude to an upper point located at 44.863 degrees latitude, and −118.823 degrees longitude. Granite Creek from a lower point located at 44.866 degrees latitude, and −118.56 degrees longitude to an upper point located at 44.857 degrees latitude, and −118.342 degrees longitude. Lightning Creek from a lower point located at 44.765 degrees latitude, and −118.496 degrees longitude to an upper point located at 44.718 degrees latitude, and −118.493 degrees longitude. North Fork Desolation Creek from a lower point located at 44.82 degrees latitude, and −118.688 degrees longitude to an upper point located at 44.773 degrees latitude, and −118.625 degrees longitude. North Fork John Day River from a lower point located at 44.755 degrees latitude, and −119.638 degrees longitude to an upper point located at 44.867 degrees latitude, and −118.238 degrees longitude. Onion Creek from a lower point located at 44.913 degrees latitude, and −118.4 degrees longitude to an upper point located at 44.889 degrees latitude, and −118.338 degrees longitude. Salmon Creek from a lower point located at 44.725 degrees latitude, and −118.502 degrees longitude to an upper point located at 44.717 degrees latitude, and −118.541 degrees longitude. South Fork Desolation Creek from a lower point located at 44.82 degrees latitude, and −118.688 degrees longitude to an upper point located at 44.719 degrees latitude, and −118.621 degrees longitude. South Trail Creek from a lower point located at 44.937 degrees latitude, and −118.389 degrees longitude to an upper point located at 44.953 degrees latitude, and −118.272 degrees longitude. Trail Creek from a lower point located at 44.916 degrees latitude, and −118.405 degrees longitude to an upper point located at 44.937 degrees latitude, and −118.389 degrees longitude. West Fork Clear Creek from a lower point located at 44.758 degrees latitude, and −118.509 degrees longitude to an upper point located at 44.733 degrees latitude, and −118.583 degrees longitude. West Fork Meadow Brook from a lower point located at 44.969 degrees latitude, and −118.965 degrees longitude to an upper point located at 44.998 degrees latitude, and −118.944 degrees longitude. Winom Creek from a lower point located at 44.977 degrees latitude, and −118.671 degrees longitude to an upper point located at 45.05 degrees latitude, and −118.61 degrees longitude.

(iii) Big Boulder Creek from a lower point located at 44.666 degrees latitude, and −118.715 degrees longitude to an upper point located at 44.749 degrees latitude, and −118.682 degrees longitude. Big Creek from a lower point located at 44.766 degrees latitude, and −118.873 degrees longitude to an upper point located at 44.765 degrees latitude, and −118.685 degrees longitude. Butte Creek from a lower point located at 44.642 degrees latitude, and −118.651 degrees longitude to an upper point located at 44.586 degrees latitude, and −118.643 degrees longitude. Clear Creek from a lower point located at 44.594 degrees latitude, and −118.507 degrees longitude to an upper point located at 44.447 degrees latitude, and −118.43 degrees longitude. Davis Creek from a lower point located at 44.607 degrees latitude, and −118.544 degrees longitude to an upper point located at 44.57 degrees latitude, and −118.621 degrees longitude. Deadwood Creek from a lower point located at 44.768 degrees latitude, and −118.792 degrees longitude to an upper point located at 44.75 degrees latitude, and −118.718

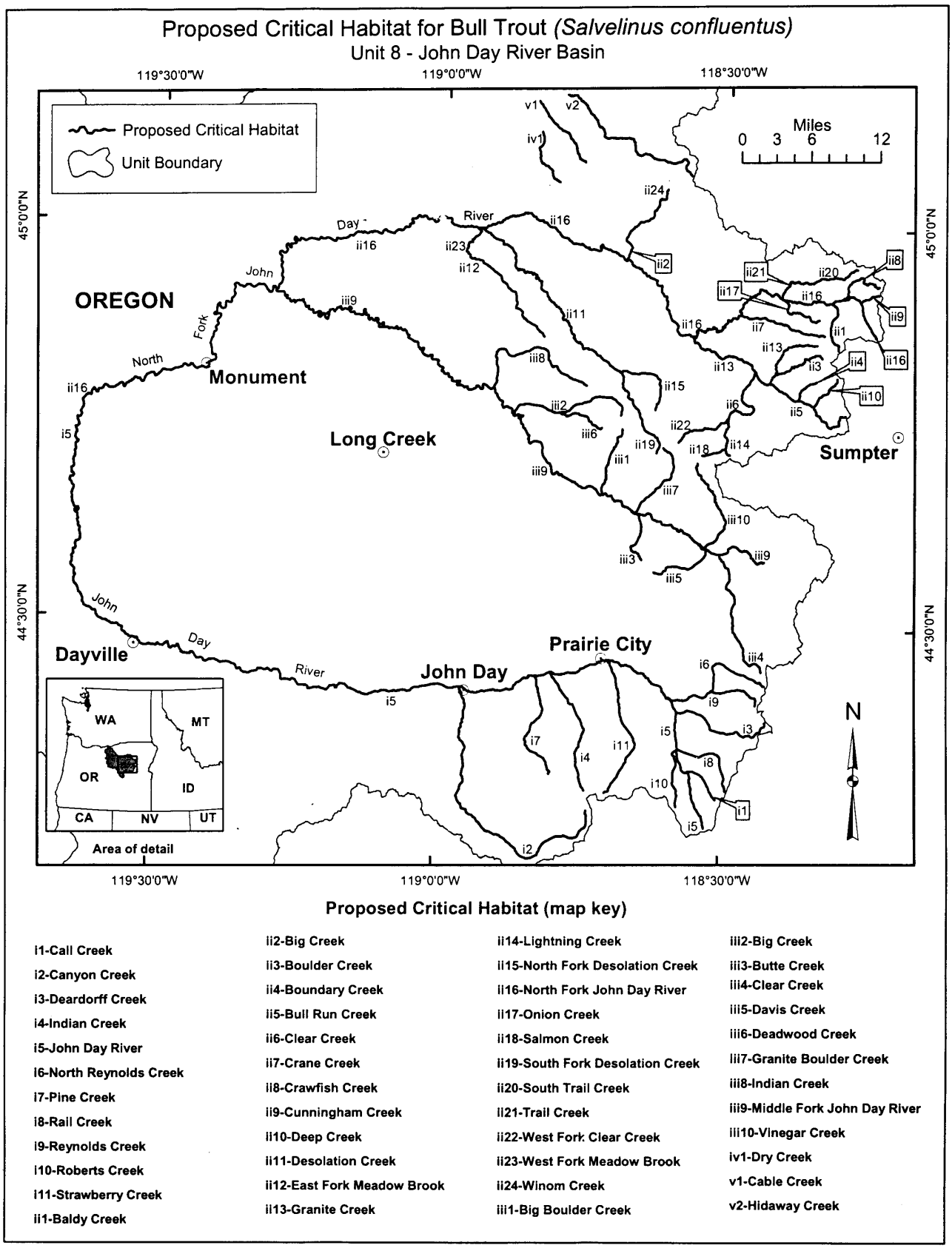
degrees longitude. Granite Boulder Creek from a lower point located at 44.648 degrees latitude, and −118.664 degrees longitude to an upper point located at 44.726 degrees latitude, and −118.61 degrees longitude. Indian Creek from a lower point located at 44.798 degrees latitude, and −118.91 degrees longitude to an upper point located at 44.802 degrees latitude, and −118.746 degrees longitude. Middle Fork John Day River from a lower point located at 44.917 degrees latitude, and −119.3 degrees longitude to an upper point located at 44.585 degrees latitude, and −118.429 degrees longitude. Vinegar Creek from a lower point located at 44.601 degrees latitude, and −118.535 degrees longitude to an upper point located at 44.707 degrees latitude, and −118.549 degrees longitude.

(iv) Dry Creek from a lower point located at 45.119 degrees latitude, and −118.835 degrees longitude to an upper point located at 45.057 degrees latitude, and −118.802 degrees longitude.

(v) Cable Creek from a lower point located at 45.158 degrees latitude, and −118.841 degrees longitude to an upper point located at 45.083 degrees latitude, and −118.758 degrees longitude. Hidaway Creek from a lower point located at 45.166 degrees latitude, and −118.791 degrees longitude to an upper point located at 45.067 degrees latitude, and −118.569 degrees longitude.

Note: Map follows for Unit 8.

BILLING CODE 4310–55–P



BILLING CODE 4310–55–C

(13) Unit 9—Umatilla-Walla Walla River Basins.

(i) Critical Habitat Subunit—Umatilla.

(A) Ryan Creek from a lower point located at 45.723 degrees latitude, and –118.314 degrees longitude to an upper point located at 45.694 degrees latitude, and –118.308 degrees longitude. Squaw Creek from a lower point located at 45.7 degrees latitude, and –118.4 degrees longitude to an upper point located at 45.655 degrees latitude, and –118.401 degrees longitude. Umatilla River from a lower point located at 45.923 degrees latitude, and –119.356 degrees longitude to an upper point located at 45.726 degrees latitude, and –118.187 degrees longitude.

(B) East Meacham Creek from a lower point located at 45.486 degrees latitude, and –118.273 degrees longitude to an upper point located at 45.479 degrees latitude, and –118.231 degrees longitude. Meacham Creek from a lower point located at 45.702 degrees latitude, and –118.359 degrees longitude to an upper point located at 45.491 degrees latitude, and –118.326 degrees longitude. North Fork Meacham Creek from a lower point located at 45.527 degrees latitude, and –118.29 degrees longitude to an upper point located at 45.571 degrees latitude, and –118.138 degrees longitude. Pot Creek from a lower point located at 45.554 degrees latitude, and –118.2 degrees longitude to an upper point located at 45.523 degrees latitude, and –118.162 degrees longitude.

(C) Coyote Creek from a lower point located at 45.732 degrees latitude, and –118.138 degrees longitude to an upper point located at 45.746 degrees latitude, and –118.136 degrees longitude. North Fork Umatilla River from a lower point located at 45.726 degrees latitude, and –118.187 degrees longitude to an upper point located at 45.705 degrees latitude, and –118.033 degrees longitude. Woodward Creek from a lower point located at 45.736 degrees latitude, and –118.079 degrees longitude to an upper point located at 45.75 degrees latitude, and –118.075 degrees longitude.

(D) Buck Creek from a lower point located at 45.719 degrees latitude, and –118.188 degrees longitude to an upper point located at 45.686 degrees latitude, and –118.087 degrees longitude. Shimmiehorn Creek from a lower point located at 45.675 degrees latitude, and –118.218 degrees longitude to an upper point located at 45.598 degrees latitude, and –118.186 degrees longitude. South Fork Umatilla River from a lower point located at 45.726 degrees latitude, and –118.187 degrees longitude to an upper point located at 45.598 degrees latitude, and –118.219 degrees longitude. Spring Creek from a lower point located at 45.665 degrees latitude, and –118.171 degrees longitude to an upper point located at 45.601 degrees latitude, and –118.139 degrees longitude. Thomas Creek from a lower point located at 45.688 degrees latitude, and –118.204 degrees longitude to an upper point located at 45.668 degrees latitude, and –118.125 degrees longitude.

(ii) Critical Habitat Subunit—Walla Walla.

(A) Walla Walla River from a lower point located at 46.039 degrees latitude, and –118.478 degrees longitude to an upper point located at 45.899 degrees latitude, and –118.307 degrees longitude.

(B) North Fork Walla Walla River from a lower point located at 45.899 degrees latitude, and –118.307 degrees longitude to an upper point located at 45.947 degrees latitude, and –117.99 degrees longitude.

(C) Husky Spring Creek from a lower point located at 45.884 degrees latitude, and –117.977 degrees longitude to an upper point located at 45.889 degrees latitude, and –117.951 degrees longitude. Reser Creek from a lower point located at 45.876 degrees latitude, and –117.985 degrees longitude to an upper point located at 45.899 degrees latitude, and –118.017 degrees longitude. Skiphorton Creek from a lower point located at 45.852 degrees latitude, and –118.024 degrees longitude to an upper point located at 45.875 degrees latitude, and –118.026 degrees longitude. South Fork Walla Walla River from a lower point located at 45.899 degrees latitude, and –118.307 degrees longitude to an upper point located at 45.966 degrees latitude, and –117.963 degrees longitude.

(D) Bull Creek from a lower point located at 46.028 degrees latitude, and –117.946 degrees longitude to an upper point located at 46.027 degrees latitude, and –117.938 degrees longitude. Burnt Fork Creek from a lower point located at 46.032 degrees latitude, and –117.952 degrees longitude to an upper point located at 46.044 degrees latitude, and –117.944 degrees longitude. Deadman Creek from a lower point located at 46.032 degrees latitude, and –117.955 degrees longitude to an upper point located at 46.036 degrees latitude, and –117.952 degrees longitude. Garrison Creek from a lower point located at 46.026 degrees latitude, and –118.433 degrees longitude to an upper point located at 46.075 degrees latitude, and –118.273 degrees longitude. Green Fork Creek from a lower point located at 46.029 degrees latitude, and –117.948 degrees longitude to an upper point located at 46.031 degrees latitude, and –117.939 degrees longitude. Low Creek from a lower point located at 45.993 degrees latitude, and –118.035 degrees longitude to an upper point located at 45.973 degrees latitude, and –118.009 degrees longitude. Mill Creek from a lower point located at 46.039 degrees latitude, and –118.478 degrees longitude to an upper point located at 46.011 degrees latitude, and –117.941 degrees longitude. North Fork Mill Creek from a lower point located at 46.022 degrees latitude, and –117.995 degrees longitude to an upper point located at 46.028 degrees latitude, and –117.995 degrees longitude. Paradise Creek from a lower point located at 46.004 degrees latitude, and –118.017 degrees longitude to an upper point located at 46.001 degrees latitude, and –117.99 degrees longitude. Yellowhawk Creek from a lower point located at 46.017 degrees latitude, and –118.4 degrees longitude to an upper point located at 46.077 degrees latitude, and –118.272 degrees longitude.

(E) Touchet River from a lower point located at 46.272 degrees latitude, and –118.174 degrees longitude to an upper point located at 46.302 degrees latitude, and –117.959 degrees longitude.

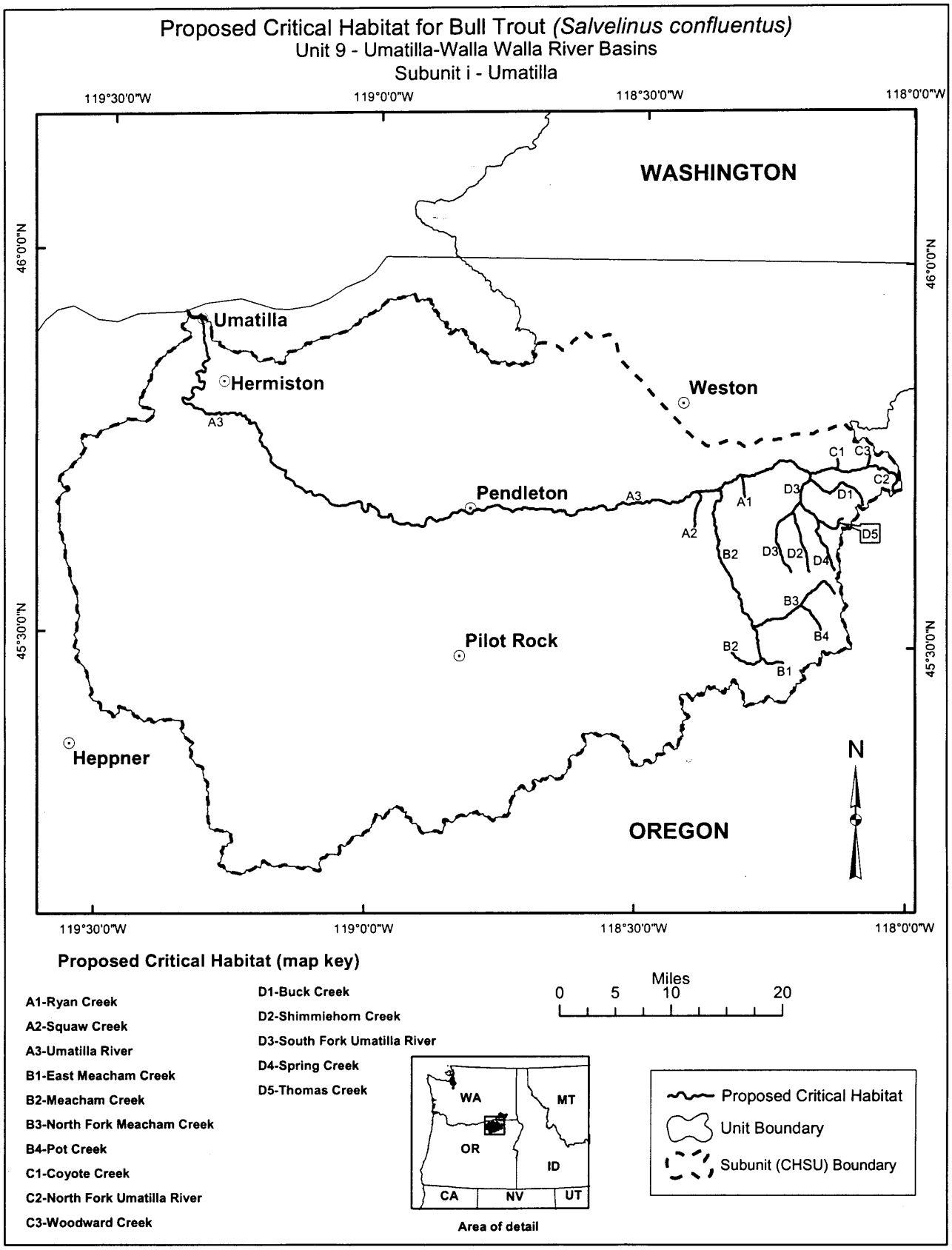
(F) Lewis Creek from a lower point located at 46.191 degrees latitude, and –117.824 degrees longitude to an upper point located at 46.156 degrees latitude, and –117.771 degrees longitude. North Fork Touchet River from a lower point located at 46.302 degrees latitude, and –117.959 degrees longitude to an upper point located at 46.093 degrees latitude, and –117.864 degrees longitude. Robinson Creek from a lower point located at 46.238 degrees latitude, and –117.895 degrees longitude to an upper point located at 46.097 degrees latitude, and –117.903 degrees longitude. Spangler Creek from a lower point located at 46.149 degrees latitude, and –117.806 degrees longitude to an upper point located at 46.099 degrees latitude, and –117.802 degrees longitude. Wolf Fork Creek from a lower point located at 46.274 degrees latitude, and –117.895 degrees longitude to an upper point located at 46.075 degrees latitude, and –117.903 degrees longitude.

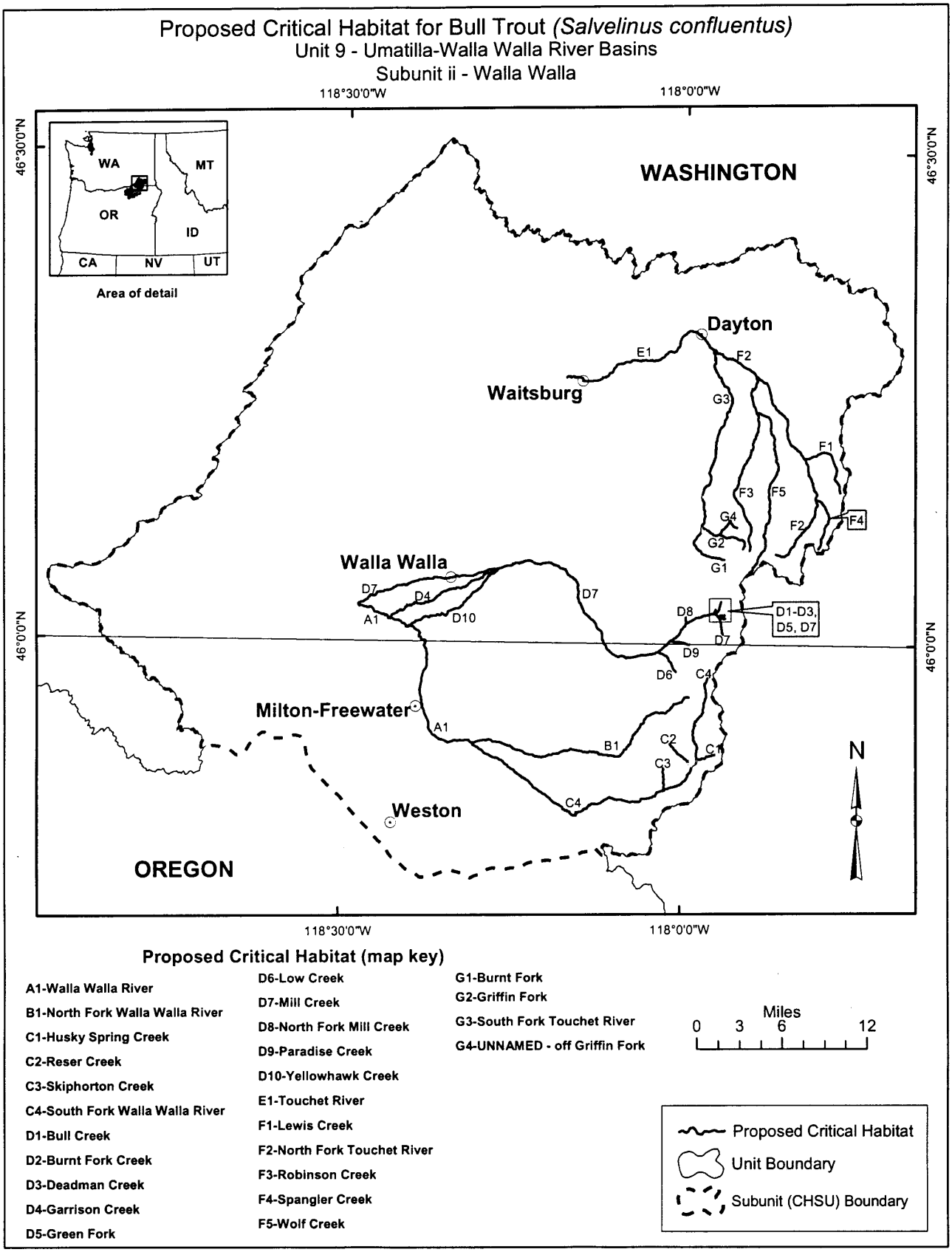
(G) Burnt Fork from a lower point located at 46.105 degrees latitude, and –117.985 degrees longitude to an upper point located at 46.087 degrees latitude, and –117.94 degrees longitude. Griffin Fork from a lower point located at 46.121 degrees latitude, and –117.973 degrees longitude to an upper point located at 46.099 degrees latitude, and –117.913 degrees longitude. South Fork Touchet River from a lower point located at 46.302 degrees latitude, and –117.959 degrees longitude to an upper point located at 46.105 degrees latitude,

and –117.985 degrees longitude.
Unnamed creek off Griffin Fork from a lower point located at 46.113 degrees latitude, and –117.948 degrees longitude to an upper point located at 46.12 degrees latitude, and –117.922 degrees longitude.

Note: Maps follow for Unit 9, Subunit i and Unit 9, Subunit ii.

BILLING CODE 4310–55–P


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 9 - Umatilla-Walla Walla River Basins
Subunit i - Umatilla
119°30'0"W
119°0'0"W
118°30'0"W
118°0'0"W
46°0'0"N
45°30'0"N
WASHINGTON
OREGON
Umatilla
Hermiston
Weston
Pendleton
Pilot Rock
Heppner
A1
A2
A3
B1
B2
B3
B4
C1
C2
C3
D1
D2
D3
D4
D5
N
Proposed Critical Habitat (map key)
A1-Ryan Creek
A2-Squaw Creek
A3-Umatilla River
B1-East Meacham Creek
B2-Meacham Creek
B3-North Fork Meacham Creek
B4-Pot Creek
C1-Coyote Creek
C2-North Fork Umatilla River
C3-Woodward Creek
D1-Buck Creek
D2-Shimmiehorn Creek
D3-South Fork Umatilla River
D4-Spring Creek
D5-Thomas Creek
Miles
0 5 10 20
WA
MT
OR
ID
CA
NV
UT
Area of detail
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary



BILLING CODE 4310–55–C

(14) Unit 10—Grande Ronde River Basin.

(i) Grande Ronde River from a lower point located at 46.08 degrees latitude, and –116.978 degrees longitude to an upper point located at 44.967 degrees latitude, and –118.254 degrees longitude.

(ii) Beaver Creek from a lower point located at 45.955 degrees latitude, and –117.785 degrees longitude to an upper point located at 45.969 degrees latitude, and –117.807 degrees longitude. Butte Creek from a lower point located at 45.982 degrees latitude, and –117.678 degrees longitude to an upper point located at 46.063 degrees latitude, and –117.722 degrees longitude. Crooked Creek from a lower point located at 45.977 degrees latitude, and –117.551 degrees longitude to an upper point located at 46.046 degrees latitude, and –117.624 degrees longitude. First Creek from a lower point located at 46.035 degrees latitude, and –117.57 degrees longitude to an upper point located at 46.043 degrees latitude, and –117.546 degrees longitude. Milk Creek from a lower point located at 45.913 degrees latitude, and –117.882 degrees longitude to an upper point located at 45.948 degrees latitude, and –117.912 degrees longitude. North Fork Wenaha River from a lower point located at 45.951 degrees latitude, and –117.794 degrees longitude to an upper point located at 46.066 degrees latitude, and –117.877 degrees longitude. South Fork Wenaha River from a lower point located at 45.951 degrees latitude, and –117.794 degrees longitude to an upper point located at 45.89 degrees latitude, and –117.905 degrees longitude. Third Creek from a lower point located at 46.046 degrees latitude, and –117.624 degrees longitude to an upper point located at 46.089 degrees latitude, and –117.627 degrees longitude. Wenaha River from a lower point located at 45.946 degrees latitude, and –117.45 degrees longitude to an upper point located at 45.951 degrees latitude, and –117.794 degrees longitude. West Fork Butte Creek from a lower point located at 46.063 degrees latitude, and –117.722 degrees longitude to an upper point located at 46.065 degrees latitude, and –117.778 degrees longitude.

(iii) Little Lookingglass Creek from a lower point located at 45.75 degrees latitude, and –117.874 degrees longitude to an upper point located at 45.817 degrees latitude, and –117.901 degrees longitude. Lookingglass Creek from a lower point located at 45.707 degrees latitude, and –117.841 degrees longitude to an upper point located at 45.779 degrees latitude, and –118.078 degrees longitude. Mottet Creek from a lower point located at 45.767 degrees latitude, and –117.886 degrees longitude to an upper point located at 45.788 degrees latitude, and –117.942 degrees longitude. Summer Creek from a lower point located at 45.767 degrees latitude, and –117.982 degrees longitude to an upper point located at 45.772 degrees latitude, and –117.982 degrees longitude.

(iv) Camp Creek from a lower point located at 45.387 degrees latitude, and –117.757 degrees longitude to an upper point located at 45.387 degrees latitude, and –117.744 degrees longitude. East Fork Indian Creek from a lower point located at 45.369 degrees latitude, and –117.748 degrees longitude to an upper point located at 45.353 degrees latitude, and –117.724 degrees longitude. Indian Creek from a lower point located at 45.534 degrees latitude, and –117.919 degrees longitude to an upper point located at 45.337 degrees latitude, and –117.721 degrees longitude.

(v) Catherine Creek from a lower point located at 45.408 degrees latitude, and –117.93 degrees longitude to an upper point located at 45.12 degrees latitude, and –117.646 degrees longitude. Collins Creek from a lower point located at 45.106 degrees latitude, and –117.542 degrees longitude to an upper point located at 45.097 degrees latitude, and –117.513 degrees longitude. Middle Fork Catherine Creek from a lower point located at 45.152 degrees latitude, and –117.616 degrees longitude to an upper point located at 45.154 degrees latitude, and –117.564 degrees longitude. North Fork Catherine Creek from a lower point located at 45.12 degrees latitude, and –117.646 degrees longitude to an upper point located at 45.225 degrees latitude, and –117.604 degrees longitude. Pole Creek from a lower point located at 45.107 degrees latitude, and –117.559 degrees longitude to an upper point located at 45.138 degrees latitude, and –117.522 degrees longitude. Sand Pass Creek from a lower point located at 45.108 degrees latitude, and –117.551 degrees longitude to an upper point located at 45.129 degrees latitude, and –117.512 degrees longitude. South Fork Catherine Creek from a lower point located at 45.12 degrees latitude, and –117.646 degrees longitude to an upper point located at 45.112 degrees latitude, and –117.513 degrees longitude.

(vi) Chicken Creek from a lower point located at 45.095 degrees latitude, and –118.394 degrees longitude to an upper point located at 45.024 degrees latitude, and –118.385 degrees longitude. Clear Creek from a lower point located at 45.063 degrees latitude, and –118.309 degrees longitude to an upper point located at 44.976 degrees latitude, and –118.326 degrees longitude. East Sheep Creek from a lower point located at 45.026 degrees latitude, and –118.474 degrees longitude to an upper point located at 44.983 degrees latitude, and 118.425 degrees longitude. Fiddlers Hell Creek from a lower point located at 45.428 degrees latitude, and –118.159 degrees longitude to an upper point located at 45.431 degrees latitude, and –118.143 degrees longitude. Five Points Creek from a lower point located at 45.347 degrees latitude, and –118.221 degrees longitude to an upper point located at 45.481 degrees latitude, and –118.143 degrees longitude. Fly Creek from a lower point located at 45.21 degrees latitude, and –118.394 degrees longitude to an upper point located at 45.121 degrees latitude, and –118.465 degrees longitude. Indiana Creek from a lower point located at 45.024 degrees latitude, and –118.385 degrees longitude to an upper point located at 45 degrees latitude, and –118.361 degrees longitude. Limber Jim Creek from a lower point located at 45.089 degrees latitude, and –118.343 degrees longitude to an upper point located at 45.085 degrees latitude, and –118.229 degrees longitude. Little Fly Creek from a lower point located at 45.121 degrees latitude, and –118.465 degrees longitude to an upper point located at 45.11 degrees latitude, and –118.475 degrees longitude. Lookout Creek from a lower point located at 45.11 degrees latitude, and –118.475 degrees longitude to an upper point located at 45.078 degrees latitude, and –118.54 degrees longitude. Marion Creek from a lower point located at 45.106 degrees latitude, and –118.266 degrees longitude to an upper point located at 45.097 degrees latitude, and –118.228 degrees longitude. Middle Fork Five Points Creek from a lower point located at 45.481 degrees latitude, and –118.143 degrees longitude to an upper point located at 45.492 degrees latitude, and –118.115 degrees longitude. Mt Emily Creek from a lower point located at 45.473 degrees latitude, and –118.146 degrees longitude to an upper point located at 45.465 degrees latitude, and –118.124 degrees longitude. Sheep Creek from a lower point located at 45.095 degrees latitude, and –118.394 degrees longitude to an upper point located at 45.016 degrees latitude, and –118.507 degrees longitude. Sheep Creek from a lower point located at 45.105 degrees latitude, and –118.381 degrees longitude to an upper point located at 45.095 degrees latitude, and –118.394 degrees longitude. Tie Creek from a lower point located at 45.423 degrees latitude, and –118.158 degrees longitude to an upper

point located at 45.421 degrees latitude, and –118.148 degrees longitude. Unnamed creek off Clear Creek from a lower point located at 45.013 degrees latitude, and –118.329 degrees longitude to an upper point located at 44.977 degrees latitude, and –118.313 degrees longitude.

(vii) Wallowa River from a lower point located at 45.726 degrees latitude, and −117.784 degrees longitude to an upper point located at 45.42 degrees latitude, and −117.301 degrees longitude.

(viii) East Fork Elk Creek from a lower point located at 45.166 degrees latitude, and −117.469 degrees longitude to an upper point located at 45.161 degrees latitude, and −117.468 degrees longitude. Elk Creek from a lower point located at 45.178 degrees latitude, and −117.459 degrees longitude to an upper point located at 45.16 degrees latitude, and −117.475 degrees longitude. Minam River from a lower point located at 45.621 degrees latitude, and −117.72 degrees longitude to an upper point located at 45.148 degrees latitude, and −117.371 degrees longitude. North Minam River from a lower point located at 45.273 degrees latitude, and −117.536 degrees longitude to an upper point located at 45.277 degrees latitude, and −117.511 degrees longitude.

(ix) Boulder Creek from a lower point located at 45.312 degrees latitude, and −117.632 degrees longitude to an upper point located at 45.31 degrees latitude, and −117.624 degrees longitude. Dobbin Creek from a lower point located at 45.259 degrees latitude, and −117.653 degrees longitude to an upper point located at 45.221 degrees latitude, and −117.639 degrees longitude. Little Minam River from a lower point located at 45.401 degrees latitude, and −117.671 degrees longitude to an upper point located at 45.246 degrees latitude, and −117.599 degrees longitude.

(x) Deer Creek from a lower point located at 45.62 degrees latitude, and −117.699 degrees longitude to an upper point located at 45.423 degrees latitude, and −117.587 degrees longitude. Sage Creek from a lower point located at 45.501 degrees latitude, and −117.606 degrees longitude to an upper point located at 45.481 degrees latitude, and −117.592 degrees longitude.

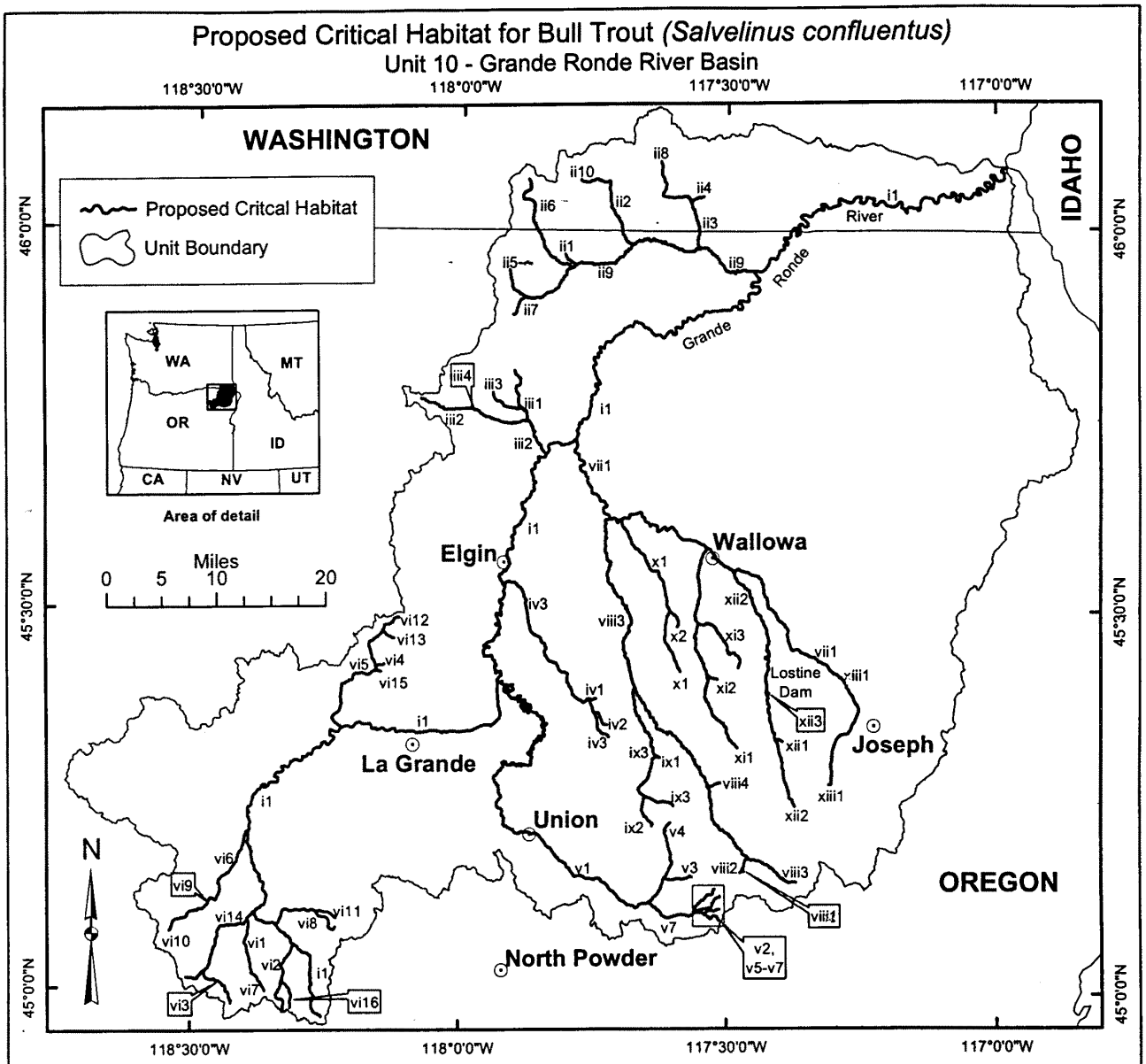
(xi) Bear Creek from a lower point located at 45.584 degrees latitude, and −117.54 degrees longitude to an upper point located at 45.323 degrees latitude, and −117.48 degrees longitude. Goat Creek from a lower point located at 45.418 degrees latitude, and −117.537 degrees longitude to an upper point located at 45.413 degrees latitude, and −117.517 degrees longitude. Little Bear Creek from a lower point located at 45.485 degrees latitude, and −117.554 degrees longitude to an upper point located at 45.428 degrees latitude, and −117.479 degrees longitude.

(xii) Lake Creek from a lower point located at 45.332 degrees latitude, and −117.409 degrees longitude to an upper point located at 45.331 degrees latitude, and −117.397 degrees longitude. Lostine River from a lower point located at 45.552 degrees latitude, and −117.489 degrees longitude to an upper point located at 45.246 degrees latitude, and −117.374 degrees longitude. Silver Creek from a lower point located at 45.396 degrees latitude, and −117.427 degrees longitude to an upper point located at 45.394 degrees latitude, and −117.421 degrees longitude.

(xiii) Hurricane Creek from a lower point located at 45.42 degrees latitude, and −117.301 degrees longitude to an upper point located at 45.274 degrees latitude, and −117.31 degrees longitude.

Note: Map follows for Unit 10.

BILLING CODE 4310–55–P



Proposed Critical Habitat (map key)

i1-Grande Ronde River
ii1-Beaver Creek
ii2-Butte Creek
ii3-Crooked Creek
ii4-First Creek
ii5-Milk Creek
ii6-North Fork Wenaha River
ii7-South Fork Wenaha River
ii8-Third Creek
ii9-Wenaha River
ii10-West Fork Butte Creek
iii1-Little Lookingglass Creek
iii2-Lookingglass Creek
iii3-Mottet Creek
iii4-Summer Creek
iv1-Camp Creek
iv2-East Fork Indian Creek
iv3-Indian Creek
v1-Catherine Creek
v2-Collins Creek
v3-Middle Fork Catherine Creek
v4-North Fork Catherine Creek
v5-Pole Creek
v6-Sand Pass Creek
v7-South Fork Catherine Creek
vi1-Chicken Creek
vi2-Clear Creek
vi3-East Sheep Creek
vi4-Fiddlers Hell Creek
vi5-Five Points Creek
vi6-Fly Creek
vi7-Indiana Creek
vi8-Limber Jim Creek
vi9-Little Fly Creek
vi10-Lookout Creek
vi11-Marion Creek
vi12-Middle Fork Five Points Creek
vi13-Mt Emily Creek
vi14-Sheep Creek
vi15-Tie Creek
vi16-UNNAMED - off Clear Creek
vii1-Wallowa River
viii1-East Fork Elk Creek
viii2-Elk Creek
viii3-Minam River
viii4-North Minam River
ix1-Boulder Creek
ix2-Dobbin Creek
ix3-Little Minam River
x1-Deer Creek
x2-Sage Creek
xi1-Bear Creek
xi2-Goat Creek
xi3-Little Bear Creek
xii1-Lake Creek
xii2-Lostine River
xii3-Silver Creek
xiii1-Hurricane Creek

(15) Unit 11—Imnaha-Snake River Basins.

(i) Critical Habitat Subunit—Snake River.

(A) Sheep Creek from a lower point located at 45.468 degrees latitude, and –116.554 degrees longitude to an upper point located at 45.405 degrees latitude, and –116.523 degrees longitude.

(B) Granite Creek from a lower point located at 45.349 degrees latitude, and –116.654 degrees longitude to an upper point located at 45.263 degrees latitude, and –116.611 degrees longitude.

(ii) Critical Habitat Subunit—Imnaha River.

(A) Bear Creek from a lower point located at 45.104 degrees latitude, and –117.171 degrees longitude to an upper point located at 45.1 degrees latitude, and –117.172 degrees longitude. Blue Creek from a lower point located at 45.101 degrees latitude, and –117.194 degrees longitude to an upper point located at 45.097 degrees latitude, and –117.193 degrees longitude. Cliff Creek from a lower point located at 45.102 degrees latitude, and –117.214 degrees longitude to an upper point located at 45.063 degrees latitude, and –117.267 degrees longitude. Imnaha River from a lower point located at 45.817 degrees latitude, and –116.764 degrees longitude to an upper point located at 45.113 degrees latitude, and –117.125 degrees longitude. Middle Fork Imnaha River from a lower point located at 45.134 degrees latitude, and –117.151 degrees longitude to an upper point located at 45.139 degrees latitude, and –117.166 degrees longitude. North Fork Imnaha River from a lower point located at 45.113 degrees latitude, and –117.125 degrees longitude to an upper point located at 45.171 degrees latitude, and –117.2 degrees longitude. Soldier Creek from a lower point located at 45.109 degrees latitude, and –117.151 degrees longitude to an upper point located at 45.107 degrees latitude, and –117.154 degrees longitude. South Fork Imnaha River from a lower point located at 45.113 degrees latitude, and –117.125 degrees longitude to an upper point located at 45.111 degrees latitude, and –117.23 degrees longitude.

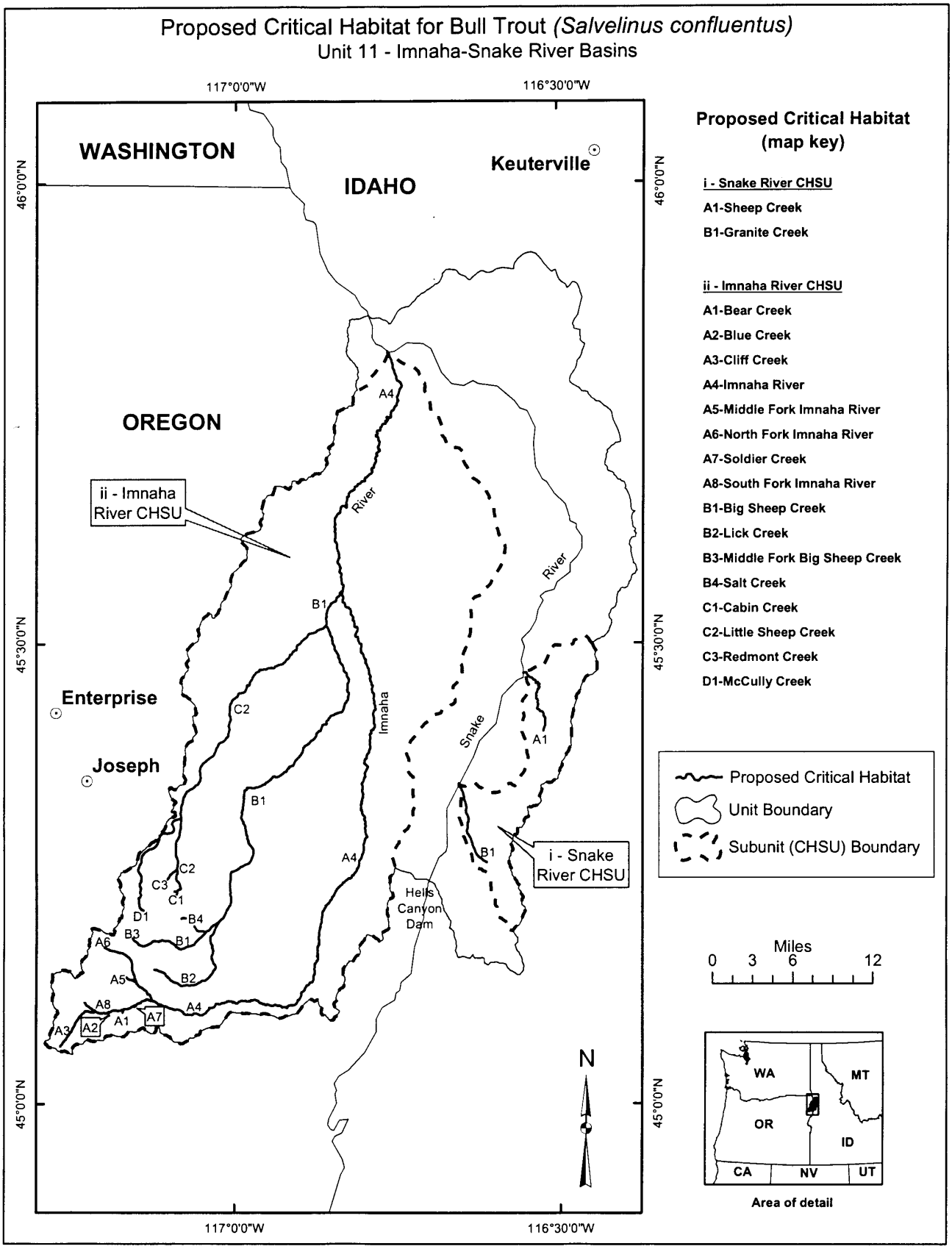
(B) Big Sheep Creek from a lower point located at 45.557 degrees latitude, and –116.834 degrees longitude to an upper point located at 45.178 degrees latitude, and –117.119 degrees longitude. Lick Creek from a lower point located at 45.198 degrees latitude, and –117.024 degrees longitude to an upper point located at 45.147 degrees latitude, and –117.123 degrees longitude. Middle Fork Big Sheep Creek from a lower point located at 45.178 degrees latitude, and –117.119 degrees longitude to an upper point located at 45.181 degrees latitude, and –117.157 degrees longitude. Salt Creek from a lower point located at 45.188 degrees latitude, and –117.043 degrees longitude to an upper point located at 45.202 degrees latitude, and –117.082 degrees longitude.

(C) Cabin Creek from a lower point located at 45.232 degrees latitude, and –117.088 degrees longitude to an upper point located at 45.229 degrees latitude, and –117.089 degrees longitude. Little Sheep Creek from a lower point located at 45.52 degrees latitude, and –116.859 degrees longitude to an upper point located at 45.232 degrees latitude, and –117.093 degrees longitude. Redmont Creek from a lower point located at 45.256 degrees latitude, and –117.088 degrees longitude to an upper point located at 45.245 degrees latitude, and –117.103 degrees longitude.

(D) McCully Creek from a lower point located at 45.311 degrees latitude, and –117.082 degrees longitude to an upper point located at 45.211 degrees latitude, and –117.14 degrees longitude.

Note: Map follows for Unit 11.

BILLING CODE 4310–55–C


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 11 - Imnaha-Snake River Basins
117°0'0"W
116°30'0"W
46°0'0"N
45°30'0"N
45°0'0"N
WASHINGTON
IDAHO
OREGON
Keuterville
Enterprise
Joseph
ii - Imnaha River CHSU
i - Snake River CHSU
Imnaha River
Snake River
Hells Canyon Dam
A1
A2
A3
A4
A5
A6
A7
A8
B1
B2
B3
B4
C1
C2
C3
D1
N
Proposed Critical Habitat (map key)
i - Snake River CHSU
A1-Sheep Creek
B1-Granite Creek
ii - Imnaha River CHSU
A1-Bear Creek
A2-Blue Creek
A3-Cliff Creek
A4-Imnaha River
A5-Middle Fork Imnaha River
A6-North Fork Imnaha River
A7-Soldier Creek
A8-South Fork Imnaha River
B1-Big Sheep Creek
B2-Lick Creek
B3-Middle Fork Big Sheep Creek
B4-Salt Creek
C1-Cabin Creek
C2-Little Sheep Creek
C3-Redmont Creek
D1-McCully Creek
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Miles
0 3 6 12
WA
MT
OR
ID
CA
NV
UT
Area of detail

(16) Unit 12—Hells Canyon Complex.

(i) Critical Habitat Subunit—Pine-Indian-Wildhorse.

(A) East Fork Pine Creek from a lower point located at 45.022 degrees latitude, and –117.2 degrees longitude to an upper point located at 45.072 degrees latitude, and –117.176 degrees longitude. Middle Fork Pine Creek from a lower point located at 45.039 degrees latitude, and –117.215 degrees longitude to an upper point located at 45.058 degrees latitude, and –117.237 degrees longitude. North Pine Creek from a lower point located at 44.91 degrees latitude, and –116.948 degrees longitude to an upper point located at 45.079 degrees latitude, and –116.897 degrees longitude. Pine Creek from a lower point located at 44.974 degrees latitude, and –116.853 degrees longitude to an upper point located at 45.039 degrees latitude, and –117.215 degrees longitude. West Fork Pine Creek from a lower point located at 45.039 degrees latitude, and –117.215 degrees longitude to an upper point located at 45.025 degrees latitude, and –117.246 degrees longitude.

(B) Aspen Creek from a lower point located at 45.057 degrees latitude, and –117.011 degrees longitude to an upper point located at 45.049 degrees latitude, and –117.037 degrees longitude. Big Elk Creek from a lower point located at 45.063 degrees latitude, and –117.023 degrees longitude to an upper point located at 45.061 degrees latitude, and –117.064 degrees longitude. Cabin Creek from a lower point located at 45.061 degrees latitude, and –117.02 degrees longitude to an upper point located at 45.077 degrees latitude, and –117.024 degrees longitude. Elk Creek from a lower point located at 45.009 degrees latitude, and –116.909 degrees longitude to an upper point located at 45.074 degrees latitude, and –117.045 degrees longitude. Fall Creek from a lower point located at 44.97 degrees latitude, and –116.948 degrees longitude to an upper point located at 45.012 degrees latitude, and –116.985 degrees longitude. Little Elk Creek from a lower point located at 44.955 degrees latitude, and –116.961 degrees longitude to an upper point located at 45.009 degrees latitude, and –117.028 degrees longitude.

(C) Lake Fork from a lower point located at 45.02 degrees latitude, and –116.941 degrees longitude to an upper point located at 45.067 degrees latitude, and –117.104 degrees longitude.

(D) Duck Creek from a lower point located at 45.069 degrees latitude, and –116.905 degrees longitude to an upper point located at 45.091 degrees latitude, and –117.003 degrees longitude. Fish Creek from a lower point located at 44.908 degrees latitude, and –116.952 degrees longitude to an upper point located at 45.036 degrees latitude, and –117.081 degrees longitude.

(E) East Fork of East Pine Creek from a lower point located at 45.021 degrees latitude, and –117.106 degrees longitude to an upper point located at 45.042 degrees latitude, and –117.103 degrees longitude. East Pine Creek from a lower point located at 44.872 degrees latitude, and –117.02 degrees longitude to an upper point located at 45.046 degrees latitude, and –117.119 degrees longitude. Okanogan Creek from a lower point located at 44.987 degrees latitude, and –117.064 degrees longitude to an upper point located at 45.017 degrees latitude, and –117.062 degrees longitude. Trinity Creek from a lower point located at 44.988 degrees latitude, and –117.071 degrees longitude to an upper point located at 45.026 degrees latitude, and –117.083 degrees longitude. Unnamed creek off East Pine Creek from a lower point located at 44.993 degrees latitude, and –117.101 degrees longitude to an upper point located at 45.006 degrees latitude, and –117.121 degrees longitude.

(F) Clear Creek from a lower point located at 44.866 degrees latitude, and –117.029 degrees longitude to an upper point located at 45.043 degrees latitude, and –117.143 degrees longitude. Meadow Creek from a lower point located at 44.99 degrees latitude, and –117.142 degrees longitude to an upper point located at 45.017 degrees latitude, and –117.171 degrees longitude. Trail Creek from a lower point located at 44.991 degrees latitude, and –117.142 degrees longitude to an upper point located at 45.046 degrees latitude, and –117.162 degrees longitude.

(G) Camp Creek from a lower point located at 45.132 degrees latitude, and –116.622 degrees longitude to an upper point located at 45.157 degrees latitude, and –116.62 degrees longitude. Indian Creek from a lower point located at 44.985 degrees latitude, and –116.828 degrees longitude to an upper point located at 45.15 degrees latitude, and –116.59 degrees longitude.

(H) Bear Creek from a lower point located at 44.959 degrees latitude, and –116.724 degrees longitude to an upper point located at 45.136 degrees latitude, and –116.524 degrees longitude. Lick Creek from a lower point located at 44.986 degrees latitude, and –116.679 degrees longitude to an upper point located at 45.105 degrees latitude, and –116.514 degrees longitude. Wildhorse River from a lower point located at 44.851 degrees latitude, and –116.896 degrees longitude to an upper point located at 44.959 degrees latitude, and –116.724 degrees longitude.

(I) Crooked River from a lower point located at 44.959 degrees latitude, and –116.724 degrees longitude to an upper point located at 44.817 degrees latitude, and –116.742 degrees longitude.

(ii) Critical Habitat Subunit—Powder River.

(A) Powder River from a lower point located at 44.743 degrees latitude, and –117.046 degrees longitude to an upper point located at 44.742 degrees latitude, and –118.205 degrees longitude.

(B) Eagle Creek from a lower point located at 44.746 degrees latitude, and –117.169 degrees longitude to an upper point located at 45.132 degrees latitude, and –117.338 degrees longitude. East Fork Eagle Creek from a lower point located at 44.983 degrees latitude, and –117.37 degrees longitude to an upper point located at 45.171 degrees latitude, and –117.324 degrees longitude. West Eagle Creek from a lower point located at 45.019 degrees latitude, and –117.453 degrees longitude to an upper point located at 45.121 degrees latitude, and –117.436 degrees longitude.

(C) Wolf Creek from a lower point located at 45.044 degrees latitude, and –117.893 degrees longitude to an upper point located at 45.068 degrees latitude, and –118.193 degrees longitude.

(D) North Powder River from a lower point located at 45.039 degrees latitude, and –117.895 degrees longitude to an upper point located at 44.878 degrees latitude, and –118.203 degrees longitude.

(E) Anthony Creek from a lower point located at 45.013 degrees latitude, and –118.059 degrees longitude to an upper point located at 44.953 degrees latitude, and –118.22 degrees longitude. North Fork Anthony Creek from a lower point located at 45.045 degrees latitude, and –118.13 degrees longitude to an upper point located at 45.042 degrees latitude, and –118.23 degrees longitude.

(F) Indian Creek from a lower point located at 45.019 degrees latitude, and –118.154 degrees longitude to an upper point located at 44.976 degrees latitude, and –118.204 degrees longitude.

(G) Big Muddy Creek from a lower point located at 44.94 degrees latitude, and –117.945 degrees longitude to an upper point located at 44.899 degrees latitude, and –118.131 degrees longitude.

(H) Rock Creek from a lower point located at 44.918 degrees latitude, and –117.929 degrees longitude to an upper point located at 44.856 degrees latitude, and –118.124 degrees longitude.

(I) Salmon Creek from a lower point located at 44.888 degrees latitude, and –117.902 degrees longitude to an upper

point located at 44.767 degrees latitude, and –118.019 degrees longitude.

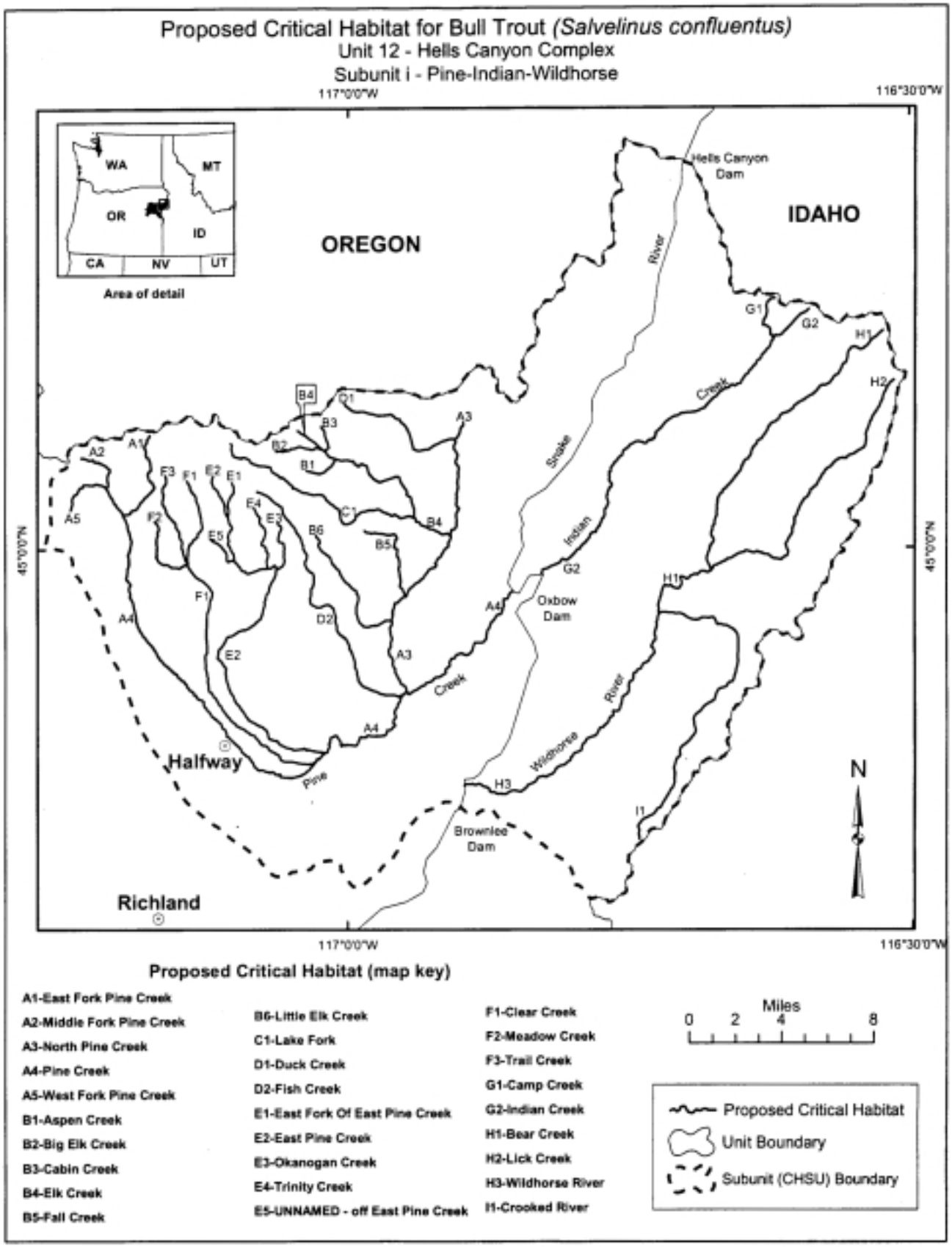
(J) Pine Creek from a lower point located at 44.849 degrees latitude, and –117.893 degrees longitude to an upper point located at 44.826 degrees latitude, and –118.078 degrees longitude.

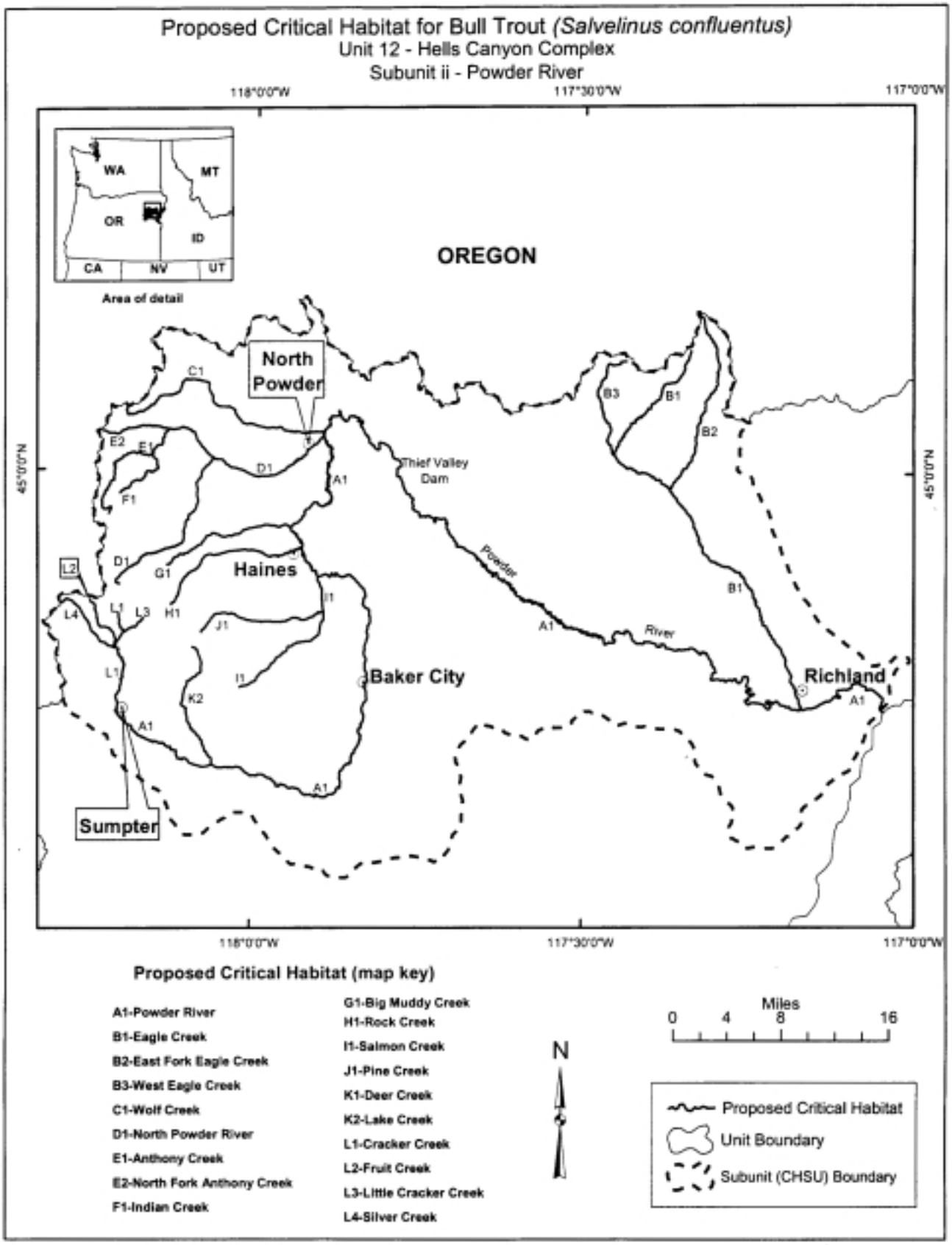
(K) Deer Creek from a lower point located at 44.684 degrees latitude, and –118.059 degrees longitude to an upper point located at 44.75 degrees latitude, and –118.107 degrees longitude. Lake Creek from a lower point located at 44.75 degrees latitude, and –118.107 degrees longitude to an upper point located at 44.81 degrees latitude, and –118.091 degrees longitude.

(L) Cracker Creek from a lower point located at 44.742 degrees latitude, and –118.205 degrees longitude to an upper point located at 44.846 degrees latitude, and –118.204 degrees longitude. Fruit Creek from a lower point located at 44.809 degrees latitude, and –118.211 degrees longitude to an upper point located at 44.859 degrees latitude, and –118.247 degrees longitude. Little Cracker Creek from a lower point located at 44.826 degrees latitude, and –118.196 degrees longitude to an upper point located at 44.84 degrees latitude, and –118.166 degrees longitude. Silver Creek from a lower point located at 44.809 degrees latitude, and –118.207 degrees longitude to an upper point located at 44.857 degrees latitude, and –118.291 degrees longitude.

Note: Maps follow for Unit 12, Subunit i and Unit 12, Subunit ii.

BILLING CODE 4310–55–P


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 12 - Hells Canyon Complex
Subunit i - Pine-Indian-Wildhorse
117°0'0"W
116°30'0"W
45°0'0"N
WA
MT
OR
ID
CA
NV
UT
Area of detail
OREGON
IDAHO
Hells Canyon Dam
Snake River
Indian Creek
Oxbow Dam
Wildhorse River
Brownlee Dam
Pine Creek
Halfway
Richland
N
Miles
0 2 4 8
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Proposed Critical Habitat (map key)
A1-East Fork Pine Creek
A2-Middle Fork Pine Creek
A3-North Pine Creek
A4-Pine Creek
A5-West Fork Pine Creek
B1-Aspen Creek
B2-Big Elk Creek
B3-Cabin Creek
B4-Elk Creek
B5-Fall Creek
B6-Little Elk Creek
C1-Lake Fork
D1-Duck Creek
D2-Fish Creek
E1-East Fork Of East Pine Creek
E2-East Pine Creek
E3-Okanogan Creek
E4-Trinity Creek
E5-UNNAMED - off East Pine Creek
F1-Clear Creek
F2-Meadow Creek
F3-Trail Creek
G1-Camp Creek
G2-Indian Creek
H1-Bear Creek
H2-Lick Creek
H3-Wildhorse River
I1-Crooked River


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 12 - Hells Canyon Complex
Subunit ii - Powder River
118°0'0"W
117°30'0"W
117°0'0"W
45°0'0"N
WA
MT
OR
ID
CA
NV
UT
Area of detail
OREGON
North Powder
Thief Valley Dam
Powder River
Haines
Baker City
Richland
Sumpter
C1
E2
E1
F1
D1
A1
B3
B1
B2
G1
L2
L4
L1
L3
H1
J1
I1
K2
Proposed Critical Habitat (map key)
A1-Powder River
B1-Eagle Creek
B2-East Fork Eagle Creek
B3-West Eagle Creek
C1-Wolf Creek
D1-North Powder River
E1-Anthony Creek
E2-North Fork Anthony Creek
F1-Indian Creek
G1-Big Muddy Creek
H1-Rock Creek
I1-Salmon Creek
J1-Pine Creek
K1-Deer Creek
K2-Lake Creek
L1-Cracker Creek
L2-Fruit Creek
L3-Little Cracker Creek
L4-Silver Creek
N
Miles
0 4 8 16
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary

(17) Unit 13—Malheur River Basin.

(i) Malheur River from a lower point located at 43.686 degrees latitude, and −118.27 degrees longitude to an upper point located at 44.145 degrees latitude, and −118.624 degrees longitude. Warm Springs Reservoir centered at 43.616 degrees latitude, and −118.237 degrees longitude.

(ii) Beulah Reservoir centered at 43.931 degrees latitude, and −118.153 degrees longitude. Cow Creek from a lower point located at 44.283 degrees latitude, and −118.396 degrees longitude to an upper point located at 44.29 degrees latitude, and −118.461 degrees longitude. Flat Creek from a lower point located at 44.305 degrees latitude, and −118.402 degrees longitude to an upper point located at 44.306 degrees latitude, and −118.389 degrees longitude. Horseshoe Creek from a lower point located at 44.323 degrees latitude, and −118.415 degrees longitude to an upper point located at 44.33 degrees latitude, and −118.463 degrees longitude. North Fork Malheur River from a lower point located at 43.945 degrees latitude, and −118.167 degrees longitude to an upper point located at 44.366 degrees latitude, and −118.404 degrees longitude. Sheep Creek from a lower point located at 44.281 degrees latitude, and −118.396 degrees longitude to an upper point located at 44.281 degrees latitude, and −118.475 degrees longitude. Swamp Creek from a lower point located at 44.291 degrees latitude, and −118.4 degrees longitude to an upper point located at 44.292 degrees latitude, and −118.483 degrees longitude.

(iii) Crane Creek from a lower point located at 44.162 degrees latitude, and −118.37 degrees longitude to an upper point located at 44.152 degrees latitude, and −118.386 degrees longitude. Elk Creek from a lower point located at 44.25 degrees latitude, and −118.391 degrees longitude to an upper point located at 44.245 degrees latitude, and −118.408 degrees longitude. Little Crane Creek from a lower point located at 44.152 degrees latitude, and −118.386 degrees longitude to an upper point located at 44.24 degrees latitude, and −118.472 degrees longitude. Little Malheur River from a lower point located at 44.019 degrees latitude, and −118.258 degrees longitude to an upper point located at 44.336 degrees latitude, and −118.351 degrees longitude. North Fork Elk Creek from a lower point located at 44.245 degrees latitude, and −118.408 degrees longitude to an upper point located at 44.274 degrees latitude, and −118.487 degrees longitude. South Fork Elk Creek from a lower point located at 44.245 degrees latitude, and −118.408 degrees longitude to an upper point located at 44.257 degrees latitude, and −118.471 degrees longitude. Unnamed creek off Little Crane Creek from a lower point located at 44.219 degrees latitude, and −118.422 degrees longitude to an upper point located at 44.214 degrees latitude, and −118.453 degrees longitude.

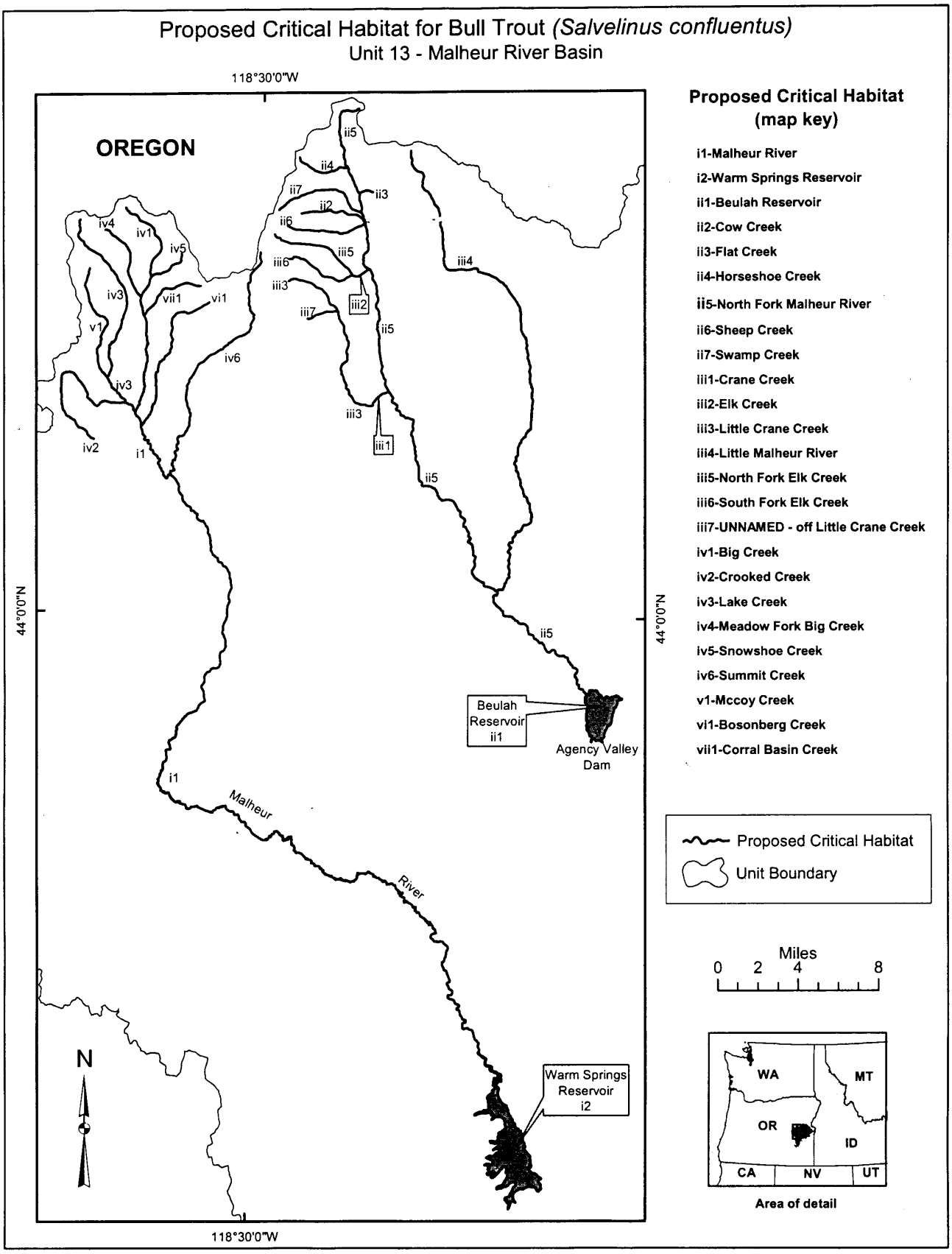
(iv) Big Creek from a lower point located at 44.145 degrees latitude, and −118.624 degrees longitude to an upper point located at 44.292 degrees latitude, and −118.638 degrees longitude. Crooked Creek from a lower point located at 44.151 degrees latitude, and −118.634 degrees longitude to an upper point located at 44.125 degrees latitude, and −118.665 degrees longitude. Lake Creek from a lower point located at 44.145 degrees latitude, and −118.624 degrees longitude to an upper point located at 44.283 degrees latitude, and −118.683 degrees longitude. Meadow Fork Big Creek from a lower point located at 44.228 degrees latitude, and −118.621 degrees longitude to an upper point located at 44.276 degrees latitude, and −118.658 degrees longitude. Snowshoe Creek from a lower point located at 44.242 degrees latitude, and −118.611 degrees longitude to an upper point located at 44.259 degrees latitude, and −118.58 degrees longitude. Summit Creek from a lower point located at 44.099 degrees latitude, and −118.587 degrees longitude to an upper point located at 44.261 degrees latitude, and −118.501 degrees longitude.

(v) Mccoy Creek from a lower point located at 44.169 degrees latitude, and −118.653 degrees longitude to an upper point located at 44.248 degrees latitude, and −118.673 degrees longitude.

(vi) Bosonberg Creek from a lower point located at 44.135 degrees latitude, and −118.618 degrees longitude to an upper point located at 44.224 degrees latitude, and −118.551 degrees longitude.

(vii) Corral Basin Creek from a lower point located at 44.214 degrees latitude, and −118.617 degrees longitude to an upper point located at 44.236 degrees latitude, and −118.561 degrees longitude.

Note: Map follows for Unit 13.



BILLING CODE 4310–55–C

(18) Unit 14—Coeur d'Alene Lake Basin.

(i) Critical Habitat Subunit—Coeur d'Alene Lake.

(A) Coeur d'Alene Lake centered at 47.548 degrees latitude, and −116.802 degrees longitude.

(B) Coeur d'Alene River from a lower point located at 47.46 degrees latitude, and −116.798 degrees longitude to an upper point located at 47.558 degrees latitude, and −116.257 degrees longitude. North Fork Coeur d'Alene River from a lower point located at 47.558 degrees latitude, and −116.257 degrees longitude to an upper point located at 48.006 degrees latitude, and −116.321 degrees longitude.

(C) Cougar Creek from a lower point located at 47.64 degrees latitude, and −116.191 degrees longitude to an upper point located at 47.732 degrees latitude, and −116.305 degrees longitude.

(D) East Fork Steamboat Creek from a lower point located at 47.716 degrees latitude, and −116.199 degrees longitude to an upper point located at 47.787 degrees latitude, and −116.204 degrees longitude. Steamboat Creek from a lower point located at 47.662 degrees latitude, and −116.154 degrees longitude to an upper point located at 47.716 degrees latitude, and −116.199 degrees longitude. West Fork Steamboat Creek from a lower point located at 47.716 degrees latitude, and −116.199 degrees longitude to an upper point located at 47.736 degrees latitude, and −116.277 degrees longitude.

(E) Prichard Creek from a lower point located at 47.658 degrees latitude, and −115.976 degrees longitude to an upper point located at 47.644 degrees latitude, and −115.921 degrees longitude.

(F) Eagle Creek from a lower point located at 47.644 degrees latitude, and −115.921 degrees longitude to an upper point located at 47.652 degrees latitude, and −115.903 degrees longitude. West Fork Eagle Creek from a lower point located at 47.652 degrees latitude, and −115.903 degrees longitude to an upper point located at 47.75 degrees latitude, and −115.803 degrees longitude.

(G) Independence Creek from a lower point located at 47.877 degrees latitude, and −116.208 degrees longitude to an upper point located at 47.862 degrees latitude, and −116.427 degrees longitude. Tepee Creek from a lower point located at 47.881 degrees latitude, and −116.132 degrees longitude to an upper point located at 47.846 degrees latitude, and −116.247 degrees longitude. Trail Creek from a lower point located at 47.846 degrees latitude, and −116.247 degrees longitude to an upper point located at 47.823 degrees latitude, and −116.341 degrees longitude.

(H) Buckskin Creek from a lower point located at 47.987 degrees latitude, and −116.225 degrees longitude to an upper point located at 48.034 degrees latitude, and −116.199 degrees longitude.

(ii) Critical Habitat Subunit—St. Joe River.

(A) St. Joe River from a lower point located at 47.393 degrees latitude, and −116.749 degrees longitude to an upper point located at 47.017 degrees latitude, and −115.078 degrees longitude.

(B) Eagle Creek from a lower point located at 47.211 degrees latitude, and −115.55 degrees longitude to an upper point located at 47.285 degrees latitude, and −115.495 degrees longitude. Gold Creek from a lower point located at 47.151 degrees latitude, and −115.408 degrees longitude to an upper point located at 47.257 degrees latitude, and −115.373 degrees longitude. Mosquito Creek from a lower point located at 47.156 degrees latitude, and −115.412 degrees longitude to an upper point located at 47.143 degrees latitude, and −115.429 degrees longitude. Simmons Creek from a lower point located at 47.137 degrees latitude, and −115.4 degrees longitude to an upper point located at 47.09 degrees latitude, and −115.231 degrees longitude.

(C) Beaver Creek from a lower point located at 47.083 degrees latitude, and −115.355 degrees longitude to an upper point located at 47.064 degrees latitude, and −115.48 degrees longitude. Fly Creek from a lower point located at 47.113 degrees latitude, and −115.385 degrees longitude to an upper point located at 47.081 degrees latitude, and −115.489 degrees longitude. Red Ives Creek from a lower point located at 47.056 degrees latitude, and −115.351 degrees longitude to an upper point located at 47.043 degrees latitude, and −115.278 degrees longitude.

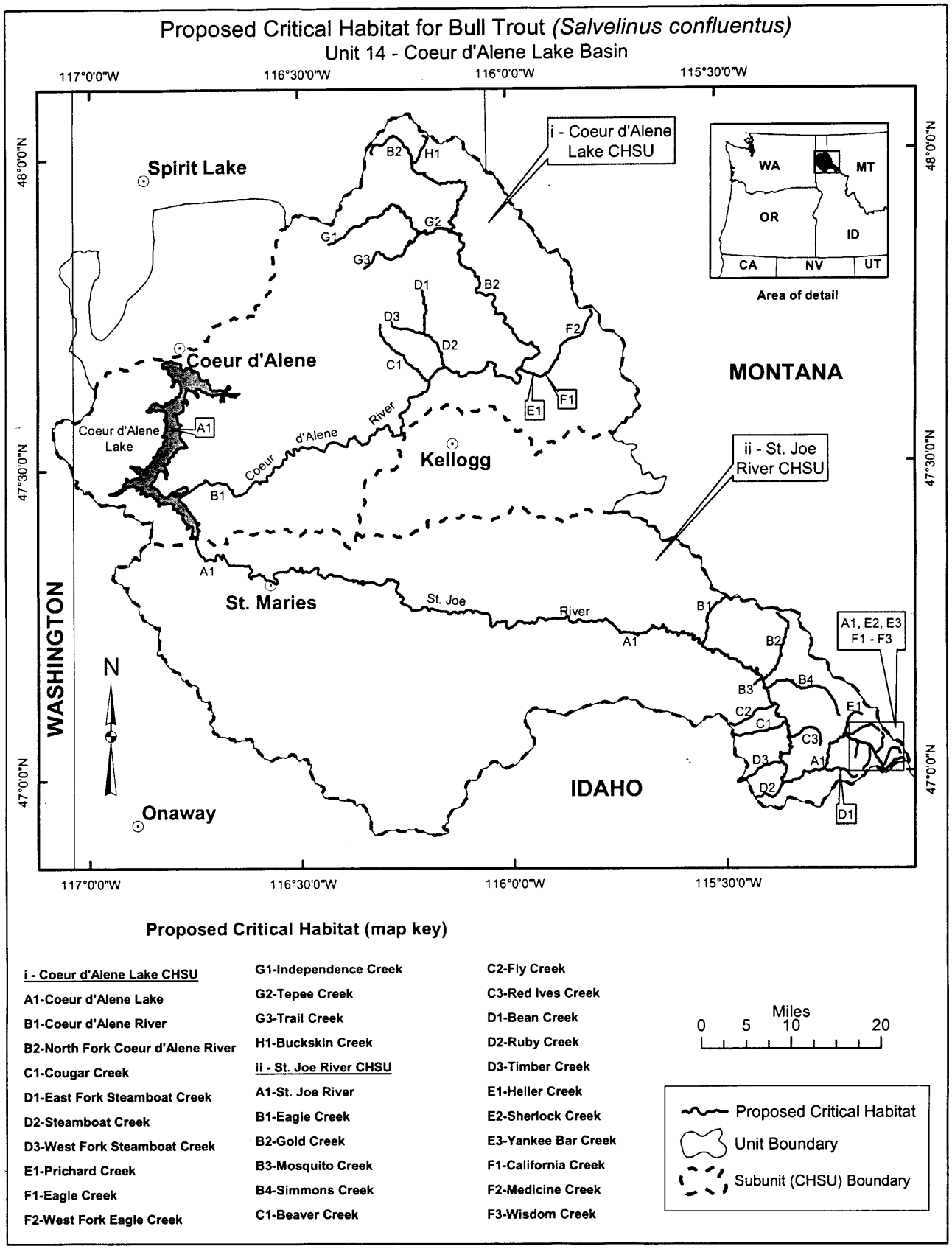
(D) Bean Creek from a lower point located at 47.005 degrees latitude, and −115.27 degrees longitude to an upper point located at 46.993 degrees latitude, and −115.192 degrees longitude. Ruby Creek from a lower point located at 46.983 degrees latitude, and −115.367 degrees longitude to an upper point located at 46.961 degrees latitude, and −115.43 degrees longitude. Timber Creek from a lower point located at 47.018 degrees latitude, and −115.368 degrees longitude to an upper point located at 46.992 degrees latitude, and −115.462 degrees longitude.

(E) Heller Creek from a lower point located at 47.061 degrees latitude, and −115.22 degrees longitude to an upper point located at 47.091 degrees latitude, and −115.176 degrees longitude. Sherlock Creek from a lower point located at 47.064 degrees latitude, and −115.218 degrees longitude to an upper point located at 47.064 degrees latitude, and −115.137 degrees longitude. Yankee Bar Creek from a lower point located at 47.049 degrees latitude, and −115.191 degrees longitude to an upper point located at 47.021 degrees latitude, and −115.194 degrees longitude.

(F) California Creek from a lower point located at 47.041 degrees latitude, and −115.159 degrees longitude to an upper point located at 47.004 degrees latitude, and −115.177 degrees longitude. Medicine Creek from a lower point located at 47.028 degrees latitude, and −115.149 degrees longitude to an upper point located at 47.06 degrees latitude, and −115.131 degrees longitude. Wisdom Creek from a lower point located at 47.009 degrees latitude, and −115.133 degrees longitude to an upper point located at 47.027 degrees latitude, and −115.087 degrees longitude.

Note: Map follows for Unit 14.

BILLING CODE 4310–55–P



BILLING CODE 4310–55–P

(19) Unit 15—Clearwater River Basin.

(i) Critical Habitat Subunit—Lower/Middle Fork Clearwater River.

(A) Clearwater River from a lower point located at 46.428 degrees latitude, and −117.039 degrees longitude to an upper point located at 46.146 degrees latitude, and −115.98 degrees longitude. Middle Fork Clearwater River from a lower point located at 46.146 degrees latitude, and −115.98 degrees longitude to an upper point located at 46.14 degrees latitude, and −115.599 degrees longitude. North Fork Clearwater River from a lower point located at 46.503 degrees latitude, and −116.331 degrees longitude to an upper point located at 46.514 degrees latitude, and −116.295 degrees longitude.

(B) Lolo Creek from a lower point located at 46.372 degrees latitude, and −116.17 degrees longitude to an upper point located at 46.457 degrees latitude, and −115.616 degrees longitude.

(C) Clear Creek from a lower point located at 46.135 degrees latitude, and −115.951 degrees longitude to an upper point located at 46.056 degrees latitude, and −115.659 degrees longitude. Middle Fork Clear Creek from a lower point located at 46.051 degrees latitude, and −115.781 degrees longitude to an upper point located at 46.024 degrees latitude, and −115.676 degrees longitude. South Fork Clear Creek from a lower point located at 46.043 degrees latitude, and −115.814 degrees longitude to an upper point located at 45.941 degrees latitude, and −115.769 degrees longitude.

(ii) Critical Habitat Subunit—North Fork Clearwater River.

(A) Breakfast Creek from a lower point located at 46.883 degrees latitude, and −115.939 degrees longitude to an upper point located at 46.884 degrees latitude, and −115.969 degrees longitude. Dworshak Reservoir centered at 46.626 degrees latitude, and −116.256 degrees longitude. Floodwood Creek from a lower point located at 46.888 degrees latitude, and −115.953 degrees longitude to an upper point located at 47.027 degrees latitude, and −115.955 degrees longitude. Freeman Creek from a lower point located at 46.567 degrees latitude, and −116.283 degrees longitude to an upper point located at 46.568 degrees latitude, and −116.312 degrees longitude. North Fork Clearwater River from a lower point located at 46.858 degrees latitude, and −115.68 degrees longitude to an upper point located at 46.999 degrees latitude, and −115.112 degrees longitude. Stony Creek from a lower point located at 46.884 degrees latitude, and −115.969 degrees longitude to an upper point located at 46.916 degrees latitude, and −116.012 degrees longitude. West Fork Floodwood Creek from a lower point located at 46.957 degrees latitude, and −115.927 degrees longitude to an upper point located at 46.999 degrees latitude, and −115.977 degrees longitude.

(B) Adair Creek from a lower point located at 47.083 degrees latitude, and −115.805 degrees longitude to an upper point located at 47.097 degrees latitude, and −115.852 degrees longitude. Butte Creek (Dworshak Reservoir) from a lower point located at 46.86 degrees latitude, and −115.743 degrees longitude to an upper point located at 46.843 degrees latitude, and −115.741 degrees longitude. Butte Creek (North Fork Clearwater) from a lower point located at 47.045 degrees latitude, and −115.719 degrees longitude to an upper point located at 47.031 degrees latitude, and −115.75 degrees longitude. Canyon Creek from a lower point located at 47 degrees latitude, and −115.65 degrees longitude to an upper point located at 47.017 degrees latitude, and −115.498 degrees longitude. Jungle Creek from a lower point located at 47.077 degrees latitude, and −115.803 degrees longitude to an upper point located at 47.11 degrees latitude, and −115.795 degrees longitude. Little Lost Lake Creek from a lower point located at 47.089 degrees latitude, and −115.892 degrees longitude to an upper point located at 47.066 degrees latitude, and −115.941 degrees longitude. Little North Fork Clearwater River from a lower point located at 46.887 degrees latitude, and −115.877 degrees longitude to an upper point located at 47.101 degrees latitude, and −115.962 degrees longitude. Lost Lake Creek from a lower point located at 47.096 degrees latitude, and −115.9 degrees longitude to an upper point located at 47.072 degrees latitude, and −115.957 degrees longitude. Lund Creek from a lower point located at 47.068 degrees latitude, and −115.883 degrees longitude to an upper point located at 47.05 degrees latitude, and −115.925 degrees longitude. Montana Creek from a lower point located at 47.045 degrees latitude, and −115.7 degrees longitude to an upper point located at 47.089 degrees latitude, and −115.675 degrees longitude. Rutledge Creek from a lower point located at 47.073 degrees latitude, and −115.754 degrees longitude to an upper point located at 47.108 degrees latitude, and −115.722 degrees longitude. Sawtooth Creek from a lower point located at 46.994 degrees latitude, and −115.649 degrees longitude to an upper point located at 46.973 degrees latitude, and −115.495 degrees longitude.

(C) Isabella Creek from a lower point located at 46.849 degrees latitude, and −115.63 degrees longitude to an upper point located at 46.914 degrees latitude, and −115.538 degrees longitude.

(D) Beaver Creek from a lower point located at 46.842 degrees latitude, and −115.62 degrees longitude to an upper point located at 46.815 degrees latitude, and −115.645 degrees longitude. Sneak Creek from a lower point located at 46.833 degrees latitude, and −115.543 degrees longitude to an upper point located at 46.834 degrees latitude, and −115.546 degrees longitude.

(E) Collins Creek from a lower point located at 46.862 degrees latitude, and −115.433 degrees longitude to an upper point located at 46.982 degrees latitude, and −115.452 degrees longitude. Frost Creek from a lower point located at 46.918 degrees latitude, and −115.348 degrees longitude to an upper point located at 46.926 degrees latitude, and −115.379 degrees longitude. Roaring Creek from a lower point located at 46.886 degrees latitude, and −115.355 degrees longitude to an upper point located at 46.918 degrees latitude, and −115.348 degrees longitude. Skull Creek from a lower point located at 46.827 degrees latitude, and −115.485 degrees longitude to an upper point located at 46.91 degrees latitude, and −115.255 degrees longitude.

(F) Quartz Creek from a lower point located at 46.806 degrees latitude, and −115.455 degrees longitude to an upper point located at 46.846 degrees latitude, and −115.258 degrees longitude.

(G) Lightning Creek from a lower point located at 46.782 degrees latitude, and −115.439 degrees longitude to an upper point located at 46.775 degrees latitude, and −115.44 degrees longitude. Rock Creek from a lower point located at 46.783 degrees latitude, and −115.477 degrees longitude to an upper point located at 46.746 degrees latitude, and −115.382 degrees longitude.

(H) Larson Creek from a lower point located at 46.765 degrees latitude, and −115.495 degrees longitude to an upper point located at 46.759 degrees latitude, and −115.487 degrees longitude. Little Washington Creek from a lower point located at 46.729 degrees latitude, and −115.554 degrees longitude to an upper point located at 46.741 degrees latitude, and −115.563 degrees longitude. Orogrande Creek from a lower point located at 46.631 degrees latitude, and −115.506 degrees longitude to an upper point located at 46.62 degrees latitude, and −115.508 degrees longitude. Washington Creek from a lower point located at 46.707 degrees latitude, and −115.557 degrees longitude to an upper point located at 46.698 degrees latitude, and −115.577 degrees longitude.

(I) Corral Creek from a lower point located at 46.483 degrees latitude, and −115.24 degrees longitude to an upper point located at 46.534 degrees latitude, and −115.206 degrees longitude. Fro Creek from a lower point located at 46.479 degrees latitude, and −115.221 degrees longitude to an upper point located at 46.467 degrees latitude, and −115.208 degrees longitude. Johnagan Creek from a lower point located at 46.51 degrees latitude, and −115.366 degrees longitude to an upper point located at 46.543 degrees latitude, and −115.353 degrees longitude. Johnny Creek from a lower point located at 46.613 degrees latitude, and −115.434 degrees longitude to an upper point located at 46.614 degrees latitude, and −115.371 degrees longitude. Little Weitas Creek from a lower point located at 46.506 degrees latitude, and −115.391 degrees longitude to an upper point located at 46.479 degrees latitude, and −115.388 degrees longitude. Liz Creek from a lower point located at 46.482 degrees latitude, and −115.289 degrees longitude to an upper point located at 46.436 degrees latitude, and −115.305 degrees longitude. Middle Creek from a lower point located at 46.521 degrees latitude, and −115.411 degrees longitude to an upper point located at 46.459 degrees latitude, and −115.538 degrees longitude. Weitas Creek from a lower point located at 46.636 degrees latitude, and −115.433 degrees longitude to an upper point located at 46.508 degrees latitude, and −115.173 degrees longitude. Windy Creek from a lower point located at 46.494 degrees latitude, and −115.327 degrees longitude to an upper point located at 46.57 degrees latitude, and −115.235 degrees longitude.

(J) Death Creek from a lower point located at 46.656 degrees latitude, and −115.388 degrees longitude to an upper point located at 46.662 degrees latitude, and −115.397 degrees longitude. Fisher Creek from a lower point located at 46.662 degrees latitude, and −115.38 degrees longitude to an upper point located at 46.672 degrees latitude, and −115.386 degrees longitude. Trail Creek from a lower point located at 46.685 degrees latitude, and −115.351 degrees longitude to an upper point located at 46.7 degrees latitude, and −115.358 degrees longitude.

(K) Bill Creek from a lower point located at 46.631 degrees latitude, and −115.27 degrees longitude to an upper point located at 46.637 degrees latitude, and −115.186 degrees longitude. Fourth Of July Creek from a lower point located at 46.665 degrees latitude, and −115.376 degrees longitude to an upper point located at 46.564 degrees latitude, and −115.259 degrees longitude. Shot Creek from a lower point located at 46.639 degrees latitude, and −115.28 degrees longitude to an upper point located at 46.666 degrees latitude, and −115.206 degrees longitude.

(L) Cold Springs Creek from a lower point located at 46.721 degrees latitude, and −115.297 degrees longitude to an upper point located at 46.745 degrees latitude, and −115.341 degrees longitude. Cool Creek from a lower point located at 46.741 degrees latitude, and −115.326 degrees longitude to an upper point located at 46.751 degrees latitude, and −115.323 degrees longitude.

(M) Barnard Creek from a lower point located at 46.708 degrees latitude, and −115.167 degrees longitude to an upper point located at 46.644 degrees latitude, and −115.188 degrees longitude. Bear Creek from a lower point located at 46.711 degrees latitude, and −114.962 degrees longitude to an upper point located at 46.75 degrees latitude, and −114.921 degrees longitude. Junction Creek from a lower point located at 46.718 degrees latitude, and −115.235 degrees longitude to an upper point located at 46.698 degrees latitude, and −115.239 degrees longitude. Kelly Creek from a lower point located at 46.716 degrees latitude, and −115.257 degrees longitude to an upper point located at 46.73 degrees latitude, and −114.86 degrees longitude. Kid Lake Creek from a lower point located at 46.747 degrees latitude, and −114.805 degrees longitude to an upper point located at 46.769 degrees latitude, and −114.804 degrees longitude. Middle Fork Kelly Creek from a lower point located at 46.73 degrees latitude, and −114.86 degrees longitude to an upper point located at 46.747 degrees latitude, and −114.805 degrees longitude. North Fork Kelly Creek from a lower point located at 46.73 degrees latitude, and −114.86 degrees longitude to an upper point located at 46.78 degrees latitude, and −114.869 degrees longitude. South Fork Kelly Creek from a lower point located at 46.712 degrees latitude, and −114.862 degrees longitude to an upper point located at 46.707 degrees latitude, and −114.817 degrees longitude.

(N) Little Moose Creek from a lower point located at 46.733 degrees latitude, and −115.077 degrees longitude to an upper point located at 46.783 degrees latitude, and −114.905 degrees longitude. Moose Creek from a lower point located at 46.721 degrees latitude, and −115.086 degrees longitude to an upper point located at 46.752 degrees latitude, and −115.184 degrees longitude. Osier Creek from a lower point located at 46.744 degrees latitude, and −115.073 degrees longitude to an upper point located at 46.837 degrees latitude, and −115.064 degrees longitude. Pollock Creek from a lower point located at 46.781 degrees latitude, and −115.022 degrees longitude to an upper point located at 46.78 degrees latitude, and −114.989 degrees longitude. Ruby Creek from a lower point located at 46.733 degrees latitude, and −115.078 degrees longitude to an upper point located at 46.745 degrees latitude, and −115.104 degrees longitude. Sugar Creek from a lower point located at 46.771 degrees latitude, and −115.034 degrees longitude to an upper point located at 46.82 degrees latitude, and −115.005 degrees longitude. Swamp Creek from a lower point located at 46.745 degrees latitude, and −115.067 degrees longitude to an upper point located at 46.799 degrees latitude, and −115.001 degrees longitude.

(O) Cayuse Creek from a lower point located at 46.712 degrees latitude, and −115.02 degrees longitude to an upper point located at 46.612 degrees latitude, and −114.792 degrees longitude. Gravey Creek from a lower point located at 46.6 degrees latitude, and −115.073 degrees longitude to an upper point located at 46.513 degrees latitude, and −115.152 degrees longitude. Howard Creek from a lower point located at 46.593 degrees latitude, and −115.013 degrees longitude to an upper point located at 46.531 degrees latitude, and −115.07 degrees longitude. Mae Creek from a lower point located at 46.581 degrees latitude, and −115.104 degrees longitude to an upper point located at 46.576 degrees latitude, and −115.1 degrees longitude. Marten Creek from a lower point located at 46.575 degrees latitude, and −115.105 degrees longitude to an upper point located at 46.555 degrees latitude, and −115.177 degrees longitude. Mink Creek from a lower point located at 46.601 degrees latitude, and −114.894 degrees longitude to an upper point located at 46.628 degrees latitude, and −114.893 degrees longitude. Monroe Creek from a lower point located at 46.642 degrees latitude, and −115.131 degrees longitude to an upper point located at 46.631 degrees latitude, and −115.149 degrees longitude. Silver Creek from a lower point located at 46.607 degrees latitude, and −114.83 degrees longitude to an upper point located at 46.653 degrees latitude, and −114.813 degrees longitude. Toboggan Creek from a lower point located at 46.677 degrees latitude, and −115.049 degrees longitude to an upper point located at 46.631 degrees latitude, and −114.937 degrees

longitude. Weasel Creek from a lower point located at 46.601 degrees latitude, and −114.904 degrees longitude to an upper point located at 46.623 degrees latitude, and −114.905 degrees longitude.

(P) Bostonian Creek from a lower point located at 46.962 degrees latitude, and −115.113 degrees longitude to an upper point located at 47.002 degrees latitude, and −115.159 degrees longitude. Boundary Creek from a lower point located at 46.972 degrees latitude, and −115.107 degrees longitude to an upper point located at 46.981 degrees latitude, and −115.076 degrees longitude. Chamberlain Creek from a lower point located at 46.929 degrees latitude, and −115.142 degrees longitude to an upper point located at 46.917 degrees latitude, and −115.2 degrees longitude. Deception Gulch from a lower point located at 46.837 degrees latitude, and −115.119 degrees longitude to an upper point located at 46.819 degrees latitude, and −115.149 degrees longitude. Elizabeth Creek from a lower point located at 46.79 degrees latitude, and −115.219 degrees longitude to an upper point located at 46.799 degrees latitude, and −115.228 degrees longitude. Goose Creek from a lower point located at 46.852 degrees latitude, and −115.012 degrees longitude to an upper point located at 46.906 degrees latitude, and −114.952 degrees longitude. Graves Creek from a lower point located at 46.986 degrees latitude, and −115.1 degrees longitude to an upper point located at 47.006 degrees latitude, and −115.078 degrees longitude. Hidden Creek from a lower point located at 46.832 degrees latitude, and −115.177 degrees longitude to an upper point located at 46.846 degrees latitude, and −115.213 degrees longitude. Lake Creek from a lower point located at 46.869 degrees latitude, and −115.078 degrees longitude to an upper point located at 46.832 degrees latitude, and −114.971 degrees longitude. Long Creek from a lower point located at 46.873 degrees latitude, and −115.075 degrees longitude to an upper point located at 46.95 degrees latitude, and −115.024 degrees longitude. Meadow Creek from a lower point located at 46.905 degrees latitude, and −115.116 degrees longitude to an upper point located at 46.964 degrees latitude, and −115.22 degrees longitude. Niagra Gulch from a lower point located at 46.967 degrees latitude, and −115.136 degrees longitude to an upper point located at 46.974 degrees latitude, and −115.158 degrees longitude. Pete Ott Creek from a lower point located at 46.748 degrees latitude, and −115.236 degrees longitude to an upper point located at 46.754 degrees latitude, and −115.239 degrees longitude. Placer Creek from a lower point located at 46.938 degrees latitude, and −115.167 degrees longitude to an upper point located at 46.963 degrees latitude, and −115.19 degrees longitude. Rawhide Creek from a lower point located at 46.898 degrees latitude, and −115.047 degrees longitude to an upper point located at 46.938 degrees latitude, and −115.055 degrees longitude. Short Creek from a lower point located at 46.886 degrees latitude, and −115.057 degrees longitude to an upper point located at 46.898 degrees latitude, and −115.013 degrees longitude. Slate Creek from a lower point located at 46.927 degrees latitude, and −115.018 degrees longitude to an upper point located at 46.914 degrees latitude, and −114.979 degrees longitude. Unnamed creek off Long Creek from a lower point located at 46.939 degrees latitude, and −115.023 degrees longitude to an upper point located at 46.956 degrees latitude, and −115.056 degrees longitude. Vanderbilt Gulch from a lower point located at 46.916 degrees latitude, and −115.119 degrees longitude to an upper point located at 46.944 degrees latitude, and −115.221 degrees longitude.

(iii) Critical Habitat Subunit—Fish Lake (North Fork).

(A) Fish Lake centered at 46.818 degrees latitude, and −114.911 degrees longitude. Lake Creek from a lower point located at 46.832 degrees latitude, and −114.971 degrees longitude to an upper point located at 46.817 degrees latitude, and −114.919 degrees longitude.

(B) [Reserved]

(iv) Critical Habitat Subunit—South Fork Clearwater River.

(A) South Fork Clearwater River from a lower point located at 46.146 degrees latitude, and −115.98 degrees longitude to an upper point located at 45.808 degrees latitude, and −115.474 degrees longitude.

(B) Merton Creek from a lower point located at 45.725 degrees latitude, and −115.995 degrees longitude to an upper point located at 45.724 degrees latitude, and −115.978 degrees longitude. Mill Creek from a lower point located at 45.83 degrees latitude, and −115.931 degrees longitude to an upper point located at 45.725 degrees latitude, and −115.995 degrees longitude.

(C) Gospel Creek from a lower point located at 45.703 degrees latitude, and –115.89 degrees longitude to an upper point located at 45.677 degrees latitude, and –115.89 degrees longitude. Hagen Creek from a lower point located at 45.649 degrees latitude, and –115.817 degrees longitude to an upper point located at 45.63 degrees latitude, and –115.808 degrees longitude. Johns Creek from a lower point located at 45.824 degrees latitude, and –115.889 degrees longitude to an upper point located at 45.683 degrees latitude, and –115.754 degrees longitude. Moores Creek from a lower point located at 45.676 degrees latitude, and –115.837 degrees longitude to an upper point located at 45.615 degrees latitude, and –115.879 degrees longitude. Moores Lake Creek from a lower point located at 45.677 degrees latitude, and –115.89 degrees longitude to an upper point located at 45.659 degrees latitude, and –115.869 degrees longitude. Open Creek from a lower point located at 45.676 degrees latitude, and –115.837 degrees longitude to an upper point located at 45.683 degrees latitude, and –115.822 degrees longitude. Taylor Creek from a lower point located at 45.659 degrees latitude, and –115.782 degrees longitude to an upper point located at 45.637 degrees latitude, and –115.773 degrees longitude. Twin Lakes Creek from a lower point located at 45.664 degrees latitude, and –115.827 degrees longitude to an upper point located at 45.65 degrees latitude, and –115.817 degrees longitude.

(D) Silver Creek from a lower point located at 45.806 degrees latitude, and –115.791 degrees longitude to an upper point located at 45.807 degrees latitude, and –115.79 degrees longitude. Twentymile Creek from a lower point located at 45.795 degrees latitude, and –115.763 degrees longitude to an upper point located at 45.794 degrees latitude, and –115.764 degrees longitude. Wing Creek from a lower point located at 45.795 degrees latitude, and –115.776 degrees longitude to an upper point located at 45.792 degrees latitude, and –115.776 degrees longitude.

(E) Sixmile Creek from a lower point located at 45.764 degrees latitude, and –115.659 degrees longitude to an upper point located at 45.763 degrees latitude, and –115.645 degrees longitude. Tenmile Creek from a lower point located at 45.806 degrees latitude, and –115.683 degrees longitude to an upper point located at 45.639 degrees latitude, and –115.712 degrees longitude. Williams Creek from a lower point located at 45.731 degrees latitude, and –115.655 degrees longitude to an upper point located at 45.667 degrees latitude, and –115.657 degrees longitude. Wiseboy Creek from a lower point located at 45.642 degrees latitude, and –115.711 degrees longitude to an upper point located at 45.638 degrees latitude, and –115.703 degrees longitude.

(F) Buckhorn Creek from a lower point located at 45.81 degrees latitude, and –115.656 degrees longitude to an upper point located at 45.808 degrees latitude, and –115.656 degrees longitude.

(G) Baldy Creek from a lower point located at 45.908 degrees latitude, and –115.629 degrees longitude to an upper point located at 45.944 degrees latitude, and –115.682 degrees longitude. Bear Creek from a lower point located at 45.863 degrees latitude, and –115.617 degrees longitude to an upper point located at 45.878 degrees latitude, and –115.594 degrees longitude. Beaver Creek from a lower point located at 45.896 degrees latitude, and –115.63 degrees longitude to an upper point located at 45.943 degrees latitude, and –115.568 degrees longitude. Mule Creek from a lower point located at 45.925 degrees latitude, and –115.634 degrees longitude to an upper point located at 45.933 degrees latitude, and –115.63 degrees longitude. Newsome Creek from a lower point located at 45.828 degrees latitude, and –115.615 degrees longitude to an upper point located at 46.004 degrees latitude, and –115.678 degrees longitude. Pilot Creek from a lower point located at 45.907 degrees latitude, and –115.629 degrees longitude to an upper point located at 45.945 degrees latitude, and –115.731 degrees longitude. Unnamed creek 1 off Pilot Creek from a lower point located at 45.93 degrees latitude, and –115.676 degrees longitude to an upper point located at 45.924 degrees latitude, and –115.687 degrees longitude. Unnamed creek 2 off Pilot Creek from a lower point located at 45.939 degrees latitude, and –115.716 degrees longitude to an upper point located at 45.934 degrees latitude, and –115.72 degrees longitude. West Fork Newsome Creek from a lower point located at 45.865 degrees latitude, and –115.617 degrees longitude to an upper point located at 45.892 degrees latitude, and –115.694 degrees longitude.

(H) Crooked River from a lower point located at 45.824 degrees latitude, and –115.529 degrees longitude to an upper point located at 45.695 degrees latitude, and –115.548 degrees longitude. East Fork Crooked River from a lower point located at 45.695 degrees latitude, and –115.548 degrees longitude to an upper point located at 45.673 degrees latitude, and –115.542 degrees longitude. Relief Creek from a lower point located at 45.748 degrees latitude, and –115.519 degrees longitude to an upper point located at 45.754 degrees latitude, and –115.497 degrees longitude. Unnamed creek off West Fork Crooked River from a lower point located at 45.69 degrees latitude, and –115.563 degrees longitude to an upper point located at 45.695 degrees latitude, and –115.573 degrees longitude. West Fork Crooked River from a lower point located at 45.695 degrees latitude, and –115.548 degrees longitude to an upper point located at 45.666 degrees latitude, and –115.596 degrees longitude.

(I) Baston Creek from a lower point located at 45.76 degrees latitude, and –115.235 degrees longitude to an upper point located at 45.731 degrees latitude, and –115.223 degrees longitude. Bridge Creek from a lower point located at 45.779 degrees latitude, and –115.21 degrees longitude to an upper point located at 45.814 degrees latitude, and –115.163 degrees longitude. Dawson Creek from a lower point located at 45.73 degrees latitude, and –115.39 degrees longitude to an upper point located at 45.743 degrees latitude, and –115.425 degrees longitude. Ditch Creek from a lower point located at 45.747 degrees latitude, and –115.297 degrees longitude to an upper point located at 45.794 degrees latitude, and –115.292 degrees longitude. Little Moose Creek from a lower point located at 45.716 degrees latitude, and –115.367 degrees longitude to an upper point located at 45.709 degrees latitude, and –115.399 degrees longitude. Middle Fork. Red River from a lower point located at 45.659 degrees latitude, and –115.412 degrees longitude to an upper point located at 45.631 degrees latitude, and –115.471 degrees longitude. Moose Butte Creek from a lower point located at 45.71 degrees latitude, and –115.352 degrees longitude to an upper point located at 45.692 degrees latitude, and –115.416 degrees longitude. Otterson Creek from a lower point located at 45.776 degrees latitude, and –115.219 degrees longitude to an upper point located at 45.82 degrees latitude, and –115.233 degrees longitude. Red Horse Creek from a lower point located at 45.794 degrees latitude, and –115.4 degrees longitude to an upper point located at 45.827 degrees latitude, and –115.326 degrees longitude. Red River from a lower point located at 45.808 degrees latitude, and –115.474 degrees longitude to an upper point located at 45.803 degrees latitude, and –115.154 degrees longitude. Siegel Creek from a lower point located at 45.773 degrees latitude, and –115.387 degrees longitude to an upper point located at 45.787 degrees latitude, and –115.367 degrees longitude. Soda Creek from a lower point located at 45.756 degrees latitude, and –115.256 degrees longitude to an upper point located at 45.746 degrees latitude, and –115.251 degrees longitude. South Fork Red River from a lower point located at 45.711 degrees latitude, and –115.344 degrees longitude to an upper point located at 45.623 degrees latitude, and –115.479 degrees longitude. Trapper Creek from a lower point located at 45.674 degrees latitude, and –115.344 degrees longitude to an upper point located at 45.705 degrees latitude, and –115.247 degrees longitude. West Fork Red River from a lower point located at 45.653 degrees latitude, and –115.401 degrees longitude to an upper point located at 45.667 degrees latitude, and –115.452 degrees longitude.

(J) American River from a lower point located at 45.808 degrees latitude, and –115.474 degrees longitude to an upper point located at 45.945 degrees latitude, and –115.449 degrees longitude. Big Elk Creek from a lower point located at 45.841 degrees latitude, and –115.434 degrees longitude to an upper point located at 45.933 degrees latitude, and –115.554 degrees longitude. East Fork. American River from a lower point located at 45.864 degrees latitude, and –115.424 degrees longitude to an upper point located at 45.919 degrees latitude, and –115.362 degrees longitude. Elk Creek from a lower point located at 45.818 degrees latitude, and –115.458 degrees longitude to an upper point located at 45.841 degrees latitude, and –115.434 degrees longitude. Flint Creek from a lower point located at 45.891 degrees latitude, and –115.427 degrees longitude to an upper point located at 45.913 degrees latitude, and –115.423 degrees longitude. Kirks Fork American River from a lower point located at 45.822 degrees latitude, and –115.41 degrees longitude to an upper point located at 45.829 degrees latitude, and –115.389 degrees longitude. Lick Creek from a lower point located at 45.923 degrees latitude, and –115.468 degrees longitude to an upper point located at 45.969 degrees latitude, and –115.486 degrees longitude. Little Elk Creek from a lower point located at 45.841 degrees latitude, and –115.434 degrees longitude to an upper point located at 45.927 degrees latitude, and –115.537 degrees longitude. West Fork American River from a lower point located at 45.913 degrees latitude, and –115.465 degrees longitude to an upper point located at 45.935 degrees latitude, and –115.544 degrees longitude.

(v) Critical Habitat Subunit—Lochsa River.

(A) Lochsa River from a lower point located at 46.14 degrees latitude, and –115.599 degrees longitude to an upper point located at 46.508 degrees latitude, and –114.681 degrees longitude.

(B) Bimerick Creek from a lower point located at 46.228 degrees latitude, and –115.444 degrees longitude to an upper point located at 46.233 degrees latitude, and –115.445 degrees longitude. Canyon Creek from a lower point located at 46.211 degrees latitude, and –115.541 degrees longitude to an upper point located at 46.211 degrees latitude, and –115.552 degrees longitude. Coolwater Creek from a lower point located at 46.229 degrees latitude, and –115.456 degrees longitude to an upper point located at 46.214 degrees latitude, and –115.466 degrees longitude. Deadman Creek from a lower point located at 46.226 degrees latitude, and –115.501 degrees longitude to an upper point located at 46.252 degrees latitude, and –115.506 degrees longitude. Fire Creek from a lower point located at 46.227 degrees latitude, and –115.432 degrees longitude to an upper point located at 46.219 degrees latitude, and –115.424 degrees longitude.

(C) Split Creek from a lower point located at 46.233 degrees latitude, and –115.407 degrees longitude to an upper point located at 46.162 degrees latitude, and –115.351 degrees longitude.

(D) Old Man Creek from a lower point located at 46.252 degrees latitude, and –115.399 degrees longitude to an upper point located at 46.231 degrees latitude, and –115.28 degrees longitude.

(E) Fish Creek from a lower point located at 46.333 degrees latitude, and –115.345 degrees longitude to an upper point located at 46.373 degrees latitude, and –115.596 degrees longitude. Hungery Creek from a lower point located at 46.356 degrees latitude, and –115.397 degrees longitude to an upper point located at 46.4 degrees latitude, and –115.568 degrees longitude.

(F) Boulder Creek from a lower point located at 46.338 degrees latitude, and –115.314 degrees longitude to an upper point located at 46.321 degrees latitude, and –115.224 degrees longitude.

(G) Bald Mountain Creek from a lower point located at 46.384 degrees latitude, and –115.231 degrees longitude to an upper point located at 46.399 degrees latitude, and –115.24 degrees longitude. Stanley Creek from a lower point located at 46.421 degrees latitude, and –115.161 degrees longitude to an upper point located at 46.406 degrees latitude, and –115.153 degrees longitude.

(H) Indian Grave Creek from a lower point located at 46.452 degrees latitude, and –115.076 degrees longitude to an upper point located at 46.49 degrees latitude, and –115.142 degrees longitude.

(I) Weir Creek from a lower point located at 46.458 degrees latitude, and –115.034 degrees longitude to an upper point located at 46.534 degrees latitude, and –115.017 degrees longitude.

(J) California Creek from a lower point located at 46.366 degrees latitude, and –114.998 degrees longitude to an upper point located at 46.344 degrees latitude, and –114.994 degrees longitude. Fish Lake Creek from a lower point located at 46.415 degrees latitude, and –115.006 degrees longitude to an upper point located at 46.366 degrees latitude, and –114.998 degrees longitude. Freezeout Creek from a lower point located at 46.404 degrees latitude, and –115 degrees longitude to an upper point located at 46.378 degrees latitude, and –114.967 degrees longitude. Lake Creek from a lower point located at 46.463 degrees latitude, and –114.996 degrees longitude to an upper point located at 46.415 degrees latitude, and –115.006 degrees longitude.

(K) Postoffice Creek from a lower point located at 46.466 degrees latitude, and –114.985 degrees longitude to an upper point located at 46.529 degrees latitude, and –114.95 degrees longitude. West Fork Postoffice Creek from a lower point located at 46.482 degrees latitude, and –114.979 degrees longitude to an upper point located at 46.514 degrees latitude, and –115.003 degrees longitude.

(L) Cooperation Creek from a lower point located at 46.452 degrees latitude, and –114.869 degrees longitude to an upper point located at 46.44 degrees latitude, and –114.816 degrees longitude. Warm Springs Creek from a lower point located at 46.473 degrees latitude, and –114.887 degrees longitude to an upper point located at 46.43 degrees latitude, and –114.864 degrees longitude.

(M) Doe Creek from a lower point located at 46.499 degrees latitude, and –114.862 degrees longitude to an upper point located at 46.554 degrees latitude, and –114.92 degrees longitude. East Fork Fishing Creek from a lower point located at 46.556 degrees latitude, and –114.854 degrees longitude to an upper point located at 46.561 degrees latitude, and –114.837 degrees longitude. Fishing Creek from a lower point located at 46.492 degrees latitude, and –114.857 degrees longitude to an upper point located at 46.571 degrees latitude, and –114.859 degrees longitude. Spring Creek from a lower point located at 46.546 degrees latitude, and –114.885 degrees longitude to an upper point located at 46.552 degrees latitude, and –114.902 degrees longitude. West Fork. Fishing Creek from a lower point located at 46.537 degrees latitude, and –114.867 degrees longitude to an upper point located at 46.567 degrees latitude, and –114.884 degrees longitude.

(N) Badger Creek from a lower point located at 46.505 degrees latitude, and −114.823 degrees longitude to an upper point located at 46.517 degrees latitude, and −114.824 degrees longitude. Wendover Creek from a lower point located at 46.509 degrees latitude, and −114.785 degrees longitude to an upper point located at 46.52 degrees latitude, and −114.788 degrees longitude.

(O) East Fork Legendary Bear Creek from a lower point located at 46.535 degrees latitude, and −114.765 degrees longitude to an upper point located at 46.562 degrees latitude, and −114.735 degrees longitude. Legendary Bear Creek from a lower point located at 46.511 degrees latitude, and −114.761 degrees longitude to an upper point located at 46.535 degrees latitude, and −114.765 degrees longitude. Parachute Creek from a lower point located at 46.529 degrees latitude, and −114.761 degrees longitude to an upper point located at 46.53 degrees latitude, and −114.756 degrees longitude. West Fork Legendary Bear Creek from a lower point located at 46.535 degrees latitude, and −114.765 degrees longitude to an upper point located at 46.58 degrees latitude, and −114.751 degrees longitude.

(P) Walton Creek from a lower point located at 46.508 degrees latitude, and −114.681 degrees longitude to an upper point located at 46.473 degrees latitude, and −114.68 degrees longitude.

(Q) Beaver Creek from a lower point located at 46.506 degrees latitude, and −114.626 degrees longitude to an upper point located at 46.553 degrees latitude, and −114.503 degrees longitude. Big Flat Creek from a lower point located at 46.402 degrees latitude, and −114.493 degrees longitude to an upper point located at 46.313 degrees latitude, and −114.44 degrees longitude. Colt Killed Creek from a lower point located at 46.508 degrees latitude, and −114.681 degrees longitude to an upper point located at 46.429 degrees latitude, and −114.414 degrees longitude. Maud Creek from a lower point located at 46.497 degrees latitude, and −114.514 degrees longitude to an upper point located at 46.474 degrees latitude, and −114.411 degrees longitude. Storm Creek from a lower point located at 46.463 degrees latitude, and −114.548 degrees longitude to an upper point located at 46.541 degrees latitude, and −114.402 degrees longitude.

(R) Boulder Creek from a lower point located at 46.615 degrees latitude, and −114.67 degrees longitude to an upper point located at 46.679 degrees latitude, and −114.748 degrees longitude. Crooked Fork from a lower point located at 46.508 degrees latitude, and −114.681 degrees longitude to an upper

point located at 46.704 degrees latitude, and −114.708 degrees longitude. Fox Creek from a lower point located at 46.617 degrees latitude, and −114.719 degrees longitude to an upper point located at 46.605 degrees latitude, and −114.754 degrees longitude. Haskell Creek from a lower point located at 46.597 degrees latitude, and −114.603 degrees longitude to an upper point located at 46.632 degrees latitude, and −114.582 degrees longitude. Hopeful Creek from a lower point located at 46.671 degrees latitude, and −114.68 degrees longitude to an upper point located at 46.724 degrees latitude, and −114.653 degrees longitude. Rock Creek from a lower point located at 46.598 degrees latitude, and −114.609 degrees longitude to an upper point located at 46.612 degrees latitude, and −114.619 degrees longitude. Shotgun Creek from a lower point located at 46.601 degrees latitude, and −114.664 degrees longitude to an upper point located at 46.6 degrees latitude, and −114.737 degrees longitude. Unnamed creek off Hopeful Creek from a lower point located at 46.699 degrees latitude, and −114.668 degrees longitude to an upper point located at 46.708 degrees latitude, and −114.624 degrees longitude. Williams Lake Creek from a lower point located at 46.644 degrees latitude, and −114.716 degrees longitude to an upper point located at 46.647 degrees latitude, and −114.767 degrees longitude.

(S) Brushy Fork from a lower point located at 46.578 degrees latitude, and −114.612 degrees longitude to an upper point located at 46.616 degrees latitude, and −114.454 degrees longitude. North Fork Spruce Creek from a lower point located at 46.606 degrees latitude, and −114.392 degrees longitude to an upper point located at 46.616 degrees latitude, and −114.351 degrees longitude. South Fork Spruce Creek from a lower point located at 46.606 degrees latitude, and −114.392 degrees longitude to an upper point located at 46.565 degrees latitude, and −114.352 degrees longitude. Shoot Creek from a lower point located at 46.606 degrees latitude, and −114.414 degrees longitude to an upper point located at 46.58 degrees latitude, and −114.425 degrees longitude. Spruce Creek from a lower point located at 46.606 degrees latitude, and −114.392 degrees longitude to an upper point located at 46.616 degrees latitude, and −114.454 degrees longitude. Twin Creek from a lower point located at 46.582 degrees latitude, and −114.527 degrees longitude to an upper point located at 46.57 degrees latitude, and −114.474 degrees longitude.

(vi) Critical Habitat Subunit—Fish Lake (Lochsa).

(A) Fish Lake centered at 46.818 degrees latitude, and −114.911 degrees longitude. Fish Lake Creek from a lower point located at 46.366 degrees latitude, and −114.998 degrees longitude to an upper point located at 46.325 degrees latitude, and −115.084 degrees longitude.

(B) [Reserved]

(vii) Critical Habitat Subunit—Selway River.

(A) Goddard Cr. from a lower point located at 46.101 degrees latitude, and −115.557 degrees longitude to an upper point located at 46.095 degrees latitude, and −115.558 degrees longitude. Selway River from a lower point located at 46.14 degrees latitude, and −115.599 degrees longitude to an upper point located at 45.478 degrees latitude, and −114.676 degrees longitude.

(B) East Fork O'Hara Creek from a lower point located at 45.999 degrees latitude, and −115.523 degrees longitude to an upper point located at 45.939 degrees latitude, and −115.54 degrees longitude. O'Hara Creek from a lower point located at 46.086 degrees latitude, and −115.517 degrees longitude to an upper point located at 45.999 degrees latitude, and −115.523 degrees longitude. West Fork O'Hara Creek from a lower point located at 45.999 degrees latitude, and −115.523 degrees longitude to an upper point located at 45.949 degrees latitude, and −115.569 degrees longitude.

(C) Boyd Creek from a lower point located at 46.081 degrees latitude, and −115.442 degrees longitude to an upper point located at 46.093 degrees latitude, and −115.43 degrees longitude. Falls Creek from a lower point located at 46.061 degrees latitude, and −115.338 degrees longitude to an upper point located at 46.051 degrees latitude, and −115.348 degrees longitude. Glover Creek from a lower point located at 46.068 degrees latitude, and −115.361 degrees longitude to an upper point located at 46.081 degrees latitude, and −115.36 degrees longitude. Rackliff Creek from a lower point located at 46.084 degrees latitude, and −115.494 degrees longitude to an upper point located at 46.102 degrees latitude, and −115.495 degrees longitude.

(D) Gedney Creek from a lower point located at 46.056 degrees latitude, and −115.313 degrees longitude to an upper point located at 46.135 degrees latitude, and −115.248 degrees longitude. West Fork Gedney Creek from a lower point located at 46.094 degrees latitude, and −115.293 degrees longitude to an upper point located at 46.11 degrees latitude, and −115.294 degrees longitude.

(E) East Fork Meadow Creek from a lower point located at 45.88 degrees latitude, and −115.103 degrees longitude to an upper point located at 45.829 degrees latitude, and −115.027 degrees longitude. Meadow Creek from a lower point located at 46.046 degrees latitude, and −115.295 degrees longitude to an upper point located at 45.879 degrees latitude, and −115.212 degrees longitude. Schwar Creek from a lower point located at 45.882 degrees latitude, and −115.116 degrees longitude to an upper point located at 45.905 degrees latitude, and −115.108 degrees longitude.

(F) Otter Creek from a lower point located at 46.051 degrees latitude, and −115.22 degrees longitude to an upper point located at 46.043 degrees latitude, and −115.217 degrees longitude. Three Links Creek from a lower point located at 46.098 degrees latitude, and −115.072 degrees longitude to an upper point located at 46.142 degrees latitude, and −115.091 degrees longitude.

(G) Mink Creek from a lower point located at 46.098 degrees latitude, and −115.071 degrees longitude to an upper point located at 46.008 degrees latitude, and −115.114 degrees longitude.

(H) Marten Creek from a lower point located at 46.099 degrees latitude, and −115.052 degrees longitude to an upper point located at 45.963 degrees latitude, and −115.046 degrees longitude.

(I) Cedar Creek from a lower point located at 46.249 degrees latitude, and −114.708 degrees longitude to an upper point located at 46.33 degrees latitude, and −114.705 degrees longitude. East Fork Moose Creek from a lower point located at 46.165 degrees latitude, and −114.897 degrees longitude to an upper point located at 46.271 degrees latitude, and −114.679 degrees longitude. Moose Creek from a lower point located at 46.122 degrees latitude, and −114.935 degrees longitude to an upper point located at 46.165 degrees latitude, and −114.897 degrees longitude. North Fork Moose Creek from a lower point located at 46.165 degrees latitude, and −114.897 degrees longitude to an upper point located at 46.274 degrees latitude, and −114.923 degrees longitude. Rhoda Creek from a lower point located at 46.239 degrees latitude, and −115.008 degrees longitude to an upper point located at 46.234 degrees latitude, and −114.96 degrees longitude. Wounded Doe Creek from a lower point located at 46.239 degrees latitude, and −115.008 degrees longitude to an upper point located at 46.3 degrees latitude, and −115.079 degrees longitude.

(J) Pettibone Creek from a lower point located at 46.041 degrees latitude, and −114.84 degrees longitude to an upper

point located at 46.064 degrees latitude, and −114.796 degrees longitude.

(K) Bear Creek from a lower point located at 46.019 degrees latitude, and −114.844 degrees longitude to an upper point located at 46.109 degrees latitude, and −114.508 degrees longitude. Brushy Fork Creek from a lower point located at 46.003 degrees latitude, and −114.698 degrees longitude to an upper point located at 45.989 degrees latitude, and −114.582 degrees longitude. Cub Creek from a lower point located at 46.034 degrees latitude, and −114.756 degrees longitude to an upper point located at 46.032 degrees latitude, and −114.617 degrees longitude. Paradise Creek from a lower point located at 46.022 degrees latitude, and −114.728 degrees longitude to an upper point located at 46.039 degrees latitude, and −114.526 degrees longitude.

(L) Eagle Creek from a lower point located at 45.908 degrees latitude, and −114.853 degrees longitude to an upper point located at 45.781 degrees latitude, and −114.899 degrees longitude. Lynx Creek from a lower point located at 45.849 degrees latitude, and −114.937 degrees longitude to an upper point located at 45.818 degrees latitude, and −114.951 degrees longitude. Running Creek from a lower point located at 45.919 degrees latitude, and −114.832 degrees longitude to an upper point located at 45.916 degrees latitude, and −115.032 degrees longitude. South Fork Running Creek from a lower point located at 45.845 degrees latitude, and −114.944 degrees longitude to an upper point located at 45.823 degrees latitude, and −114.965 degrees longitude. Tom Creek from a lower point located at 45.862 degrees latitude, and −114.986 degrees longitude to an upper point located at 45.913 degrees latitude, and −114.984 degrees longitude.

(M) Canyon Creek from a lower point located at 45.888 degrees latitude, and −114.613 degrees longitude to an upper point located at 45.882 degrees latitude, and −114.408 degrees longitude. White Cap Creek from a lower point located at 45.86 degrees latitude, and −114.744 degrees longitude to an upper point located at 45.91 degrees latitude, and −114.428 degrees longitude.

(N) Burnt Strip Creek from a lower point located at 45.817 degrees latitude, and −114.626 degrees longitude to an upper point located at 45.838 degrees latitude, and −114.588 degrees longitude. Indian Creek from a lower point located at 45.792 degrees latitude, and −114.764 degrees longitude to an upper point located at 45.785 degrees latitude, and −114.581 degrees longitude. Schofield Creek from a lower point located at 45.777 degrees latitude, and −114.645 degrees longitude to an upper point located at 45.819 degrees latitude, and −114.585 degrees longitude.

(O) Burnt Knob Creek from a lower point located at 45.715 degrees latitude, and −114.898 degrees longitude to an upper point located at 45.697 degrees latitude, and −114.945 degrees longitude. Flat Creek from a lower point located at 45.722 degrees latitude, and −114.857 degrees longitude to an upper point located at 45.651 degrees latitude, and −114.847 degrees longitude. Little Clearwater River from a lower point located at 45.754 degrees latitude, and −114.775 degrees longitude to an upper point located at 45.738 degrees latitude, and −114.945 degrees longitude. Salamander Creek from a lower point located at 45.711 degrees latitude, and −114.865 degrees longitude to an upper point located at 45.648 degrees latitude, and −114.879 degrees longitude.

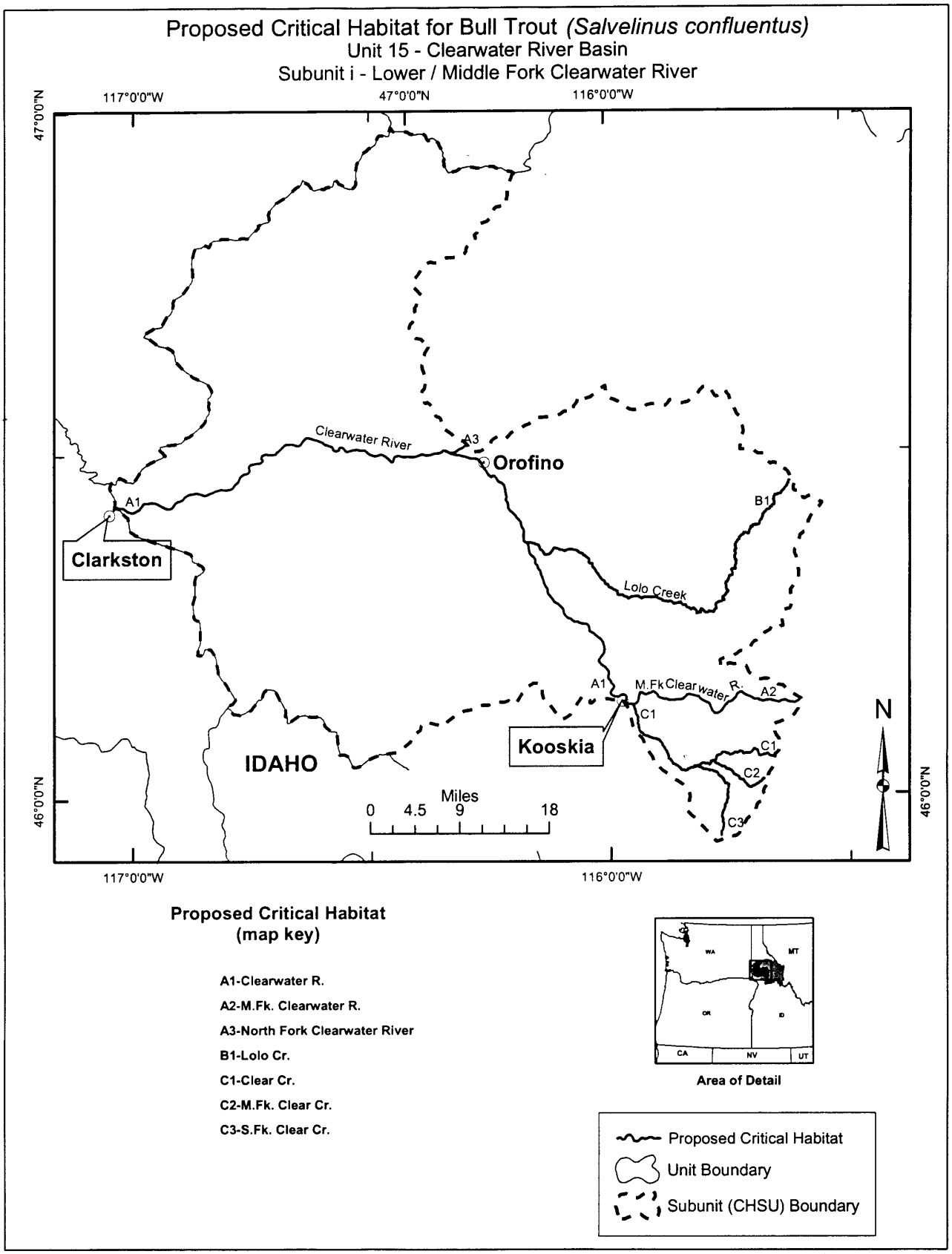
(P) Magruder Creek from a lower point located at 45.745 degrees latitude, and −114.76 degrees longitude to an upper point located at 45.726 degrees latitude, and −114.771 degrees longitude.

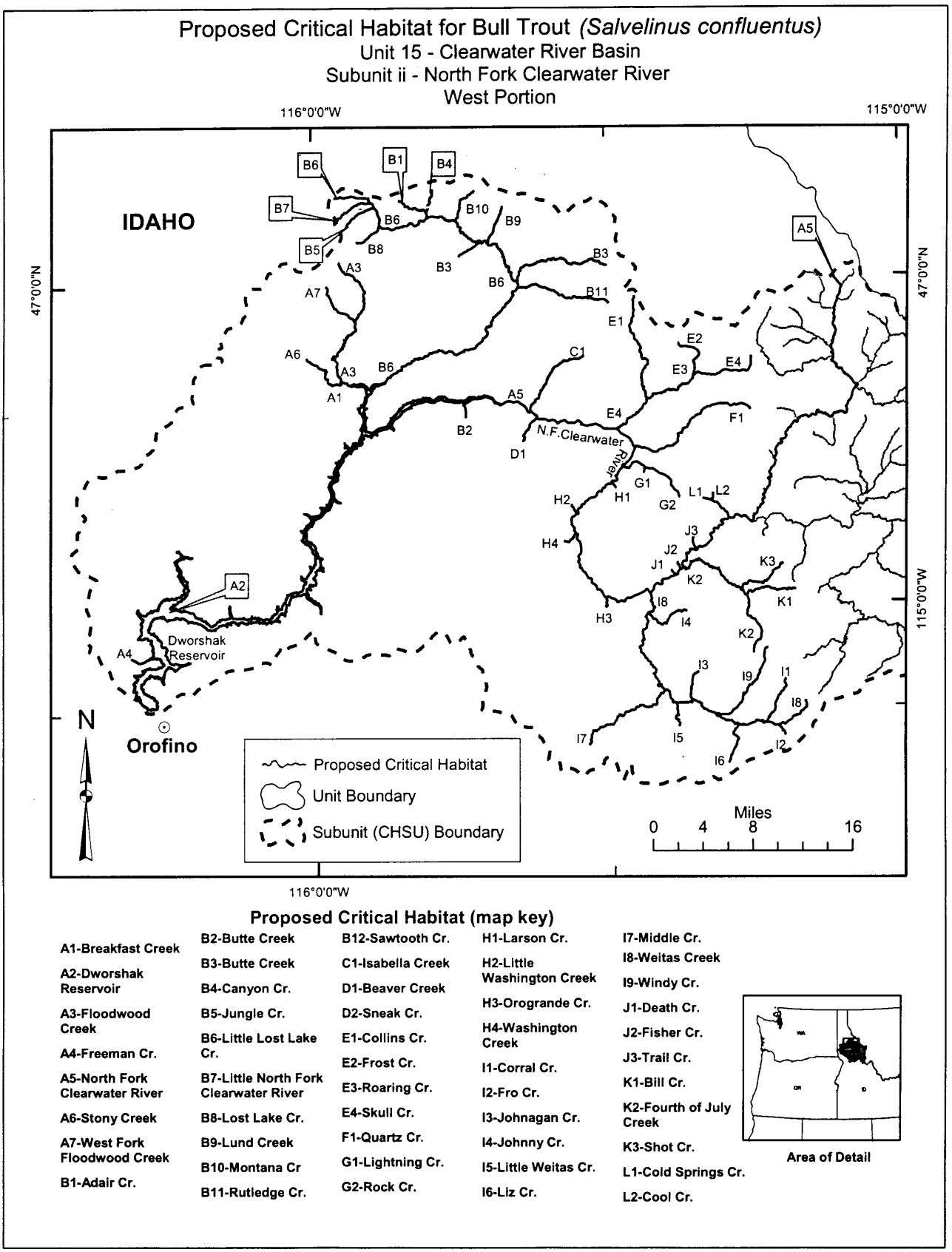
(Q) Cayuse Creek from a lower point located at 45.706 degrees latitude, and −114.614 degrees longitude to an upper point located at 45.761 degrees latitude, and −114.551 degrees longitude. Deep Creek from a lower point located at 45.707 degrees latitude, and −114.719 degrees longitude to an upper point located at 45.719 degrees latitude, and −114.509 degrees longitude. Slow Gulch Creek from a lower point located at 45.694 degrees latitude, and −114.56 degrees longitude to an upper point located at 45.679 degrees latitude, and −114.545 degrees longitude. Vance Creek from a lower point located at 45.703 degrees latitude, and −114.579 degrees longitude to an upper point located at 45.695 degrees latitude, and −114.581 degrees longitude.

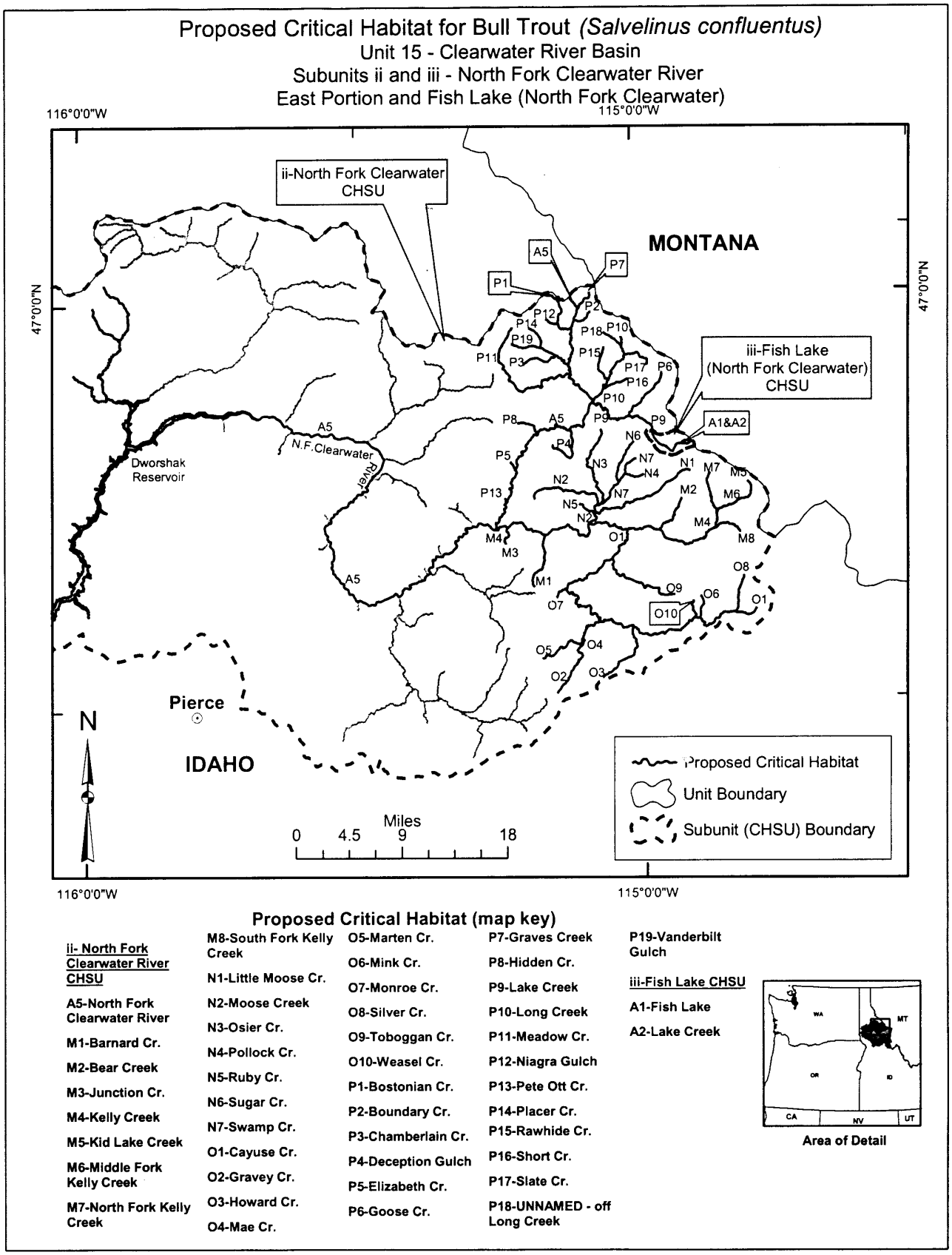
(R) French Creek from a lower point located at 45.597 degrees latitude, and −114.591 degrees longitude to an upper point located at 45.609 degrees latitude, and −114.561 degrees longitude. South Fork Surprise Creek from a lower point located at 45.527 degrees latitude, and −114.679 degrees longitude to an upper point located at 45.479 degrees latitude, and −114.664 degrees longitude. Storm Creek from a lower point located at 45.578 degrees latitude, and −114.64 degrees longitude to an upper point located at 45.636 degrees latitude, and −114.583 degrees longitude. Surprise Creek from a lower point located at 45.521 degrees latitude, and −114.701 degrees longitude to an upper point located at 45.538 degrees latitude, and −114.627 degrees longitude. Swet Creek from a lower point located at 45.58 degrees latitude, and −114.719 degrees longitude to an upper point located at 45.501 degrees latitude, and −114.801 degrees longitude. Wilkerson Creek from a lower point located at 45.612 degrees latitude, and −114.706 degrees longitude to an upper point located at 45.557 degrees latitude, and −114.585 degrees longitude.

Note: Maps follow for Unit 15, Subunit i; Subunit ii (West portion); Subunits ii (East Portion) and iii; Subunit iv; Subunits v and vi; and Subunit vii.

BILLING CODE 4310–55–P


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 15 - Clearwater River Basin
Subunit i - Lower / Middle Fork Clearwater River
117°0'0"W
47°0'0"N
116°0'0"W
47°0'0"N
46°0'0"N
Clearwater River
A3
Orofino
A1
Clarkston
B1
Lolo Creek
A1
M.Fk Clearwater R.
A2
C1
Kooskia
IDAHO
C1
C2
C3
Miles
0 4.5 9 18
N
117°0'0"W
116°0'0"W
46°0'0"N
Proposed Critical Habitat
(map key)
A1-Clearwater R.
A2-M.Fk. Clearwater R.
A3-North Fork Clearwater River
B1-Lolo Cr.
C1-Clear Cr.
C2-M.Fk. Clear Cr.
C3-S.Fk. Clear Cr.
WA
MT
OR
ID
CA
NV
UT
Area of Detail
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 15 - Clearwater River Basin
Subunit ii - North Fork Clearwater River
West Portion
116°0'0"W
115°0'0"W
47°0'0"N
IDAHO
N.F.Clearwater River
Dworshak Reservoir
Orofino
N
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Miles
0 4 8 16
Proposed Critical Habitat (map key)
A1-Breakfast Creek
A2-Dworshak Reservoir
A3-Floodwood Creek
A4-Freeman Cr.
A5-North Fork Clearwater River
A6-Stony Creek
A7-West Fork Floodwood Creek
B1-Adair Cr.
B2-Butte Creek
B3-Butte Creek
B4-Canyon Cr.
B5-Jungle Cr.
B6-Little Lost Lake Cr.
B7-Little North Fork Clearwater River
B8-Lost Lake Cr.
B9-Lund Creek
B10-Montana Cr
B11-Rutledge Cr.
B12-Sawtooth Cr.
C1-Isabella Creek
D1-Beaver Creek
D2-Sneak Cr.
E1-Collins Cr.
E2-Frost Cr.
E3-Roaring Cr.
E4-Skull Cr.
F1-Quartz Cr.
G1-Lightning Cr.
G2-Rock Cr.
H1-Larson Cr.
H2-Little Washington Creek
H3-Orogrande Cr.
H4-Washington Creek
I1-Corral Cr.
I2-Fro Cr.
I3-Johnagan Cr.
I4-Johnny Cr.
I5-Little Weitas Cr.
I6-Liz Cr.
I7-Middle Cr.
I8-Weitas Creek
I9-Windy Cr.
J1-Death Cr.
J2-Fisher Cr.
J3-Trail Cr.
K1-Bill Cr.
K2-Fourth of July Creek
K3-Shot Cr.
L1-Cold Springs Cr.
L2-Cool Cr.
Area of Detail



Proposed Critical Habitat (map key)

ii- North Fork Clearwater River CHSU

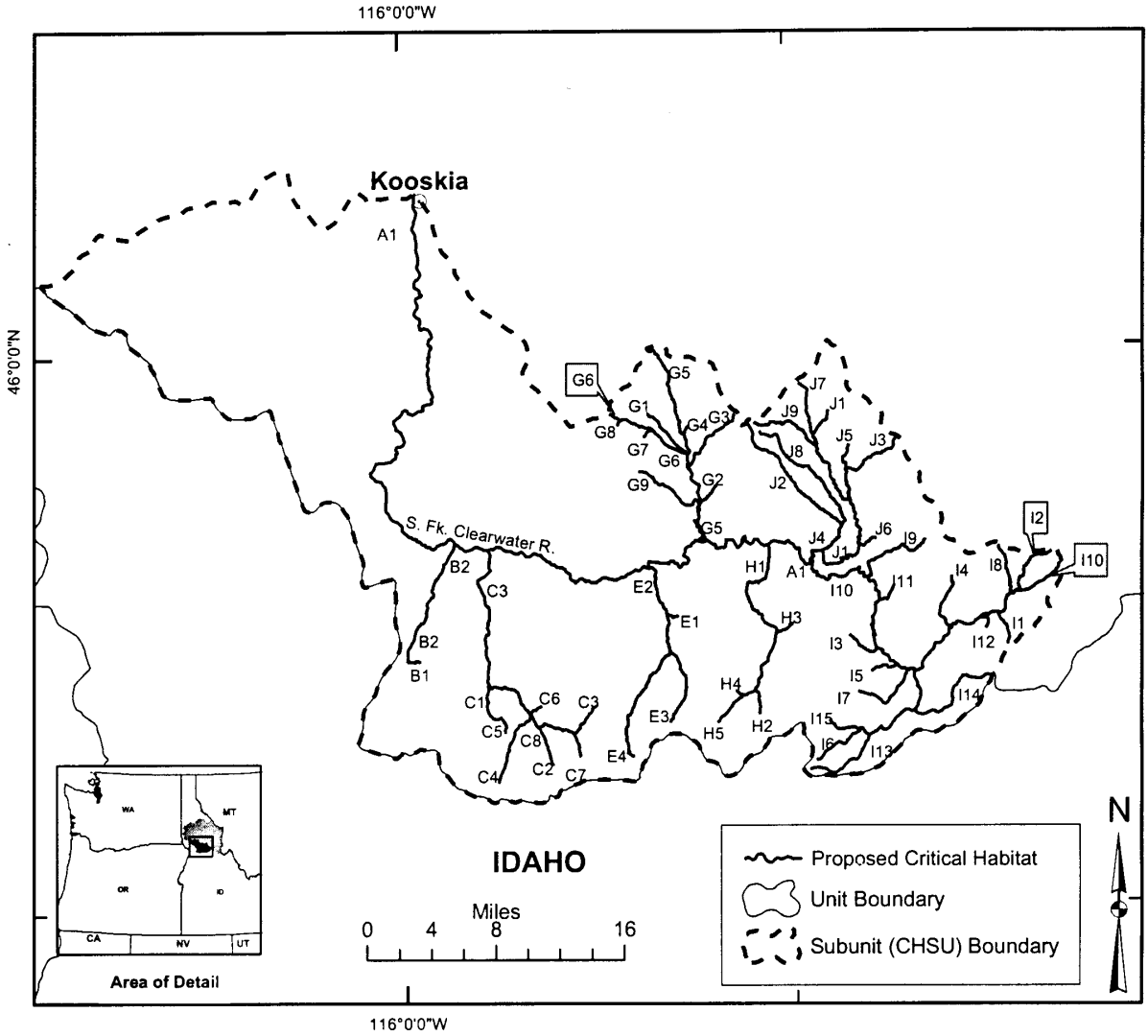
A5-North Fork Clearwater River
M1-Barnard Cr.
M2-Bear Creek
M3-Junction Cr.
M4-Kelly Creek
M5-Kid Lake Creek
M6-Middle Fork Kelly Creek
M7-North Fork Kelly Creek
M8-South Fork Kelly Creek
N1-Little Moose Cr.
N2-Moose Creek
N3-Osier Cr.
N4-Pollock Cr.
N5-Ruby Cr.
N6-Sugar Cr.
N7-Swamp Cr.
O1-Cayuse Cr.
O2-Gravey Cr.
O3-Howard Cr.
O4-Mae Cr.
O5-Marten Cr.
O6-Mink Cr.
O7-Monroe Cr.
O8-Silver Cr.
O9-Toboggan Cr.
O10-Weasel Cr.
P1-Bostonian Cr.
P2-Boundary Cr.
P3-Chamberlain Cr.
P4-Deception Gulch
P5-Elizabeth Cr.
P6-Goose Cr.
P7-Graves Creek
P8-Hidden Cr.
P9-Lake Creek
P10-Long Creek
P11-Meadow Cr.
P12-Niagra Gulch
P13-Pete Ott Cr.
P14-Placer Cr.
P15-Rawhide Cr.
P16-Short Cr.
P17-Slate Cr.
P18-UNNAMED - off Long Creek
P19-Vanderbilt Gulch

iii-Fish Lake CHSU

A1-Fish Lake
A2-Lake Creek

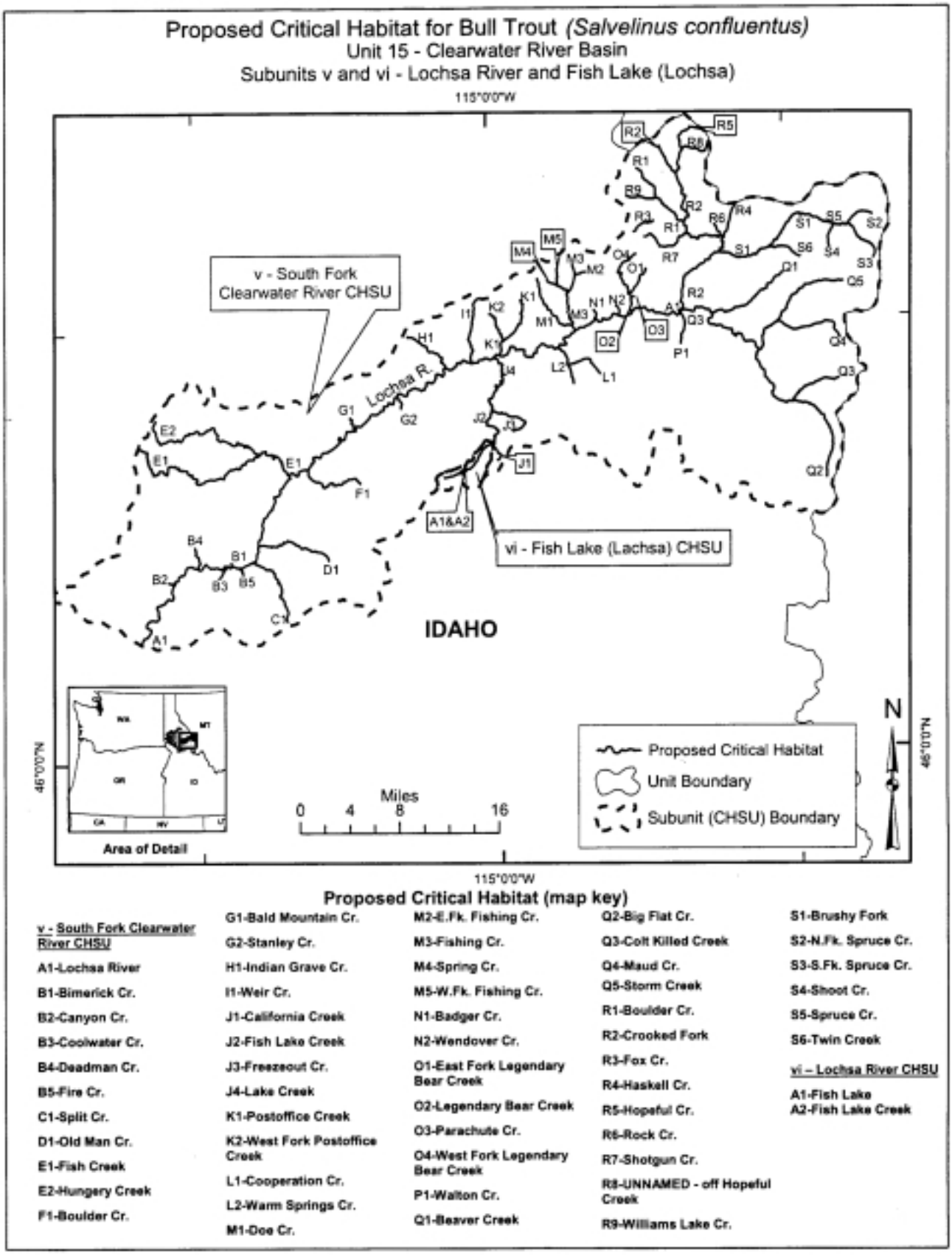
Area of Detail

Proposed Critical Habitat for Bull Trout *(Salvelinus confluentus)*
Unit 15 - Clearwater River Basin
Subunit iv - South Fork Clearwater River

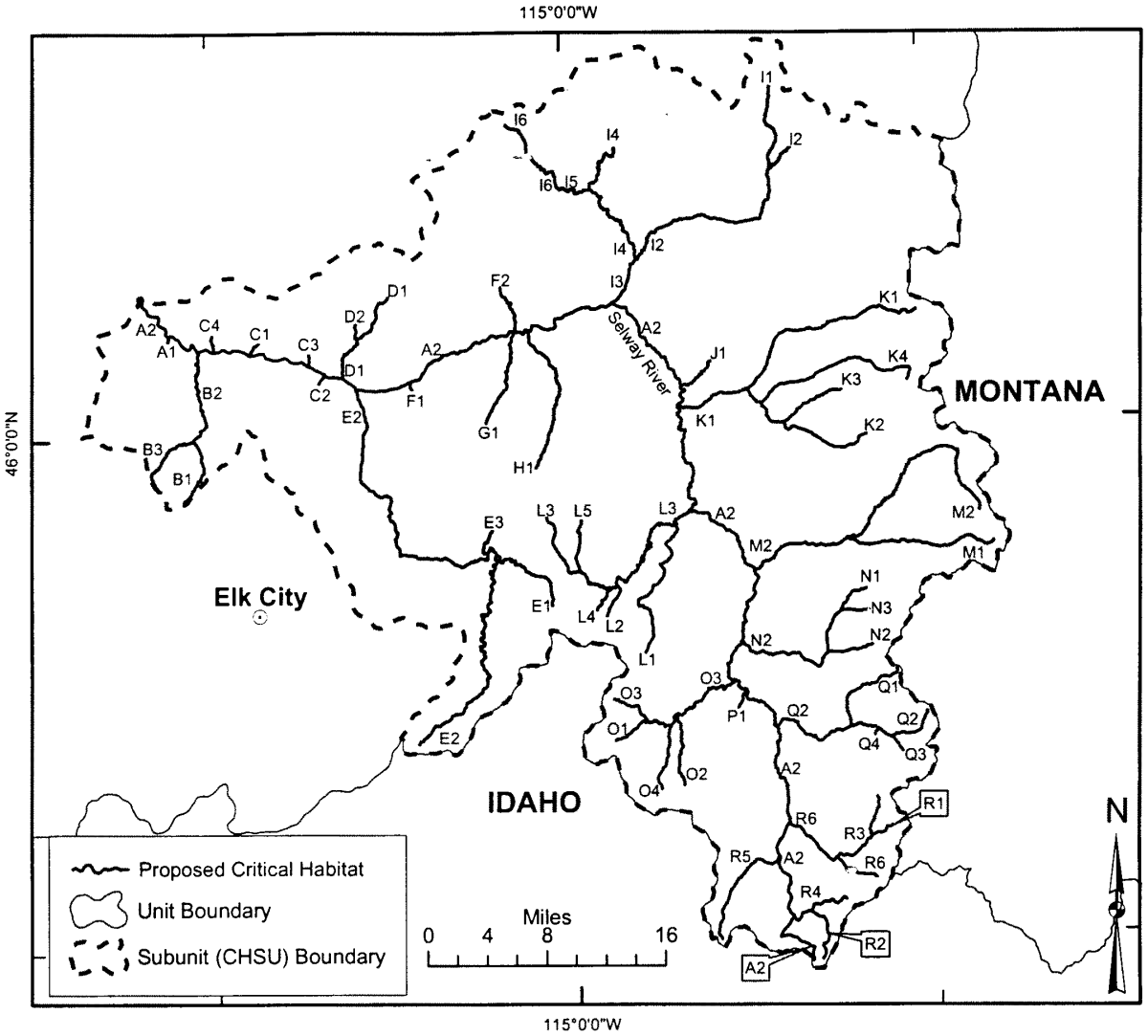


Proposed Critical Habitat (map key)

A1-South Fork Clearwater River
B1-Merton Creek
B2-Mill Creek
C1-Gospel Creek
C2-Hagen Cr.
C3-Johns Creek
C4-Moores Creek
C5-Moores Lake Creek
C6-Open Creek
C7-Taylor Cr.
C8-Twin Lakes Cr.
D1-Silver Cr.
D2-Twentymile Cr.
D3-Wing Cr.
E1-Sixmile Cr.
E2-Tenmile Cr.
E3-Williams Cr.
E4-Wiseboy Cr.
F1-Buckhorn Cr.
G1-Baldy Cr.
G2-Bear Creek
G3-Beaver Creek
G4-Mule Creek
G5-Newsome Creek
G6-Pilot Creek
G7-UNNAMED 1 - off Pilot Creek
G8-UNNAMED 2 - off Pilot Creek
G9-West Fork Newsome Creek
H1-Crooked River
H2-East Fork Crooked River
H3-Relief Cr.
H4-UNNAMED - off West Fork Crooked River
H5-West Fork Crooked River
I1-Baston Cr.
I2-Bridge Cr.
I3-Dawson Cr.
I4-Ditch Cr.
I5-Little Moose Cr.
I6-Middle Fork. Red R.
I7-Moose Butte Cr.
I8-Otterson Cr.
I9-Red Horse Cr.
I10-Red River
I11-Siegel Cr.
I12-Soda Cr.
I13-South Fork Red River
I14-Trapper Cr.
I15-West Fork Red R.
J1-American R.
J2-Big Elk Cr.
J3-E.Fk. American R.
J4-Elk Cr.
J5-Flint Cr.
J6-Kirks Fk. American R.
J7-Lick Cr.
J8-Little Elk Cr.
J9-W.Fk. American R.

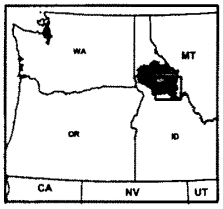

Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 15 - Clearwater River Basin
Subunits v and vi - Lochsa River and Fish Lake (Lochsa)
115°0'0"W
v - South Fork Clearwater River CHSU
vi - Fish Lake (Lochsa) CHSU
Lochsa R.
IDAHO
Area of Detail
Miles
0 4 8 16
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
N
46°0'0"N
Proposed Critical Habitat (map key)
v - South Fork Clearwater River CHSU
A1-Lochsa River
B1-Bimerick Cr.
B2-Canyon Cr.
B3-Coolwater Cr.
B4-Deadman Cr.
B5-Fire Cr.
C1-Split Cr.
D1-Old Man Cr.
E1-Fish Creek
E2-Hungery Creek
F1-Boulder Cr.
G1-Bald Mountain Cr.
G2-Stanley Cr.
H1-Indian Grave Cr.
I1-Weir Cr.
J1-California Creek
J2-Fish Lake Creek
J3-Freezeout Cr.
J4-Lake Creek
K1-Postoffice Creek
K2-West Fork Postoffice Creek
L1-Cooperation Cr.
L2-Warm Springs Cr.
M1-Doe Cr.
M2-E.Fk. Fishing Cr.
M3-Fishing Cr.
M4-Spring Cr.
M5-W.Fk. Fishing Cr.
N1-Badger Cr.
N2-Wendover Cr.
O1-East Fork Legendary Bear Creek
O2-Legendary Bear Creek
O3-Parachute Cr.
O4-West Fork Legendary Bear Creek
P1-Walton Cr.
Q1-Beaver Creek
Q2-Big Flat Cr.
Q3-Colt Killed Creek
Q4-Maud Cr.
Q5-Storm Creek
R1-Boulder Cr.
R2-Crooked Fork
R3-Fox Cr.
R4-Haskell Cr.
R5-Hopeful Cr.
R6-Rock Cr.
R7-Shotgun Cr.
R8-UNNAMED - off Hopeful Creek
R9-Williams Lake Cr.
S1-Brushy Fork
S2-N.Fk. Spruce Cr.
S3-S.Fk. Spruce Cr.
S4-Shoot Cr.
S5-Spruce Cr.
S6-Twin Creek
vi – Lochsa River CHSU
A1-Fish Lake
A2-Fish Lake Creek

Proposed Critical Habitat for Bull Trout *(Salvelinus confluentus)*
Unit 15 - Clearwater River Basin
Subunit vii - Selway River



Proposed Critical Habitat (map key)

A1-Goddard Cr.
A2-Selway River
B1-E.Fk. O'Hara Cr.
B2-O'Hara Cr.
B3-W.Fk. O'Hara Cr.
C1-Boyd Cr.
C2-Falls Cr.
C3-Glover Cr.
C4-Rackliff Cr.
D1-Gedney Cr.
D2-W.Fk. Gedney Cr.
E1-E.Fk. Meadow Cr.
E2-Meadow Cr.
E3-Schwar Cr.
F1-Otter Cr.
F2-Three Links Creek
G1-Mink Cr.
H1-Marten Cr.
I1-Cedar Cr.
I2-East Fork Moose Creek
I3-Moose Creek
I4-North Fork Moose Creek
I5-Rhoda Creek
I6-Wounded Doe Creek
J1-Pettibone Cr.
K1-Bear Creek
K2-Brushy Fork Cr.
K3-Cub Cr.
K4-Paradise Cr.
L1-Eagle Cr.
L2-Lynx Cr.
L3-Running Cr.
L4-S.Fk. Running Cr.
L5-Tom Cr.
M1-Canyon Cr.
M2-White Cap Cr.
N1-Burnt Strip Creek
N2-Indian Cr.
N3-Schofield Cr.
O1-Burnt Knob Cr.
O2-Flat Cr.
O3-Little Clearwater River
O4-Salamander Cr.
P1-Magruder Creek
Q1-Cayuse Cr.
Q2-Deep Cr.
Q3-Slow Gulch Cr.
Q4-Vance Cr.
R1-French Cr.
R2-S.Fk. Surprise Cr.
R3-Storm Creek
R4-Surprise Cr.
R5-Swet Creek
R6-Wilkerson Cr.



Area of Detail

BILLING CODE 4310–55–C

(20) Unit 16—Salmon River Basin.

(i) Critical Habitat Subunit—Little-Lower Salmon.

(A) Salmon River from a lower point located at 45.857 degrees latitude, and –116.794 degrees longitude to an upper point located at 45.425 degrees latitude, and –116.03 degrees longitude.

(B) Deadhorse Creek from a lower point located at 45.613 degrees latitude, and –116.066 degrees longitude to an upper point located at 45.575 degrees latitude, and –116.144 degrees longitude. Little Slate Creek from a lower point located at 45.62 degrees latitude, and –116.066 degrees longitude to an upper point located at 45.523 degrees latitude, and –116.092 degrees longitude. Slate Creek from a lower point located at 45.64 degrees latitude, and –116.284 degrees longitude to an upper point located at 45.625 degrees latitude, and –116.054 degrees longitude. Van Buren Creek from a lower point located at 45.533 degrees latitude, and –116.082 degrees longitude to an upper point located at 45.536 degrees latitude, and –116.168 degrees longitude. Willow Creek from a lower point located at 45.638 degrees latitude, and –116.109 degrees longitude to an upper point located at 45.65 degrees latitude, and –116.088 degrees longitude.

(C) East Fork John Day Creek from a lower point located at 45.573 degrees latitude, and –116.229 degrees longitude to an upper point located at 45.577 degrees latitude, and –116.153 degrees longitude. John Day Creek from a lower point located at 45.586 degrees latitude, and –116.295 degrees longitude to an upper point located at 45.521 degrees latitude, and –116.195 degrees longitude.

(D) Little Salmon River from a lower point located at 45.417 degrees latitude, and –116.313 degrees longitude to an upper point located at 45.138 degrees latitude, and –116.282 degrees longitude.

(E) Granite Fork Lake Fork Rapid River from a lower point located at 45.187 degrees latitude, and –116.517 degrees longitude to an upper point located at 45.151 degrees latitude, and –116.552 degrees longitude. Lake Fork Rapid River from a lower point located at 45.187 degrees latitude, and –116.482 degrees longitude to an upper point located at 45.19 degrees latitude, and –116.557 degrees longitude. Rapid River from a lower point located at 45.375 degrees latitude, and –116.355 degrees longitude to an upper point located at 45.114 degrees latitude, and –116.506 degrees longitude. West Fork Rapid River from a lower point located at 45.307 degrees latitude, and –116.419 degrees longitude to an upper point located at 45.23 degrees latitude, and –116.537 degrees longitude.

(F) Boulder Creek from a lower point located at 45.204 degrees latitude, and –116.31 degrees longitude to an upper point located at 45.129 degrees latitude, and –116.475 degrees longitude. Yellow Jacket Creek from a lower point located at 45.137 degrees latitude, and –116.412 degrees longitude to an upper point located at 45.146 degrees latitude, and –116.444 degrees longitude.

(G) Hard Creek from a lower point located at 45.183 degrees latitude, and –116.283 degrees longitude to an upper point located at 45.125 degrees latitude, and –116.239 degrees longitude. Hazard Creek from a lower point located at 45.184 degrees latitude, and –116.3 degrees longitude to an upper point located at 45.222 degrees latitude, and –116.139 degrees longitude.

(H) Lake Creek from a lower point located at 45.4 degrees latitude, and –116.212 degrees longitude to an upper point located at 45.294 degrees latitude, and –116.219 degrees longitude.

(I) Partridge Creek from a lower point located at 45.408 degrees latitude, and –116.126 degrees longitude to an upper point located at 45.288 degrees latitude, and –116.217 degrees longitude.

(J) Elkhorn Creek from a lower point located at 45.404 degrees latitude, and –116.094 degrees longitude to an upper point located at 45.27 degrees latitude, and –116.121 degrees longitude.

(K) French Creek from a lower point located at 45.425 degrees latitude, and –116.03 degrees longitude to an upper point located at 45.158 degrees latitude, and –116.084 degrees longitude. North Creek from a lower point located at 45.286 degrees latitude, and –116.044 degrees longitude to an upper point located at 45.259 degrees latitude, and –115.988 degrees longitude.

(ii) Critical Habitat Subunit—Middle Salmon—Chamberlain.

(A) Salmon River from a lower point located at 45.425 degrees latitude, and –116.03 degrees longitude to an upper point located at 45.454 degrees latitude, and –114.931 degrees longitude.

(B) East Fork Fall Creek from a lower point located at 45.415 degrees latitude, and –115.976 degrees longitude to an upper point located at 45.36 degrees latitude, and –115.963 degrees longitude. Fall Creek from a lower point located at 45.433 degrees latitude, and –115.983 degrees longitude to an upper point located at 45.331 degrees latitude, and –115.995 degrees longitude.

(C) Wind River from a lower point located at 45.455 degrees latitude, and –115.941 degrees longitude to an upper point located at 45.605 degrees latitude, and –115.917 degrees longitude.

(D) Sheep Creek from a lower point located at 45.468 degrees latitude, and –115.81 degrees longitude to an upper point located at 45.614 degrees latitude, and –115.696 degrees longitude.

(E) California Creek from a lower point located at 45.448 degrees latitude, and –115.759 degrees longitude to an upper point located at 45.341 degrees latitude, and –115.85 degrees longitude.

(F) Crooked Creek from a lower point located at 45.434 degrees latitude, and –115.666 degrees longitude to an upper point located at 45.612 degrees latitude, and –115.438 degrees longitude. Lake Creek from a lower point located at 45.514 degrees latitude, and –115.574 degrees longitude to an upper point located at 45.616 degrees latitude, and –115.686 degrees longitude.

(G) Guard Creek from a lower point located at 45.293 degrees latitude, and –115.695 degrees longitude to an upper point located at 45.309 degrees latitude, and –115.658 degrees longitude. Mayflower Creek from a lower point located at 45.248 degrees latitude, and –115.653 degrees longitude to an upper point located at 45.259 degrees latitude, and –115.601 degrees longitude. Schissler Creek from a lower point located at 45.328 degrees latitude, and –115.707 degrees longitude to an upper point located at 45.321 degrees latitude, and –115.779 degrees longitude. Slaughter Creek from a lower point located at 45.261 degrees latitude, and –115.672 degrees longitude to an upper point located at 45.297 degrees latitude, and –115.609 degrees longitude. Warren Creek from a lower point located at 45.397 degrees latitude, and –115.592 degrees longitude to an upper point located at 45.22 degrees latitude, and –115.677 degrees longitude. Webfoot Creek from a lower point located at 45.237 degrees latitude, and –115.675 degrees longitude to an upper point located at 45.217 degrees latitude, and –115.695 degrees longitude.

(H) Rhett Creek from a lower point located at 45.472 degrees latitude, and –115.393 degrees longitude to an upper point located at 45.476 degrees latitude, and –115.407 degrees longitude.

(I) Little Mallard Creek from a lower point located at 45.529 degrees latitude, and −115.303 degrees longitude to an upper point located at 45.533 degrees latitude, and −115.311 degrees longitude.

(J) Big Mallard Creek from a lower point located at 45.537 degrees latitude, and −115.269 degrees longitude to an upper point located at 45.543 degrees latitude, and −115.279 degrees longitude.

(K) Bargamin Creek from a lower point located at 45.567 degrees latitude, and −115.191 degrees longitude to an upper point located at 45.771 degrees latitude, and −114.934 degrees longitude.

(L) Sabe Creek from a lower point located at 45.507 degrees latitude, and −115.024 degrees longitude to an upper point located at 45.681 degrees latitude, and −114.948 degrees longitude.

(M) Big Harrington Creek from a lower point located at 45.473 degrees latitude, and −114.963 degrees longitude to an upper point located at 45.518 degrees latitude, and −114.823 degrees longitude.

(N) Chamberlain Creek from a lower point located at 45.454 degrees latitude, and −114.931 degrees longitude to an upper point located at 45.336 degrees latitude, and −115.329 degrees longitude. Game Creek from a lower point located at 45.398 degrees latitude, and −115.192 degrees longitude to an upper point located at 45.404 degrees latitude, and −115.274 degrees longitude. McCalla Creek from a lower point located at 45.414 degrees latitude, and −114.981 degrees longitude to an upper point located at 45.255 degrees latitude, and −115.127 degrees longitude. Moose Creek from a lower point located at 45.356 degrees latitude, and −115.249 degrees longitude to an upper point located at 45.283 degrees latitude, and −115.292 degrees longitude. Rim Creek from a lower point located at 45.336 degrees latitude, and −115.329 degrees longitude to an upper point located at 45.281 degrees latitude, and −115.382 degrees longitude. South Fork Chamberlain Creek from a lower point located at 45.336 degrees latitude, and −115.329 degrees longitude to an upper point located at 45.282 degrees latitude, and −115.351 degrees longitude. West Fork Chamberlain Creek from a lower point located at 45.383 degrees latitude, and −115.166 degrees longitude to an upper point located at 45.463 degrees latitude, and −115.184 degrees longitude. Whimstick Creek from a lower point located at 45.378 degrees latitude, and −114.999 degrees longitude to an upper point located at 45.241 degrees latitude, and −115.053 degrees longitude.

(iii) Critical Habitat Subunit—South Fork Salmon River.

(A) South Fork Salmon River from a lower point located at 45.378 degrees latitude, and −115.512 degrees longitude to an upper point located at 44.494 degrees latitude, and −115.735 degrees longitude.

(B) Pony Creek from a lower point located at 45.187 degrees latitude, and −115.562 degrees longitude to an upper point located at 45.179 degrees latitude, and −115.703 degrees longitude.

(C) Elk Creek from a lower point located at 45.156 degrees latitude, and −115.585 degrees longitude to an upper point located at 45.157 degrees latitude, and −115.431 degrees longitude. South Fork Elk Creek from a lower point located at 45.095 degrees latitude, and −115.513 degrees longitude to an upper point located at 45.069 degrees latitude, and −115.482 degrees longitude. West Fork Elk Creek from a lower point located at 45.147 degrees latitude, and −115.511 degrees longitude to an upper point located at 45.061 degrees latitude, and −115.519 degrees longitude.

(D) Flat Creek from a lower point located at 45.271 degrees latitude, and −115.836 degrees longitude to an upper point located at 45.302 degrees latitude, and −115.879 degrees longitude. Grouse Creek from a lower point located at 45.265 degrees latitude, and −115.83 degrees longitude to an upper point located at 45.317 degrees latitude, and −115.816 degrees longitude. Hum Creek from a lower point located at 45.049 degrees latitude, and −115.897 degrees longitude to an upper point located at 45.07 degrees latitude, and −115.903 degrees longitude. Josephine Creek from a lower point located at 45.224 degrees latitude, and −115.929 degrees longitude to an upper point located at 45.225 degrees latitude, and −115.97 degrees longitude. Lake Creek from a lower point located at 45.256 degrees latitude, and −115.896 degrees longitude to an upper point located at 45.374 degrees latitude, and −115.867 degrees longitude. Lick Creek from a lower point located at 45.062 degrees latitude, and −115.761 degrees longitude to an upper point located at 45.058 degrees latitude, and −115.932 degrees longitude. Loon Creek from a lower point located at 45.17 degrees latitude, and −115.808 degrees longitude to an upper point located at 45.082 degrees latitude, and −115.916 degrees longitude. Nethker Creek from a lower point located at 45.265 degrees latitude, and −115.905 degrees longitude to an upper point located at 45.25 degrees latitude, and −115.971 degrees longitude. Ruby Creek from a lower point located at 45.258 degrees latitude, and −115.878 degrees longitude to an upper point located at 45.19 degrees latitude, and −115.914 degrees longitude. Sand Creek from a lower point located at 45.307 degrees latitude, and −115.82 degrees longitude to an upper point located at 45.327 degrees latitude, and −115.862 degrees longitude. Secesh River from a lower point located at 45.025 degrees latitude, and −115.706 degrees longitude to an upper point located at 45.256 degrees latitude, and −115.896 degrees longitude. Summit Creek from a lower point located at 45.256 degrees latitude, and −115.896 degrees longitude to an upper point located at 45.172 degrees latitude, and −115.915 degrees longitude. Threemile Creek from a lower point located at 45.299 degrees latitude, and −115.929 degrees longitude to an upper point located at 45.334 degrees latitude, and −115.891 degrees longitude. Victor Creek from a lower point located at 45.183 degrees latitude, and −115.821 degrees longitude to an upper point located at 45.147 degrees latitude, and −115.936 degrees longitude. Willow Basket Creek from a lower point located at 45.186 degrees latitude, and −115.831 degrees longitude to an upper point located at 45.192 degrees latitude, and −115.894 degrees longitude. Willow Creek from a lower point located at 45.331 degrees latitude, and −115.949 degrees longitude to an upper point located at 45.356 degrees latitude, and −115.857 degrees longitude.

(E) Bum Creek from a lower point located at 44.995 degrees latitude, and −115.318 degrees longitude to an upper point located at 45.036 degrees latitude, and −115.286 degrees longitude. Cane Creek from a lower point located at 44.953 degrees latitude, and −115.291 degrees longitude to an upper point located at 44.978 degrees latitude, and −115.261 degrees longitude. Cinnabar Creek from a lower point located at 44.952 degrees latitude, and −115.293 degrees longitude to an upper point located at 44.912 degrees latitude, and −115.266 degrees longitude. East Fork South Fork Salmon River from a lower point located at 45.015 degrees latitude, and −115.713 degrees longitude to an upper point located at 44.886 degrees latitude, and −115.256 degrees longitude. Meadow Creek from a lower point located at 44.902 degrees latitude, and −115.327 degrees longitude to an upper point located at 44.864 degrees latitude, and −115.372 degrees longitude. Missouri Creek from a lower point located at 45.007 degrees latitude, and −115.394 degrees longitude to an upper point located at 45.028 degrees latitude, and −115.351 degrees longitude. Profile Creek from a lower point located at 44.958 degrees latitude, and −115.428 degrees longitude to an upper point located at 45.053 degrees latitude, and −115.416 degrees longitude. Quartz Creek from a lower point located at 44.97 degrees latitude, and −115.477 degrees longitude to an upper point located at 45.048 degrees latitude, and −115.496 degrees

longitude. Salt Creek from a lower point located at 44.95 degrees latitude, and −115.352 degrees longitude to an upper point located at 44.973 degrees latitude, and −115.324 degrees longitude. Sugar Creek from a lower point located at 44.936 degrees latitude, and −115.336 degrees longitude to an upper point located at 44.975 degrees latitude, and −115.245 degrees longitude. Tamarack Creek from a lower point located at 44.959 degrees latitude, and −115.389 degrees longitude to an upper point located at 44.984 degrees latitude, and −115.27 degrees longitude.

(F) Buck Creek from a lower point located at 44.792 degrees latitude, and –115.518 degrees longitude to an upper point located at 44.751 degrees latitude, and –115.479 degrees longitude. Burntlog Creek from a lower point located at 44.803 degrees latitude, and –115.518 degrees longitude to an upper point located at 44.718 degrees latitude, and –115.419 degrees longitude. East Fork Burntlog Creek from a lower point located at 44.737 degrees latitude, and –115.501 degrees longitude to an upper point located at 44.73 degrees latitude, and –115.426 degrees longitude. Johnson Creek from a lower point located at 44.963 degrees latitude, and –115.501 degrees longitude to an upper point located at 44.55 degrees latitude, and –115.59 degrees longitude. Riordan Creek from a lower point located at 44.907 degrees latitude, and –115.485 degrees longitude to an upper point located at 44.808 degrees latitude, and –115.392 degrees longitude. Riordan Lake centered at 44.85 degrees latitude, and –115.438 degrees longitude. Trapper Creek from a lower point located at 44.832 degrees latitude, and –115.513 degrees longitude to an upper point located at 44.774 degrees latitude, and –115.404 degrees longitude. Unnamed creek off East Fork Burntlog Creek from a lower point located at 44.74 degrees latitude, and –115.458 degrees longitude to an upper point located at 44.764 degrees latitude, and –115.44 degrees longitude. Unnamed creek off Trapper Creek from a lower point located at 44.793 degrees latitude, and –115.464 degrees longitude to an upper point located at 44.772 degrees latitude, and –115.433 degrees longitude.

(G) Bear Creek from a lower point located at 44.623 degrees latitude, and –115.69 degrees longitude to an upper point located at 44.607 degrees latitude, and –115.6 degrees longitude. Blackmare Creek from a lower point located at 44.823 degrees latitude, and –115.703 degrees longitude to an upper point located at 44.809 degrees latitude, and –115.795 degrees longitude. Buckhorn Creek from a lower point located at 44.922 degrees latitude, and –115.736 degrees longitude to an upper point located at 44.853 degrees latitude, and –115.886 degrees longitude. Cabin Creek from a lower point located at 44.667 degrees latitude, and –115.685 degrees longitude to an upper point located at 44.703 degrees latitude, and –115.647 degrees longitude. Cougar Creek from a lower point located at 44.889 degrees latitude, and –115.716 degrees longitude to an upper point located at 44.81 degrees latitude, and –115.804 degrees longitude. Curtis Creek from a lower point located at 44.652 degrees latitude, and –115.703 degrees longitude to an upper point located at 44.562 degrees latitude, and –115.759 degrees longitude. Fitsum Creek from a lower point located at 44.999 degrees latitude, and –115.722 degrees longitude to an upper point located at 45 degrees latitude, and –115.762 degrees longitude. Fourmile Creek from a lower point located at 44.857 degrees latitude, and –115.695 degrees longitude to an upper point located at 44.798 degrees latitude, and –115.621 degrees longitude. Little Buckhorn Creek from a lower point located at 44.914 degrees latitude, and –115.75 degrees longitude to an upper point located at 44.865 degrees latitude, and –115.8 degrees longitude. Lodgepole Creek from a lower point located at 44.593 degrees latitude, and –115.686 degrees longitude to an upper point located at 44.576 degrees latitude, and –115.61 degrees longitude. Mormon Creek from a lower point located at 44.524 degrees latitude, and –115.695 degrees longitude to an upper point located at 44.499 degrees latitude, and –115.654 degrees longitude. North Fork Fitsum Creek from a lower point located at 44.999 degrees latitude, and –115.759 degrees longitude to an upper point located at 44.986 degrees latitude, and –115.883 degrees longitude. Reeves Creek from a lower point located at 44.668 degrees latitude, and –115.666 degrees longitude to an upper point located at 44.686 degrees latitude, and –115.618 degrees longitude. Rice Creek from a lower point located at 44.575 degrees latitude, and –115.685 degrees longitude to an upper point located at 44.51 degrees latitude, and –115.644 degrees longitude. Six-Bit Creek from a lower point located at 44.686 degrees latitude, and –115.706 degrees longitude to an upper point located at 44.646 degrees latitude, and –115.808 degrees longitude. South Fork Blackmare Creek from a lower point located at 44.809 degrees latitude, and –115.747 degrees longitude to an upper point located at 44.77 degrees latitude, and –115.803 degrees longitude. South Fork Buckhorn Creek from a lower point located at 44.89 degrees latitude, and –115.823 degrees longitude to an upper point located at 44.84 degrees latitude, and –115.823 degrees longitude. Trail Creek from a lower point located at 44.635 degrees latitude, and –115.717 degrees longitude to an upper point located at 44.628 degrees latitude, and –115.79 degrees longitude. Tyndall Creek from a lower point located at 44.58 degrees latitude, and –115.684 degrees longitude to an upper point located at 44.562 degrees latitude, and –115.748 degrees longitude. Unnamed creek off Rice Creek from a lower point located at 44.551 degrees latitude, and –115.655 degrees longitude to an upper point located at 44.561 degrees latitude, and –115.643 degrees longitude. Unnamed creek off South Fork Salmon River from a lower point located at 44.556 degrees latitude, and –115.682 degrees longitude to an upper point located at 44.552 degrees latitude, and –115.706 degrees longitude. Unnamed creek off Trail Creek from a lower point located at 44.626 degrees latitude, and –115.745 degrees longitude to an upper point located at 44.599 degrees latitude, and –115.802 degrees longitude. Unnamed creek 1 off Curtis Creek from a lower point located at 44.61 degrees latitude, and –115.745 degrees longitude to an upper point located at 44.586 degrees latitude, and –115.803 degrees longitude. Unnamed creek 2 off Curtis Creek from a lower point located at 44.595 degrees latitude, and –115.752 degrees longitude to an upper point located at 44.568 degrees latitude, and –115.793 degrees longitude. Warm Lake centered at 44.645 degrees latitude, and –115.669 degrees longitude. Warm Lake Creek from a lower point located at 44.666 degrees latitude, and –115.698 degrees longitude to an upper point located at 44.653 degrees latitude, and –115.661 degrees longitude.

(iv) Critical Habitat Subunit—Middle Fork Salmon River.

(A) Middle Fork Salmon River from a lower point located at 45.297 degrees latitude, and –114.591 degrees longitude to an upper point located at 44.449 degrees latitude, and –115.23 degrees longitude.

(B) Beaver Creek from a lower point located at 45.163 degrees latitude, and –115.242 degrees longitude to an upper point located at 45.242 degrees latitude, and –115.314 degrees longitude. Belvidere Creek from a lower point located at 45.07 degrees latitude, and –115.364 degrees longitude to an upper point located at 45.041 degrees latitude, and –115.386 degrees longitude. Big

Creek from a lower point located at 45.095 degrees latitude, and –114.732 degrees longitude to an upper point located at 45.06 degrees latitude, and –115.451 degrees longitude. Big Ramey Creek from a lower point located at 45.177 degrees latitude, and –115.159 degrees longitude to an upper point located at 45.279 degrees latitude, and –115.243 degrees longitude. Boulder Creek from a lower point located at 45.242 degrees latitude, and –115.314 degrees longitude to an upper point located at 45.277 degrees latitude, and –115.34 degrees longitude. Cabin Creek from a lower point located at 45.127 degrees latitude, and –114.935 degrees longitude to an upper point located at 45.195 degrees latitude, and –114.837 degrees longitude. Cave Creek from a lower point located at 45.132 degrees latitude, and –114.955 degrees longitude to an upper point located at 45.24 degrees latitude, and –114.846 degrees longitude. Crooked Creek from a lower point located at 45.163 degrees latitude, and –115.128 degrees longitude to an upper point located at 45.195 degrees latitude, and –115.031 degrees longitude. East Fork Big Ramey Creek from a lower point located at 45.214 degrees latitude, and –115.187 degrees longitude to an upper point located at 45.245 degrees latitude, and –115.136 degrees longitude. Hand Creek from a lower point located at 45.228 degrees latitude, and –115.3 degrees longitude to an upper point located at 45.287 degrees latitude, and –115.245 degrees longitude. Logan Creek from a lower point located at 45.118 degrees latitude, and –115.319 degrees longitude to an upper point located at 45.072 degrees latitude, and –115.455 degrees longitude. Middle Fork Smith Creek from a lower point located at 45.17 degrees latitude, and –115.38 degrees longitude to an upper point located at 45.157 degrees latitude, and –115.412 degrees longitude. Monumental Creek from a lower point located at 45.16 degrees latitude, and –115.129 degrees longitude to an upper point located at 44.904 degrees latitude, and –115.262 degrees longitude. Rush Creek from a lower point located at 45.105 degrees latitude, and –114.861 degrees longitude to an upper point located at 44.933 degrees latitude, and –114.99 degrees longitude. Smith Creek from a lower point located at 45.153 degrees latitude, and –115.297 degrees longitude to an upper point located at 45.17 degrees latitude, and –115.38 degrees longitude. Snowslide Creek from a lower point located at 45.098 degrees latitude, and –115.156 degrees longitude to an upper point located at 45.045 degrees latitude, and –115.281 degrees longitude. South Fork Rush Creek from a lower point located at 45.014 degrees latitude, and –114.978 degrees longitude to an upper point located at 44.965 degrees latitude, and –114.928 degrees longitude. South Fork Smith Creek from a lower point located at 45.17 degrees latitude, and –115.38 degrees longitude to an upper point located at 45.149 degrees latitude, and –115.419 degrees longitude. West Fork Monumental Creek from a lower point located at 45.005 degrees latitude, and –115.139 degrees longitude to an upper point located at 45.034 degrees latitude, and –115.275 degrees longitude.

(C) Wilson Creek from a lower point located at 45.033 degrees latitude, and −114.723 degrees longitude to an upper point located at 45.143 degrees latitude, and −114.589 degrees longitude.

(D) Soldier Creek from a lower point located at 45.029 degrees latitude, and −114.726 degrees longitude to an upper point located at 45.007 degrees latitude, and −114.881 degrees longitude.

(E) Brush Creek from a lower point located at 44.955 degrees latitude, and −114.733 degrees longitude to an upper point located at 44.965 degrees latitude, and −114.859 degrees longitude.

(F) Sheep Creek from a lower point located at 44.943 degrees latitude, and −114.726 degrees longitude to an upper point located at 44.915 degrees latitude, and −114.903 degrees longitude.

(G) Arrastra Creek from a lower point located at 44.868 degrees latitude, and −114.425 degrees longitude to an upper point located at 44.841 degrees latitude, and −114.35 degrees longitude. Birdseye Creek from a lower point located at 44.927 degrees latitude, and −114.384 degrees longitude to an upper point located at 44.938 degrees latitude, and −114.456 degrees longitude. Blue Fork Silver Creek from a lower point located at 44.883 degrees latitude, and −114.354 degrees longitude to an upper point located at 44.854 degrees latitude, and −114.359 degrees longitude. Camas Creek from a lower point located at 44.892 degrees latitude, and −114.722 degrees longitude to an upper point located at 44.708 degrees latitude, and −114.387 degrees longitude. Castle Creek from a lower point located at 44.801 degrees latitude, and −114.471 degrees longitude to an upper point located at 44.826 degrees latitude, and −114.312 degrees longitude. Fly Creek from a lower point located at 44.705 degrees latitude, and −114.496 degrees longitude to an upper point located at 44.67 degrees latitude, and −114.55 degrees longitude. Furnace Creek from a lower point located at 44.767 degrees latitude, and −114.486 degrees longitude to an upper point located at 44.789 degrees latitude, and −114.343 degrees longitude. Hoodoo Creek from a lower point located at 44.953 degrees latitude, and −114.581 degrees longitude to an upper point located at 45.06 degrees latitude, and −114.552 degrees longitude. J Fell Creek from a lower point located at 44.684 degrees latitude, and −114.458 degrees longitude to an upper point located at 44.615 degrees latitude, and −114.461 degrees longitude. Lake Creek from a lower point located at 44.948 degrees latitude, and −114.591 degrees longitude to an upper point located at 44.981 degrees latitude, and −114.645 degrees longitude. Little Jacket Creek from a lower point located at 44.953 degrees latitude, and −114.566 degrees longitude to an upper point located at 44.926 degrees latitude, and −114.478 degrees longitude. Pole Creek from a lower point located at 44.794 degrees latitude, and −114.594 degrees longitude to an upper point located at 44.763 degrees latitude, and −114.674 degrees longitude. Shovel Creek from a lower point located at 45 degrees latitude, and −114.478 degrees longitude to an upper point located at 45.034 degrees latitude, and −114.443 degrees longitude. Silver Creek from a lower point located at 44.83 degrees latitude, and −114.501 degrees longitude to an upper point located at 44.852 degrees latitude, and −114.343 degrees longitude. South Fork Camas Creek from a lower point located at 44.721 degrees latitude, and −114.498 degrees longitude to an upper point located at 44.73 degrees latitude, and −114.64 degrees longitude. West Fork Camas Creek from a lower point located at 44.831 degrees latitude, and −114.504 degrees longitude to an upper point located at 44.819 degrees latitude, and −114.654 degrees longitude. White Goat Creek from a lower point located at 44.741 degrees latitude, and −114.488 degrees longitude to an upper point located at 44.726 degrees latitude, and −114.415 degrees longitude. Woodtick Creek from a lower point located at 44.884 degrees latitude, and −114.625 degrees longitude to an upper point located at 44.809 degrees latitude, and −114.679 degrees longitude. Yellowjacket Creek from a lower point located at 44.892 degrees latitude, and −114.644 degrees longitude to an upper point located at 45.103 degrees latitude, and −114.535 degrees longitude.

(H) Norton Creek from a lower point located at 44.827 degrees latitude, and −114.794 degrees longitude to an upper point located at 44.89 degrees latitude, and −114.901 degrees longitude.

(I) Bear Creek from a lower point located at 44.742 degrees latitude, and −114.817 degrees longitude to an upper point located at 44.735 degrees latitude, and −114.861 degrees longitude. Cabin Creek from a lower point located at 44.691 degrees latitude, and −114.753 degrees longitude to an upper point located at 44.76 degrees latitude, and −114.692 degrees longitude. Cache Creek from a lower point located at 44.801 degrees latitude, and −114.805 degrees longitude to an upper point located at 44.776 degrees latitude, and −114.687 degrees longitude. Canyon Creek from a lower point located at 44.568 degrees latitude, and −114.846 degrees longitude to an upper point located at 44.59 degrees latitude, and −114.871 degrees longitude. Cat Creek from a lower point located at 44.652 degrees latitude, and −114.628 degrees longitude to an upper point located at 44.633 degrees latitude, and −114.648 degrees longitude. Cold Spring Creek from a lower point located at 44.718 degrees latitude, and −114.799 degrees longitude to an upper point located at 44.682 degrees latitude, and −114.84 degrees longitude. Cottonwood Creek from a lower point located at 44.623 degrees latitude, and −114.76 degrees longitude to an upper point located at 44.593 degrees latitude, and −114.679 degrees longitude. Deer Creek from a lower point located at 44.548 degrees latitude, and −114.854 degrees longitude to an upper point located at 44.568 degrees latitude, and −114.881 degrees longitude. East Fork Mayfield Creek from a lower point located at 44.539 degrees latitude, and −114.797 degrees longitude to an upper point located at 44.48 degrees latitude, and −114.713 degrees longitude. Fir Creek from a lower point located at 44.656 degrees latitude, and −114.697 degrees longitude to an upper point located at 44.64 degrees latitude, and −114.685 degrees longitude. Indian Creek from a lower point located at 44.692 degrees latitude, and −114.754 degrees longitude to an upper point located at 44.672 degrees latitude, and −114.839 degrees longitude. Jack Creek from a lower point located at 44.696 degrees latitude, and −114.76 degrees longitude to an upper point located at 44.689 degrees latitude, and −114.792 degrees longitude. Loon Creek from a lower point located at 44.808 degrees latitude, and −114.811 degrees longitude to an upper point located at 44.444 degrees latitude, and −114.941 degrees longitude. Mahoney Creek from a lower point located at 44.638 degrees latitude, and −114.609 degrees longitude to an upper point located at 44.662 degrees latitude, and −114.567 degrees longitude. Mayfield Creek from a lower point located at 44.552 degrees latitude, and −114.849 degrees longitude to an upper point located at 44.539 degrees latitude, and −114.797 degrees longitude. McKee Creek from a lower point located at 44.591 degrees latitude, and −114.609 degrees longitude to an upper point located at 44.578 degrees latitude, and −114.649 degrees longitude. Nelson Creek from a lower point located at 44.54 degrees latitude, and −114.803 degrees longitude to an upper point located at 44.499 degrees latitude, and −114.804 degrees longitude. Parker Creek from a lower point located at 44.623 degrees latitude, and −114.596 degrees longitude to an upper point located at 44.637 degrees latitude, and −114.564 degrees longitude. Pioneer Creek from a lower point located at 44.522 degrees latitude, and −114.864 degrees longitude to an upper point located at 44.441 degrees latitude, and −114.894 degrees longitude. Rat Creek from a lower point located at 44.588 degrees latitude, and −114.825 degrees longitude to an upper point located at 44.577 degrees latitude, and −114.8 degrees longitude. Rock Creek from a lower point located at 44.674 degrees latitude, and −114.74 degrees longitude to an upper point located at 44.754 degrees latitude, and −114.67 degrees longitude. Rush Creek from a lower point located at 44.578 degrees latitude, and −114.613 degrees longitude to an upper point located at 44.555 degrees latitude, and −114.641 degrees longitude. Shell Creek from a lower point located at 44.613 degrees latitude, and −114.788 degrees longitude to an upper point located at 44.632 degrees latitude, and −114.813 degrees longitude. South Fork Cottonwood Creek from a lower point located at 44.621 degrees latitude, and −114.759 degrees longitude to an upper point located at 44.584 degrees latitude, and −114.765 degrees longitude. South Fork Warm Spring Creek from a lower point located at 44.578 degrees latitude, and −114.551 degrees longitude to an upper point located at 44.568 degrees latitude, and −114.542 degrees longitude. Trail Creek from a lower point located at 44.543 degrees latitude, and −114.858 degrees longitude to an upper point located at 44.506 degrees latitude, and −114.959 degrees longitude. Trapper Creek from a lower point located at 44.597 degrees latitude, and −114.602 degrees longitude to an upper point located at 44.544 degrees latitude, and −114.6 degrees longitude. Warm Spring Creek from a lower point located at 44.653 degrees latitude, and −114.736 degrees longitude to an upper point located at 44.609 degrees latitude, and −114.481 degrees longitude. West Fork Mayfield Creek from a lower point located at 44.539 degrees latitude, and −114.797 degrees longitude to an upper point located at 44.465 degrees latitude, and −114.731 degrees longitude. Wickiup Creek from a lower point located at 44.607 degrees latitude, and −114.597 degrees longitude to an upper point located at 44.598 degrees latitude, and −114.658 degrees longitude.

(J) Little Loon Creek from a lower point located at 44.731 degrees latitude, and −114.94 degrees longitude to an upper point located at 44.615 degrees latitude, and −114.963 degrees longitude. West Fork Little Loon Creek from a lower point located at 44.71 degrees latitude, and −114.934 degrees longitude to an upper point located at 44.666 degrees latitude, and −114.976 degrees longitude.

(K) Little Creek from a lower point located at 44.724 degrees latitude, and −114.997 degrees longitude to an upper point located at 44.695 degrees latitude, and −114.98 degrees longitude.

(L) East Fork Thomas Creek from a lower point located at 44.705 degrees latitude, and −115.027 degrees longitude to an upper point located at 44.668 degrees latitude, and −115.042 degrees longitude. Thomas Creek from a lower point located at 44.715 degrees latitude, and −115.011 degrees longitude to an upper point located at 44.705 degrees latitude, and −115.027 degrees longitude. West Fork Thomas Creek from a lower point located at 44.705 degrees latitude, and −115.027 degrees longitude to an upper point located at 44.682 degrees latitude, and −115.054 degrees longitude.

(M) Big Cottonwood Creek from a lower point located at 44.912 degrees latitude, and −115.082 degrees longitude to an upper point located at 44.879 degrees latitude, and −115.206 degrees longitude. Buck Creek from a lower point located at 44.896 degrees latitude, and −115.064 degrees longitude to an upper point located at 44.929 degrees latitude, and −115.002 degrees longitude. Dynamite Creek from a lower point located at 44.876 degrees latitude, and −115.057 degrees longitude to an upper point located at 44.871 degrees latitude, and −115.207 degrees longitude. Little Cottonwood Creek from a lower point located at 44.907 degrees latitude, and −115.073 degrees longitude to an upper point located at 44.942 degrees latitude, and −115.019 degrees longitude. Marble Creek from a lower point located at 44.743 degrees latitude, and −115.016 degrees longitude to an upper point

located at 44.983 degrees latitude, and −115.079 degrees longitude. Trail Creek from a lower point located at 44.841 degrees latitude, and −115.008 degrees longitude to an upper point located at 44.952 degrees latitude, and −114.934 degrees longitude.

(N) Big Chief Creek from a lower point located at 44.838 degrees latitude, and −115.297 degrees longitude to an upper point located at 44.817 degrees latitude, and −115.368 degrees longitude. Cultus Creek from a lower point located at 44.813 degrees latitude, and −115.175 degrees longitude to an upper point located at 44.781 degrees latitude, and −115.21 degrees longitude. Indian Creek from a lower point located at 44.77 degrees latitude, and −115.089 degrees longitude to an upper point located at 44.799 degrees latitude, and −115.389 degrees longitude. Little Indian Creek from a lower point located at 44.842 degrees latitude, and −115.256 degrees longitude to an upper point located at 44.871 degrees latitude, and −115.218 degrees longitude. Middle Fork Indian Creek from a lower point located at 44.797 degrees latitude, and −115.133 degrees longitude to an upper point located at 44.856 degrees latitude, and −115.103 degrees longitude. Papoose Creek from a lower point located at 44.837 degrees latitude, and −115.245 degrees longitude to an upper point located at 44.796 degrees latitude, and −115.277 degrees longitude.

(O) Browning Creek from a lower point located at 44.759 degrees latitude, and −115.363 degrees longitude to an upper point located at 44.738 degrees latitude, and −115.406 degrees longitude. Forty-Five Creek from a lower point located at 44.718 degrees latitude, and −115.232 degrees longitude to an upper point located at 44.665 degrees latitude, and −115.308 degrees longitude. Little Pistol Creek from a lower point located at 44.721 degrees latitude, and −115.203 degrees longitude to an upper point located at 44.721 degrees latitude, and −115.404 degrees longitude. Luger Creek from a lower point located at 44.686 degrees latitude, and −115.357 degrees longitude to an upper point located at 44.618 degrees latitude, and −115.395 degrees longitude. Pistol Creek from a lower point located at 44.724 degrees latitude, and −115.149 degrees longitude to an upper point located at 44.644 degrees latitude, and −115.442 degrees longitude. Springfield Creek from a lower point located at 44.764 degrees latitude, and −115.312 degrees longitude to an upper point located at 44.789 degrees latitude, and −115.297 degrees longitude. Thirty-Eight Creek from a lower point located at 44.673 degrees latitude, and −115.395 degrees longitude to an upper point located at 44.713 degrees latitude, and −115.412 degrees longitude. West Fork Springfield Creek from a lower point located at 44.786 degrees latitude, and −115.32 degrees longitude to an upper point located at 44.78 degrees latitude, and −115.383 degrees longitude.

(P) Baldwin Creek from a lower point located at 44.541 degrees latitude, and −115.067 degrees longitude to an upper point located at 44.5 degrees latitude, and −115.105 degrees longitude. Duffield Creek from a lower point located at 44.551 degrees latitude, and −115.007 degrees longitude to an upper point located at 44.571 degrees latitude, and −114.93 degrees longitude. Float Creek from a lower point located at 44.571 degrees latitude, and −115.071 degrees longitude to an upper point located at 44.523 degrees latitude, and −115.178 degrees longitude. North Fork Sheep Creek from a lower point located at 44.649 degrees latitude, and −115.017 degrees longitude to an upper point located at 44.648 degrees latitude, and −114.963 degrees longitude. Rapid River from a lower point located at 44.68 degrees latitude, and −115.152 degrees longitude to an upper point located at 44.551 degrees latitude, and −115.007 degrees longitude. Seafoam Creek from a lower point located at 44.542 degrees latitude, and −115.064 degrees longitude to an upper point located at 44.518 degrees latitude, and −115.118 degrees longitude. Sheep Creek from a lower point located at 44.647 degrees latitude, and −115.057 degrees longitude to an upper point located at 44.649 degrees latitude, and −115.017 degrees longitude. South Fork Sheep Creek from a lower point located at 44.649 degrees latitude, and −115.017 degrees longitude to an upper point located at 44.604 degrees latitude, and −115.006 degrees longitude. Sulphur Creek from a lower point located at 44.586 degrees latitude, and −115.072 degrees longitude to an upper point located at 44.562 degrees latitude, and −115.161 degrees longitude. Vanity Creek from a lower point located at 44.553 degrees latitude, and −115.061 degrees longitude to an upper point located at 44.481 degrees latitude, and −115.076 degrees longitude.

(Q) Greyhound Creek from a lower point located at 44.648 degrees latitude, and −115.167 degrees longitude to an upper point located at 44.588 degrees latitude, and −115.154 degrees longitude.

(R) Soldier Creek from a lower point located at 44.626 degrees latitude, and −115.212 degrees longitude to an upper point located at 44.528 degrees latitude, and −115.201 degrees longitude.

(S) Elkhorn Creek from a lower point located at 44.615 degrees latitude, and −115.256 degrees longitude to an upper point located at 44.582 degrees latitude, and −115.369 degrees longitude. Middle Fork Elkhorn Creek from a lower point located at 44.62 degrees latitude, and −115.29 degrees longitude to an upper point located at 44.628 degrees latitude, and −115.368 degrees longitude. North Fork Elkhorn Creek from a lower point located at 44.625 degrees latitude, and −115.276 degrees longitude to an upper point located at 44.639 degrees latitude, and −115.362 degrees longitude.

(T) North Fork Sulphur Creek from a lower point located at 44.554 degrees latitude, and −115.439 degrees longitude to an upper point located at 44.597 degrees latitude, and −115.465 degrees longitude. Sulphur Creek from a lower point located at 44.555 degrees latitude, and −115.297 degrees longitude to an upper point located at 44.51 degrees latitude, and −115.518 degrees longitude.

(U) Dagger Creek from a lower point located at 44.523 degrees latitude, and −115.281 degrees longitude to an upper point located at 44.457 degrees latitude, and −115.373 degrees longitude.

(V) Banner Creek from a lower point located at 44.356 degrees latitude, and −115.208 degrees longitude to an upper point located at 44.291 degrees latitude, and −115.187 degrees longitude. Bear Creek from a lower point located at 44.439 degrees latitude, and −115.1 degrees longitude to an upper point located at 44.49 degrees latitude, and −115.098 degrees longitude. Beaver Creek from a lower point located at 44.406 degrees latitude, and −115.17 degrees longitude to an upper point located at 44.472 degrees latitude, and −114.953 degrees longitude. Cape Horn Creek from a lower point located at 44.395 degrees latitude, and −115.168 degrees longitude to an upper point located at 44.333 degrees latitude, and −115.287 degrees longitude. Knapp Creek from a lower point located at 44.365 degrees latitude, and −115.131 degrees longitude to an upper point located at 44.424 degrees latitude, and −114.915 degrees longitude. Lola Creek from a lower point located at 44.408 degrees latitude, and −115.174 degrees longitude to an upper point located at 44.391 degrees latitude, and −115.239 degrees longitude. Marsh Creek from a lower point located at 44.449 degrees latitude, and −115.23 degrees longitude to an upper point located at 44.329 degrees latitude, and −115.091 degrees longitude. Winnemucca Creek from a

lower point located at 44.436 degrees latitude, and −115.058 degrees longitude to an upper point located at 44.486 degrees latitude, and −114.962 degrees longitude.

(W) Bear Valley Creek from a lower point located at 44.449 degrees latitude, and –115.23 degrees longitude to an upper point located at 44.236 degrees latitude, and –115.499 degrees longitude. Bearskin Creek from a lower point located at 44.415 degrees latitude, and –115.466 degrees longitude to an upper point located at 44.331 degrees latitude, and –115.528 degrees longitude. Cache Creek from a lower point located at 44.346 degrees latitude, and –115.419 degrees longitude to an upper point located at 44.263 degrees latitude, and –115.402 degrees longitude. Casner Creek from a lower point located at 44.295 degrees latitude, and –115.484 degrees longitude to an upper point located at 44.281 degrees latitude, and –115.451 degrees longitude. Cold Creek from a lower point located at 44.425 degrees latitude, and –115.311 degrees longitude to an upper point located at 44.371 degrees latitude, and –115.317 degrees longitude. Cook Creek from a lower point located at 44.409 degrees latitude, and –115.377 degrees longitude to an upper point located at 44.373 degrees latitude, and –115.444 degrees longitude. Cub Creek from a lower point located at 44.324 degrees latitude, and –115.473 degrees longitude to an upper point located at 44.32 degrees latitude, and –115.517 degrees longitude. East Fork Elk Creek from a lower point located at 44.485 degrees latitude, and –115.452 degrees longitude to an upper point located at 44.481 degrees latitude, and –115.359 degrees longitude. Elk Creek from a lower point located at 44.411 degrees latitude, and –115.372 degrees longitude to an upper point located at 44.485 degrees latitude, and –115.452 degrees longitude. Fir Creek from a lower point located at 44.428 degrees latitude, and –115.29 degrees longitude to an upper point located at 44.344 degrees latitude, and –115.298 degrees longitude. Little Beaver Creek from a lower point located at 44.41 degrees latitude, and –115.491 degrees longitude to an upper point located at 44.445 degrees latitude, and –115.527 degrees longitude. Little East Fork Elk Creek from a lower point located at 44.465 degrees latitude, and –115.445 degrees longitude to an upper point located at 44.48 degrees latitude, and –115.397 degrees longitude. North Fork Elk Creek from a lower point located at 44.485 degrees latitude, and –115.452 degrees longitude to an upper point located at 44.527 degrees latitude, and –115.458 degrees longitude. Poker Creek from a lower point located at 44.429 degrees latitude, and –115.334 degrees longitude to an upper point located at 44.446 degrees latitude, and –115.366 degrees longitude. Pole Creek from a lower point located at 44.386 degrees latitude, and –115.379 degrees longitude to an upper point located at 44.361 degrees latitude, and –115.366 degrees longitude. Porter Creek from a lower point located at 44.457 degrees latitude, and –115.45 degrees longitude to an upper point located at 44.47 degrees latitude, and –115.54 degrees longitude. Sack Creek from a lower point located at 44.359 degrees latitude, and –115.407 degrees longitude to an upper point located at 44.32 degrees latitude, and –115.351 degrees longitude. Sheep Trail Creek from a lower point located at 44.337 degrees latitude, and –115.447 degrees longitude to an upper point located at 44.36 degrees latitude, and –115.451 degrees longitude. Unnamed creek off Bear Valley Creek from a lower point located at 44.429 degrees latitude, and –115.34 degrees longitude to an upper point located at 44.443 degrees latitude, and –115.358 degrees longitude. Unnamed creek off Cache Creek from a lower point located at 44.315 degrees latitude, and –115.423 degrees longitude to an upper point located at 44.306 degrees latitude, and –115.389 degrees longitude. West Fork Elk Creek from a lower point located at 44.479 degrees latitude, and –115.457 degrees longitude to an upper point located at 44.48 degrees latitude, and –115.52 degrees longitude. Wyoming Creek from a lower point located at 44.426 degrees latitude, and –115.321 degrees longitude to an upper point located at 44.355 degrees latitude, and –115.341 degrees longitude.

(v) Critical Habitat Subunit—Middle Salmon—Panther.

(A) Salmon River from a lower point located at 45.454 degrees latitude, and –114.931 degrees longitude to an upper point located at 44.692 degrees latitude, and –114.049 degrees longitude.

(B) Cayuse Creek from a lower point located at 45.474 degrees latitude, and –114.568 degrees longitude to an upper point located at 45.5 degrees latitude, and –114.602 degrees longitude. Horse Creek from a lower point located at 45.395 degrees latitude, and –114.732 degrees longitude to an upper point located at 45.475 degrees latitude, and –114.401 degrees longitude. Woods Fork Horse Creek from a lower point located at 45.506 degrees latitude, and –114.459 degrees longitude to an upper point located at 45.535 degrees latitude, and –114.442 degrees longitude.

(C) Owl Creek from a lower point located at 45.318 degrees latitude, and –114.447 degrees longitude to an upper point located at 45.474 degrees latitude, and –114.382 degrees longitude.

(D) Arnett Creek from a lower point located at 45.205 degrees latitude, and –114.133 degrees longitude to an upper point located at 45.266 degrees latitude, and –114.2 degrees longitude. Beaver Creek from a lower point located at 45.274 degrees latitude, and –114.334 degrees longitude to an upper point located at 45.272 degrees latitude, and –114.185 degrees longitude. Clear Creek from a lower point located at 45.295 degrees latitude, and –114.351 degrees longitude to an upper point located at 45.146 degrees latitude, and –114.578 degrees longitude. Deep Creek from a lower point located at 45.126 degrees latitude, and –114.215 degrees longitude to an upper point located at 45.018 degrees latitude, and –114.097 degrees longitude. Fourth of July Creek from a lower point located at 44.986 degrees latitude, and –114.346 degrees longitude to an upper point located at 44.996 degrees latitude, and –114.408 degrees longitude. Little Deep Creek from a lower point located at 45.108 degrees latitude, and –114.179 degrees longitude to an upper point located at 45.001 degrees latitude, and –114.162 degrees longitude. Moccasin Creek from a lower point located at 45.153 degrees latitude, and –114.171 degrees longitude to an upper point located at 45.088 degrees latitude, and –114.089 degrees longitude. Musgrove Creek from a lower point located at 45.022 degrees latitude, and –114.313 degrees longitude to an upper point located at 45.097 degrees latitude, and –114.47 degrees longitude. Napias Creek from a lower point located at 45.137 degrees latitude, and –114.217 degrees longitude to an upper point located at 45.244 degrees latitude, and –114.023 degrees longitude. Opal Creek from a lower point located at 44.896 degrees latitude, and –114.314 degrees longitude to an upper point located at 44.901 degrees latitude, and –114.282 degrees longitude. Otter Creek from a lower point located at 44.861 degrees latitude, and –114.29 degrees longitude to an upper point located at 44.869 degrees latitude, and –114.248 degrees longitude. Panther Creek from a lower point located at 45.316 degrees latitude, and –114.405 degrees longitude to an upper point located at 44.829 degrees latitude, and –114.294 degrees longitude. Phelan Creek from a lower point located at 45.167 degrees latitude, and –114.16 degrees longitude to an upper point located at 45.146 degrees latitude, and –114.041 degrees

longitude. Porphyry Creek from a lower point located at 45.004 degrees latitude, and –114.333 degrees longitude to an upper point located at 45.069 degrees latitude, and –114.433 degrees longitude. Rapps Creek from a lower point located at 45.213 degrees latitude, and –114.163 degrees longitude to an upper point located at 45.268 degrees latitude, and –114.171 degrees longitude. South Fork Porphyry Creek from a lower point located at 45.033 degrees latitude, and –114.387 degrees longitude to an upper point located at 45.038 degrees latitude, and –114.427 degrees longitude. Trail Creek from a lower point located at 45.25 degrees latitude, and –114.319 degrees longitude to an upper point located at 45.215 degrees latitude, and –114.233 degrees longitude. Unnamed creek off Deep Creek from a lower point located at 45.064 degrees latitude, and –114.121 degrees longitude to an upper point located at 45.08 degrees latitude, and –114.091 degrees longitude. Weasel Creek from a lower point located at 44.887 degrees latitude, and –114.305 degrees longitude to an upper point located at 44.888 degrees latitude, and –114.272 degrees longitude. West Fork Blackbird Creek from a lower point located at 45.093 degrees latitude, and –114.3 degrees longitude to an upper point located at 45.11 degrees latitude, and –114.399 degrees longitude. Woodtick Creek from a lower point located at 45.046 degrees latitude, and –114.282 degrees longitude to an upper point located at 44.973 degrees latitude, and –114.191 degrees longitude.

(E) Pine Creek from a lower point located at 45.364 degrees latitude, and –114.3 degrees longitude to an upper point located at 45.282 degrees latitude, and –114.167 degrees longitude.

(F) Boulder Creek from a lower point located at 45.376 degrees latitude, and –114.276 degrees longitude to an upper point located at 45.46 degrees latitude, and –114.348 degrees longitude.

(G) Spring Creek from a lower point located at 45.391 degrees latitude, and −114.255 degrees longitude to an upper point located at 45.449 degrees latitude, and −114.337 degrees longitude.

(H) Squaw Creek from a lower point located at 45.399 degrees latitude, and −114.168 degrees longitude to an upper point located at 45.504 degrees latitude, and −114.257 degrees longitude.

(I) Corral Creek from a lower point located at 45.498 degrees latitude, and −114.146 degrees longitude to an upper point located at 45.545 degrees latitude, and −114.111 degrees longitude. Indian Creek from a lower point located at 45.4 degrees latitude, and −114.167 degrees longitude to an upper point located at 45.552 degrees latitude, and −114.144 degrees longitude. McConn Creek from a lower point located at 45.504 degrees latitude, and −114.152 degrees longitude to an upper point located at 45.527 degrees latitude, and −114.242 degrees longitude. West Fork Indian Creek from a lower point located at 45.475 degrees latitude, and −114.138 degrees longitude to an upper point located at 45.489 degrees latitude, and −114.198 degrees longitude.

(J) Dahlonega Creek from a lower point located at 45.541 degrees latitude, and −113.929 degrees longitude to an upper point located at 45.524 degrees latitude, and −113.836 degrees longitude. Hughes Creek from a lower point located at 45.476 degrees latitude, and −113.988 degrees longitude to an upper point located at 45.582 degrees latitude, and −114.12 degrees longitude. Moose Creek from a lower point located at 45.654 degrees latitude, and −113.97 degrees longitude to an upper point located at 45.691 degrees latitude, and −113.944 degrees longitude. North Fork Salmon River from a lower point located at 45.405 degrees latitude, and −113.994 degrees longitude to an upper point located at 45.702 degrees latitude, and −113.989 degrees longitude. North Fork Sheep Creek from a lower point located at 45.482 degrees latitude, and −113.836 degrees longitude to an upper point located at 45.483 degrees latitude, and −113.774 degrees longitude. Pierce Creek from a lower point located at 45.621 degrees latitude, and −113.963 degrees longitude to an upper point located at 45.67 degrees latitude, and −113.932 degrees longitude. Sheep Creek from a lower point located at 45.504 degrees latitude, and −113.953 degrees longitude to an upper point located at 45.482 degrees latitude, and −113.836 degrees longitude. South Fork Sheep Creek from a lower point located at 45.482 degrees latitude, and −113.836 degrees longitude to an upper point located at 45.449 degrees latitude, and −113.8 degrees longitude. Twin Creek from a lower point located at 45.608 degrees latitude, and −113.964 degrees longitude to an upper point located at 45.591 degrees latitude, and −114.081 degrees longitude. Vine Creek from a lower point located at 45.611 degrees latitude, and −113.966 degrees longitude to an upper point located at 45.638 degrees latitude, and −114 degrees longitude. West Fork North Fork Salmon River from a lower point located at 45.654 degrees latitude, and −113.97 degrees longitude to an upper point located at 45.667 degrees latitude, and −114.002 degrees longitude.

(K) Fourth of July Creek from a lower point located at 45.364 degrees latitude, and −113.943 degrees longitude to an upper point located at 45.427 degrees latitude, and −113.773 degrees longitude.

(L) Carmen Creek from a lower point located at 45.25 degrees latitude, and −113.899 degrees longitude to an upper point located at 45.39 degrees latitude, and −113.737 degrees longitude. Freeman Creek from a lower point located at 45.279 degrees latitude, and −113.815 degrees longitude to an upper point located at 45.276 degrees latitude, and −113.686 degrees longitude.

(M) South Fork Williams Creek from a lower point located at 45.077 degrees latitude, and −114.013 degrees longitude to an upper point located at 45.038 degrees latitude, and −114.086 degrees longitude. Williams Creek from a lower point located at 45.081 degrees latitude, and −113.899 degrees longitude to an upper point located at 45.077 degrees latitude, and −114.013 degrees longitude.

(N) Twelvemile Creek from a lower point located at 45.011 degrees latitude, and −113.932 degrees longitude to an upper point located at 44.929 degrees latitude, and −113.851 degrees longitude.

(O) Iron Creek from a lower point located at 44.887 degrees latitude, and −113.968 degrees longitude to an upper point located at 44.908 degrees latitude, and −114.192 degrees longitude. North Fork Iron Creek from a lower point located at 44.921 degrees latitude, and −114.109 degrees longitude to an upper point located at 45.007 degrees latitude, and −114.096 degrees longitude. South Fork Iron Creek from a lower point located at 44.92 degrees latitude, and −114.113 degrees longitude to an upper point located at 44.906 degrees latitude, and −114.158 degrees longitude. West Fork Iron Creek from a lower point located at 44.921 degrees latitude, and −114.124 degrees longitude to an upper point located at 44.961 degrees latitude, and −114.186 degrees longitude.

(P) McKim Creek from a lower point located at 44.81 degrees latitude, and −114.009 degrees longitude to an upper point located at 44.816 degrees latitude, and −113.901 degrees longitude. North Fork McKim Creek from a lower point located at 44.81 degrees latitude, and −113.965 degrees longitude to an upper point located at 44.821 degrees latitude, and −113.871 degrees longitude.

(Q) Big Hat Creek from a lower point located at 44.821 degrees latitude, and −114.091 degrees longitude to an upper point located at 44.819 degrees latitude, and −114.166 degrees longitude. Hat Creek from a lower point located at

44.795 degrees latitude, and −114.001 degrees longitude to an upper point located at 44.869 degrees latitude, and −114.132 degrees longitude. Middle Fork Hat Creek from a lower point located at 44.869 degrees latitude, and −114.132 degrees longitude to an upper point located at 44.882 degrees latitude, and −114.201 degrees longitude. North Fork Hat Creek from a lower point located at 44.869 degrees latitude, and −114.132 degrees longitude to an upper point located at 44.894 degrees latitude, and −114.199 degrees longitude.

(R) Allison Creek from a lower point located at 44.771 degrees latitude, and −113.997 degrees longitude to an upper point located at 44.782 degrees latitude, and −113.879 degrees longitude.

(S) Cow Creek from a lower point located at 44.736 degrees latitude, and −114.003 degrees longitude to an upper point located at 44.738 degrees latitude, and −113.853 degrees longitude.

(vi) Critical Habitat Subunit—Lemhi River.

(A) Lemhi River from a lower point located at 45.188 degrees latitude, and −113.889 degrees longitude to an upper point located at 44.682 degrees latitude, and −113.355 degrees longitude.

(B) Geertson Creek from a lower point located at 45.132 degrees latitude, and −113.769 degrees longitude to an upper point located at 45.239 degrees latitude, and −113.665 degrees longitude.

(C) Bohannon Creek from a lower point located at 45.112 degrees latitude, and −113.746 degrees longitude to an upper point located at 45.229 degrees latitude, and −113.667 degrees longitude.

(D) East Fork Kenney Creek from a lower point located at 45.066 degrees latitude, and −113.573 degrees longitude to an upper point located at 45.075 degrees latitude, and −113.495 degrees longitude. Kenney Creek from a lower point located at 45.032 degrees latitude, and −113.662 degrees longitude to an upper point located at 45.11 degrees latitude, and −113.513 degrees longitude.

(E) Pattee Creek from a lower point located at 44.98 degrees latitude, and −113.643 degrees longitude to an upper point located at 45.046 degrees latitude, and −113.477 degrees longitude.

(F) Bear Valley Creek from a lower point located at 44.772 degrees latitude, and −113.707 degrees longitude to an upper point located at 44.804 degrees latitude, and −113.866 degrees longitude. Bray Creek from a lower point located at 44.706 degrees latitude, and −113.768 degrees longitude to an upper point located at 44.675 degrees latitude, and −113.813 degrees longitude. Cooper Creek from a lower point located at 44.726 degrees latitude, and −113.725 degrees longitude to an upper point located at 44.675 degrees latitude, and −113.702 degrees longitude. Deer Creek from a lower point located at 44.793 degrees latitude, and −113.777 degrees longitude to an upper point located at 44.776 degrees latitude, and −113.809 degrees longitude. East Fork Hayden Creek from a lower point located at 44.76 degrees latitude, and −113.711 degrees longitude to an upper point located at 44.664 degrees latitude, and −113.683 degrees longitude. Hayden Creek from a lower point located at 44.869 degrees latitude, and −113.626 degrees longitude to an upper point located at 44.722 degrees latitude, and −113.819 degrees longitude. Kadletz Creek from a lower point located at 44.775 degrees latitude, and −113.742 degrees longitude to an upper point located at 44.74 degrees latitude, and −113.819 degrees longitude. Short Creek from a lower point located at 44.788 degrees latitude, and −113.767 degrees longitude to an upper point located at 44.773 degrees latitude, and −113.796 degrees longitude. West Fork Hayden Creek from a lower point located at 44.705 degrees latitude, and −113.756 degrees longitude to an upper point located at 44.706 degrees latitude, and −113.768 degrees longitude. Wright Creek from a lower point located at 44.784 degrees latitude, and −113.754 degrees longitude to an upper point located at 44.746 degrees latitude, and −113.836 degrees longitude.

(G) Mill Creek from a lower point located at 44.767 degrees latitude, and −113.518 degrees longitude to an upper point located at 44.656 degrees latitude, and −113.656 degrees longitude.

(H) Big Springs Creek from a lower point located at 44.689 degrees latitude, and −113.369 degrees longitude to an upper point located at 44.758 degrees latitude, and −113.5 degrees longitude.

(I) Little Eightmile Creek from a lower point located at 44.739 degrees latitude, and −113.459 degrees longitude to an upper point located at 44.823 degrees latitude, and −113.365 degrees longitude.

(J) Big Eightmile Creek from a lower point located at 44.739 degrees latitude, and −113.459 degrees longitude to an upper point located at 44.561 degrees latitude, and −113.562 degrees longitude. Dairy Creek from a lower point located at 44.637 degrees latitude, and −113.552 degrees longitude to an upper point located at 44.62 degrees latitude, and −113.593 degrees longitude.

(K) Big Timber Creek from a lower point located at 44.7 degrees latitude, and −113.374 degrees longitude to an upper point located at 44.509 degrees latitude, and −113.538 degrees longitude. Little Timber Creek from a lower point located at 44.642 degrees latitude, and −113.383 degrees longitude to an upper point located at 44.606 degrees latitude, and −113.444 degrees longitude. Middle Fork Little Timber Creek from a lower point located at 44.606 degrees latitude, and −113.444 degrees longitude to an upper point located at 44.551 degrees latitude, and −113.53 degrees longitude.

(L) Canyon Creek from a lower point located at 44.692 degrees latitude, and −113.366 degrees longitude to an upper point located at 44.799 degrees latitude, and −113.29 degrees longitude. Cruikshank Creek from a lower point located at 44.759 degrees latitude, and −113.259 degrees longitude to an upper point located at 44.771 degrees latitude, and −113.134 degrees longitude. Hood Gulch Springs 1 from a lower point located at 44.769 degrees latitude, and −113.251 degrees longitude to an upper point located at 44.781 degrees latitude, and −113.336 degrees longitude. Hood Gulch Springs 2 from a lower point located at 44.78 degrees latitude, and −113.279 degrees longitude to an upper point located at 44.752 degrees latitude, and −113.317 degrees longitude. Hood Gulch Springs 3 from a lower point located at 44.777 degrees latitude, and −113.282 degrees longitude to an upper point located at 44.777 degrees latitude, and −113.323 degrees longitude. Hood Gulch Springs 4 from a lower point located at 44.768 degrees latitude, and −113.296 degrees longitude to an upper point located at 44.764 degrees latitude, and −113.325 degrees longitude.

(M) Big Bear Creek from a lower point located at 44.677 degrees latitude, and −113.159 degrees longitude to an upper point located at 44.642 degrees latitude, and −113.065 degrees longitude. Deer Creek from a lower point located at 44.52 degrees latitude, and −113.286 degrees longitude to an upper point located at 44.452 degrees latitude, and −113.342 degrees longitude. Eighteenmile Creek from a lower point located at 44.682 degrees latitude, and −113.355 degrees longitude to an upper point located at 44.447 degrees latitude, and −113.008 degrees longitude. Hawley Creek from a lower point located at 44.667 degrees latitude, and −113.323 degrees longitude to an upper point located at 44.677 degrees latitude, and −113.159 degrees longitude. Meadow Creek from a lower point located at 44.663 degrees latitude, and −113.104 degrees longitude to an upper point located at 44.678 degrees latitude, and −113.079 degrees longitude.

Reservoir Creek from a lower point located at 44.677 degrees latitude, and −113.159 degrees longitude to an upper point located at 44.745 degrees latitude, and −113.126 degrees longitude.

(vii) Critical Habitat Subunit—Opal Lake.

(A) Opal Creek from a lower point located at 44.898 degrees latitude, and −114.277 degrees longitude to an upper point located at 44.876 degrees latitude, and −114.251 degrees longitude. Opal Lake centered at 44.899 degrees latitude, and −114.281 degrees longitude.

(B) [Reserved]

(viii) Critical Habitat Subunit—Lake Creek.

(A) Lake Creek from a lower point located at 45.017 degrees latitude, and −113.988 degrees longitude to an upper point located at 44.986 degrees latitude, and −114.08 degrees longitude. North Fork Lake Creek from a lower point located at 45.009 degrees latitude, and −114.016 degrees longitude to an upper point located at 45.015 degrees latitude, and −114.068 degrees longitude. Williams Lake centered at 45.016 degrees latitude, and −113.975 degrees longitude.

(B) [Reserved]

(ix) Critical Habitat Subunit—Pahsimeroi River.

(A) Pahsimeroi River from a lower point located at 44.692 degrees latitude, and −114.049 degrees longitude to an upper point located at 44.157 degrees latitude, and −113.703 degrees longitude.

(B) East Fork Morgan Creek from a lower point located at 44.675 degrees latitude, and −113.899 degrees longitude to an upper point located at 44.67 degrees latitude, and −113.828 degrees longitude. Morgan Creek from a lower point located at 44.618 degrees latitude, and −113.963 degrees longitude to an upper point located at 44.675 degrees latitude, and −113.899 degrees longitude. North Fork Morgan Creek from a lower point located at 44.675 degrees latitude, and −113.899 degrees longitude to an upper point located at 44.71 degrees latitude, and −113.829 degrees longitude.

(C) Tater Creek from a lower point located at 44.633 degrees latitude, and −113.902 degrees longitude to an upper point located at 44.661 degrees latitude, and −113.839 degrees longitude.

(D) Morse Creek from a lower point located at 44.569 degrees latitude, and −113.885 degrees longitude to an upper point located at 44.654 degrees latitude, and −113.709 degrees longitude.

(E) Falls Creek from a lower point located at 44.566 degrees latitude, and −113.878 degrees longitude to an upper point located at 44.611 degrees latitude, and −113.684 degrees longitude.

(F) Inyo Creek from a lower point located at 44.535 degrees latitude, and −113.683 degrees longitude to an upper point located at 44.532 degrees latitude, and −113.627 degrees longitude. Patterson Creek from a lower point located at 44.614 degrees latitude, and −113.966 degrees longitude to an upper point located at 44.636 degrees latitude, and −113.653 degrees longitude.

(G) Big Creek from a lower point located at 44.442 degrees latitude, and −113.6 degrees longitude to an upper point located at 44.495 degrees latitude, and −113.818 degrees longitude. North Fork Big Creek from a lower point located at 44.442 degrees latitude, and −113.6 degrees longitude to an upper point located at 44.552 degrees latitude, and −113.593 degrees longitude. South Fork Big Creek from a lower point located at 44.442 degrees latitude, and −113.6 degrees longitude to an upper point located at 44.385 degrees latitude, and −113.476 degrees longitude.

(H) Big Gulch from a lower point located at 44.354 degrees latitude, and −113.58 degrees longitude to an upper point located at 44.374 degrees latitude, and −113.483 degrees longitude. Ditch Creek from a lower point located at 44.354 degrees latitude, and −113.58 degrees longitude to an upper point located at 44.4 degrees latitude, and −113.558 degrees longitude. Goldberg Creek from a lower point located at 44.485 degrees latitude, and −113.815 degrees longitude to an upper point located at 44.354 degrees latitude, and −113.58 degrees longitude.

(I) Burnt Creek from a lower point located at 44.284 degrees latitude, and −113.652 degrees longitude to an upper point located at 44.149 degrees latitude, and −113.632 degrees longitude. East Fork Burnt Creek from a lower point located at 44.149 degrees latitude, and −113.632 degrees longitude to an upper point located at 44.12 degrees latitude, and −113.624 degrees longitude.

(J) Mahogany Creek from a lower point located at 44.208 degrees latitude, and −113.701 degrees longitude to an upper point located at 44.159 degrees latitude, and −113.767 degrees longitude.

(K) West Fork Pahsimeroi River from a lower point located at 44.157 degrees latitude, and −113.703 degrees longitude to an upper point located at 44.092 degrees latitude, and −113.749 degrees longitude.

(L) East Fork Pahsimeroi River from a lower point located at 44.157 degrees latitude, and −113.703 degrees longitude to an upper point located at 44.081 degrees latitude, and −113.72 degrees longitude.

(x) Critical Habitat Subunit—Upper Salmon River.

(A) Salmon River from a lower point located at 44.692 degrees latitude, and −114.049 degrees longitude to an upper point located at 43.797 degrees latitude, and −114.774 degrees longitude.

(B) Alder Creek from a lower point located at 44.803 degrees latitude, and −114.256 degrees longitude to an upper point located at 44.805 degrees latitude, and −114.308 degrees longitude. Corral Creek from a lower point located at 44.779 degrees latitude, and −114.248 degrees longitude to an upper point located at 44.876 degrees latitude, and −114.219 degrees longitude. Lick Creek from a lower point located at 44.722 degrees latitude, and −114.271 degrees longitude to an upper point located at 44.775 degrees latitude, and −114.347 degrees longitude. Morgan Creek from a lower point located at 44.612 degrees latitude, and −114.168 degrees longitude to an upper point located at 44.846 degrees latitude, and −114.261 degrees longitude. Unnamed creek off Corral Creek from a lower point located at 44.805 degrees latitude, and −114.224 degrees longitude to an upper point located at 44.84 degrees latitude, and −114.198 degrees longitude. Van Horn Creek from a lower point located at 44.757 degrees latitude, and −114.256 degrees longitude to an upper point located at 44.786 degrees latitude, and −114.337 degrees longitude. West Fork Morgan Creek from a lower point located at 44.681 degrees latitude, and −114.243 degrees longitude to an upper point located at 44.734 degrees latitude, and −114.393 degrees longitude.

(C) Bear Creek from a lower point located at 44.569 degrees latitude, and −114.361 degrees longitude to an upper point located at 44.597 degrees latitude, and −114.462 degrees longitude. Challis Creek from a lower point located at 44.57 degrees latitude, and −114.186 degrees longitude to an upper point located at 44.552 degrees latitude, and −114.511 degrees longitude. Lodgepole Creek from a lower point located at 44.54 degrees latitude, and −114.408 degrees longitude to an upper point located at 44.555 degrees latitude, and −114.474 degrees longitude. Mill Creek from a lower point located at 44.561 degrees latitude, and −114.274 degrees longitude to an upper point located at 44.47 degrees latitude, and −114.492 degrees longitude.

(D) Garden Creek from a lower point located at 44.509 degrees latitude, and −114.191 degrees longitude to an upper point located at 44.431 degrees latitude, and −114.427 degrees longitude.

(E) Big Boulder Creek from a lower point located at 44.118 degrees latitude, and −114.428 degrees longitude to an upper point located at 44.097 degrees latitude, and −114.612 degrees longitude. Bowery Creek from a lower point located at 44.032 degrees latitude, and −114.46 degrees longitude to an upper point located at 44.012 degrees latitude, and −114.389 degrees longitude. Chamberlain Creek from a lower point located at 44.004 degrees latitude, and −114.53 degrees longitude to an upper point located at 44.037 degrees latitude, and −114.609 degrees longitude. East Fork Herd Creek from a lower point located at 44.058 degrees latitude, and −114.233 degrees longitude to an upper point located at 43.984 degrees latitude, and −114.203 degrees longitude. East Fork Salmon River from a lower point located at 44.268 degrees latitude, and −114.326 degrees longitude to an upper point located at 43.929 degrees latitude, and −114.554 degrees longitude. East Pass Creek from a lower point located at 44.076 degrees latitude, and −114.244 degrees longitude to an upper point located at 44.05 degrees latitude, and −114.276 degrees longitude. Germania Creek from a lower point located at 44.039 degrees latitude, and −114.461 degrees longitude to an upper point located at 43.968 degrees latitude, and −114.703 degrees longitude. Herd Creek from a lower point located at 44.154 degrees latitude, and −114.3 degrees longitude to an upper point located at 44.058 degrees latitude, and −114.233 degrees longitude. Ibex Creek from a lower point located at 43.953 degrees latitude, and −114.525 degrees longitude to an upper point located at 43.908 degrees latitude, and −114.492 degrees longitude. Little Boulder Creek from a lower point located at 44.099 degrees latitude, and −114.442 degrees longitude to an upper point located at 44.065 degrees latitude, and −114.542 degrees longitude. Long Tom Creek from a lower point located at 44.027 degrees latitude, and −114.429 degrees longitude to an upper point located at 43.978 degrees latitude, and −114.401 degrees longitude. Meridian Creek from a lower point located at 44.011 degrees latitude, and −114.251 degrees longitude to an upper point located at 43.988 degrees latitude, and −114.256 degrees longitude. North Fork Bowery Creek from a lower point located at 44.032 degrees latitude, and −114.4 degrees longitude to an upper point located at 44.049 degrees latitude, and −114.365 degrees longitude. Roaring Creek from a lower point located at 43.978 degrees latitude, and −114.473 degrees longitude to an upper point located at 43.939 degrees latitude, and −114.485 degrees longitude. South Fork East Fork Salmon River from a lower point located at 43.929 degrees latitude, and −114.554 degrees longitude to an upper point located at 43.848 degrees latitude, and −114.566 degrees longitude. West Fork East Fork Salmon River from a lower point located at 43.929 degrees latitude, and −114.554 degrees longitude to an upper point located at 43.919 degrees latitude, and −114.655 degrees longitude. West Fork Herd Creek from a lower point located at 44.058 degrees latitude, and −114.233 degrees longitude to an upper point located at 43.99 degrees latitude, and −114.224 degrees longitude. West Pass Creek from a lower point located at 43.988 degrees latitude, and −114.49 degrees longitude to an upper point located at 43.893 degrees latitude, and −114.418 degrees longitude. Wickiup Creek from a lower point located at 44.072 degrees latitude, and −114.458 degrees longitude to an upper point located at 44.033 degrees latitude, and −114.565 degrees longitude.

(F) Kinnikinic Creek from a lower point located at 44.258 degrees latitude, and −114.401 degrees longitude to an upper point located at 44.367 degrees latitude, and −114.396 degrees longitude.

(G) Martin Creek from a lower point located at 44.387 degrees latitude, and −114.494 degrees longitude to an upper point located at 44.426 degrees latitude, and −114.563 degrees longitude. Squaw Creek from a lower point located at 44.249 degrees latitude, and −114.454 degrees longitude to an upper point located at 44.456 degrees latitude, and −114.503 degrees longitude. Willow Creek from a lower point located at 44.428 degrees latitude, and −114.489 degrees longitude to an upper point located at 44.447 degrees latitude, and −114.445 degrees longitude.

(H) Thompson Creek from a lower point located at 44.25 degrees latitude, and −114.516 degrees longitude to an upper point located at 44.378 degrees latitude, and −114.596 degrees longitude.

(I) Livingston Creek from a lower point located at 44.194 degrees latitude, and −114.603 degrees longitude to an upper point located at 44.144 degrees latitude, and −114.608 degrees longitude. Silver Rule Creek from a lower point located at 44.207 degrees latitude, and −114.597 degrees longitude to an upper point located at 44.146 degrees latitude, and −114.581 degrees longitude. Slate Creek from a lower point located at 44.256 degrees latitude, and −114.563 degrees longitude to an upper point located at 44.155 degrees latitude, and −114.629 degrees longitude.

(J) Martin Creek from a lower point located at 44.137 degrees latitude, and −114.724 degrees longitude to an upper point located at 44.117 degrees latitude, and −114.797 degrees longitude. Pigtail Creek from a lower point located at 44.129 degrees latitude, and −114.726 degrees longitude to an upper point located at 44.122 degrees latitude, and −114.735 degrees longitude. Warm Springs Creek from a lower point located at 44.254 degrees latitude, and −114.675 degrees longitude to an upper point located at 44.059 degrees latitude, and −114.613 degrees longitude.

(K) Cabin Creek from a lower point located at 44.397 degrees latitude, and −114.827 degrees longitude to an upper point located at 44.419 degrees latitude, and −114.901 degrees longitude. Deadwood Creek from a lower point located at 44.376 degrees latitude, and −114.776 degrees longitude to an upper point located at 44.349 degrees latitude, and −114.835 degrees longitude. Eightmile Creek from a lower point located at 44.426 degrees latitude, and −114.619 degrees longitude to an upper point located at 44.471 degrees latitude, and −114.715 degrees longitude. Elevenmile Creek from a lower point located at 44.467 degrees latitude, and −114.579 degrees longitude to an upper point located at 44.436 degrees latitude, and −114.544 degrees longitude. Elevenmile Creek from a lower point located at 44.405 degrees latitude, and −114.654 degrees longitude to an upper point located at 44.355 degrees latitude, and −114.615 degrees longitude. Jordan Creek from a lower point located at 44.379 degrees latitude, and −114.72 degrees longitude to an upper point located at 44.469 degrees latitude, and −114.77 degrees longitude. Lightning Creek from a lower point located at 44.388 degrees latitude, and −114.795 degrees longitude to an upper point located at 44.466 degrees latitude, and −114.787 degrees longitude. McKay Creek from a lower point located at 44.489 degrees latitude, and −114.55 degrees longitude to an upper point located at 44.475 degrees latitude, and −114.491 degrees longitude. Ninemile Creek from a lower point located at 44.445 degrees latitude, and −114.604 degrees longitude to an upper point located at 44.414 degrees latitude, and −114.582 degrees longitude. Sixmile Creek from a lower point located at 44.413 degrees latitude, and −114.637 degrees longitude to an upper point located at 44.385 degrees latitude, and −114.595 degrees longitude. Tenmile Creek from a lower point located at

44.465 degrees latitude, and −114.581 degrees longitude to an upper point located at 44.484 degrees latitude, and −114.646 degrees longitude. Twelvemile Creek from a lower point located at 44.478 degrees latitude, and −114.564 degrees longitude to an upper point located at 44.497 degrees latitude, and −114.614 degrees longitude. Unnamed creek off McKay Creek from a lower point located at 44.477 degrees latitude, and −114.525 degrees longitude to an upper point located at 44.445 degrees latitude, and −114.525 degrees longitude. West Fork Yankee Fork from a lower point located at 44.351 degrees latitude, and −114.727 degrees longitude to an upper point located at 44.388 degrees latitude, and −114.932 degrees longitude. Yankee Fork from a lower point located at 44.27 degrees latitude, and −114.734 degrees longitude to an upper point located at 44.51 degrees latitude, and −114.588 degrees longitude.

(L) Basin Creek from a lower point located at 44.264 degrees latitude, and −114.817 degrees longitude to an upper point located at 44.368 degrees latitude, and −114.942 degrees longitude. East Basin Creek from a lower point located at 44.277 degrees latitude, and −114.849 degrees longitude to an upper point located at 44.343 degrees latitude, and −114.79 degrees longitude. Short Creek from a lower point located at 44.291 degrees latitude, and −114.871 degrees longitude to an upper point located at 44.313 degrees latitude, and −114.855 degrees longitude. Sunday Creek from a lower point located at 44.349 degrees latitude, and −114.905 degrees longitude to an upper point located at 44.341 degrees latitude, and −114.969 degrees longitude. Unnamed creek off East Basin Creek from a lower point located at 44.32 degrees latitude, and −114.817 degrees longitude to an upper point located at 44.344 degrees latitude, and −114.823 degrees longitude.

(M) Crooked Creek from a lower point located at 44.237 degrees latitude, and −114.994 degrees longitude to an upper point located at 44.203 degrees latitude, and −115.044 degrees longitude. East Fork Valley Creek from a lower point located at 44.358 degrees latitude, and −115.048 degrees longitude to an upper point located at 44.327 degrees latitude, and −114.987 degrees longitude. Elk Creek from a lower point located at 44.293 degrees latitude, and −115.023 degrees longitude to an upper point located at 44.196 degrees latitude, and −115.133 degrees longitude. Goat Creek from a lower point located at 44.219 degrees latitude, and −114.942 degrees longitude to an upper point located at 44.179 degrees latitude, and −115.008 degrees longitude. Iron Creek from a lower point located at 44.223 degrees latitude, and −114.947 degrees longitude to an upper point located at 44.189 degrees latitude, and −115.047 degrees longitude. Job Creek from a lower point located at 44.243 degrees latitude, and −115.001 degrees longitude to an upper point located at 44.243 degrees latitude, and −115.003 degrees longitude. Meadow Creek from a lower point located at 44.306 degrees latitude, and −115.052 degrees longitude to an upper point located at 44.316 degrees latitude, and −115.088 degrees longitude. Prospect Creek from a lower point located at 44.394 degrees latitude, and −114.985 degrees longitude to an upper point located at 44.357 degrees latitude, and −114.984 degrees longitude. Trap Creek from a lower point located at 44.316 degrees latitude, and −115.088 degrees longitude to an upper point located at 44.29 degrees latitude, and −115.162 degrees longitude. Valley Creek from a lower point located at 44.225 degrees latitude, and −114.927 degrees longitude to an upper point located at 44.377 degrees latitude, and −114.96 degrees longitude.

(N) Fishhook Creek from a lower point located at 44.143 degrees latitude, and −114.92 degrees longitude to an upper point located at 44.133 degrees latitude, and −114.981 degrees longitude. Little Redfish Lake centered at 44.161 degrees latitude, and −114.908 degrees longitude. Redfish Lake centered at 44.117 degrees latitude, and −114.931 degrees longitude. Redfish Lake Creek from a lower point located at 44.169 degrees latitude, and −114.898 degrees longitude to an upper point located at 44.1 degrees latitude, and −114.955 degrees longitude.

(O) Fourth of July Creek from a lower point located at 44.032 degrees latitude, and −114.836 degrees longitude to an upper point located at 44.044 degrees latitude, and −114.62 degrees longitude.

(P) Alpine Creek from a lower point located at 43.896 degrees latitude, and −114.907 degrees longitude to an upper point located at 43.93 degrees latitude, and −114.969 degrees longitude. Alturas Lake centered at 43.914 degrees latitude, and −114.86 degrees longitude. Alturas Lake Creek from a lower point located at 44.004 degrees latitude, and −114.836 degrees longitude to an upper point located at 43.859 degrees latitude, and −114.983 degrees longitude. Cabin Creek from a lower point located at 43.928 degrees latitude, and −114.842 degrees longitude to an upper point located at 43.929 degrees latitude, and −114.879 degrees longitude. Petit Lake centered at 43.98 degrees latitude, and −114.878 degrees longitude. Pettit Lake Creek from a lower point located at 43.988 degrees latitude, and −114.84 degrees longitude to an upper point located at 43.961 degrees latitude, and −114.916 degrees longitude. Pole Creek from a lower point located at 43.926 degrees latitude, and −114.809 degrees longitude to an upper point located at 43.964 degrees latitude, and −114.69 degrees longitude. Yellowbelly Creek from a lower point located at 43.992 degrees latitude, and −114.838 degrees longitude to an upper point located at 43.981 degrees latitude, and −114.927 degrees longitude. Yellowbelly Lake centered at 44.001 degrees latitude, and −114.875 degrees longitude.

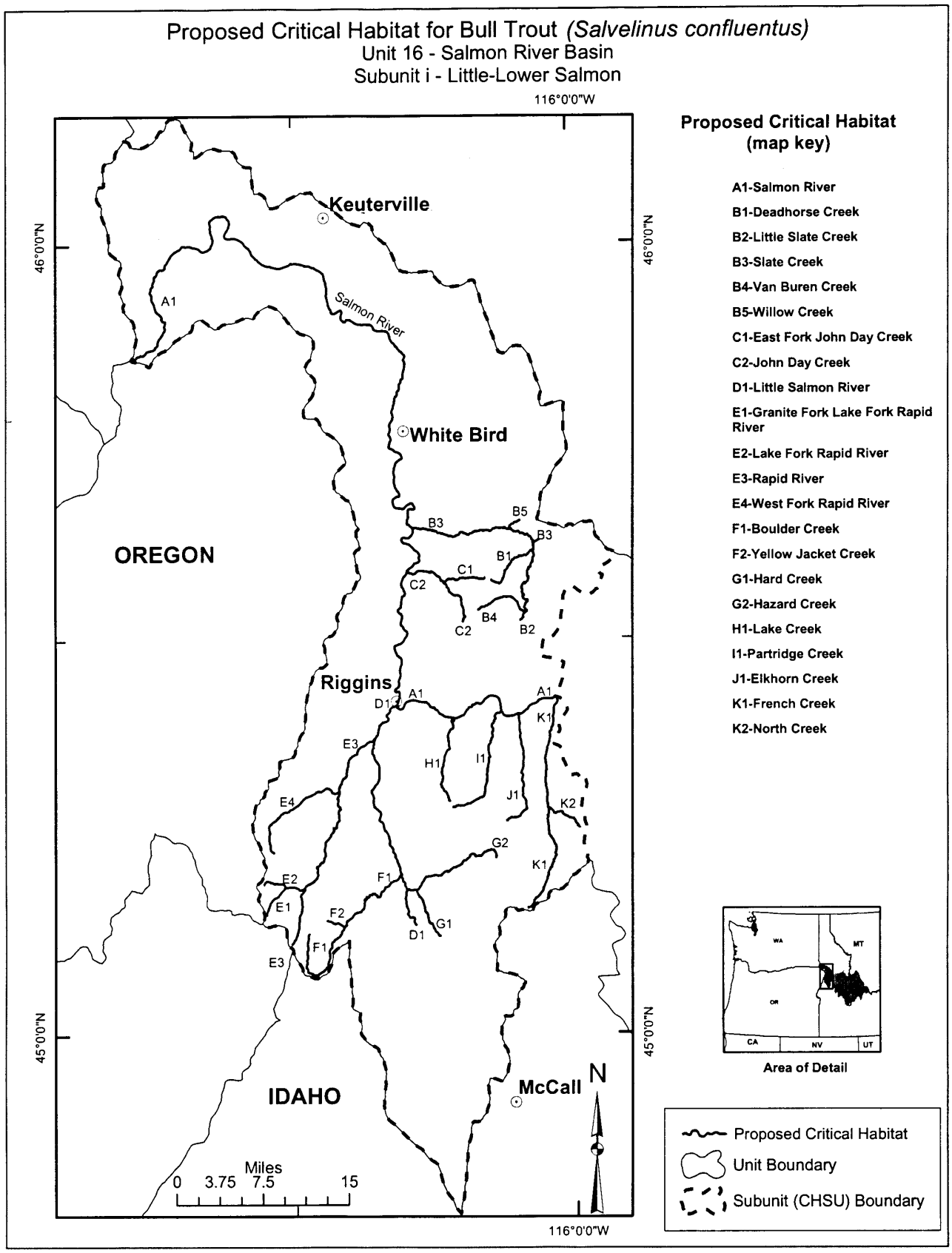
(Q) Beaver Creek from a lower point located at 43.925 degrees latitude, and −114.809 degrees longitude to an upper point located at 43.836 degrees latitude, and −114.906 degrees longitude.

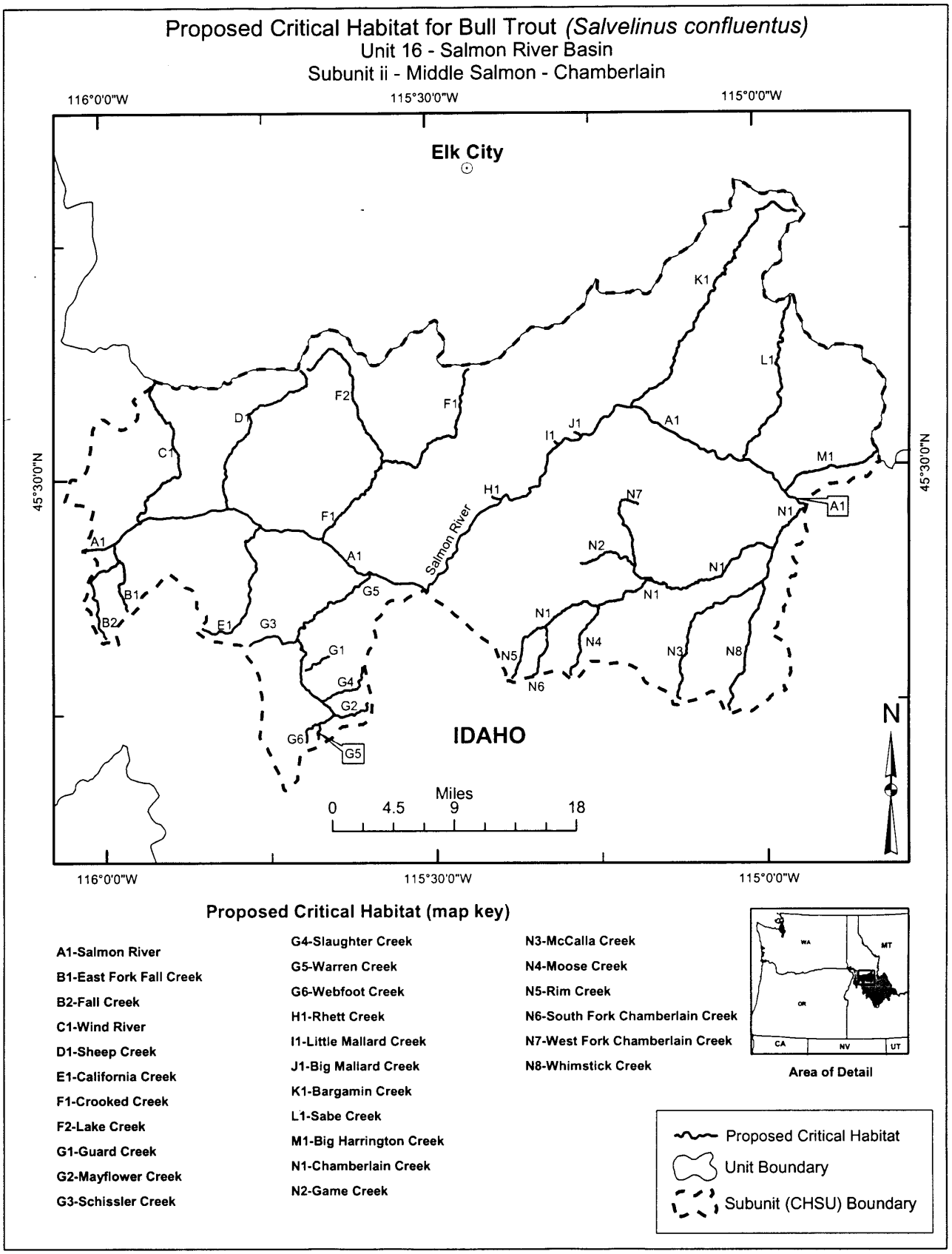
(R) Smiley Creek from a lower point located at 43.915 degrees latitude, and −114.8 degrees longitude to an upper point located at 43.792 degrees latitude, and −114.824 degrees longitude.

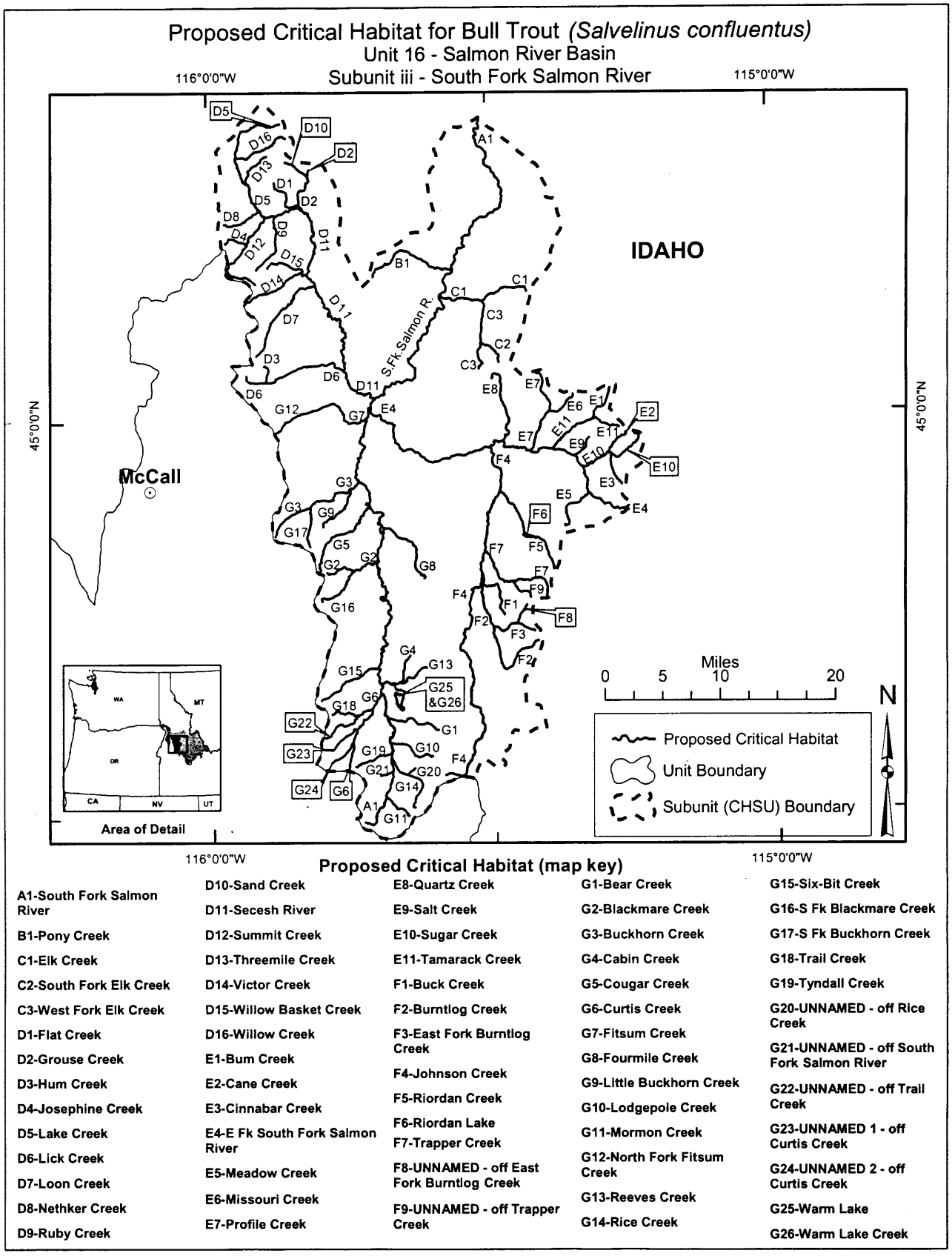
(S) Frenchman Creek from a lower point located at 43.885 degrees latitude, and −114.77 degrees longitude to an upper point located at 43.804 degrees latitude, and −114.816 degrees longitude.

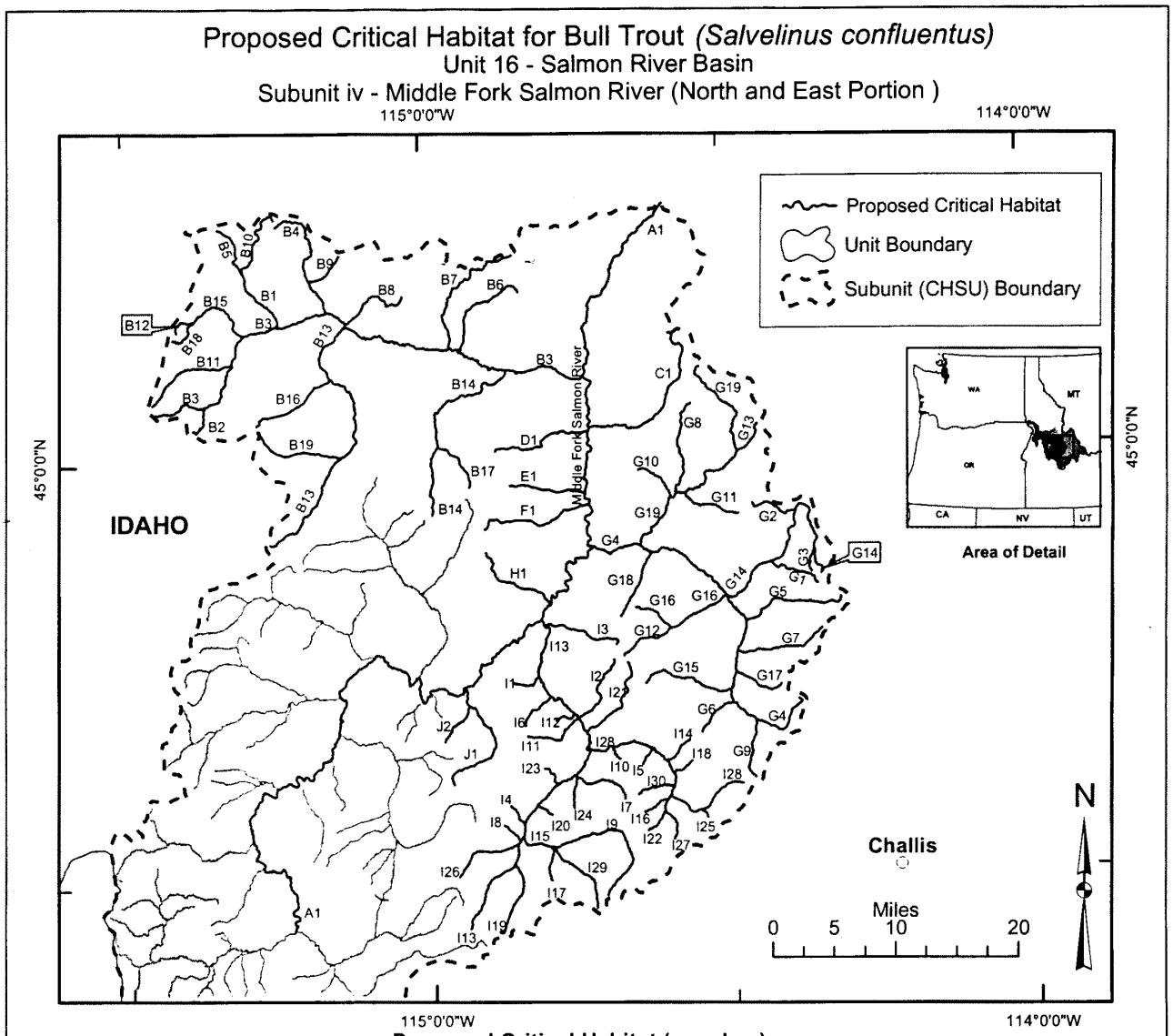
Note: Maps follow for Unit 16, Subunit i; Subunit ii; Subunit iii; Subunit iv (North and East Portion); Subunit iv (South and West Portion); Subunit v; Subunit vi; Subunits vii and viii; Subunit ix; Subunit x (North Portion); and Subunit x (South Portion).

BILLING CODE 4310–55–P


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 16 - Salmon River Basin
Subunit i - Little-Lower Salmon
116°0'0"W
46°0'0"N
45°0'0"N
Keuterville
Salmon River
White Bird
OREGON
Riggins
IDAHO
McCall
A1
B1
B2
B3
B4
B5
C1
C2
D1
E1
E2
E3
E4
F1
F2
G1
G2
H1
I1
J1
K1
K2
Miles
0 3.75 7.5 15
N
Proposed Critical Habitat (map key)
A1-Salmon River
B1-Deadhorse Creek
B2-Little Slate Creek
B3-Slate Creek
B4-Van Buren Creek
B5-Willow Creek
C1-East Fork John Day Creek
C2-John Day Creek
D1-Little Salmon River
E1-Granite Fork Lake Fork Rapid River
E2-Lake Fork Rapid River
E3-Rapid River
E4-West Fork Rapid River
F1-Boulder Creek
F2-Yellow Jacket Creek
G1-Hard Creek
G2-Hazard Creek
H1-Lake Creek
I1-Partridge Creek
J1-Elkhorn Creek
K1-French Creek
K2-North Creek
WA
MT
OR
CA
NV
UT
Area of Detail
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary

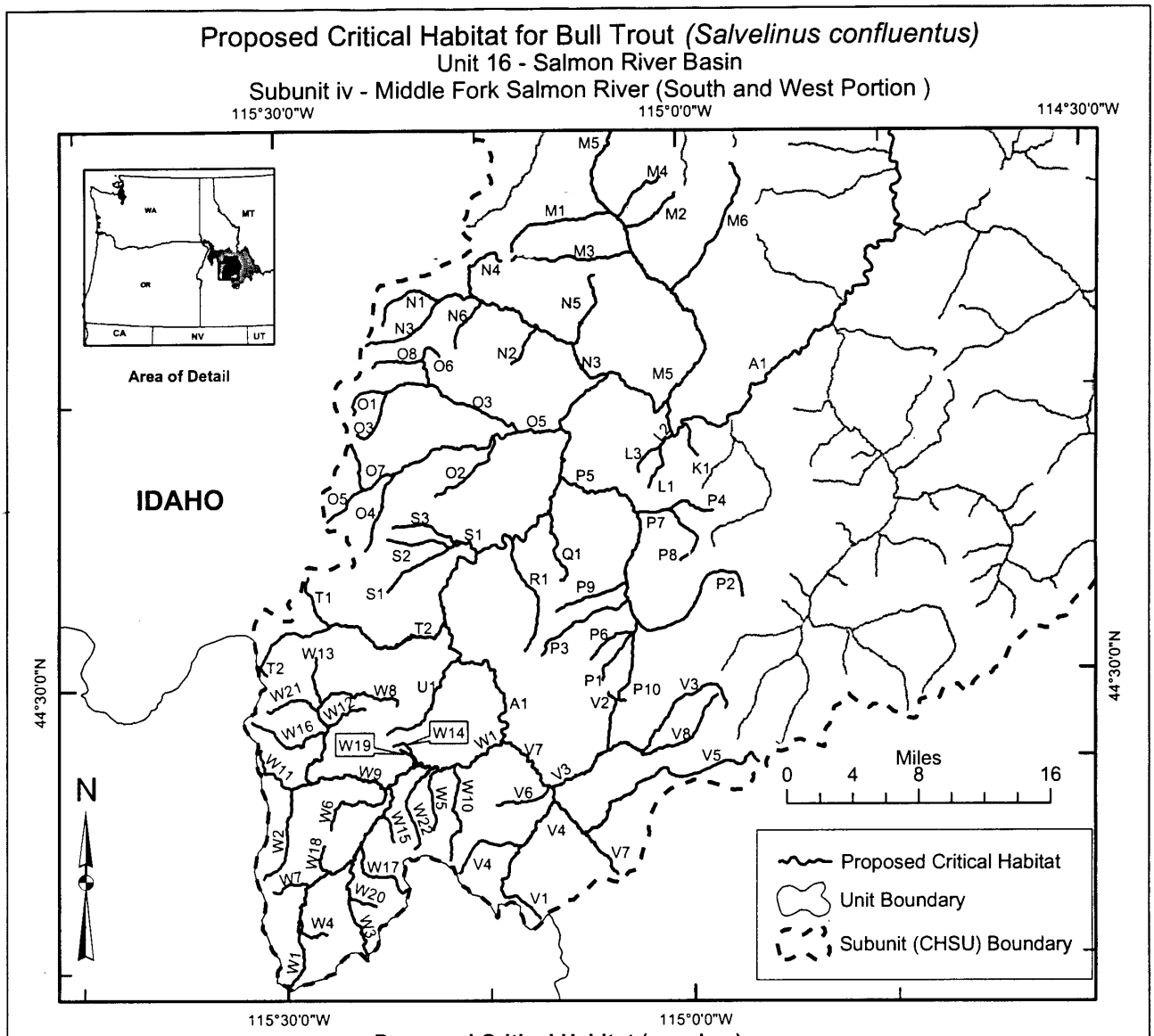

Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 16 - Salmon River Basin
Subunit ii - Middle Salmon - Chamberlain
116°0'0"W
115°30'0"W
115°0'0"W
45°30'0"N
Elk City
Salmon River
IDAHO
Miles
0 4.5 9 18
N
Proposed Critical Habitat (map key)
A1-Salmon River
B1-East Fork Fall Creek
B2-Fall Creek
C1-Wind River
D1-Sheep Creek
E1-California Creek
F1-Crooked Creek
F2-Lake Creek
G1-Guard Creek
G2-Mayflower Creek
G3-Schissler Creek
G4-Slaughter Creek
G5-Warren Creek
G6-Webfoot Creek
H1-Rhett Creek
I1-Little Mallard Creek
J1-Big Mallard Creek
K1-Bargamin Creek
L1-Sabe Creek
M1-Big Harrington Creek
N1-Chamberlain Creek
N2-Game Creek
N3-McCalla Creek
N4-Moose Creek
N5-Rim Creek
N6-South Fork Chamberlain Creek
N7-West Fork Chamberlain Creek
N8-Whimstick Creek
WA
MT
OR
CA
NV
UT
Area of Detail
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 16 - Salmon River Basin
Subunit iii - South Fork Salmon River
116°0'0"W
115°0'0"W
45°0'0"N
IDAHO
McCall
S.Fk.Salmon R.
Area of Detail
WA
MT
OR
CA
NV
UT
Miles
0 5 10 20
N
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Proposed Critical Habitat (map key)
A1-South Fork Salmon River
B1-Pony Creek
C1-Elk Creek
C2-South Fork Elk Creek
C3-West Fork Elk Creek
D1-Flat Creek
D2-Grouse Creek
D3-Hum Creek
D4-Josephine Creek
D5-Lake Creek
D6-Lick Creek
D7-Loon Creek
D8-Nethker Creek
D9-Ruby Creek
D10-Sand Creek
D11-Secesh River
D12-Summit Creek
D13-Threemile Creek
D14-Victor Creek
D15-Willow Basket Creek
D16-Willow Creek
E1-Bum Creek
E2-Cane Creek
E3-Cinnabar Creek
E4-E Fk South Fork Salmon River
E5-Meadow Creek
E6-Missouri Creek
E7-Profile Creek
E8-Quartz Creek
E9-Salt Creek
E10-Sugar Creek
E11-Tamarack Creek
F1-Buck Creek
F2-Burntlog Creek
F3-East Fork Burntlog Creek
F4-Johnson Creek
F5-Riordan Creek
F6-Riordan Lake
F7-Trapper Creek
F8-UNNAMED - off East Fork Burntlog Creek
F9-UNNAMED - off Trapper Creek
G1-Bear Creek
G2-Blackmare Creek
G3-Buckhorn Creek
G4-Cabin Creek
G5-Cougar Creek
G6-Curtis Creek
G7-Fitsum Creek
G8-Fourmile Creek
G9-Little Buckhorn Creek
G10-Lodgepole Creek
G11-Mormon Creek
G12-North Fork Fitsum Creek
G13-Reeves Creek
G14-Rice Creek
G15-Six-Bit Creek
G16-S Fk Blackmare Creek
G17-S Fk Buckhorn Creek
G18-Trail Creek
G19-Tyndall Creek
G20-UNNAMED - off Rice Creek
G21-UNNAMED - off South Fork Salmon River
G22-UNNAMED - off Trail Creek
G23-UNNAMED 1 - off Curtis Creek
G24-UNNAMED 2 - off Curtis Creek
G25-Warm Lake
G26-Warm Lake Creek



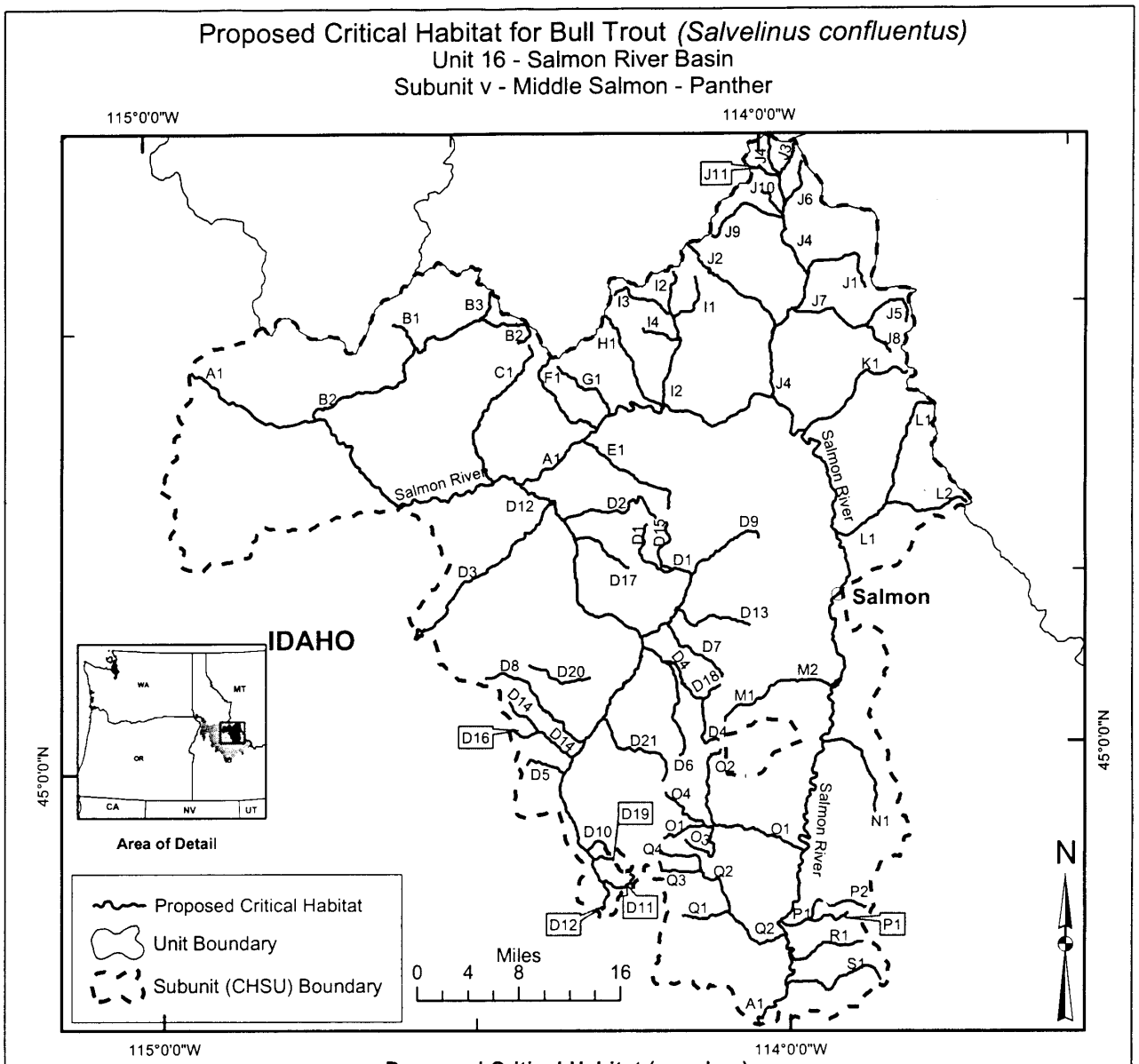
Proposed Critical Habitat (map key)

A1-Middle Fork Salmon River
B1-Beaver-Big Creek1
B2-Belvidere Creek
B3-Big Creek
B4-Big Ramey Creek
B5-Boulder Creek
B6-Cabin-Big Creek
B7-Cave-Big Creek
B8-Crooked Creek
B9-E Fk Big Ramey Creek
B10-Hand Creek
B11-Logan Creek
B12-M Fk Smith Creek
B13-Monumental Creek
B14-Rush-Big Creek
B15-Smith Creek
B16-Snowslide Creek
B17-S Fk Rush Creek
B18-S Fk Smith Creek
B19-W Fk Monumental Cr
C1-Wilson Creek
D1-Soldier Creek-Lmf
E1-Brush Creek
F1-Sheep Creek-Lmf
G1-Arrastra Creek
G2-Birdseye Creek
G3-Blue Fork Silver Creek
G4-Camas Creek
G5-Castle Creek
G6-Fly Creek
G7-Furnace Creek
G8-Hoodoo Creek
G9-J Fell Creek
G10-Lake-Camas Creek
G11-Little Jacket Creek
G12-Pole Creek-Camas
G13-Shovel Creek
G14-Silver Creek-Camas
G15-South Fork Camas Creek
G16-W Fk Camas Creek
G17-White Goat Creek
G18-Woodtick Creek
G19-Yellowjacket Creek
H1-Norton Creek
I1-Bear Creek-Loon
I2-Cabin Creek-Loon
I3-Cache Creek-Loon
I4-Canyon Creek
I5-Cat Creek
I6-Cold Spring Creek-Loon
I7-Cottonwood Creek
I8-Deer Creek-Loon
I9-E Fk Mayfield Creek
I10-Fir Creek-Loon
I11-Indian Creek-Loon
I12-Jack Creek
I13-Loon Creek
I14-Mahoney Creek
I15-Mayfield Creek
I16-McKee Creek
I17-Nelson Creek
I18-Parker Creek
I19-Pioneer-Loon Creek
I20-Rat Creek
I21-Rock Creek-Loon
I22-Rush Creek-Warmspring
I23-Shell Creek
I24-S Fk Cottonwood Creek
I25-S Fk Warm Spring Creek
I26-Trail Creek-Loon
I27-Trapper Creek-Warmspring
I28-Warm Spring Creek-Loon
I29-W Fk Mayfield Creek
I30-Wicklup Creek-Loon
J1-Little Loon Creek
J2-W Fk Little Loon Creek



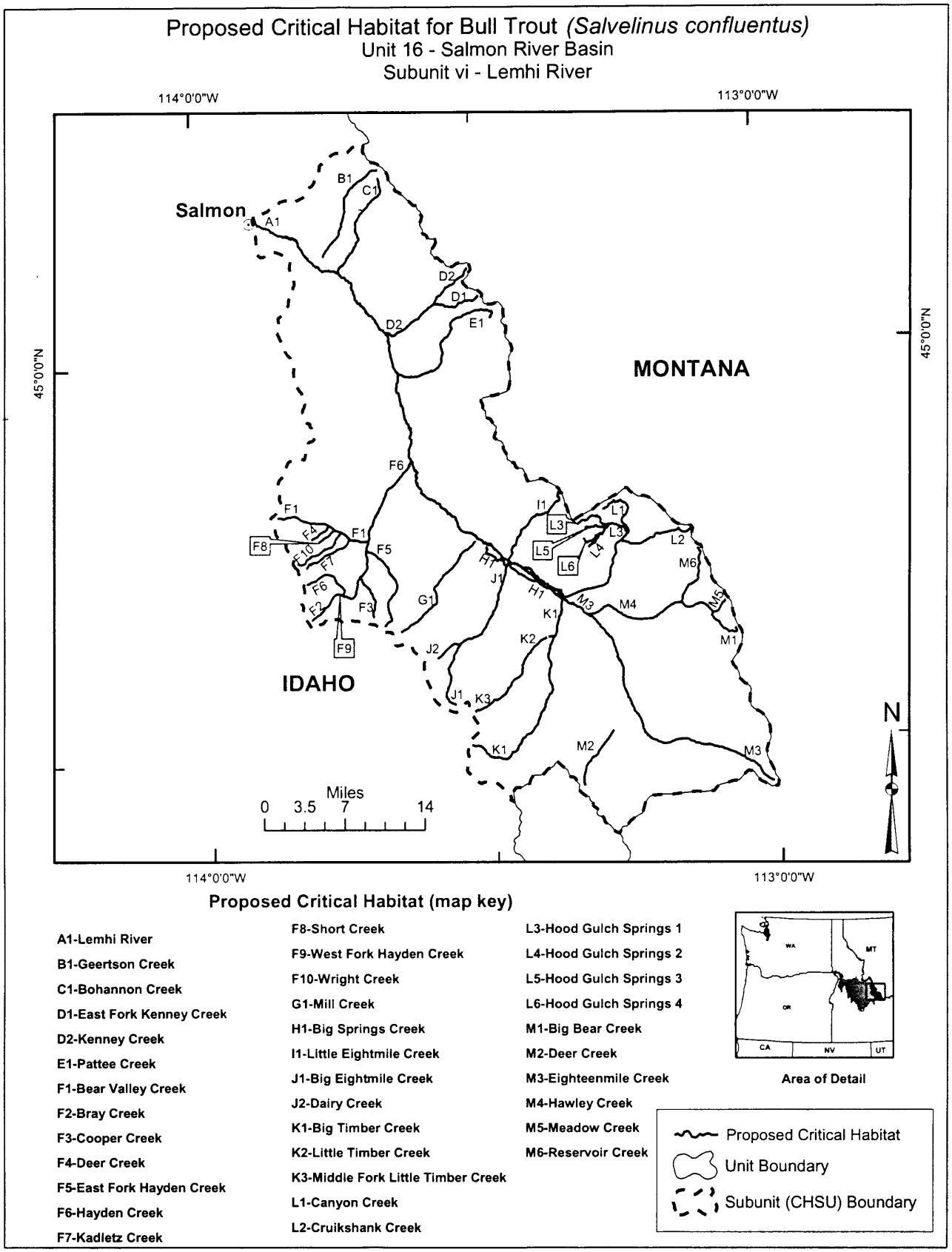
Proposed Critical Habitat (map key)

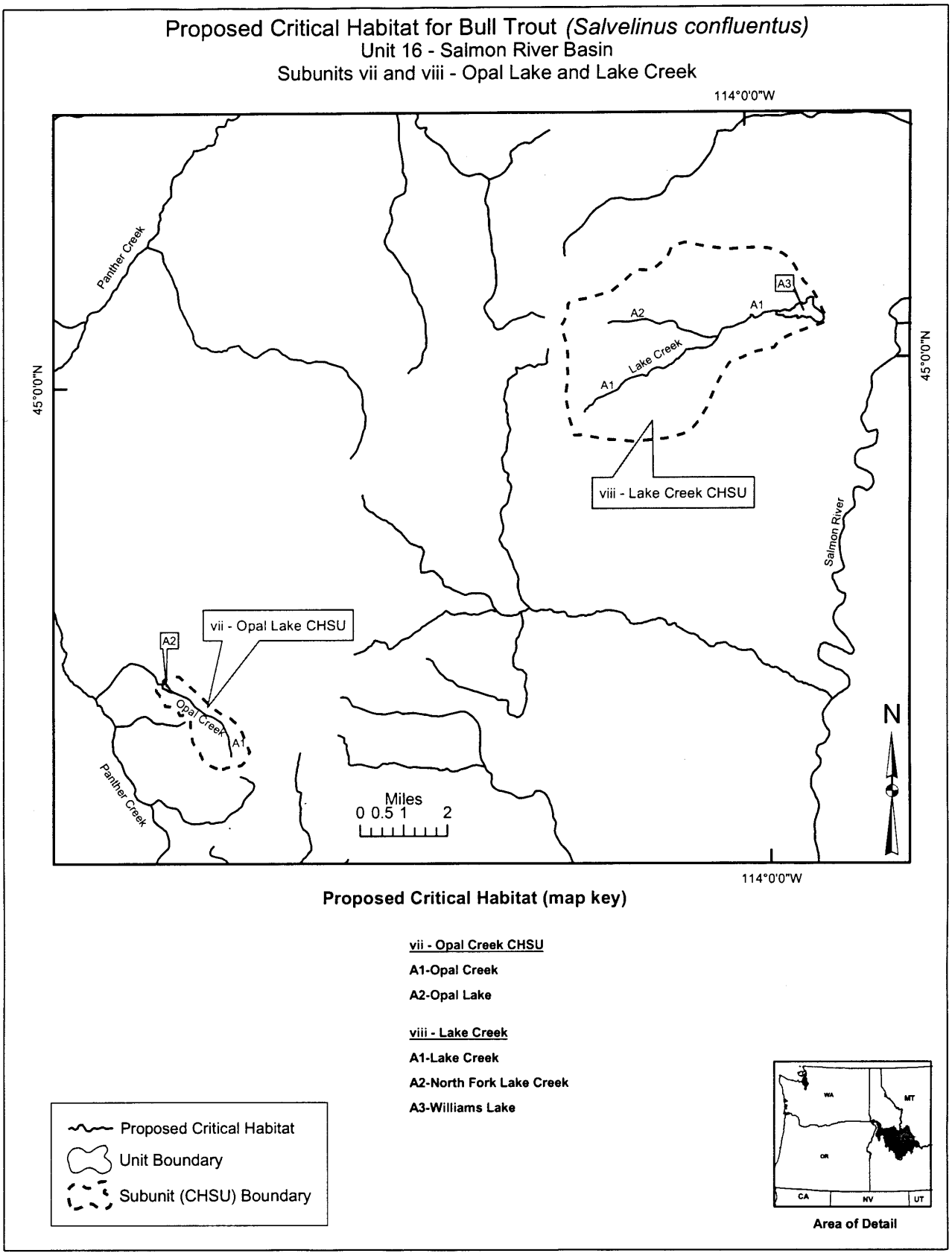
A1-M Fk Salmon River
K1-Little Creek
L1-E Fk Thomas Creek
L2-Thomas Creek
L3-W Fork Thomas Creek
M1-Big Cottonwood Creek
M2-Buck-Marble Creek
M3-Dynamite Creek
M4-Little Cottonwood Creek
M5-Marble Creek
M6-Trail Creek-Marble
N1-Big Chief Creek
N2-Cultus Creek
N3-Indian Creek
N4-Little Indian Creek
N5-M Fk Indian Creek
N6-Papoose Creek-Indian
O1-Browning Creek
O2-Forty-Five Creek
O3-Little Pistol Creek
O4-Luger Creek
O5-Pistol Creek
O6-Springfield Creek
O7-Thirty-Eight Creek
O8-W Fk Springfield Creek
P10-Vanity Creek
P1-Baldwin Creek
P2-Duffield Creek
P3-Float Creek
P4-North Fork Sheep Creek
P5-Rapid River
P6-Seafoam Creek
P7-Sheep Creek
P8-South Fork Sheep Creek
P9-Sulphur Creek-Rapid
Q1-Greyhound Creek
R1-Soldier Creek-Umf
S1-Elkhorn Creek
S2-M Fk Elkhorn Creek
S3-N Fk Elkhorn Creek
T1-North Fork Sulphur Creek
T2-Sulphur Creek
U1-Dagger Creek
V1-Banner Creek
V2-Bear Creek-Marsh
V3-Beaver Creek-Marsh
V4-Cape Horn Creek
V5-Knapp Creek
V6-Lola Creek
V7-Marsh Creek
V8-Winnemucca Creek
W1-Bear Valley Creek
W2-Bearskin Creek
W3-Cache Creek
W4-Casner Creek
W5-Cold-Bv Creek
W6-Cook Creek
W7-Cub Creek
W8-East Fork Elk Creek
W9-Elk Creek
W10-Fir-Bv Creek
W11-Little Beaver Creek
W12-Little E Fk Elk Creek
W13-North Fork Elk Creek
W14-Poker Creek
W15-Pole-Bv Creek
W16-Porter Creek
W17-Sack Creek
W18-Sheep Trail Creek
W19-UNNAMED - off Bear Valley Creek
W20-UNNAMED - off Cache Creek
W21-W Fk Elk Creek
W22-Wyoming Creek

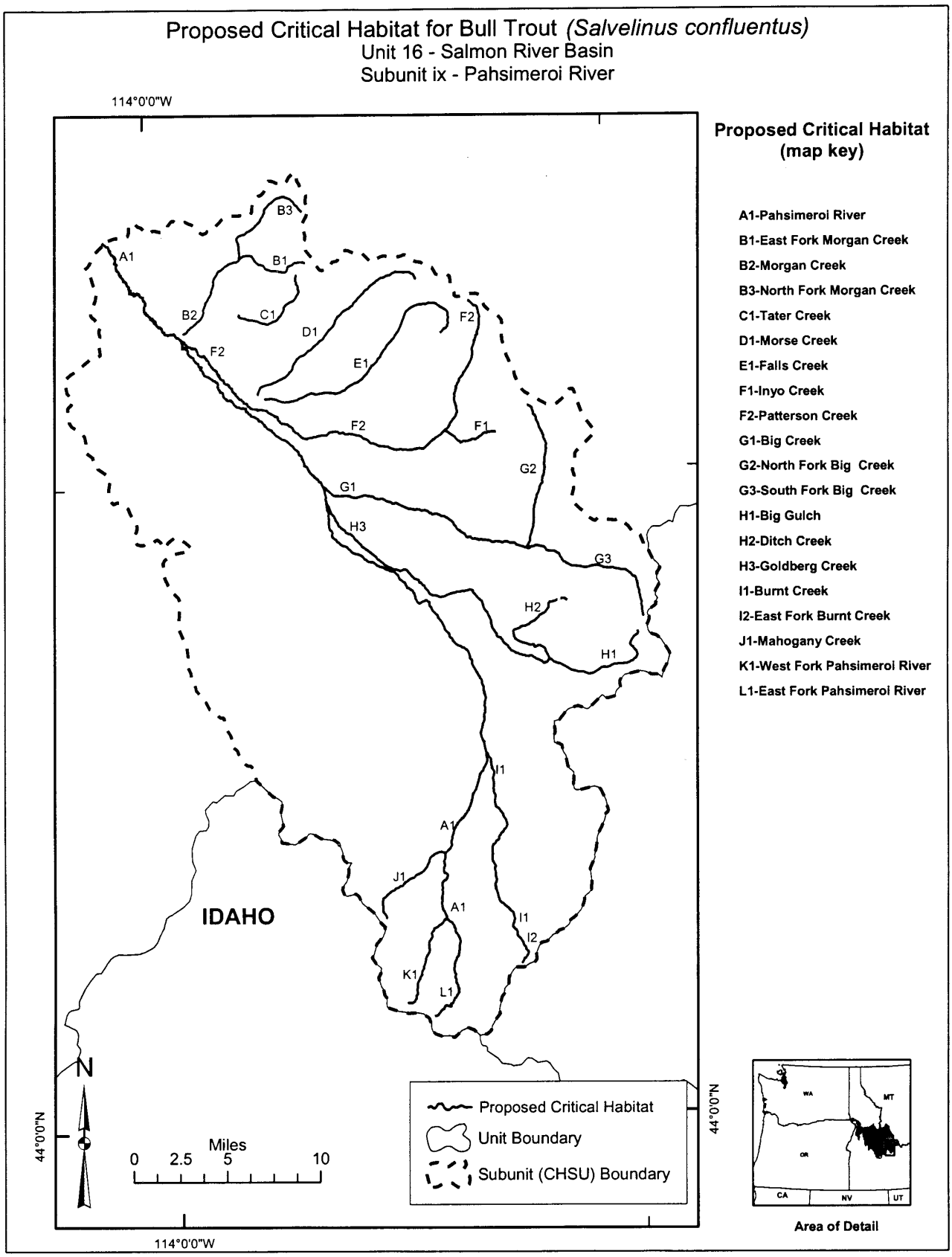


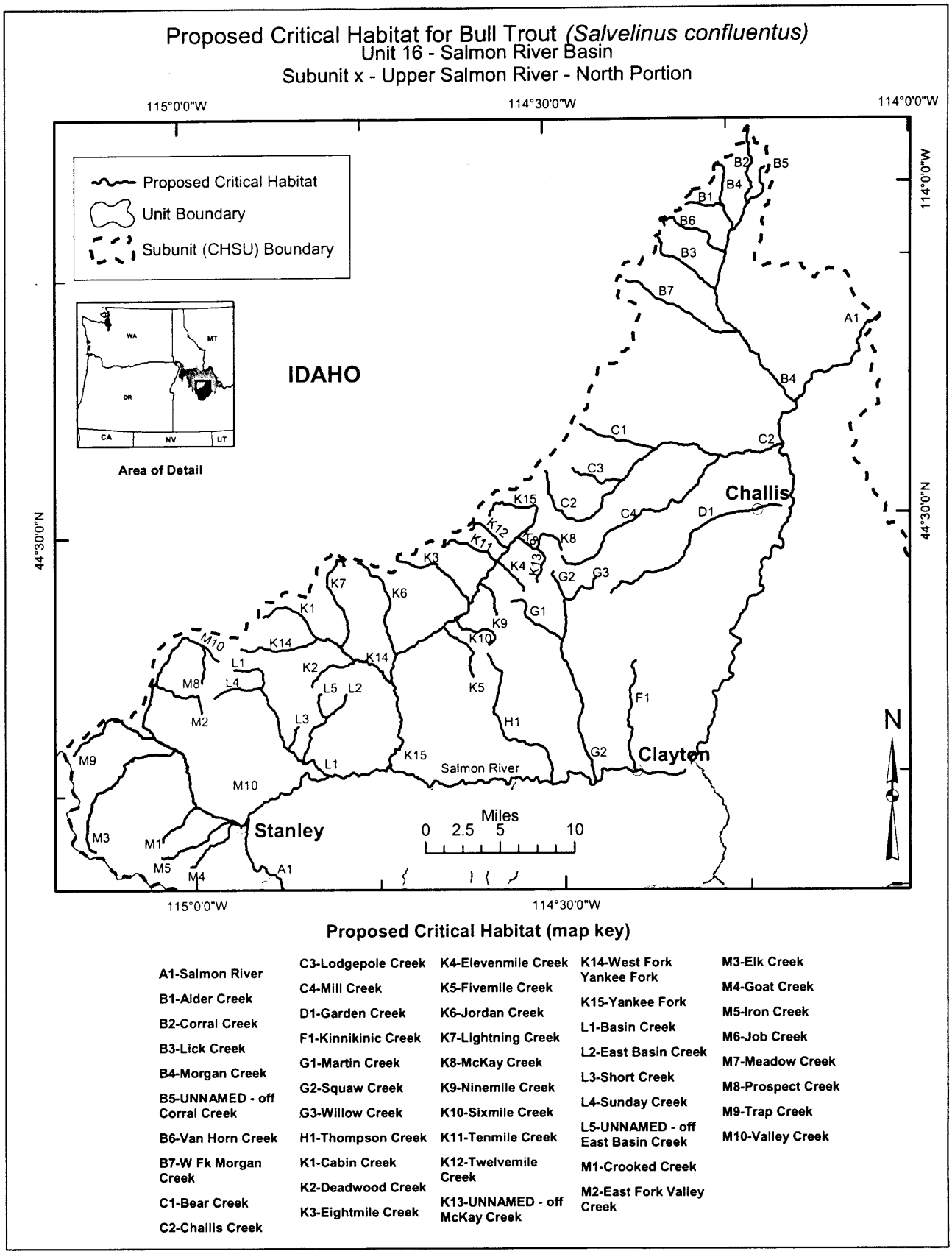
Proposed Critical Habitat (map key)

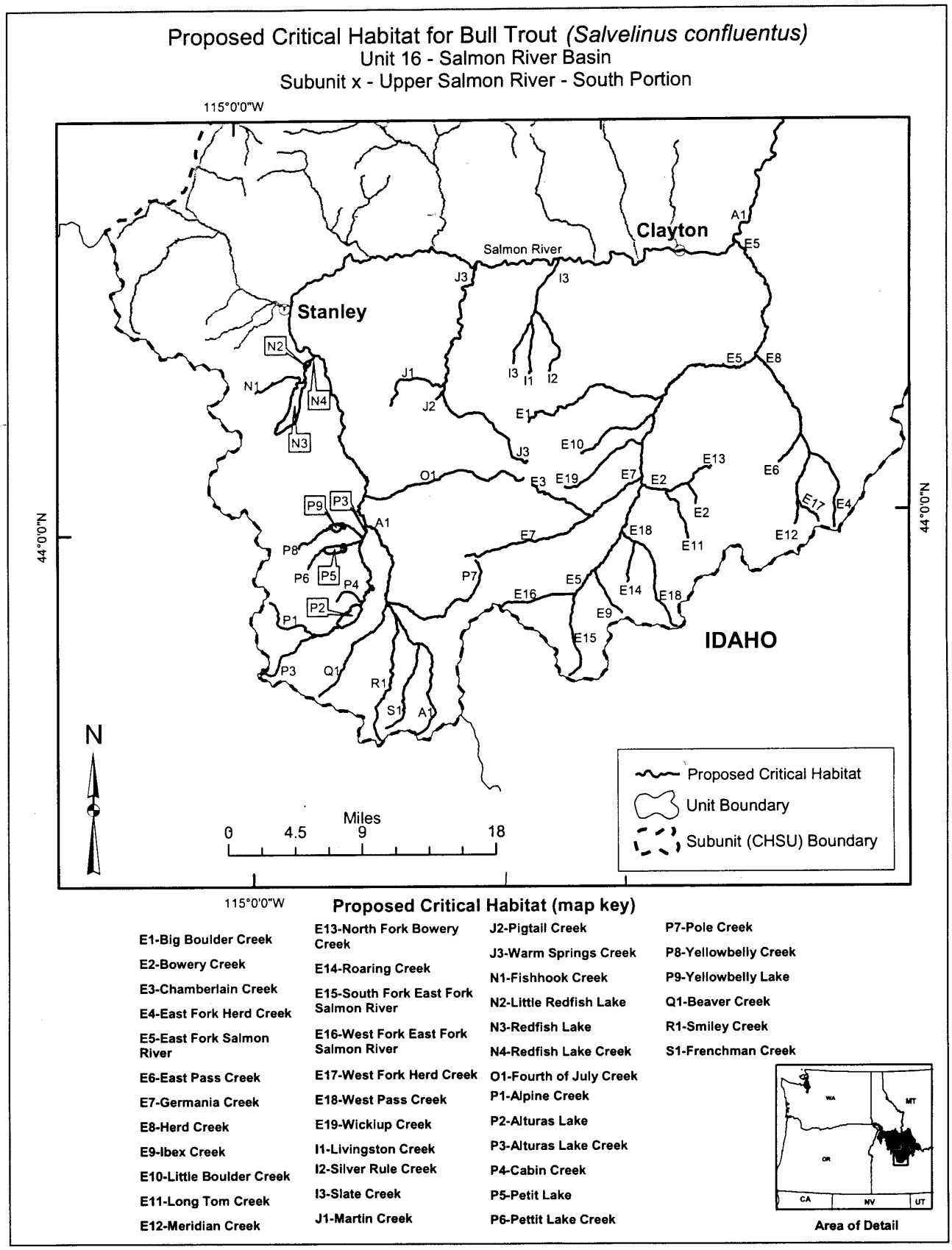
A1-Salmon River
B1-Cayuse Creek
B2-Horse Creek
B3-Woods Fork Horse Creek
C1-Owl Creek
D1-Arnett Creek
D2-Beaver Creek
D3-Clear Creek
D4-Deep Creek
D5-Fourth of July Creek
D6-Little Deep Creek
D7-Moccasin Creek
D8-Musgrove Creek
D9-Napias Creek
D10-Opal Creek
D11-Otter Creek
D12-Panther Creek
D13-Phelan Creek
D14-Porphyry Creek
D15-Rapps Creek
D16-South Fork Porphyry Creek
D17-Trail Creek
D18-UNNAMED - off Deep Creek
D19-Weasel Creek
D20-West Fork Blackbird Creek
D21-Woodtick Creek
E1-Pine Creek
F1-Boulder Creek
G1-Spring Creek
H1-Squaw Creek
I1-Corral Creek
I2-Indian Creek
I3-McConn Creek
I4-West Fork Indian Creek
J1-Dahlonega Creek
J2-Hughes Creek
J3-Moose Creek
J4-North Fork Salmon River
J5-North Fork Sheep Creek
J6-Pierce Creek
J7-Sheep Creek
J8-South Fork Sheep Creek
J9-Twin Creek
J10-Vine Creek
J11-West Fork North Fork Salmon River
K1-Fourth of July Creek
L1-Carmen Creek
L2-Freeman Creek
M1-South Fork Williams Creek
M2-Williams Creek
N1-Twelvemile Creek
O1-Iron Creek
O2-North Fork Iron Creek
O3-South Fork Iron Creek
O4-West Fork Iron Creek
P1-McKim Creek
P2-North Fork McKim Creek
Q1-Big Hat Creek
Q2-Hat Creek
Q3-Middle Fork Hat Creek
Q4-North Fork Hat Creek
R1-Allison Creek
S1-Cow Creek


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 16 - Salmon River Basin
Subunit vi - Lemhi River
114°0'0"W
113°0'0"W
45°0'0"N
Salmon
MONTANA
IDAHO
N
Miles
0 3.5 7 14
Proposed Critical Habitat (map key)
A1-Lemhi River
B1-Geertson Creek
C1-Bohannon Creek
D1-East Fork Kenney Creek
D2-Kenney Creek
E1-Pattee Creek
F1-Bear Valley Creek
F2-Bray Creek
F3-Cooper Creek
F4-Deer Creek
F5-East Fork Hayden Creek
F6-Hayden Creek
F7-Kadletz Creek
F8-Short Creek
F9-West Fork Hayden Creek
F10-Wright Creek
G1-Mill Creek
H1-Big Springs Creek
I1-Little Eightmile Creek
J1-Big Eightmile Creek
J2-Dairy Creek
K1-Big Timber Creek
K2-Little Timber Creek
K3-Middle Fork Little Timber Creek
L1-Canyon Creek
L2-Cruikshank Creek
L3-Hood Gulch Springs 1
L4-Hood Gulch Springs 2
L5-Hood Gulch Springs 3
L6-Hood Gulch Springs 4
M1-Big Bear Creek
M2-Deer Creek
M3-Eighteenmile Creek
M4-Hawley Creek
M5-Meadow Creek
M6-Reservoir Creek
WA
MT
OR
CA
NV
UT
Area of Detail
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 16 - Salmon River Basin
Subunits vii and viii - Opal Lake and Lake Creek
114°0'0"W
45°0'0"N
Panther Creek
A3
A2
A1
Lake Creek
A1
viii - Lake Creek CHSU
Salmon River
vii - Opal Lake CHSU
A2
Opal Creek
A1
Panther Creek
Miles
0 0.5 1 2
N
114°0'0"W
Proposed Critical Habitat (map key)
vii - Opal Creek CHSU
A1-Opal Creek
A2-Opal Lake
viii - Lake Creek
A1-Lake Creek
A2-North Fork Lake Creek
A3-Williams Lake
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
WA
MT
OR
CA
NV
UT
Area of Detail


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 16 - Salmon River Basin
Subunit ix - Pahsimeroi River
114°0'0"W
44°0'0"N
Proposed Critical Habitat (map key)
A1-Pahsimeroi River
B1-East Fork Morgan Creek
B2-Morgan Creek
B3-North Fork Morgan Creek
C1-Tater Creek
D1-Morse Creek
E1-Falls Creek
F1-Inyo Creek
F2-Patterson Creek
G1-Big Creek
G2-North Fork Big Creek
G3-South Fork Big Creek
H1-Big Gulch
H2-Ditch Creek
H3-Goldberg Creek
I1-Burnt Creek
I2-East Fork Burnt Creek
J1-Mahogany Creek
K1-West Fork Pahsimeroi River
L1-East Fork Pahsimeroi River
IDAHO
N
Miles
0 2.5 5 10
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
WA
MT
OR
CA
NV
UT
Area of Detail


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 16 - Salmon River Basin
Subunit x - Upper Salmon River - North Portion
115°0'0"W
114°30'0"W
114°0'0"W
44°30'0"N
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
IDAHO
WA
MT
OR
CA
NV
UT
Area of Detail
Challis
Clayton
Stanley
Salmon River
Miles
0 2.5 5 10
N
Proposed Critical Habitat (map key)
A1-Salmon River
B1-Alder Creek
B2-Corral Creek
B3-Lick Creek
B4-Morgan Creek
B5-UNNAMED - off Corral Creek
B6-Van Horn Creek
B7-W Fk Morgan Creek
C1-Bear Creek
C2-Challis Creek
C3-Lodgepole Creek
C4-Mill Creek
D1-Garden Creek
F1-Kinnikinic Creek
G1-Martin Creek
G2-Squaw Creek
G3-Willow Creek
H1-Thompson Creek
K1-Cabin Creek
K2-Deadwood Creek
K3-Eightmile Creek
K4-Elevenmile Creek
K5-Fivemile Creek
K6-Jordan Creek
K7-Lightning Creek
K8-McKay Creek
K9-Ninemile Creek
K10-Sixmile Creek
K11-Tenmile Creek
K12-Twelvemile Creek
K13-UNNAMED - off McKay Creek
K14-West Fork Yankee Fork
K15-Yankee Fork
L1-Basin Creek
L2-East Basin Creek
L3-Short Creek
L4-Sunday Creek
L5-UNNAMED - off East Basin Creek
M1-Crooked Creek
M2-East Fork Valley Creek
M3-Elk Creek
M4-Goat Creek
M5-Iron Creek
M6-Job Creek
M7-Meadow Creek
M8-Prospect Creek
M9-Trap Creek
M10-Valley Creek



BILLING CODE 4310–55–C

(21) Unit 17—Southwest Idaho River Basins.

(i) Critical Habitat Subunit—Anderson Ranch.

(A) Anderson Ranch Reservoir centered at 43.394 degrees latitude, and −115.39 degrees longitude. Dog Creek from a lower point located at 43.53 degrees latitude, and −115.299 degrees longitude to an upper point located at 43.564 degrees latitude, and −115.379 degrees longitude. South Fork Boise River from a lower point located at 43.335 degrees latitude, and −115.536 degrees longitude to an upper point located at 43.774 degrees latitude, and −114.928 degrees longitude.

(B) Feather River from a lower point located at 43.607 degrees latitude, and −115.262 degrees longitude to an upper point located at 43.678 degrees latitude, and −115.264 degrees longitude.

(C) East Fork Elk Creek from a lower point located at 43.709 degrees latitude, and −115.253 degrees longitude to an upper point located at 43.742 degrees latitude, and −115.231 degrees longitude. Elk Creek from a lower point located at 43.678 degrees latitude, and −115.264 degrees longitude to an upper point located at 43.751 degrees latitude, and −115.306 degrees longitude.

(D) Willow Creek from a lower point located at 43.605 degrees latitude, and −115.143 degrees longitude to an upper point located at 43.725 degrees latitude, and −115.022 degrees longitude.

(E) Big Water Gulch from a lower point located at 43.604 degrees latitude, and −115.107 degrees longitude to an upper point located at 43.665 degrees latitude, and −115.042 degrees longitude.

(F) Deadwood Creek from a lower point located at 43.586 degrees latitude, and −115.007 degrees longitude to an upper point located at 43.532 degrees latitude, and −115.015 degrees longitude.

(G) Burnt Log Creek from a lower point located at 43.643 degrees latitude, and −114.969 degrees longitude to an upper point located at 43.646 degrees latitude, and −115.016 degrees longitude. East Fork Skeleton Creek from a lower point located at 43.658 degrees latitude, and −114.998 degrees longitude to an upper point located at 43.685 degrees latitude, and −115.018 degrees longitude. Skeleton Creek from a lower point located at 43.589 degrees latitude, and −115.021 degrees longitude to an upper point located at 43.694 degrees latitude, and −114.986 degrees longitude. West Fork Skeleton Creek from a lower point located at 43.651 degrees latitude, and −114.973 degrees longitude to an upper point located at 43.672 degrees latitude, and −115.026 degrees longitude.

(H) Boardman Creek from a lower point located at 43.612 degrees latitude, and −114.939 degrees longitude to an upper point located at 43.525 degrees latitude, and −115.018 degrees longitude. Smokey Dome Canyon from a lower point located at 43.547 degrees latitude, and −114.955 degrees longitude to an upper point located at 43.503 degrees latitude, and −114.937 degrees longitude.

(I) Big Peak Creek from a lower point located at 43.658 degrees latitude, and −114.794 degrees longitude to an upper point located at 43.628 degrees latitude, and −114.729 degrees longitude. Big Smoky Creek from a lower point located at 43.604 degrees latitude, and −114.915 degrees longitude to an upper point located at 43.792 degrees latitude, and −114.755 degrees longitude. Bluff Creek from a lower point located at 43.7 degrees latitude, and −114.754 degrees longitude to an upper point located at 43.698 degrees latitude, and −114.685 degrees longitude. Carrie Creek from a lower point located at 43.552 degrees latitude, and −114.759 degrees longitude to an upper point located at 43.59 degrees latitude, and −114.69 degrees longitude. Little Smoky Creek from a lower point located at 43.608 degrees latitude, and −114.871 degrees longitude to an upper point located at 43.585 degrees latitude, and −114.679 degrees longitude. Loggy Creek from a lower point located at 43.763 degrees latitude, and −114.787 degrees longitude to an upper point located at 43.8 degrees latitude, and −114.789 degrees longitude. North Fork Big Smoky Creek from a lower point located at 43.686 degrees latitude, and −114.778 degrees longitude to an upper point located at 43.723 degrees latitude, and −114.788 degrees longitude. Salt Creek from a lower point located at 43.607 degrees latitude, and −114.871 degrees longitude to an upper point located at 43.539 degrees latitude, and −114.859 degrees longitude. Snowslide Creek from a lower point located at 43.723 degrees latitude, and −114.788 degrees longitude to an upper point located at 43.739 degrees latitude, and −114.829 degrees longitude. West Fork Big Smoky Creek from a lower point located at 43.744 degrees latitude, and −114.726 degrees longitude to an upper point located at 43.788 degrees latitude, and −114.82 degrees longitude.

(J) Bear Creek from a lower point located at 43.727 degrees latitude, and −114.901 degrees longitude to an upper point located at 43.703 degrees latitude, and −115.006 degrees longitude. Goat Creek from a lower point located at 43.715 degrees latitude, and −114.979 degrees longitude to an upper point located at 43.73 degrees latitude, and −115.006 degrees longitude.

(K) Emma Creek from a lower point located at 43.735 degrees latitude, and −114.906 degrees longitude to an upper point located at 43.791 degrees latitude, and −114.834 degrees longitude. Unnamed creek off Emma Creek from a lower point located at 43.759 degrees latitude, and −114.871 degrees longitude to an upper point located at 43.772 degrees latitude, and −114.883 degrees longitude.

(L) Bass Creek from a lower point located at 43.791 degrees latitude, and −114.975 degrees longitude to an upper point located at 43.741 degrees latitude, and −115.002 degrees longitude. Little Bear Creek from a lower point located at 43.779 degrees latitude, and −114.935 degrees longitude to an upper point located at 43.746 degrees latitude, and −114.974 degrees longitude. North Fork Ross Fork from a lower point located at 43.796 degrees latitude, and −114.988 degrees longitude to an upper point located at 43.853 degrees latitude, and −114.975 degrees longitude. Ross Fork from a lower point located at 43.774 degrees latitude, and −114.928 degrees longitude to an upper point located at 43.796 degrees latitude, and −114.988 degrees longitude. South Fork Ross Fork from a lower point located at 43.796 degrees latitude, and −114.988 degrees longitude to an upper point located at 43.735 degrees latitude, and −115.021 degrees longitude.

(M) Johnson Creek from a lower point located at 43.774 degrees latitude, and −114.928 degrees longitude to an upper point located at 43.844 degrees latitude, and −114.971 degrees longitude. Vienna Creek from a lower point located at 43.802 degrees latitude, and −114.909 degrees longitude to an upper point located at 43.791 degrees latitude, and −114.86 degrees longitude.

(ii) Critical Habitat Subunit—Arrowrock.

(A) Arrowrock Reservoir centered at 43.606 degrees latitude, and −115.833 degrees longitude. Boise River from a lower point located at 43.645 degrees latitude, and −115.748 degrees longitude to an upper point located at 43.713 degrees latitude, and −115.635 degrees longitude. South Fork Boise River from a lower point located at 43.55 degrees latitude, and −115.721 degrees longitude to an upper point located at 43.335 degrees latitude, and −115.536 degrees longitude.

(B) Rattlesnake Creek from a lower point located at 43.561 degrees latitude, and −115.739 degrees longitude to an upper point located at 43.622 degrees

latitude, and −115.525 degrees longitude. Russel Gulch from a lower point located at 43.591 degrees latitude, and −115.595 degrees longitude to an upper point located at 43.577 degrees latitude, and −115.559 degrees longitude.

(C) Devils Creek from a lower point located at 43.685 degrees latitude, and −115.591 degrees longitude to an upper point located at 43.642 degrees latitude, and −115.563 degrees longitude. East Fork Sheep Creek from a lower point located at 43.684 degrees latitude, and −115.547 degrees longitude to an upper point located at 43.674 degrees latitude, and −115.485 degrees longitude. Sheep Creek from a lower point located at 43.697 degrees latitude, and −115.661 degrees longitude to an upper point located at 43.617 degrees latitude, and −115.51 degrees longitude.

(D) Middle Fork Boise River from a lower point located at 43.713 degrees latitude, and −115.635 degrees longitude to an upper point located at 43.946 degrees latitude, and −115.032 degrees longitude.

(E) East Fork Roaring River from a lower point located at 43.695 degrees latitude, and −115.464 degrees longitude to an upper point located at 43.616 degrees latitude, and −115.438 degrees longitude. Middle Fork Roaring River from a lower point located at 43.688 degrees latitude, and −115.451 degrees longitude to an upper point located at 43.624 degrees latitude, and −115.465 degrees longitude. Roaring River from a lower point located at 43.79 degrees latitude, and −115.439 degrees longitude to an upper point located at 43.647 degrees latitude, and −115.479 degrees longitude.

(F) Buck Creek from a lower point located at 43.803 degrees latitude, and –115.396 degrees longitude to an upper point located at 43.747 degrees latitude, and –115.325 degrees longitude.

(G) Black Warrior Creek from a lower point located at 43.818 degrees latitude, and –115.29 degrees longitude to an upper point located at 43.945 degrees latitude, and –115.189 degrees longitude. Unnamed creek off Black Warrior Creek from a lower point located at 43.878 degrees latitude, and –115.244 degrees longitude to an upper point located at 43.896 degrees latitude, and –115.263 degrees longitude. West Warrior Creek from a lower point located at 43.84 degrees latitude, and –115.256 degrees longitude to an upper point located at 43.882 degrees latitude, and –115.297 degrees longitude.

(H) Bald Mountain Creek from a lower point located at 43.818 degrees latitude, and –115.266 degrees longitude to an upper point located at 43.756 degrees latitude, and –115.277 degrees longitude.

(I) Little Queens River from a lower point located at 43.843 degrees latitude, and –115.184 degrees longitude to an upper point located at 43.93 degrees latitude, and –115.143 degrees longitude. Queens River from a lower point located at 43.821 degrees latitude, and –115.208 degrees longitude to an upper point located at 43.959 degrees latitude, and –115.118 degrees longitude. Scenic Creek from a lower point located at 43.921 degrees latitude, and –115.178 degrees longitude to an upper point located at 43.901 degrees latitude, and –115.145 degrees longitude. Scott Creek from a lower point located at 43.883 degrees latitude, and –115.18 degrees longitude to an upper point located at 43.891 degrees latitude, and –115.152 degrees longitude. Tripod Creek from a lower point located at 43.895 degrees latitude, and –115.188 degrees longitude to an upper point located at 43.896 degrees latitude, and –115.154 degrees longitude.

(J) Decker Creek from a lower point located at 43.769 degrees latitude, and –115.144 degrees longitude to an upper point located at 43.718 degrees latitude, and –115.046 degrees longitude. Grouse Creek from a lower point located at 43.767 degrees latitude, and –115.122 degrees longitude to an upper point located at 43.731 degrees latitude, and –115.078 degrees longitude. Sawmill Creek from a lower point located at 43.761 degrees latitude, and –115.12 degrees longitude to an upper point located at 43.709 degrees latitude, and –115.094 degrees longitude. Yuba River from a lower point located at 43.803 degrees latitude, and –115.159 degrees longitude to an upper point located at 43.708 degrees latitude, and –115.201 degrees longitude.

(K) Trail Creek from a lower point located at 43.763 degrees latitude, and –115.145 degrees longitude to an upper point located at 43.707 degrees latitude, and –115.117 degrees longitude.

(L) Mattingly Creek from a lower point located at 43.846 degrees latitude, and –115.048 degrees longitude to an upper point located at 43.865 degrees latitude, and –114.984 degrees longitude.

(M) Hungarian Creek from a lower point located at 43.818 degrees latitude, and –115.533 degrees longitude to an upper point located at 43.818 degrees latitude, and –115.539 degrees longitude. North Fork Boise River from a lower point located at 43.713 degrees latitude, and –115.635 degrees longitude to an upper point located at 44.095 degrees latitude, and –115.225 degrees longitude. Rabbit Creek from a lower point located at 43.79 degrees latitude, and –115.602 degrees longitude to an upper point located at 43.797 degrees latitude, and –115.612 degrees longitude.

(N) Banner Creek from a lower point located at 43.983 degrees latitude, and –115.547 degrees longitude to an upper point located at 43.998 degrees latitude, and –115.542 degrees longitude. Crooked River from a lower point located at 43.853 degrees latitude, and –115.536 degrees longitude to an upper point located at 44.027 degrees latitude, and –115.337 degrees longitude. Pikes Fork from a lower point located at 43.971 degrees latitude, and –115.561 degrees longitude to an upper point located at 44.048 degrees latitude, and –115.44 degrees longitude. Ski Creek from a lower point located at 43.88 degrees latitude, and –115.58 degrees longitude to an upper point located at 43.865 degrees latitude, and –115.613 degrees longitude.

(O) Bear Creek from a lower point located at 43.938 degrees latitude, and –115.456 degrees longitude to an upper point located at 44.017 degrees latitude, and –115.405 degrees longitude. Bear River from a lower point located at 43.892 degrees latitude, and –115.488 degrees longitude to an upper point located at 43.987 degrees latitude, and –115.341 degrees longitude. Cub Creek from a lower point located at 43.98 degrees latitude, and –115.401 degrees longitude to an upper point located at 43.979 degrees latitude, and –115.352 degrees longitude. Louise Creek from a lower point located at 43.968 degrees latitude, and –115.424 degrees longitude to an upper point located at 43.964 degrees latitude, and –115.391 degrees longitude. South Fork Cub Creek from a lower point located at 43.977 degrees latitude, and –115.388 degrees longitude to an upper point located at 43.968 degrees latitude, and –115.355 degrees longitude.

(P) Trail Creek from a lower point located at 43.912 degrees latitude, and –115.406 degrees longitude to an upper point located at 43.908 degrees latitude, and –115.399 degrees longitude.

(Q) Lodgepole Creek from a lower point located at 43.93 degrees latitude, and –115.314 degrees longitude to an upper point located at 43.888 degrees latitude, and –115.294 degrees longitude.

(R) Johnson Creek from a lower point located at 43.94 degrees latitude, and –115.284 degrees longitude to an upper point located at 43.947 degrees latitude, and –115.129 degrees longitude.

(S) Big Silver Creek from a lower point located at 43.99 degrees latitude,

and –115.255 degrees longitude to an upper point located at 43.989 degrees latitude, and –115.327 degrees longitude. Little Silver Creek from a lower point located at 43.997 degrees latitude, and –115.288 degrees longitude to an upper point located at 44.001 degrees latitude, and –115.325 degrees longitude.

(T) Cow Creek from a lower point located at 43.991 degrees latitude, and −115.254 degrees longitude to an upper point located at 44.021 degrees latitude, and −115.295 degrees longitude.

(U) Ballentyne Creek from a lower point located at 44.011 degrees latitude, and −115.232 degrees longitude to an upper point located at 43.983 degrees latitude, and −115.142 degrees longitude.

(V) West Fork Creek from a lower point located at 44.056 degrees latitude, and −115.209 degrees longitude to an upper point located at 44.048 degrees latitude, and −115.246 degrees longitude.

(W) McLeod Creek from a lower point located at 44.057 degrees latitude, and −115.207 degrees longitude to an upper point located at 44.023 degrees latitude, and −115.162 degrees longitude.

(X) McPhearson Creek from a lower point located at 44.066 degrees latitude, and −115.198 degrees longitude to an upper point located at 44.038 degrees latitude, and −115.158 degrees longitude.

(iii) Critical Habitat Subunit—Lucky Peak.

(A) Lucky Peak Reservoir centered at 43.564 degrees latitude, and −115.997 degrees longitude. Mores Creek from a lower point located at 43.618 degrees latitude, and −115.999 degrees longitude to an upper point located at 43.959 degrees latitude, and −115.7 degrees longitude.

(iv) Critical Habitat Subunit—Deadwood River.

(A) Deadwood Reservoir centered at 44.309 degrees latitude, and −115.662 degrees longitude. Deadwood River from a lower point located at 44.342 degrees latitude, and −115.657 degrees longitude to an upper point located at 44.547 degrees latitude, and −115.56 degrees longitude.

(B) Daisy Creek from a lower point located at 44.26 degrees latitude, and −115.693 degrees longitude to an upper point located at 44.269 degrees latitude, and −115.747 degrees longitude. Trail Creek from a lower point located at 44.279 degrees latitude, and −115.666 degrees longitude to an upper point located at 44.239 degrees latitude, and −115.758 degrees longitude.

(C) South Fork Beaver Creek from a lower point located at 44.295 degrees latitude, and −115.685 degrees longitude to an upper point located at 44.297 degrees latitude, and −115.732 degrees longitude. Unnamed creek off South Fork Beaver Creek from a lower point located at 44.294 degrees latitude, and −115.687 degrees longitude to an upper point located at 44.283 degrees latitude, and −115.721 degrees longitude.

(D) Beaver Creek from a lower point located at 44.317 degrees latitude, and −115.684 degrees longitude to an upper point located at 44.31 degrees latitude, and −115.741 degrees longitude. Unnamed creek off Beaver Creek from a lower point located at 44.318 degrees latitude, and −115.686 degrees longitude to an upper point located at 44.336 degrees latitude, and −115.717 degrees longitude.

(E) Habit Creek from a lower point located at 44.33 degrees latitude, and −115.672 degrees longitude to an upper point located at 44.349 degrees latitude, and −115.712 degrees longitude.

(F) Basin Creek from a lower point located at 44.341 degrees latitude, and −115.658 degrees longitude to an upper point located at 44.377 degrees latitude, and −115.701 degrees longitude.

(G) Wild Buck Creek from a lower point located at 44.342 degrees latitude, and −115.657 degrees longitude to an upper point located at 44.389 degrees latitude, and −115.649 degrees longitude.

(H) Deer Creek from a lower point located at 44.396 degrees latitude, and −115.615 degrees longitude to an upper point located at 44.347 degrees latitude, and −115.548 degrees longitude. North Fork Deer Creek from a lower point located at 44.408 degrees latitude, and −115.553 degrees longitude to an upper point located at 44.452 degrees latitude, and −115.544 degrees longitude. Unnamed creek 1 off Deer Creek from a lower point located at 44.407 degrees latitude, and −115.585 degrees longitude to an upper point located at 44.425 degrees latitude, and −115.586 degrees longitude. Unnamed creek 2 off Deer Creek from a lower point located at 44.402 degrees latitude, and −115.559 degrees longitude to an upper point located at 44.388 degrees latitude, and −115.553 degrees longitude. Unnamed creek 3 off Deer Creek from a lower point located at 44.407 degrees latitude, and −115.542 degrees longitude to an upper point located at 44.422 degrees latitude, and −115.533 degrees longitude.

(I) Goat Creek from a lower point located at 44.398 degrees latitude, and −115.618 degrees longitude to an upper point located at 44.393 degrees latitude, and −115.679 degrees longitude.

(J) Bitter Creek from a lower point located at 44.406 degrees latitude, and −115.617 degrees longitude to an upper point located at 44.421 degrees latitude, and −115.677 degrees longitude.

(K) Stratton Creek from a lower point located at 44.47 degrees latitude, and −115.586 degrees longitude to an upper point located at 44.446 degrees latitude, and −115.63 degrees longitude.

(L) East Fork Deadwood River from a lower point located at 44.492 degrees latitude, and −115.574 degrees longitude to an upper point located at 44.494 degrees latitude, and −115.57 degrees longitude.

(v) Critical Habitat Subunit—Middle Fork Payette River.

(A) Middle Fork Payette River from a lower point located at 44.103 degrees latitude, and −115.999 degrees longitude to an upper point located at 44.551 degrees latitude, and −115.764 degrees longitude. Unnamed creek 1 off Middle Fork Payette River from a lower point located at 44.524 degrees latitude, and −115.774 degrees longitude to an upper point located at 44.552 degrees latitude, and −115.834 degrees longitude. Unnamed creek 2 off Middle Fork Payette River from a lower point located at 44.532 degrees latitude, and −115.772 degrees longitude to an upper point located at 44.534 degrees latitude, and −115.755 degrees longitude. Unnamed creek 3 off Middle Fork Payette River from a lower point located at 44.539 degrees latitude, and −115.77 degrees longitude to an upper point located at 44.541 degrees latitude, and −115.738 degrees longitude.

(B) Lightning Creek from a lower point located at 44.193 degrees latitude, and −115.936 degrees longitude to an upper point located at 44.233 degrees latitude, and −115.766 degrees longitude. Onion Creek from a lower point located at 44.214 degrees latitude, and −115.824 degrees longitude to an upper point located at 44.234 degrees latitude, and −115.775 degrees longitude.

(C) Long Fork Silver Creek from a lower point located at 44.382 degrees latitude, and −115.76 degrees longitude to an upper point located at 44.411 degrees latitude, and −115.679 degrees longitude. Peace Creek from a lower point located at 44.341 degrees latitude, and −115.791 degrees longitude to an upper point located at 44.356 degrees latitude, and −115.733 degrees longitude. Silver Creek from a lower point located at 44.304 degrees latitude, and −115.864 degrees longitude to an upper point located at 44.408 degrees latitude, and −115.749 degrees longitude. Ucon Creek from a lower point located at 44.371 degrees latitude,

and −115.766 degrees longitude to an upper point located at 44.379 degrees latitude, and −115.72 degrees longitude. Valley Creek from a lower point located at 44.333 degrees latitude, and −115.776 degrees longitude to an upper point located at 44.28 degrees latitude, and −115.742 degrees longitude.

(D) Bull Creek from a lower point located at 44.422 degrees latitude, and −115.813 degrees longitude to an upper point located at 44.491 degrees latitude, and −115.614 degrees longitude. Oxtail Creek from a lower point located at 44.459 degrees latitude, and −115.667 degrees longitude to an upper point located at 44.439 degrees latitude, and −115.638 degrees longitude. Sixteen−to−one Creek from a lower point located at 44.426 degrees latitude, and −115.801 degrees longitude to an upper point located at 44.467 degrees latitude, and −115.754 degrees longitude.

(vi) Critical Habitat Subunit—Weiser River.

(A) Little Weiser River from a lower point located at 44.553 degrees latitude, and −116.693 degrees longitude to an upper point located at 44.637 degrees latitude, and −116.174 degrees longitude. Weiser River from a lower point located at 44.553 degrees latitude, and −116.693 degrees longitude to an upper point located at 44.847 degrees latitude, and −116.379 degrees longitude.

(B) Anderson Creek from a lower point located at 44.527 degrees latitude, and −116.242 degrees longitude to an upper point located at 44.605 degrees latitude, and −116.186 degrees longitude.

(C) Sheep Creek from a lower point located at 44.542 degrees latitude, and −116.221 degrees longitude to an upper point located at 44.504 degrees latitude, and −116.174 degrees longitude.

(D) East Pine Creek from a lower point located at 44.652 degrees latitude, and −116.815 degrees longitude to an upper point located at 44.772 degrees latitude, and −116.769 degrees longitude.

(E) Rush Creek from a lower point located at 44.567 degrees latitude, and −116.672 degrees longitude to an upper point located at 44.789 degrees latitude, and −116.747 degrees longitude.

(F) Middle Fork Weiser River from a lower point located at 44.668 degrees latitude, and −116.483 degrees longitude to an upper point located at 44.771 degrees latitude, and −116.214 degrees longitude.

(G) Disappointment Creek from a lower point located at 44.825 degrees latitude, and −116.657 degrees longitude to an upper point located at 44.83 degrees latitude, and −116.706 degrees longitude. Grouse Creek from a lower point located at 44.826 degrees latitude, and −116.656 degrees longitude to an upper point located at 44.835 degrees latitude, and −116.707 degrees longitude. Hornet Creek from a lower point located at 44.728 degrees latitude, and −116.448 degrees longitude to an upper point located at 44.797 degrees latitude, and −116.732 degrees longitude. Mill Creek from a lower point located at 44.837 degrees latitude, and −116.619 degrees longitude to an upper point located at 44.854 degrees latitude, and −116.634 degrees longitude. North Creek from a lower point located at 44.814 degrees latitude, and −116.692 degrees longitude to an upper point located at 44.818 degrees latitude, and −116.72 degrees longitude. Olive Creek from a lower point located at 44.836 degrees latitude, and −116.627 degrees longitude to an upper point located at 44.787 degrees latitude, and −116.693 degrees longitude. Placer Creek from a lower point located at 44.808 degrees latitude, and −116.679 degrees longitude to an upper point located at 44.806 degrees latitude, and −116.737 degrees longitude. Unnamed creek 1 off Olive Creek from a lower point located at 44.812 degrees latitude, and −116.643 degrees longitude to an upper point located at 44.791 degrees latitude, and −116.648 degrees longitude. Unnamed creek 2 off Olive Creek from a lower point located at 44.801 degrees latitude, and −116.66 degrees longitude to an upper point located at 44.787 degrees latitude, and −116.665 degrees longitude. West Mill Creek from a lower point located at 44.854 degrees latitude, and −116.634 degrees longitude to an upper point located at 44.853 degrees latitude, and −116.686 degrees longitude.

(H) West Fork Weiser River from a lower point located at 44.808 degrees latitude, and −116.443 degrees longitude to an upper point located at 45.008 degrees latitude, and −116.509 degrees longitude.

(I) Lost Creek from a lower point located at 44.91 degrees latitude, and −116.495 degrees longitude to an upper point located at 45.091 degrees latitude, and −116.503 degrees longitude. Lost Valley Reservoir centered at 44.966 degrees latitude, and −116.462 degrees longitude.

(J) Dewey Creek from a lower point located at 44.807 degrees latitude, and −116.277 degrees longitude to an upper point located at 44.772 degrees latitude, and −116.275 degrees longitude. East Fork Weiser River from a lower point located at 44.847 degrees latitude, and −116.379 degrees longitude to an upper point located at 44.729 degrees latitude, and −116.278 degrees longitude.

(vii) Critical Habitat Subunit—Upper South Fork Payette River.

(A) Baron Creek from a lower point located at 44.137 degrees latitude, and −115.148 degrees longitude to an upper point located at 44.094 degrees latitude, and −115.027 degrees longitude. Deadwood River from a lower point located at 44.079 degrees latitude, and −115.657 degrees longitude to an upper point located at 44.294 degrees latitude, and −115.645 degrees longitude. North Fork Baron Creek from a lower point located at 44.131 degrees latitude, and −115.101 degrees longitude to an upper point located at 44.145 degrees latitude, and −115.077 degrees longitude. South Fork Payette River from a lower point located at 44.103 degrees latitude, and −115.999 degrees longitude to an upper point located at 43.999 degrees latitude, and −115.039 degrees longitude.

(B) Scott Creek from a lower point located at 44.223 degrees latitude, and −115.648 degrees longitude to an upper point located at 44.191 degrees latitude, and −115.761 degrees longitude. Smith Creek from a lower point located at 44.214 degrees latitude, and −115.709 degrees longitude to an upper point located at 44.2 degrees latitude, and −115.757 degrees longitude. South Fork Scott Creek from a lower point located at 44.222 degrees latitude, and −115.66 degrees longitude to an upper point located at 44.187 degrees latitude, and −115.702 degrees longitude.

(C) Ninemile Creek from a lower point located at 44.231 degrees latitude, and −115.647 degrees longitude to an upper point located at 44.232 degrees latitude, and −115.747 degrees longitude.

(D) No Man Creek from a lower point located at 44.247 degrees latitude, and −115.629 degrees longitude to an upper point located at 44.247 degrees latitude, and −115.59 degrees longitude. Unnamed creek 1 off Deadwood River from a lower point located at 44.24 degrees latitude, and −115.632 degrees longitude to an upper point located at 44.226 degrees latitude, and −115.616 degrees longitude. Unnamed creek 2 off Deadwood River from a lower point located at 44.276 degrees latitude, and −115.635 degrees longitude to an upper point located at 44.269 degrees latitude, and −115.653 degrees longitude.

(E) North Fork Whitehawk Creek from a lower point located at 44.277 degrees latitude, and −115.584 degrees longitude to an upper point located at 44.291 degrees latitude, and −115.538 degrees longitude. Whitehawk Creek from a lower point located at 44.275 degrees latitude, and −115.635 degrees

longitude to an upper point located at 44.261 degrees latitude, and −115.555 degrees longitude.

(F) East Fork Warm Springs Creek from a lower point located at 44.294 degrees latitude, and −115.621 degrees longitude to an upper point located at 44.317 degrees latitude, and −115.537 degrees longitude. Middle Fork Warm Springs Creek from a lower point located at 44.326 degrees latitude, and −115.598 degrees longitude to an upper point located at 44.351 degrees latitude, and −115.565 degrees longitude. Unnamed creek off East Fork Warm Springs Creek from a lower point located at 44.312 degrees latitude, and −115.577 degrees longitude to an upper point located at 44.324 degrees latitude, and −115.563 degrees longitude. Unnamed creek off Middle Fork Warm Springs Creek from a lower point located at 44.332 degrees latitude, and −115.579 degrees longitude to an upper point located at 44.324 degrees latitude, and −115.54 degrees longitude. Warm Springs Creek from a lower point located at 44.279 degrees latitude, and −115.63 degrees longitude to an upper point located at 44.367 degrees latitude, and −115.579 degrees longitude.

(G) Wilson Creek from a lower point located at 44.292 degrees latitude, and −115.641 degrees longitude to an upper point located at 44.366 degrees latitude, and −115.564 degrees longitude.

(H) Clear Creek from a lower point located at 44.082 degrees latitude, and −115.61 degrees longitude to an upper point located at 44.229 degrees latitude, and −115.408 degrees longitude. Long Creek from a lower point located at 44.129 degrees latitude, and −115.579 degrees longitude to an upper point located at 44.153 degrees latitude, and −115.532 degrees longitude. South Fork Clear Creek from a lower point located at 44.232 degrees latitude, and −115.439 degrees longitude to an upper point located at 44.183 degrees latitude, and −115.483 degrees longitude. Unnamed creek off Long Creek from a lower point located at 44.148 degrees latitude, and −115.546 degrees longitude to an upper point located at 44.137 degrees latitude, and −115.534 degrees longitude.

(I) Kettle Creek from a lower point located at 44.107 degrees latitude, and −115.443 degrees longitude to an upper point located at 44.147 degrees latitude, and −115.442 degrees longitude.

(J) East Fork Eightmile Creek from a lower point located at 44.133 degrees latitude, and −115.406 degrees longitude to an upper point located at 44.2 degrees latitude, and −115.354 degrees longitude. Eightmile Creek from a lower point located at 44.118 degrees latitude, and −115.412 degrees longitude to an upper point located at 44.251 degrees latitude, and −115.399 degrees longitude. Unnamed creek 1 off Eightmile Creek from a lower point located at 44.153 degrees latitude, and −115.414 degrees longitude to an upper point located at 44.162 degrees latitude, and −115.451 degrees longitude. Unnamed creek 2 off Eightmile Creek from a lower point located at 44.173 degrees latitude, and −115.4 degrees longitude to an upper point located at 44.195 degrees latitude, and −115.419 degrees longitude. Unnamed creek 3 off Eightmile Creek from a lower point located at 44.174 degrees latitude, and −115.397 degrees longitude to an upper point located at 44.198 degrees latitude, and −115.418 degrees longitude.

(K) Tenmile Creek from a lower point located at 44.12 degrees latitude, and −115.385 degrees longitude to an upper point located at 44.087 degrees latitude, and −115.236 degrees longitude. Unnamed creek 1 off Tenmile Creek from a lower point located at 44.062 degrees latitude, and −115.322 degrees longitude to an upper point located at 44.08 degrees latitude, and −115.303 degrees longitude. Unnamed creek 2 off Tenmile Creek from a lower point located at 44.062 degrees latitude, and −115.304 degrees longitude to an upper point located at 44.041 degrees latitude, and −115.298 degrees longitude. Unnamed creek 3 off Tenmile Creek from a lower point located at 44.069 degrees latitude, and −115.286 degrees longitude to an upper point located at 44.046 degrees latitude, and −115.287 degrees longitude.

(L) Chapman Creek from a lower point located at 44.137 degrees latitude, and −115.314 degrees longitude to an upper point located at 44.097 degrees latitude, and −115.289 degrees longitude.

(M) Gates Creek from a lower point located at 44.292 degrees latitude, and −115.305 degrees longitude to an upper point located at 44.348 degrees latitude, and −115.327 degrees longitude. Warm Spring Creek from a lower point located at 44.144 degrees latitude, and −115.303 degrees longitude to an upper point located at 44.292 degrees latitude, and −115.305 degrees longitude.

(N) Canyon Creek from a lower point located at 44.172 degrees latitude, and −115.243 degrees longitude to an upper point located at 44.303 degrees latitude, and −115.23 degrees longitude. North Fork Canyon Creek from a lower point located at 44.25 degrees latitude, and −115.214 degrees longitude to an upper point located at 44.261 degrees latitude, and −115.198 degrees longitude. South Fork Canyon Creek from a lower point located at 44.237 degrees latitude, and −115.213 degrees longitude to an upper point located at 44.226 degrees latitude, and −115.191 degrees longitude. Unnamed creek off North Fork Canyon Creek from a lower point located at 44.261 degrees latitude, and −115.198 degrees longitude to an upper point located at 44.241 degrees latitude, and −115.165 degrees longitude.

(O) Wapiti Creek from a lower point located at 44.162 degrees latitude, and −115.19 degrees longitude to an upper point located at 44.117 degrees latitude, and −115.201 degrees longitude.

(P) Trail Creek from a lower point located at 44.146 degrees latitude, and −115.153 degrees longitude to an upper point located at 44.164 degrees latitude, and −115.092 degrees longitude.

(viii) Critical Habitat Subunit—North Fork Payette River.

(A) Foolhen Creek from a lower point located at 44.687 degrees latitude, and −115.878 degrees longitude to an upper point located at 44.739 degrees latitude, and −115.842 degrees longitude. Gold Fork River from a lower point located at 44.697 degrees latitude, and −116.053 degrees longitude to an upper point located at 44.674 degrees latitude, and −115.896 degrees longitude. Lodgepole Creek from a lower point located at 44.69 degrees latitude, and −115.866 degrees longitude to an upper point located at 44.728 degrees latitude, and −115.843 degrees longitude. North Fork Gold Fork River from a lower point located at 44.674 degrees latitude, and −115.896 degrees longitude to an upper point located at 44.756 degrees latitude, and −115.8 degrees longitude. South Fork Gold Fork River from a lower point located at 44.674 degrees latitude, and −115.896 degrees longitude to an upper point located at 44.653 degrees latitude, and −115.839 degrees longitude. Spruce Creek from a lower point located at 44.689 degrees latitude, and −115.87 degrees longitude to an upper point located at 44.672 degrees latitude, and −115.848 degrees longitude. Unnamed creek 1 off North Fork Gold Fork River from a lower point located at 44.704 degrees latitude, and −115.833 degrees longitude to an upper point located at 44.726 degrees latitude, and −115.838 degrees longitude. Unnamed creek 2 off North Fork Gold Fork River from a lower point located at 44.704 degrees latitude, and −115.824 degrees longitude to an upper point located at 44.679 degrees latitude, and −115.827 degrees longitude. Unnamed creek 3 off North Fork Gold Fork River from a lower point located at 44.706 degrees latitude, and −115.819 degrees longitude to an upper point located at 44.679 degrees latitude, and −115.811 degrees longitude. Unnamed creek 4 off

North Fork Gold Fork River from a lower point located at 44.708 degrees latitude, and −115.817 degrees longitude to an upper point located at 44.747 degrees latitude, and −115.811 degrees longitude.

(B) Kennally Creek from a lower point located at 44.683 degrees latitude, and −115.974 degrees longitude to an upper point located at 44.781 degrees latitude, and −115.863 degrees longitude. Rapid Creek from a lower point located at 44.749 degrees latitude, and −115.957 degrees longitude to an upper point located at 44.861 degrees latitude, and −115.904 degrees longitude.

(C) Cascade Reservoir centered at 44.599 degrees latitude, and −116.097 degrees longitude.

(D) Lake Fork from a lower point located at 44.75 degrees latitude, and −116.096 degrees longitude to an upper point located at 44.917 degrees latitude, and −115.928 degrees longitude. Little Payette Lake centered at 44.916 degrees latitude, and −116.033 degrees longitude. North Fork Lake Fork from a lower point located at 44.923 degrees latitude, and −115.945 degrees longitude to an upper point located at 44.998 degrees latitude, and −115.921 degrees longitude. South Fork Lake Fork from a lower point located at 44.917 degrees latitude, and −115.928 degrees longitude to an upper point located at 44.875 degrees latitude, and −115.902 degrees longitude.

(ix) Critical Habitat Subunit—Squaw Creek.

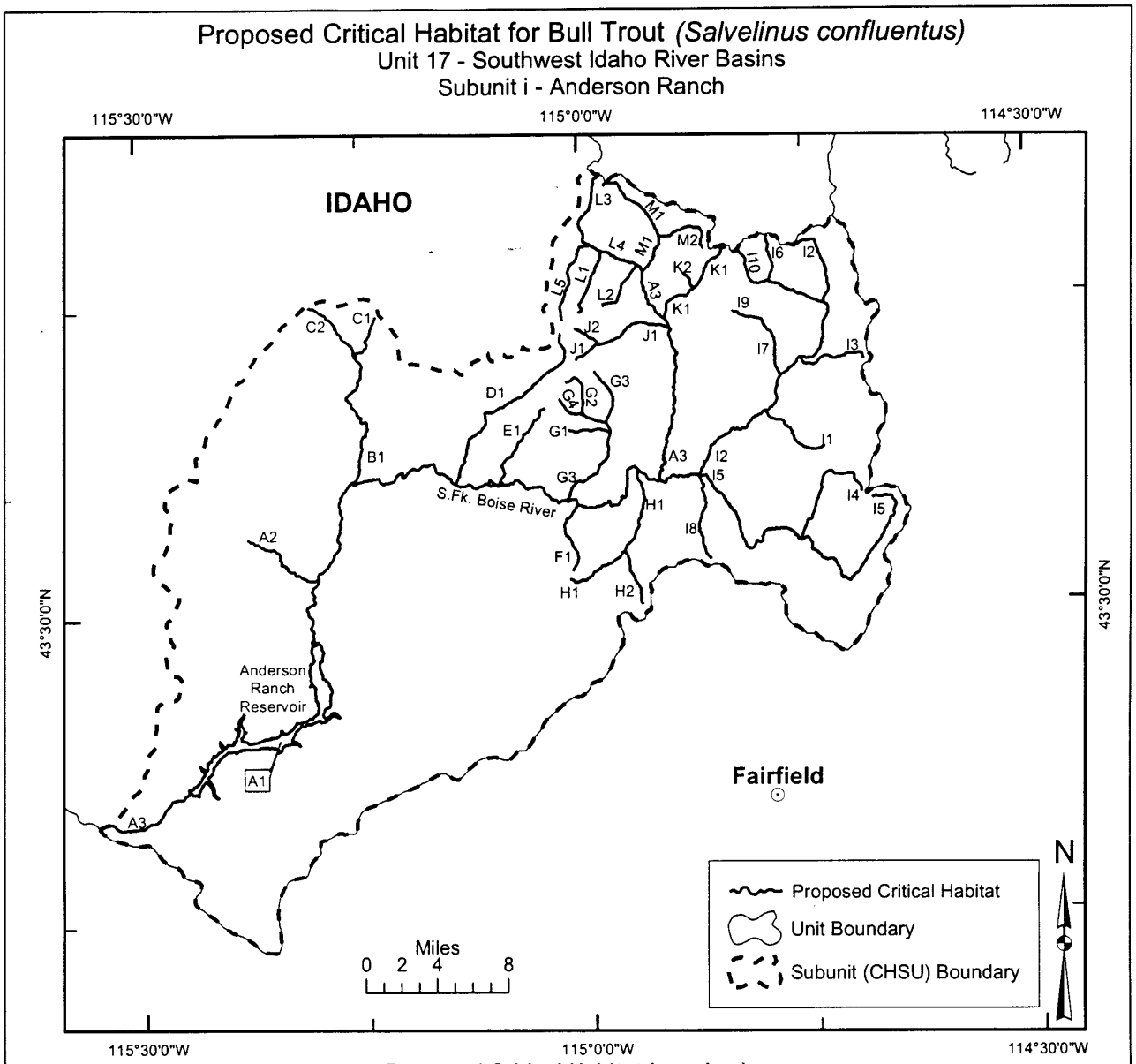
(A) Poison Creek from a lower point located at 44.479 degrees latitude, and −116.185 degrees longitude to an upper point located at 44.491 degrees latitude, and −116.162 degrees longitude. Pole Creek from a lower point located at 44.471 degrees latitude, and −116.218 degrees longitude to an upper point located at 44.494 degrees latitude, and −116.202 degrees longitude. Squaw Creek from a lower point located at 43.936 degrees latitude, and −116.366 degrees longitude to an upper point located at 44.436 degrees latitude, and −116.152 degrees longitude. Unnamed creek 1 off Squaw Creek from a lower point located at 44.47 degrees latitude, and −116.219 degrees longitude to an upper point located at 44.455 degrees latitude, and −116.199 degrees longitude. Unnamed creek 2 off Squaw Creek from a lower point located at 44.479 degrees latitude, and −116.193 degrees longitude to an upper point located at 44.46 degrees latitude, and −116.165 degrees longitude. Unnamed creek 3 off Squaw Creek from a lower point located at 44.476 degrees latitude, and −116.19 degrees longitude to an upper point located at 44.457 degrees latitude, and −116.174 degrees longitude.

(B) Antelope Creek from a lower point located at 44.375 degrees latitude, and −116.197 degrees longitude to an upper point located at 44.4 degrees latitude, and −116.168 degrees longitude. Renwick Creek from a lower point located at 44.367 degrees latitude, and −116.195 degrees longitude to an upper point located at 44.397 degrees latitude, and −116.139 degrees longitude. Second Fork Squaw Creek from a lower point located at 44.309 degrees latitude, and −116.31 degrees longitude to an upper point located at 44.404 degrees latitude, and −116.191 degrees longitude. Third Fork Squaw Creek from a lower point located at 44.373 degrees latitude, and −116.3 degrees longitude to an upper point located at 44.453 degrees latitude, and −116.156 degrees longitude. Unnamed creek 1 off Third Fork Squaw Creek from a lower point located at 44.424 degrees latitude, and −116.21 degrees longitude to an upper point located at 44.42 degrees latitude, and −116.148 degrees longitude. Unnamed creek 2 off Third Fork Squaw Creek from a lower point located at 44.416 degrees latitude, and −116.201 degrees longitude to an upper point located at 44.426 degrees latitude, and −116.16 degrees longitude. Unnamed creek 3 off Third Fork Squaw Creek from a lower point located at 44.415 degrees latitude, and −116.19 degrees longitude to an upper point located at 44.421 degrees latitude, and −116.171 degrees longitude. Unnamed creek 4 off Third Fork Squaw Creek from a lower point located at 44.434 degrees latitude, and −116.203 degrees longitude to an upper point located at 44.433 degrees latitude, and −116.168 degrees longitude.

(C) Joes Creek from a lower point located at 44.335 degrees latitude, and −116.176 degrees longitude to an upper point located at 44.372 degrees latitude, and −116.147 degrees longitude. Sage Hen Creek from a lower point located at 44.351 degrees latitude, and −116.209 degrees longitude to an upper point located at 44.373 degrees latitude, and −116.133 degrees longitude. Sage Hen Reservoir centered at 44.329 degrees latitude, and −116.183 degrees longitude. Unnamed creek Into Sage Hen Reservoir from a lower point located at 44.332 degrees latitude, and −116.174 degrees longitude to an upper point located at 44.317 degrees latitude, and −116.161 degrees longitude.

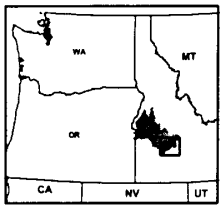
Note: Maps follow for Unit 17, Subunit i; Subunit ii; Subunit iii; Subunit iv; Subunit v; Subunit vi; Subunit vii; Subunit viii; and Subunit ix.

BILLING CODE 4310–55–P

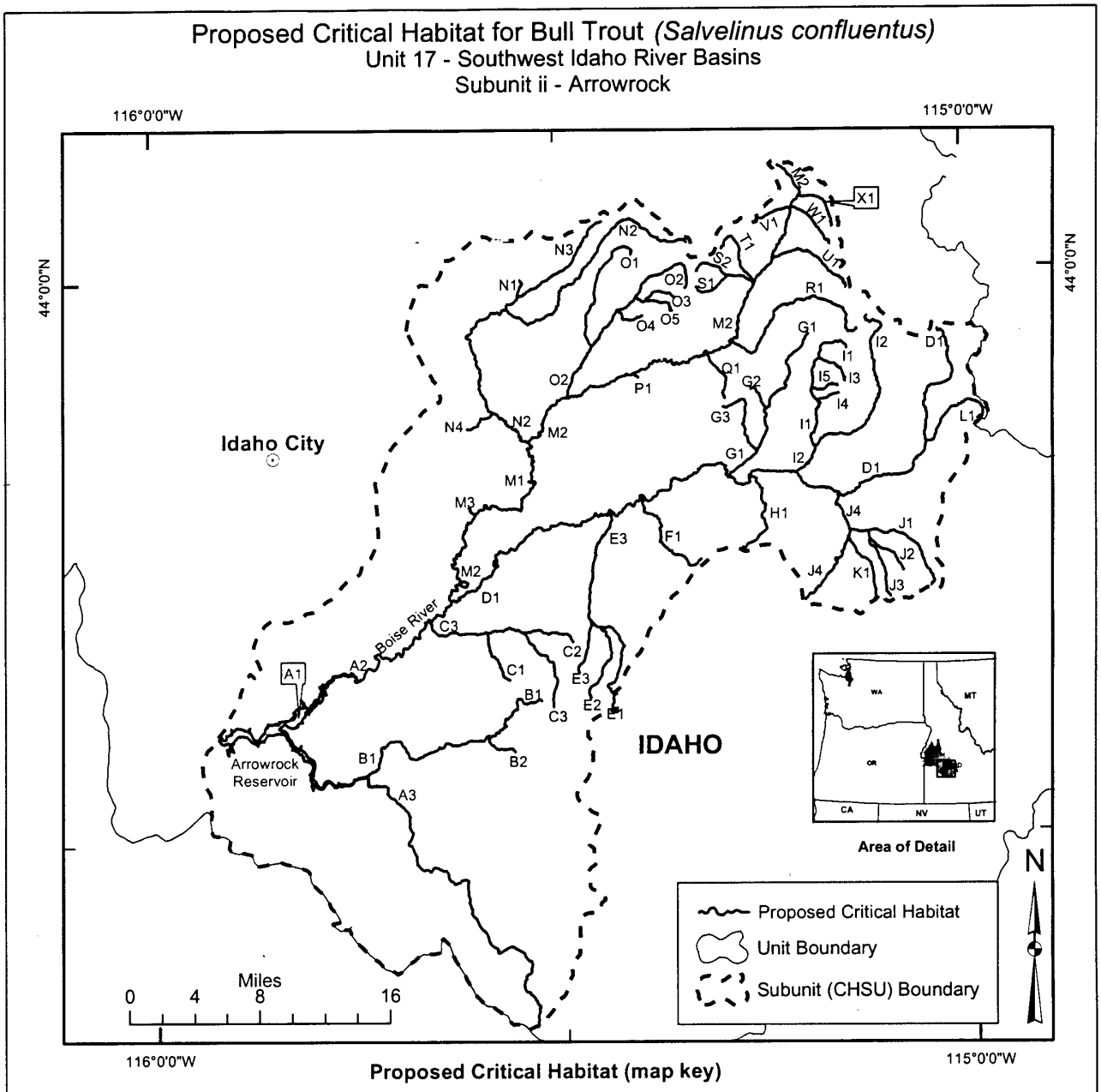


Proposed Critical Habitat (map key)

A1-Anderson Ranch Reservoir
A2-Dog Creek
A3-South Fork Boise River
B1-Feather River
C1-East Fork Elk Creek
C2-Elk Creek
D1-Willow Creek
E1-Big Water Gulch
F1-Deadwood Creek
G1-Burnt Log Creek
G2-East Fork Skeleton Creek
G3-Skeleton Creek
G4-West Fork Skeleton Creek
H1-Boardman Creek
H2-Smokey Dome Canyon
I1-Big Peak Creek
I2-Big Smoky Creek
I3-Bluff Creek
I4-Carrie Creek
I5-Little Smoky Creek
I6-Loggy Creek
I7-North Fork Big Smoky Creek
I8-Salt Creek
I9-Snowslide Creek
I10-West Fork Big Smoky Creek
J1-Bear Creek
J2-Goat Creek
K1-Emma Creek
K2-UNNAMED - off Emma Creek
L1-Bass Creek
L2-Little Bear Creek
L3-North Fork Ross Fork
L4-Ross Fork
L5-South Fork Ross Fork
M1-Johnson Creek
M2-Vienna Creek

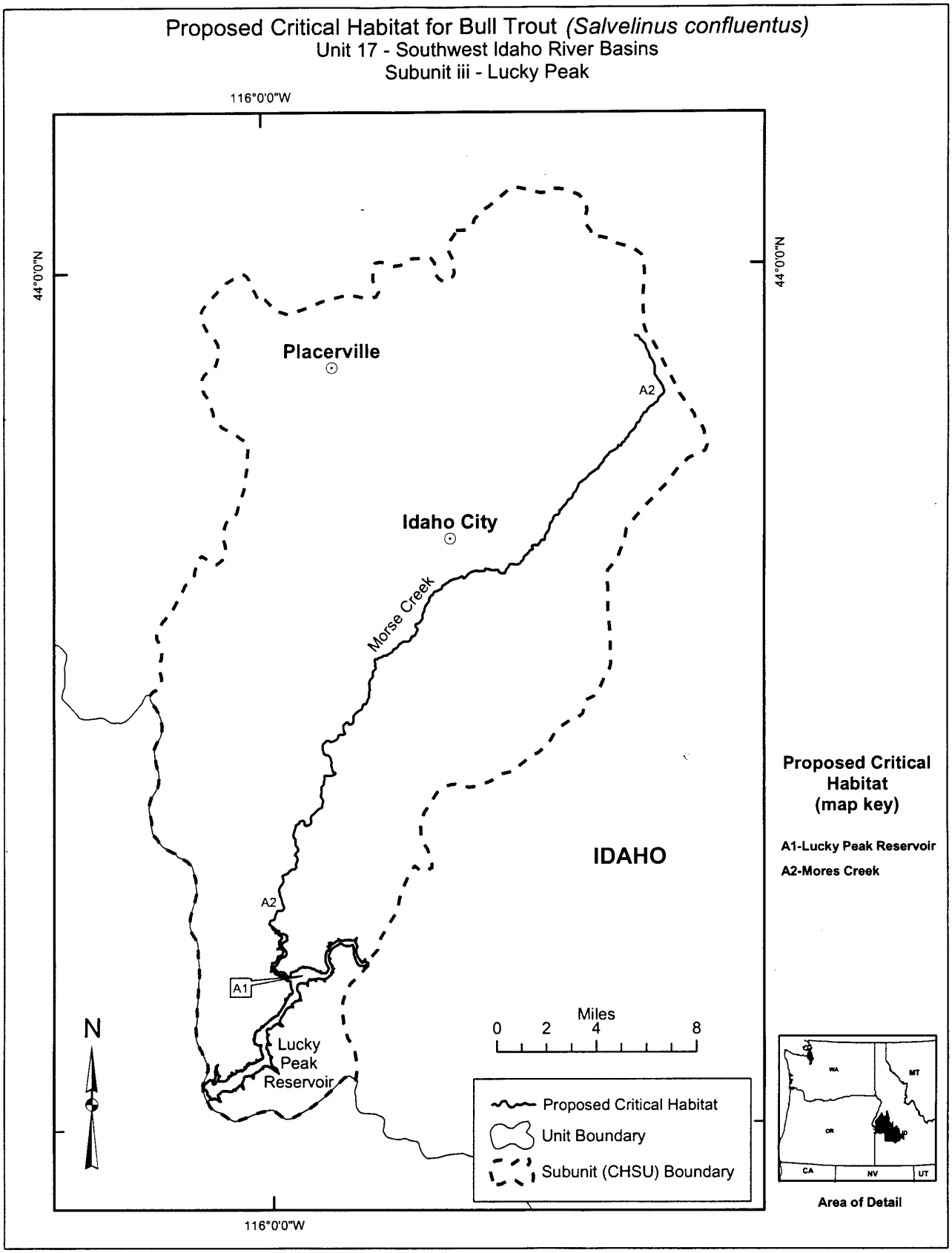


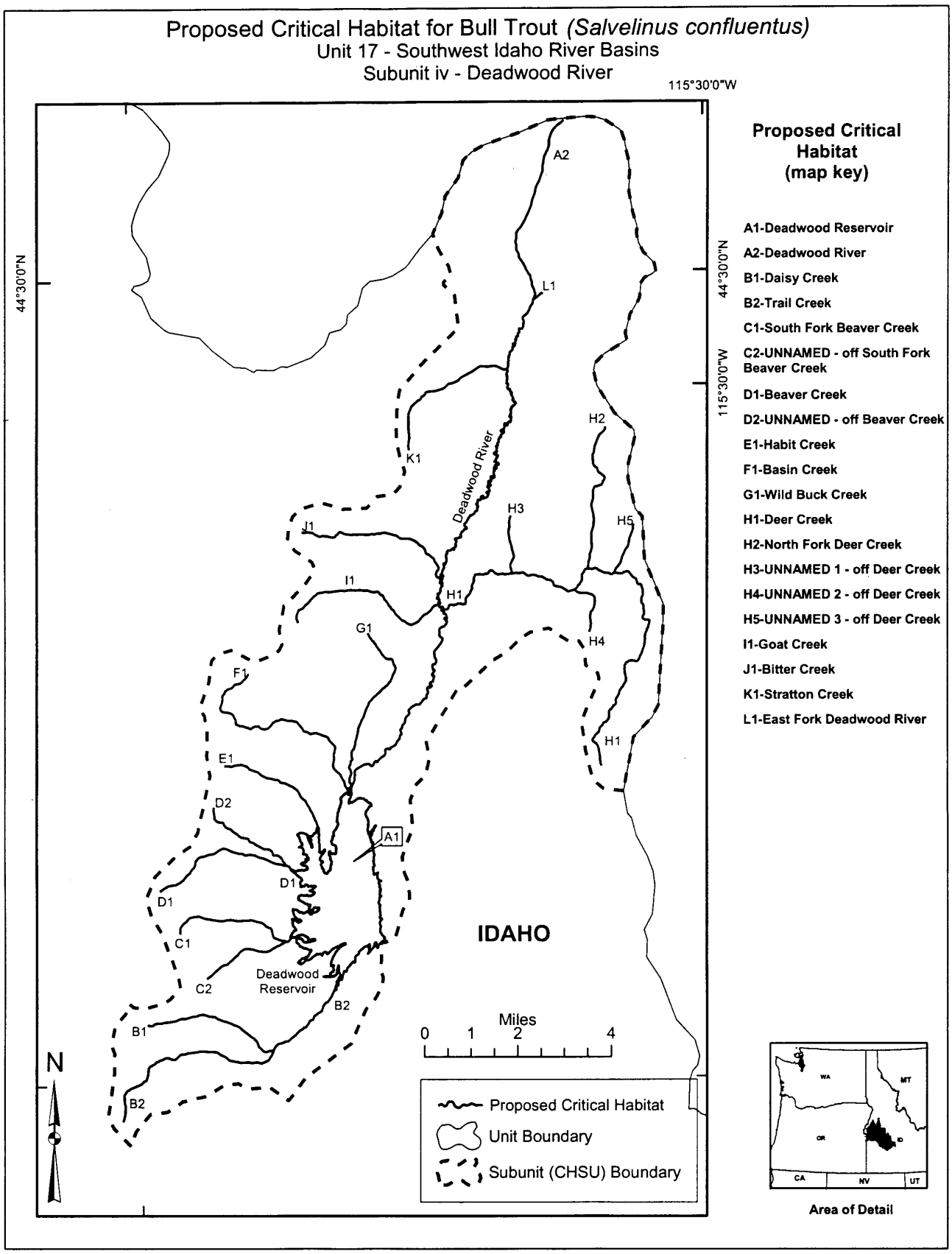
Area of Detail

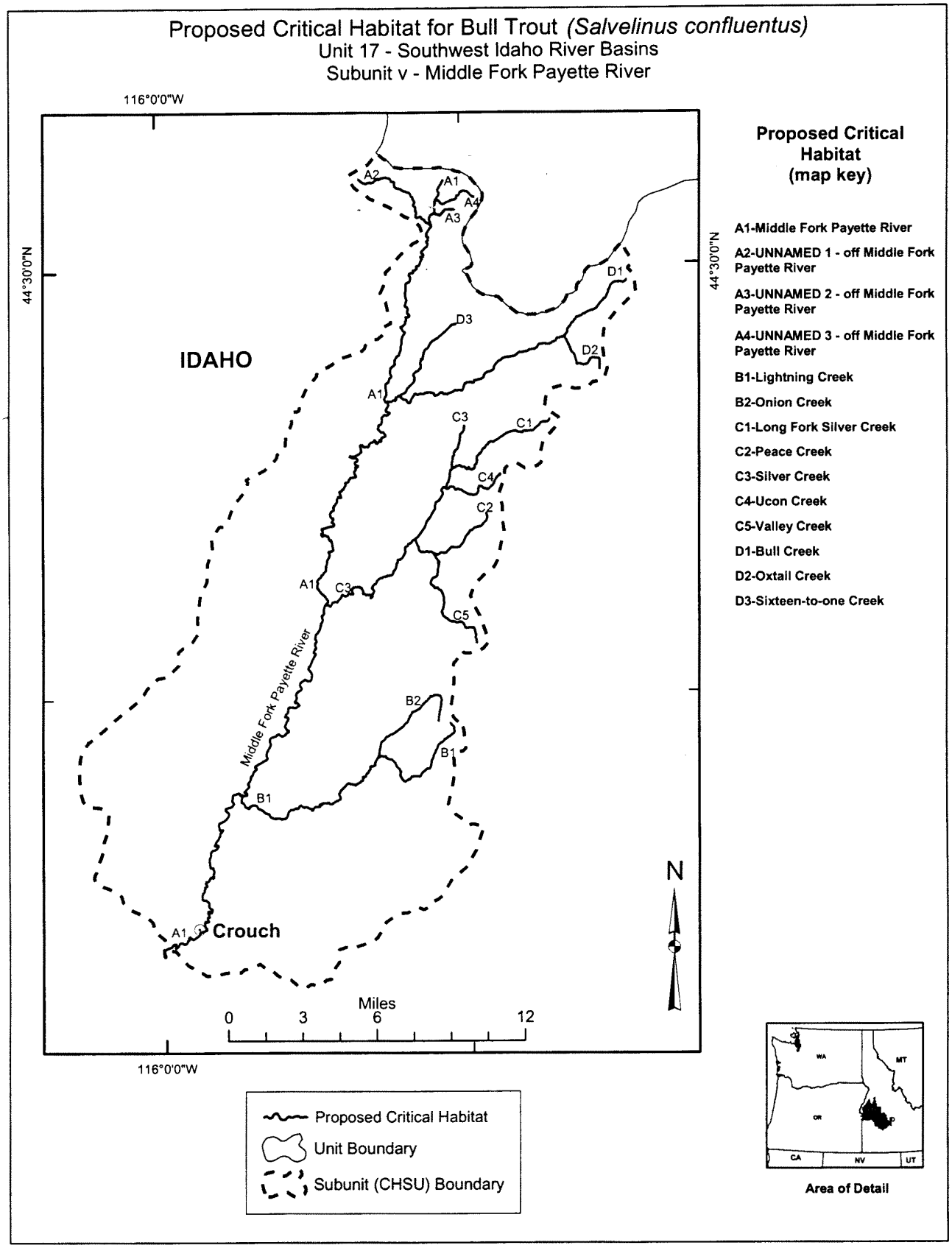


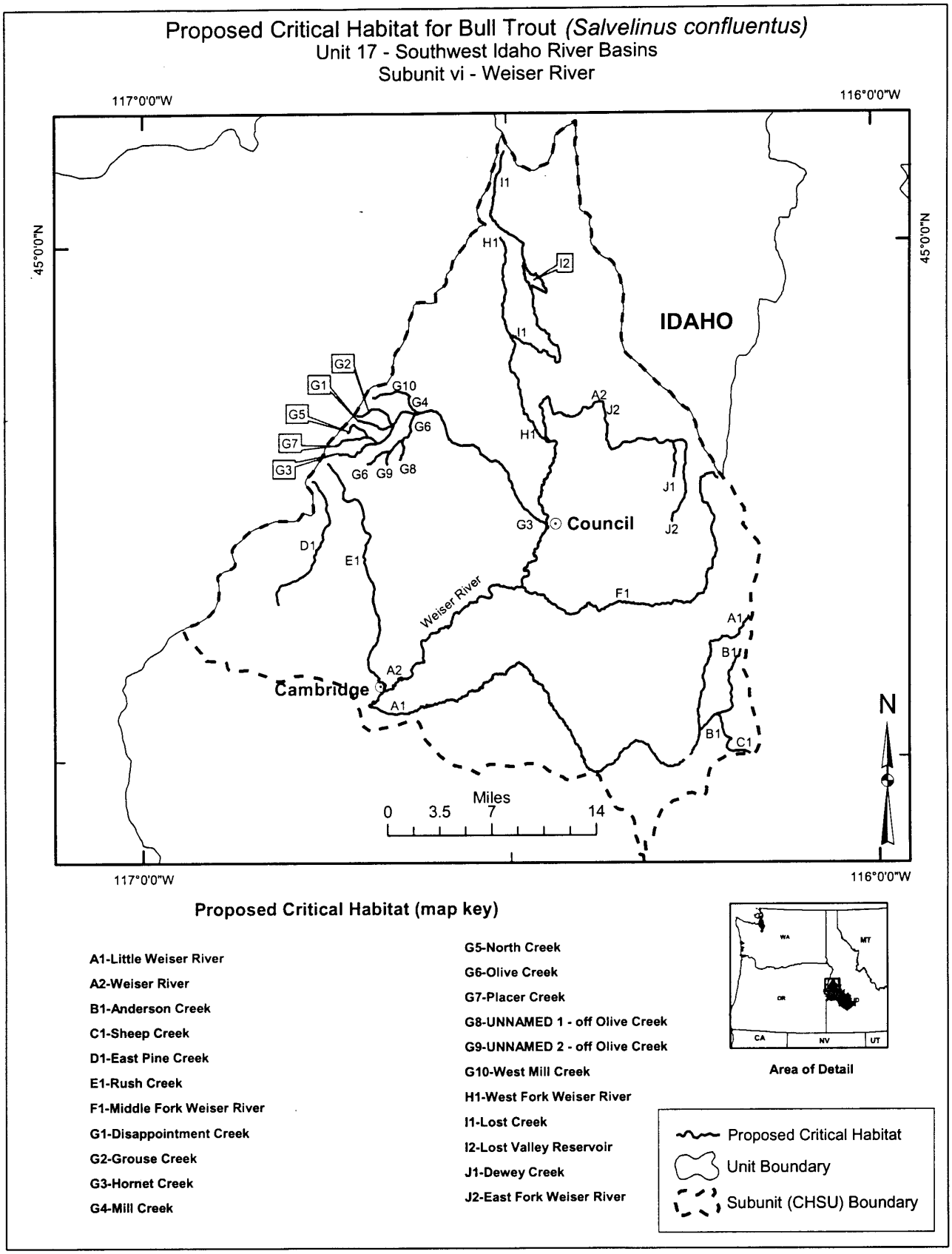
Proposed Critical Habitat (map key)

A1-Arrowrock Reservoir
A2-Boise River
A3-South Fork Boise River
B1-Rattlesnake Creek
B2-Russel Gulch
C1-Devils Creek
C2-East Fork Sheep Creek
C3-Sheep Creek
D1-Middle Fork Boise River
E1-East Fork Roaring River
E2-Middle Fork Roaring River
E3-Roaring River
F1-Buck Creek
G1-Black Warrior Creek
G2-UNNAMED - off Black Warrior Creek
G3-West Warrior Creek
H1-Bald Mountain Creek
I1-Little Queens River
I2-Queens River
I3-Scenic Creek
I4-Scott Creek
I5-Tripod Creek
J1-Decker Creek
J2-Grouse Creek
J3-Sawmill Creek
J4-Yuba River
K1-Trail Creek-Yuba
L1-Mattingly Creek
M1-Hungarian Creek
M2-North Fork Boise River
M3-Rabbit Creek
N1-Banner Creek
N2-Crooked River
N3-Pikes Fork
N4-Ski Creek
O1-Bear Creek
O2-Bear River
O3-Cub Creek
O4-Louise Creek
O5-South Fork Cub Creek
P1-Trail Creek
Q1-Lodgepole Creek
R1-Johnson Creek
S1-Big Silver Creek
S2-Little Silver Creek
T1-Cow Creek
U1-Ballentyne Creek
V1-West Fork Creek
W1-McLeod Creek
X1-McPhearson Creek

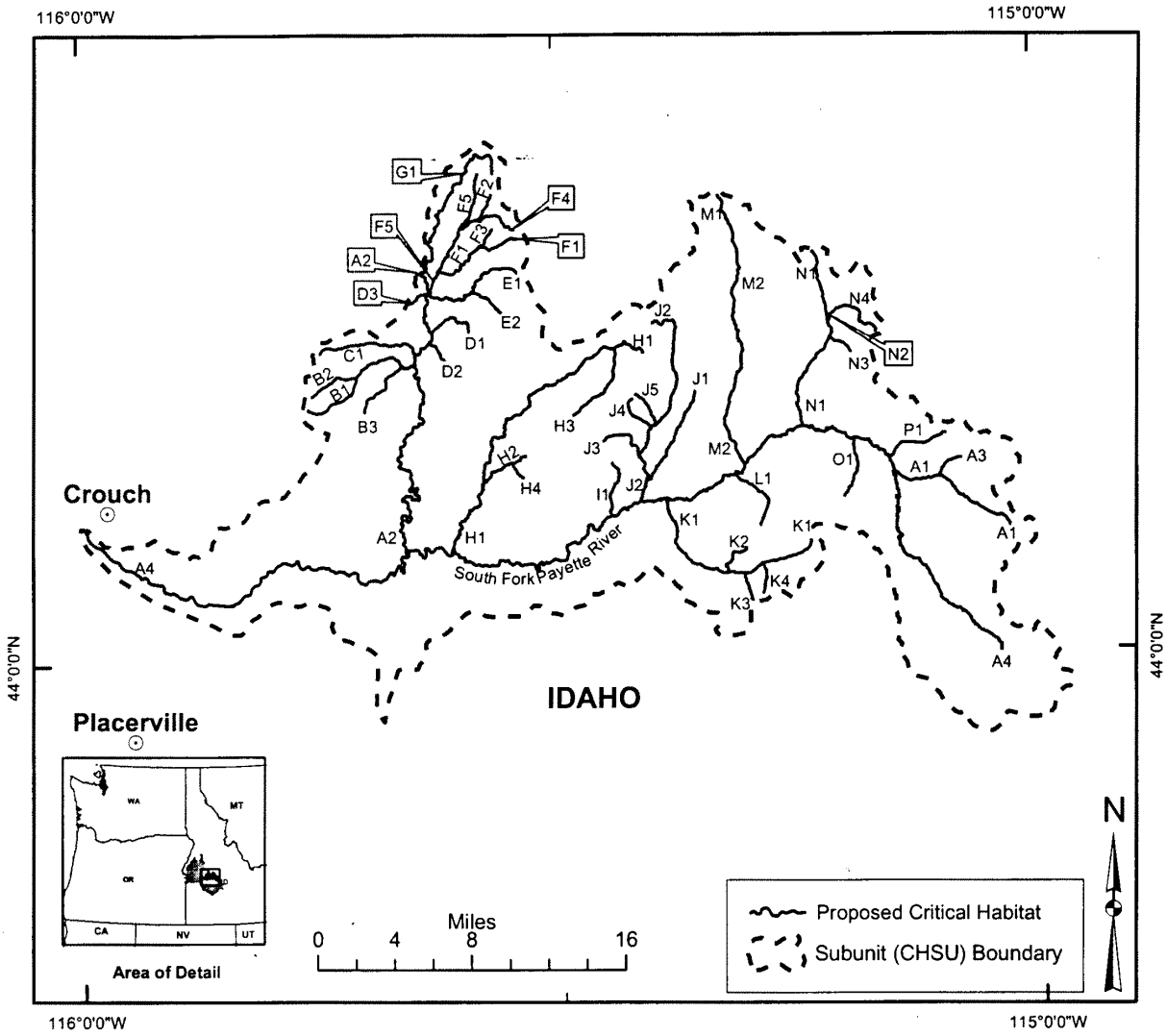

Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 17 - Southwest Idaho River Basins
Subunit iii - Lucky Peak
116°0'0"W
44°0'0"N
Placerville
Idaho City
Morse Creek
A2
A1
Lucky Peak Reservoir
IDAHO
N
Miles
0 2 4 8
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Proposed Critical Habitat (map key)
A1-Lucky Peak Reservoir
A2-Mores Creek
WA
MT
OR
ID
CA
NV
UT
Area of Detail


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 17 - Southwest Idaho River Basins
Subunit iv - Deadwood River
115°30'0"W
44°30'0"N
Proposed Critical Habitat (map key)
A1-Deadwood Reservoir
A2-Deadwood River
B1-Daisy Creek
B2-Trail Creek
C1-South Fork Beaver Creek
C2-UNNAMED - off South Fork Beaver Creek
D1-Beaver Creek
D2-UNNAMED - off Beaver Creek
E1-Habit Creek
F1-Basin Creek
G1-Wild Buck Creek
H1-Deer Creek
H2-North Fork Deer Creek
H3-UNNAMED 1 - off Deer Creek
H4-UNNAMED 2 - off Deer Creek
H5-UNNAMED 3 - off Deer Creek
I1-Goat Creek
J1-Bitter Creek
K1-Stratton Creek
L1-East Fork Deadwood River
Deadwood River
Deadwood Reservoir
IDAHO
Miles
0 1 2 4
N
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
WA
MT
OR
ID
CA
NV
UT
Area of Detail


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 17 - Southwest Idaho River Basins
Subunit v - Middle Fork Payette River
116°0'0"W
44°30'0"N
IDAHO
Middle Fork Payette River
Crouch
A1
A2
A3
A4
B1
B2
C1
C2
C3
C4
C5
D1
D2
D3
N
Miles
0
3
6
12
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Proposed Critical Habitat (map key)
A1-Middle Fork Payette River
A2-UNNAMED 1 - off Middle Fork Payette River
A3-UNNAMED 2 - off Middle Fork Payette River
A4-UNNAMED 3 - off Middle Fork Payette River
B1-Lightning Creek
B2-Onion Creek
C1-Long Fork Silver Creek
C2-Peace Creek
C3-Silver Creek
C4-Ucon Creek
C5-Valley Creek
D1-Bull Creek
D2-Oxtail Creek
D3-Sixteen-to-one Creek
WA
MT
OR
ID
CA
NV
UT
Area of Detail

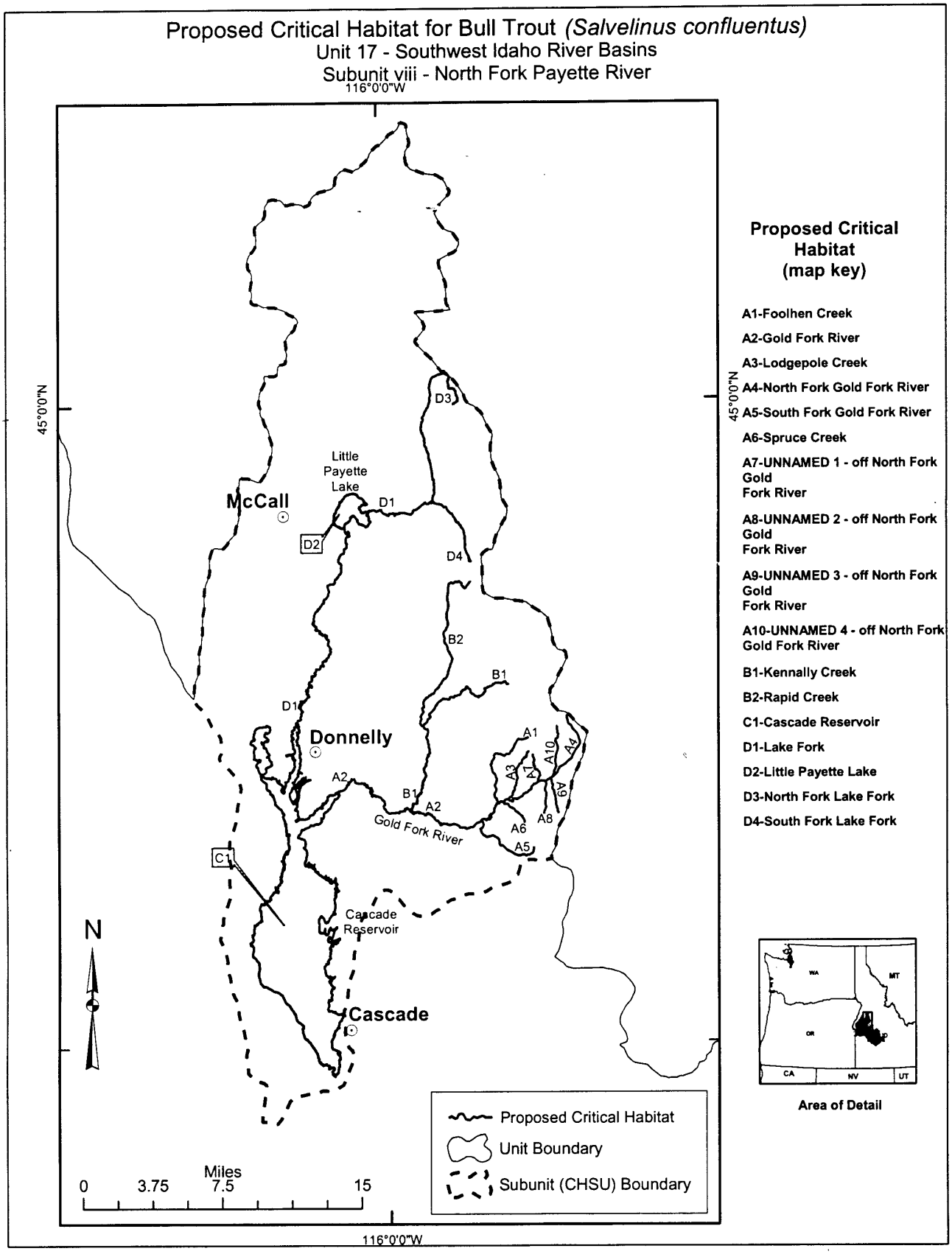

Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 17 - Southwest Idaho River Basins
Subunit vi - Weiser River
117°0'0"W
116°0'0"W
45°0'0"N
IDAHO
Council
Cambridge
Weiser River
I1
H1
I2
G1
G2
G3
G4
G5
G6
G7
G8
G9
G10
A1
A2
B1
C1
D1
E1
F1
J1
J2
N
Miles
0
3.5
7
14
Proposed Critical Habitat (map key)
A1-Little Weiser River
A2-Weiser River
B1-Anderson Creek
C1-Sheep Creek
D1-East Pine Creek
E1-Rush Creek
F1-Middle Fork Weiser River
G1-Disappointment Creek
G2-Grouse Creek
G3-Hornet Creek
G4-Mill Creek
G5-North Creek
G6-Olive Creek
G7-Placer Creek
G8-UNNAMED 1 - off Olive Creek
G9-UNNAMED 2 - off Olive Creek
G10-West Mill Creek
H1-West Fork Weiser River
I1-Lost Creek
I2-Lost Valley Reservoir
J1-Dewey Creek
J2-East Fork Weiser River
WA
MT
OR
ID
CA
NV
UT
Area of Detail
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary

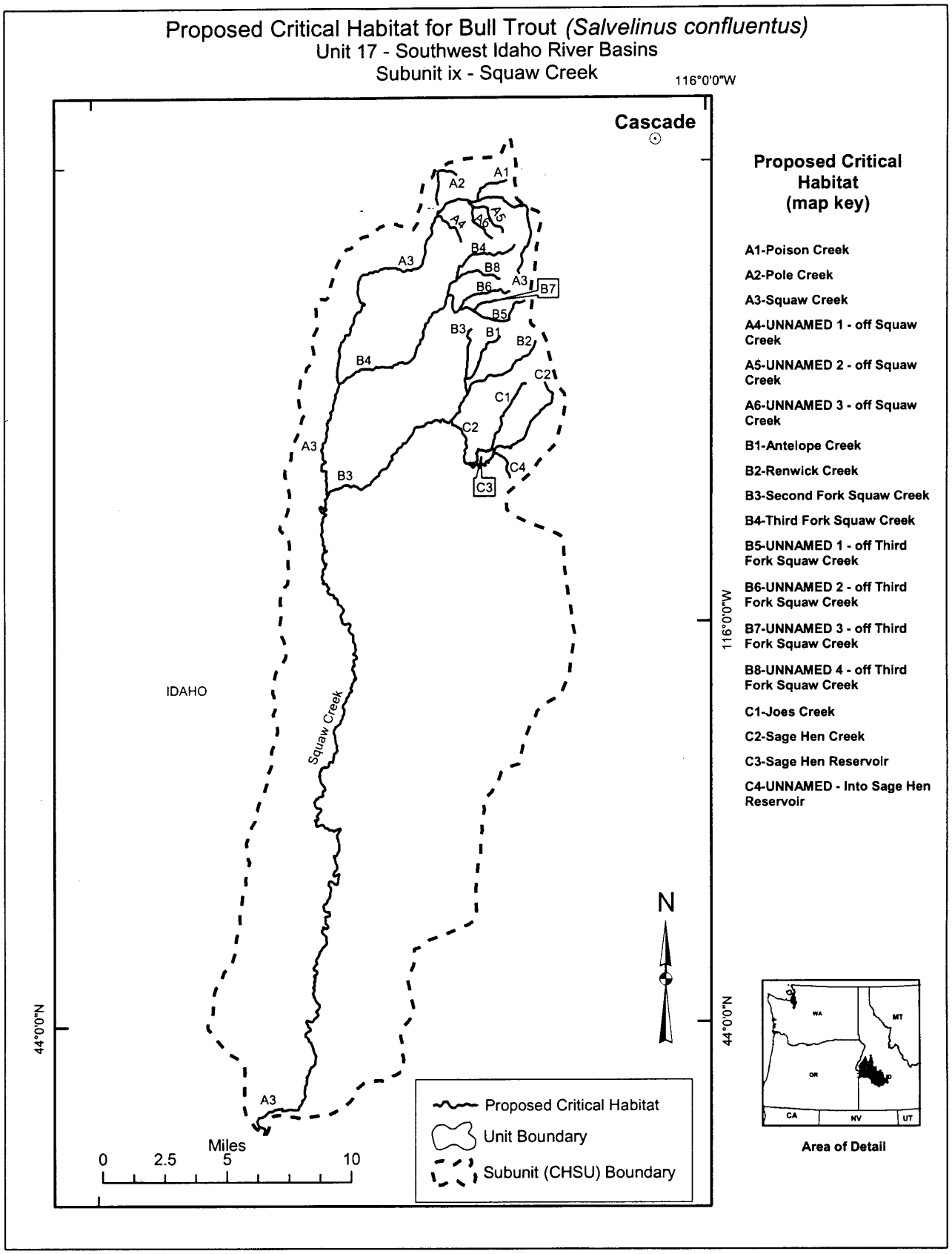
Proposed Critical Habitat for Bull Trout *(Salvelinus confluentus)*
Unit 17 - Southwest Idaho River Basins
Subunit vii - Upper South Fork Payette River



Proposed Critical Habitat (map key)

A1-Baron Creek
A2-Deadwood River
A3-North Fork Baron Creek
A4-South Fork Payette River
B1-Scott Creek
B2-Smith Creek
B3-South Fork Scott Creek
C1-Ninemile Creek
D1-No Man Creek
D2-UNNAMED 1 - off Deadwood River
D3-UNNAMED 2 - off Deadwood River
E1-North Fork Whitehawk Creek
E2-Whitehawk Creek
F1-East Fork Warm Springs Creek
F2-Middle Fork Warm Springs Creek
F3-UNNAMED - off East Fork Warm Springs Creek
F4-UNNAMED - off Middle Fork Warm Springs Creek
F5-Warm Springs Creek
G1-Wilson Creek
H1-Clear Creek
H2-Long Creek
H3-South Fork Clear Creek
H4-UNNAMED - off Long Creek
I1-Kettle Creek
J1-East Fork Eightmile Creek
J2-Eightmile Creek
J3-UNNAMED 1 - off Eightmile Creek
J4-UNNAMED 2 - off Eightmile Creek
J5-UNNAMED 3 - off Eightmile Creek
K1-Tenmile Creek
K2-UNNAMED 1 - off Tenmile Creek
K3-UNNAMED 2 - off Tenmile Creek
K4-UNNAMED 3 - off Tenmile Creek
L1-Chapman Creek
M1-Gates Creek
M2-Warm Spring Creek
N1-Canyon Creek
N2-North Fork Canyon Creek
N3-South Fork Canyon Creek
N4-UNNAMED - off North Fork Canyon Creek
O1-Wapiti Creek
P1-Trail Creek


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 17 - Southwest Idaho River Basins
Subunit viii - North Fork Payette River
116°0'0"W
45°0'0"N
Little Payette Lake
McCall
D1
D2
D3
D4
B1
B2
Donnelly
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
Gold Fork River
C1
Cascade Reservoir
Cascade
N
Miles
0
3.75
7.5
15
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Proposed Critical Habitat (map key)
A1-Foolhen Creek
A2-Gold Fork River
A3-Lodgepole Creek
A4-North Fork Gold Fork River
A5-South Fork Gold Fork River
A6-Spruce Creek
A7-UNNAMED 1 - off North Fork Gold Fork River
A8-UNNAMED 2 - off North Fork Gold Fork River
A9-UNNAMED 3 - off North Fork Gold Fork River
A10-UNNAMED 4 - off North Fork Gold Fork River
B1-Kennally Creek
B2-Rapid Creek
C1-Cascade Reservoir
D1-Lake Fork
D2-Little Payette Lake
D3-North Fork Lake Fork
D4-South Fork Lake Fork
WA
MT
OR
CA
NV
UT
Area of Detail



BILLING CODE 4310–55–C

(2) Unit 18—Little Lost River Basin.

(i) Firebox Creek from a lower point located at 44.443 degrees latitude, and −113.38 degrees longitude to an upper point located at 44.434 degrees latitude, and −113.362 degrees longitude. Little Lost River from a lower point located at 43.883 degrees latitude, and −113.096 degrees longitude to an upper point located at 44.452 degrees latitude, and −113.375 degrees longitude. Right Fork Little Lost River from a lower point located at 44.446 degrees latitude, and −113.378 degrees longitude to an upper point located at 44.45 degrees latitude, and −113.37 degrees longitude.

(ii) Badger Creek from a lower point located at 44.059 degrees latitude, and −113.232 degrees longitude to an upper point located at 44.118 degrees latitude, and −113.131 degrees longitude. Bunting Canyon Creek from a lower point located at 44.11 degrees latitude, and −113.137 degrees longitude to an upper point located at 44.107 degrees latitude, and −113.098 degrees longitude.

(iii) Unnamed creek—off Williams Creek from a lower point located at 44.135 degrees latitude, and −113.196 degrees longitude to an upper point located at 44.13 degrees latitude, and −113.175 degrees longitude. Williams Creek from a lower point located at 44.122 degrees latitude, and −113.237 degrees longitude to an upper point located at 44.135 degrees latitude, and −113.196 degrees longitude.

(iv) Big Creek from a lower point located at 44.063 degrees latitude, and −113.429 degrees longitude to an upper point located at 44.062 degrees latitude, and −113.503 degrees longitude. Wet Creek from a lower point located at 44.14 degrees latitude, and −113.244 degrees longitude to an upper point located at 44.027 degrees latitude, and −113.473 degrees longitude.

(v) Warm Creek from a lower point located at 44.306 degrees latitude, and −113.337 degrees longitude to an upper point located at 44.31 degrees latitude, and −113.302 degrees longitude.

(vi) North Fork Squaw Creek from a lower point located at 44.356 degrees latitude, and −113.329 degrees longitude to an upper point located at 44.38 degrees latitude, and −113.329 degrees longitude. Squaw Creek from a lower point located at 44.334 degrees latitude, and −113.356 degrees longitude to an upper point located at 44.375 degrees latitude, and −113.304 degrees longitude. Unnamed creek off Squaw Creek from a lower point located at 44.359 degrees latitude, and −113.325 degrees longitude to an upper point located at 44.36 degrees latitude, and −113.314 degrees longitude.

(vii) Mill Creek from a lower point located at 44.357 degrees latitude, and −113.374 degrees longitude to an upper point located at 44.387 degrees latitude, and −113.344 degrees longitude.

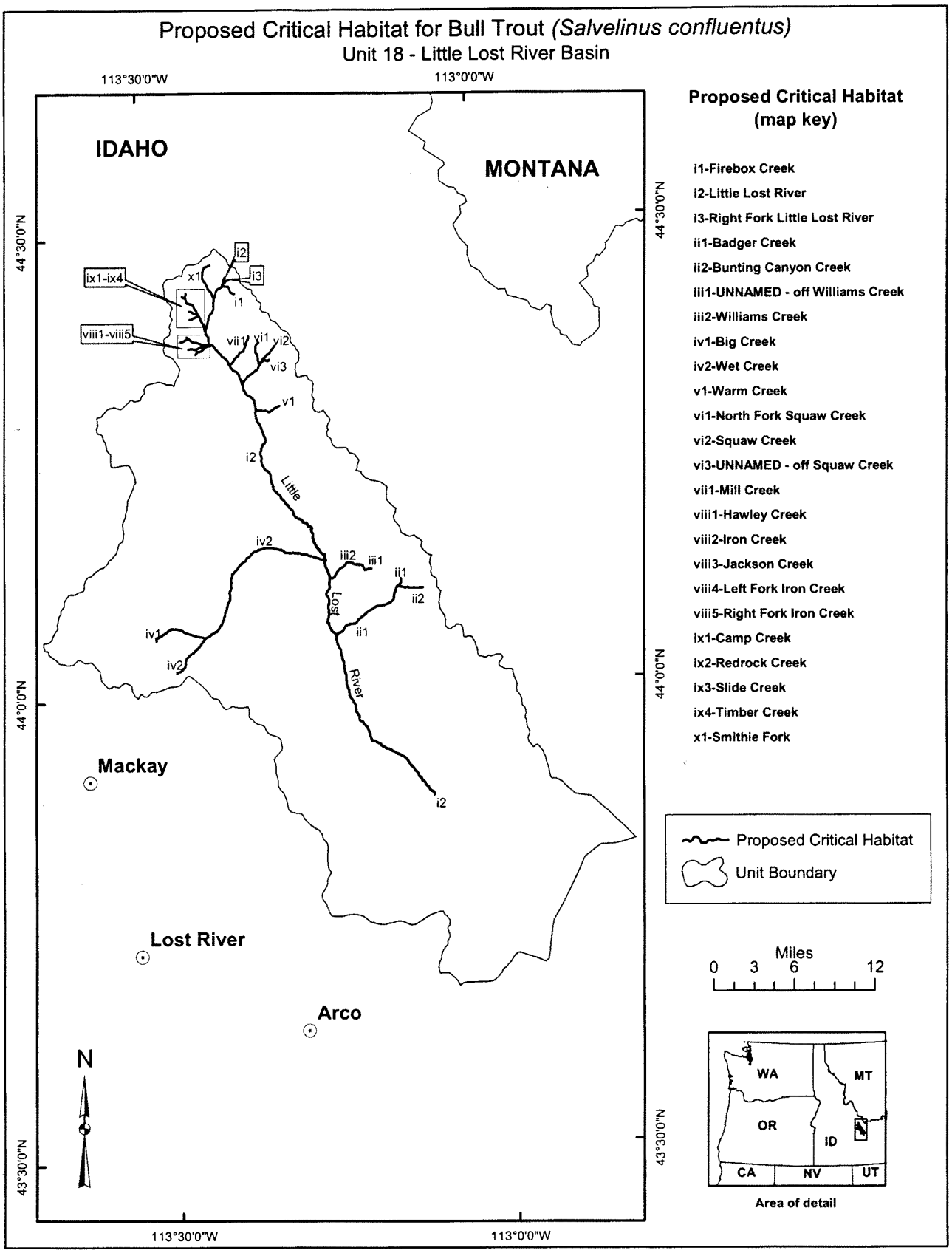
(viii) Hawley Creek from a lower point located at 44.379 degrees latitude, and −113.403 degrees longitude to an upper point located at 44.37 degrees latitude, and −113.425 degrees longitude. Iron Creek from a lower point located at 44.379 degrees latitude, and −113.4 degrees longitude to an upper point located at 44.387 degrees latitude, and −113.434 degrees longitude. Jackson Creek from a lower point located at 44.38 degrees latitude, and −113.412 degrees longitude to an upper point located at 44.376 degrees latitude, and −113.435 degrees longitude. Left Fork Iron Creek from a lower point located at 44.387 degrees latitude, and −113.434 degrees longitude to an upper point located at 44.384 degrees latitude, and −113.446 degrees longitude. Right Fork Iron Creek from a lower point located at 44.387 degrees latitude, and −113.434 degrees longitude to an upper point located at 44.389 degrees latitude, and −113.437 degrees longitude.

(ix) Camp Creek from a lower point located at 44.411 degrees latitude, and −113.417 degrees longitude to an upper point located at 44.408 degrees latitude, and −113.432 degrees longitude. Redrock Creek from a lower point located at 44.414 degrees latitude, and −113.419 degrees longitude to an upper point located at 44.417 degrees latitude, and −113.432 degrees longitude. Slide Creek from a lower point located at 44.432 degrees latitude, and −113.436 degrees longitude to an upper point located at 44.433 degrees latitude, and −113.441 degrees longitude. Timber Creek from a lower point located at 44.394 degrees latitude, and −113.408 degrees longitude to an upper point located at 44.437 degrees latitude, and −113.436 degrees longitude.

(x) Smithie Fork from a lower point located at 44.43 degrees latitude, and −113.393 degrees longitude to an upper point located at 44.466 degrees latitude, and −113.397 degrees longitude.

Note: Map follows for Unit 18.

BILLING CODE 4310–55–P



(23) Unit 19—Lower Columbia River Basin.

(i) Critical Habitat Subunit—Lewis River.

(A) Lewis River from a lower point located at 45.85 degrees latitude, and

−122.782 degrees longitude to an upper point located at 46.216 degrees latitude, and −121.667 degrees longitude.

(B) Lake Merwin centered at 45.985 degrees latitude, and −122.485 degrees longitude. Speelyai Creek from a lower point located at 45.988 degrees latitude, and −122.406 degrees longitude to an upper point located at 46.008 degrees latitude, and −122.346 degrees longitude.

(C) Cougar Creek from a lower point located at 46.055 degrees latitude, and −122.292 degrees longitude to an upper point located at 46.071 degrees latitude, and −122.267 degrees longitude. Ole Creek from a lower point located at 46.055 degrees latitude, and −122.236 degrees longitude to an upper point located at 46.047 degrees latitude, and −122.237 degrees longitude. Rain Creek from a lower point located at 46.051 degrees latitude, and −122.238 degrees longitude to an upper point located at 46.053 degrees latitude, and −122.222 degrees longitude. Yale Lake centered at 46.012 degrees latitude, and −122.311 degrees longitude.

(D) Swift Creek from a lower point located at 46.083 degrees latitude, and −122.198 degrees longitude to an upper point located at 46.085 degrees latitude, and −122.202 degrees longitude. Swift Creek Reservoir centered at 46.056 degrees latitude, and −122.113 degrees longitude. Unnamed creek off Swift Creek Reservoir from a lower point located at 46.043 degrees latitude, and −122.038 degrees longitude to an upper point located at 46.03 degrees latitude, and −122.024 degrees longitude.

(E) Pine Creek from a lower point located at 46.071 degrees latitude, and −122.016 degrees longitude to an upper point located at 46.142 degrees latitude, and −122.095 degrees longitude. Rush Creek from a lower point located at 46.075 degrees latitude, and −121.936 degrees longitude to an upper point located at 46.055 degrees latitude, and −121.915 degrees longitude. Unnamed creek 1 off Pine Creek from a lower point located at 46.092 degrees latitude, and −122.058 degrees longitude to an upper point located at 46.099 degrees latitude, and −122.068 degrees longitude. Unnamed creek 2 off Pine Creek from a lower point located at 46.104 degrees latitude, and −122.062 degrees longitude to an upper point located at 46.14 degrees latitude, and −122.081 degrees longitude. Unnamed creek 3 off Pine Creek from a lower point located at 46.12 degrees latitude, and −122.076 degrees longitude to an upper point located at 46.123 degrees latitude, and −122.087 degrees longitude.

(ii) Critical Habitat Subunit—White Salmon River.

(A) Northwestern Lake centered at 45.775 degrees latitude, and −121.529 degrees longitude. White Salmon River from a lower point located at 45.723 degrees latitude, and −121.521 degrees longitude to an upper point located at 45.897 degrees latitude, and −121.503 degrees longitude.

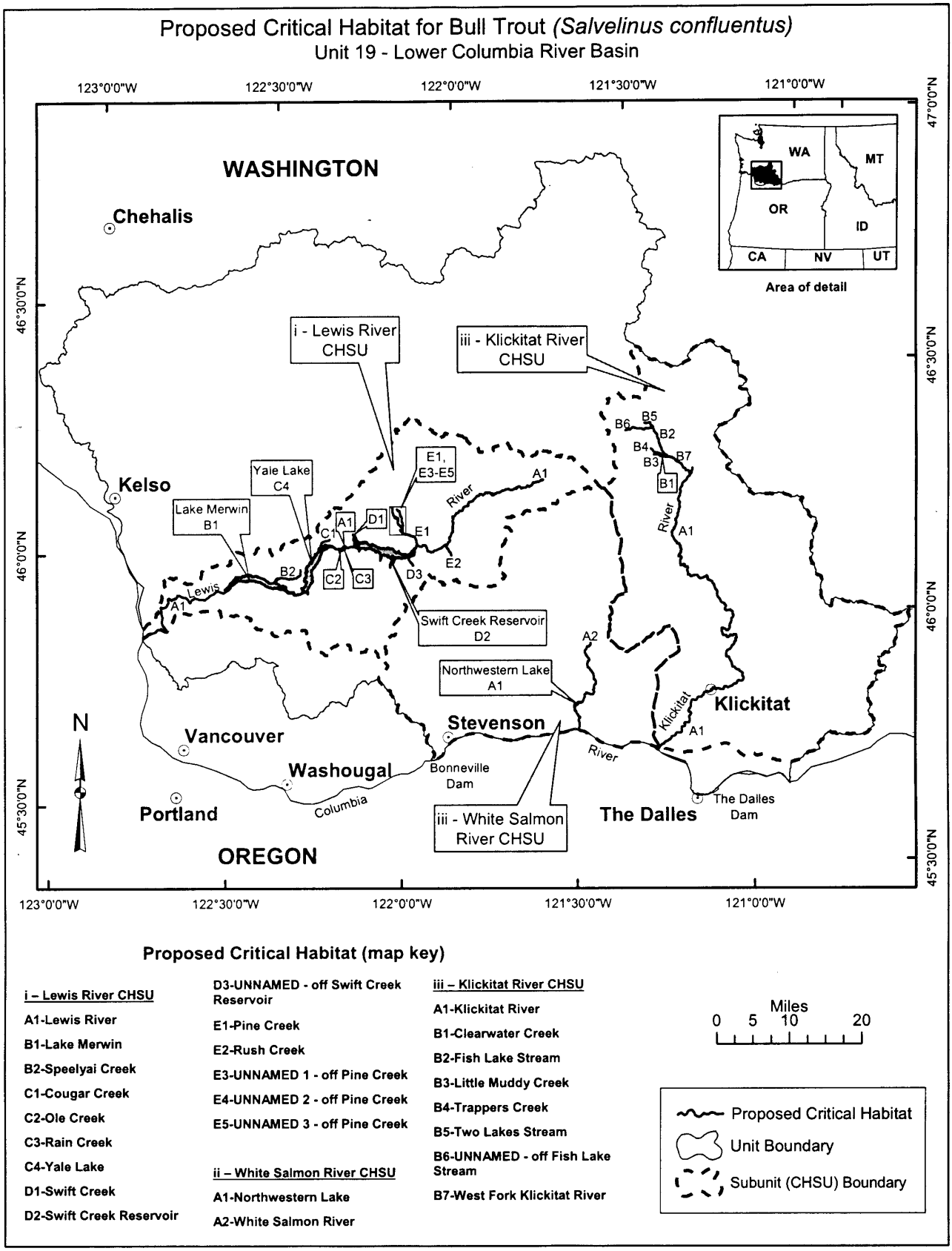
(B) [Reserved]

(iii) Critical Habitat Subunit—Klickitat River.

(A) Klickitat River from a lower point located at 45.691 degrees latitude, and −121.293 degrees longitude to an upper point located at 46.255 degrees latitude, and −121.239 degrees longitude.

(B) Clearwater Creek from a lower point located at 46.276 degrees latitude, and −121.327 degrees longitude to an upper point located at 46.278 degrees latitude, and −121.33 degrees longitude. Fish Lake Stream from a lower point located at 46.275 degrees latitude, and −121.312 degrees longitude to an upper point located at 46.342 degrees latitude, and −121.368 degrees longitude. Little Muddy Creek from a lower point located at 46.275 degrees latitude, and −121.312 degrees longitude to an upper point located at 46.278 degrees latitude, and −121.352 degrees longitude. Trappers Creek from a lower point located at 46.275 degrees latitude, and −121.33 degrees longitude to an upper point located at 46.29 degrees latitude, and −121.362 degrees longitude. Two Lakes Stream from a lower point located at 46.342 degrees latitude, and −121.368 degrees longitude to an upper point located at 46.34 degrees latitude, and −121.384 degrees longitude. Unnamed creek off Fish Lake Stream from a lower point located at 46.331 degrees latitude, and −121.359 degrees longitude to an upper point located at 46.323 degrees latitude, and −121.437 degrees longitude. West Fork Klickitat River from a lower point located at 46.242 degrees latitude, and −121.246 degrees longitude to an upper point located at 46.275 degrees latitude, and −121.312 degrees longitude.

Note: Map follows for Unit 19.



BILLING CODE 4310–55–C

(24) Unit 20—Middle Columbia River Basin.

(i) Yakima River from a lower point located at 46.529 degrees latitude, and −120.472 degrees longitude to an upper point located at 47.322 degrees latitude, and −121.339 degrees longitude.

(ii) Ahtanum Creek from a lower point located at 46.529 degrees latitude, and −120.472 degrees longitude to an upper point located at 46.523 degrees latitude, and −120.853 degrees longitude. Middle Fork Ahtanum Creek from a lower point located at 46.518 degrees latitude, and −121.014 degrees longitude to an upper point located at 46.507 degrees latitude, and −121.179 degrees longitude. North Fork Ahtanum Creek from a lower point located at 46.523 degrees latitude, and −120.853 degrees longitude to an upper point located at 46.538 degrees latitude, and −121.211 degrees longitude. Shellneck Creek from a lower point located at 46.531 degrees latitude, and −121.158 degrees longitude to an upper point located at 46.516 degrees latitude, and −121.187 degrees longitude. South Fork Ahtanum Creek from a lower point located at 46.523 degrees latitude, and −120.853 degrees longitude to an upper point located at 46.454 degrees latitude, and −121.118 degrees longitude.

(iii) Naches River from a lower point located at 46.63 degrees latitude, and −120.514 degrees longitude to an upper point located at 46.989 degrees latitude, and −121.094 degrees longitude.

(iv) Tieton River from a lower point located at 46.746 degrees latitude, and −120.786 degrees longitude to an upper point located at 46.656 degrees latitude, and −121.129 degrees longitude.

(v) North Fork Tieton River from a lower point located at 46.635 degrees latitude, and −121.261 degrees longitude to an upper point located at 46.508 degrees latitude, and −121.435 degrees longitude. Rimrock Lake centered at 46.639 degrees latitude, and −121.179 degrees longitude.

(vi) Bear Creek from a lower point located at 46.539 degrees latitude, and −121.259 degrees longitude to an upper point located at 46.54 degrees latitude, and −121.281 degrees longitude. Grey Creek from a lower point located at 46.592 degrees latitude, and −121.222 degrees longitude to an upper point located at 46.594 degrees latitude, and −121.225 degrees longitude. Short And Dirty Creek from a lower point located at 46.617 degrees latitude, and −121.149 degrees longitude to an upper point located at 46.616 degrees latitude, and −121.148 degrees longitude. South Fork Tieton River from a lower point located at 46.627 degrees latitude, and −121.132 degrees longitude to an upper point located at 46.496 degrees latitude, and −121.314 degrees longitude. Spruce Creek from a lower point located at 46.591 degrees latitude, and −121.218 degrees longitude to an upper point located at 46.586 degrees latitude, and −121.211 degrees longitude.

(vii) Indian Creek from a lower point located at 46.641 degrees latitude, and −121.248 degrees longitude to an upper point located at 46.696 degrees latitude, and −121.3 degrees longitude.

(viii) Clear Lake centered at 46.629 degrees latitude, and −121.279 degrees longitude.

(ix) Dog Creek from a lower point located at 46.787 degrees latitude, and −121.167 degrees longitude to an upper point located at 46.794 degrees latitude, and −121.177 degrees longitude. Hindoo Creek from a lower point located at 46.785 degrees latitude, and −121.163 degrees longitude to an upper point located at 46.781 degrees latitude, and −121.181 degrees longitude. Little Wildcat Creek from a lower point located at 46.731 degrees latitude, and −121.234 degrees longitude to an upper point located at 46.687 degrees latitude, and −121.266 degrees longitude. Rattlesnake Creek from a lower point located at 46.82 degrees latitude, and −120.929 degrees longitude to an upper point located at 46.76 degrees latitude, and −121.315 degrees longitude.

(x) Little Naches River from a lower point located at 46.989 degrees latitude, and −121.094 degrees longitude to an upper point located at 47.015 degrees latitude, and −121.133 degrees longitude.

(xi) Crow Creek from a lower point located at 47.015 degrees latitude, and −121.133 degrees longitude to an upper point located at 47.017 degrees latitude, and −121.317 degrees longitude.

(xii) Bumping Lake centered at 46.851 degrees latitude, and −121.326 degrees longitude. Bumping River from a lower point located at 46.989 degrees latitude, and −121.094 degrees longitude to an upper point located at 46.868 degrees latitude, and −121.298 degrees longitude.

(xiii) Deep Creek from a lower point located at 46.844 degrees latitude, and −121.316 degrees longitude to an upper point located at 46.804 degrees latitude, and −121.321 degrees longitude.

(xiv) American River from a lower point located at 46.976 degrees latitude, and −121.157 degrees longitude to an upper point located at 46.901 degrees latitude, and −121.415 degrees longitude. Kettle Creek from a lower point located at 46.942 degrees latitude, and −121.326 degrees longitude to an upper point located at 46.917 degrees latitude, and −121.341 degrees longitude. Timber Creek from a lower point located at 46.914 degrees latitude, and −121.385 degrees longitude to an upper point located at 46.907 degrees latitude, and −121.381 degrees longitude. Union Creek from a lower point located at 46.932 degrees latitude, and −121.357 degrees longitude to an upper point located at 46.937 degrees latitude, and −121.361 degrees longitude.

(xv) North Fork Taneaum Creek from a lower point located at 47.112 degrees latitude, and −120.932 degrees longitude to an upper point located at 47.109 degrees latitude, and −121.144 degrees longitude. South Fork Taneaum Creek from a lower point located at 47.112 degrees latitude, and −120.932 degrees longitude to an upper point located at 47.081 degrees latitude, and −121.083 degrees longitude. Taneaum Creek from a lower point located at 47.092 degrees latitude, and −120.708 degrees longitude to an upper point located at 47.112 degrees latitude, and −120.932 degrees longitude.

(xvi) DeRoux Creek from a lower point located at 47.419 degrees latitude, and −120.94 degrees longitude to an upper point located at 47.442 degrees latitude, and −120.979 degrees longitude. Jack Creek from a lower point located at 47.319 degrees latitude, and −120.855 degrees longitude to an upper point located at 47.334 degrees latitude, and −120.742 degrees longitude. Jungle Creek from a lower point located at 47.333 degrees latitude, and −120.855 degrees longitude to an upper point located at 47.333 degrees latitude, and −120.923 degrees longitude. North Fork Teanaway River from a lower point located at 47.251 degrees latitude, and −120.877 degrees longitude to an upper point located at 47.454 degrees latitude, and −120.965 degrees longitude. Teanaway River from a lower point located at 47.167 degrees latitude, and −120.834 degrees longitude to an upper point located at 47.257 degrees latitude, and −120.897 degrees longitude.

(xvii) Middle Fork Teanaway River from a lower point located at 47.257 degrees latitude, and −120.897 degrees longitude to an upper point located at 47.42 degrees latitude, and −120.992 degrees longitude.

(xviii) Cle Elum River from a lower point located at 47.177 degrees latitude, and −120.99 degrees longitude to an upper point located at 47.589 degrees latitude, and −121.161 degrees longitude.

(xix) Cle Elum Lake centered at 47.28 degrees latitude, and −121.105 degrees longitude. Cooper River from a lower point located at 47.391 degrees latitude, and −121.098 degrees longitude to an

upper point located at 47.455 degrees latitude, and −121.213 degrees longitude. Fortune Creek from a lower point located at 47.478 degrees latitude, and −121.046 degrees longitude to an upper point located at 47.469 degrees latitude, and −120.964 degrees longitude. Waptus River from a lower point located at 47.419 degrees latitude, and −121.086 degrees longitude to an upper point located at 47.54 degrees latitude, and −121.24 degrees longitude.

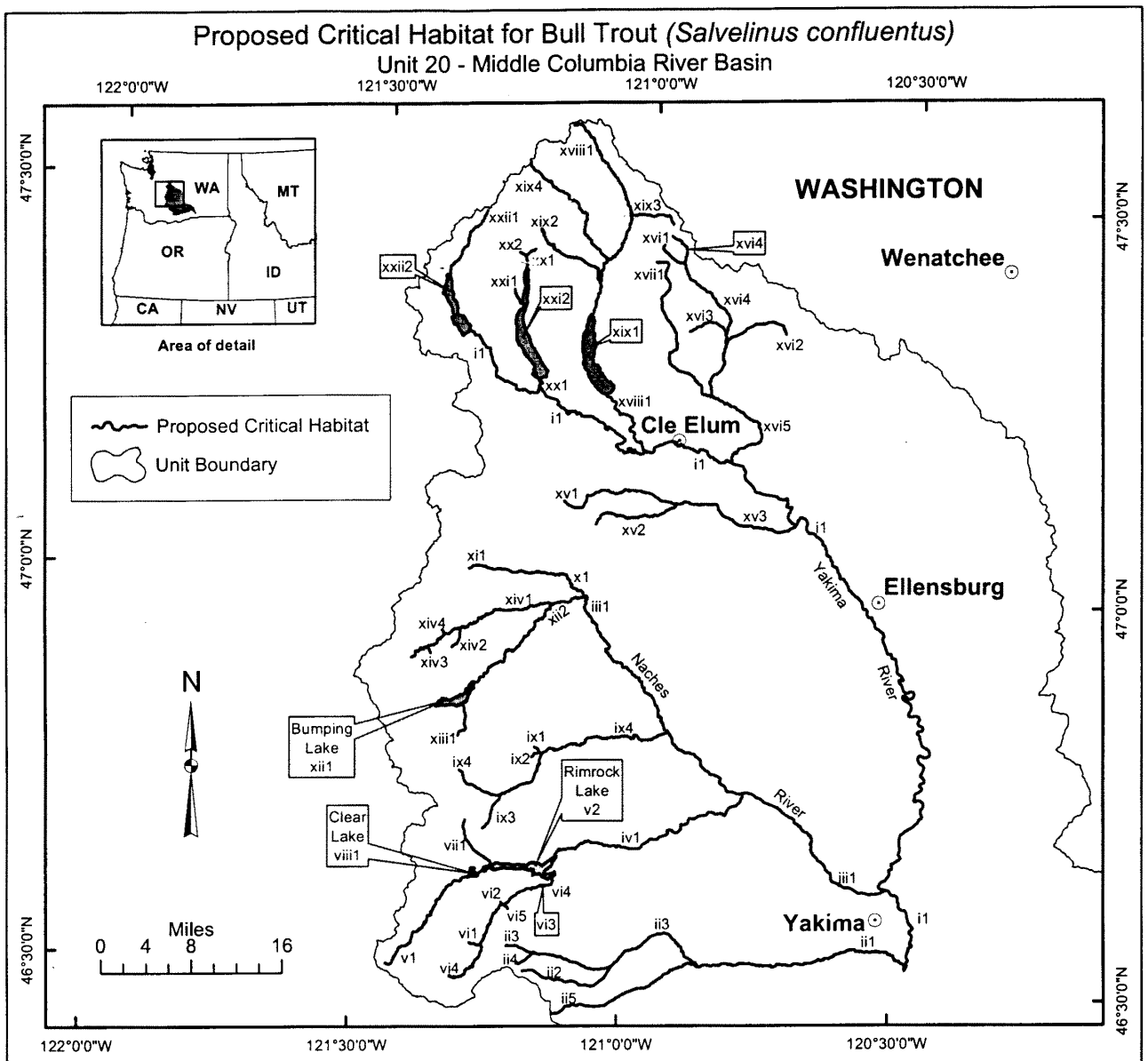
(xx) Kachess River from a lower point located at 47.251 degrees latitude, and −121.2 degrees longitude to an upper point located at 47.429 degrees latitude, and −121.222 degrees longitude. Mineral Creek from a lower point located at 47.42 degrees latitude, and −121.24 degrees longitude to an upper point located at 47.424 degrees latitude, and −121.251 degrees longitude.

(xxi) Box Canyon Creek from a lower point located at 47.361 degrees latitude, and −121.243 degrees longitude to an upper point located at 47.377 degrees latitude, and −121.257 degrees longitude. Kachess Lake centered at 47.317 degrees latitude, and −121.227 degrees longitude.

(xxii) Gold Creek from a lower point located at 47.39 degrees latitude, and −121.382 degrees longitude to an upper point located at 47.475 degrees latitude, and −121.316 degrees longitude. Keechelus Lake centered at 47.349 degrees latitude, and −121.367 degrees longitude.

Note: Map follows for Unit 20.

BILLING CODE 4310–55–P



Proposed Critical Habitat (map key)

i1-Yakima River
ii1-Ahtanum Creek
ii2-M.F. Ahtanum Creek
ii3-North Fork Ahtanum Creek
ii4-Shellneck Creek
ii5-South Fork Ahtanum Creek
iii1-Naches River
iv1-Tieton River
v1-North Fork Tieton River
v2-Rimrock Lake
vi1-Bear Creek
vi2-Grey Creek
vi3-Short And Dirty Creek
vi4-South Fork Tieton River
vi5-Spruce Creek
vii1-Indian Creek
viii1-Clear Lake
ix1-Dog Creek
ix2-Hindoo Creek
ix3-Little Wildcat Creek
ix4-Rattlesnake Creek
x1-Little Naches River
xi1-Crow Creek
xii1-Bumping Lake
xii2-Bumping River
xiii1-Deep Creek
xiv1-American River
xiv2-Kettle Creek
xiv3-Timber Creek
xiv4-Union Creek
xv1-N. Fork Taneaum Creek
xv2-S. Fork Taneaum Creek
xv3-Taneaum Creek
xvi1-DeRoux Creek
xvi2-Jack Creek
xvi3-Jungle Creek
xvi4-North Fork Teanaway River
xvi5-Teanaway River
xvii1-Middle Fork Teanaway River
xviii1-Cle Elum River
xix1-Cle Elum Lake
xix2-Cooper River
xix3-Fortune Creek
xix4-Waptus River
xx1-Kachess River
xx2-Mineral Creek
xxi1-Box Canyon Creek
xxi2-Kachess Lake
xxii1-Gold Creek
xxii2-Keechelus Lake

BILLING CODE 4310–55–C

(25) Unit 21—Upper Columbia River Basin.

(i) Critical Habitat Subunit—Wenatchee River.

(A) Lake Wenatchee centered at 47.823 degrees latitude, and −120.777 degrees longitude. Wenatchee River from a lower point located at 47.456 degrees latitude, and −120.316 degrees longitude to an upper point located at 47.808 degrees latitude, and −120.727 degrees longitude.

(B) Ingalls Creek from a lower point located at 47.463 degrees latitude, and −120.66 degrees longitude to an upper point located at 47.449 degrees latitude, and −120.858 degrees longitude. Peshastin Creek from a lower point located at 47.558 degrees latitude, and −120.573 degrees longitude to an upper point located at 47.443 degrees latitude, and −120.662 degrees longitude.

(C) French Creek from a lower point located at 47.628 degrees latitude, and −120.961 degrees longitude to an upper point located at 47.593 degrees latitude, and −121.041 degrees longitude. Icicle Creek from a lower point located at 47.58 degrees latitude, and −120.666 degrees longitude to an upper point located at 47.695 degrees latitude, and −121.054 degrees longitude. Jack Creek from a lower point located at 47.608 degrees latitude, and −120.898 degrees longitude to an upper point located at 47.53 degrees latitude, and −120.951 degrees longitude.

(D) Chiwaukum Creek from a lower point located at 47.679 degrees latitude, and −120.727 degrees longitude to an upper point located at 47.714 degrees latitude, and −120.834 degrees longitude.

(E) Alpine Creek from a lower point located at 48.084 degrees latitude, and −120.863 degrees longitude to an upper point located at 48.083 degrees latitude, and −120.865 degrees longitude. Buck Creek from a lower point located at 48.104 degrees latitude, and −120.877 degrees longitude to an upper point located at 48.106 degrees latitude, and −120.885 degrees longitude. Chikamin Creek from a lower point located at 47.904 degrees latitude, and −120.73 degrees longitude to an upper point located at 48.011 degrees latitude, and −120.722 degrees longitude. Chiwawa River from a lower point located at 47.788 degrees latitude, and −120.658 degrees longitude to an upper point located at 48.104 degrees latitude, and −120.877 degrees longitude. James Creek from a lower point located at 48.077 degrees latitude, and −120.856 degrees longitude to an upper point located at 48.075 degrees latitude, and −120.86 degrees longitude. Phelps Creek from a lower point located at 48.071 degrees latitude, and −120.851 degrees longitude to an upper point located at 48.081 degrees latitude, and −120.838 degrees longitude. Rock Creek from a lower point located at 47.963 degrees latitude, and −120.795 degrees longitude to an upper point located at 48.037 degrees latitude, and −120.762 degrees longitude.

(F) Mill Creek from a lower point located at 47.777 degrees latitude, and −121.01 degrees longitude to an upper point located at 47.772 degrees latitude, and −121.02 degrees longitude. Nason Creek from a lower point located at 47.81 degrees latitude, and −120.715 degrees longitude to an upper point located at 47.784 degrees latitude, and −121.027 degrees longitude.

(G) Little Wenatchee River from a lower point located at 47.827 degrees latitude, and −120.818 degrees longitude to an upper point located at 47.846 degrees latitude, and −120.932 degrees longitude.

(H) Canyon Creek from a lower point located at 47.907 degrees latitude, and −120.894 degrees longitude to an upper point located at 47.891 degrees latitude, and −120.964 degrees longitude. Napeequa River from a lower point located at 47.922 degrees latitude, and −120.896 degrees longitude to an upper point located at 47.938 degrees latitude, and −120.872 degrees longitude. Panther Creek from a lower point located at 47.941 degrees latitude, and −120.928 degrees longitude to an upper point located at 47.938 degrees latitude, and −120.941 degrees longitude. White River from a lower point located at 47.834 degrees latitude, and −120.814 degrees longitude to an upper point located at 47.953 degrees latitude, and −120.939 degrees longitude.

(ii) Critical Habitat Subunit—Entiat River.

(A) Entiat River from a lower point located at 47.661 degrees latitude, and −120.217 degrees longitude to an upper point located at 47.92 degrees latitude, and −120.506 degrees longitude.

(B) Mad River from a lower point located at 47.736 degrees latitude, and −120.362 degrees longitude to an upper point located at 47.864 degrees latitude, and −120.607 degrees longitude. Tillicum Creek from a lower point located at 47.748 degrees latitude, and −120.393 degrees longitude to an upper point located at 47.724 degrees latitude, and −120.438 degrees longitude.

(iii) Critical Habitat Subunit—Methow River.

(A) Methow River from a lower point located at 48.05 degrees latitude, and −119.893 degrees longitude to an upper point located at 48.586 degrees latitude, and −120.744 degrees longitude. Rattlesnake Creek from a lower point located at 48.649 degrees latitude, and −120.564 degrees longitude to an upper point located at 48.695 degrees latitude, and −120.635 degrees longitude. Robinson Creek from a lower point located at 48.66 degrees latitude, and −120.537 degrees longitude to an upper point located at 48.75 degrees latitude, and −120.633 degrees longitude. Trout Creek from a lower point located at 48.64 degrees latitude, and −120.598 degrees longitude to an upper point located at 48.664 degrees latitude, and −120.709 degrees longitude.

(B) Crater Creek from a lower point located at 48.214 degrees latitude, and −120.208 degrees longitude to an upper point located at 48.215 degrees latitude, and −120.268 degrees longitude. Gold Creek from a lower point located at 48.188 degrees latitude, and −120.094 degrees longitude to an upper point located at 48.185 degrees latitude, and −120.115 degrees longitude. N. Fork Gold Creek from a lower point located at 48.185 degrees latitude, and −120.115 degrees longitude to an upper point located at 48.214 degrees latitude, and −120.208 degrees longitude.

(C) Beaver Creek from a lower point located at 48.327 degrees latitude, and −120.065 degrees longitude to an upper point located at 48.486 degrees latitude, and −120.004 degrees longitude. Blue Buck Creek from a lower point located at 48.486 degrees latitude, and −120.004 degrees longitude to an upper point located at 48.553 degrees latitude, and −119.962 degrees longitude.

(D) Buttermilk Creek from a lower point located at 48.363 degrees latitude, and −120.338 degrees longitude to an upper point located at 48.34 degrees latitude, and −120.302 degrees longitude. East Fork Buttermilk Creek from a lower point located at 48.34 degrees latitude, and −120.302 degrees longitude to an upper point located at 48.299 degrees latitude, and −120.298 degrees longitude. Little Bridge Creek from a lower point located at 48.379 degrees latitude, and −120.285 degrees longitude to an upper point located at 48.449 degrees latitude, and −120.431 degrees longitude. North Creek from a lower point located at 48.454 degrees latitude, and −120.562 degrees longitude to an upper point located at 48.464 degrees latitude, and −120.557 degrees longitude. Reynolds Creek from a lower point located at 48.406 degrees latitude, and −120.478 degrees longitude to an upper point located at 48.403 degrees latitude, and −120.491 degrees longitude. Twisp River from a lower point located at 48.369 degrees latitude, and −120.118 degrees longitude to an upper point located at

48.463 degrees latitude, and −120.6 degrees longitude. West Fork Buttermilk Creek from a lower point located at 48.34 degrees latitude, and −120.302 degrees longitude to an upper point located at 48.259 degrees latitude, and −120.436 degrees longitude.

(E) Black Lake centered at 48.829 degrees latitude, and −120.207 degrees longitude. Chewuch River from a lower point located at 48.476 degrees latitude, and −120.182 degrees longitude to an upper point located at 48.815 degrees latitude, and −120.019 degrees longitude. Lake Creek from a lower point located at 48.75 degrees latitude, and −120.136 degrees longitude to an upper point located at 48.848 degrees latitude, and −120.237 degrees longitude.

(F) Wolf Creek from a lower point located at 48.491 degrees latitude, and −120.231 degrees longitude to an upper point located at 48.476 degrees latitude, and −120.439 degrees longitude.

(G) Goat Creek from a lower point located at 48.574 degrees latitude, and −120.378 degrees longitude to an upper point located at 48.73 degrees latitude, and −120.359 degrees longitude.

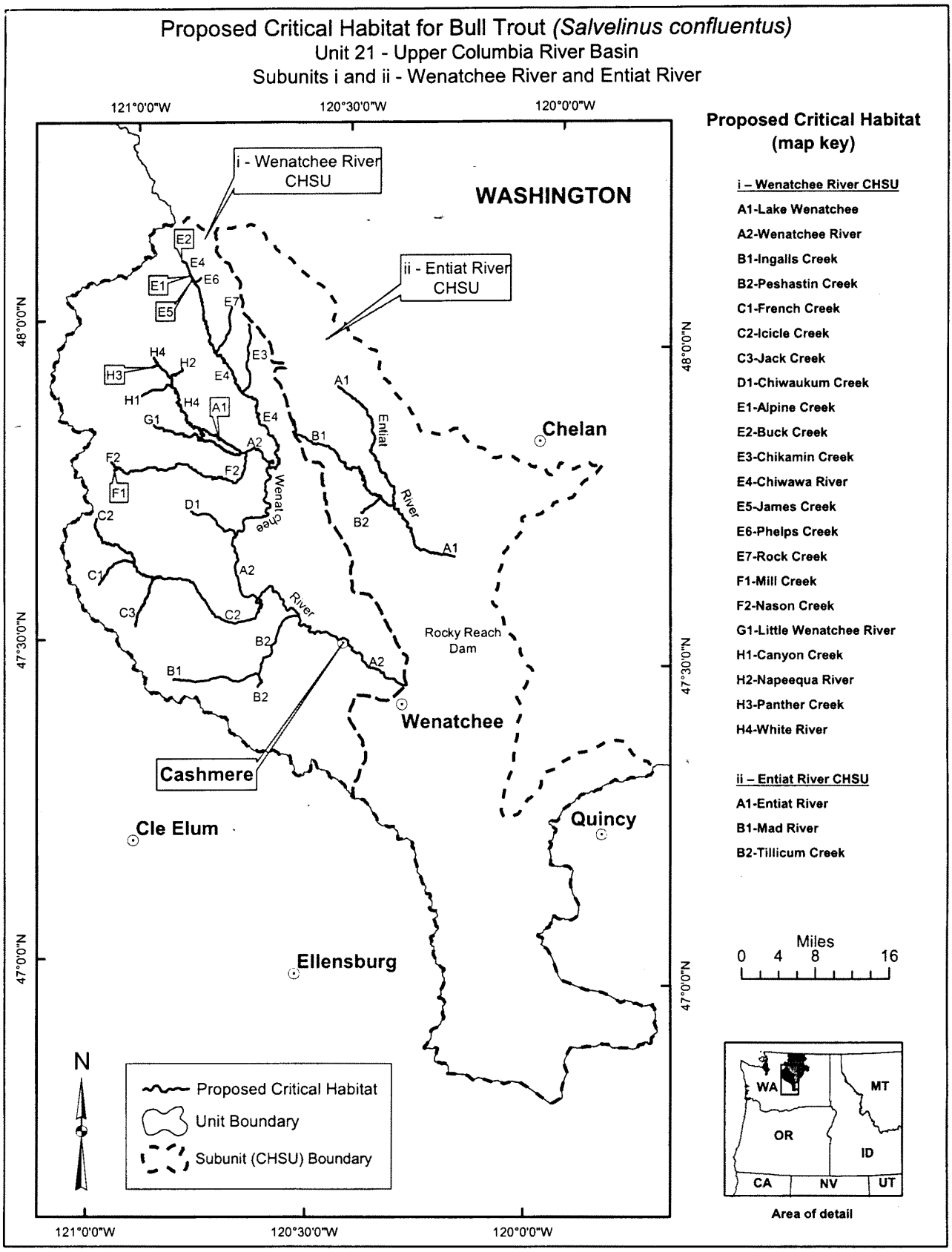
(H) Cedar Creek from a lower point located at 48.589 degrees latitude, and −120.47 degrees longitude to an upper point located at 48.558 degrees latitude, and −120.482 degrees longitude. Early Winters Creek from a lower point located at 48.601 degrees latitude, and −120.436 degrees longitude to an upper point located at 48.504 degrees latitude, and −120.624 degrees longitude. Huckleberry Creek from a lower point located at 48.569 degrees latitude, and −120.472 degrees longitude to an upper point located at 48.512 degrees latitude, and −120.449 degrees longitude.

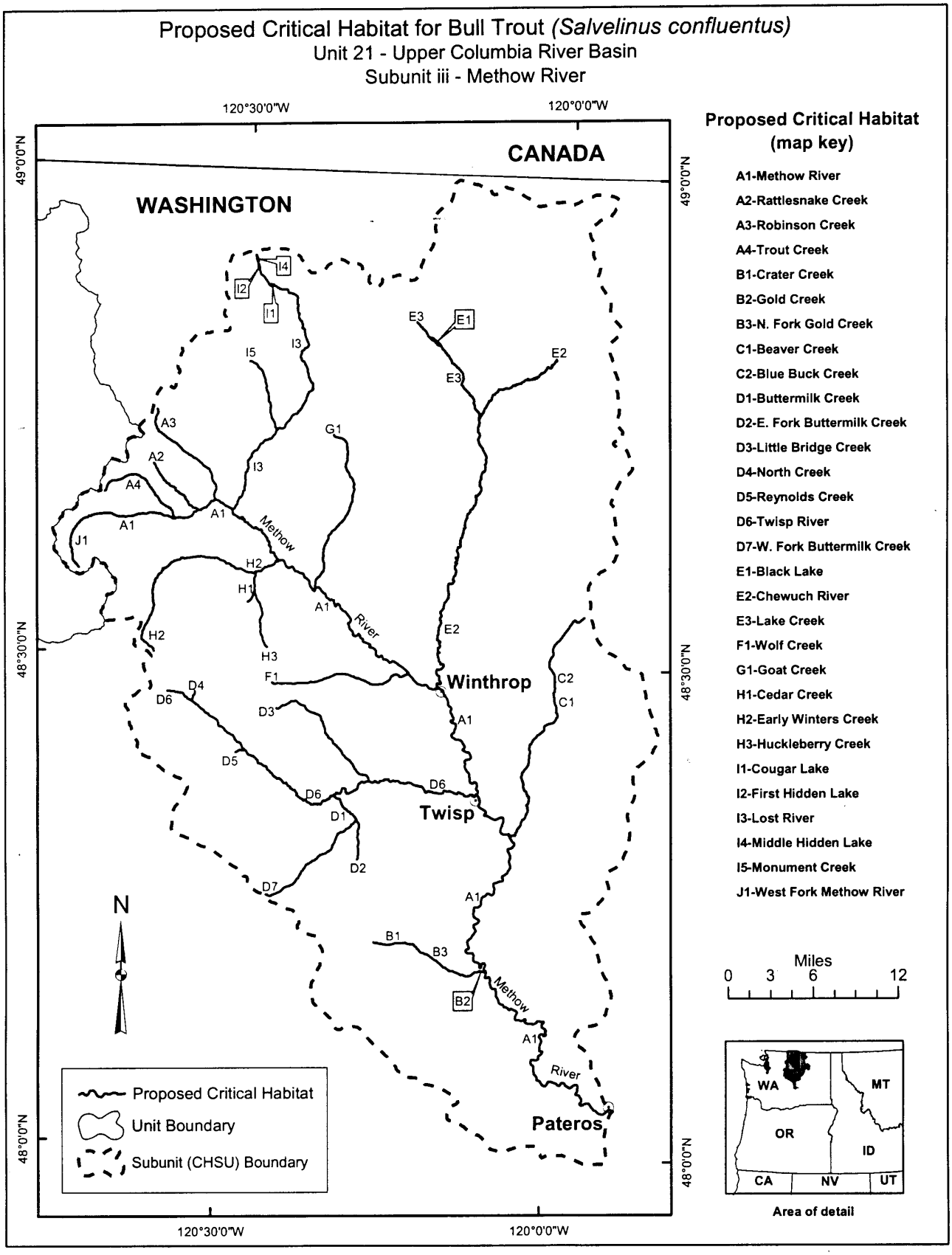
(I) Cougar Lake centered at 48.881 degrees latitude, and −120.464 degrees longitude. First Hidden Lake centered at 48.899 degrees latitude, and −120.485 degrees longitude. Lost River from a lower point located at 48.65 degrees latitude, and −120.511 degrees longitude to an upper point located at 48.905 degrees latitude, and −120.488 degrees longitude. Middle Hidden Lake centered at 48.908 degrees latitude, and −120.488 degrees longitude. Monument Creek from a lower point located at 48.733 degrees latitude, and −120.448 degrees longitude to an upper point located at 48.803 degrees latitude, and −120.493 degrees longitude.

(J) West Fork Methow River from a lower point located at 48.65 degrees latitude, and −120.511 degrees longitude to an upper point located at 48.586 degrees latitude, and −120.744 degrees longitude.

Note: Maps follow for Unit 21, Subunits i and ii; and Subunit iii.

BILLING CODE 4310–55–P


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 21 - Upper Columbia River Basin
Subunits i and ii - Wenatchee River and Entiat River
121°0'0"W
120°30'0"W
120°0'0"W
48°0'0"N
47°30'0"N
47°0'0"N
i - Wenatchee River CHSU
ii - Entiat River CHSU
WASHINGTON
Chelan
Rocky Reach Dam
Wenatchee
Cashmere
Cle Elum
Quincy
Ellensburg
Wenatchee River
Entiat River
E1
E2
E3
E4
E5
E6
E7
H1
H2
H3
H4
G1
A1
A2
B1
B2
C1
C2
C3
D1
F1
F2
N
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Proposed Critical Habitat (map key)
i – Wenatchee River CHSU
A1-Lake Wenatchee
A2-Wenatchee River
B1-Ingalls Creek
B2-Peshastin Creek
C1-French Creek
C2-Icicle Creek
C3-Jack Creek
D1-Chiwaukum Creek
E1-Alpine Creek
E2-Buck Creek
E3-Chikamin Creek
E4-Chiwawa River
E5-James Creek
E6-Phelps Creek
E7-Rock Creek
F1-Mill Creek
F2-Nason Creek
G1-Little Wenatchee River
H1-Canyon Creek
H2-Napeequa River
H3-Panther Creek
H4-White River
ii – Entiat River CHSU
A1-Entiat River
B1-Mad River
B2-Tillicum Creek
Miles
0 4 8 16
WA
MT
OR
ID
CA
NV
UT
Area of detail


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 21 - Upper Columbia River Basin
Subunit iii - Methow River
120°30'0"W
120°0'0"W
49°0'0"N
48°30'0"N
48°0'0"N
CANADA
WASHINGTON
Winthrop
Twisp
Pateros
Methow
River
N
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
Proposed Critical Habitat (map key)
A1-Methow River
A2-Rattlesnake Creek
A3-Robinson Creek
A4-Trout Creek
B1-Crater Creek
B2-Gold Creek
B3-N. Fork Gold Creek
C1-Beaver Creek
C2-Blue Buck Creek
D1-Buttermilk Creek
D2-E. Fork Buttermilk Creek
D3-Little Bridge Creek
D4-North Creek
D5-Reynolds Creek
D6-Twisp River
D7-W. Fork Buttermilk Creek
E1-Black Lake
E2-Chewuch River
E3-Lake Creek
F1-Wolf Creek
G1-Goat Creek
H1-Cedar Creek
H2-Early Winters Creek
H3-Huckleberry Creek
I1-Cougar Lake
I2-First Hidden Lake
I3-Lost River
I4-Middle Hidden Lake
I5-Monument Creek
J1-West Fork Methow River
Miles
0 3 6 12
WA
MT
OR
ID
CA
NV
UT
Area of detail

(26) Unit 22—Northeast Washington River Basins.

(i) Critical Habitat Subunit—Pend Oreille River.

(A) Pend Oreille River from a lower point located at 48.179 degrees latitude, and −116.998 degrees longitude to an upper point located at 48.989 degrees latitude, and −117.348 degrees longitude.

(B) Slate Creek from a lower point located at 48.923 degrees latitude, and −117.332 degrees longitude to an upper point located at 48.948 degrees latitude, and −117.165 degrees longitude.

(C) Harvey Creek from a lower point located at 48.789 degrees latitude, and −117.285 degrees longitude to an upper point located at 48.691 degrees latitude, and −117.182 degrees longitude. Outlet Creek from a lower point located at 48.847 degrees latitude, and −117.288 degrees longitude to an upper point located at 48.839 degrees latitude, and −117.288 degrees longitude. Sullivan Creek from a lower point located at 48.865 degrees latitude, and −117.37 degrees longitude to an upper point located at 48.95 degrees latitude, and −117.07 degrees longitude. Sullivan Lake centered at 48.815 degrees latitude, and −117.289 degrees longitude.

(D) Cedar Creek from a lower point located at 48.742 degrees latitude, and −117.411 degrees longitude to an upper point located at 48.846 degrees latitude, and −117.521 degrees longitude.

(E) Ruby Creek from a lower point located at 48.556 degrees latitude, and −117.342 degrees longitude to an upper point located at 48.568 degrees latitude, and −117.509 degrees longitude.

(F) East Branch Leclerc Creek from a lower point located at 48.534 degrees latitude, and −117.282 degrees longitude to an upper point located at 48.673 degrees latitude, and −117.188 degrees longitude. Fourth Of July Creek from a lower point located at 48.556 degrees latitude, and −117.272 degrees longitude to an upper point located at 48.573 degrees latitude, and −117.2 degrees longitude. LeClerc Creek from a lower point located at 48.518 degrees latitude, and −117.283 degrees longitude to an upper point located at 48.534 degrees latitude, and −117.282 degrees longitude. West Branch LeClerc Creek from a lower point located at 48.534 degrees latitude, and −117.282 degrees longitude to an upper point located at 48.701 degrees latitude, and −117.211 degrees longitude.

(G) Mill Creek from a lower point located at 48.489 degrees latitude, and −117.265 degrees longitude to an upper point located at 48.493 degrees latitude, and −117.239 degrees longitude.

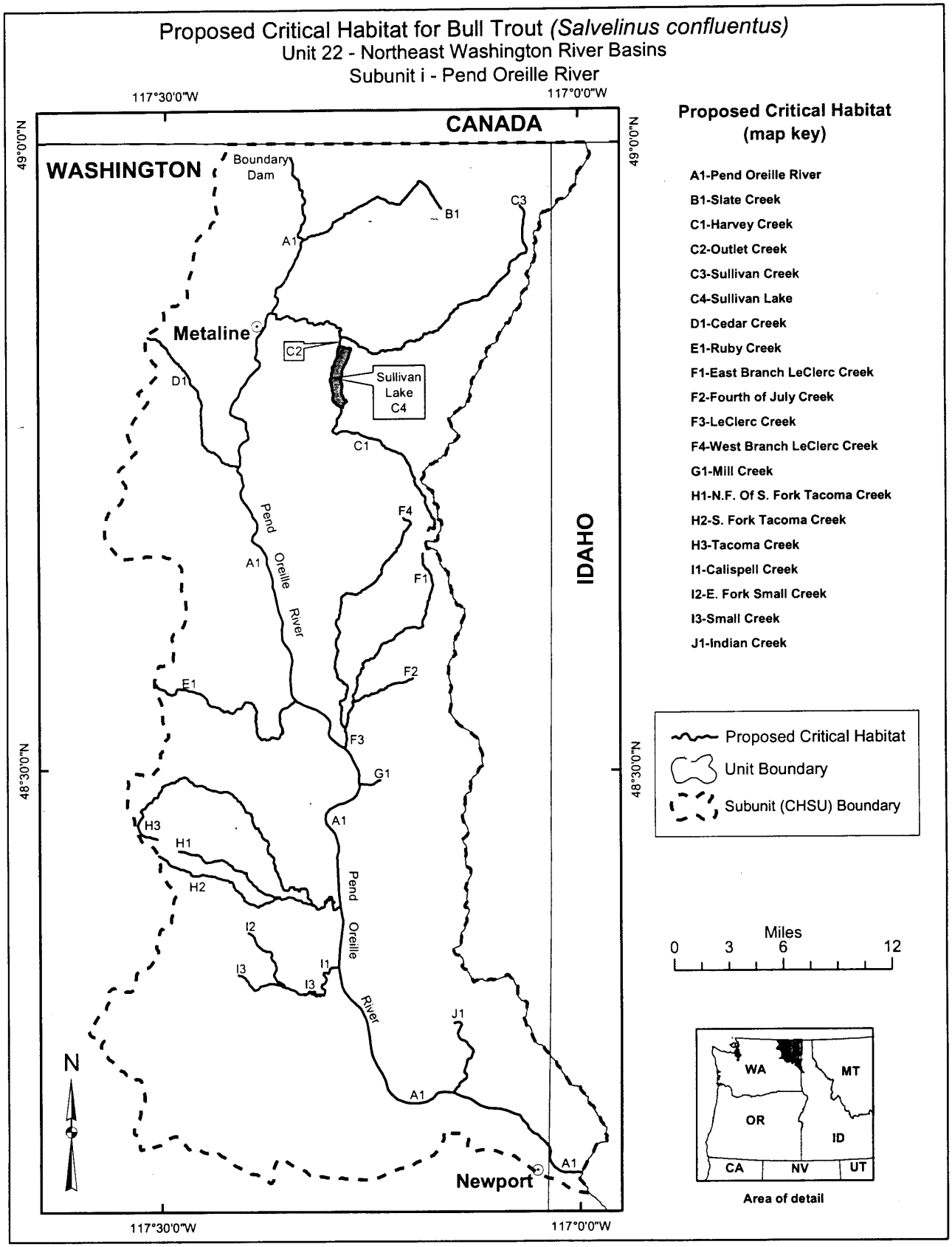
(H) North Fork of S. Fork Tacoma Creek from a lower point located at 48.399 degrees latitude, and −117.361 degrees longitude to an upper point located at 48.436 degrees latitude, and −117.482 degrees longitude. South Fork Tacoma Creek from a lower point located at 48.394 degrees latitude, and −117.323 degrees longitude to an upper point located at 48.432 degrees latitude, and −117.506 degrees longitude. Tacoma Creek from a lower point located at 48.392 degrees latitude, and −117.288 degrees longitude to an upper point located at 48.445 degrees latitude, and −117.507 degrees longitude.

(I) Calispell Creek from a lower point located at 48.344 degrees latitude, and −117.289 degrees longitude to an upper point located at 48.321 degrees latitude, and −117.307 degrees longitude. East Fork Small Creek from a lower point located at 48.328 degrees latitude, and −117.354 degrees longitude to an upper point located at 48.371 degrees latitude, and −117.398 degrees longitude. Small Creek from a lower point located at 48.321 degrees latitude, and −117.307 degrees longitude to an upper point located at 48.337 degrees latitude, and −117.409 degrees longitude.

(J) Indian Creek from a lower point located at 48.243 degrees latitude, and −117.151 degrees longitude to an upper point located at 48.299 degrees latitude, and −117.151 degrees longitude.

(ii) [Reserved]

Note: Map follows for Unit 22.



BILLING CODE 4310–55–C

(27) Unit 23—Snake River Basin in Washington.

(i) Critical Habitat Subunit—Tucannon River.

(A) Tucannon River from a lower point located at 46.558 degrees latitude, and −118.174 degrees longitude to an upper point located at 46.139 degrees latitude, and −117.52 degrees longitude.

(B) Cummings Creek from a lower point located at 46.333 degrees latitude, and −117.674 degrees longitude to an upper point located at 46.219 degrees latitude, and −117.595 degrees longitude.

(C) Hixon Creek from a lower point located at 46.246 degrees latitude, and −117.683 degrees longitude to an upper point located at 46.219 degrees latitude, and −117.651 degrees longitude.

(D) Little Tucannon River from a lower point located at 46.228 degrees latitude, and −117.721 degrees longitude to an upper point located at 46.181 degrees latitude, and −117.751 degrees longitude.

(E) Panjab Creek from a lower point located at 46.205 degrees latitude, and −117.705 degrees longitude to an upper point located at 46.115 degrees latitude, and −117.682 degrees longitude.

(F) Meadow Creek from a lower point located at 46.177 degrees latitude, and −117.718 degrees longitude to an upper point located at 46.102 degrees latitude, and −117.785 degrees longitude.

(G) Turkey Creek from a lower point located at 46.161 degrees latitude, and −117.702 degrees longitude to an upper point located at 46.113 degrees latitude, and −117.738 degrees longitude.

(H) Little Turkey Creek from a lower point located at 46.155 degrees latitude, and −117.736 degrees longitude to an upper point located at 46.116 degrees latitude, and −117.749 degrees longitude.

(I) Cold Creek from a lower point located at 46.191 degrees latitude, and −117.63 degrees longitude to an upper point located at 46.168 degrees latitude, and −117.644 degrees longitude.

(J) Sheep Creek from a lower point located at 46.188 degrees latitude, and −117.624 degrees longitude to an upper point located at 46.195 degrees latitude, and −117.623 degrees longitude.

(K) Bear Creek from a lower point located at 46.168 degrees latitude, and −117.559 degrees longitude to an upper point located at 46.134 degrees latitude, and −117.561 degrees longitude.

(ii) Critical Habitat Subunit—Asotin Creek.

(A) Asotin Creek from a lower point located at 46.345 degrees latitude, and −117.053 degrees longitude to an upper point located at 46.272 degrees latitude, and −117.291 degrees longitude.

(B) George Creek from a lower point located at 46.326 degrees latitude, and −117.105 degrees longitude to an upper point located at 46.118 degrees latitude, and −117.363 degrees longitude.

(C) Wormell Creek from a lower point located at 46.171 degrees latitude, and −117.206 degrees longitude to an upper point located at 46.115 degrees latitude, and −117.201 degrees longitude.

(D) Hefflefinger Creek from a lower point located at 46.169 degrees latitude, and −117.243 degrees longitude to an upper point located at 46.111 degrees latitude, and −117.248 degrees longitude.

(E) Coombs Creek from a lower point located at 46.168 degrees latitude, and −117.253 degrees longitude to an upper point located at 46.109 degrees latitude, and −117.267 degrees longitude.

(F) Charley Creek from a lower point located at 46.289 degrees latitude, and −117.278 degrees longitude to an upper point located at 46.21 degrees latitude, and −117.552 degrees longitude.

(G) N. Fork Asotin Creek from a lower point located at 46.272 degrees latitude, and −117.291 degrees longitude to an upper point located at 46.196 degrees latitude, and −117.568 degrees longitude.

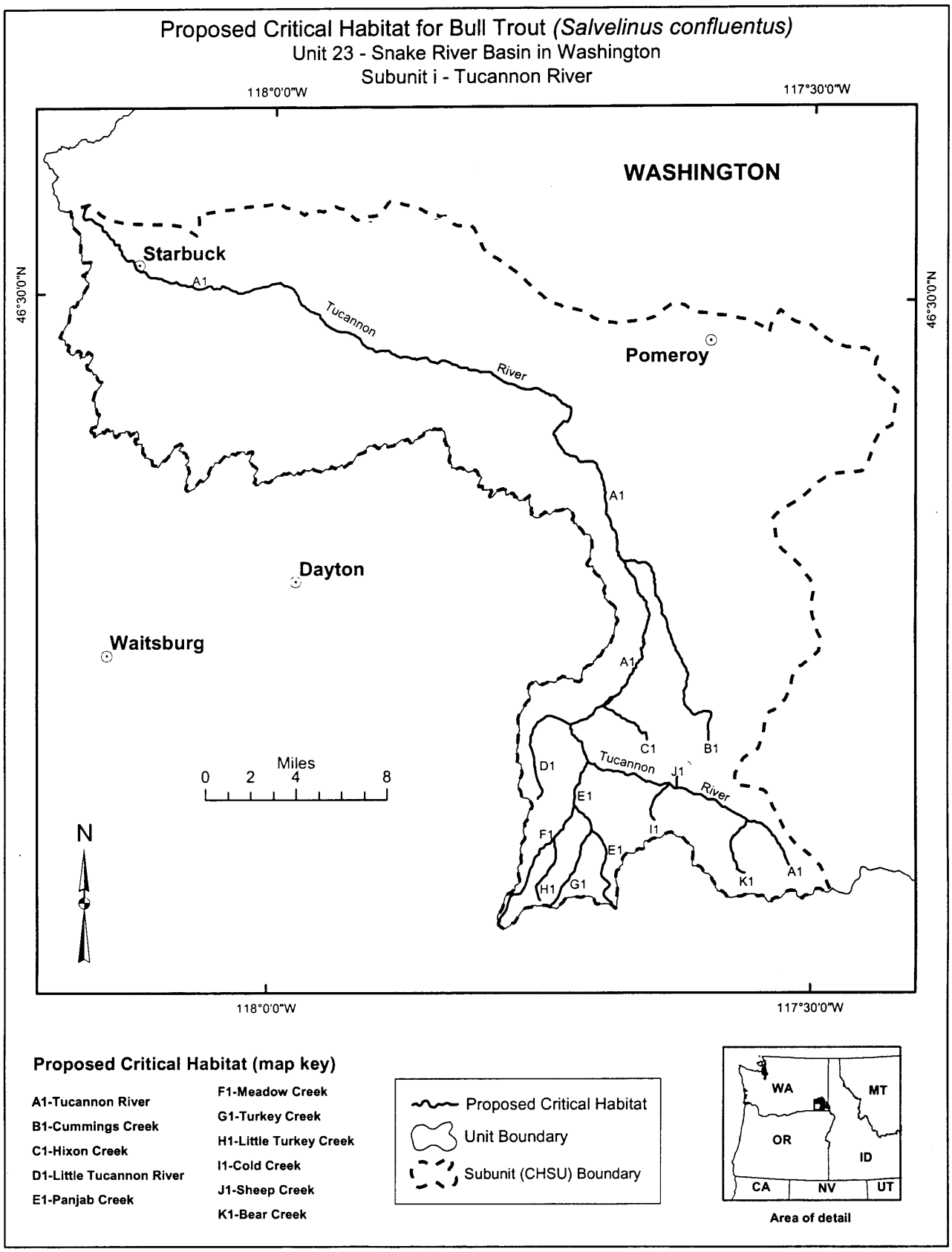
(H) South Fork of N. Fork Asotin Creek from a lower point located at 46.197 degrees latitude, and −117.426 degrees longitude to an upper point located at 46.125 degrees latitude, and −117.468 degrees longitude.

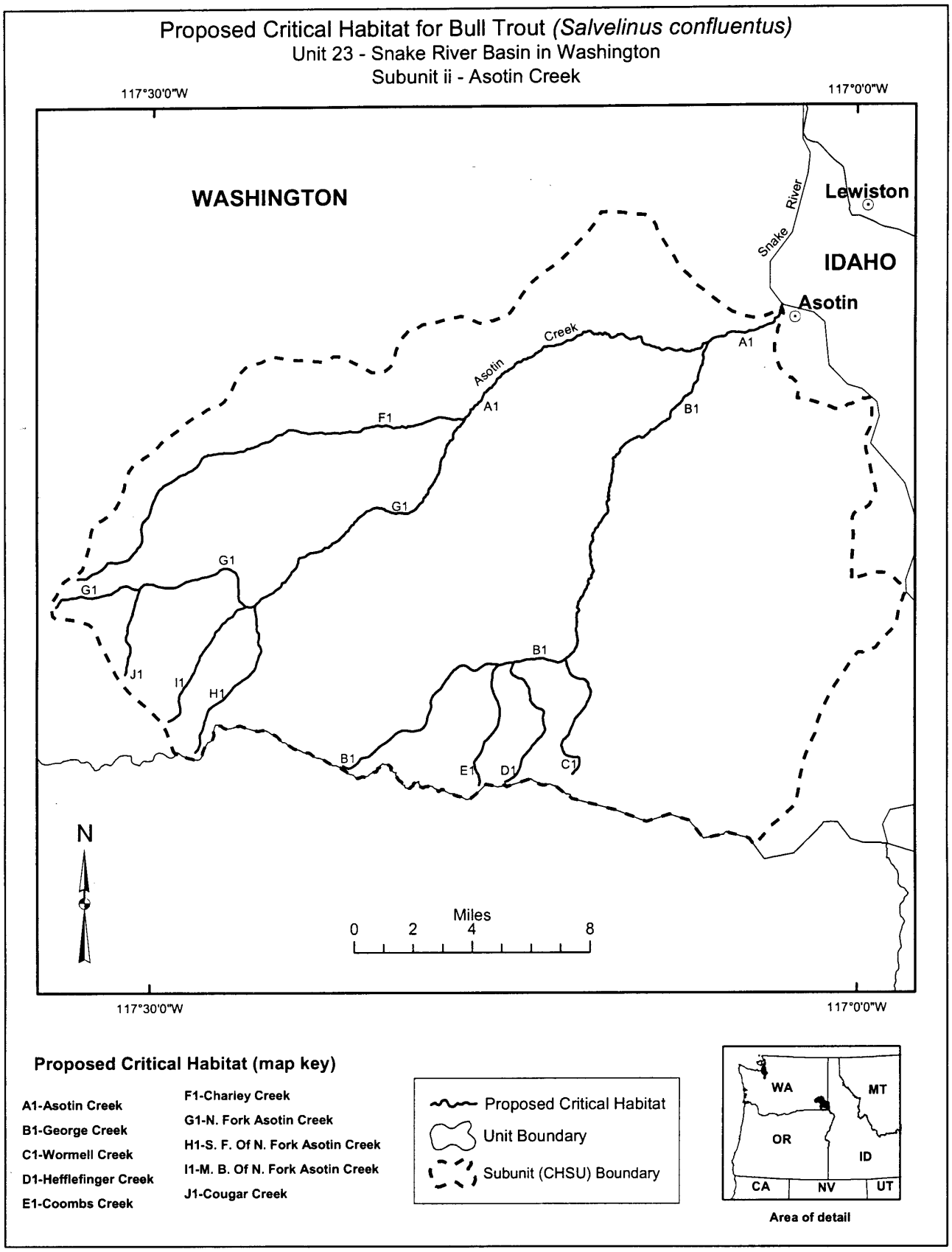
(I) Middle Branch Of N. Fork Asotin Creek from a lower point located at 46.196 degrees latitude, and −117.433 degrees longitude to an upper point located at 46.14 degrees latitude, and −117.487 degrees longitude.

(J) Cougar Creek from a lower point located at 46.205 degrees latitude, and −117.508 degrees longitude to an upper point located at 46.163 degrees latitude, and −117.518 degrees longitude.

Note: Maps follow for Unit 23 Subunit i and for Subunit ii.

BILLING CODE 4310–55–P


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 23 - Snake River Basin in Washington
Subunit i - Tucannon River
118°0'0"W
117°30'0"W
46°30'0"N
WASHINGTON
Starbuck
Pomeroy
Dayton
Waitsburg
Tucannon River
A1
B1
C1
D1
E1
F1
G1
H1
I1
J1
K1
Miles
0 2 4 8
N
Proposed Critical Habitat (map key)
A1-Tucannon River
B1-Cummings Creek
C1-Hixon Creek
D1-Little Tucannon River
E1-Panjab Creek
F1-Meadow Creek
G1-Turkey Creek
H1-Little Turkey Creek
I1-Cold Creek
J1-Sheep Creek
K1-Bear Creek
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
WA
MT
OR
ID
CA
NV
UT
Area of detail


Proposed Critical Habitat for Bull Trout (Salvelinus confluentus)
Unit 23 - Snake River Basin in Washington
Subunit ii - Asotin Creek
117°30'0"W
117°0'0"W
WASHINGTON
IDAHO
Lewiston
Asotin
Snake River
Asotin Creek
A1
B1
C1
D1
E1
F1
G1
H1
I1
J1
N
Miles
0 2 4 8
Proposed Critical Habitat (map key)
A1-Asotin Creek
B1-George Creek
C1-Wormell Creek
D1-Hefflefinger Creek
E1-Coombs Creek
F1-Charley Creek
G1-N. Fork Asotin Creek
H1-S. F. Of N. Fork Asotin Creek
I1-M. B. Of N. Fork Asotin Creek
J1-Cougar Creek
Proposed Critical Habitat
Unit Boundary
Subunit (CHSU) Boundary
WA
MT
OR
ID
CA
NV
UT
Area of detail

(28) Unit 24—Columbia River.

(i) Columbia River from a lower point located at 46.246 degrees latitude, and −124.048 degrees longitude to an upper point located at 48.067 degrees latitude, and −119.516 degrees longitude.

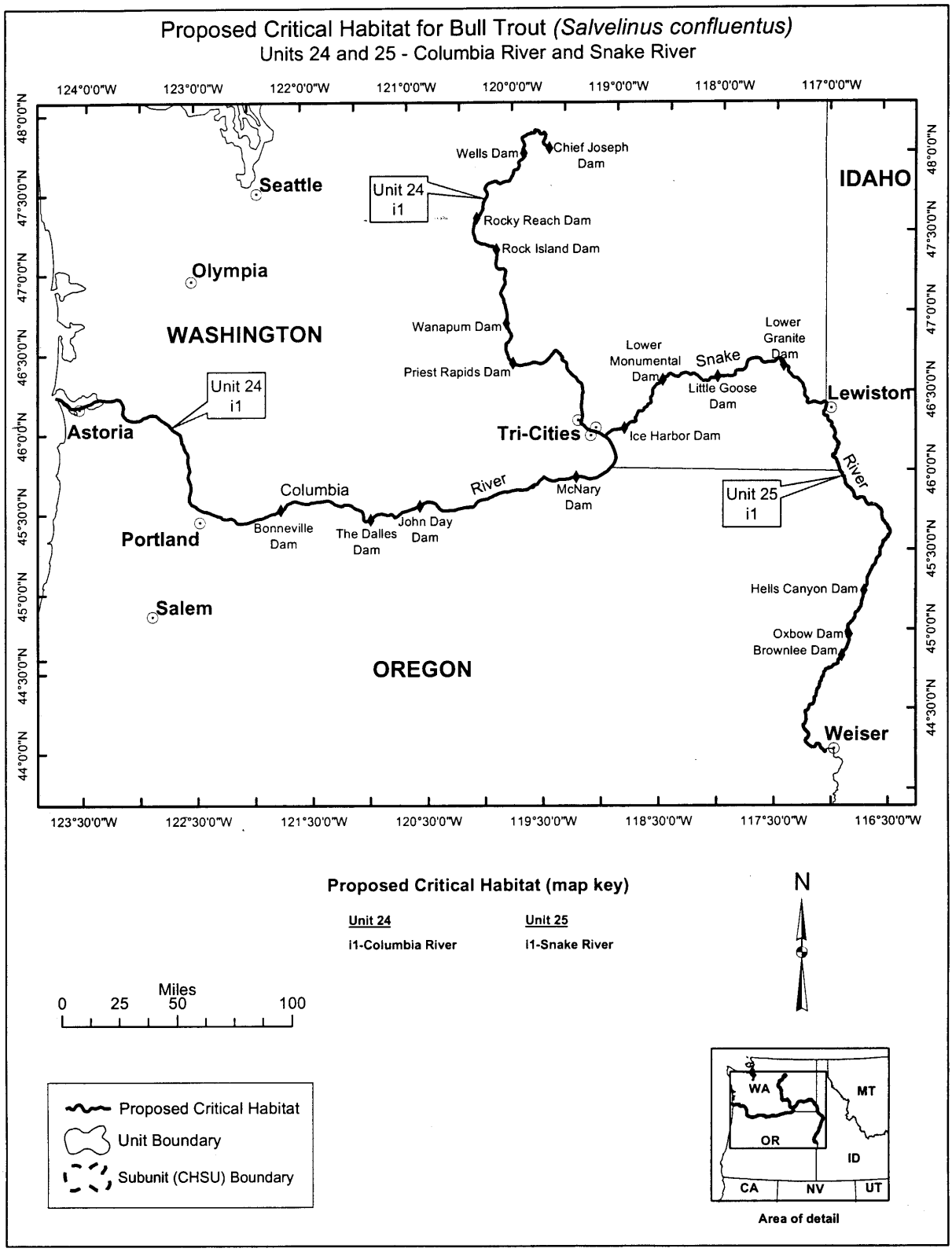
(ii) [Reserved]

(29) Unit 25—Snake River.

(i) Snake River from a lower point located at 46.189 degrees latitude, and −119.03 degrees longitude to an upper point located at 44.243 degrees latitude, and −117.041 degrees longitude.

(ii) [Reserved]

Note: Map follows for Units 24 and 25.



* * * * *

Dated: November 8, 2002.

Paul Hoffman,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 02–29232 Filed 11–27–02; 8:45 am]

BILLING CODE 4310–55–C