

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**

[Docket No. FWS-R1-ES-2013-0088;
4500030114]

RIN 1018-AZ56

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Oregon Spotted Frog

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for the Oregon spotted frog (*Rana pretiosa*) under the Endangered Species Act. In total, approximately 65,038 acres (26,320 hectares) and 20.3 river miles (32.7 river kilometers) in Whatcom, Skagit, Thurston, Skamania, and Klickitat Counties in Washington, and Wasco, Deschutes, Klamath, Lane, and Jackson Counties in Oregon, fall within the boundaries of the critical habitat designation. The effect of this regulation is to designate critical habitat for the Oregon spotted frog under the Endangered Species Act.

DATES: This rule becomes effective on June 10, 2016.

ADDRESSES: This final rule is available on the internet at <http://www.regulations.gov> and <http://www.fws.gov/wafwo>. Comments and materials we received, as well as some supporting documentation we used in preparing this final rule, are available for public inspection at <http://www.regulations.gov>. All of the comments, materials, and documentation that we considered in this rulemaking are available by appointment, during normal business hours at: U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office, 510 Desmond Drive SE., Suite 102, Lacey, WA 98503, by telephone 360-753-9440 or by facsimile 360-753-9445.

The coordinates or plot points or both from which the maps are generated are included in the administrative record for this critical habitat designation and are available at <http://www.regulations.gov> at Docket No. FWS-R1-ES-2013-0088, and at the Washington Fish and Wildlife Office (<http://www.fws.gov/wafwo>) (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we developed for this critical habitat designation will also be

available at the Fish and Wildlife Service Web site and Field Office set out above, and may also be included in the preamble and at <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Eric V. Rickerson, State Supervisor, U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office, 510 Desmond Drive SE., Suite 102, Lacey, WA 98503, by telephone 360-753-9440, or by facsimile 360-753-9445. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:**Executive Summary**

Why we need to publish a rule. This is a final rule to designate critical habitat for the Oregon spotted frog. Under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (ESA or Act), any species that is determined to be an endangered or threatened species requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule.

We, the U.S. Fish and Wildlife Service (Service), listed the Oregon spotted frog as a threatened species on August 29, 2014 (79 FR 51658). On August 29, 2013, we published in the **Federal Register** a proposed critical habitat designation for the Oregon spotted frog (78 FR 53538). On June 18, 2014, we published in the **Federal Register** a proposed refinement to the August 29, 2013, proposal (79 FR 34685). Section 4(b)(2) of the Act states that the Secretary shall designate critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat.

The critical habitat areas we are designating in this rule constitute our current best assessment of the areas that meet the definition of critical habitat for the Oregon spotted frog. Here we are designating approximately 65,038 acres (ac) (26,320 hectares) (ha) and 20.3 river miles (mi) (32.7 river kilometers (km)) in 14 units as critical habitat in Washington and Oregon for the Oregon spotted frog.

This rule consists of: A final rule for designation of critical habitat for the Oregon spotted frog. The Oregon spotted frog was listed as threatened under the Act. This rule designates critical habitat necessary for the conservation of the species. We have prepared an economic

analysis of the designation of critical habitat. In order to consider economic impacts, we prepared an incremental effects memorandum and a screening analysis, which together with our narrative and interpretation of effects we consider our draft economic analysis (DEA) of the proposed critical habitat designation and related factors. The analysis, dated April 30, 2014, was made available for public review from June 18, 2014, through July 18, 2014 (79 FR 34685). The analysis was made available for review a second time when we reopened the comment period from September 9, 2014, through September 23, 2014 (79 FR 53384). The DEA addressed probable economic impacts of critical habitat designation for the Oregon spotted frog. Following the close of the comment period, we reviewed and evaluated all information submitted during the comment period that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. We have incorporated the comments into this final determination.

Peer review and public comment. We sought comments from independent specialists to ensure that our designation is based on scientifically sound data and analyses. We solicited opinions from nine knowledgeable individuals with scientific expertise to review our technical assumptions, analysis, and whether or not we used the best available information. Five individuals provided comments. These peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve this final rule. Information we received from peer review is incorporated in this final designation. We also considered all comments and information received from the public during the comment period.

Previous Federal Actions

The Service listed the Oregon spotted frog as a threatened species on August 29, 2014 (79 FR 51658). A list of the previous Federal actions can be found in the final listing rule and in the proposal to designate critical habitat (78 FR 53538, August 29, 2013).

Summary of Comments and Recommendations

We requested written comments from the public on the proposed designation of critical habitat for the Oregon spotted frog during three comment periods. The first comment period associated with the publication of the proposed rule (78 FR 53538) opened on August 29, 2013, and closed on November 12, 2013. We

opened a second comment period on June 18, 2014, to allow for comment on the DEA and associated perceptual effects memorandum, as well as a revised proposed rule with changes to the critical habitat designation; this period closed on July 18, 2014 (79 FR 34685). A third comment period opened September 9, 2014, to allow for additional comment on the DEA and associated perceptual effects memorandum, and on the changes to proposed critical habitat we announced on June 18, 2014; it closed on September 23, 2014 (79 FR 53384). We received one request for a public hearing; however, the request was from a county in California where the species is not known to currently occur (see Response to Comment 22). However, we did hold a public hearing on October 21, 2013, in Lacey, Washington. In addition, multiple informal public meetings were held in the Bend and Klamath Falls areas in Oregon. We also contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed rule and DEA during these comment periods.

During the three comment periods, we received comments from 114 commenters directly addressing the August 29, 2013, proposed critical habitat designation and the June 18, 2014, revision to proposed critical habitat. During the October 21, 2013, public hearing, four individuals or organizations made statements on the designation of critical habitat for the Oregon spotted frog. All substantive information provided during comment periods has either been incorporated directly into this final determination or addressed below. Comments received were grouped into six general issues specifically relating to the proposed critical habitat designation for the Oregon spotted frog and the June 18, 2014, proposed revision to the designation, and are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from nine knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which the species occurs, and conservation biology principles. We received responses pertinent to the proposed critical habitat rule from five peer reviewers.

We reviewed all comments received from the peer reviewers for substantive issues and new information regarding

critical habitat for the Oregon spotted frog. Two of the peer reviewers provided additional information, clarifications, and suggestions to improve the final critical habitat rule. We evaluated and incorporated this information into this final rule when and where appropriate to clarify this final designation. Two peer reviewers provided substantive comments on the proposed designation of critical habitat for the Oregon spotted frog, which we address below. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Reviewer Comments

(1) *Comment:* One peer reviewer expressed concern that Unit 7 does not sufficiently delineate the habitat currently used by the population of Oregon spotted frogs in that area, specifically Camas Prairie. The western boundary was drawn around what appear to be wetlands on aerial photographs, but does not account for the primary wintering sites, such as springs, small streams, and immediately adjacent streambanks.

Our response: This comment was received during the comment period for our original proposed critical habitat, published in the **Federal Register** on August 29, 2013 (78 FR 53538). We subsequently modified the boundaries of Unit 7 to include overwintering habitat and included this boundary refinement in the revised critical habitat proposed in the **Federal Register** on June 18, 2014 (79 FR 34685). We did not receive comments that disagreed with the Unit 7 boundary refinements; therefore, the final designation for this unit includes, according to the best available scientific information, the known habitats that meet the year-round needs of the species in this unit.

(2) *Comment:* One peer reviewer stated that, in his experience, egg-laying sites are depressions that hold shallow water in a nearly flat topography and frequently do not sustain water for the entire 4-month larval rearing period. The reviewer stated that it is only critical that these depressions maintain water during the embryonic development and early larval periods to allow tadpoles to move to more permanent waters to complete their development. The success of these breeding pools is based on the ability of free-swimming tadpoles to move out to more permanent waters sometime after hatching, usually within about 2 weeks. Therefore, the total period of time that these areas must retain water, from egg-laying to out-migration, is closer to 6 weeks.

Our response: The primary constituent element (PCE) characteristic of inundation for a minimum of 4 months per year is applied to both the breeding and rearing habitats. This is not counter to the information discussed by the peer reviewer. However, throughout the range of the species, not all breeding areas are shallow, seasonally inundated areas that cannot support rearing, such that tadpoles must out-migrate. For example, some breeding areas in Oregon and Washington retain water throughout the rearing phase. Due to the variations across the range, we believe the characteristic of inundation for a minimum of 4 months is appropriate.

Comments From Federal Agencies

(3) *Comment:* One commenter from the U.S. Environmental Protection Agency, two State commenters (one from Washington Department of Ecology (WDOE) and one from Washington Department of Fish and Wildlife (WDFW), Whatcom County, and one member of the public expressed the opinion that the portion of Swift Creek included in the proposed critical habitat may not be capable of supporting a healthy Oregon spotted frog population due to the environmental conditions caused by the Sumas Mountain landslide.

Our response: We concur that Swift Creek and the segments of the Sumas River downstream of its confluence with Swift Creek likely lack the PCEs and may not be capable of providing habitat in the future. Therefore, based on the information provided by the commenters, we have revised Unit 1 to remove these areas from critical habitat.

(4) *Comment:* A commenter with the U.S. Forest Service (USFS) and three public commenters suggested expanding the proposed critical habitat designation in Unit 12 to include newly identified occupied habitat at the headwaters of Jack Creek (Yellow Jacket Spring area) and extend the downstream extent to Lily Camp. One commenter asked that all wet meadow habitat adjacent to Jack Creek be explicitly mentioned in the text as critical habitat. The public commenters also recommended expanding proposed critical habitat to include Round Meadow, an unoccupied but apparently suitable site that was not proposed as critical habitat.

Our response: Critical habitat in Unit 12 was proposed for expansion on June 18, 2014 (79 FR 34685), extending critical habitat approximately 3.1 mi (5 km) downstream along Jack Creek to O'Connor Meadow. This expansion includes the location described as Yellow Jacket Spring by the

commenters. However, we did not include the area beyond O'Connor Meadow as far south as Lily Camp due to the lack of detections south of Yellow Jacket Spring. This is in compliance with the 3.1-mi (5-km) rule set, as defined in our description of critical habitat (78 FR 53546). To the best of our ability, we believe that the entire wet meadow habitat associated with Jack Creek has been included in critical habitat in Unit 12. We have no information in our files to suggest that Round Meadow is currently occupied by Oregon spotted frogs. Technically, Round Meadow is part of the Deschutes Basin; however, it is not hydrologically connected via surface water to any other Oregon spotted frog location in the Deschutes Basin nor the Klamath Basin, including Jack Creek. Thus Round Meadow does not fit the criteria for designating unoccupied critical habitat.

(5) *Comment:* A commenter from the USFS observed that the National Wetlands Inventory (NWI) data used, in part, to map critical habitat for the Oregon spotted frog does not capture all potential wet habitats along rivers, streams, lakes, and ponds and concluded that the proposed critical habitat does not accurately encompass all potential habitat. The commenter then recommended adding language to the rule to address areas of potential habitat outside mapped critical habitat in order to be clear as to whether these lands will be treated as critical habitat.

Our response: We are aware that the NWI does not map all potential wet habitats that are consistent with our PCEs. Where we knew the data was incomplete, we employed National Agriculture Imagery Program (NAIP) digital imagery, hydrologic and slope data, and our best professional judgment to identify and map the areas containing the PCEs. Critical habitat, as defined and used in the Act, is the specific areas within the geographical area occupied by the species at the time it is listed on which are found those physical or biological features essential for the conservation of the species and which may require special management considerations or protection, and specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. All the areas designated as critical habitat for the Oregon spotted frog meet the definition of critical habitat and contain the PCEs for the species' habitat; conversely, areas of potential habitat outside of the designated critical habitat boundaries could not be determined to meet the definition of critical habitat or

contain the PCEs and are, therefore, not included in this final designation. However, the lateral extent of critical habitat along river corridors will vary because of their dynamic nature.

Critical habitat along river corridors in Units 1 through 5 is intended to encompass rivers/streams/creeks and all areas within the associated hydrologic floodplain, including adjacent seasonally wetted areas that contain any components of the PCEs. The text within the criteria section and unit descriptions has been revised to better define the features included in this final designation. The commenter did not provide specific details of areas believed to be incorrectly mapped; therefore, no additional changes beyond the revised descriptions have been made to critical habitat boundaries.

(6) *Comment:* A commenter from USFS raised a concern about the scale of critical habitat mapping in an area of proposed Unit 10. The area of concern is in the Willamette National Forest on the south fork of the McKenzie River between two unnamed marshes. The width of the stream, as mapped for the purposes of critical habitat, is 2 meters wide at some points, and the stream channel itself may shift depending on seasonal flow. Considering this scenario, the commenter suggested a 100-foot (ft) buffer on each side of the segment of stream in question, stating that such an amendment would not only accommodate future changes in the location of the stream, but would also protect habitat immediately adjacent to the stream, which the USFS indicated should be considered as important for protecting the physical and biological features that are essential to the conservation of the Oregon spotted frog. Similarly, a commenter from WDFW suggested that proposed critical habitat along streams would be improved by making allowances for natural disturbance processes, such as flooding and American beaver (*Castor canadensis*) activity, which might affect the size and location of the wetted areas along streams.

Our response: Regarding the McKenzie River polygon width, we recognize that there are areas within the critical habitat designation where our mapped polygons may not precisely delineate all of the habitat features that constitute critical habitat for the spotted frog due to limitations of the data used to delineate the boundaries. We also recognize that the characteristics of the area designated as critical habitat may fluctuate over time as water is impounded by beavers or natural disturbances affect the riverine hydrology. We mapped critical habitat

using NAIP imagery, NWI information, and other resources at a scale of 1:24,000, which has inherent limitations that preclude the specificity the commenters desire. While we acknowledge the data limitations implicit in our data source, the addition of a 100-ft buffer along all rivers would encompass an area beyond what is necessary for the survival and recovery of the Oregon spotted frog. However, see the *Criteria Used To Identify Critical Habitat* section and our response to Comment 5 pertaining to the in-text description of areas that are considered to be critical habitat along designated river miles (see Table 2 for a summary of approximate river mileage and ownership within proposed critical habitat units, and also descriptions of Units 1 through 5).

Comments From States

Section 4(i) of the Act states, "the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency's comments or petition." Comments received from the State regarding the proposal to designate critical habitat for the Oregon spotted frog are addressed below.

(7) *Comment:* A commenter from the WDOE suggested that text in the proposed rule appears to confuse the Sumas River in Whatcom County, Washington, with the Chilliwack River in British Columbia, Canada. The commenter asserted that in one part of the rule the Sumas River is described as a tributary to the Lower Chilliwack River watershed, which the commenter believed to be correct, but pointed out that elsewhere in the rule the Sumas River was used interchangeably with the Chilliwack River and/or the Lower Chilliwack River, which the commenter felt was incorrect.

Our response: The commenter's confusion arises from the multiple geographic scales that could be used to describe the distribution of the Oregon spotted frog. Because we are considering the species across its range, we attempted to use a consistent naming convention across the range, specifically we chose to use the hydrological unit code (HUC) 8 (4th field or sub-basin) or HUC 10 (5th field or watershed) delineation. In this case, the Sumas River is a tributary to the Lower Chilliwack River watershed (HUC 10) and to the Fraser River sub-basin (HUC 8), and we chose to use the HUC 10 name to delineate Unit 1 consistent with the convention used for the other critical habitat units.

(8) *Comment:* The WDFW questioned why some areas were not included in

Critical Habitat Unit 4: Black River. The agency stated that we did not clearly identify whether the wetlands (including seasonally flooded wetlands and pastures) associated with Upper Dempsey Creek, Upper Salmon Creek, and lower Beaver Creek were included. The agency further commented that these segments have not been well-surveyed, and the possibility remains that Oregon spotted frogs occur in the wetlands associated with these segments. In addition, the agency noted that Allen Creek between Tilly Road and Interstate 5 (through Deep Lake and Scott Lake) is not mapped as critical habitat and that, although Oregon spotted frogs are not currently known to occur in this area, there are many unsurveyed wetlands and the possibility remains that Oregon spotted frogs may occur here.

Our response: Critical habitat, as defined and used in the Act, is the specific areas within the geographical area occupied by the species at the time it is listed on which are found those physical or biological features essential for the conservation of the species and which may require special management considerations or protection, and specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. We agree that, throughout the range, there are many areas that may provide the types of habitat needed by the Oregon spotted frog but have yet to be surveyed; however, the available information is not sufficient to support a conclusion that all of these areas are essential for the conservation of the species.

To the best of our ability, we have included the seasonally flooded wetlands and pastures associated with Upper Dempsey Creek, Upper Salmon Creek, and lower Beaver Creek when they were within 3.1 mi (5 km) of currently known occupied areas. Please see response to Comment 5 for further clarification of areas included in the river mile segments. Areas beyond 3.1 mi (5 km) of currently known occupied areas were outside of our mapping criteria. As noted by WDFW, the areas of Allen Creek between Tilly Road and Interstate 5 are not occupied, there have been no indications that Oregon spotted frogs are or will be able to use Deep Lake and Scott Lake, nor did WDFW provide information to support our finding that these areas are essential for the conservation of the species; therefore, we were unable to adequately justify revising the boundaries of Unit 4 to include these areas.

(9) *Comment:* The WDFW wanted to highlight the preparation of a Habitat Conservation Plan (HCP) that will cover multiple species across Washington State where they occur on WDFW-owned Wildlife Areas and requested that the Service provide the same consideration for exclusion of West Rocky Prairie Wildlife Area under section 4(b)(2) of the Act as the Service is providing to the Deschutes Basin Multispecies HCP.

Our response: The Service acknowledges the valuable effort on the part of WDFW to prepare the state-wide Wildlife Areas HCP. The protective provisions provided by completed HCPs are an important part of balancing species conservation with the needs of entities to manage their lands for public and private good. In the absence of an approved HCP, there are no concrete assurances of funding or implementation of the measures included in such a plan. Because there is no approved HCP for either the West Rocky Prairie Wildlife Area or the Deschutes Basin Multispecies area, we are unable to exclude either of these areas from the proposed designation of critical habitat.

(10) *Comment:* The Washington Department of Natural Resources (WDNR) expressed support for the designation of critical habitat on the Trout Lake Natural Area Preserve (NAP) in the absence of a completed Management Plan, stating that designation of critical habitat would be appropriate and may help strengthen conservation support at the site.

Our response: In our proposed designation of critical habitat for the Oregon spotted frog (78 FR 53538), we stated that we were considering the exclusion of the Trout Lake NAP if conservation efforts identified in a revised and finalized NAP management plan would provide a conservation benefit to the Oregon spotted frog. Based on comments from WDNR, we understand that the management plan for this area cannot be updated and finalized before final designation of critical habitat. Therefore, with WDNR's support, Trout Lake NAP was not excluded from critical habitat. We appreciate the WDNR's commitment to managing the Trout Lake NAP for the benefit of the Oregon spotted frog.

(11) *Comment:* The WDNR stated that the proposed critical habitat in areas regulated by WDNR presents a potential conflict between the long-term Washington State Forest Practices Rules and their associated HCP, citing a misalignment between management strategies for wetlands and riparian areas and the habitat maintenance and

enhancement needs for the Oregon spotted frog. Because the Oregon spotted frog is not a covered species under the Forest Practices HCP and the proposed listing decision does not draw a specific determination regarding the "potential for incidental take of the species while conducting forest management activities covered by the Forest Practices HCP," the regulating State agency expressed its desire to "avoid a circumstance where actions approved to benefit one set of listed species may potentially adversely impact another listed species."

Our response: The Oregon spotted frog, as a species, is not generally dependent on a forested landscape; therefore, there is a lower likelihood that Oregon spotted frogs or their habitat will be negatively affected by forest management activities. That said, Oregon spotted frogs may occur in areas delineated as forested wetlands (e.g., along Trout Lake Creek) or located downstream or downslope from forest management activities, and management agencies should be aware of the activities that may negatively impact them. An example of such activity may include upslope management actions that alter the hydrology of streams, springs, or wetlands upon which Oregon spotted frogs depend. Activities that are currently allowed under the Forest Practices HCP do have the potential to impact Oregon spotted frogs or their habitat. Conversely, disallowing management actions that could improve habitat for Oregon spotted frogs could hinder or prolong their recovery. For example, a lack of options to manage trees and/or shrubs that encroach into the wetlands could reduce the availability of suitable egg-laying habitat. We note that areas of concern are limited to a very small subset of lands included or covered under the Forest Practices HCP. If there is a process for landowners to obtain a variance from WDNR in order to reestablish or enhance Oregon spotted frog habitat, the Service recommends that WDNR make that process available to willing landowners.

Comments From Tribes

(12) *Comment:* The Yakama Nation asserted that Critical Habitat Unit 6 lies entirely within the boundaries of the Yakama Reservation, despite the statement in the proposed rule that the Service "determined that the proposed designation does not include any tribal lands" (78 FR 53553). The Yakama Nation further stated that Critical Habitat Unit 6 is within the Tract D Area and explained that this area was included in the Yakama Nation's

homelands, which was expressly reserved by the Treaty of 1855 “for the exclusive use and benefit” of the Confederated Tribes and Bands of the Yakama Nation. The Yakama Nation contends that Tract D was erroneously excluded from the Yakama Reservation’s original boundaries and directed the attention of the Service to the correction of this mistake through the return of Tract D to the Yakama Nation in 1972 under Executive Order 11670. The Yakama Nation requested that the critical habitat designation be amended to reflect consideration of the Yakama Nation’s concerns regarding long-term management implications and objected to the proposed Oregon spotted frog critical habitat designation for the area entitled, Critical Habitat Unit 6: Middle Klickitat River.

Our response: While we understand that the Yakama Nation disputes the ownership in this area, it is our current understanding that the Federal lands are under ownership of the U.S. Fish and Wildlife Service’s Conboy Lake National Wildlife Refuge. Based upon consultation with the Yakama Nation, it is our understanding that the Nation would like assurances that designation of critical habitat will not infringe on tribal treaty rights that may be exercised on the lands that fall within Unit 6. FWS sought information from NWR staff and Yakama Nation representatives regarding exercising tribal treaty rights on the lands included in the critical habitat designation. Whether or not treaty rights have been exercised on these lands is unclear; however, it is our opinion that designation of critical habitat for the Oregon spotted frog on lands owned by the Conboy Lake NWR will not affect the exercise of treaty rights by the Yakama Nation.

Public Comments

Service Authorities and Policy Compliance

(13) *Comment:* One commenter observed that the annual water regulation of the Deschutes River for the purpose of irrigation has had negative impacts on the populations of fish and other wildlife for which the river provides habitat. The commenter expressed frustration about mortality to wildlife and questioned the utility of a Federal agency listing another species and designating associated critical habitat under the Act to address these impacts.

Our response: The Act requires the Service to designate critical habitat for listed species to the maximum extent prudent and determinable. This designation will not, standing alone,

suffice to address impacts to Oregon spotted frogs that result from water management, which is governed primarily by Oregon law. The Service is working with irrigation districts and other entities in the Deschutes River Basin to develop a habitat conservation plan aimed at minimizing the impacts of irrigation diversions on Oregon spotted frogs and listed fish species.

(14) *Comment:* One commenter expressed concern about the lack of regulatory oversight for federally permitted grazing where it may overlap with critical habitat on USFS land.

Our response: The Service coordinates and provides technical assistance to other Federal agencies, including the USFS, on a broad scope of work. The USFS has been proactive in developing site management plans specific to Oregon spotted frogs. However, development of their Forest Plans, land use classifications, standards and guidelines, and project planning remains under the purview of the Federal agencies developing such products. Additionally, if a federally authorized, funded, or conducted action could affect a listed species or its critical habitat, the responsible Federal agency is then required to enter into consultation with the Service under section 7 of the Act.

(15) *Comment:* One commenter expressed concern that groundwater pumping conveyed as surface water for long distances or across lands that may be considered critical habitat will be regulated and ultimately result in less water available for irrigation. Currently groundwater pumping and use is monitored and regulated by the Oregon Water Resources Department in accordance with State law. The commenter is concerned that additional regulation could ultimately result in less water available for irrigation. In addition, the commenter expressed the opinion that groundwater pumping practices should not be identified as an action that could negatively affect Oregon spotted frog habitat because such a connection is not supported by science.

Our response: The critical habitat designation will have no effect on pumping or conveyance of groundwater where there is no Federal nexus to that action. On actions where there is a Federal nexus the Service will analyze groundwater pumping effects to Oregon spotted frog critical habitat on a case-by-case basis. Our current understanding of the sources of surface water within the designated critical habitat is that the seasonally flooded areas are fed by winter rains or snowmelt, not groundwater pumping. Pumping of

groundwater can result in lower water levels in groundwater systems, diminished flow of springs, and reduced streamflow (Gannett *et al.* 2007, pp. 59–60, 65), and could adversely affect wetland habitats occupied by Oregon spotted frog that are supported by springs. Therefore, the Service appropriately identified groundwater pumping as a potential threat to Oregon spotted frog. A determination of whether such pumping poses a threat to the frog’s habitat at any particular site will depend on site-specific analysis. The Service assesses impacts on critical habitat only in the context of consultation with Federal agencies on the effects of their actions. Hence, if groundwater pumping in a particular instance does not involve a nexus with a Federal agency action, designation of critical habitat for the Oregon spotted frog will have no impact on such pumping.

(16) *Comment:* One commenter stated that the Service’s Director should not be able to certify whether the critical habitat rule will have a significant economic impact. The commenter speculated that the decisionmaking process represents a conflict of interest and does not allow any protections for the private landowners.

Our response: We assume the commenter is referring to our determination under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*) that this final critical habitat designation will not have a significant economic impact. Under section 605 of the RFA, “the head of the agency” can make a certification “that the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.” The Director of the Service is in the approval chain for Service designations of critical habitat. However, the Principal Deputy Assistant Secretary for Fish and Wildlife and Parks within the Department of the Interior has the ultimate signature authority for Service designations of critical habitat.

As described in our response to Comment 17 and later in this document under Required Determinations, under section 7 of the Act only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, our position is that only Federal action agencies will be directly regulated by this designation, and Federal agencies are not small entities. Therefore, because no small entities are directly regulated by this rulemaking, we certify that, if promulgated, the final critical

habitat designation will not have a significant economic impact on a substantial number of small entities.

(17) *Comment:* A representative of Modoc County, California, expressed the opinion that the Service had not complied with the Regulatory Flexibility Act (RFA) when proposing critical habitat.

Our response: Oregon spotted frogs are not known to occur in Modoc County, and we did not propose to designate critical habitat in that county. When publishing a proposed or final rule that may have a significant economic impact on a substantial number of small entities, a Federal agency is required by the RFA to prepare and make available for public comment a regulatory flexibility analysis describing the effects of the rule on the small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions) directly regulated by the rulemaking itself, and the potential impacts to indirectly affected entities. This designation of critical habitat will directly regulate only Federal agencies, which are not by definition small entities. And as such, this designation of critical habitat would not have a significant economic impact on a substantial number of small entities. Therefore, an initial regulatory flexibility analysis was not required.

However, because we acknowledge that, in some cases, third-party proponents of actions subject to Federal agency permitting or funding may participate in a section 7 consultation, our DEA considered the potential effects to these third-party project proponents. The DEA was made available for a 30-day comment period beginning on June 18, 2014, and for another 14 days beginning September 9, 2014. The economic analysis determined that the designation has the potential to cause ranchers and landowners to perceive that private lands will be subject to use restrictions. However, the designation of critical habitat for the Oregon spotted frog is not expected to trigger additional requirements under State or local regulations that would restrict private land use.

(18) *Comment:* One commenter stated that the Service is required to conduct a National Environmental Policy Act (NEPA) compliance analysis before finalizing the designation of proposed critical habitat in Washington, Oregon, and California.

Our response: It is the position of the Service that preparation of environmental analysis pursuant to NEPA is not required prior to designation of critical habitat outside of the jurisdiction of the U.S. Court of

Appeals for the Tenth Circuit. We published a notice in the **Federal Register** outlining our reasoning for this determination on October 25, 1983 (48 FR 49244), and our position has been upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

(19) *Comment:* One commenter requested an extension of the public comment period for the proposed critical habitat designation due to the Federal Government shutdown that occurred from October 1–16, 2013. The commenter stated that the shutdown effectively truncated the initial public comment period by 16 days. During the comment period opened for the DEA and proposed critical habitat designation on June 18, 2014, another commenter requested a reopening of the comment period to give the public additional time to review the DEA, including the perceptual effects memo.

Our response: The Service is committed to receiving and evaluating feedback from all interested parties. We regret any difficulties experienced during the government shutdown. The comment period for the proposed critical habitat rule was extended an extra 15 days from October 28, 2013, until November 12, 2013. In addition, another comment period of 30 days was available from June 18, 2014, to July 18, 2014. We also reopened the comment period for an additional 14 days from September 9, 2014, to September 23, 2014.

(20) *Comment:* A representative of Modoc County, California, asserted that the Service failed to follow Federal procedures when publishing the proposal to designate critical habitat for the Oregon spotted frog. The commenter cited case law holding that the Service is required to give actual notice to local governments of its intent to propose a species for listing.

Our response: The ESA at 16 U.S.C. 1533(b)(5)(A)(ii) requires the Secretary to provide actual notice of a proposed critical habitat designation only to each county in which the species at issue is believed to occur. The Oregon spotted frog is not currently known or believed to occur in either Modoc or Siskiyou Counties in California; therefore, the Service did not provide notification of proposed critical habitat for the species to these counties. Notice was provided, however, to the counties where Oregon spotted frog does occur; these include Klickitat, Skagit, Skamania, Thurston, and Whatcom in Washington, and Deschutes, Jackson, Klamath, Lane, and Wasco Counties in Oregon.

(21) *Comment:* One commenter stated that the Service failed to release viewable maps of the proposed designated habitat in the La Pine, Oregon, basin, and that residents and other stakeholders need to see in sufficient detail the areas that the Service proposes to designate.

Our response: The Service provided the required maps in the proposal to designate critical habitat (78 FR 53538). In addition, the Service made maps with aerial photos and finer scale critical habitat unit boundaries available at <http://www.regulations.gov> and <http://www.fws.gov/wfwo>. The geographic information system shapefiles were also available for download at <http://www.fws.gov/wfwo>. In addition, the Service convened a public meeting in the La Pine, Oregon, area where larger scale maps were available for viewing. Therefore, the Service believes we have provided clear maps to inform the general public about the critical habitat designation.

(22) *Comment:* One commenter requested both a public meeting and a public hearing and specifically requested that they be held in Siskiyou County, California.

Our response: The Service held a public hearing in Lacey, Washington, on October 21, 2013. Public meetings were conducted in Deschutes County, Oregon, in December 2013 and Klamath County, Oregon, in September 2013. The Service did not accommodate the request to hold a public meeting or a public hearing in Siskiyou County, California, because we did not propose to designate any critical habitat in Siskiyou County, California, and as such, there are no affected parties in that county.

(23) *Comment:* One commenter expressed concern that the designation of critical habitat would preclude small mining activities in southern Oregon and northern California and suggested that the designation of critical habitat would convert land from other ownership or designation to ownership by the Service as part of the wildlife refuge system.

Our response: The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, through consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. Where a landowner requests Federal agency funding or authorization

for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply. If a consultation were to find that actions would result in the destruction or adverse modification of affected habitat, the obligation of the Federal action agency and the landowner in this case is not to restore or to recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat. In light of this provision of the law, the Service does not agree that the designation of critical habitat will have the effects suggested by the commenter as implementation of any reasonable and prudent alternatives would not result in a change in land ownership.

Critical Habitat Delineation Criteria

(24) *Comment:* Several commenters were unclear about the criteria used to designate critical habitat. Several commenters requested that unoccupied and currently unsuitable habitat be designated as critical habitat. Other commenters stated that areas included in the proposed designation of critical habitat should be removed for various reasons (e.g., fluctuating water levels and property boundaries) or that boundaries should be adjusted.

Our response: We mapped critical habitat at a large spatial scale (1:24,000) using NWI and NAIP imagery, per parameters for publication within the Code of Federal Regulations. Because of the scale of mapping, there may be areas where the delineation of critical habitat in populated areas may not precisely include all of the habitat with PCEs, or may include some areas that do not have the PCEs. Based upon comments received, we refined the boundaries of the critical habitat delineation to align more closely with the areas containing the PCEs, in particular along the Deschutes River. However, due to the scale of mapping, the final critical habitat designation may still include developed areas such as lands covered by buildings, pavement, and other structures. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this final rule have been excluded by text and are not designated as critical habitat (See paragraph (3) in the rule portion of this document.).

We acknowledge there may be portions of critical habitat units that are not known to be used, may not be consistently used, or may be currently unsuitable (see *Criteria Used To Identify Critical Habitat*). However, we have determined that all of the critical habitat

units meet our definition of occupied at the time of listing and contain sufficient elements of physical or biological features to support Oregon spotted frog life-history processes. In addition, there are areas within these critical habitat units that are considered to be essential for the conservation of the species (and are, therefore, designated as critical habitat) even though Oregon spotted frog use or the presence of the physical or biological features may be uncertain, seasonal, or sporadic. Both areas outside the geographical area occupied by the species at the time of listing, as well as unsuitable areas located greater than 3.1 mi (5 km) upstream of habitat currently known to be used by Oregon spotted frog, are not likely to support Oregon spotted frogs without human intervention (*i.e.*, translocation), and we have not determined that reestablishment in these unoccupied or unsuitable areas is essential for the conservation of the species. Therefore, there is no Oregon spotted frog critical habitat designated in unoccupied or unsuitable areas outside of currently known occupied sub-basins or farther than 3.1 mi (5 km) from habitat known to be used at the time of listing.

One commenter suggested that Tumalo Creek in the Upper Deschutes River sub-basin be considered as critical habitat for Oregon spotted frog. Although Tumalo Creek contains wetland habitats similar to those that support Oregon spotted frog, there are no historical or current records that indicate that spotted frogs inhabit the Tumalo Creek watershed. Furthermore, Tumalo Creek is greater than a 3.1-mi (5-km) distance from occupied habitat. Therefore, Tumalo Creek does not meet our criteria for critical habitat designation.

Reservoirs in the Upper Deschutes River sub-basin are used by Oregon spotted frogs. Although the current system of reservoir management results in significant fluctuations in water levels within the reservoirs, the increasing water depth from November to March provides overwintering habitat, and inundation of wetland areas along the reservoir margins allows for breeding to occur in the spring. The Service determined that PCEs are present in the reservoirs and that these PCEs vary spatially and temporally with reservoir storage and release operations. For example, Oregon spotted frog breeding habitat shifts depending on water elevation in the reservoirs. When water levels are too high for frogs to access breeding habitat, they move to shallow margins where habitat may be available. The Deschutes River and associated wetlands downstream of

Wickiup Dam experience reduced water levels during the reservoir storage season (October through mid April), such that PCEs shift seasonally depending on water elevations in the areas downstream of the dam. Therefore, all of these geographic areas are included in the critical habitat designation.

(25) *Comment:* Two commenters expressed confusion regarding the exclusion of deep water in our description of Critical Habitat Subunit 8B in the preamble to the proposed rule and how the buffers were developed for the proposed critical habitat. One commenter questioned the application of buffers around waters that connect occupied habitat.

Our response: See the responses to Comments 5 and 6 regarding our revised text description of areas along designated river miles that are considered to be critical habitat. We have removed language referring to the exclusion of deep water in the description of Critical Habitat Subunit 8B in the preamble to the final rule.

(26) *Comment:* A few commenters were unclear about why the Service proposed critical habitat in wetlands and areas that have been extensively farmed in the past because most of these areas already receive protection under existing regulations and conservation programs, making additional regulation unnecessary. Two commenters stated that residential properties should be excluded from critical habitat because the existing regulatory mechanisms are adequate to protect the species and the designation of critical habitat would not provide additional regulatory benefits.

Our response: We acknowledge that there are multiple regulatory mechanisms in both Washington and Oregon that afford some conservation benefits to the Oregon spotted frog. However, as determined in our final listing determination (79 FR 51658, August 29, 2014), current regulatory mechanisms are not adequate to reduce or remove threats to Oregon spotted frog habitat, particularly the threat of habitat loss and degradation. While some setbacks are required, not all “wetlands” are equivalent, and not all counties or States have equivalent regulations. Additionally, not all Oregon spotted frog habitat is classified as “wetland” under county or State regulations. In any case, while existing regulatory mechanisms are considered when listing a species, current regulatory protection is not a consideration in the determination of whether an area meets the definition of critical habitat. We are designating critical habitat within areas that we

identified as occupied by the species at the time of listing that contain the physical or biological features essential to the conservation of the species, and which may require special management consideration or protection.

We are especially concerned about ongoing loss of wetlands due to both development (including urban and agricultural) and wetland modification from restoration and conservation programs that are actively planting willows and other riparian shrubs in wetland and riparian areas that currently provide egg-laying habitat. In the absence of a Federal nexus, designation of critical habitat does not impose an additional regulatory burden on private lands, but does serve to educate private landowners, as well as State and county regulators, of the importance of the area for the species.

(27) *Comment:* One commenter expressed concern that no tribal lands were proposed as critical habitat despite appearing to have wetland habitat of similar quality to the wetlands proposed as critical habitat.

Our response: The identification of critical habitat followed a specified protocol as set out in the proposed critical habitat rule and does not take land ownership into consideration. There are no areas currently known to be occupied by Oregon spotted frogs on tribally owned lands, nor are there areas not currently occupied that we determined to be essential for the conservation of the species. Therefore, Tribal lands have not been designated as critical habitat.

(28) *Comment:* One commenter stated an opinion that the distribution of proposed critical habitat was strategically spread across the range of assumed historical Oregon spotted frog habitat and asked, if frogs were found in these areas, why would it not be possible that more populations of Oregon spotted frogs may be discovered to exist in other similar habitats?

Our response: The distribution of critical habitat includes all sub-basins/watersheds that are currently known to be occupied. This distribution does not encompass the historical range. Sixteen sub-basins in Puget Sound, Willamette Valley, and northern California, within which Oregon spotted frogs were historically documented, have not been included in the designation. While it is possible that other populations of Oregon spotted frogs may be located in the future, critical habitat units were established in sub-basins with positive detections no older than 2000.

(29) *Comment:* Several commenters highlighted the value of beaver activity in maintaining suitable Oregon spotted

frog habitat, pointing out that some areas adjacent to proposed critical habitat units currently have suitable habitat that was not included in the proposed designation. Two of these commenters suggested additional areas that they believed met the criteria for critical habitat due to beaver activity.

Our response: As stated above, we propose critical habitat in the specific areas within the geographical area occupied by a species at the time it is listed on which are found those physical or biological features essential for the conservation of the species and which may require special management considerations or protection. In addition, if such areas are not adequate to provide for the conservation of the species, we may propose critical habitat in specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. For more information on how we determined what areas to include in the final designation for the Oregon spotted frog, see our discussion in the section *Criteria Used To Identify Critical Habitat*.

Based on information received, we proposed a refinement of unit 14 in the **Federal Register** on June 18, 2014 (79 FR 34685). The refinement included an additional portion of the Buck Lake drainage system of canals, as well as a portion of Spencer Creek. Not all of the inclusions suggested by the commenters were included in the proposed refinements because, based on our delineation process, the refinements were limited to 3.1 mi (5 km) from the last known location occupied by Oregon spotted frog. We did not receive comments that disagreed with our refinements, therefore, the final designation includes the areas added through the refinement process.

(30) *Comment:* A commenter from Jackson County, Oregon, argued that critical habitat should not be designated in Jackson County because only 245 ac (99 ha) of land in the county were proposed as critical habitat, which represents a very small proportion of the overall proposed acreage and is not essential to the recovery of the species. In addition, the commenter was concerned that the critical habitat proposed in this county would have a negative economic impact due to the current regulations governing the proposed acreage under the Oregon and California Railroad Revested Lands (O&C Lands) Act of 1937, which is administered by the Bureau of Land Management (BLM).

Our response: The criteria for the designation of critical habitat can be found in the proposed rule, this final rule, and in the responses to Comments 8, 24, and 29. As required under the Act, the Service delineated the specific areas within the geographical area occupied by the species at the time of listing on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection. Regardless of the small amount of critical habitat in Jackson County, Oregon, these areas meet the definition of critical habitat for the species.

The O&C Lands Act mandates the protection of watersheds as part of its regulatory function. The Oregon spotted frog population at Parsnips Lakes occurs entirely within the boundary of the Cascade-Siskiyou National Monument (CSNM). The presidential proclamation that established the monument reserved the CSNM in recognition of its remarkable ecology and to protect a diverse range of biological, geological, aquatic, archeological, and historic objects. The CSNM Management Plan (BLM 2008) promotes the protection, maintenance, restoration, or enhancement of monument resources as required by the proclamation. Because Oregon spotted frog conservation falls in line with the purpose and priorities of the CSNM, the critical habitat designation is not anticipated to add additional restrictions in this area.

(31) *Comment:* One commenter requested that the Service clarify, and amend where necessary, the rule to omit manmade features such as golf courses, fairways, greens, cart paths, mowed rough areas, lawns, turf grass, landscaped areas, open meadows, pastures, walking paths, and other areas of nonnative vegetation. The rationale provided was that such areas have been excluded from other critical habitat designations because these manmade features are actively managed and no longer resemble native habitat.

Our response: The Service determined in the final listing document (79 FR 51658, August 29, 2014) that the vegetated areas supporting Oregon spotted frogs are largely management-dependent and in many cases no longer contain native vegetation. Most of the known breeding areas, particularly in Washington, are located on lands that could be termed mowed rough areas, open meadows, pastures, and other areas of nonnative vegetation. The areas in Unit 8, specifically concerning to the commenter, are being excluded from critical habitat because the lands are being managed under a management

plan in such a way that the benefits of excluding outweigh the benefits of including these areas in critical habitat.

The final critical habitat designation may still include developed areas such as lands covered by buildings, pavement, and other structures.

Manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located that fall inside critical habitat boundaries shown on the maps of this final rule have been excluded by text and are not designated as critical habitat. See *Criteria Used To Identify Critical Habitat* and the responses to Comments 5, 6, and 24 for further information.

Occupancy

(32) *Comment:* Two commenters questioned the Service's conclusion that the upper Klamath basin is occupied and argued that surveys conducted as recently as 2011 confirm that no Oregon spotted frogs occur in the areas where critical habitat has been proposed.

Our response: We provided citations in both our proposed listing (78 FR 53582, August 29, 2013) and proposed critical habitat (78 FR 53538, August 29, 2013) rules for the sources we relied upon for evidence that all three critical habitat units (Units 12, 13, and 14) in the Klamath basin are occupied by the Oregon spotted frog. These sources include data provided by the USFS, U.S. Geological Survey (USGS), BLM, and the Klamath Marsh National Wildlife Refuge (NWR). All of these sources document occupancy as recently as 2012, and we have received additional information further documenting occupancy in 2013. Therefore, we believe there is sufficient evidence supporting our determination of occupancy in the Klamath basin, specifically, within critical habitat Units 12, 13, and 14.

(33) *Comment:* One commenter stated that the Service lacks population trend data for 90 percent of the known Oregon spotted frog populations and, without this information, the Service cannot determine how designating particular areas as critical habitat will affect those populations.

Our response: A listing determination is an assessment of the best scientific and commercial information available regarding the past, present, and future threats to the Oregon spotted frog. While the loss of Oregon spotted frogs across the historical distribution and the status of the species within the current range is considered in the listing decision, the designation of critical habitat is focused on the ongoing and future threats to the PCEs and the special management

necessary for the conservation of the species. All of the designated critical habitat units were known to be occupied by the species at the time of listing and contain the physical or biological features essential to the conservation of the Oregon spotted frog and require special management considerations or protection.

Primary Constituent Elements

(34) *Comment:* One commenter expressed the opinion that wetted corridors alone do not necessarily provide Oregon spotted frog habitat and we should consider rephrasing PCE 2 to define aquatic movement corridors as those that contain slow-moving water, gradual topographic gradient, and emergent vegetation with a minimum summer water temperature (not provided by the commenter), and the presence of connectivity to other suitable habitats. The commenter stated that corridors that may be cold, high-velocity streams with no aquatic vegetation should not be considered critical habitat because frogs would avoid these areas. In addition, the commenter opined that movement corridors that do not connect occupied or suitable habitats (e.g., no suitable habitat downstream) should be removed from critical habitat.

Our response: While we acknowledge that Oregon spotted frogs likely prefer slow-moving water, PCE 2 is intended to represent both movement corridors that are necessary for year-round movements between breeding, rearing, dry season, and overwintering habitat, as well as corridors that facilitate dispersal between occupied areas or into new areas. In addition, in many cases, streams may not maintain high velocity throughout the year. Therefore, these areas may also be defined with characteristics consistent with PCE 1 in addition to PCE 2.

(35) *Comment:* One commenter questioned our lack of information regarding the presence and impacts of warm-water fishes in Oregon spotted frog areas because the information was extrapolated from impacts on other amphibian species.

Our response: The microhabitat requirement of the Oregon spotted frog, unique among native ranids of the Pacific Northwest, exposes it to a number of introduced fish species (Hayes 1994, p. 25), such as smallmouth bass (*Micropterus dolomieu*), largemouth bass (*Micropterus salmoides*), pumpkinseed (*Lepomis gibbosus*), yellow perch (*Perca flavescens*), bluegill (*Lepomis macrochirus*), brown bullhead (*Ameriurus nebulosus*), black crappie

(*Pomoxis nigromaculatus*), warmouth (*Lepomis gulosus*), and fathead minnow (*Pimephales promelas*) (Hayes and Jennings 1986, pp. 494–496; Hayes 1997, pp. 42–43; Hayes *et al.* 1997; McAllister and Leonard 1997, p. 14; Engler 1999, pers. comm.) and mosquitofish (*Gambusia affinis*) (Wydoski and Whitney 2003, p. 163; Johnson 2008, p. 5). Information presented in the *Physical or Biological Features* discussion is directly derived from Oregon spotted frog-specific studies. Factor C (Disease or Predation) in our final listing document (79 FR 51658, August 29, 2014) includes a more thorough discussion of the impacts resulting from the presence of nonnative fish species. Some of these references involve other western amphibians and closely related frog species. We often find it informative to consider appropriate research on closely related species, particularly when species-specific research is lacking. In this case, there is both direct Oregon spotted frog evidence, as well as evidence derived from closely related frog species. Further information on the sub-basins within which warm-water fish are known to occur is available in the Threats Synthesis document available at www.regulations.gov (docket #FWS-R1-ES-2013-0013). Accordingly, we maintain that the presence of warm-water fishes requires special management considerations, and, therefore, changes to the *Physical or Biological Features* section are unnecessary.

(36) *Comment:* One commenter had questions about the definition of "barriers to movement" and requested clarification on the parameters of the environment that constitute barriers.

Our response: Impediments to upstream movement may include, but are not limited to, hard barriers such as dams, impassable culverts, and lack of water, or biological barriers, such as lakes or rivers/creeks without refugia from predators. Additional text clarifying this definition has been added to the *Physical or Biological Features* section of the preamble to this rule and the actual rule text.

(37) *Comment:* One commenter disagreed with the Service's conclusion that PCEs are present and require special management on privately owned lands in Unit 6. The commenter further stated that Oregon spotted frogs are found in the unit because of the existing management on the private lands.

Our response: Unit 6 is currently occupied by the Oregon spotted frog. The species carries out all life stages (egg laying, rearing, and over-wintering) in this unit, on all land ownerships. All

of the PCEs are present in this unit; however, it is not a requirement of critical habitat designation that all of the acres within each unit contain all of the PCEs. As the commenter points out, land managers are “managing” the lands, such that Oregon spotted frogs remain present, which demonstrates that special management is required. Thus, the lands included in the designation for Unit 6 meet all of the criteria required to be designated as critical habitat. However, a number of these private lands that were proposed for critical habitat in Unit 6 have been excluded from the final designation under section 4(b)(2) of the Act (see Comment 42 below and *Exclusions Based on Other Relevant Impacts* section).

Exclusions

(38) *Comment:* Several commenters questioned the benefits of including private lands in the proposed designation of critical habitat and argued that the designation of critical habitat on private lands would discourage the kind of land stewardship that is beneficial to the Oregon spotted frog and its habitat. These commenters further argued that designation of critical habitat on private property could potentially limit future partnerships between the Service and private land holders. Some of these commenters requested that all private lands be excluded from critical habitat, stating that the exclusion of private lands would provide a greater conservation benefit than inclusion.

Our response: Under the Act, critical habitat is defined as those specific areas within the geographical area occupied by the species at the time it is listed on which are found the physical or biological features essential to the conservation of the species and which may require special management considerations or protection; and specific areas outside of the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. All of the critical habitat units designated for Oregon spotted frog were known to be occupied at the time the species was listed (79 FR 51658, August 29, 2014). The Act does not provide for any distinction between land ownerships in those areas that meet the definition of critical habitat. However, the Act does allow the Secretary to consider whether certain areas may be excluded from final critical habitat. An area may be excluded under section 4(b)(2) of the Act if the benefits of excluding it

outweigh the benefits of including it in critical habitat, unless that exclusion would result in the extinction of the species. With respect to private landowners, the Secretary has excluded private lands from the final designation of critical habitat in cases where conservation agreements or other partnerships resulted in a conclusion that the benefits of excluding those areas outweigh the benefits of including them in critical habitat (see *Exclusions Based on Other Relevant Impacts* section of this document). Unless a private landowner has an existing conservation agreement or an established partnership with the Service before the finalization of critical habitat (that provides a demonstrable conservation benefit to the Oregon spotted frog and its habitat), it is unlikely that there is a basis for concluding that the benefit of exclusion outweighs the benefit of inclusion.

In areas occupied by a federally listed species and designated as critical habitat, Federal agencies are obligated under section 7 of the Act to consult with us on actions that may affect that species to ensure that such actions do not jeopardize the species' continued existence or adversely modify critical habitat. However, in the case of privately owned lands, there is a low likelihood of a Federal consultation responsibility (nexus) because Federal agencies rarely carry out discretionary actions on private land, and future Federal actions that might trigger such a Federal nexus are limited. Therefore, the regulatory benefit of including these lands in critical habitat is reduced.

We encourage any landowner concerned about potential take of listed species on their property to contact the Service (see **FOR FURTHER INFORMATION CONTACT**) to explore options for developing a safe harbor agreement or HCP that can provide for the conservation of the species and offer management options to landowners associated with a permit to protect the party from violations under section 9 of the Act.

(39) *Comment:* One commenter requested that the Service consider exclusion of all areas that would be covered under the proposed Upper Deschutes Basin Multispecies HCP. Alternately, the commenter requested that if these areas are not excluded from the designation of critical habitat, that these areas be removed from critical habitat upon completion of the HCP. Conversely, one commenter stated the Service should not exclude these areas because of the uncertainty regarding the final agreed-upon conservation

measures applicable to the Oregon spotted frog.

Our response: When deciding whether to exclude an area from designation of critical habitat under section 4(b)(2) of the Act, the Service assesses the level of assurance an entity can provide that it will actually fund and implement the conservation measures identified within the plan. The same process would hold true when evaluating the Upper Deschutes Basin Multispecies HCP. Because we have not received a complete draft of the HCP document to review in order to make an assessment and would require a final approved HCP, the Service declined to exclude these areas at this time. Removal of designated critical habitat upon future completion of an HCP would require an evaluation of the HCP through a separate rulemaking process to revise critical habitat.

(40) *Comment:* One commenter stated that it is important for the Service to understand that the private landowners in Klickitat County, Washington, utilize irrigation water via their Washington State recorded and recognized water rights. The commenter further asserted that in Washington water rights are considered property rights and any regulatory actions that the Service might implement that limits or impairs those rights could be viewed as a taking and may be grounds for litigation from the private landowners. Finally, the commenter suggested that potential litigation could be avoided by not designating critical habitat on private property in Klickitat County.

Our response: Though private lands may be subject to State or local governmental regulatory mechanisms, the designation of critical habitat on private lands has no Federal regulatory impact on the owner of such lands unless a Federal nexus is present. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply. If a consultation were to find that actions would result in the destruction or adverse modification of affected habitat, the obligation of the Federal action agency and the landowner is not to restore or to recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat. In the Service's experience with other species, it is generally possible to devise such alternatives in a way that permits continued economic use of designated lands (also see response to comment 53).

(41) *Comment:* One commenter requested the Service to consider excluding private lands within the Crosswater Resort that are managed according to the Crosswater Environmental Plan and private lands within the Sunriver Community that are managed according to the Sunriver Great Meadow Management Plan.

Our response: Based on our analysis of these Plans and our determinations that the benefits of excluding lands covered by these plans outweigh the benefits of including them, we are excluding private lands within the Crosswater Resort and Sunriver Community from critical habitat. See *Exclusions Based on Other Relevant Impacts* for the complete analyses.

(42) *Comment:* Three commenters requested that the Service consider excluding private lands within Unit 6 that will be operated under the Coordinated Resource Management Plan and Conservation Agreement between Glenwood Valley Ranchers and the Service.

Our response: Based on our analysis of this Agreement and our determinations that the benefits of excluding lands covered by these plans outweigh the benefits of including them, we are excluding those private lands covered under the Agreement from critical habitat. See *Exclusions Based on Other Relevant Impacts* for the complete analyses.

(43) *Comment:* One commenter requested that the Service consider excluding private lands within Unit 3 that will be operated under the Coordinated Resource Management Plan and Conservation Agreement between Skagit Valley Ranchers and the Service.

Our response: Upon further coordination between the commenter and the Service, this request for exclusion was withdrawn.

Economic Analysis

(44) *Comment:* Two commenters expressed concern that critical habitat would be designated before an economic analysis of the effects of critical habitat would be completed. Both commenters stated that their preferred timing of events would have included the availability of the completed economic analysis before the publication of the proposed critical habitat.

Our response: Under the Act, the Service is required to consider economic impacts prior to finalizing the proposed designation of critical habitat, but not prior to the proposal of critical habitat. The DEA was made available for public review and comment on June 18, 2014, in the **Federal Register** (79 FR

34685) and in a separate comment period that opened September 9, 2014 (79 FR 53384). We have considered all comments received on the DEA and proposed critical habitat designation in this final designation.

(45) *Comment:* One commenter pointed out what appears to be an inconsistency within our Incremental Effects Memorandum (IEM) regarding how we expect private landowners in Washington to behave (*i.e.*, fence-off lands and discontinue management) versus private landowners in Oregon to behave (*i.e.*, designing projects to be compatible with Oregon spotted frog needs) in response to a critical habitat designation. The commenter believes there is a lack of data to support this distinction and that Oregon landowners are “almost certain” to respond similarly to landowners in Washington.

Our response: Even though the designation of critical habitat for Oregon spotted frog will not put any additional regulatory burden on private landowners in either Oregon or Washington, the reaction of landowners in Washington to the designation may be influenced by their previous experience working to comply with Washington State’s stream management guidelines.

The State of Washington developed water quality standards for temperature and intergravel dissolved oxygen that were approved by the Environmental Protection Agency in February 2008. The temperature standards are intended to restore thermal regimes necessary to protect native salmonids and sustain viable salmon populations. Water quality management plans developed by Washington State recommend planting trees and shrubs and excluding cattle from riparian areas to improve thermal conditions for salmonids. Some Washington landowners find it more expedient to fence off the riparian areas and reduce the perceived conflict between a State water quality regulation and the habitat necessary to support a listed species. The IEM anticipates that some landowners in Washington may respond to the designation of Oregon spotted frog critical habitat by installing fencing because that action is already a preferred option for these landowners in dealing with the proximity of their land to the habitat of listed salmonid species.

The areas within proposed critical habitat in Oregon do not support ESA-listed salmonid species and, therefore, fencing of the riparian areas along the Little Deschutes River, where most of the private grazing lands occur, is not a common practice nor is it regulated by the implementation of water quality management plans. The Service held

public meetings in Sunriver and La Pine, Oregon, in December 2013 for private landowners within the proposed critical habitat designation. During the meetings, the Service explained that grazing does not always result in a negative impact to critical habitat for the Oregon spotted frog. Rather, low-intensity grazing could be used to maintain breeding habitat for spotted frogs by improving ground-level solar exposure and maintaining early seral emergent vegetation within wetlands. The Service does not anticipate that private lands in Oregon will be fenced as they are in Washington State where water quality standards are designed to support salmon. The Service is already working with local Soil and Water Conservation Districts in Oregon to implement appropriate conservation practices for Oregon spotted frogs within the proposed critical habitat designation.

(46) *Comment:* Several commenters assert that the Economic Screening Analysis does not adequately consider impacts to private landowners and local communities. One commenter states that the Economic Screening Analysis should include impacts associated with reductions in land value and income of landowners.

Our response: As stated in the analysis, the quality of Oregon spotted frog habitat is closely linked to species survival. Specifically, the Service states that “in occupied critical habitat, it is unlikely that an analysis would identify a difference between measures needed to avoid the destruction or adverse modification of critical habitat from measures needed to avoid jeopardizing the species.” As such, section 7 impacts in occupied areas are anticipated to be limited to administrative costs. These costs include costs to private landowners, where applicable.

In addition to these costs, the analysis discusses potential perceptual impacts that the critical habitat designation could have on the value of private land. The analysis recognizes that a property that is inhabited by a threatened or endangered species, or that lies within a critical habitat designation, could have a lower market value than an identical property that is not inhabited by the species or that lies outside of critical habitat. This lower value, if any, would result from a perception that critical habitat will preclude, limit, or slow development, or somehow alter the highest and best use of the property (*e.g.*, grazing). Public attitudes about the restrictions and costs that the Act can impose can cause real economic effects to the owners of property, regardless of whether such restrictions are actually

imposed. Over time, as public understanding of the actual regulatory burden placed on designated lands grows, particularly where no Federal nexus compelling section 7 consultation exists, the perceptual effect of critical habitat designation on private properties may subside.

(47) Comment: One commenter stated that extensive Federal funding for restoration activities in the Klamath Basin that is stipulated by various settlement agreements through the Klamath Basin Adjudication process will create a Federal nexus that is unaccounted for in the DEA.

Our response: Our forecast of future actions likely to result in section 7 consultations include consultations associated with participation in Natural Resource Conservation Service and Farm Service Agency programs such as the Wetland Reserve Enhancement Program, the Conservation Reserve Enhancement Program, and the Environmental Quality Incentives Program in the critical habitat area. As such, our analysis does include a Federal nexus and includes administrative cost estimates related to section 7 consultations for the restoration projects in these areas.

(48) Comment: One commenter asked if the Economic Screening Analysis surveyed private landowners in order to detail types of land use.

Our response: A survey of private landowners was not conducted as part of the Economic Screening Analysis. However, based on information in the proposed rule, the Incremental Effects Memorandum, as well as visual examination of satellite imagery of the designation, we determined that the proposed critical habitat for the Oregon spotted frog on privately owned lands is located mainly in areas that are seasonally flooded, protected from development by county restrictions, and/or are used for grazing or crop agriculture; the primary use of land within the designation is for livestock grazing.

(49) Comment: Two commenters took issue with the Service's assumption that Federal agencies will treat unoccupied areas as if they were occupied for purposes of section 7 consultation, stating that relying on this assumption causes the Economic Screening Analysis to underestimate the economic impacts of critical habitat designation for the Oregon spotted frog. In unoccupied areas, the commenters believe that incremental economic impacts should include costs associated with project modifications, delay, and restrictions on land use.

Our response: In the proposed critical habitat rule (78 FR 53538, August 29, 2013), the Service proposed to designate areas that were currently "not known to be occupied." The Service has since reclassified these areas as "occupied" based on the fact that these areas are within occupied sub-basins, contain habitat features similar to known occupied areas, are hydrologically connected (via surface waters) to occupied areas, and do not contain barriers that would inhibit Oregon spotted frog movement between occupied areas. The Service recognizes that the physical or biological features may only be present seasonally in some areas because aquatic systems are not static; water levels fluctuate between seasons, severe flood events occur, and beavers abandon and recolonize sites. As a result of these changing habitat conditions, some areas may only be occupied intermittently or seasonally; however, we consider the entire critical habitat unit to be occupied. Therefore, impacts in these areas are anticipated to be limited to administrative costs.

(50) Comment: One commenter stated that some of the private lands considered in the perceptual effects analysis are used for hay production rather than grazing and the value of irrigated land is considerably higher than non-irrigated rangeland.

Our response: The analysis recognizes that the proposed critical habitat for the Oregon spotted frog on privately owned lands is located primarily in areas that are seasonally flooded, protected from development by county restrictions, and/or are used for grazing or crop agriculture. It also recognizes that public perception of critical habitat impacts may diminish land values by some percent of these total values, though it is unlikely that total land values would be lost due to these perceived economic impacts. However, because data limitations prevent us from estimating the size of this percent reduction or its attenuation rate, the analysis used USDA National Agricultural Statistics Service pasture-land-per-acre values data to estimate the per-acre value for agricultural lands. We applied this value to all private acres other than those considered to be developable for residential use. To the extent that the value of some of these acres is, in fact, higher, this total value would be underestimated. However, we reiterate that perceived economic effects are likely to represent only a portion of the total value of the properties. Hence, it is uncertain to what extent this effect would be understated by figures reported.

(51) Comment: One commenter asserted that the Service has the ability to sue or threaten to sue private landowners if the Service deems take or potential harm to the species or if the Service deems that modification of critical habitat has occurred.

Our response: Designation of critical habitat has no effect on the liability of non-Federal parties for actions that may affect listed species. While private landowners may be liable for civil or criminal penalties under section 9(a)(1) of the Act for actions that harm the Oregon spotted frog, any such liability would arise from the listing of the species, and not from the designation of critical habitat. Absent evidence of harm to Oregon spotted frogs, the Act does not give the Service authority to institute an enforcement action for modification of critical habitat on private lands.

(52) Comment: One commenter stated that the Economic Screening Analysis fails to consider costs associated with "potentially modified management of storage levels and releases from Wickiup, Crane Prairie, and Crescent Lake Reservoirs." The commenter included an Economic Review conducted by Highland Economics, which concludes that a 10 percent reduction in water to Deschutes River water districts would result in total direct economic losses of approximately \$4.3 million related to farm income and hydroelectric generation losses, and additional indirect and induced regional losses of approximately \$3.5 million. The Economic Review also suggests that reduction in water supplies could have adverse impacts on recreation and tourism in the area.

Our response: As stated in Section 2, the Economic Screening Analysis considers effects of the designation of critical habitat that are incremental to the baseline for the analysis. The baseline includes the economic impacts of listing the species under the Act, even if the listing occurs concurrently with critical habitat designation. Wickiup, Crane Prairie, and Crescent Lake Reservoirs are occupied by the Oregon spotted frog (see the responses to comments 24 and 46). Because the quality of Oregon spotted frog habitat is closely linked to species survival, the Service states that "in occupied critical habitat, it is unlikely that an analysis would identify a difference between measures needed to avoid the destruction or adverse modification of critical habitat from measures needed to avoid jeopardizing the species." Therefore, most costs associated with section 7 impacts to Oregon spotted frog habitat at these reservoirs would be

included in the baseline, and any incremental section 7 costs associated with the critical habitat designation are anticipated to be limited to administrative costs.

(53) *Comment:* One commenter stated that the Economic Screening Analysis should take into account beneficial uses of water rights. The commenter further stated that there are numerous privately held water rights for diversion and use of water totaling tens of thousands of acre-feet within Unit 6, Middle Klickitat River. The commenter mentioned one specific water right claim within Unit 6 of 33,500 acre feet, which the commenter estimated could be valued at \$25 million to \$122 million. The commenter also stated that the issue of takings is addressed in the supplemental proposed rule (79 FR 34685, June 18, 2014) where it states that it is not likely that economic impacts on a property owner would be of a sufficient magnitude to support takings action. The commenter questioned whether the Service considered the value of water rights and the economic impacts associated with restricting the beneficial use of these rights when it made this determination regarding the likelihood of takings.

Our response: The issue that the commenter raises rests on an assumption that the presence of critical habitat designation would restrict use of the water rights held by private landowners whose lands fall within the critical habitat designation. However, the rationale for this assumption is not explained. Indeed, it is unlikely that any restrictions on the beneficial use of water rights would occur as a result of critical habitat designation for two primary reasons. First, many actions that involve the beneficial use of water rights do not involve a Federal nexus; hence, critical habitat could have no direct effect. Second, as noted previously in this document, we consider the proposed critical habitat areas to be occupied by the species. Thus, we would expect that, even if water rights are held on a system that involved a Federal nexus, and a consultation occurred that resulted in a change in the availability of water in the system for beneficial use, this action would occur even without critical habitat designation and, hence, is not appropriately characterized as an incremental impact of critical habitat designation.

(54) *Comment:* Multiple commenters expressed concern about the economic impact of the designation of critical habitat on grazing and associated activities. One commenter stated that the Economic Screening Analysis does

not provide a complete analysis of impacts to grazing conducted on Federal lands because grazing on Federal lands could be restricted, removed, or modified. Specifically, the commenter feared that critical habitat designation could delay turn-out dates for cattle grazing or result in other seasonal restrictions. One commenter stated that the Economic Screening Analysis should include costs per animal unit months (AUM) associated with the feeding of hay to cattle and use of alternative pastures during non-use periods. One commenter also stated that the Service should consider impacts to haying including those related to altered planting and harvest dates, or irrigation schedules.

Our response: See the response to Comment 52. Consultations for grazing activities on Federal lands are anticipated in areas proposed as critical habitat for the Oregon spotted frog. However, economic impacts of critical habitat designation are expected to be limited to additional administrative effort to consider adverse modification in section 7 consultations. This finding is based on the following factors: (1) In occupied areas, activities with a Federal nexus will be subject to section 7 consultation requirements regardless of critical habitat designation, due to the presence of the listed species; (2) in areas not known to be occupied, agencies are in most cases likely to treat areas as potentially occupied due to their proximity to occupied areas; and (3) project modifications requested to avoid adverse modification are likely to be the same as those needed to avoid jeopardy.

(55) *Comment:* One commenter stated that the Economic Screening Analysis is inconsistent in how it presents incremental costs. The commenter noted that the Economic Screening Analysis presents incremental costs as costs associated with all known future actions at one point, and as costs in a typical year at another point.

Our response: The Economic Screening Analysis includes all known probable projects that may affect the critical habitat designation which may require consultation under section 7 of the Act. Timing of many of these projects is unknown, thus the analysis conservatively assumes that all projects would occur in the first year following designation (approximately a total of \$190,000 in administrative costs), even though it is likely some projects will not be implemented that quickly. In the summary of the Screening Analysis (p. 15), we say, "The economic impacts of implementing the rule through section 7 of the Act are expected to be limited to

additional administrative effort to consider adverse modification in section 7 consultations, which are not expected to exceed \$200,000 in a typical year." If \$190,000 is anticipated to be the maximum (most conservative) total administrative cost of the critical habitat designation incurred in a year, then a typical year would not have greater administrative costs than \$200,000.

(56) *Comment:* Two commenters stated that the Service does not show costs of section 7 consultation to a private landowner.

Our response: Private landowners are not involved in section 7 consultation unless there is a nexus with a Federal agency action, such as issuance of a permit to a private landowner. Exhibit 3 of the Economic Screening Analysis presents average consultation costs applied in the analysis. The costs estimates are based on data from Federal Government Schedule Rates and a review of consultation records from several Service field offices across the country conducted in 2002. Exhibit 3 separates costs specific to third parties, which includes private landowners involved in section 7 consultations. Third party costs range from between \$260 and \$880 per consultation. For further clarification, see response to Comment 54.

(57) *Comment:* One commenter stated that the Economic Screening Analysis is inadequate in its consideration of perceptual costs. The commenter questioned the use of a bounding analysis and states that the Economic Screening Analysis should quantify specific perceptual impacts rather than simply concluding that these impacts are more than zero but less than \$100 million. The commenter also states that the analysis' consideration of perception costs is flawed because it defines the incremental perceptual costs too narrowly. Another commenter suggested that the Service show the reduction in private land values by multiplying per-acre values by critical habitat acres across the range of the Oregon spotted frog.

Our response: The findings on perceptual impacts presented in the Economic Screening Analysis are supported by the memorandum on Supplemental Information on Perceptual Effects on Land Values. In this memorandum, we estimate the total land value for developable acres in Unit 9 of the designation to be approximately \$42 million. In addition, we estimate the total value of private acreage used for grazing in other units to be approximately \$12 million by applying U.S. Department of Agriculture (USDA) National Agricultural Statistics Service

pasture land per-acre values. Because data availability limits our ability to estimate what percentage of these values would be lost as a result of perceptual effects, we conservatively estimate that the full value is lost. Therefore, we conclude that the critical habitat designation for the Oregon spotted frog is unlikely to generate costs exceeding \$100 million in a single year.

(58) *Comment:* One commenter stated that the Economic Screening Analysis should consider the loss of Federal lands intermingled with private lands and entire pastures adjacent to critical habitat. The commenter stated that the closing off of proximate riparian areas may result in negative impacts to the value and income utility of large swaths of pastureland. The commenter went on to state that the benefits from these pasture lands are often higher than the value of the land, and suggested that the Economic Screening Analysis consider the annual loss of reduced benefits of the land rather than the one-time value. The commenter further suggested quantifying the costs of fencing and developing alternative water sources.

Our response: Grazing activities on private lands typically do not have a Federal nexus and, therefore, would not be directly affected by section 7 consultation. In a section 7 consultation with a Federal agency, the Service may recommend excluding grazing from certain riparian areas; however, we anticipate that we would do so because of the presence of the listed frog, and not solely because the areas are critical habitat. Therefore, other than some additional administrative costs, potential economic impacts associated with these actions, including the cost of fencing and water source development, as well as any quantifiable loss in benefit of the land, are anticipated to occur even absent critical habitat designation and are, therefore, considered part of the baseline for the economic analysis. Any measures to avoid adverse modification of critical habitat would be the same as those required by the Service to avoid jeopardy to the species.

In addition to administrative costs, the Economic Screening Analysis recognizes potential perceptual impacts that the critical habitat designation could have on private land value. Public attitudes about the limits and costs that the Act may impose can cause real economic effects to the owners of property, regardless of whether such limits are actually imposed. Over time, the perceptual effect of critical habitat designation on properties may subside as the public gains a better understanding of the regulatory burden, or lack thereof,

placed on designated lands (particularly where no Federal nexus compelling section 7 consultation exists). Economic benefits of grazing lands are captured by the one-time land values used in our analysis.

(59) *Comment:* Multiple commenters stated that the screening analysis only focuses on costs and ignores benefits of the designation. Several commenters suggested that tourism and recreation would benefit from the designation of critical habitat for the Oregon spotted frog, highlighting the contributions that protected riverine ecosystems bring to the local economy. Two commenters requested that the economic analysis specifically take into consideration the economic benefits that the designation of critical habitat could impart to Oregon in tourism and recreation dollars based on the preservation of healthy riverine ecosystems. One commenter specifically identified benefits to fisheries as being excluded from the analysis. One commenter suggested that the economic analysis be conducted by an independent third party in order to examine the true economics, including the benefits of a healthier river.

Our response: Portions of the economic analysis were conducted by an independent third party. As stated in Section 5 of the screening analysis, the primary intended benefit of critical habitat designation for the Oregon spotted frog is to support the species' long-term conservation. Critical habitat designation may also generate ancillary benefits, which are defined as favorable impacts of a rulemaking that are typically unrelated, or secondary, to the statutory purpose of the rulemaking. Critical habitat aids in the conservation of species by protecting the PCEs on which the species depends. To this end, management actions undertaken to conserve a species or habitat may have coincident, positive social welfare implications, such as increased recreational opportunities in a region or improved property values on nearby parcels. Quantification and monetization of species conservation benefits requires information on: (1) The incremental change in the probability of frog conservation that is expected to result from the designation; and (2) the public's willingness to pay for such beneficial changes. If water management activities change as a result of the critical habitat designation, various benefits could occur within aquatic ecosystems, including improvements in the quality of recreational activities. If perceptual effects cause changes in future land use, benefits to the species and environmental quality may also

occur. However, due to existing data limitations, we are unable to assess the magnitude of such potential benefits.

(60) *Comment:* One commenter stated that the Screening Analysis should consider whether the benefits of exclusion of a particular area outweigh the benefits of specifying that area as critical habitat. One commenter stated that the Screening Analysis overstates the conservation benefits that may result from the proposed designation. The commenter stated that the Screening Analysis discusses benefits in only a very general way, which results in an overstatement of the conservation benefits of the proposed designation.

Our response: The lack of quantification of benefits is not intended to suggest that the proposed designation will not result in benefits. As stated in Section 5 of the Screening Analysis, quantification and monetization of species conservation benefits requires information on the incremental change in the probability of Oregon spotted frog conservation that is expected to result from the designation and the public's willingness to pay for such beneficial changes. These sorts of data are unavailable for the frog, thus precluding quantification of benefits.

(61) *Comment:* One commenter stated that the Screening Analysis should consider small business impacts. The commenter also disagreed with the statement that, because no small entities are directly regulated by the rulemaking, the proposed critical habitat designation will not have a significant economic impact on a substantial number of small entities.

Our response: Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), Federal agencies are only required to evaluate the potential incremental impacts of a rulemaking on directly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the Agency is not likely to adversely modify critical habitat. Therefore, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction or adverse modification of critical habitat) imposed by critical habitat designation. Under these circumstances, it is the Service's position that only Federal action agencies will be directly regulated by this designation. Therefore, because Federal agencies are not small entities, the Service may certify that the critical habitat rule will not have a significant economic impact on a substantial

number of small entities. Because certification is possible, no regulatory flexibility analysis is required.

Summary of Changes From Proposed Rule

We are designating a total of 65,038 ac (26,320 ha) and 20.3 river mi (32.7 km) of critical habitat for the Oregon spotted frog. We received a number of site-specific comments related to critical habitat for the species, completed our analysis of areas considered for exclusion under section 4(b)(2) of the Act or for exemption under section 4(a)(3) of the Act, reviewed the application of our criteria for identifying critical habitat across the range of these species to refine our designations, and completed the final economic analysis of the designation as proposed. We fully considered all comments from the public and peer reviewers on the proposed rule and the associated economic analysis to develop this final designation of critical habitat for Oregon spotted frog. This final rule incorporates changes to our proposed critical habitat based on the comments that we received and have responded to in this document.

Some technical corrections to the document including our final designation of critical habitat reflect the following changes from the proposed rule as summarized here:

(1) Based on comments received from Whatcom County, WDOE, WDFW, and the Environmental Protection Agency, we have revised Unit 1 by removing Swift Creek and the Sumas River downstream from the confluence with Swift Creek. The final critical habitat designation is reduced by 137 acres (55 hectares) and 3.2 river mi (5.1 river km) from the proposed rule.

(2) In the proposed rule, we did not identify the scale at which occupancy was to be determined. Therefore, the proposed rule included occupied and "not known to be occupied" segments within a single critical habitat unit. In this final rule, we have clarified the scale of occupancy to be a sub-basin (hydrologic unit code 8, 4th field watershed) or 5th field watershed when more appropriate (hydrologic unit code 10). Therefore, all designated critical habitat units are known to be occupied at the time the species was listed in 2014, and language pertaining to "not known to be occupied" critical habitat has been removed. For further information, see *Criteria Used To Identify Critical Habitat*.

(3) Trout Lake Natural Area Preserve was not excluded, based on comments received from WDNR.

(4) Based on comments received regarding the complexity with implementing the textual exclusion of the deep-water areas, we have removed language referring to the exclusion of deep water from the unit description of Critical Habitat Subunit 8B in the preamble to this final rule.

(5) Based on comments received, we have revised the boundaries of the critical habitat delineation within Units 8 and 9 using NAIP imagery to align more closely with the areas containing the PCEs. The areas where boundaries were refined are primarily along the Deschutes and Little Deschutes Rivers where developed areas do not provide PCEs. These refinements resulted in a net removal of approximately 45 ac (18 ha) in Subunit 8a and 207 ac (84 ha) in Unit 9. In Subunit 8A, a segment of the Deschutes River was removed from final critical habitat designation because it did not contain the PCEs nor could it contain PCEs in the future due to the geometry of the river channel (narrow and steep gradient) and distance (*i.e.*, greater than 3.1 mi (5 km)) from known populations of Oregon spotted frogs. This segment of the Deschutes River (approximately 88 ac (36 ha) of proposed critical habitat was also ground-verified for presence of PCEs, and the Service determined that the PCEs were not present.

(6) Minor corrections in acres and river miles were made to correct errors made in the area calculations found between proposed and final. Updated ownership layers were used to calculate final acres/river miles, resulting in increased acres/river miles for some land ownerships (Units 4, 6, and 13) and decreased acres/river miles for others (Units 4 and 12), even though no other changes were made. In Unit 7, 6 ac (2 ha), were incorrectly double-counted in the proposed refinement (79 FR 34685, June 18, 2014), and the final critical habitat acres have been adjusted accordingly.

(7) A total of 3,083 ac (1,248 ha) has been excluded under section 4(b)(2) in three units: 2,627 ac (1,062 ha) in Unit 6; 335 ac (136 ha) in Subunit 8a; and 121 ac (49 ha) in Unit 9.

Due to these changes in our final critical habitat designation, we have updated unit descriptions and critical habitat maps, all of which can be found later in this document. This final designation of critical habitat represents a reduction of 3,463 ac (1,401 ha) and 3.2 river mi (5.1 river km) from our proposed critical habitat for Oregon spotted frog for the reasons detailed above.

Critical Habitat

Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement

reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical or biological features within an area, we focus on the principal biological or physical constituent elements (PCEs such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. PCEs are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to

the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. 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, HCPs, or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Physical or Biological Features

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area

occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derive the specific physical or biological features essential for the Oregon spotted frog from studies of this species' habitat, ecology, and life history as described in the Critical Habitat section of the proposed rule to designate critical habitat published in the **Federal Register** on August 29, 2013 (78 FR 53538), and in the information presented below. Additional information can be found in the final listing rule published in the **Federal Register** on August 29, 2014 (79 FR 51658). We have determined that the Oregon spotted frog requires the following physical or biological features:

Space for Individual and Population Growth and for Normal Behavior

The Oregon spotted frog is the most aquatic native frog species in the Pacific Northwest, as it is the only frog species that does not have a terrestrial life stage. It is found in or near perennial bodies of water, such as springs, ponds, lakes, sluggish streams, irrigation canals, and roadside ditches. For completion of their life cycle, Oregon spotted frogs require shallow, stable water areas for egg and tadpole survival and development; perennial, deep, moderately vegetated pools for adult and juvenile survival in the dry season; and perennial water overlying emergent vegetation for protecting all age classes during cold wet weather (Watson *et al.* 2003, p. 298; Pearl and Hayes 2004, p. 18). This scenario essentially equates to "an expansive meadow/wetland with a continuum of vegetation densities along edges and in pools and an absence of introduced predators" (Watson *et al.* 2003, p. 298).

Oregon spotted frogs exhibit fidelity to seasonal pools throughout all seasons (breeding, dry, and wet) (Watson *et al.*

2003, p. 295), and these seasonal pools need to be connected by water, at least through the spring and again in the fall, for frogs to access them. Subadult and adult frogs may be able to make short terrestrial movements, but wetted movement corridors are preferred. A wetted movement corridor with a gradual topographic gradient (less than or equal to three percent) is necessary to enable tadpole movement out of shallow egg-laying sites into deeper, more permanent water, as water levels recede during the dry season (Watson *et al.* 2003, p. 298; Pearl and Hayes 2004, p. 20). Impediments to upstream movement may include, but are not limited to, hard barriers such as dams, impassable culverts, lack of water, and biological barriers, such as lakes or rivers/creeks without refugia from predators.

Therefore, based on the information above, we identify the following physical or biological features needed by Oregon spotted frogs to provide space for their individual and population growth and for normal behavior: (1) Perennial bodies of water (such as, but not limited to springs, ponds, lakes, and sluggish streams) or other water bodies that retain water year round (such as irrigation canals or roadside ditches) with a continuum of vegetation densities along edges; (2) a gradual topographic gradient that enables movement out of shallow oviposition (egg-laying) sites into deeper, more permanent water; and, (3) barrier-free movement corridors.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

The ecosystems utilized by Oregon spotted frogs have inherent community dynamics that sustain the food web. Habitats, therefore, must maintain sufficient water quality to sustain all life stages, as well as acceptable ranges for maintaining the underlying ecological community. These key physical parameters include pH, dissolved oxygen, temperature, nutrients, and uncontaminated water (see Water Quality and Contamination is the Final Listing Document (79 FR 51688–51690).

For tadpoles and frogs living in productive wetland habitats, food is not usually a limiting factor. Post-metamorphic Oregon spotted frogs are opportunistic predators feeding on live animals found in or near water (important prey species information is provided in the life-history section of our final listing rule published in the **Federal Register** on August 29, 2014 (79 FR 51658)). Tadpoles are grazers, having rough tooth rows for scraping plant

surfaces and ingesting plant tissue and bacteria, algae, detritus, and probably carrion (Licht 1974, p. 624; McAllister and Leonard 1997, p. 13). Competitors for food resources include nonnative fish species, bullfrogs, and green frogs.

Pearl and Hayes (2004, pp. 8–9) posit that Oregon spotted frogs are limited by both latitude and elevation to areas that provide warm-water marsh conditions (summer shallow water exceeding 68 degrees Fahrenheit (F) (20 degrees Celsius (C)) based on the observed temperatures and slow developmental rates in egg stages (compared to other pond-breeding ranid frogs) and increased surface activity in adult frogs as water temperatures exceed 68 degrees F (20 degrees C) and when the differentiation between surface and subsurface is greater than 37 degrees F (3 degrees C) (Watson *et al.* 2003, p. 299). Warmer water is important for embryonic development and plant food production for larval rearing (Watson *et al.* 2003, p. 299) and to allow subadults and adults to bask.

Therefore, based on the information above, we identify the following physical or biological features needed by Oregon spotted frogs to provide for their nutritional and physiological requirements: (1) Sufficient quality of water to support habitat used by Oregon spotted frogs (including providing for a sufficient prey base); (2) absence of competition from introduced fish and bullfrogs; and (3) shallow (warmer) water.

Cover or Shelter

During the dry season, Oregon spotted frogs move to deeper, permanent pools or creeks and show a preference for areas with greater than 50 percent surface water and/or less than 50 percent vegetation closure (Watson *et al.* 2003, pp. 295, 297), avoiding dense stands of grasses with greater than 75 percent closure. They are often observed near the water surface basking and feeding in beds of floating and shallow subsurface vegetation (Watson *et al.* 2003, pp. 291–298; Pearl *et al.* 2005a, pp. 36–37) that appears to allow them to effectively use ambush behaviors in habitats with high prey availability. The off-shore vegetation mats also offer basking habitat that is less accessible to some terrestrial predators (Pearl *et al.* 2005a, p. 37). Proximity to escape cover such as aggregated organic substrates also may be particularly important for Oregon spotted frogs to successfully evade avian, terrestrial, and amphibian predators (Licht 1986b, p. 241; Hallock and Pearson 2001, pp. 14–15; Pearl & Hayes 2004, p. 26).

Oregon spotted frogs, which are palatable to fish and bullfrogs (see Factor C. Disease or Predation in our final listing rule published in the **Federal Register** on August 29, 2014 (79 FR 51658)), did not evolve with introduced species and, in some areas, such as high-elevation lakes, did not evolve with native fish. Therefore, Oregon spotted frogs may not have the mechanisms to avoid the fish that prey on the tadpoles. The warm-water microhabitat requirement of the Oregon spotted frog, unique among native ranids of the Pacific Northwest, exposes it to a number of introduced fish species (Hayes 1994, p. 25), the most common being brook trout (*Salvelinus fontinalis*). During drought years, as dropping water levels reduce wetland refuges, Oregon spotted frog larvae become concentrated and are exposed to brook trout predation (Hayes *et al.* 1997, p. 5; Hayes 1998a, p. 15), resulting in lower Oregon spotted frog recruitment (Pearl 1999, p. 18). Demographic data suggest introduced fish have a negative effect on Oregon spotted frogs because sites with significant numbers of brook trout and/or fathead minnow have a disproportionate ratio of older spotted frogs to juvenile frogs (*i.e.*, poor recruitment) (Hayes 1997, pp. 42–43). Winter survival rates of Oregon spotted frog males and females are higher in overwintering locations where nonnative fish have limited or no access (Chelgren *et al.* 2008, p. 749), and the associated breeding areas have a significantly higher (0.89 times) number of egg masses (Pearl *et al.* 2009a, p. 142). Predation is believed to be more pronounced in spatially constrained overwintering habitats where frogs and fish both seek flowing water with dissolved oxygen; however, these negative effects can be mediated by habitat complexity and the seasonal use of microhabitats, and Oregon spotted frogs can benefit from fish-free overwintering sites, even if fish are present in other local habitats (Pearl *et al.* 2009a, p. 143). In addition, nonnative fish (in particular wide-gape fish like bluegill sunfish) may be facilitating the distribution and abundance of bullfrogs by preying upon macroinvertebrates that would otherwise consume bullfrog tadpoles (Adams *et al.* 2003, p. 349).

Bullfrogs share similar habitat and temperature requirements with the Oregon spotted frog, but adult bullfrogs achieve larger body size than native western ranids and even juvenile bullfrogs can consume post-metamorphic native frogs (Hayes and Jennings 1986, p. 492; Pearl *et al.* 2004,

p. 16). In addition, bullfrog larvae can outcompete or displace native larvae from their habitat or optimal conditions by harassing native larvae at feeding stations or inhibiting native larvae feeding patterns (Kupferberg 1997, pp. 1741–1746, Kiesecker and Blaustein 1998, pp. 783–784, Kiesecker *et al.* 2001b, pp. 1966–1967). Therefore, Oregon spotted frogs require areas that are sheltered from competition with, or predation by, bullfrogs.

Within the current range of the Oregon spotted frog are two different winter regimes. In British Columbia and Washington, the Puget Trough climate is maritime with mild summer and winter temperatures. Subfreezing conditions occur only for short periods in November through March, but ice rarely persists for more than a week. The Cascades winter conditions are cold enough to produce ice-capped water bodies from December to February, and temperatures regularly extend below freezing between mid-October and early April. Known overwintering sites are associated with flowing systems, such as springs and creeks, that provide well-oxygenated water (Hallock and Pearson 2001, p. 15; Hayes *et al.* 2001, pp. 20–23; Tattersall and Ultsch 2008, pp. 123, 129, 136) and sheltering locations protected from predators and freezing conditions (Risenhoover *et al.* 2001b, pp. 13–26; Watson *et al.* 2003, p. 295; Pearl and Hayes 2004, pp. 32–33). Oregon spotted frogs may burrow in mud, silty substrate, or clumps of emergent vegetation during periods of prolonged or severe cold (Watson *et al.* 2003, p. 295; McAllister and Leonard 1997, p. 17) but may remain active throughout most of the winter (Hallock and Pearson 2001, p. 17). Therefore, overwintering habitat needs to retain water during the winter (October through March or early April), and, to facilitate movement, these areas need to be hydrologically connected via surface water breeding and rearing habitat.

In the areas of the range where water bodies become capped by ice and snow for several weeks during the winter, hypoxic water conditions can occur due to cessation of photosynthesis combined with oxygen consumption by decomposers (Wetzel 1983, pp. 162–170). While lethal oxygen levels for Oregon spotted frogs have not been evaluated, other ranid species have been found to use overwintering microhabitat with well-oxygenated waters (Ultsch *et al.* 2000, p. 315; Lamoureux and Madison 1999, p. 434), and most fish cannot tolerate levels below 2.0 mg/L (Wetzel 1983, p. 170). However, some evidence indicates that Oregon spotted frogs can tolerate levels at, or somewhat

below, 2.0 mg/L and do not purposefully avoid areas with low oxygen levels, at least for short periods (Hayes *et al.* 2001, pp. 20–22; Risenhoover *et al.* 2001b, pp. 17–18).

Therefore, based on the information above, we identify the following physical or biological features needed by Oregon spotted frogs to provide for their cover and shelter requirements: (1) Permanent fresh water bodies, including natural and manmade, that have greater than 50 percent surface water with floating and shallow subsurface vegetation during the summer, and that are hydrologically connected via surface water to breeding and rearing habitat; (2) permanent fresh water bodies, including natural and manmade, that hold water from October to March and are hydrologically connected via surface water to breeding and rearing habitat; (3) physical cover from avian and terrestrial predators, and lack of predation by introduced fish and bullfrogs; and (4) refuge from lethal overwintering conditions (freezing and anoxia).

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

Oregon spotted frog breeding sites are generally temporarily inundated (flooded or underwater) shallows (≤ 12 in (30 cm) deep) that are hydrologically connected to permanent waters (Licht 1971, p. 120, Hayes *et al.* 2000 entire, Pearl and Bury 2000, pp. 6–7, Risenhoover *et al.* 2001a, pp. 13–15, Watson *et al.* 2003, p. 297) and include pools, gradually receding shorelines, benches of seasonal lakes and marshes, and wet meadows. Egg-laying microhabitats are gradually sloped and relatively close to shorelines (Hayes *et al.* 2000, p. 5; Pearl and Bury 2000, p. 6; Pearl and Hayes 2004, p. 20) and are usually associated with submergent or the previous year's emergent vegetation. Characteristic vegetation includes grasses, sedges, and rushes. Vegetation coverage beneath egg masses is generally high, and Oregon spotted frog egg masses are rarely found over open soil or rock substrates (Pearl and Bury 2000, p. 6; Lewis *et al.* 2001, pp. 9–10). Full solar exposure seems to be a significant factor in breeding habitat selection and eggs are laid where the vegetation is low or sparse, such that vegetation structure does not shade the eggs (McAllister and Leonard 1997, pp. 8, 17; McAllister and White 2001, pp. 10–11; Pearl and Bury 2000, p. 6; Pearl *et al.* 2009a, pp. 141–142).

To be considered essential breeding habitat, water must be permanent enough to support breeding, tadpole development to metamorphosis

(approximately 4 months), and survival of frogs. Egg-laying can begin as early as February in British Columbia and Washington, and as late as early June in the higher elevations (Leonard *et al.* 1993, p. 132). In addition, breeding habitat must be hydrologically connected to permanent waters. The heaviest losses to predation are thought to occur shortly after tadpoles emerge from eggs, when they are relatively exposed and poor swimmers (Licht 1974, p. 624). Significant mortality can also result when tadpoles become isolated in breeding pools away from more permanent waters (Licht 1974, p. 619; Watson *et al.* 2003, p. 298). Watson *et al.* (2000, p. 28) reported nearly total reproductive failure in 1998 when the egg-laying pools dried due to dry weather following breeding. In addition to being vulnerable to desiccation, tadpoles may succumb to low dissolved oxygen levels in isolated pools and ponds during summer (Watson *et al.* 2000, p. 28).

Therefore, based on the information above, we identify the following physical or biological features needed by Oregon spotted frogs to provide for sites for reproduction, or rearing (development) of offspring: (1) Standing bodies of fresh water, including natural and manmade ponds, slow-moving streams or pools within streams, and other ephemeral or permanent water bodies that typically become inundated during winter rains and hold water for a minimum of 4 months (from egg-laying through metamorphosis); (2) shallow (less than or equal to 12 in (30 cm)) water areas (shallow water may also occur over vegetation that is in deeper water); (3) a hydrological connection to a permanent water body; (4) gradual topographic gradient; (5) emergent wetland vegetation (or vegetation that can mimic emergent vegetation via manipulation, for example reed canarygrass that can be mowed); and (6) full solar exposure.

Habitats Protected From Disturbance or Representative of the Historical, Geographic, and Ecological Distributions of the Species

Dispersal habitat may consist of ephemeral (water present for only a short time), intermittent, or perennial drainages that are generally not suitable for breeding but can provide corridors that afford movement. This habitat also offers areas for the establishment of home ranges by juvenile recruits, maintenance of gene flow through the movement of juveniles and adults between populations, and recruitment into new breeding habitat or recolonization of breeding habitat after

local extirpations. Detailed studies of dispersal and population dynamics of Oregon spotted frogs are limited. However, home ranges in a Washington study averaged 5.4 ac (2.2 ha), and daily movement was 16–23 feet (5–7 meters) throughout the year (Watson *et al.* 2003, p. 295). Oregon spotted frogs at the Sunriver site in Oregon routinely make annual migrations of 0.31–0.81 mi (0.5–1.3 km) between the major egg-laying complex and an overwintering site (Bowerman 2006, pers. comm.). Longer travel distances, while infrequent, have been observed between years and within a single year between seasons. The maximum observed movement distance in Washington was 1.5 mi (2.4 km) between seasons along lower Dempsey Creek to the creek's mouth from the point where the frogs were marked (McAllister and Walker 2003, p. 6). In Oregon, the maximum observed movement was 1.74 mi (2.8 km) downstream (Cushman and Pearl 2007, p. 13). While these movement studies are specific to Oregon spotted frogs, the number of studies and size of the study areas are limited and studies have not been conducted over multiple seasons or years. In addition, the ability to detect frogs is challenging because of the difficult terrain in light of the need for the receiver and transmitter to be in close proximity. Hammerson (2005) recommends that a 3.1-mi (5-km) separation distance for suitable habitat be applied to all ranid frog species because the movement data for ranids are consistent. Furthermore, despite occasional movements that are longer or that may allow some genetic interchange between distant populations (for example, the 10-km (6.2-mi) distance noted by Blouin *et al.* (2010, pp. 2186, 2188), the preponderance of data indicates that a separation distance of several kilometers may be appropriate and practical for delineation of occupancy. Therefore, for the purposes of evaluating the connectedness of Oregon spotted frog breeding areas and individual frogs' ability to move between areas of suitable habitat, we will assume a maximum movement distance of 3.1 mi (5 km). However, this distance does not account for high-water events that can transport frogs and tadpoles downstream. In addition, these aquatic movement corridors should be free of impediments to upstream movement, including but not limited to hard barriers such as dams, impassable culverts, lack of water, and biological barriers such as lakes or rivers/creeks without refugia from predators.

Maintenance of populations across a diversity of ecological landscapes is necessary to provide sufficient protection against changing environmental circumstances (such as climate change). This diversity of habitat areas provides functional redundancy to safeguard against stochastic events (such as droughts) and may also be necessary as different regions or microclimates respond to changing climate conditions. Establishing or maintaining populations across a broad geographic area spreads out the risk to individual populations across the range of the species, thereby conferring species resilience. Finally, protecting a wide range of habitats across the occupied range of the species simultaneously maintains genetic diversity of the species, which protects the underlying integrity of the major genetic groups (Blouin *et al.* 2010, pp. 2184–2185) whose persistence is important to the ecological fitness of the species as a whole (Blouin *et al.* 2010, p. 2190).

Therefore, based on the information above, we identify the following physical or biological features needed by Oregon spotted frogs to provide habitats protected from disturbance and representative of the historical, geographic, and ecological distribution: (1) Wetted corridors within 3.1 mi (5 km) of breeding habitat that are free of barriers to movement, and (2) a diversity of high-quality habitats across multiple sub-basins throughout the geographic extent of the species' range sufficiently representing the major genetic groups.

Primary Constituent Elements for Oregon Spotted Frog

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of the Oregon spotted frog in areas occupied at the time of listing, focusing on the features' PCEs. PCEs are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the PCEs specific to the Oregon spotted frog are:

(1) PCE 1—Nonbreeding (N), Breeding (B), Rearing (R), and Overwintering Habitat (O). Ephemeral or permanent bodies of fresh water, including but not limited to natural or manmade ponds, springs, lakes, slow-moving streams, or pools within or oxbows adjacent to streams, canals, and ditches, that have

one or more of the following characteristics:

- Inundated for a minimum of 4 months per year (B, R) (timing varies by elevation but may begin as early as February and last as long as September);
- Inundated from October through March (O);
 - If ephemeral, areas are hydrologically connected by surface water flow to a permanent water body (e.g., pools, springs, ponds, lakes, streams, canals, or ditches) (B, R);
 - Shallow-water areas (less than or equal to 30 centimeters (12 inches), or water of this depth over vegetation in deeper water (B, R);
 - Total surface area with less than 50 percent vegetative cover (N);
 - Gradual topographic gradient (less than 3 percent slope) from shallow water toward deeper, permanent water (B, R);
 - Herbaceous wetland vegetation (*i.e.*, emergent, submergent, and floating-leaved aquatic plants), or vegetation that can structurally mimic emergent wetland vegetation through manipulation (B, R);
 - Shallow-water areas with high solar exposure or low (short) canopy cover (B, R);
 - An absence or low density of nonnative predators (B, R, N)
- (2) PCE 2—Aquatic movement corridors. Ephemeral or permanent bodies of fresh water that have one or more of the following characteristics:
 - Less than or equal to 3.1 mi (5 km) linear distance from breeding areas;
 - Impediment free (including, but not limited to, hard barriers such as dams, impassable culverts, lack of water, or biological barriers such as abundant predators, or lack of refugia from predators).
- (3) PCE 3—Refugia habitat. Nonbreeding, breeding, rearing, or overwintering habitat or aquatic movement corridors with habitat characteristics (e.g., dense vegetation and/or an abundance of woody debris) that provide refugia from predators (*e.g.*, nonnative fish or bullfrogs).

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features that are essential to the conservation of the species and which may require special management considerations or protection. Here we describe the type of special management considerations or protection that may be required for the physical or biological features identified as essential for the

Oregon spotted frog. The specific critical habitat units and subunits where these management considerations or protection apply for each species are identified in Unit Descriptions.

A detailed discussion of activities influencing the Oregon spotted frog and their habitat can be found in the final listing rule (79 FR 51658). Threats to the physical or biological features that are essential to the conservation of this species and that may warrant special management considerations or protection include, but are not limited to: (1) Habitat modifications brought on by nonnative plant invasions or native vegetation encroachment (trees and shrubs); (2) loss of habitat from conversion to other uses; (3) hydrologic manipulation; (4) removal of beavers and features created by beavers; (5) livestock grazing; and (6) predation by invasive fish and bullfrogs. These threats also have the potential to affect the PCEs if conducted within or adjacent to designated units.

The physical or biological features essential to the conservation of the Oregon spotted frog may require special management considerations or protection to ensure the provision of wetland conditions and landscape context of sufficient quantity and quality for long-term conservation and recovery of the species. Management activities that could ameliorate the threats described above include (but are not limited to): Treatment or removal of exotic and encroaching vegetation (for example mowing, burning, grazing, herbicide treatment, shrub/tree removal); modifications to fish stocking and beaver removal practices in specific water bodies; nonnative predator control; stabilization of extreme water level fluctuations; restoration of habitat features; and implementation of appropriate livestock grazing practices.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify occupied areas at the time of listing that contain the features essential to the conservation of the species. If, after identifying currently occupied areas, we determine that those areas are inadequate to ensure conservation of the species, in accordance with the Act and our implementing regulations at 50 CFR 424.12(e) we then consider whether designating additional areas—outside

those currently occupied—are essential for the conservation of the species.

We equate the geographical area occupied at the time of listing with the current range for the species; see the final listing rule (79 FR 51658, August 29, 2014; Current Range/Distribution and Table 1) for a description of the current range of the Oregon spotted frog, which is identified at the scale of sub-basin/5th field watershed. We used information from reports and databases prepared by Federal and State agencies and private researchers to identify the specific locations used by Oregon spotted frogs for egg-laying, rearing, nonbreeding, and overwintering. Occurrence data used for determining occupancy includes the time period between 2000 and 2013; older occurrence data were not considered to be a reliable predictor for current occupancy. In only one location (Davis Lake in the Upper Deschutes River) throughout the species' range is occurrence data used prior to 2005 (*i.e.*, 2000–2004). Therefore, the majority of occupied occurrence data was collected in 2005 or later.

To determine whether the specific areas within the occupied sub-basins/watersheds contain the PCEs, we plotted all occurrence records in ArcGIS, version 9 or 10 (Environmental Systems Research Institute, Inc.), a computer geographic information system program, and overlaid them on NAIP digital imagery, NWI data, National Hydrologic Data (NHD), and slope data. Where NWI data were available and appeared to well-represent the potential habitat as seen on the NAIP imagery, the NWI data were used to approximate PCEs. These areas are referred to as "wetlands" in the unit descriptions. However, in many cases the NWI features were either too expansive or not expansive enough to capture the known occurrences and areas of use; in these cases, NAIP imagery, slope, and local knowledge were utilized to approximate the areas that are most likely to contain the PCEs. These areas are referred to as "seasonally wetted" in the unit descriptions. In order to capture PCE 2-aquatic movement corridors, we used the NHD to map 3.1 mi (5 km) distance up and downstream from the occurrence data. NAIP imagery and local knowledge were used to refine NHD line features (for example, adjusting alignment with actual water course).

In Washington, within five of the sub-basins/watersheds, NWI and NAIP imagery were not sufficient to map the seasonally flooded areas adjacent to riversstreams. In these areas, we relied on the NHD line features (adjusting where needed to reflect the actual water

course) to delineate river miles. The lateral extent of critical habitat in these segments is defined as the stream and the associated hydrologic floodplain. The hydrologic floodplain is the relatively flat, depositional surface adjacent to the channel, formed by the river under its present climate and sediment load, and overflowed during moderate peak flow events. The hydrologic floodplain can be distinguished from the abutting upland by the presence of soils derived from alluvial sediments, wetland soils, and riparian/wetland vegetation.

Within the geographical area occupied at the time of listing we identified specific areas that are known to be occupied by the Oregon spotted frog on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection. Additionally, in the proposed rule (78 FR 53538, August 29, 2013) we proposed to designate areas that are currently "not known to be occupied." Although we acknowledged in the proposed rule our uncertainty about the occupancy status of these areas based on a lack of specific survey data, we determined that these areas are occupied under the definition of critical habitat based on the following factors: These areas (1) are within occupied sub-basins, (2) contain habitat features similar to known occupied areas, (3) hydrologically connect (via surface waters) to occupied areas, and (4) do not contain barriers that would inhibit Oregon spotted frog movement between occupied areas.

We recognize that the physical or biological features may only be present seasonally in some areas because aquatic systems are not static; water levels fluctuate between seasons, severe flood events occur, and beavers abandon and recolonize sites. As a result of these changing habitat conditions, some areas may not have continuous Oregon spotted frog presence. Therefore, we also applied the standard for unoccupied areas and evaluated whether all areas are essential for the conservation of the species. In evaluating this, we considered: (1) The importance of the area to the future recovery of the species; (2) whether the areas have or are capable of providing the essential physical or biological features; and (3) whether the areas provide connectivity between upstream and downstream populations, thus facilitating gene flow and allowing for recolonization of sites that may become lost due to threats or other factors, such as natural catastrophic or stochastic

events that render existing occupied areas nonfunctional. We determined that all of the areas included in critical habitat also meet these three factors; therefore, we consider all lands and waters included in the designation to be essential for the conservation of the species.

Areas designated as critical habitat for the Oregon spotted frog are not representative of the entire known historical geographic distribution of the species. We are not designating critical habitat in areas where the species may be extirped, such as in California or the Willamette Valley in Oregon. These historical areas do not meet the criteria for critical habitat since they are not essential to the conservation of the species.

When determining critical habitat boundaries within this final rule, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features for the Oregon spotted frog. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation

with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

The critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on <http://www.regulations.gov> at Docket No. FWS-R1-ES-2013-0088, on our Internet site <http://www.fws.gov/wafwo/osf.html>, and at the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT** above).

In summary, we are designating 14 units of critical habitat that we determined were occupied at the time of listing and contain sufficient elements of physical or biological features being present to support Oregon spotted frog life-history processes. The physical or biological features relate to Oregon spotted frog nonbreeding, breeding, rearing, and overwintering habitat needs, the specifics of which are discussed in greater detail above, see *Primary Constituent Elements* for Oregon spotted frog. In addition, where occupancy or the presence of the physical or biological features may be

uncertain, seasonal, or sporadic, we also consider those areas to be essential for the conservation of the species. These units are delineated by the sub-basins/watersheds where Oregon spotted frogs remain extant, based on occurrence data as described above. Within each unit, the physical or biological features necessary to support life-history processes require special management (see *Special Management Considerations or Protections* above). The threats are relatively consistent across each unit, with the exception of one unit where threats are significantly different (Unit 8 Upper Deschutes River). This unit is further subdivided into two subunits.

Final Critical Habitat Designation

We are designating 14 units as critical habitat for the Oregon spotted frog. The critical habitat areas described below constitute our best assessment at this time of areas that meet the definition of critical habitat. Those 14 units are: (1) Lower Chilliwack River; (2) South Fork Nooksack River; (3) Samish River; (4) Black River; (5) White Salmon River; (6) Middle Klickitat River; (7) Lower Deschutes River; (8) Upper Deschutes River; (9) Little Deschutes River; (10) McKenzie River; (11) Middle Fork Willamette River; (12) Williamson River; (13) Upper Klamath Lake; and (14) Upper Klamath. Table 1 shows the critical habitat units.

TABLE 1—APPROXIMATE AREA AND LANDOWNERSHIP IN DESIGNATED CRITICAL HABITAT UNITS FOR THE OREGON SPOTTED FROG

Critical habitat unit	Federal Ac (Ha)	State Ac (Ha)	County Ac (Ha)	Private/local municipalities Ac (Ha)	Total
Washington					
1. Lower Chilliwack River	0	0	0	143 (58)	143 (58)
2. South Fork Nooksack River	0	0	0	111 (45)	111 (45)
3. Samish River	0	1 (<1)	7 (3)	976 (395)	984 (398)
4. Black River	877 (355)	375 (152)	485 (196)	3,143 (1,272)	4,880 (1,975)
5. White Salmon River	108 (44)	1,084 (439)	0	33 (13)	1,225 (496)
6. Middle Klickitat River	4,069 (1,647)	0	0	151 (61)	4,220 (1,708)
Oregon					
7. Lower Deschutes River	90 (36)	0	0	0	90 (36)
8. Upper Deschutes River	23,213 (9,395)	185 (75)	45 (18)	589 (238)	24,032 (9,726)
8A. Upper Deschutes River, Below Wickiup Dam	1,182 (479)	185 (75)	45 (18)	589 (238)	2,001 (810)
8B. Upper Deschutes River, Above Wickiup Dam	22,031 (8,916)	0	0	0 (<1)	22,031 (8,916)
9. Little Deschutes River	5,288 (2,140)	14 (6)	80 (32)	5,651 (2,287)	11,033 (4,465)
10. McKenzie River	98 (40)	0	0	0	98 (40)
11. Middle Fork Willamette River ...	292 (118)	0	0	0	292 (118)
12. Williamson River	10,418 (4,216)	0	0	4,913 (1,988)	15,331 (6,204)
13. Upper Klamath Lake	1,259 (510)	9 (4)	1 (<1)	1,068 (432)	2,337 (946)
14. Upper Klamath	103 (42)	0	0	159 (64)	262 (106)
Total	45,815 (18,541)	1,668 (675)	618 (250)	16,937 (6,854)	65,038 (26,320)

Note: Area sizes may not sum due to rounding. Area estimates reflect all land and stream miles within critical habitat unit boundaries, except those stream miles included in Table 2.

TABLE 2—APPROXIMATE RIVER MILEAGE AND OWNERSHIP WITHIN PROPOSED CRITICAL HABITAT UNITS FOR THE OREGON SPOTTED FROG

Critical habitat unit	Federal river mile (km)	Federal/private* river mile (km)	State river mile (km)	State/private river mile (km)	County river mile (km)	County/private river mile (km)	Private/local municipalities river mile (km)	Total
1. Lower Chilliwack River	0	0	0	0	0	0	4.38 (7.05)	4.38 (7.05)
2. South Fork Nooksack River	0	0	0	0	0	0	3.56 (5.73)	3.56 (5.73)
3. Samish River	0	0	0	0	0	0	1.73 (2.78)	1.73 (2.78)
4. Black River	0.06 (0.10)	0.06 (0.10)	0.49 (0.79)	0.05 (0.07)	0.64 (1.02)	0.26 (0.42)	5.90 (9.49)	7.46 (11.98)
5. White Salmon River	0.91 (1.46)	0	0	0	0	0	2.30 (3.70)	3.21 (5.16)
Total	0.97 (1.56)	0.06 (0.09)	0.49 (0.79)	0.05 (0.07)	0.64 (1.02)	0.26 (0.42)	17.87 (28.75)	20.34 (32.7)

* Ownership—multi-ownership (such as Federal/Private) indicate different ownership on each side of the river/stream/creek.

Note: River miles (km) may not sum due to rounding. Mileage estimates reflect stream miles within critical habitat unit boundaries that are not included in area estimates in Table 1.

We present brief descriptions of all critical habitat units and subunits and reasons why they meet the definition of critical habitat for the Oregon spotted frog, below. All critical habitat units are occupied by the species at the time of listing (see the final listing rule published August 29, 2014 (79 FR 51658)). All of the critical habitat units contain the physical or biological features essential to the conservation of the species, which may require special management considerations or protection. All units are subject to some or all of the following threats: Habitat modifications brought on by nonnative plant invasions or native vegetation encroachment (trees and shrubs); loss or modification of habitat from conversion to other uses; hydrologic manipulation; removal of beavers and their structures; livestock grazing; and predation by invasive fish and bullfrogs. In all units, the physical or biological features essential to the conservation of the species may require special management considerations or protection to restore, protect, and maintain the essential features found there. Special management considerations or protection may be required to address the threats listed above.

All of the critical habitat units provide habitat needed by Oregon spotted frogs for year-round survival and contain the full extent of the distribution known at the time the species was listed. Each of the critical habitat units contributes to maintaining the geographic distribution (latitude, longitude, and elevation) of the species necessary to provide sufficient protection against changing environmental circumstances, thus providing resiliency and redundancy to safeguard against stochastic events, as well as providing representation of the genetic groups.

Critical Habitat Unit 1: Lower Chilliwack River

The Lower Chilliwack River unit consists of 143 ac (58 ha) and 4.4 river mi (7 river km) in Whatcom County, Washington. This unit includes the Sumas River and adjacent seasonally wetted areas from approximately the intersection with Hopewell Road downstream to the confluence with Swift Creek. This unit also includes portions of an unnamed tributary just south of Swift Creek, along with the adjacent seasonally wetted areas. Critical habitat in the river segments is defined as the stream and the associated hydrologic floodplain. Oregon spotted frogs are known to currently occupy this unit (Bohannon *et al.* 2012). The entire area within this unit is under private ownership. All of the essential physical or biological features are found within the unit, but are impacted by invasive plants (reed canarygrass), woody vegetation plantings and succession, and beaver removal efforts. The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 2: South Fork Nooksack River

The South Fork Nooksack River unit consists of 111 ac (45 ha) and 3.5 river mi (5.7 river km) in Whatcom County, Washington. This unit includes the Black Slough and adjacent seasonally wetted areas from the headwaters to the confluence with South Fork Nooksack River. This unit also includes wetlands and seasonally wetted areas along Tinling Creek and the unnamed tributary to the Black Slough. Critical habitat in the river segments is defined as the stream and the associated

hydrologic floodplain. Oregon spotted frogs are known to currently occupy this unit (Bohannon *et al.* 2012; Danilson *et al.* 2013). The entire area within this unit is under private ownership, including one nonprofit conservation organization. All of the essential physical or biological features are found within the unit, but are impacted by invasive plants (reed canarygrass), woody vegetation plantings and succession, and beaver removal efforts. The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 3: Samish River

The Samish River unit consists of 984 ac (398 ha) and 1.7 river mi (2.8 river km) in Whatcom and Skagit Counties, Washington. This unit includes the Samish River and adjacent seasonally wetted areas from the headwaters downstream to the confluence with Dry Creek. Critical habitat in the river segments is defined as the stream and the associated hydrologic floodplain. Oregon spotted frogs are known to currently occupy this unit (Bohannon *et al.* 2012; Danilson *et al.* 2013). Within this unit, currently less than 1 ac (less than 1 ha) is managed by WDNR, 7 ac (3 ha) is managed by Skagit County, and 976 ac (395 ha) and 2 river mi (3 river km) are privately owned, including three nonprofit conservation organizations. All of the essential physical or biological features are found within the unit, but are impacted by invasive plants (reed canarygrass), woody vegetation plantings and succession, and beaver removal efforts. The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the

existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 4: Black River

The Black River unit consists of 4,880 ac (1,975 ha) and 7.5 river mi (12 river km) in Thurston County, Washington. This unit includes the Black River and adjacent seasonally wetted areas from Black Lake downstream to approximately 3 mi (5 km) south of the confluence with Mima Creek. This unit also includes six tributaries to the Black River (Dempsey Creek, Salmon Creek, Blooms Ditch, Allen Creek, Beaver Creek, and Mima Creek), one tributary to Black Lake (Fish Pond Creek), and their adjacent seasonally wetted areas. Critical habitat in the river segments is defined as the stream and the associated hydrologic floodplain. Oregon spotted frogs are known to currently occupy this unit (Hallock 2011 and Hallock 2012). Within this unit, currently 108 ac (44 ha) and 1 river mi (2 river km) are managed by the USFS Gifford-Pinchot National Forest, 1,084 ac (439 ha) are managed by WDNR as the Trout Lake NAP, and 33 ac (13 ha) and 2 river mi (4 river km) are privately owned. All of the essential physical or biological features are found within the unit, but are impacted by invasive plants and nonnative predaceous fish. The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 5: White Salmon River

The White Salmon River unit consists of 1,225 ac (496 ha) and 3.2 river mi (5.2 river km) in Skamania and Klickitat Counties, Washington. This unit includes the Trout Lake Creek from the

confluence with Little Goose Creek downstream to the confluence with White Salmon River, Trout Lake, and the adjacent seasonally wetted areas. Critical habitat in the river segments is defined as the stream and the associated hydrologic floodplain. Oregon spotted frogs are known to currently occupy this unit (Hallock 2011 and Hallock 2012). Within this unit, currently 108 ac (44 ha) and 1 river mi (2 river km) are managed by the USFS Gifford-Pinchot National Forest, 1,084 ac (439 ha) are managed by WDNR as the Trout Lake NAP, and 33 ac (13 ha) and 2 river mi (4 river km) are privately owned. All of the essential physical or biological features are found within the unit, but are impacted by invasive plants and nonnative predaceous fish. The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 6: Middle Klickitat River

The Middle Klickitat River unit consists of 4,220 ac (1,708 ha) in Klickitat County, Washington. This unit encompasses Conboy Lake, Camas Prairie, and all water bodies therein, and extends to the northeast along Outlet Creek to Mill Pond. The southwestern edge is approximately Laurel Road, the southern edge is approximately BZ Glenwood Highway, and the northern edge follows the edge of Camas Prairie to approximately Willard Spring. Oregon spotted frogs are known to currently occupy this unit (Hayes and Hicks 2011). Within this unit, currently 4,069 ac (1,647 ha) are managed by the Conboy Lake NWR, and 151 ac (61 ha) are privately owned. All of the essential physical or biological features are found within the unit, but are impacted by water management, exotic plant invasion, native tree encroachment, and nonnative predaceous fish and bullfrogs. The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features. Within this unit, we are excluding lands managed under the Glenwood Valley Coordinated Resource Management Plan and Conservation Agreement. See

Exclusions Based on Other Relevant Impacts for further details.

Critical Habitat Unit 7: Lower Deschutes River

The Lower Deschutes River unit consists of 90 ac (36 ha) in Wasco County, Oregon. This unit includes Camas Prairie and Camas Creek, a tributary to the White River, and occur entirely on the Mt. Hood National Forest. Oregon spotted frogs are known to currently occupy this unit (C. Corkran, pers. comm. October 2012). All of the essential physical or biological features are found within the unit but are impacted by vegetation succession (conifer encroachment). The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 8: Upper Deschutes River

The Upper Deschutes River unit includes 24,032 ac (9,726 ha) in Deschutes and Klamath Counties, Oregon, in the Upper Deschutes River sub-basin. The Upper Deschutes River unit extends from headwater streams and wetlands draining to Crane Prairie and Wickiup Reservoirs to the Deschutes River downstream to Bend, Oregon. This unit also includes Odell Creek and Davis Lake. Within this unit, currently 23,213 ac (9,394 ha) are managed by the USFS Deschutes National Forest, 185 ac (75 ha) are managed by Oregon Parks and Recreation Department, 45 ac (18 ha) are owned by the counties, and 589 ac (238 ha) are privately owned. A subset of the acreage managed by the Deschutes National Forest occurs within Wickiup and Crane Prairie reservoirs, which are operated by the Bureau of Reclamation. The Upper Deschutes River unit consists of two subunits: Below Wickiup Dam (Subunit 8A) and Above Wickiup Dam (Subunit 8B). Oregon spotted frogs are known to currently occupy this unit (USGS 2006 and 2012 datasets; Sunriver Nature Center; and USFS multiple data sources). The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features. Storage and

release of water from the reservoir system influences the physical and biological features between the subunits. Within this unit, we are excluding lands managed under the Sunriver Great Meadow Management Plan, the Crosswater Environmental Plan, and the Old Mill Pond Oregon Spotted Frog Candidate Conservation Agreement with Assurances (CCAA). See *Exclusions Based on Other Relevant Impacts* for further details.

Subunit 8A: Below Wickiup Dam

This subunit includes 2,001 ac (810 ha). This subunit consists of the Deschutes River and associated wetlands downstream of Wickiup Dam to Bend, Oregon, beginning at the outlet of an unnamed tributary draining Dilman Meadow. Within this subunit, currently 1,182 ac (479 ha) are managed by the USFS Deschutes National Forest, 185 ac (75 ha) are managed by Oregon Parks and Recreation Department, 45 ac (18 ha) are managed by Deschutes County, and 589 ac (238 ha) are privately owned. All of the essential physical or biological features are found within the subunit but are impacted by hydrologic modification of river flows, reed canarygrass, nonnative predaceous fish, and bullfrogs. The essential features within occupied habitat within this subunit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Subunit 8B: Above Wickiup Dam

This subunit includes 22,031 ac (8,916 ha). This subunit includes the following lakes, including associated wetlands, in the upper watersheds that flow into the Crane Prairie/Wickiup Reservoir system: Hosmer Lake, Lava Lake, Little Lava Lake, Winopee Lake, Muskrat Lake, and Little Cultus Lake, Crane Prairie and Wickiup Reservoirs, and Davis Lake. The following riverine waterbodies and associated wetlands are critical habitat: Deschutes River from Lava Lake to Wickiup Reservoir, Cultus Creek downstream of Cultus Lake, Deer Creek downstream of Little Cultus Lake, and Odell Creek from an occupied unnamed tributary to the outlet in Davis Lake. The land within this subunit is primarily under USFS ownership. However, the Bureau of Reclamation manages the operation of Crane Prairie and Wickiup reservoirs. Within this subunit, currently 22,031 ac (8,916 ha) are managed by the USFS Deschutes

National Forest and less than 1.0 ac (0.14 ha) is in private ownership. All of the essential physical or biological features are found within the subunit but are impacted by vegetation succession and nonnative predaceous fish. Physical and biological features found within the reservoirs in this unit are affected by the storage and release of water for irrigation. The essential features within this subunit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 9: Little Deschutes River

The Little Deschutes River unit consists of 11,033 ac (4,465 ha) in Klamath and Deschutes Counties, Oregon. The Little Deschutes River unit includes the extent of the Little Deschutes River and associated wetlands from the headwaters to the confluence with the Deschutes River, 1 mi (1.6 km) south of Sunriver and approximately 20 mi (32.2 km) south of Bend, Oregon. This unit includes the following tributaries, including adjacent wetlands: Big Marsh Creek, Crescent Creek, and Long Prairie Creek. Oregon spotted frogs are known to currently occupy this unit (USGS, Sunriver Nature Center, and USFS multiple data sources). Within this unit, currently 5,288 ac (2,140 ha) are managed by the USFS Deschutes National Forest and Prineville BLM, 14 ac (6 ha) are managed by the State of Oregon, 80 ac (32 ha) are managed by Deschutes and Klamath Counties, and 5,651 ac (2,287 ha) are privately owned. Additionally, the essential physical or biological features are found within the unit but are impacted by hydrologic manipulation of water levels for irrigation, nonnative predaceous fish, reed canarygrass, and bullfrogs. The essential features within occupied areas within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features. Within this unit, we are excluding lands managed under the Crosswater Environmental Plan. See *Exclusions Based on Other Relevant Impacts* for further details.

Critical Habitat Unit 10: McKenzie River Sub-Basin

The McKenzie River unit consists of 98 ac (40 ha) in Lane County, Oregon. This critical habitat unit occurs in the Mink Lake Basin, located in the headwaters of the main South Fork of the McKenzie River on the McKenzie River Ranger District of the USFS Willamette National Forest. The McKenzie River unit includes seven wilderness lakes, marshes, and ponds: Penn Lake, Corner Lake, Boat Lake, Cabin Meadows, two unnamed marshes, and a pond northeast of Penn Lake. A small segment of the South Fork McKenzie River between the two unnamed marshes also is included within this critical habitat unit. The entire area within this unit is under USFS ownership. Oregon spotted frogs are known to currently occupy this unit (Adams *et al.* 2011). All of the essential physical or biological features are found within the unit, but are impacted by nonnative predaceous fish, isolation, and vegetation encroachment. The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 11: Middle Fork Willamette River

The Middle Fork Willamette River unit consists of 292 ac (118 ha) in Lane County, Oregon. This unit includes Gold Lake and bog, which are located in the 465-ac (188-ha) Gold Lake Bog Research Natural Area on the upstream end of Gold Lake on the USFS Willamette National Forest. The entire area within this unit is under USFS ownership. Oregon spotted frogs are known to currently occupy this unit (USFS data sources). All of the essential physical or biological features are found within the unit, but are impacted by nonnative predaceous fish, isolation, and vegetation encroachment. The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 12: Williamson River

The Williamson River unit consists of 15,331 ac (6,204 ha) in Klamath County, Oregon. This unit includes the Williamson River and adjacent, seasonally wetted areas in Klamath Marsh NWR 4.89 mi (7.87 km) east of Silver Lake Highway, north to 0.998 mi (1.61 km) southeast of Big Springs, north through the Refuge to 0.24 mi (0.36 km) southeast of Three Creek spring, and upstream to 2.14 mi (3.44 km) north of the confluence with Aspen Creek. This unit also includes a portion of one tributary to the Williamson River (Jack Creek) and its adjacent seasonally wetted areas from National Forest Road 94, south of National Forest Road 88 through 1.32 mi (2.12 km) of O'Connor Meadow. Oregon spotted frogs are known to currently occupy this unit (USGS, USFS, and USFWS multiple data sources). Within this unit, 10,418 ac (4,216 ha) are federally managed by the Klamath Marsh NWR and the USFS Fremont-Winema National Forest, and 4,913 ac (1,988 ha) are privately owned. Additionally, the essential physical or biological features are found within the unit, but are impacted by invasive plants (reed canarygrass), woody vegetation succession, absence of beaver, and nonnative predators. The essential features within occupied areas within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 13: Upper Klamath Lake

The Upper Klamath Lake unit consists of 2,337 ac (946 ha) in Klamath County, Oregon. This unit includes the Wood River and its adjacent seasonally wetted areas from its headwaters downstream to the BLM south levee road just north of the confluence with Agency Lake as well as the complete length of the Wood River Canal (west of the Wood River) and its adjacent seasonally wetted areas starting 1.80 mi (2.90 km) south of Weed Road and continuing south. This unit also includes two tributaries to the Wood River (Fort Creek and Annie Creek) and their adjacent seasonally wetted areas: Fort Creek in its entirety from its headwaters to the junction of the Wood River and Annie Creek 0.75 mi (1.2 km) downstream from the Annie Creek Sno-Park to its junction with the Wood River. In addition, this unit

includes three creeks (Sevenmile, Crane, and Fourmile) that flow into Sevenmile Canal and then into Agency Lake and their adjacent seasonally wetted areas.

Sevenmile Creek includes 1.40 mi (2.25 km) beginning north of Nicholson Road, south to the confluence of Crane Creek as well as the entire length of two connected tributaries (Blue Spring and Short Creek) and the associated, adjacent seasonally wetted areas. Crane Creek includes adjacent seasonally wetted areas 0.28 mi (0.44 km) from its headwaters south to the confluence with Sevenmile Creek as well as two tributaries (Mares Egg spring and a portion of an unnamed spring to the west of Crane Creek 0.16 mi (0.30 km) south of three unnamed springs near Sevenmile Road). Fourmile Creek includes the adjacent seasonally wetted areas associated with the historical Crane Creek channel, Threemile Creek, Cherry Creek, Jack springs, Fourmile springs, the confluence of Nannie Creek, and the north-south canals that connect Fourmile Creek to Crane Creek.

Oregon spotted frogs are known to currently occupy this unit (BLM, USFS, USGS, and USFWS multiple data sources). Within this unit, 1,259 ac (510 ha) are managed by the BLM, USFS Fremont-Winema National Forest, and Bureau of Reclamation; 9 ac (4 ha) are managed by Oregon State Parks; less than 1 ac (<1 ha) are owned by Klamath County; and 1,068 ac (432 ha) are privately owned. All of the essential physical or biological features are found within the unit, but are impacted by invasive plants (reed canarygrass), woody vegetation plantings and succession, hydrological changes, and nonnative predators. The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Critical Habitat Unit 14: Upper Klamath

The Upper Klamath unit consists of 262 ac (106 ha) of lakes and creeks in Klamath and Jackson Counties, Oregon. In Klamath County, Buck Lake critical habitat includes seasonally wetted areas adjacent to the western edge of Buck Lake encompassing Spencer Creek downstream due west of Forest Service Road 46, three unnamed springs, and Tunnel Creek. Parsnip Lakes, in Jackson County, includes seasonally wetted areas associated with Keene Creek from the Keene Creek dam to 0.55 mi (0.88 km) east from the confluence of Mill

Creek as well as four lakes associated with the creek. Oregon spotted frogs are known to currently occupy this unit (BLM, USFS, USGS, and USFWS multiple data sources). Within this unit, 103 ac (42 ha) are managed by the BLM and USFS Fremont-Winema National Forest, and 159 ac (64 ha) are privately owned. All of the essential physical or biological features are found within the unit, but are impacted by woody vegetation succession, nonnative predators, lack of beaver, and hydrological changes. The essential features within this unit may require special management considerations or protection to ensure maintenance or improvement of the existing nonbreeding, breeding, rearing, and overwintering habitat, aquatic movement corridors, or refugia habitat, as well as to address any changes that could affect these features.

Effects of Critical Habitat Designation**Section 7 Consultation**

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

We published a final regulation with a new definition of destruction or adverse modification on February 11, 2016 (81 FR 7214), which became effective on March 14, 2016. Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under

section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect and are likely to adversely affect listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or

control over the action (or the agency’s discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Application of the “Adverse Modification” Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that result in a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of the Oregon spotted frog. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of these species or that preclude or significantly delay development of such features. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the 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, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the Oregon spotted frog. These activities include, but are not limited to:

(1) Actions that would significantly alter the structure and function of the wetland, pond, channel, lake, oxbow, spring, or seasonally flooded areas morphology, geometry, or water availability/permanence. Such actions or activities could include, but are not limited to:

- a. Filling or excavation; channelization; impoundment;
- b. road and bridge construction; urban, agricultural, or recreational development;
- c. mining;
- d. groundwater pumping;
- e. dredging;
- f. construction or destruction of dams or impoundments;
- g. water diversion;

- h. water withdrawal;
- i. hydropower generation;
- j. livestock grazing;
- k. beaver removal;
- l. destruction of riparian or wetland vegetation;
- m. pond construction;
- n. river restoration, including channel reconstruction, placement of large woody debris, vegetation planting, reconnecting riverine floodplain, or gravel placement; and
- o. reservoir water storage and release.

These activities may lead to changes in the hydrologic function of the aquatic habitat and alter the timing, duration, water flows, and water depth. These changes may be designed to benefit the Oregon spotted frog and actually increase habitat in the long term, or may degrade or eliminate Oregon spotted frog habitat and could lead to the reduction in available breeding, rearing, nonbreeding, and overwintering habitat necessary for the frog to complete its life cycle. If the permanence of an aquatic system declines so that it regularly dries up, it may lose its ability to support Oregon spotted frogs. If the quantity of water declines, it may reduce the likelihood that the site will support a population of frogs that is robust enough to be viable over time. Similarly, ephemeral, intermittent, or perennial ponds can be important stop-over points for frogs moving among breeding areas or between breeding, rearing, dry season, or wintering areas. Reducing the permanence of these sites may reduce their ability to facilitate frog movements. However, in some cases, increasing permanence can be detrimental as well, if it creates favorable habitat for predatory fish or bullfrogs that otherwise could not exist in the system. Reservoir operations such as the storage and release of water could be timed to support breeding, rearing, and overwintering habitat within occupied reservoirs and downstream of dams.

(2) Actions that would significantly alter the vegetation structure in and around habitat. Such actions or activities could include, but are not limited to, removing, cutting, burning, or planting vegetation for restoration actions, creation or maintenance of urban or recreational developments, agricultural activities, and grazing. The alteration of the vegetation structure may change the habitat characteristics by changing the microhabitat (*e.g.*, change in temperature, water depth, basking opportunities, and cover) and thereby negatively affect whether the Oregon spotted frog is able to complete all normal behaviors and necessary life

functions or may allow invasion of competitors or predators.

(3) Actions that would significantly degrade water quality (for example, alter water chemistry or temperature). Such actions or activities could include, but are not limited to, release of chemicals or biological pollutants into surface water or into connected ground water at a point source or by dispersed release (nonpoint source); livestock grazing that results in sedimentation, urine, or feces in surface water; runoff from agricultural fields; and application of pesticides (including aerial overspray). These actions could adversely affect the ability of the habitat to support survival and reproduction of Oregon spotted frogs. Variances in water chemistry or temperature could also affect the frog's ability to survive with chytrid fungus (*Batrachochytrium dendrobatidis*), oomycete water mold *Saprolegnia*, or the trematode *Ribeiroia ondatrae*.

(4) Actions that would directly or indirectly result in introduction of nonnative predators, increase the abundance of extant predators, or introduce disease. Such actions could include, but are not limited to: Introduction or stocking of fish or bullfrogs; water diversions, canals, or other water conveyance that moves water from one place to another and through which inadvertent transport of predators into Oregon spotted frog habitat may occur; and movement of water, mud, wet equipment, or vehicles from one aquatic site to another, through which inadvertent transport of eggs, tadpoles, or pathogens may occur. These actions could adversely affect the ability of the habitat to support survival and reproduction of Oregon spotted frogs. Additionally, the stocking of introduced fishes could prevent or preclude recolonization of otherwise available breeding or overwintering habitats, which are necessary for the conservation of Oregon spotted frogs.

(5) Actions and structures that would physically block aquatic movement corridors. Such actions and structures include, but are not limited to: Urban, industrial, or agricultural development; water diversions (such as dams, canals, pipes); water bodies stocked with predatory fishes or bullfrogs; roads that do not include culverts; or other structures that physically block movement. These actions and structures could reduce or eliminate immigration and emigration within a sub-basin.

(6) Inclusion of lands in conservation agreements or easements that result in any of the actions discussed above. Such easements could include, but are not limited to, Natural Resources

Conservation Service Wetland Reserve Program, USDA Farm Service Agency's Conservation Reserve and Conservation Reserve Enhancement Programs, HCPs, Safe Harbor Agreements, or CCAAs.

Exemptions

Application of Section 4(a)(3) of the Act

Section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that: "The Secretary shall not designate as critical habitat any lands or other geographic areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan [INRMP] prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation." There are no Department of Defense lands within the critical habitat designation.

Consideration of Impacts Under Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if she determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless she determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

When identifying the benefits of inclusion for an area, we consider the additional regulatory benefits that area would receive from the protection from adverse modification or destruction as a result of actions with a Federal nexus; the educational benefits of mapping essential habitat for recovery of the listed species; and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When identifying the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or

encouragement of partnerships; or implementation of a management plan that provides equal to or more conservation than a critical habitat designation would provide.

In the case of the Oregon spotted frog, the benefits of critical habitat include promotion of public awareness of the presence of the Oregon spotted frog and the importance of habitat protection, and in cases where a Federal nexus exists, potentially greater habitat protection for the Oregon spotted frog due to the protection from adverse modification or destruction of critical habitat.

When we evaluate the existence of a conservation plan when considering the benefits of exclusion, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After identifying the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to evaluate whether the benefits of exclusion outweigh those of inclusion. If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then determine whether exclusion would result in extinction of the species. If exclusion of an area from critical habitat will result in extinction, we will not exclude it from the designation.

Based on the information provided by entities seeking exclusion, as well as any additional public comments received, we evaluated whether certain lands in the proposed critical habitat were appropriate for exclusion from this final designation pursuant to section 4(b)(2) of the Act. We are excluding the areas listed below (table 3) from critical habitat designation for the Oregon spotted frog based on the following final plans/agreements: Glenwood Valley Coordinated Resource Management Plan and Conservation Agreement, Crosswater Environmental Plan, Sunriver Management Plans, and Old Mill District Candidate Conservation Agreement with Assurances.

TABLE 3—AREAS EXCLUDED FROM CRITICAL HABITAT DESIGNATION BY CRITICAL HABITAT UNIT

Unit or subunit as proposed	Specific area	Areas excluded from critical habitat, in acres (hectares)
6—Middle Klickitat River	Glenwood Valley Coordinated Resource Management Plan and Conservation Agreement.	2,627 (1,063)
8A—Upper Deschutes River Below Wickiup Dam	Crosswater Environmental Plan	86 (35)
9—Little Deschutes River	121 (49)
8A—Upper Deschutes River Below Wickiup Dam	Sunriver Management Plans	223 (90)
8A—Upper Deschutes River Below Wickiup Dam	Old Mill District Candidate Conservation Agreement with Assurances.	26 (11)

Consideration of Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we prepared an IEM and screening analysis which, together with our narrative and interpretation of effects, we consider our DEA of the proposed critical habitat designation and related factors (IeC 2014). The analysis, dated April 30, 2014, was made available for public review from June 18, 2014, through July 18, 2014 (79 FR 34685), and from September 9, 2014, through September 23, 2014 (79 FR 53384). The DEA addressed probable economic impacts of critical habitat designation for the Oregon spotted frog. Following the close of the comment periods, we reviewed and evaluated all information submitted during the comment periods that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. Additional information relevant to the probable incremental economic impacts of critical habitat designation for the Oregon spotted frog is summarized below and available in the screening analysis for the Oregon spotted frog (Iec 2014), available at <http://www.regulations.gov>.

The economic analysis estimated direct (section 7) and indirect costs likely to result from the critical habitat designation for the Oregon spotted frog. The economic impacts of implementing the rule through section 7 of the Act are expected to be limited to additional administrative effort to consider adverse modification in section 7 consultations, which are not expected to exceed \$200,000 in a typical year. The critical habitat unit likely to incur the largest incremental administrative costs is Unit 9 (Little Deschutes River) due to a relatively high number of anticipated consultations to consider grazing allotments intersecting the unit.

In terms of indirect costs, the analysis concluded that the designation of

critical habitat is unlikely to trigger additional requirements under State or local regulations. In addition, the analysis was supplemented by a separate memorandum assessing the potential perceptual effects on the value of privately owned grazing lands. The analysis concluded that the aggregate value of private lands is less than \$100 million.

Therefore, the analysis concluded that the critical habitat designation for the Oregon spotted frog is unlikely to generate costs exceeding \$100 million in a single year. The magnitude of benefits is highly uncertain, and quantification would require primary research and the generation of substantial amounts of new data, which was beyond the scope of the analysis and Executive Order 12866.

Exclusions Based on Economic Impacts

The Service considered the economic impacts of the critical habitat designation and the Secretary is not exercising her discretion to exclude any areas from this designation of critical habitat for the Oregon spotted frog based on economic impacts.

A copy of the IEM and screening analysis with supporting documents may be obtained by contacting the Washington Fish and Wildlife Office (see **ADDRESSES**) or by downloading from the Internet at <http://www.regulations.gov>.

Exclusions Based on National Security Impacts or Homeland Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense where a national security impact might exist. In preparing this final rule, we have determined that no lands within the designation of critical habitat for the Oregon spotted frog are owned or managed by the Department of Defense or Department of Homeland Security, and, therefore, we anticipate no impact on national security or homeland security. Consequently, the Secretary is not exercising her

discretion to exclude any areas from this final designation based on impacts on national security or homeland security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors including whether there are permitted conservation plans covering the species in the area such as HCPs, safe harbor agreements, or candidate conservation agreements with assurances, or whether there are non-permitted conservation agreements and partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at the existence of tribal conservation plans and partnerships and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

In our proposed critical habitat we extended consideration of exclusion to the Trout Lake NAP Draft Management Plan and the Deschutes Basin HCP. The Trout Lake NAP is managed by the WDNR. In its comment letter on the proposed critical habitat, the WDNR stated that the draft management plan would not be finalized prior to final designation of critical habitat and the critical habitat designation for the lands with the NAP appears appropriate and may help to strengthen conservation support at the site. The Deschutes Basin Multispecies HCP continues to be in the development stage; therefore, no analysis of the conservation benefit can be made for consideration of exclusion. Therefore, lands managed under the Trout Lake NAP Draft Management Plan and areas that may be covered by the Deschutes Basin Multispecies HCP are not excluded from critical habitat.

Private or Other Non-Federal Conservation Plans or Agreements and Partnerships, in General

We sometimes exclude specific areas from critical habitat designations based in part on the existence of private or other non-Federal conservation plans or agreements and their attendant partnerships. A conservation plan or agreement describes actions that are designed to provide for the conservation needs of a species and its habitat, and may include actions to reduce or mitigate negative effects on the species caused by activities on or adjacent to the area covered by the plan. Conservation plans or agreements can be developed by private entities with no Service involvement, or in partnership with the Service.

We evaluate a variety of factors to determine how the benefits of any exclusion and the benefits of inclusion are affected by the existence of private or other non-Federal conservation plans or agreements and their attendant partnerships when we undertake a discretionary section 4(b)(2) exclusion analysis. A non-exhaustive list of factors that we will consider for non-permitted plans or agreements is shown below. These factors are not required elements of plans or agreements, and all items may not apply to every plan or agreement.

(i) The degree to which the plan or agreement provides for the conservation of the species or the essential physical or biological features (if present) for the species;

(ii) Whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan or agreement will be implemented;

(iii) The demonstrated implementation and success of the chosen conservation measures;

(iv) The degree to which the record of the plan supports a conclusion that a critical habitat designation would impair the realization of benefits expected from the plan, agreement, or partnership;

(v) The extent of public participation in the development of the conservation plan;

(vi) The degree to which there has been agency review and required determinations (e.g., State regulatory requirements), as necessary and appropriate;

(vii) Whether National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) compliance was required; and

(viii) Whether the plan or agreement contains a monitoring program and adaptive management to ensure that the

conservation measures are effective and can be modified in the future in response to new information.

We find that the Glenwood Valley Coordinated Resource Management Plan and Conservation Agreement, Crosswater Environmental Plan, Sunriver Management Plans, and Old Mill District Candidate Conservation Agreement with Assurances all fulfill the above criteria. We are excluding these lands because the plans adequately provide for the long-term conservation of the Oregon spotted frog; such exclusion is likely to result in the continuation, strengthening, or encouragement of important conservation partnerships; and the Secretary has determined that the benefits of excluding such areas outweigh the benefits of including them in critical habitat as detailed here.

Glenwood Valley Coordinated Resource Management Plan and Conservation Agreement

In this final designation, the Secretary has exercised her discretion under section 4(b)(2) of the Act to exclude from this critical habitat designation 2,625 ac (1,062 ha) of private lands and 2 ac (1 ha) of Klickitat County lands that are covered under a Coordinated Resource Management Plan and Conservation Agreement (Agreement). The excluded area falls within a portion of the proposed Unit 6 (Middle Klickitat River) (78 FR 53538, August 29, 2013).

The Service worked directly with several Glenwood Valley private landowners (hereafter known as Glenwood Valley ranchers) regarding conservation actions that are being implemented through this Agreement on a subset of private lands within the Glenwood Valley/Conboy Lake area. Glenwood Valley Ranchers collaboratively developed a voluntary resource management plan and conservation agreement with the Service to conserve the Oregon spotted frog while continuing their ranching operations in an economically viable manner. This 20-year agreement was approved and signed by the Service, participating Glenwood Valley ranchers, and Klickitat County on June 29, 2015 (USFWS et al. 2015).

Under the agreement, the participating Glenwood Valley ranchers manage their lands and water in a manner that is compatible with the long-term conservation of the Oregon spotted frog and in partnership with the adjacent Conboy Lake NWR. The management plan uses a combination of water management, livestock grazing, and haying as the primary tools on these private lands to provide vegetation

management within Oregon spotted frog habitats and to maintain adequate wetland breeding areas and deeper-water overwintering areas for the frog. Although some of these practices may impact individual frogs, overall these practices contribute to a positive long-term conservation benefit for the species and its habitat.

Benefits of Inclusion—Glenwood Valley Coordinated Resource Management Plan and Conservation Agreement

We find that there are minimal benefits to including Glenwood Valley ranchers' lands in critical habitat. As discussed above under *Application of Section 4(b)(2) of the Act*, the primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence.

Because the Glenwood Valley ranchers' lands are currently occupied by the Oregon spotted frog, a Federal action with potential adverse effects would trigger a jeopardy analysis. Should critical habitat be designated, an adverse modification analysis would also be triggered by the action. If such a Federal nexus were to occur, it would most likely result from the granting of Federal funds to manage the lands and/or Federal permitting to upgrade water control structures to benefit the Oregon spotted frog. However, we anticipate that any section 7 consultations related to funding of upgrades to water control structures or habitat management are not likely to provide much added benefit to the species, since the action being consulted on is itself intended to benefit this species. In addition, because one of the primary threats to the species is habitat loss and degradation, a section 7 jeopardy analysis would evaluate the effects of the action on the conservation or function of the habitat for the species regardless of whether or not critical habitat is designated for these lands.

Project modifications requested to avoid adverse modification would likely be the same as those needed to avoid jeopardy. Therefore, we anticipate that section 7 consultation analyses will likely result in no difference between conservation recommendations to avoid jeopardy or adverse modification in occupied areas of critical habitat,

making the incremental benefit of designating critical habitat in this case low at best.

Another benefit of including lands in a critical habitat designation is that it serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. Identifying areas of high conservation value for the Oregon spotted frog can help focus and promote conservation efforts by other parties. Designation of critical habitat informs State agencies and local governments about areas that could be conserved under State laws or local ordinances. Any additional information about the needs of the Oregon spotted frog or its habitat that reaches a wider audience can be of benefit to future conservation efforts. In this case, however, the potential educational benefit of critical habitat is reduced due to the extensive knowledge by the State, Klickitat County, and private landowners about the presence of the frog in this area of the Glenwood Valley; the location of Conboy Lake NWR immediately adjacent to these areas (on which critical habitat will remain designated); and the limited number of private landowners encompassed by the critical habitat designation. Because of Conboy Lake NWR's proximity to private ranching lands and the importance of water management in the Glenwood Valley for both the Oregon spotted frog and ranching activities, refuge staff frequently interact with ranchers to discuss the management of water resources and the conservation of the frog. This interaction has increased the ranchers' understanding of the ecological value of their land and has emphasized the importance of this ongoing collaboration between the ranchers and the Service.

The incremental benefit from designating critical habitat for the Oregon spotted frog on these private lands is further minimized due to the long-term conservation agreement recently signed by participating ranchers, Klickitat County, and the Service (USFWS et al. 2015). These ranchers have committed to implementing management for the conservation of the Oregon spotted frog that will improve maintenance of habitat that contains the essential physical or biological features to support the frog. We are confident that the Agreement signed by participating ranchers will be successful in conserving habitat for the frog, as a number of ongoing actions conducted by participating ranchers have contributed to the frogs' persistence in this area. The implementation of the

Agreement provides greater protection to Oregon spotted frog habitat than the designation of critical habitat since the provisions of the Agreement are intended to improve water management and the habitat conditions to support the long-term conservation of the species on these lands (critical habitat designation does not require active management, only avoidance of destruction or adverse modification). In many cases, this work is accomplished without Federal funding, which highlights these landowners' willingness to implement the partnership. We have no information to suggest that the designation of critical habitat on these properties would generate any appreciable added benefit beyond what is outlined in the Agreement.

Benefits of Exclusion—Glenwood Valley Coordinated Resource Management Plan and Conservation Agreement

The benefits of excluding these private properties from designated critical habitat are relatively greater. We developed a partnership with Glenwood Valley ranchers and can use these properties as an example of land uses that can be compatible with Oregon spotted frog conservation given it is now largely a management-dependent species. This partnership is evidenced by the Agreement provisions that are anticipated to improve the conservation status of the Oregon spotted frog. They include: (1) Seasonally retaining water longer on inundated fields to improve the successful development of tadpoles and subsequent migration of juvenile frogs from potential breeding sites; (2) support of efforts to upgrade or replace key water control structures to facilitate this water management; (3) ongoing vegetation management of reed canary grass to support suitable wetland breeding habitats and to allow migratory movements of frogs; (4) periodic ditch cleaning conducted in a manner that reduces direct and indirect impacts to frogs, while maintaining these water sources in a condition suitable for summer holding habitat; and (5) opportunities to conduct Oregon spotted frog surveys on private lands as part of an adaptive management process. These surveys will help determine levels of use and provide options for more site-specific management actions and options for periodically translocating frogs to more secure sites. Measures contained in the Agreement are consistent with recommendations from the Service for the conservation of the Oregon spotted frog, and will afford benefits to the species and its habitat. The Service accrues a significant benefit

from encouraging the development of such voluntary conservation agreements in cooperation with non-Federal partners. Because the majority of occurrences of endangered or threatened species are on non-Federal lands, partnerships with non-Federal landowners and land managers are vital to the conservation of listed species. Therefore, the Service is committed to maintaining and encouraging such partnerships through the recognition of positive conservation contributions.

Excluding these private properties from critical habitat designation will provide a significant benefit in terms of sustaining and enhancing the current partnership between the Service and participating Glenwood Valley ranchers, as well as other partners who participate in Oregon spotted frog habitat management decisionmaking. The willingness of these private landowners to undertake conservation efforts for the benefit of the Oregon spotted frog, and work with the Service and others to develop and employ conservation actions, will continue to reinforce those conservation efforts and our partnership, which contribute toward achieving recovery of the Oregon spotted frog. We consider this voluntary partnership in conservation vital to the further development of our understanding of the status of the Oregon spotted frog on agricultural lands and the further refinement of the levels of compatible agricultural activity on such lands. This information is necessary for us to implement recovery actions such as habitat protection, restoration, and beneficial management actions for this species. In addition, exclusion will provide the landowner with relief from any potential additional regulatory burden associated with the designation of critical habitat, whether real or perceived, which we consider to be a significant benefit of exclusion in acknowledging the positive contributions of our conservation partners.

Together, States, counties, local jurisdictions, conservation organizations, and private landowners can implement various cooperative conservation actions (such as Safe Harbor Agreements, HCPs, and other conservation plans, particularly large, regional conservation plans that involve numerous participants and/or address landscape-level conservation of species and habitats) that we would be unable to accomplish otherwise. These private landowners have made a commitment to develop and implement this Agreement, which will maintain and enhance habitat favorable to the Oregon spotted frog, and can engage and encouraged

other parties, both public and private, to join in conservation partnerships. These private landowners serve as a model of voluntary conservation and may aid in fostering future voluntary conservation efforts by other parties in other locations for the benefit of listed species. Most endangered or threatened species do not occur on Federal lands. As the recovery of these species, and in particular the Oregon spotted frog, will, therefore, depend on the willingness of non-Federal landowners to partner with us to engage in conservation efforts (including active management of habitat), we consider the positive effect of excluding proven conservation partners from critical habitat to be a significant benefit of exclusion.

Benefits of Exclusion Outweigh Benefits of Inclusion—Glenwood Valley Coordinated Resource Management Plan and Conservation Agreement

The Secretary has determined that the benefits of excluding the private lands of participating Glenwood Valley ranchers from the designation of critical habitat for the Oregon spotted frog outweigh the benefits of including these areas in critical habitat. The regulatory and informational benefits of including the private lands of participating Glenwood Valley ranchers in critical habitat are minimal. Furthermore, any potential limited benefits of inclusion on the section 7 process are relatively unlikely to be realized, because a Federal nexus on these lands would rarely occur. If one were to occur, it would most likely be with the Service, Natural Resources Conservation Service, or Army Corps of Engineers, and their actions would be geared toward the conservation benefits of restoring and enhancing habitat specifically for the Oregon spotted frog. This type of management is focused on the maintenance of open wetland breeding habitats with short-statured vegetative conditions, and providing sufficient sources of adjacent habitats of deeper water for maturation and overwintering that the Oregon spotted frog requires for persistence. Since any action likely to be the subject of consultation under the adverse modification standard on this area would be largely focused on providing positive habitat benefits for the Oregon spotted frog, we find it unlikely that critical habitat would result in any significant additional benefit to the species. Furthermore, the informational benefits of including this area in critical habitat are further reduced since significant management actions are already under way to manage habitat on the adjacent Conboy Lake NWR for the benefit of Oregon

spotted frog. In this instance, the Agreement with the Glenwood Valley Ranchers contains provisions for conserving and enhancing habitat on which the Oregon spotted frog relies, and those provisions exceed the conservation benefits that would be afforded through section 7 and, therefore, reduce the benefits of designating this area as critical habitat.

In contrast, the benefits derived from excluding the private lands of participating Glenwood Valley ranchers are substantial. Excluding these lands will help us maintain and foster an important and successful partnership with these private landowners. They have voluntarily supported stewardship of habitat beneficial to the conservation of the Oregon spotted frog on working agricultural lands. The exclusion of participating Glenwood Valley ranchers' lands will serve as a positive conservation model, and provides encouragement for other private landowners to partner with the Service for the purpose of conserving listed species. The positive conservation benefits that may be realized through the maintenance of this existing partnership, as well as through the encouragement of future such partnerships, and the importance of developing such partnerships on non-Federal lands for the benefit of listed species in other areas, are such that we consider the positive effect of excluding willing conservation partners from critical habitat to be a significant benefit of exclusion. For these reasons, we have determined that the benefits of exclusion outweigh the benefits of inclusion in this case.

Exclusion Will Not Result in the Extinction of the Species—Glenwood Valley Coordinated Resource Management Plan and Conservation Agreement

We have determined that exclusion of approximately 2,627 ac (1,063 ha) for the portion of the Unit 6 managed under the Agreement implemented by participating Glenwood Valley ranchers will not result in extinction of the Oregon spotted frog. Actions covered by the Agreement will not result in the extinction of the Oregon spotted frog because the management actions implemented on participating Glenwood Valley ranchers' lands are designed to conserve and enhance Oregon spotted frog habitat during the period of the agreement, plus a significant portion of Oregon spotted frog habitat within Unit 6 occurs on adjacent Conboy Lake NWR lands and the Refuge is specifically managing habitat for the frog. We anticipate that

management of Oregon spotted frog habitat on these private lands will continue and may be modified over time to better enhance Oregon spotted frog habitat as new information is gained and addressed through the adaptive management process under the Agreement.

Crosswater Environmental Plan

In this final designation, the Secretary has exercised her discretion to exclude 207 ac (84 ha) of lands from critical habitat, under section 4(b)(2) of the Act, that are owned by the Sunriver Limited Partnership and managed under the Crosswater Environmental Plan (CEP). The excluded area falls within a portion of Subunit 8A (78 FR 53538, August 29, 2013).

The Crosswater Resort comprises an area of 617 ac (250 ha), including the proposed Oregon spotted frog critical habitat, at the confluence of the Deschutes and Little Deschutes Rivers south of Sunriver, Oregon. The Crosswater Resort is a private golf and residential community under ownership of the Sunriver Limited Partnership. Oregon spotted frog conservation measures outlined in the CEP and voluntarily implemented by the Crosswater Resort in partnership with Sunriver Nature Center and Observatory (SRNCO) for over a decade have contributed to sustaining a population of Oregon spotted frogs on private lands within the Crosswater Resort. The CEP, developed and implemented prior to 2003, contains conservation measures that are specific to Oregon spotted frog, such as the removal of invasive bullfrogs from wetlands and ponds on private lands that are inhabited by the Oregon spotted frog and maintaining buffers for herbicide application between golf courses and wetlands inhabited by the frog. The CEP also addresses management of vegetation encroachment into wetlands that may threaten the amount of open water habitat for spotted frogs. In addition to implementing voluntary conservation measures for spotted frogs through the CEP, the preservation of wetland and riparian areas along the Deschutes and Little Deschutes Rivers under a conservation easement provide protection to spotted frog habitat. These ongoing management activities combined with a conservation easement for wetlands have reduced threats to the Oregon spotted frog and its habitat by maintaining habitat conditions that are suitable for all life-history stages of the species.

The Crosswater Resort has been a conservation partner for over a decade. In 2009, the Service worked with

Crosswater to monitor water quality in ponds and wetlands inhabited by the Oregon spotted frog to determine whether or not the buffer for herbicide use adjacent to wetlands outlined in the CEP was effectively protecting water quality. A report published by the Service in 2009 indicated that the Integrated Pest Management practices implemented by Crosswater Resort minimized the input of herbicides into water bodies inhabited by the species. Oregon spotted frog surveys, conducted in partnership with the USGS and SRNCO on private lands within the Crosswater Resort, have been provided to the Service since 2000. Habitat protection, management and monitoring conducted at Crosswater Resort have significantly contributed to our understanding of Oregon spotted frog biology and responses to habitat management.

Benefits of Inclusion—Crosswater Environmental Plan

We find there are minimal benefits to including the Crosswater Resort lands in critical habitat. As discussed above under *Application of Section 4(b)(2) of the Act*, the primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence.

The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. The regulatory standard is different, as the jeopardy analysis investigates the action's impact on the survival and recovery of the species, while the adverse modification analysis focuses on the action's effects on the designated habitat's contribution to conservation. This will, in many instances, lead to different results and different regulatory requirements. Thus, critical habitat designations have the potential to provide greater benefit to the recovery of a species than would listing alone. However, because one of the primary threats to the species is habitat loss and degradation, a section 7 jeopardy analysis would evaluate the effects of the action on the conservation

or function of the habitat for the species regardless of whether or not critical habitat is designated for these lands, and project modifications requested to avoid adverse modification would likely be the same as those needed to avoid jeopardy. Therefore, we anticipate that section 7 consultation analyses will likely result in no difference between conservation recommendations to avoid jeopardy or adverse modification in occupied areas of critical habitat, making the incremental benefit of designating critical habitat in this case low at best.

The inclusion of these private lands as critical habitat could provide some additional Federal regulatory benefits for the species consistent with the conservation standard addressed in the Ninth Circuit Court's decision in *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004). As noted above, a potential benefit of inclusion would be the requirement of a Federal agency to ensure that their actions on these non-Federal lands would not likely result in the destruction or adverse modification of critical habitat. However, this additional analysis to determine whether a Federal action is likely to result in destruction or adverse modification of critical habitat is not likely to be significant because these covered lands are not under Federal ownership, making the application of section 7 less likely. Overall, given the low likelihood of a Federal nexus occurring on these lands, we believe the regulatory benefit of a critical habitat designation on these lands, if any, may be limited. As described above, the presence of a beneficial conservation plan and the history of implementing conservation actions specific to the Oregon spotted frog on these lands further reduces this benefit of including these lands in critical habitat.

The incremental benefit of inclusion is reduced because of the ongoing implementation of management actions by the Crosswater Resort that benefit the conservation of the Oregon spotted frog and its habitat, as discussed above. The Crosswater Resort has been implementing specific management actions that maintain and enhance spotted frog habitat for over a decade. Monitoring of the spotted frog population conducted at Crosswater Resort has shown that the ongoing management is providing benefits to the species. These management actions provide greater benefits to spotted frog habitat than a designation of critical habitat would, since these actions actively improve the breeding, rearing, and overwintering habitat. Therefore,

the existing management at this site will provide greater benefit than the regulatory designation of critical habitat, which requires only the avoidance of adverse modification and does not require the creation, improvement, or restoration of habitat.

Another potential benefit of including lands in a critical habitat designation is that such inclusion raises the awareness of landowners, State and local governments, and the public regarding the potential conservation value of an area. This knowledge can help focus and promote conservation efforts by identifying areas of high conservation value for the Oregon spotted frog. The designation of critical habitat informs State agencies and local governments about areas that could be conserved under State laws or local ordinances. Any additional information about the needs of the Oregon spotted frog or its habitat that reaches a wider audience can be of benefit to future conservation efforts. The Crosswater Resort has been working on implementing conservation measures for the Oregon spotted frog with assistance from SRNCO, which has been a key partner in providing education and outreach to landowners and visitors to the Sunriver area for over 20 years about the Oregon spotted frog. Because of this ongoing education in the Sunriver area, we have been able to hold public meetings about the proposed critical habitat and listing without contention. Furthermore, the management and monitoring of spotted frog habitat at Crosswater Resort for over a decade has provided us with information about how to improve spotted frog habitat through management. The educational benefits of including this area in the designation of critical habitat are reduced by the above-mentioned public education that is ongoing in the Sunriver area.

Benefits of Exclusion—Crosswater Environmental Plan

The benefits of excluding private lands at Crosswater Resort from critical habitat are substantial. The partnership in Oregon spotted frog conservation is evidenced by the conservation and management actions that provide a benefit to the Oregon spotted frog and its habitat for over a decade; monitoring results indicate that such management actions improve breeding, rearing, and overwintering habitat for spotted frog. The CEP includes specific conservation measures for the Oregon spotted frog and its habitat, including bull frog removal and management of encroaching vegetation in wetlands inhabited by spotted frogs. The CEP also requires a buffer for the application of

herbicide on golf courses from wetlands. Annual monitoring conducted by the USGS in partnership with SRNCO validates that these types of management activities are effectively providing conservation benefits to the species. The Crosswater Resort retains a conservation easement that prohibits development on all wetland and riparian areas along the Deschutes and Little Deschutes River, thereby providing additional protections to Oregon spotted frog habitat.

Biological information gathered while working in partnership with the Crosswater Resort will facilitate the development of strategies to conserve the species and inform conservation efforts for the species in other areas. Without the partnership between the Service, Crosswater Resort, and SRNCO, management actions that benefit the spotted frog would not occur, and important breeding, rearing, and overwintering habitat for the spotted frog may not be maintained and enhanced. Excluding lands from critical habitat designation that are managed under the CEP and already protected through a conservation easement will affirm and sustain the partnership, and is expected to enhance the working relationship between the Service and property owners at Crosswater Resort and the Sunriver Limited Partnership. The designation of critical habitat on private lands within Crosswater Resort may have a negative effect on the conservation partnership between the Service and the owners of Crosswater Resort who have agreed to future implementation of conservation measures for the Oregon spotted frog and its habitat. By excluding these lands, we affirm the conservation partnership with Crosswater Resort that not only are providing conservation benefits to the Oregon spotted frog and its habitat during the present time but also into the future. Excluding the lands managed under the CEP and protected through an existing conservation easement from critical habitat designation will sustain the long-standing conservation partnership between the Service, private landowners that reside within Crosswater Resort, and the Sunriver Limited Partnership.

Benefits of Exclusion Outweigh the Benefits of Inclusion—Crosswater Environmental Plan

The primary benefit of including these lands as critical habitat for the Oregon spotted frog is the regulatory requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely

modify designated critical habitat. However, this benefit is reduced for the following reasons. First, the likelihood of a Federal nexus on these lands is low. Furthermore, these lands are occupied by the Oregon spotted frog and we anticipate that even if a Federal nexus exists and triggers the need for section 7 consultation, there will be no difference between conservation recommendations to avoid jeopardy and those to avoid adverse modification in occupied areas of critical habitat. Finally, the benefits of including these lands in critical habitat are reduced due to the existing easement and ongoing management at the site that provides a greater benefit than the regulatory designation of critical habitat.

Another benefit of including these lands in critical habitat is the opportunity to educate landowners, State and local governments, and the public regarding the potential conservation value of the area. However, we have determined that the above-mentioned entities are all aware of the conservation value of these lands for the Oregon spotted frog and that education of the private landowners that reside within and visit Crosswater Resort has been ongoing for over a decade. Therefore, the benefit of designating these lands as critical habitat is minimal.

The benefits of excluding these lands from the critical habitat designation are greater than inclusion for the following reasons. The exclusion will affirm and maintain a partnership with private landowners that promotes the conservation of the species. Additionally, the ongoing implementation of habitat improvements to promote Oregon spotted frog conservation provides strong evidence that our partnership with the Crosswater Resort will continue into the future.

For these reasons, stated above, the Secretary has determined that the benefits of excluding the 207 ac (84 ha) on private lands within Crosswater Resort from the designation of critical habitat for the Oregon spotted frog outweigh the benefits of including these areas in critical habitat.

Exclusion Will Not Result in Extinction of the Species—Crosswater Environmental Plan

We have determined that exclusion of approximately 207 ac (84 ha) on private lands within Crosswater Resort will not result in the extinction of the Oregon spotted frog. This exclusion will not result in extinction of the Oregon spotted frog because the CEP outlines specific conservation actions for

wetlands and riparian areas inhabited by the frog that provide for the needs of the species by protecting, restoring, and enhancing all of the Oregon spotted frog habitat at Crosswater Resort along the Deschutes and Little Deschutes Rivers. Further, for projects having a Federal nexus and potentially affecting the Oregon spotted frog, the jeopardy standard of section 7 of the Act, coupled with protection provided by the CEP, would provide a level of assurance that this subspecies will not go extinct as a result of excluding these lands from the critical habitat designation. Critical habitat for the Oregon spotted frog would be designated in the Deschutes River west of Crosswater Resort and within the Little Deschutes River south of Crosswater Resort. Oregon spotted frogs inhabit the Deschutes and Little Deschutes Rivers in this area. Therefore, actions that result in a Federal nexus would undergo section 7 consultation with the Service.

Sunriver Management Plans

In this final designation, the Secretary has exercised her discretion under section 4(b)(2) of the Act to exclude from this critical habitat designation 223 ac (90 ha) of private land owned by the members of the Sunriver Owners Association (SROA) and covered under the Sunriver Great Meadow Management Plan (GMMP). The excluded area falls within a portion of the proposed Subunit 8A (78 FR 53538, August 29, 2013).

The Sunriver Community comprises an area of 3,373 ac (1,365 ha), including approximately 219 ac (89 ha) of proposed Oregon spotted frog critical habitat and 223 ac (90 ha) of critical habitat that was revised via mapping for the final rule. Sunriver hosts the largest known population of Oregon spotted frogs in the Upper Deschutes River sub-basin downstream of Wickiup Dam. Oregon spotted frog conservation measures voluntarily implemented by the SRNCO for over two decades and preservation of wetland and riparian areas along the Deschutes River under the Sunriver GMMP have contributed to sustaining a large population of Oregon spotted frogs on private lands in the Sunriver area. Common areas within the Sunriver Community, including wetlands, ponds, and meadows, are managed under the authority of the SROA via the Sunriver GMMP. Through a contract with SROA, the SRNCO has been managing a system of weirs within the waterways and ponds to improve breeding, rearing, and overwintering habitat conditions for the Oregon spotted frog. The SRNCO also has been voluntarily removing invasive bullfrogs

from wetlands and ponds in Sunriver that are inhabited by the Oregon spotted frog. These ongoing management activities have reduced threats to the Oregon spotted frog and its habitat by maintaining habitat conditions that are suitable for all life-history stages of the species. The SRNCO has been a conservation partner since the Oregon spotted frog became a candidate species for listing in 1993. Monitoring, research, and habitat management conducted by SRNCO have significantly contributed to our understanding of Oregon spotted frog biology and responses to habitat management.

Benefits of Inclusion—Sunriver Management Plans

We find there are minimal benefits to including the Sunriver Management Plans lands in critical habitat. As discussed above under *Application of Section 4(b)(2) of the Act*, the primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence.

The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. The regulatory standard is different, as the jeopardy analysis investigates the action's impact on the survival and recovery of the species, while the adverse modification analysis focuses on the action's effects on the designated habitat's contribution to conservation. This will, in many instances, lead to different results and different regulatory requirements. Thus, critical habitat designations have the potential to provide greater benefit to the recovery of a species than would listing alone. However, because one of the primary threats to the species is habitat loss and degradation, a section 7 jeopardy analysis would evaluate the effects of the action on the conservation or function of the habitat for the species regardless of whether or not critical habitat is designated for these lands and project modifications requested to avoid adverse modification would likely be the same as those needed to avoid jeopardy. Therefore, we anticipate that

section 7 consultation analyses will likely result in no difference between conservation recommendations to avoid jeopardy or adverse modification in occupied areas of critical habitat, making the incremental benefit of designating critical habitat in this case low at best.

The inclusion of these private lands as critical habitat could provide some additional Federal regulatory benefits for the species consistent with the conservation standard addressed in the Ninth Circuit Court's decision in *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004). As noted above, a potential benefit of inclusion would be the requirement of a Federal agency to ensure that their actions on these non-Federal lands would not likely result in the destruction or adverse modification of critical habitat. However, this additional analysis to determine whether a Federal action is likely to result in destruction or adverse modification of critical habitat is not likely to be significant because these covered lands are not under Federal ownership, making the application of section 7 less likely. Overall, given the low likelihood of a Federal nexus occurring on these lands, we believe the regulatory benefit of a critical habitat designation on these lands, if any, may be limited. As described above, the presence of a beneficial conservation plan and the history of implementing conservation actions specific to the Oregon spotted frog on these lands further reduces this benefit of including these lands in critical habitat.

The incremental benefit of inclusion is reduced because of the ongoing implementation of management actions by the Sunriver Nature Center, under contract with the SROA, that benefit the conservation of the Oregon spotted frog and its habitat, as discussed above. Sunriver has been implementing specific management actions that maintain and enhance spotted frog habitat for over two decades. Monitoring of the spotted frog population conducted by the SRNCO has shown that the management being implemented is providing benefits to the species, and Sunriver hosts the largest population of spotted frogs downstream of Wickiup Dam. These management actions provide greater benefits to spotted frog habitat than the designation of critical habitat, since these actions actively improve the breeding, rearing, and overwintering habitat. Therefore, the existing management at this site will provide greater benefit than the regulatory designation of critical habitat, which

requires only the avoidance of adverse modification and does not require the creation, improvement, or restoration of habitat.

Another potential benefit of including lands in a critical habitat designation is that doing so raises the awareness of landowners, State and local governments, and the public regarding the potential conservation value of an area. This knowledge can help focus and promote conservation efforts by identifying areas of high conservation value for the Oregon spotted frog. The designation of critical habitat informs State agencies and local governments about areas that could be conserved under State laws or local ordinances. Any additional information about the needs of the Oregon spotted frog or its habitat that reaches a wider audience can be of benefit to future conservation efforts. The SRNCO has been educating landowners and visitors to Sunriver Resort for over 20 years about the Oregon spotted frog. Because of this ongoing education in the Sunriver area, we have been able to hold public meetings about the proposed critical habitat and listing without contention. High school and college students in central Oregon are gaining opportunities to learn about the Oregon spotted frog through the efforts of the SRNCO. The management and monitoring of spotted frog habitat in Sunriver that has been implemented by SRNCO for the past 20 years has provided us with information about how to improve Oregon spotted frog habitat through management. The educational benefits of including this area in the designation of critical habitat are reduced by the above-mentioned public education that is ongoing through the SRNCO.

Benefits of Exclusion—Sunriver Management Plans

The benefits of excluding private lands in Sunriver lands from critical habitat are substantial. Conservation measures that provide a benefit to the Oregon spotted frog and its habitat have been implemented since Oregon spotted frogs were determined to be a candidate for listing in 1993. Since that time, the Service has worked in partnership with the SRNCO and SROA to address the needs of the Oregon spotted frog. Evidence of this partnership is the ongoing management over the last 20 years that has improved breeding, rearing, and overwintering habitat. The GMMP and specific habitat enhancement measures implemented by SRNCO provide a benefit to the Oregon spotted frog and its habitat. The threat of low-water conditions in wetlands during the breeding, rearing, and

overwintering period has been reduced by the ongoing management. Sunriver maintains water levels in wetlands through a weir system that offsets impacts to this habitat that occurs when water is stored behind Wickiup Dam from October through April. Water level management combined with bull frog removal has improved habitat for Oregon spotted frogs. Annual monitoring conducted by SRNCO validates that these types of management activities are effectively providing conservation benefits to the species.

Biological information gathered while working with these private landowners will facilitate the development of strategies to conserve the species and inform conservation efforts for the species in other areas. Without the partnership between the Service, SROA, and SRNCO, management actions that benefit the spotted frog would not occur and important breeding, rearing, and overwintering habitat for the spotted frog may not be maintained and enhanced. Excluding lands managed under the Sunriver GMMP from critical habitat designation will affirm and sustain the partnership and is expected to enhance the working relationship between the Service and property owners in Sunriver. The designation of critical habitat on private lands within Sunriver may have a negative effect on the conservation partnership between the Service and the SROA and SRNCO who have agreed to future implementation of conservation measures for the Oregon spotted frog and its habitat. By excluding these lands, we affirm the conservation partnership with SROA and SRNCO that not only are providing conservation benefits to the Oregon spotted frog and its habitat during the present time but also into the future. Excluding the lands managed under the Sunriver GMMP from critical habitat designation will sustain the long-standing conservation partnership between the Service and the Sunriver Community.

Benefits of Exclusion Outweigh the Benefits of Inclusion—Sunriver Management Plans

The primary benefit of including these lands as critical habitat for the Oregon spotted frog is the regulatory requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify designated critical habitat. However, this benefit is reduced for the following reasons. First, the benefits of inclusion are reduced because the likelihood of a Federal nexus on these

lands is low. Furthermore, these lands are occupied by the Oregon spotted frog, and we anticipate that if a Federal nexus exists and triggers the need for section 7 consultation, there will be no difference between conservation recommendations to avoid jeopardy or adverse modification in occupied areas of critical habitat. Finally, the benefits of including these lands in critical habitat are reduced due to the commitment to management at the site that provides a greater benefit than the regulatory designation of critical habitat.

Another benefit of including these lands in critical habitat is the opportunity to educate landowners, State and local governments, and the public regarding the potential conservation value of the area. However, we have determined that the above-mentioned entities are all aware of the conservation value of these lands for the Oregon spotted frog and that education of the public and students has been ongoing since 1993. Therefore, the benefit of designating these lands as critical habitat is minimal.

The benefits of excluding these lands from the critical habitat designation are greater than inclusion for the following reasons. The exclusion will affirm and maintain a partnership with private landowners that is promoting conservation of the species. Additionally, the ongoing implementation of habitat improvements to promote Oregon spotted frog conservation provides strong evidence that our partnership with the SROA and SRNCO will continue into the future.

For these reasons, stated above, the Secretary has determined that the benefits of excluding the 223 ac (90 ha) on private lands in the Sunriver area from the designation of critical habitat for the Oregon spotted frog outweigh the benefits of including these areas in critical habitat.

Exclusion Will Not Result in Extinction of the Species—Sunriver Management Plans

We have determined that exclusion of approximately 223 ac (90 ha) on Sunriver private lands will not result in the extinction of the Oregon spotted frog. This exclusion will not result in extinction of the Oregon spotted frog because the Sunriver GMMP and ongoing active habitat enhancement provide for the needs of the species by protecting, restoring, and enhancing all of the Oregon spotted frog habitat within Sunriver along the Deschutes River and implementing species-specific conservation measures designed to avoid and minimize impacts to the

Oregon spotted frog. Further, for projects having a Federal nexus and potentially affecting the Oregon spotted frog, the jeopardy standard of section 7 of the Act coupled with protection provided by the Sunriver GMMP would provide a level of assurance that this subspecies will not go extinct as a result of excluding these lands from the critical habitat designation. Critical habitat for the Oregon spotted frog would be designated in the Deschutes River west of Sunriver. Oregon spotted frogs that inhabit Sunriver use the Deschutes River in this area. Therefore, actions that result in a Federal nexus would undergo section 7 consultation with the Service.

Private or Other Non-Federal Conservation Plans Related to Permits Under Section 10 of the Act

HCPs for incidental take permits under section 10(a)(1)(B) of the Act provide for partnerships with non-Federal entities to minimize and mitigate impacts to listed species and their habitat. In some cases, HCP permittees agree to do more for the conservation of the species and their habitats on private lands than designation of critical habitat would provide alone. We place great value on the partnerships that are developed during the preparation and implementation of HCPs.

CCAs and SHAs are voluntary agreements designed to conserve candidate and listed species, respectively, on non-Federal lands. In exchange for actions that contribute to the conservation of species on non-Federal lands, participating property owners are covered by an “enhancement of survival” permit under section 10(a)(1)(A) of the Act, which authorizes incidental take of the covered species that may result from implementation of conservation actions, specific land uses, and, in the case of SHAs, the option to return to a baseline condition under the agreements. The Service also provides enrollees assurances that we will not impose further land-, water-, or resource-use restrictions, or require additional commitments of land, water, or finances, beyond those agreed to in the agreements.

When we undertake a discretionary section 4(b)(2) exclusion analysis, we will always consider areas covered by an approved CCAA/SHA/HCP, and generally exclude such areas from a designation of critical habitat if three conditions are met:

1. The permittee is properly implementing the CCAA/SHA/HCP and is expected to continue to do so for the term of the agreement. A CCAA/SHA/

HCP is properly implemented if the permittee is, and has been, fully implementing the commitments and provisions in the CCAA/SHA/HCP, Implementing Agreement, and permit.

2. The species for which critical habitat is being designated is a covered species in the CCAA/SHA/HCP, or very similar in its habitat requirements to a covered species. The recognition that the Services extend to such an agreement depends on the degree to which the conservation measures undertaken in the CCAA/SHA/HCP would also protect the habitat features of the similar species.

3. The CCAA/SHA/HCP specifically addresses the habitat of the species for which critical habitat is being designated and meets the conservation needs of the species in the planning area.

We believe that the Old Mill District CCAA fulfills all of the above criteria.

Old Mill District CCAA

In this final designation, the Secretary has exercised her discretion under section 4(b)(2) of the Act to exclude from this critical habitat designation 26 ac (11 ha) of private lands covered under the Old Mill District CCAA. The excluded area falls within a portion of the proposed Subunit 8A (78 FR 53538, August 29, 2013).

The Old Mill District CCAA was developed to protect and manage 29 ac (12 ha) of Oregon spotted frog habitat, including 26 ac (11 ha) that were proposed as critical habitat for the Oregon spotted frog, while operating the 170-ac (69-ha) Old Mill District mixed-use development complex. The CCAA covers only the Oregon spotted frog. The permit associated with this CCAA was issued September 18, 2014, has a term of 20 years, and covers activities primarily associated with water and vegetation management, potential predator control, and riparian use. Conservation measures include monitoring and maintaining sufficient water levels in a manmade pond to support breeding, rearing, and overwintering habitat; reduction of vegetation encroachment into the manmade pond to maintain open-water areas for breeding; removal of nonnative predators in the pond should they be discovered during annual surveys; and protection of the riparian zone along the banks of the Deschutes River, including marsh habitat occupied by Oregon spotted frogs, within the covered lands, through the use of signs and temporary fencing. These activities reduce or eliminate threats to the Oregon spotted frog and its habitat by creating or maintaining habitat conditions that are

suitable for all life-history stages of the species through the implementation of conservation measures. Further, conservation measures within the CCAA include monitoring and management of areas within the covered lands and outside of critical habitat that may provide habitat for Oregon spotted frogs in the future as the Old Mill District continues to develop a stormwater management system. Stormwater bioswales will be designed to catch runoff before reaching the riparian areas and wetlands of the Deschutes River that are occupied by Oregon spotted frogs. The bioswales will be monitored for frog use and managed to reduce the threat of stranding frogs during the breeding season. The landowners have been voluntarily implementing Oregon spotted frog conservation measures outlined in the CCAA since Oregon spotted frogs were discovered in the Old Mill District in 2012, and these conservation efforts are expected to occur throughout the 20-year term of the CCAA agreement.

Benefits of Inclusion—Old Mill District CCAA

The primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence.

The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Therefore, any difference in predicted outcomes between these two analyses represents the regulatory benefit of critical habitat. The regulatory standard is different, as the jeopardy analysis investigates the action's impact on the survival and recovery of the species, while the adverse modification analysis focuses on the action's effects on the designated habitat's contribution to conservation. This difference could, in some instances, lead to different results and different regulatory requirements. Thus, critical habitat designations have the potential to provide greater benefit to the recovery of a species than would listing alone. However, because one of the primary threats to the species is habitat loss and degradation, a section 7 jeopardy analysis would evaluate the effects of the action on the conservation or

function of the habitat for the species regardless of whether or not critical habitat is designated for these lands and project modifications requested to avoid adverse modification would likely be the same as those needed to avoid jeopardy. Therefore, we anticipate that section 7 consultation analyses will likely result in no difference between conservation recommendations to avoid jeopardy or adverse modification in occupied areas of critical habitat, making the incremental benefit of designating critical habitat in this case low at best.

The inclusion of these private lands as critical habitat could provide some additional Federal regulatory benefits for the species consistent with the conservation standard addressed in the Ninth Circuit Court's decision in *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004). As noted above, a potential benefit of inclusion would be the requirement that a Federal agency ensure that its actions on these non-Federal lands would not likely result in the destruction or adverse modification of critical habitat. However, this additional analysis to determine whether a Federal action is likely to result in destruction or adverse modification of critical habitat is not likely to be significant because these covered lands are not under Federal ownership, making the application of section 7 less likely. Overall, given the low likelihood of a Federal nexus occurring on these lands, we believe the regulatory benefit of a critical habitat designation on these lands, if any, may be limited.

As described above, the presence of a beneficial conservation plan and the history of implementing conservation actions specific to the Oregon spotted frog on these lands further reduces this benefit of including these lands in critical habitat. The conservation measures that have been implemented and will continue to be implemented under the Old Mill District CCAA focus on reducing threats to the habitat such as vegetation encroachment and dropping water levels. These management actions are likely to provide greater benefits to the Oregon spotted frog habitat than would the designation of critical habitat, since these actions actively improve the breeding, rearing, and overwintering habitat. The designation of critical habitat does not require any active management. Therefore, the benefits of including these lands in critical habitat are reduced due to the commitment to management at this site that provides greater benefit than the regulatory

designation of critical habitat, which requires only the avoidance of adverse modification and does not require the creation, improvement, or restoration of habitat.

Another potential benefit of including lands in a critical habitat designation is that it serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. This knowledge can help focus and promote conservation efforts by identifying areas of high conservation value for the Oregon spotted frog. The designation of critical habitat informs State agencies and local governments about areas that could be conserved under State laws or local ordinances. Any additional information about the needs of the Oregon spotted frog or its habitat that reaches a wider audience can be of benefit to future conservation efforts. However, in this case, designation of critical habitat would result in little, if any, additional educational benefit, because the conservation needs of the Oregon spotted frog are already well-recognized in the Old Mill District. The Old Mill District CCAA covers an area that receives high public use within the shopping area and along the river, and the discovery of Oregon spotted frogs within a manmade pond at the Old Mill in 2012 gained immediate awareness from the public. Furthermore, the Oregon spotted frogs received immediate attention from the landowners, spotted frog researchers, and the public media, since the known distribution of the species at the time ended approximately 17 mi (27 km) upstream on the Deschutes National Forest. The Sunriver Nature Center naturalist, a local expert on Oregon spotted frogs, began monitoring the newly found population, providing habitat management recommendations to the landowner that led to the development of the CCAA. The Sunriver Nature Center naturalist also began mentoring Oregon spotted frog research focused in the Old Mill District for high school and college students, providing an educational benefit to the community and providing the Service with new information on the species. Given that the Oregon spotted frog population in the Old Mill District is receiving attention from the landowners, public, researchers, and students, an educational benefit already exists and the conservation of the Oregon spotted frog is being promoted.

Benefits of Exclusion—Old Mill District CCAA

The benefits of excluding lands covered under the Old Mill District

CCAA from critical habitat are substantial. Conservation measures that provide a benefit to the Oregon spotted frog and its habitat have been implemented since Oregon spotted frogs were detected in the Old Mill District in 2012. Since that time, the owners of private lands within the Old Mill District and the Service have formed a conservation partnership to implement conservation measures for the Oregon spotted frog. Further evidence of this conservation partnership is the development of the Old Mill District CCAA, which was finalized on September 18, 2014. Through the CCAA, the landowner commits to manage vegetation and water levels in a stormwater pond that supports Oregon spotted frog breeding, rearing, and overwintering habitat over a 20-year period. The installation of riparian fencing within the high public use areas has facilitated the reestablishment of riparian vegetation along the banks of the Deschutes River, which provides habitat for Oregon spotted frogs during the summer. Biological information gathered while working with these private landowners will facilitate the development of strategies to conserve the species and inform conservation efforts for the species in other areas. Without the partnership between the Service and the parties to the Old Mill District CCAA, such management would not occur and vegetation encroachment into the pond would reduce breeding and rearing habitat for the frog and the banks of the Deschutes River would not be protected. Excluding these lands managed under the Old Mill District CCAA from critical habitat designation will affirm and sustain the partnership and is expected to enhance the working relationship between the Service and the Old Mill District property owners. The designation of critical habitat on private lands within the Old Mill District may have a negative effect on the conservation partnership between the Service and the landowners who have agreed to future implementation of conservation measures for the Oregon spotted frog and its habitat. By excluding these lands, we affirm the conservation partnership with private landowners that not only are providing conservation benefits to the Oregon spotted frog and its habitat during the present time but also into the future.

Benefits of Exclusion Outweigh the Benefits of Inclusion—Old Mill District CCAA

The primary benefit of including these lands as critical habitat for the Oregon spotted frog is the regulatory requirement for Federal agencies to

consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not adversely modify designated critical habitat. However, this benefit is reduced for the following reasons. First, the likelihood of a Federal nexus on these lands is low. Furthermore, these lands are occupied by the Oregon spotted frog, and we anticipate that if a Federal nexus exists and triggers the need for section 7 consultation, there will be no difference between conservation recommendations to avoid jeopardy or adverse modification in occupied areas of critical habitat. Finally, the benefits of including these lands in critical habitat are reduced due to the commitment to management at the site that provides a greater benefit than the regulatory designation of critical habitat.

Another benefit of including these lands in critical habitat is the opportunity to educate landowners, State and local governments, and the public regarding the potential conservation value of the area. However, we determined that the above-mentioned entities are all aware of the conservation value of these lands for the Oregon spotted frog and that education of the public and students has been ongoing since the discovery of this population of Oregon spotted frogs in 2012. Therefore, the benefit of designating these lands as critical habitat is minimal.

The benefits of excluding these lands from the critical habitat designation are greater than inclusion for the following reasons. The exclusion will affirm and maintain a partnership with private landowners that is promoting conservation of the species. Additionally, the ongoing implementation of habitat improvements to promote Oregon spotted frog conservation provides strong evidence that our partnership with private landowners in the Old Mill District will continue into the future.

For these reasons, stated above, the Secretary has determined that the benefits of excluding the 26 ac (11 ha) covered by the Old Mill District CCAA from the designation of critical habitat for the Oregon spotted frog outweigh the benefits of including these areas in critical habitat.

Exclusion Will Not Result in Extinction of the Species—Old Mill District CCAA

We have determined that exclusion of approximately 26 ac (11 ha) in the Old Mill District CCAA covered lands will not result in the extinction of the Oregon spotted frog. Actions covered by the Old Mill CCAA will not result in extinction of the Oregon spotted frog

because the CCAA provides for the needs of the species by protecting, restoring, and enhancing all of the Oregon spotted frog habitat within the Old Mill District along the Deschutes River and implementing species-specific conservation measures designed to avoid and minimize impacts to the Oregon spotted frog. Monitoring, as agreed to within the CCAA, will ensure that conservation measures are effective and an adaptive management component of the CCAA allows for modification to future management in response to new information.

Further, for projects having a Federal nexus and potentially affecting the Oregon spotted frog, the jeopardy standard of section 7 of the Act, coupled with protection provided by the voluntary Old Mill CCAA would provide a level of assurance that this species will not go extinct as a result of excluding these lands from the critical habitat designation. Critical habitat for the Oregon spotted frog would be designated in the Deschutes River adjacent to the Old Mill District and outside of the lands covered by the Old Mill CCAA. Oregon spotted frogs that inhabit the covered lands use the Deschutes River in this area. Therefore, actions that result in a Federal nexus would undergo section 7 consultation with the Service. For example, if the Old Mill District were to install a boat ramp that extends into the Deschutes River where critical habitat is designated and a U.S. Army Corps of Engineers permit is required, then section 7 consultation would be required for the species and critical habitat.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes

further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 *et seq.*), 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. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and 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. To determine if potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

The Service's current understanding of the requirements under the RFA, as amended, and following recent court decisions, is that Federal agencies are

required to evaluate the potential incremental impacts of rulemaking only on those entities directly regulated by the rulemaking itself and, therefore, not required to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried by the Agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7 only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, it is our position that only Federal action agencies will be directly regulated by this designation. There is no requirement under the RFA to evaluate the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities. Therefore, because no small entities are directly regulated by this rulemaking, the Service certifies that, if promulgated, the final critical habitat designation will not have a significant economic impact on a substantial number of small entities.

During the development of this final rule we reviewed and evaluated all information submitted during the comment period that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. Based on this information, we affirm our certification that this final critical habitat designation will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute "a significant adverse effect" when compared to not taking the regulatory action under consideration.

The economic analysis finds that none of these criteria are relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with Oregon spotted frog conservation activities within

critical habitat are not expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following findings:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal

funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because it would not produce a Federal mandate of \$100 million or greater in any year; that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. The economic analysis concludes that incremental impacts may occur due to administrative costs of section 7 consultations; however, these are not expected to significantly affect small governments. The designation of critical habitat imposes no obligations on State or local governments. By definition, Federal agencies are not considered small entities, although the activities they fund or permit may be proposed or carried out by small entities. Consequently, we do not believe that the critical habitat designation would significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (“Government Actions and Interference with Constitutionally Protected Private Property Rights”), we have analyzed the potential takings implications of designating critical habitat for the Oregon spotted frog in a takings implications assessment. Based on the best available information, the takings implications assessment concludes that this designation of critical habitat for the Oregon spotted frog does not pose significant takings implications.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), this rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of the

proposed critical habitat designation with, appropriate State resource agencies in Washington and Oregon. We received comments from WDFW, WDNR, WDOE, and ODFW and have addressed them in the Summary of Comments and Recommendations section of the rule. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the rule does not have substantial direct effects either on the States, or on the relationship between the Federal Government and the States, or on the distribution of powers and responsibilities among the various levels of government. The designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical and biological features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist these local governments in long-range planning (because these local governments no longer have to wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the applicable standards set forth in sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the rule identifies the elements of physical or biological features essential to the conservation of the Oregon spotted frog. The designated areas of critical habitat are presented on

maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency 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.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the NEPA (42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

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 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes. We determined that there are no tribal lands occupied by the Oregon spotted frog at the time of listing that contain the physical or biological features essential to conservation of the species, and no tribal lands unoccupied by the Oregon spotted frog that are essential for the conservation of the species. Therefore, we are not designating critical habitat for the Oregon spotted frog on tribal lands.

References Cited

A complete list of all references cited is available on the Internet at <http://www.regulations.gov> and upon request from the Washington Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

www.regulations.gov and upon request from the Washington Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this rulemaking are the staff members of the Washington Fish and Wildlife Office, Oregon Fish and Wildlife Office—Bend Field Office, and Klamath Falls Fish and Wildlife Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

- 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245; unless otherwise noted.

- 2. Amend § 17.11(h), the List of Endangered and Threatened Wildlife, by revising the entry for “Frog, Oregon spotted” 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						
*	*	*	*	*	*	*	*
AMPHIBIANS							
*	*	*	*	*	*	*	*
Frog, Oregon spotted	<i>Rana pretiosa</i>	Canada (BC); U.S.A. (CA, OR, WA)	Entire	T	846	17.95(d)	NA
*	*	*	*	*	*	*	*

* * * * *

- 3. In § 17.95, amend paragraph (d) by adding an entry for “Oregon Spotted Frog (*Rana pretiosa*)” in the same order that the species appears in the table at § 17.11(h), to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(d) Amphibians.

* * * * *

Oregon Spotted Frog (*Rana pretiosa*)

(1) Critical habitat units are depicted for Klickitat, Skagit, Skamania, Thurston, and Whatcom Counties in Washington and Deschutes, Jackson,

Klamath, Lane, and Wasco Counties in Oregon, on the maps below.

(2) Within these areas, the PCEs of the physical or biological features essential to the conservation of the Oregon spotted frog consist of three components:

(i) *Primary constituent element 1.*—Nonbreeding (N), Breeding (B), Rearing

(R), and Overwintering (O) Habitat. Ephemeral or permanent bodies of fresh water, including, but not limited to, natural or manmade ponds, springs, lakes, slow-moving streams, or pools within or oxbows adjacent to streams, canals, and ditches, that have one or more of the following characteristics:

(A) Inundated for a minimum of 4 months per year (B, R) (timing varies by elevation but may begin as early as February and last as long as September);

(B) Inundated from October through March (O);

(C) If ephemeral, areas are hydrologically connected by surface water flow to a permanent water body (e.g., pools, springs, ponds, lakes, streams, canals, or ditches) (B, R);

(D) Shallow-water areas (less than or equal to 12 inches (30 centimeters), or water of this depth over vegetation in deeper water (B, R);

(E) Total surface area with less than 50 percent vegetative cover (N);

(F) Gradual topographic gradient (less than 3 percent slope) from shallow water toward deeper, permanent water (B, R);

(G) Herbaceous wetland vegetation (i.e., emergent, submergent, and floating-leaved aquatic plants), or

vegetation that can structurally mimic emergent wetland vegetation through manipulation (B, R);

(H) Shallow-water areas with high solar exposure or low (short) canopy cover (B, R); and

(I) An absence or low density of nonnative predators (B, R, N).

(ii) *Primary constituent element 2.*— Aquatic movement corridors. Ephemeral or permanent bodies of fresh water that have one or more of the following characteristics:

(A) Less than or equal to 3.1 miles (5 kilometers) linear distance from breeding areas; and

(B) Impediment free (including, but not limited to, hard barriers such as dams, impassable culverts, lack of water, or biological barriers such as abundant predators, or lack of refugia from predators).

(iii) *Primary constituent element 3.*— Refugia habitat. Nonbreeding, breeding, rearing, or overwintering habitat or aquatic movement corridors with habitat characteristics (e.g., dense vegetation and/or an abundance of woody debris) that provide refugia from predators (e.g., nonnative fish or bullfrogs).

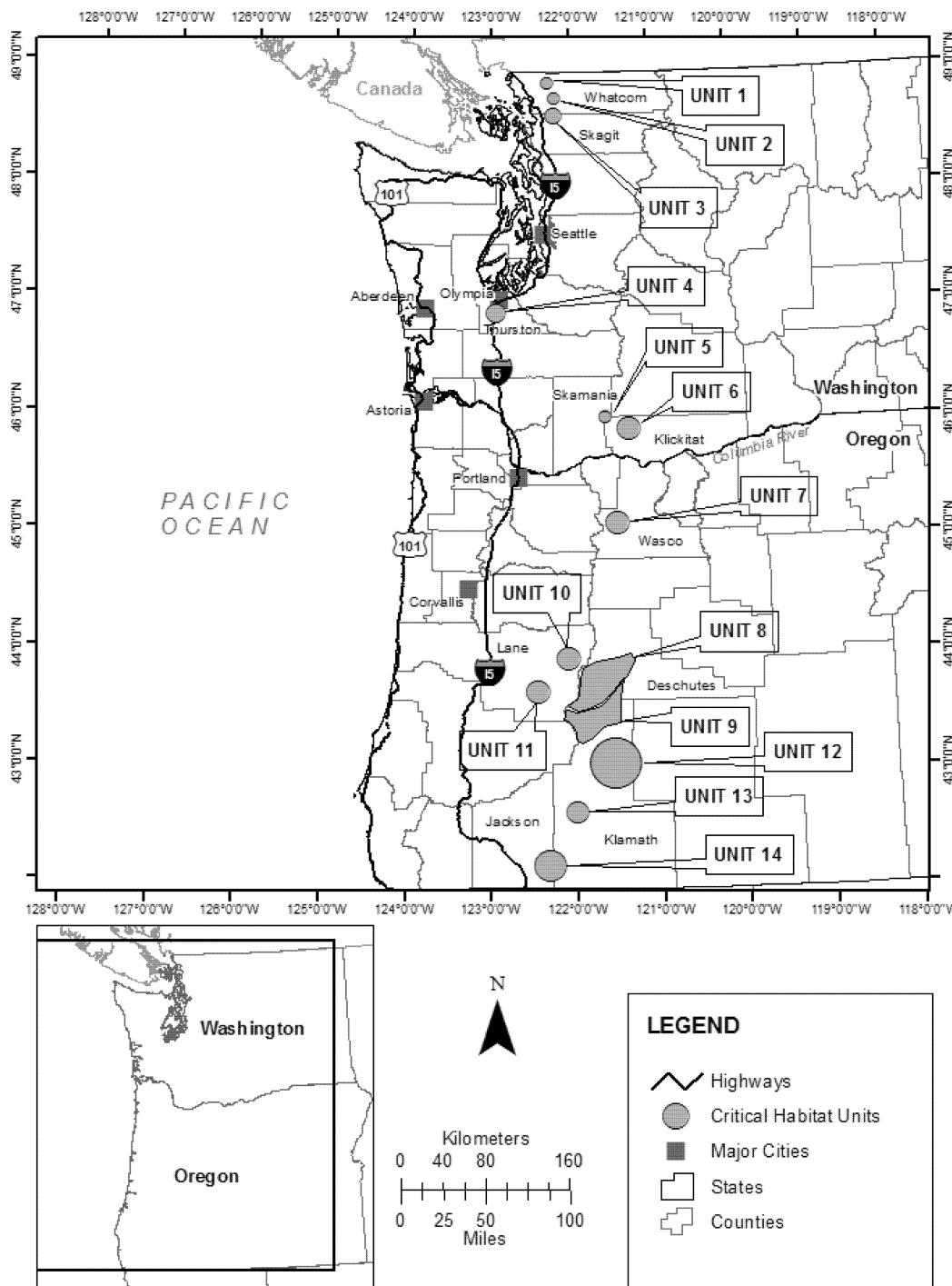
(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on June 10, 2016.

(4) *Critical habitat map units.* Data layers defining map units were created from 2010–2013 aerial photography from USDA National Agriculture Imagery Program base maps using ArcMap (Environmental Systems Research Institute, Inc.), a computer geographic information system program. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site, (<http://www.fws.gov/wafwo>), <http://www.regulations.gov> at Docket No. FWS-R1-ES-2013-0088, and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

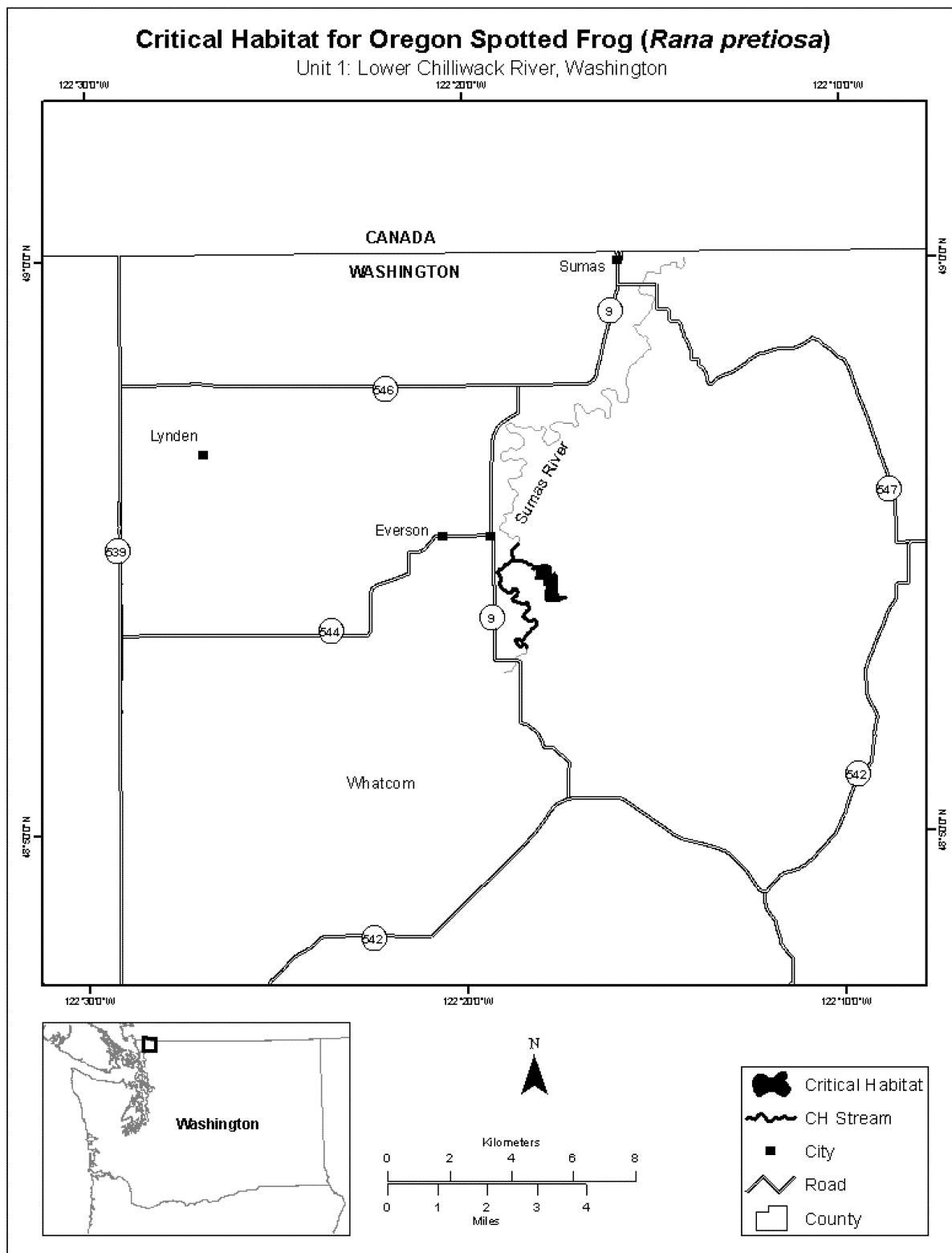
(5) **Note:** Index map follows:

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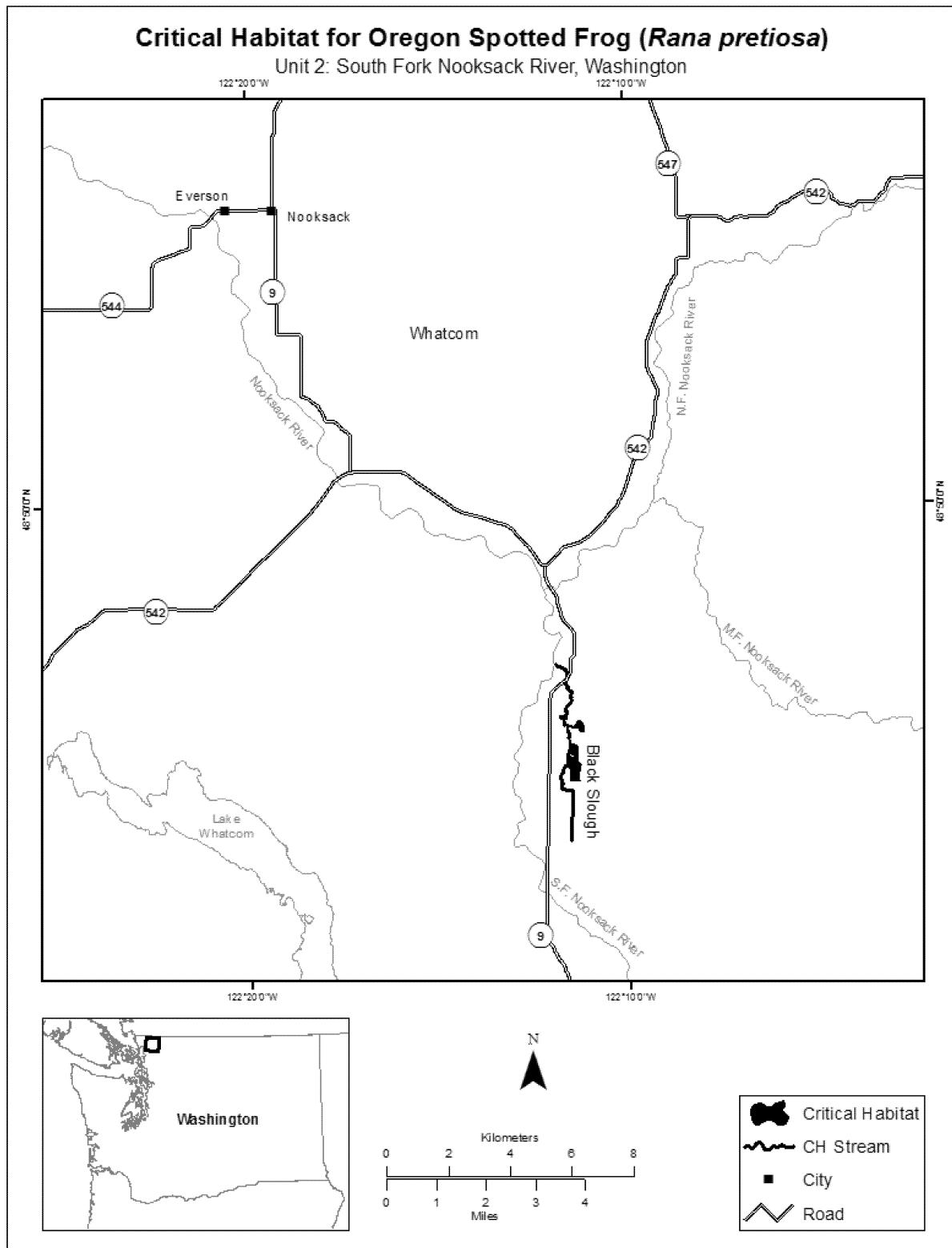
Critical Habitat for Oregon Spotted Frog in Washington and Oregon



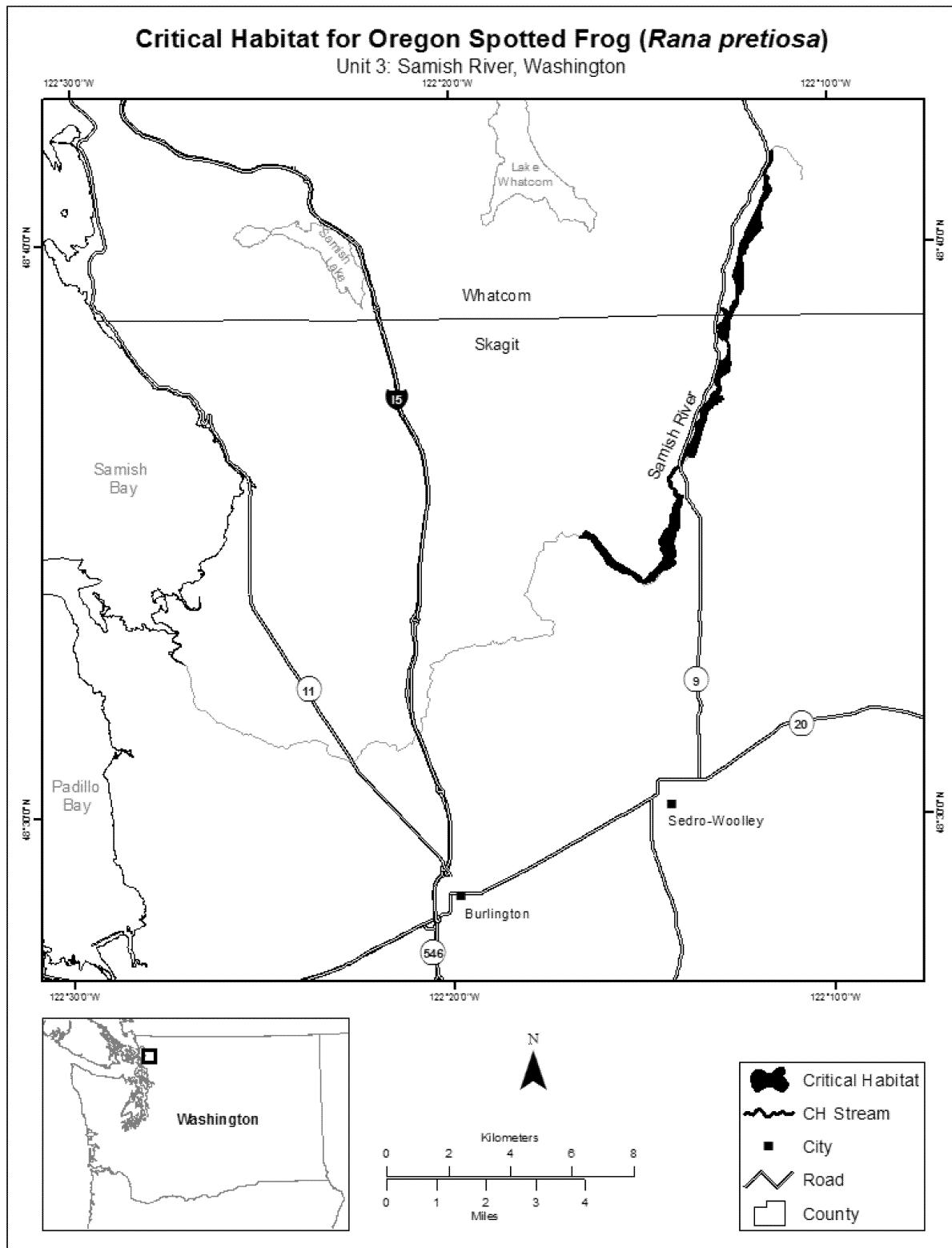
(6) Unit 1: Lower Chilliwack River, Whatcom County, Washington. Map of Unit 1 follows:



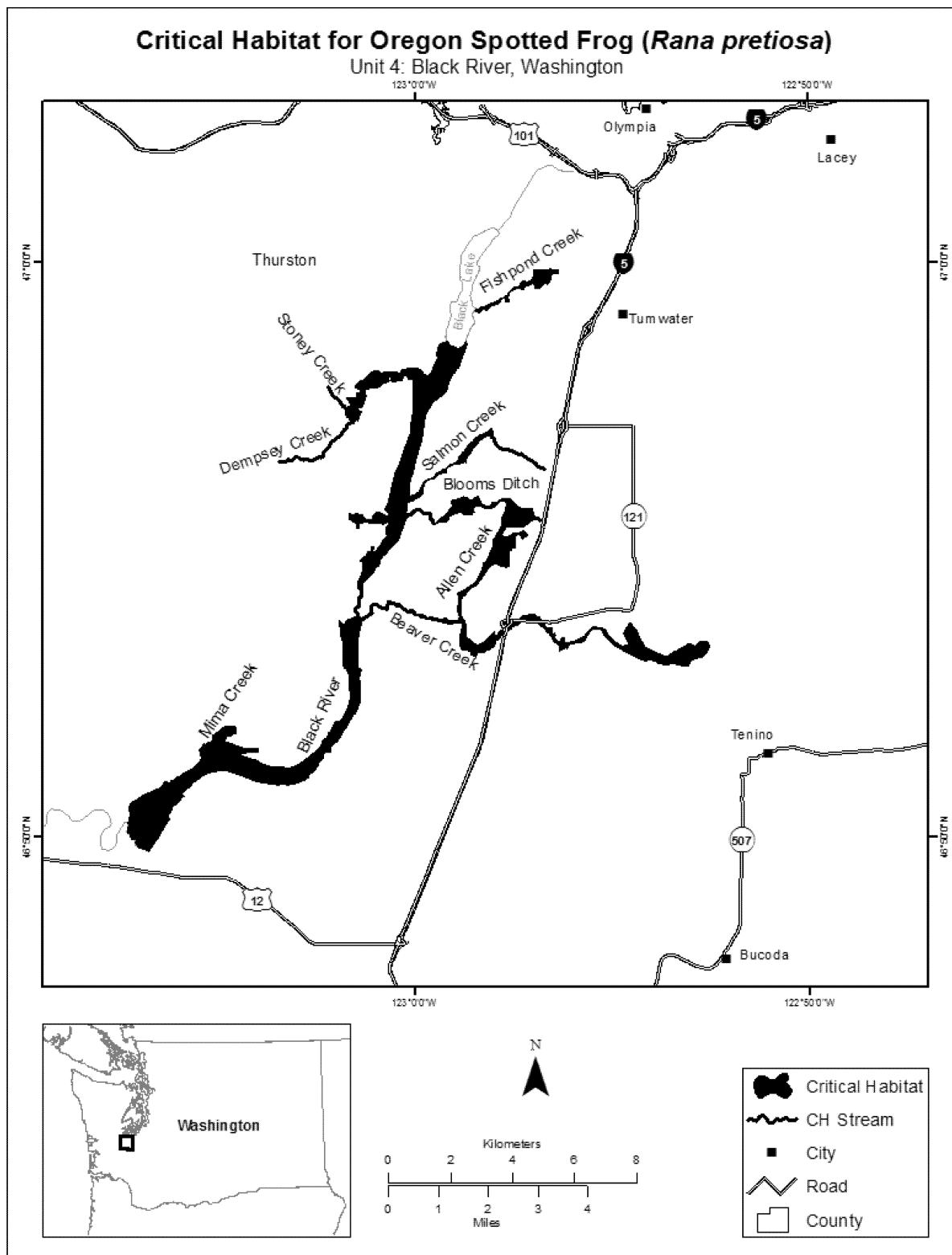
(7) Unit 2: South Fork Nooksack River, Whatcom County, Washington.
Map of Unit 2 follows:



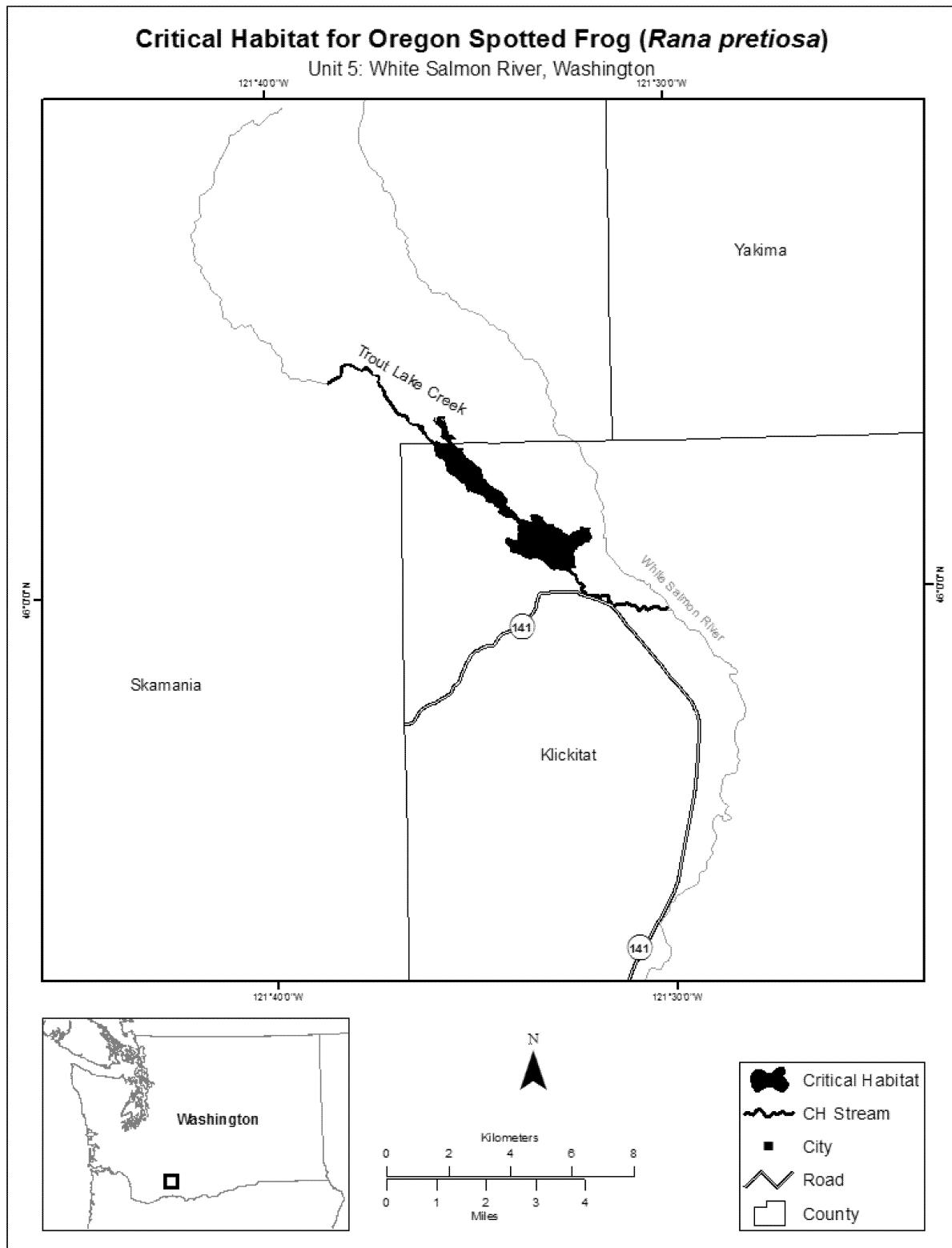
(8) Unit 3: Samish River, Whatcom and Skagit Counties, Washington. Map of Unit 3 follows:



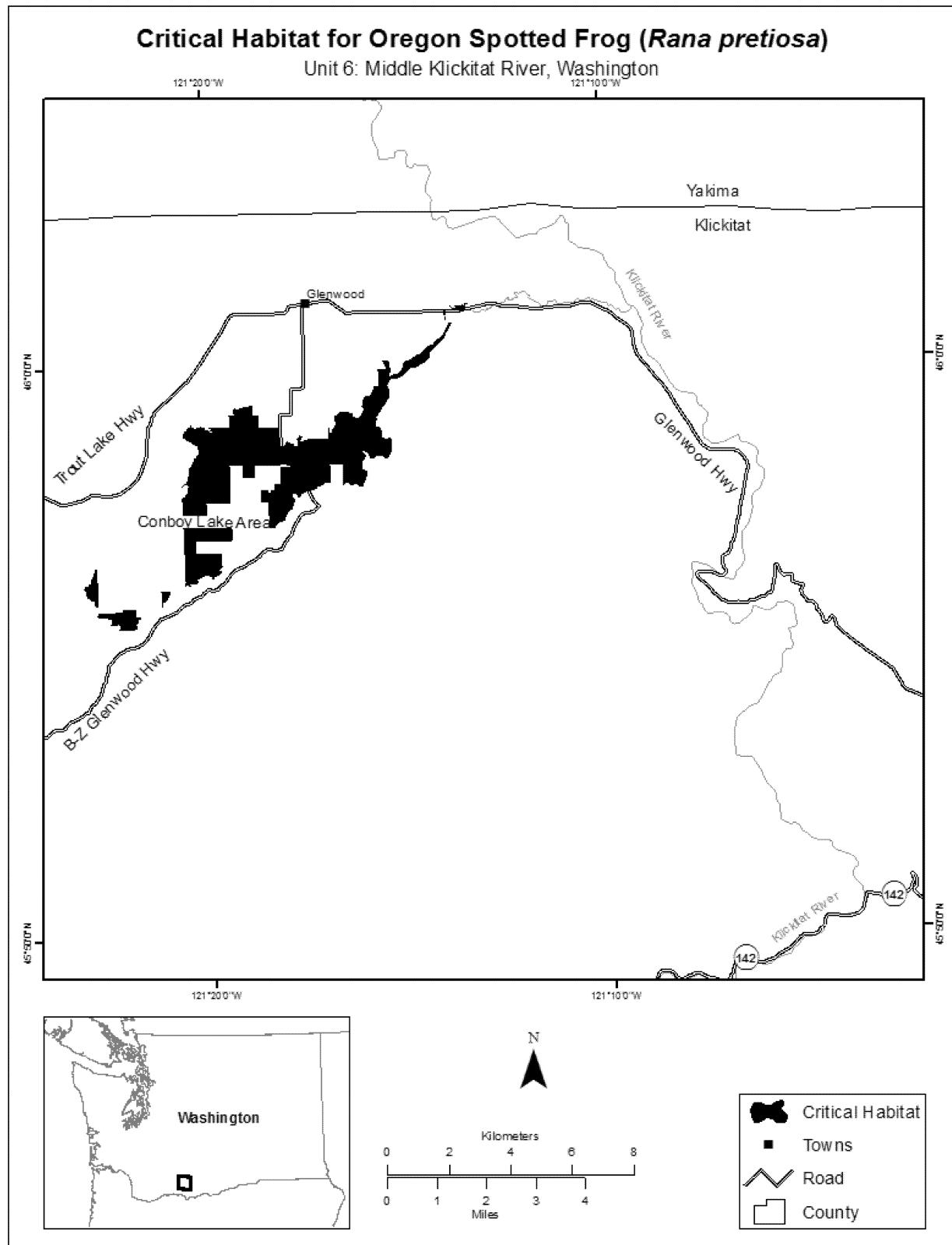
(9) Unit 4: Black River, Thurston County, Washington. Map of Unit 4 follows:



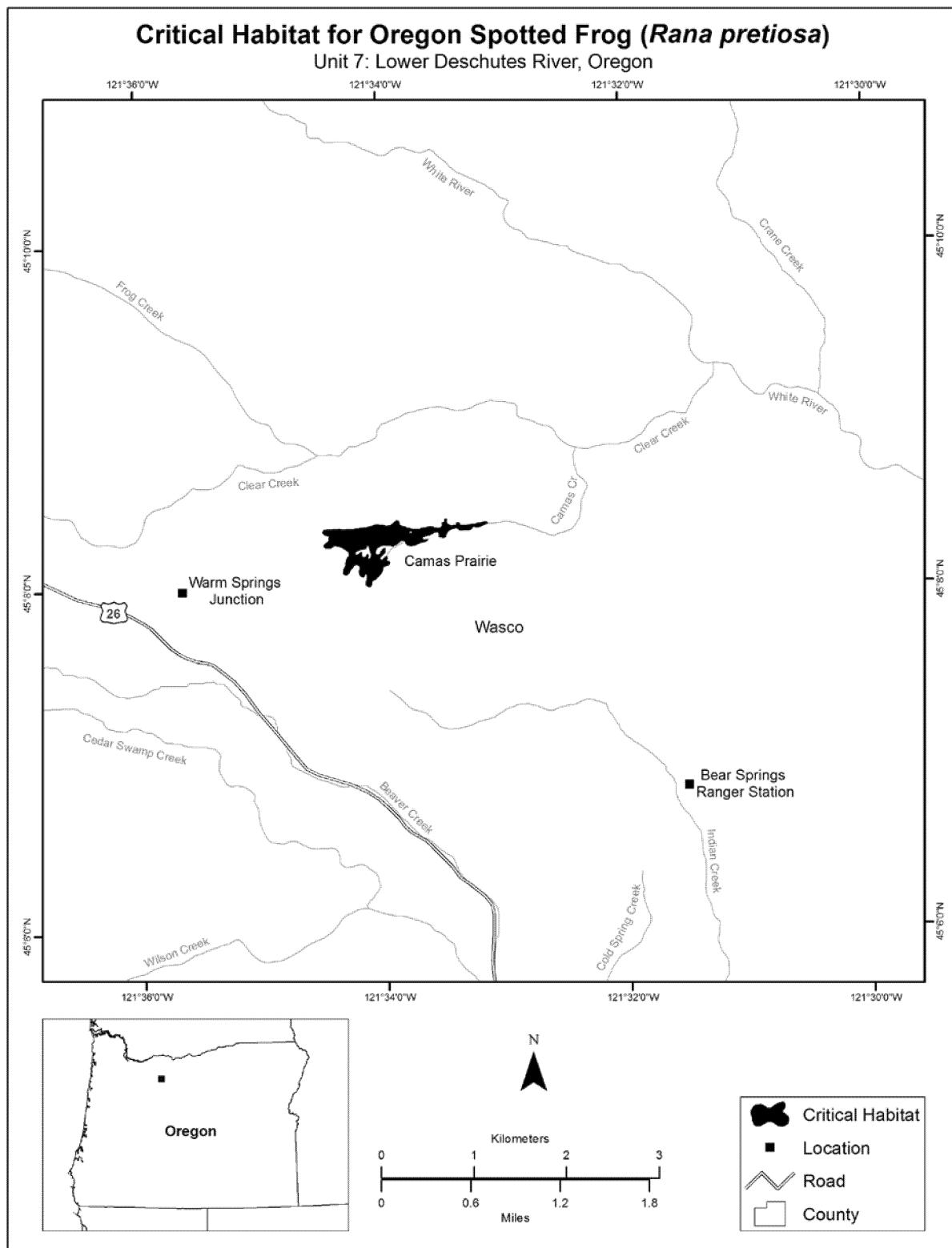
(10) Unit 5: White Salmon River, Skamania and Klickitat Counties, Washington. Map of Unit 5 follows:



(11) Unit 6: Middle Klickitat River, Klickitat County, Washington. Map of Unit 6 follows:

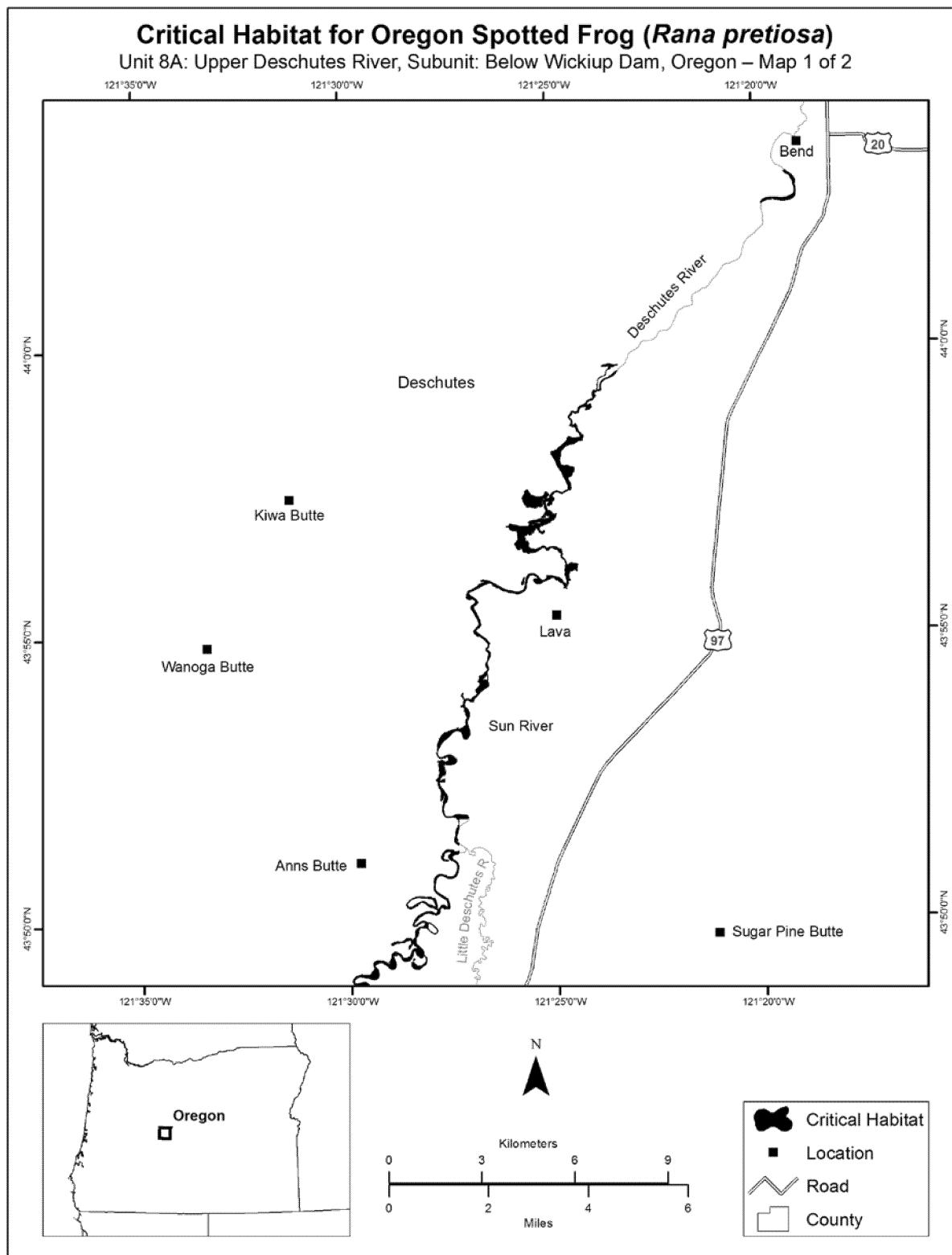


(12) Unit 7: Lower Deschutes River, Wasco County, Oregon. Map of Unit 7 follows:

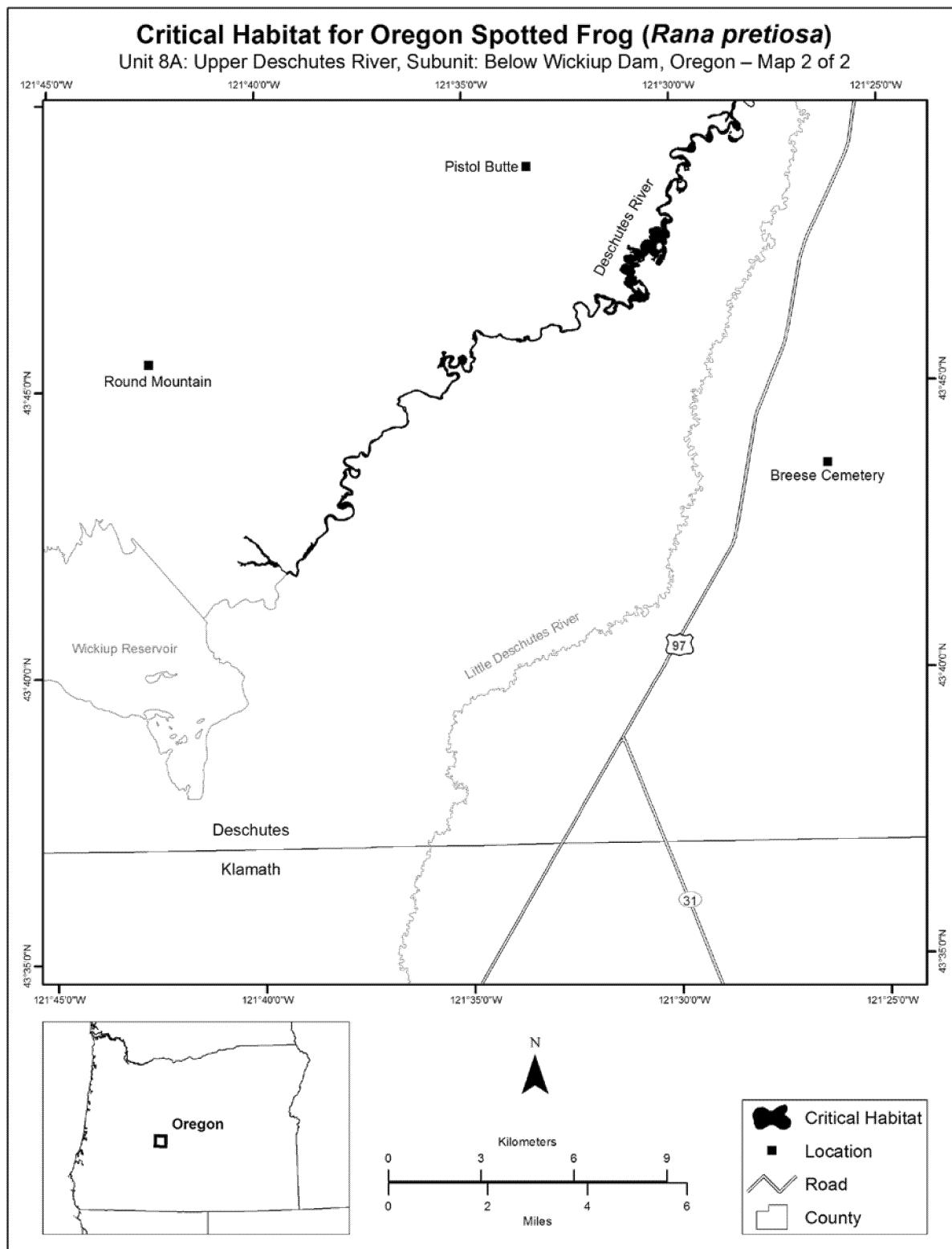


(13) Unit 8A: Upper Deschutes River, Subunit: Below Wickiup Dam, Oregon.

(i) Map 1 of 2, Upper Deschutes River, Below Wickiup Dam, Deschutes County, Oregon. Map 1 of 2 of Unit 8A follows:

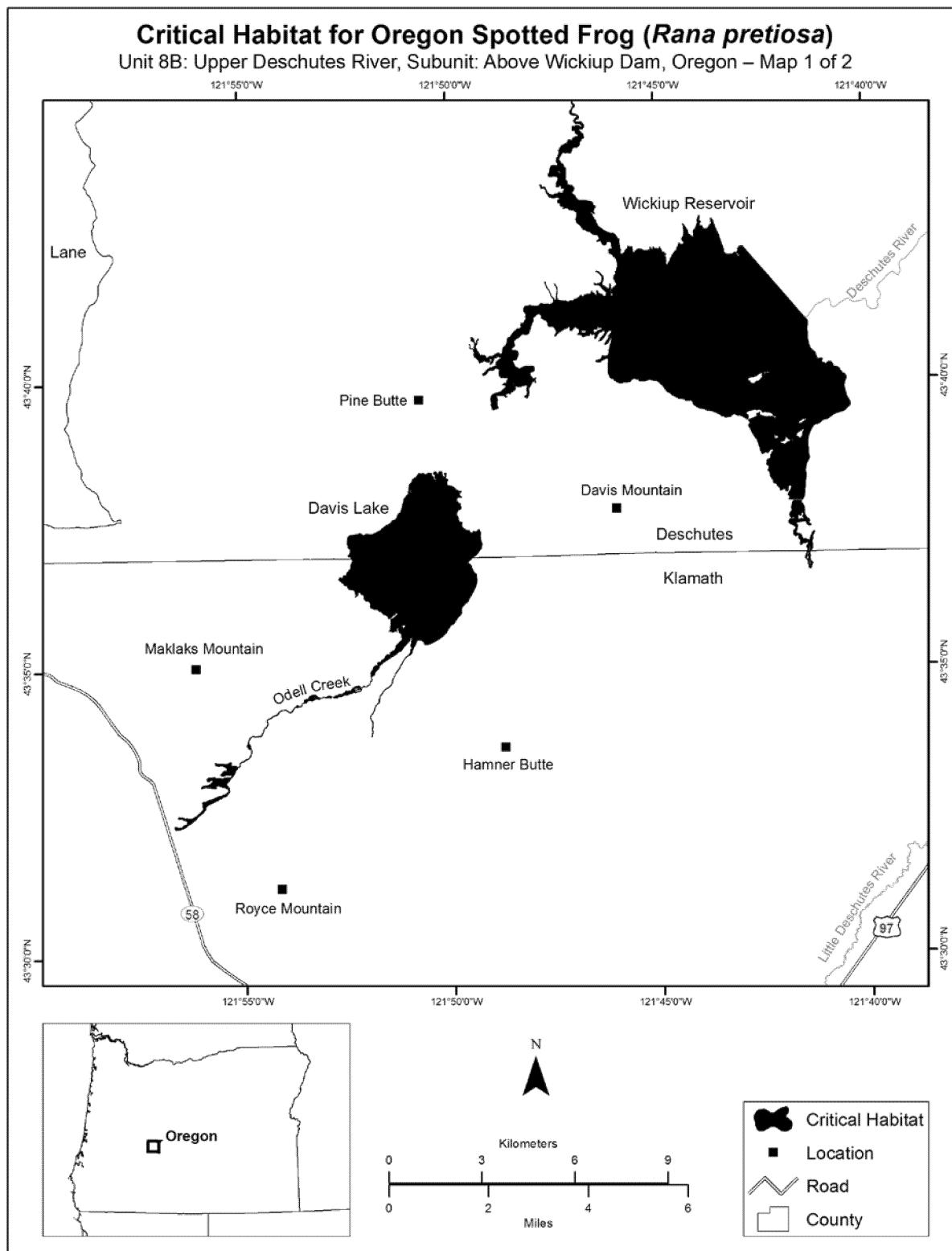


(ii) Map 2 of 2, Upper Deschutes River, Below Wickiup Dam, Deschutes County, Oregon. Map 2 of 2 of Unit 8A follows:



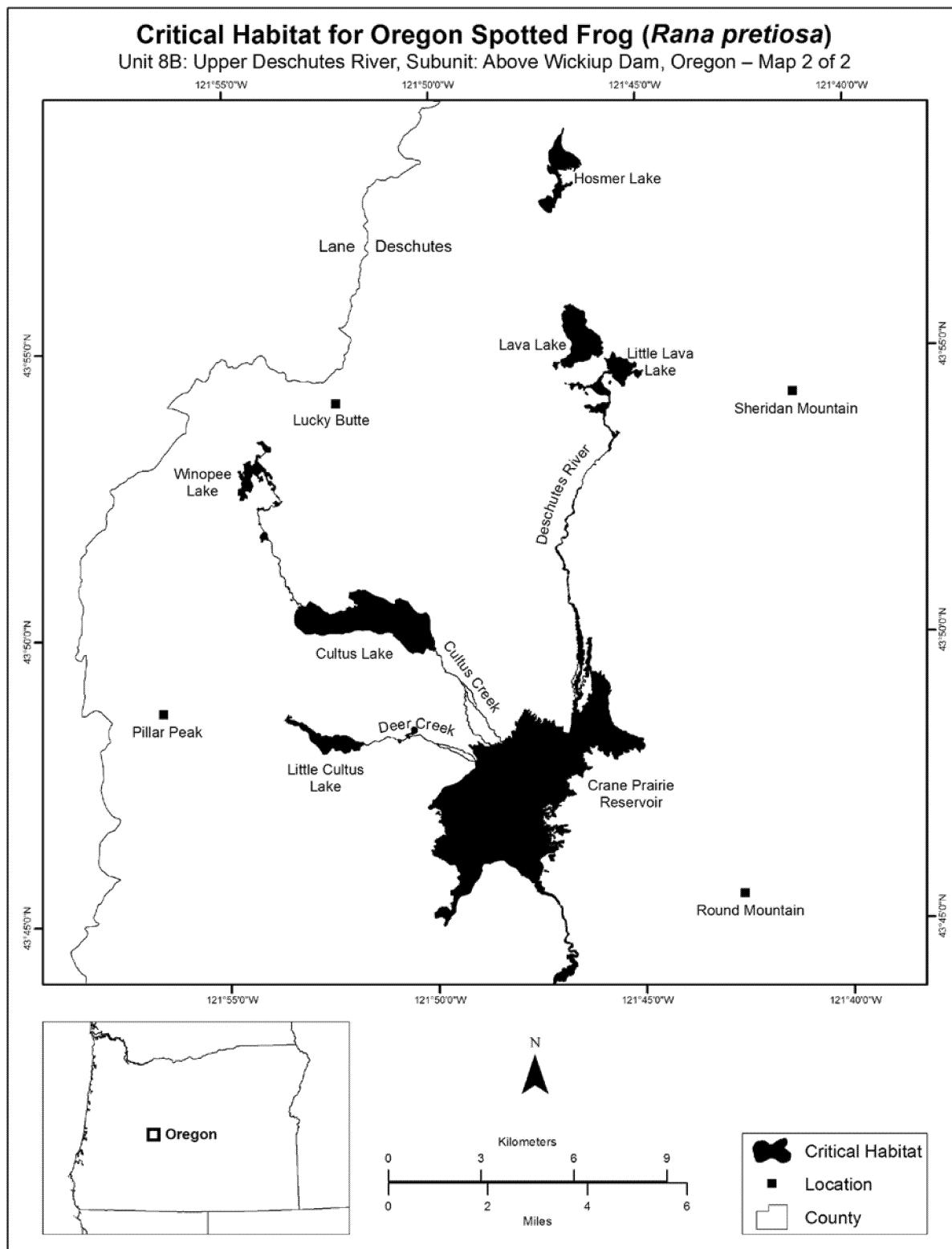
(14) Unit 8B: Upper Deschutes River, Subunit: Above Wickiup Dam, Oregon.

(i) Map 1 of 2, Upper Deschutes River, Above Wickiup Dam, Deschutes and Klamath Counties, Oregon. Map 1 of 2 of Unit 8B follows:



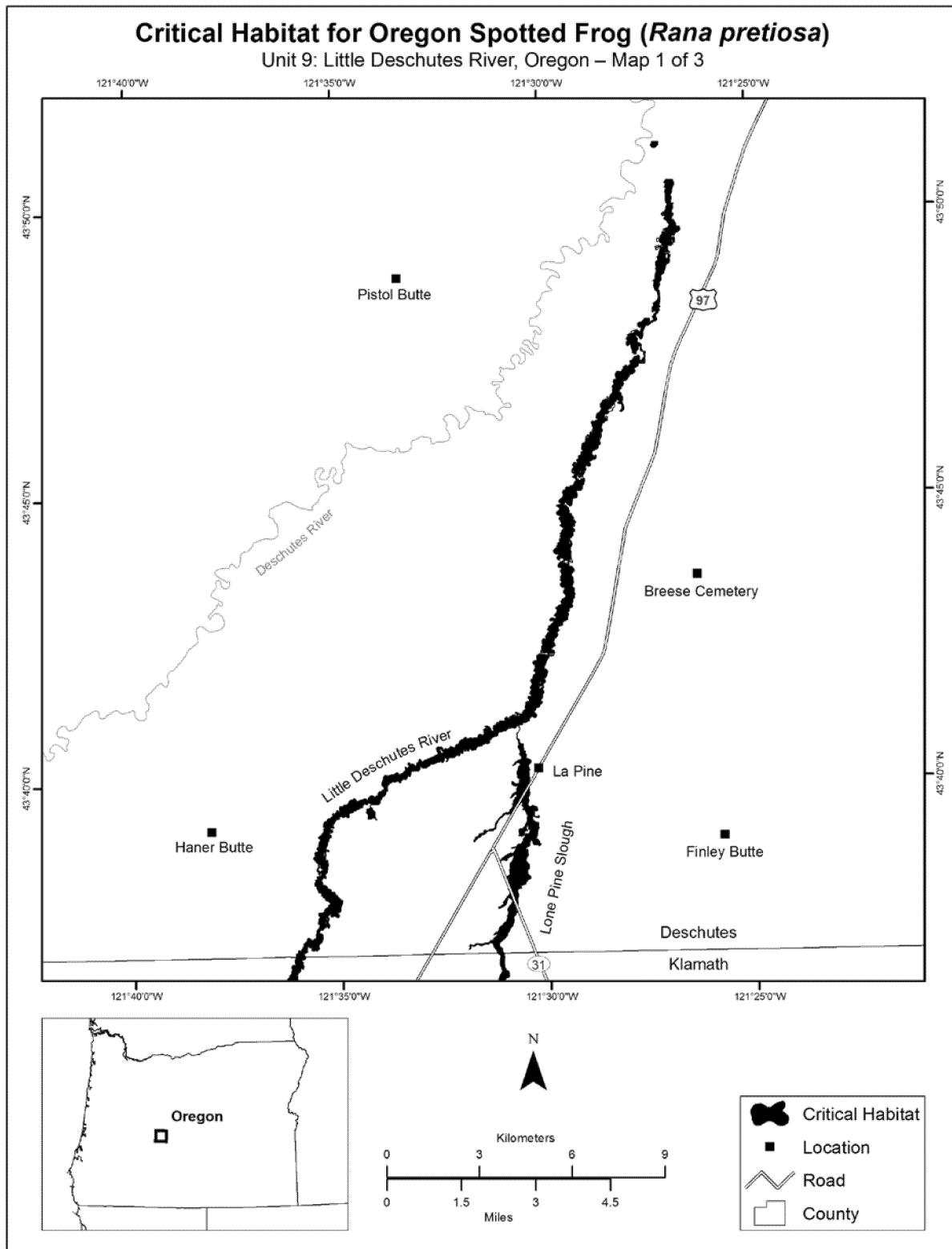
(ii) Map 2 of 2, Upper Deschutes River, Above Wickiup Dam, Deschutes

and Klamath Counties, Oregon. Map 2 of 2 of Unit 8B follows:

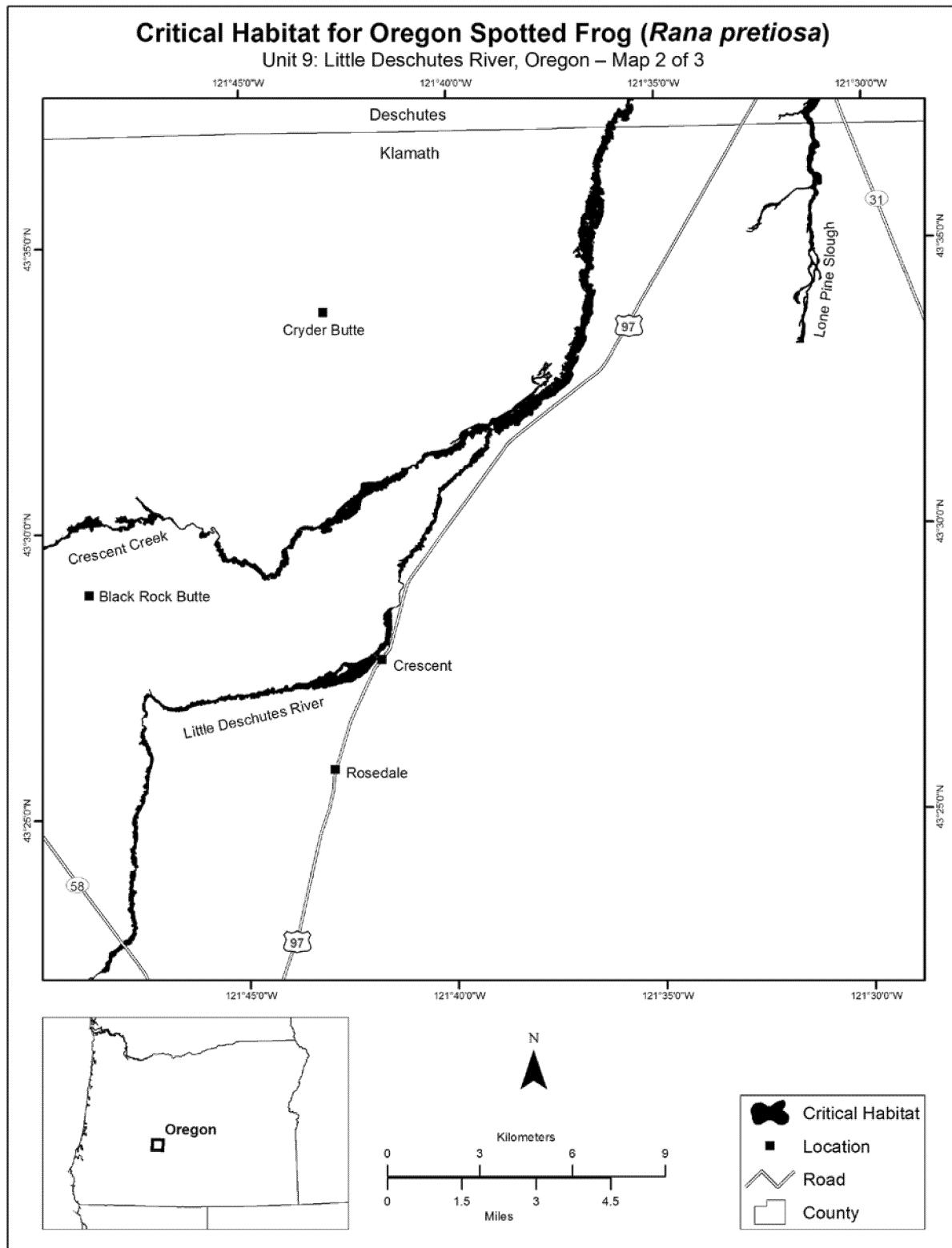


(15) Unit 9: Little Deschutes River, Deschutes and Klamath Counties, Oregon.

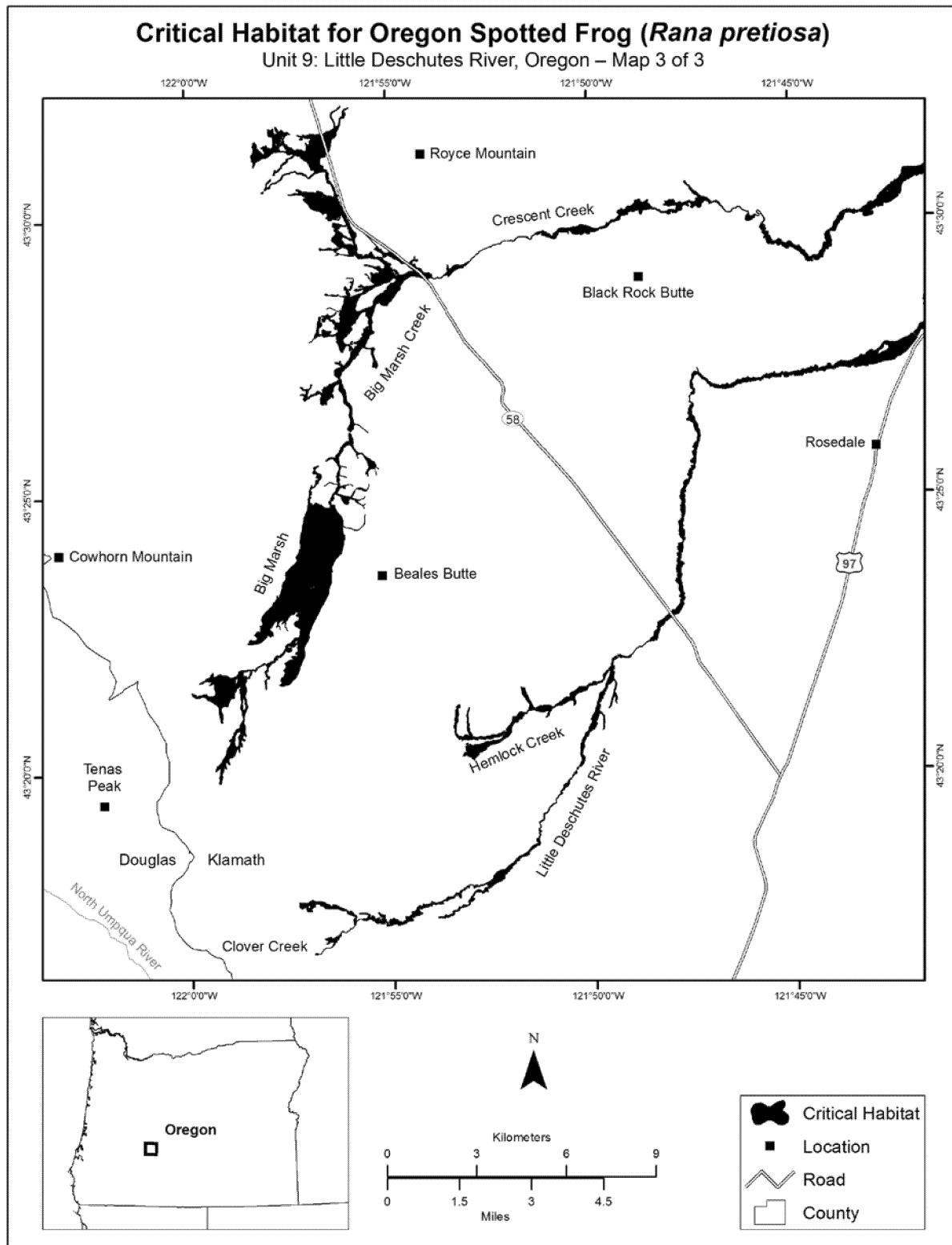
(i) Map 1 of 3, Little Deschutes River, Deschutes and Klamath Counties, Oregon. Map 1 of 3 of Unit 9 follows:



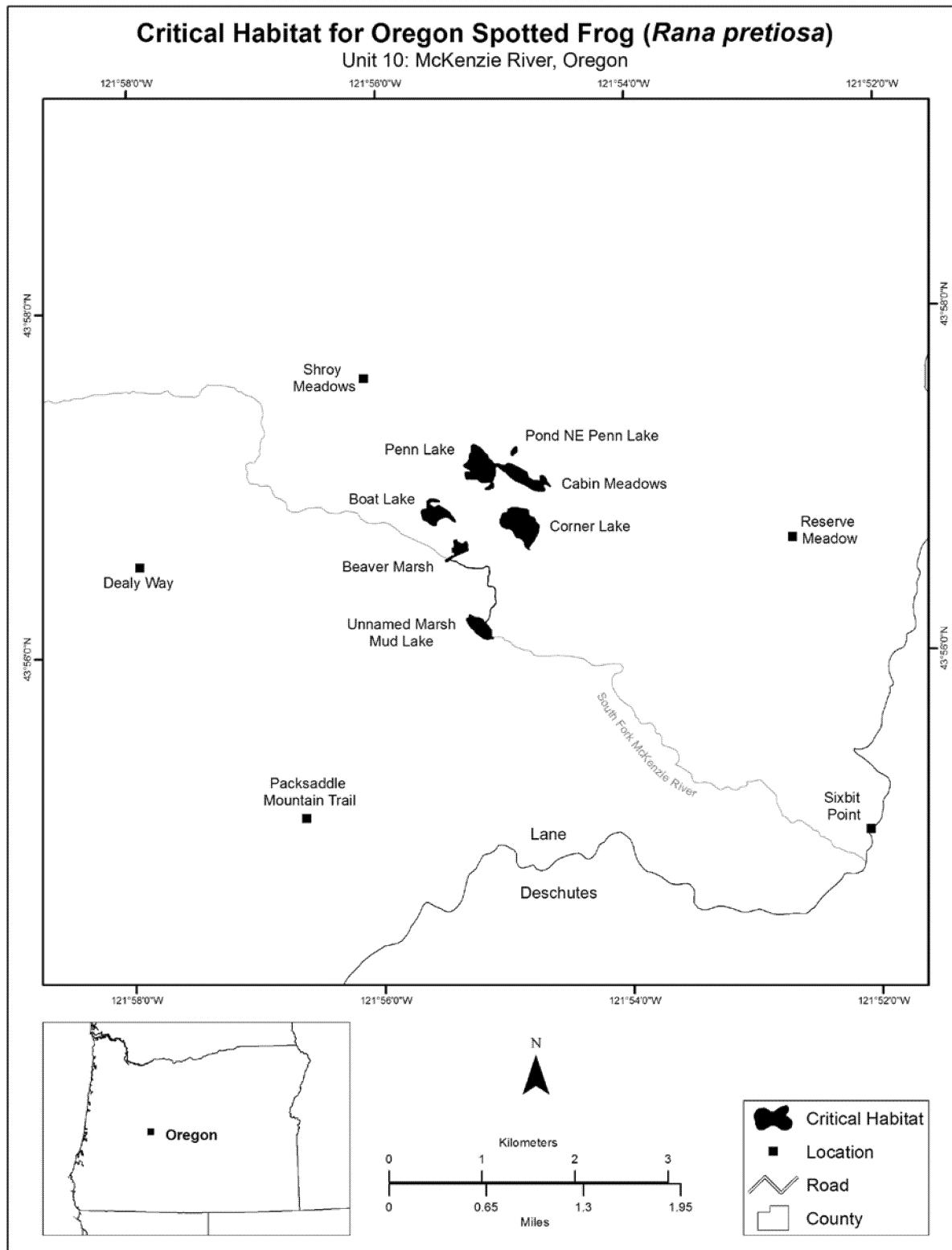
(ii) Map 2 of 3, Little Deschutes River, Deschutes and Klamath Counties, Oregon. Map 2 of 3 of Unit 9 follows:



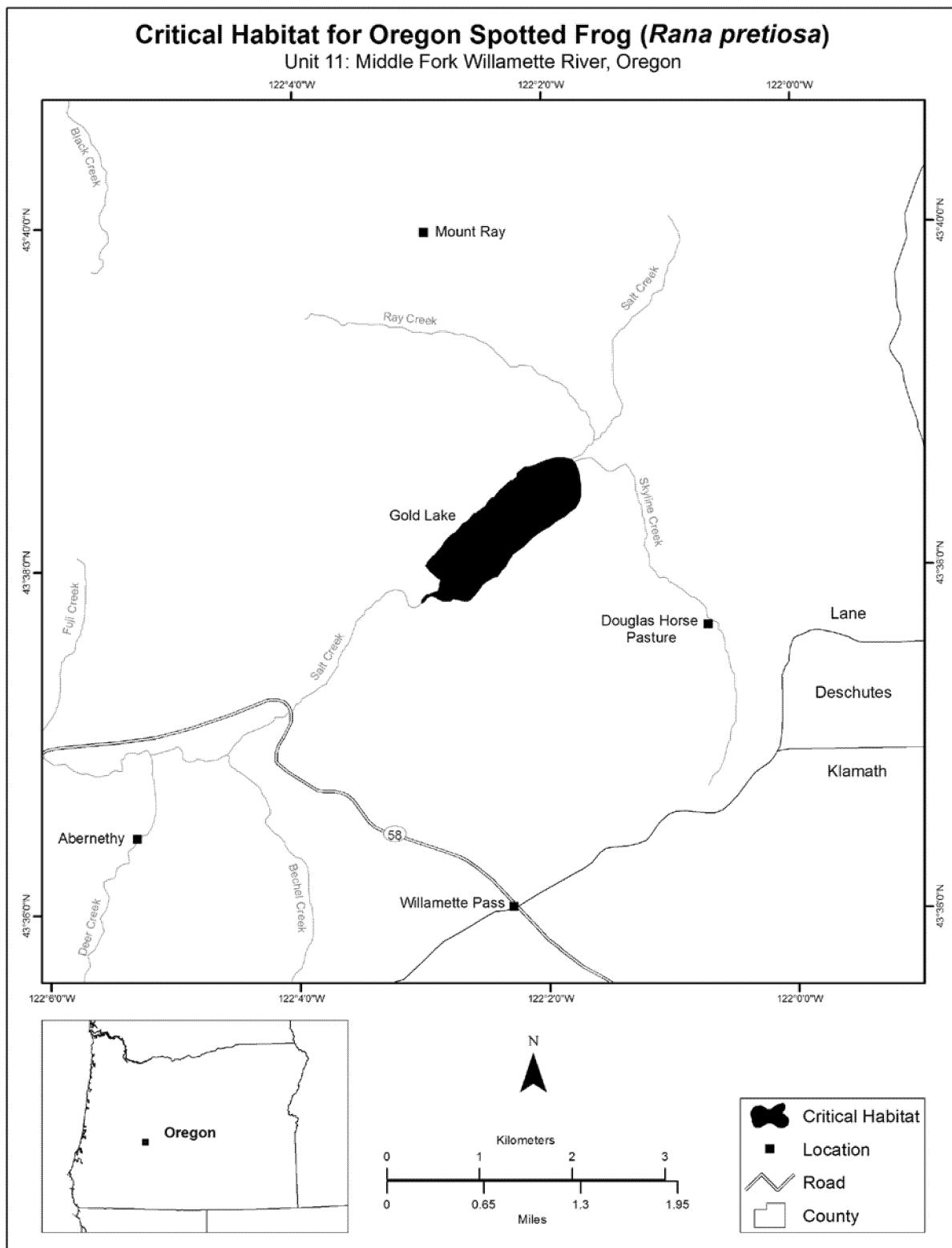
(iii) Map 3 of 3, Little Deschutes River, Deschutes and Klamath Counties, Oregon. Map 3 of 3 of Unit 9 follows:



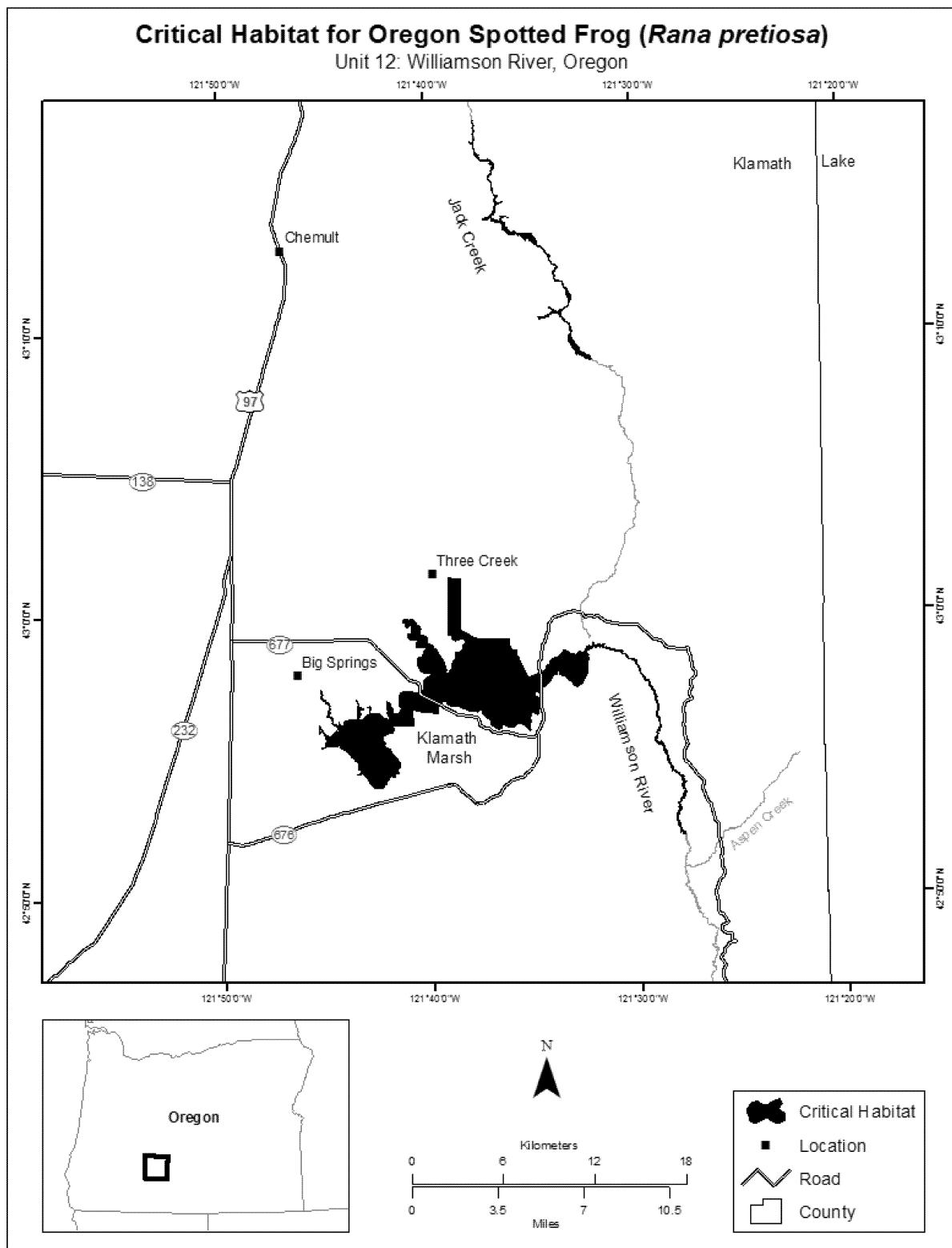
(16) Unit 10: McKenzie River, Lane County, Oregon. Map of Unit 10 follows:



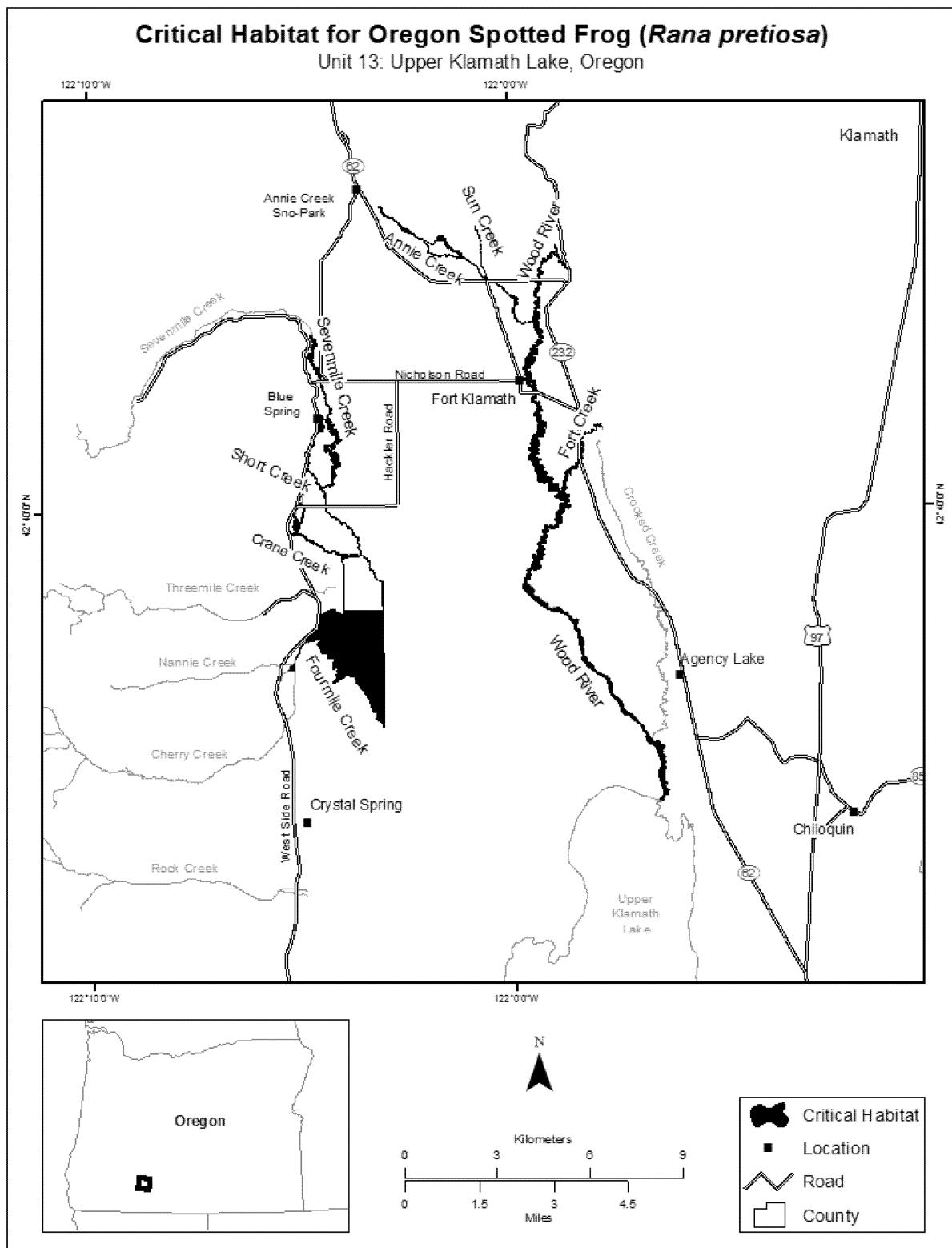
(17) Unit 11: Middle Fork Willamette River, Lane County, Oregon. Map of Unit 11 follows:



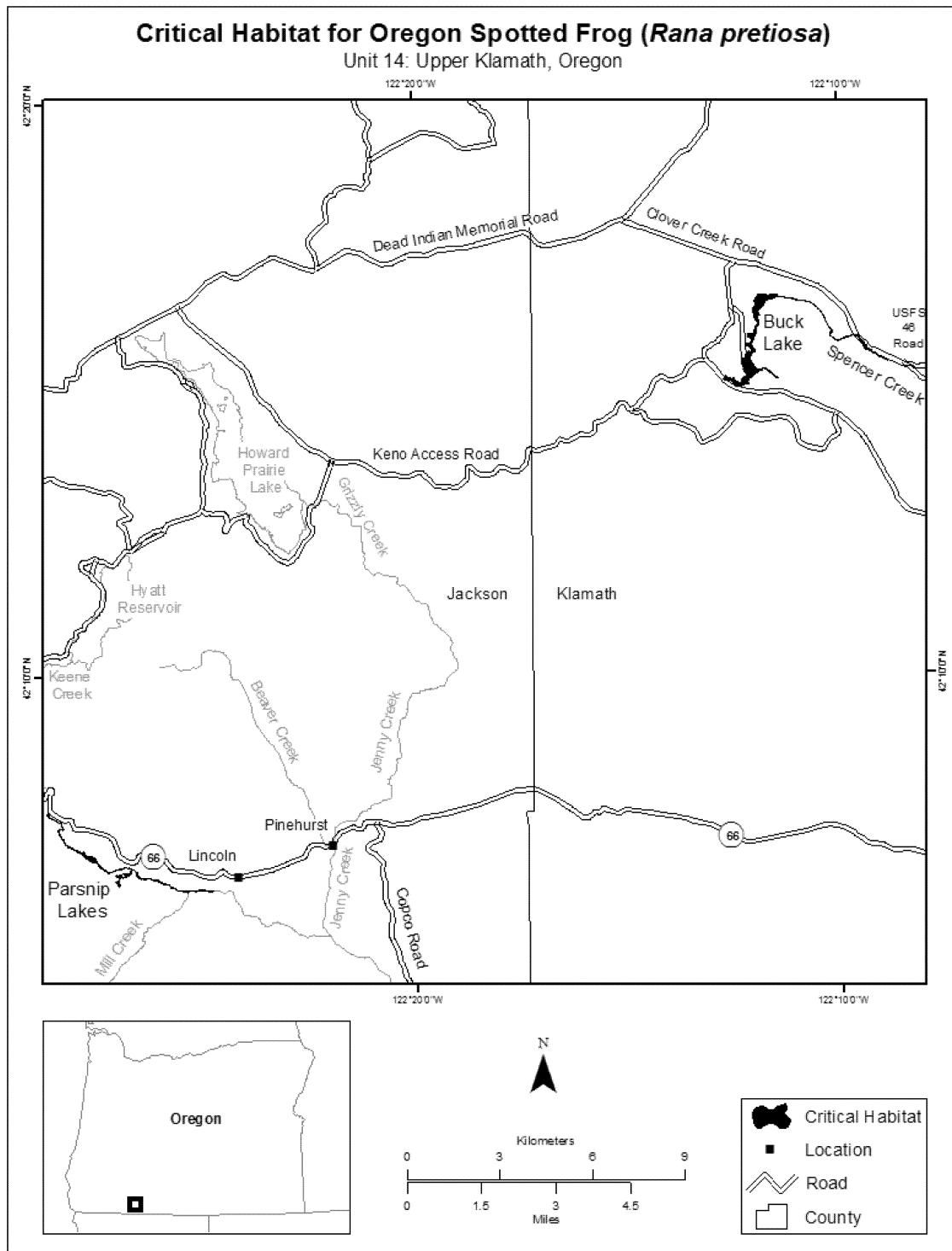
(18) Unit 12: Williamson River, Klamath County, Oregon. Map of Unit 12 follows:



(19) Unit 13: Upper Klamath Lake, Klamath County, Oregon. Map of Unit 13 follows:



(20) Unit 14: Upper Klamath, Jackson and Klamath Counties, Oregon. Map of Unit 14 follows:



* * * * *

Dated: April 7, 2016.

Michael J. Bean,

Principal Deputy Assistant Secretary for Fish
and Wildlife and Parks.

[FR Doc. 2016-10712 Filed 5-10-16; 8:45 am]

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