Baker Station Cave beetle, and Noblett's Cave beetle). Although usually zero to three individuals of any of the six species are found during most surveys, 97 Coleman Cave beetles were also found during a 2013 site visit.

Various populations of the six cave beetles were historically believed to have been subjected to stressors such as water quality impacts associated with a landfill, erosion due to construction, livestock operations, various aspects of human visitation of caves, and possible impacts to cave food webs resulting from interruption of organic energy inputs. The greatest potential stressors to the beetles appear recently to have been human trampling of beetles and their habitats, curtailing the input of organic materials to caves, excavation of cave habitats, and predation. However, actual impacts from these potential sources appear to be minimal. We have no information indicating that these stressors are adversely affecting the species at this time, either individually or cumulatively, at a level that warrants their listing under the Act.

Abatement of stressors has been initiated for the Coleman Cave beetle, Fowler's Cave beetle, and inquirer cave beetle through development of cooperative management agreements (CMAs) with private landowners and coordination between State property managers, nongovernmental organizations, and the Service. Implementation of CMAs is likely resulting in reduction of the impacts of potential stressors to these three beetles. However, our not-warranted finding is not based on the implementation of these voluntary efforts. For the Baker Station Cave beetle, Indian Grave Point Cave beetle, and Noblett's Cave beetle, the stressors appear minimal.

There has been a perception since the 1960s that population trends of the six beetles could possibly be decreasing, but that perception is likely due in part to the low level of survey effort expended for these species and difficulty in collecting them. The recent evidence of continued persistence of these species, in conjunction with the lack of evidence that stressors are negatively affecting these cave beetles, lead us to conclude that these species are more stable than previously thought.

## Finding

Based on our review of the best available scientific and commercial information pertaining to the five factors, we find that the stressors acting on the species and its habitat are not of sufficient imminence, intensity, or magnitude to conclude that the Coleman Cave beetle, Fowler's Cave beetle, inquirer cave beetle, Baker Station Cave beetle, Indian Grave Point Cave beetle, or Noblett's Cave beetle are in danger of extinction (endangered species), or likely to become endangered within the foreseeable future (threatened species), throughout all of their respective ranges. We evaluated the current range of the six beetles to determine if there is any apparent geographic concentration of stressors for any of the species. The six beetles have relatively small ranges that are limited to the local cave systems where they are currently found. We examined potential stressors including human visitation, livestock grazing, commercial and residential development, disease, predation, and sources of water quality impairment. We found no concentration of stressors that suggests that any of these six species of cave beetles may be in danger of extinction in a portion of their respective ranges. Therefore, we find that listing the Coleman Cave beetle, Fowler's Cave beetle, inquirer cave beetle, Baker Station Cave beetle, Indian Grave Point Cave beetle, or Noblett's Cave beetle as threatened species or endangered species throughout all or a significant portion of their respective ranges is not warranted at this time, and consequently we are removing Coleman Cave beetle, Fowler's Cave beetle, inquirer cave beetle, Baker Station Cave beetle, Indian Grave Point Cave beetle, and Noblett's Cave beetle from candidate status.

## New Information

We request that you submit any new information concerning the status of, or stressors to, the American eel, Cumberland arrow darter, the Great Basin distinct population segment of the Columbia spotted frog, Goose Creek milkvetch, Nevares spring bug, Page springsnail, Ramshaw meadows sand-verbena, Sequatchie caddisfly, Shawnee darter, Siskiyou mariposa lily, Sleeping ute milkvetch, Southern Idaho ground squirrel, Tahoe yellow cress, and six Tennessee cave beetles (Baker Station, Coleman, Fowler's, Indian Grave Point, inquirer, and Noblett's cave beetles) to the appropriate person, as specified under **FOR FURTHER INFORMATION CONTACT**, whenever it becomes available. New information will help us monitor these species and encourage their conservation. If an emergency situation develops for any of these species, we will act to provide immediate protection.

## References Cited

Lists of the references cited in the petition findings are available on the Internet at *http://www.regulations.gov* and upon request from the appropriate person, as specified under **FOR FURTHER INFORMATION CONTACT**.

## Author(s)

The primary author(s) of this notice are the staff members of the Branch of Listing, Ecological Services Program.

## Authority

The authority for this section is section 4 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: September 23, 2015.

**Gary Frazer,**

*Acting Director, U.S. Fish and Wildlife Service.*

[FR Doc. 2015–25058 Filed 10–7–15; 8:45 am]

**BILLING CODE 4333–15–P**

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**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**50 CFR Part 17**

**[Docket No. FWS–R1–ES–2014–0045; FXES11130900000C6–156–FF09E42000]**

**RIN 1018–BA30**

# Endangered and Threatened Wildlife and Plants; Reclassifying the Columbian White-Tailed Deer From Endangered to Threatened With a Rule Under Section 4(d) of the Act

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** Under the authority of the Endangered Species Act of 1973, as amended (Act), we, the U.S. Fish and Wildlife Service (Service), propose to reclassify the Columbia River distinct population segment (DPS) of Columbian white-tailed deer (*Odocoileus virginianus leucurus*) from endangered to threatened, and we propose a rule under section 4(d) of the Act to enhance conservation of the species through range expansion and management flexibility. This proposal is based on a thorough review of the best available scientific data, which indicate that the species' status has improved such that it is not currently in danger of extinction throughout all or a significant portion of its range. We seek information, data, and comments from the public regarding the Columbian white-tailed deer and this proposal.

**DATES:** We will accept comments received or postmarked on or before December 7, 2015. Please note that if you are using the Federal eRulemaking Portal (see **ADDRESSES**), the deadline for

submitting an electronic comment is 11:59 p.m. Eastern Time on this date. We must receive requests for public hearings, in writing, at the address shown in the **FOR FURTHER INFORMATION CONTACT** section by November 23, 2015.

**ADDRESSES:** You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal: *http://www.regulations.gov.* In the Search box, enter FWS–R1–ES–2014–0045, which is the docket number for this rulemaking. Then, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rules link to locate this document. You may submit a comment by clicking on ''Comment Now!'' Please ensure that you have found the correct rulemaking before submitting your comment.

(2) *By hard copy:* Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R1–ES–2014–0045; U.S. Fish and Wildlife Service, MS: BPHC, 5275 Leesburg Pike, Falls Church, VA 22041–3808.

We request that you send comments only by the methods described above. We will post all comments on *http://www.regulations.gov*. This generally means that we will post any personal information you provide us (see the Information Requested section, below, for more information).

*Document availability:* The proposed rule is available on *http://www.regulations.gov*. In addition, the supporting file for this proposed rule will be available for public inspection, by appointment, during normal business hours, at the Oregon Fish and Wildlife Office, 2600 SE 98th Avenue, Portland, OR 97266; telephone 503–231–6179. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Services (FIRS) at 800–877–8339.

**FOR FURTHER INFORMATION CONTACT:** Paul Henson, State Supervisor, telephone: 503–231–6179. Direct all questions or requests for additional information to: Columbian White-tailed Deer Information Request, U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office, 2600 SE 98th Avenue, Portland, OR 97266. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339.

**SUPPLEMENTARY INFORMATION:**

## Executive Summary

*Why we need to publish a rule.* Under the Act, a species may warrant reclassification from endangered to threatened if it no longer meets the definition of endangered (in danger of extinction). The Columbia River DPS of Columbian white-tailed deer (CWTD) is listed as endangered, and we are proposing to reclassify the DPS as threatened because we have determined it is no longer in danger of extinction. Reclassifications can only be made by issuing a rulemaking. Furthermore, changes to the take prohibitions in section 9 of the Act, such as those we are proposing for this species under a section 4(d) rule, can only be made by issuing a rulemaking.

*The basis for our action.* Under the Act, we may determine that a species is an endangered or threatened species based on any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We have determined that the CWTD is no longer at risk of extinction and therefore does not meet the definition of endangered, but is still impacted by habitat loss and degradation of habitat to the extent that the species meets the definition of a threatened species (a species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range) under the Act.

*We are proposing to promulgate a section 4(d) rule.* We are considering whether to exempt from the Act's take prohibitions (under section 9), certain activities conducted on State, Tribal, and private lands where CWTD occur or where they would occur if we were to reintroduce them to areas of their historic distribution. Under the proposed 4(d) rule, take of CWTD caused by CWTD damage management activities (such as hazing, use of non-lethal projectiles, or lethal control), and accidental misidentification during damage management activities and hunting of Columbian black-tailed deer (*Odocoileus hemionus columbianus*) (black-tailed deer) would be exempt from section 9 of the Act. The proposed 4(d) rule targets these activities to provide protective mechanisms to private landowners and State and Tribal agencies so they may continue with normal activities in the presence of CWTD and therefore facilitate the natural movement, translocation, and range expansion of CWTD.

## Public Hearing

Section 4(b)(5)(E) of the Act provides for a public hearing on this proposal, if requested. We must receive a request for a public hearing, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by the date specified in the **DATES** section. We will schedule a public hearing on this proposal, if requested, and announce the date, time, and place of the hearing, as well as how to obtain reasonable accommodations, in the **Federal Register** at least 15 days before the hearing.

## Peer Review

In accordance with our policy, ''Notice of Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities,'' which published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinion of at least three appropriate independent specialists regarding scientific data and interpretations contained in this proposed rule. We will send copies of this proposed rule to the peer reviewers immediately following publication in the **Federal Register**. This assessment will be completed during the public comment period. The purpose of such review is to ensure that our decisions are based on scientifically sound data, assumptions, and analysis. Accordingly, the final decision may differ from this proposal.

## Information Requested

We intend that any final action resulting from this proposal will be based on the best available scientific and commercial data and will be as accurate and as effective as possible. Therefore, we invite Native American Tribes, governmental agencies, the scientific community, industry, or any other interested parties to submit comments or recommendations concerning any aspect of this proposed rule. Comments should be as specific as possible. We are specifically requesting comments on:

(1) The appropriateness of our proposal to reclassify this CWTD DPS from endangered to threatened.

(2) The factors that are the basis for making a reclassification determination for a species under section 4(a) of the Act (16 U.S.C. 1531 *et seq.*), which are:

(a) The present or threatened destruction, modification, or curtailment of its habitat or range;

(b) Overutilization for commercial, recreational, scientific, or educational purposes;

(c) Disease or predation;

(d) The inadequacy of existing regulatory mechanisms; or

(e) Other natural or manmade factors affecting its continued existence.

(3) Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to this DPS and existing regulations that may be addressing those threats.

(4) Additional information concerning the historical and current status, range, distribution, and population size of this species, including the locations of any additional populations of this species.

(5) Any information on the biological or ecological requirements of the species and ongoing conservation measures for the species and its habitat.

(6) Any information on foreseeable changes to land use or County land use planning within the boundaries of the DPS that may affect future habitat availability for CWTD.

(7) The appropriateness of a rule to exempt certain take prohibitions of CWTD under section 4(d) of the Act.

(8) Any additional information pertaining to the promulgation of a rule to exempt certain take prohibitions of CWTD under section 4(d) of the Act.

(9) Relevant data on climate change and potential impacts to CWTD and its habitat.

We will take into consideration all comments and any additional information we receive. Such communications may lead to a final rule that differs from this proposal. All comments, including commenters' names and addresses, if provided to us, will become part of the supporting record. Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include. Please note that submissions merely stating support for or opposition to the action under consideration without providing supporting information, although noted, will not be considered in making a determination, as section 4(b)(1)(A) of the Act directs that determinations as to whether any species is a threatened or endangered species must be made ''solely on the basis of the best scientific and commercial data available.''

You may submit your comments and materials concerning the proposed rule by one of the methods listed in the **ADDRESSES** section. We request that you send comments only by the methods described in the **ADDRESSES** section.

If you submit information via *http://www.regulations.gov*, your entire submission—including any personal identifying information—will be posted on the Web site. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so.

We will post all hardcopy submissions on *http://www.regulations.gov*. Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on *http://www.regulations.gov*, or by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

## Previous Federal Action

On March 11, 1967, the Secretary of the Interior identified the CWTD as an endangered species (32 FR 4001), under the authority of the Endangered Species Preservation Act of October 15, 1966 (80 Stat. 926; 16 U.S.C. 668aa(c)). On March 8, 1969, the Secretary of the Interior again identified the CWTD as an endangered species (34 FR 5034) under section 1(c) of the Endangered Species Preservation Act of 1966. On August 25, 1970, the Acting Secretary of the Interior proposed to list the CWTD as an endangered subspecies (35 FR 13519) under the authority of the new regulations implementing the Endangered Species Conservation Act (ESCA) of 1969. On October 13, 1970, the Director of the Bureau of Sport Fisheries and Wildlife listed the CWTD as an endangered subspecies (35 FR 16047) under the authority of the new regulations implementing the ESCA of 1969. Species listed as endangered under the ESCA of 1969 were automatically included in the List of Endangered and Threatened Wildlife when the Endangered Species Act was enacted in 1973. In December 1971, the Service established the Julia Butler Hansen Refuge for CWTD (JBHR), in Cathlamet, Washington.

On October 21, 1976, the Service released the CWTD Recovery Plan. On June 14, 1983, the Service released the Revised CWTD Recovery Plan. The plan addressed the two main populations of CWTD, Columbia River and Douglas County, separately. On July 24, 2003, the Service published a rule (68 FR 43647) that: (1) Recognized the Douglas County and Columbia River populations as DPSs under the Service's 1996 Policy Regarding the Recognition of Distinct Vertebrate Population Segments under the Act (see 61 FR 4722; February 7, 1996), and (2) removed the Douglas County population of CWTD from the List of Endangered and Threatened Wildlife. It was determined that recovery criteria for the Douglas County population had been met, as it achieved benchmarks in both population size and amount of secure habitat.

A 5-year status review of the Columbia River DPS was completed on November 5, 2013 (U.S. Fish and Wildlife Service 2013a); this review concluded that CWTD's status had substantially improved since listing, that the DPS no longer met the definition of an endangered species under the Act, and recommended the DPS should be downlisted from endangered to threatened.

## Species Information

The Columbian white-tailed deer is the westernmost representative of 38 subspecies of white-tailed deer in North and Central America (Gavin 1984, p. 6). It resembles other white-tailed deer subspecies, ranging in size from 39 to 45 kilograms (kg) (85 to 100 pounds (lb)) for females and 52 to 68 kg (115 to 150 lb) for males (Oregon Department of Fish and Wildlife 1995, p. 2). Generally, the species displays a red-brown color in summer and gray in winter, with distinct white rings around the eyes and a white ring just behind the nose (Oregon Department of Fish and Wildlife 1995, p. 2). Its tail is relatively long, brown on top with a white fringe and white underneath (Verts and Carraway 1998, p. 479).

Although white-tailed deer can live up to 20 years, their mean lifespan is probably closer to 6 years, though 9- to 12-year olds are common. One Service study showed a median age at death of 3 years for bucks and 5 years for does (Gavin 1984, p. 490). More recent data from CWTD translocated in 2013 and 2014 showed a median age at death of 5 years for bucks and 9 years for does. Does can reach sexual maturity by 6 months of age or when their weight reaches approximately 36 kg (80 lb), however their maturation and fertility depends on the nutritional quality of available forage (Verme and Ullrey 1984, p. 96). Breeding will occur from mid-September through late February, and the peak of the breeding season, or rut, occurs in November. Fawns are born in the early summer after an approximate 200-day gestation period. In their first pregnancy, does usually give birth to a single fawn, although twins are common in later years if adequate forage is abundant (Verme and Ullrey 1984, p. 96).

The subspecies was formerly distributed throughout the bottomlands and prairie woodlands of the lower Columbia, Willamette, and Umpqua River basins in Oregon and southern

Washington (Bailey 1936, p. 92; Verts and Carraway 1998, p. 479). Although white-tailed deer are considered generalist browsers that also graze on grasses and forbs, Suring and Vohs (1979, p. 616) and Gavin *et al.* (1984, p. 13) reported that CWTD on the JBHR Mainland Unit were primarily grazers. This probably reflects browse and forage availability rather than a predisposition toward forage. Observations by JBHR biologists suggest fawns on the JBHR Mainland Unit are most often associated with pastures of tall, dense reed canary grass (*Phalaris arundinacea* L.) and tall fescue (*Festuca arundinacea*), as well as mixed deciduous and Sitka spruce (*Picea sitchensis*) forest (U.S. Fish and Wildlife Service 1983, p. 10; Brookshier 2004, p. 2).

Early accounts indicate that CWTD were locally common, particularly in riparian areas along major rivers (Crews 1939, p. 5). The subspecies occupied a range of approximately 60,000 square kilometers ($km^2$) (23,170 square miles ($mi^2$)) west of the Cascades Mountains: From the Dalles, Oregon, in the east, to the Pacific Ocean in the west; and Lake Cushman in Mason County, Washington, in the north, to Grants Pass, Oregon, in the south (Crews 1939, p. 3; Smithsonian 2014, p. 1). The decline in CWTD numbers was rapid with the arrival and settlement of pioneers in the fertile river valleys (Crews 1939, p. 2). Conversion of brushy riparian land to agriculture, urbanization, uncontrolled sport and commercial hunting, and perhaps other factors apparently caused the extirpation of this deer over most of its range by the early 1900s (Crews 1939, pp. 2, 5). By 1940, a population of 500 to 700 animals along the lower Columbia River in Oregon and Washington, and a disjunct population of 200 to 300 in Douglas County, Oregon, survived (Crews 1939, p. 3; Gavin 1984, p. 487; Verts and Carraway 1998, p. 480). These two remnant populations remain geographically separated by about 320 km (200 mi), much of which is unsuitable or discontinuous habitat. The Columbia River DPS has a discontinuous current range of approximately 240 $km^2$ (93 $mi^2$) or about 24,281 hectares (ha) (60,000 acres (ac)) (Smith 1985, p. 247) (Figure 1) in limited areas of Clatsop and Columbia Counties in Oregon, and Cowlitz, Wahkiakum, and Clark Counties in Washington. Within that range, CWTD currently occupy an area of approximately 6,475 ha (16,000 ac) (U.S. Fish and Wildlife Service 2013a, p. 7), with a 2014 population estimate of about 830 deer (U.S. Fish and Wildlife Service, unpublished data).

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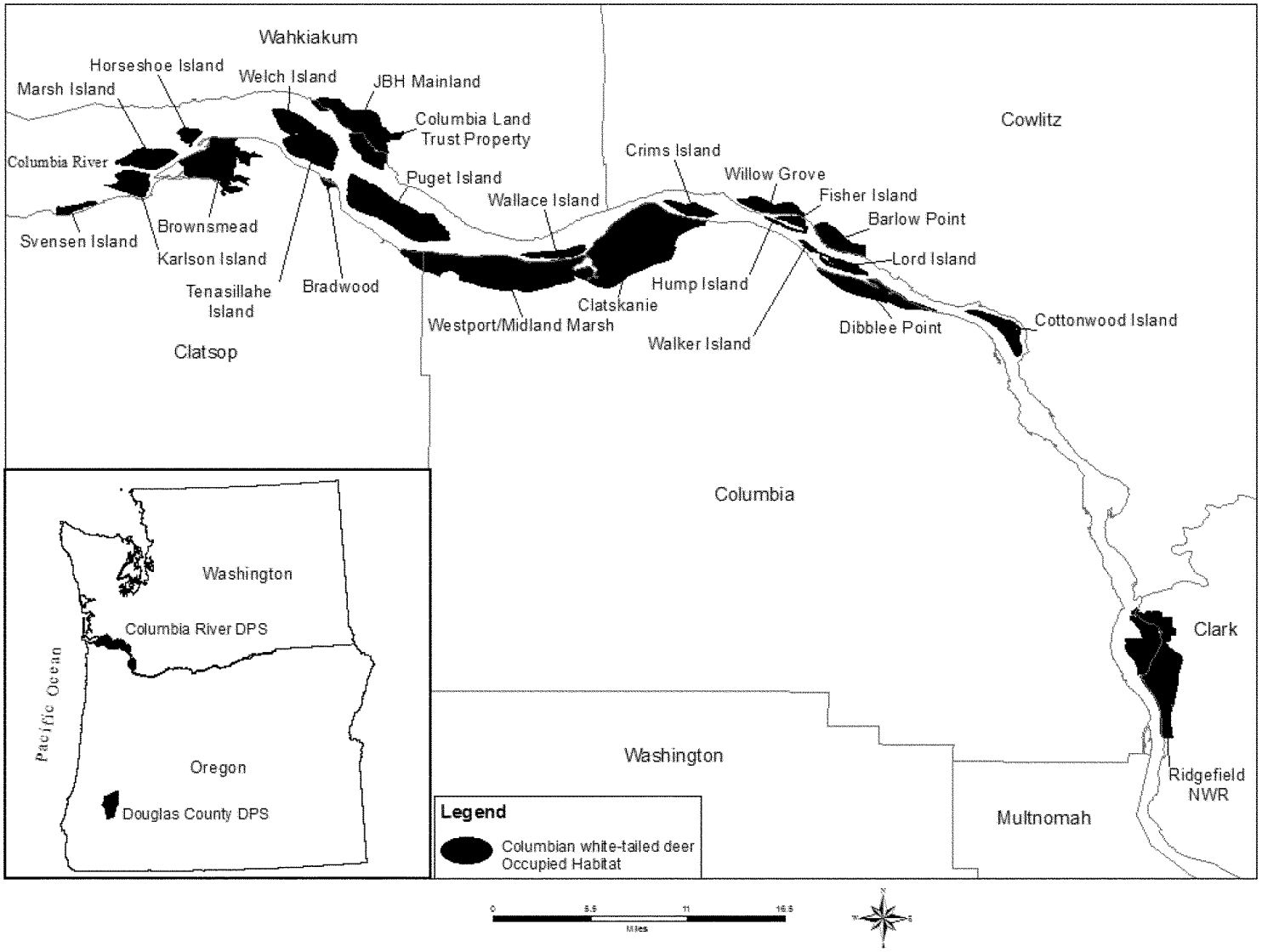


Figure 1. Current range of the Columbia River DPS of CWTD including subpopulations, as well as known CWTD occurrence. Inset map shows the geographic isolation between the Columbia River DPS (Top) and the delisted Douglas County DPS (bottom).

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**Review of the Recovery Plan**

Section 4(f) of the Act directs us to develop and implement recovery plans for the conservation and survival of endangered and threatened species unless we determine that such a plan will not promote the conservation of the species. Under section 4(f)(1)(B)(ii), recovery plans must, to the maximum extent practicable, include "objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of [section 4 of the Act], that the species

be removed from the list.'' However, revisions to the Lists of Endangered and Threatened Wildlife and Plants (adding, removing, or reclassifying a species) must be based on determinations made in accordance with sections 4(a)(1) and 4(b) of the Act. Section 4(a)(1) requires that the Secretary determine whether a species is endangered or threatened (or not) because of one or more of five threat factors. Section 4(b) of the Act requires that the determination be made ''solely on the basis of the best scientific and commercial data available.'' While recovery plans provide important guidance to the Service, States, and other partners on methods of minimizing threats to listed species and measurable objectives against which to measure progress towards recovery, they are not regulatory documents and cannot substitute for the determinations and promulgation of regulations required under section 4(a)(1) of the Act. A decision to revise the status of a species on, or to remove a species from, the Federal List of Endangered and Threatened Wildlife (50 CFR 17.11) is ultimately based on an analysis of the best scientific and commercial data then available to determine whether a species is no longer an endangered species or a threatened species, regardless of whether that information differs from the recovery plan.

There are many paths to accomplishing recovery of a species, and recovery may be achieved without all criteria being fully met. For example, one or more criteria may be exceeded while other criteria may not yet be accomplished. In that instance, we may determine that the threats are minimized sufficiently and the species is robust enough to delist. In other cases, recovery opportunities may be discovered that were not known when the recovery plan was finalized. These opportunities may be used instead of methods identified in the recovery plan. Likewise, information on the species may be learned that was not known at the time the recovery plan was finalized. The new information may change the extent to which criteria need to be met for recognizing recovery of the species. Recovery of a species is a dynamic process requiring adaptive management that may, or may not, fully follow the guidance provided in a recovery plan.

In the 1983 Revised Recovery Plan for CWTD (U.S. Fish and Wildlife Service 1983), the Service established the following criteria for downlisting the Columbia River DPS from endangered to threatened: (1) Maintain a minimum of at least 400 CWTD across the Columbia River DPS; and (2) maintain 3 viable subpopulations, 2 of which are located on secure habitat (U.S. Fish and Wildlife Service 1983, pp. 31–33). Viable is defined as a minimum November population of 50 individuals or more. Secure habitat is defined as free from adverse human activities in the foreseeable future and relatively safe from natural phenomena that would destroy the habitat's value to CWTD.

The recovery plan established the following criteria for delisting (*i.e.,* removing the species from the Federal List of Endangered and Threatened Wildlife): (1) Maintain a minimum of at least 400 CWTD across the Columbia River DPS; and (2) maintain 3 viable subpopulations, all located on secure habitat. Recovery actions specified in the recovery plan to achieve the downlisting and delisting goals include management of existing subpopulations and protection of their habitat, establishment of new subpopulations, and public education and outreach to foster greater understanding of CWTD and its place in the natural environment of its historic range (U.S. Fish and Wildlife Service 1983, pp. 31–33).

*Recovery Plan Implementation for the Columbia River DPS.* At the time of the Revised Recovery Plan's publication, the JBHR Mainland Unit subpopulation was the only subpopulation considered viable and secure. The Revised Recovery Plan recommended increasing the Tenasillahe Island subpopulation to a minimum viable herd of 50 deer, maintaining a total population minimum of 400 deer, and securing habitat for one additional subpopulation (U.S. Fish and Wildlife Service 1983, p. 31).

Forty-eight years have passed since the CWTD was federally listed as endangered, and the species is now more abundant and better distributed throughout the lower Columbia River Valley. The improvement is due in part to the support and augmentation of existing subpopulations, and the establishment of new subpopulations via successful translocations within the species' historical range. Currently, there are six main CWTD subpopulations: JBHR Mainland Unit (88 deer), Tenasillahe Island (154 deer), Upper Estuary Islands (39 deer), Puget Island (227 deer), Westport/Wallace Island (154 deer), and Ridgefield National Wildlife Refuge (NWR) (48 deer) (see Table 1, below). Threats to the species have been substantially ameliorated and CWTD have met all of the criteria for downlisting to threatened in the Revised Recovery Plan. A review of the species' current status relative to the downlisting criteria follows.

Downlisting Criterion 1: Maintain a minimum of at least 400 CWTD across the Columbia River DPS. This criterion has been met. The total population of the Columbia River DPS has been maintained at over 400 deer annually since regular surveys began in 1984, and the population estimate for 2014 is more than double this figure. See Table 1, below, for CWTD subpopulations and their current population sizes.

Downlisting Criterion 2: Maintain three viable subpopulations, two of which are located on secure habitat. This criterion has been met. There are currently four viable subpopulations of CWTD: Tenasillahe Island at 154 deer, Puget Island at 227 deer, Westport/Wallace Island at 154 deer, and the JBH Mainland Unit at 88 deer (see Table 1, below). The Tenasillahe Island and Puget Island subpopulations are located on secure habitat, as explained in the following status discussion.

TABLE 1—ESTIMATED POPULATION SIZE OF THE COLUMBIA RIVER DPS OF CWTD BY SUBPOPULATION

[U.S. Fish and Wildlife Service 2013a, p. 7; U.S. Fish and Wildlife Service, unpublished data]

| Year | Puget Island | Tenasillahe Island | Westport/ Wallace Island | JBHR Mainland unit | Upper Estuary Islands [c] | Ridgefield NWR | Total |
|---|---|---|---|---|---|---|---|
| 1984 | 170 | 40 | 150 | 360 | 0 | 0 | 720 |
| 1985 | 215 | 40 | 125 | 480 | 0 | 0 | 860 |
| 1986 | 195 | 55 | 125 | 500 | 0 | 0 | 875 |
| 1987 | 185 | 70 | 150 | 500 | 0 | 0 | 905 |
| 1988 | 205 | 80 | 150 | 410 | 0 | 0 | 845 |
| 1989 | 205 | 90 | 150 | 375 | 0 | 0 | 820 |
| 1990 | 200 | 105 | 150 | 345 | 0 | 0 | 800 |
| 1991 | 200 | 130 | 150 | 280 | 0 | 0 | 760 |

TABLE 1—ESTIMATED POPULATION SIZE OF THE COLUMBIA RIVER DPS OF CWTD BY SUBPOPULATION—Continued

[U.S. Fish and Wildlife Service 2013a, p. 7; U.S. Fish and Wildlife Service, unpublished data]

| Year | Puget Island | Tenasillahe Island | Westport/ Wallace Island | JBHR Mainland unit | Upper Estuary Islands [c] | Ridgefield NWR | Total |
|---|---|---|---|---|---|---|---|
| 1992 | 200 | 165 | 175 | 280 | 0 | 0 | 820 |
| 1993 | 200 | 195 | 200 | 175 | 0 | 0 | 770 |
| 1994 | 200 | 205 | 225 | 140 | 0 | 0 | 770 |
| 1995 | 200 | 205 | 225 | 120 | 0 | 0 | 750 |
| 1996 | 200 | 125 | 225 | 51 | 0 | 0 | 610 |
| 1997 | 200 | 150 | 200 | 100 | 0 | 0 | 650 |
| 1998 | 200 | 200 | 200 | 110 | 0 | 0 | 710 |
| 1999 | 150 | 160 | 140 | 110 | 25 | 0 | 585 |
| 2000 | 150 | 135 | 150 | 120 | 55 | 0 | 610 |
| 2001 | 125 | 135 | 150 | 120 | 55 | 0 | 585 |
| 2002 | 125 | 100 | 140 | 125 | 55 | 0 | 545 |
| 2003 | 125 | 100 | 140 | 115 | 80 | 0 | 560 |
| 2004 | 110 | 100 | 140 | 110 | 95 | 0 | 555 |
| 2005 | 125 | 100 | 140 | 100 | 100 | 0 | 565 |
| 2006 [a] | n/a | 86 | 104 | 81 | 67 | 0 | |
| 2007 [a] | n/a | 82 | n/a | 59 | [e] 41 | 0 | |
| 2009 [a] | 138 | [b] 97 | 146 | [b] 74 | 28 | 0 | [d] 593 |
| 2010 [a] | n/a | 143 | 164 | 68 | 39 | 0 | [d] 630 |
| 2011 | 171 | 90 | n/a | 83 | [f] 18 | 0 | [d] 603 |
| 2014 | 227 | 154 | [g] 154 | 88 | 39 | 48 | [d] 830 |

[a] Estimates from 2006–2010 are derived from Forward-Looking Infrared (FLIR) survey results, but survey results from 2008 produced anomalous data because an alternative technique was used. These data are not considered representative of actual numbers, and are thus not included in this table.
[b] Numbers reflect a post-survey translocation of 16 deer from Tenasillahe Island to the Refuge mainland.
[c] Includes Lord, Walker, Fisher, Hump, and Crims Islands.
[d] Includes estimates from residual populations in Cottonwood Island, Clatskanie Flats, Brownsmead, Willow Grove, Barlow Point, and Rainier.
[e] Does not include Fisher and Hump Islands.
[f] Assuming a white-tailed:black-tailed deer ratio of 20:1; this includes only Crims Island.
[g] Approximate population estimate after 2014 translocation.
**Note:** Totals are not given in 2006 and 2007 due to incomplete data, and no surveys were conducted in 2012 or 2013.

At the time of the CWTD Revised Recovery Plan publication in 1983, the number of deer in the Columbia River DPS was thought to be 300 to 400. The first comprehensive survey effort in 1984 resulted in an estimate of 720 deer, suggesting that prior estimates were probably low. Beginning in 1996, the Service began using Forward-Looking Infrared (FLIR) thermography camera systems affixed to a helicopter (or, in 2008, a fixed-wing Cessna 206) to conduct aerial CWTD surveys within the Columbia River DPS, in addition to annual fall ground counts. Fall ground counts have been conducted since 1985, and have been used to provide more clarity in establishing long-term population trends by indicating gross population changes. In years when FLIR surveys were not completed, ground counts were used to estimate whether there had been any unusual decrease or increase in a subpopulation. The current estimate (2014) of the Columbia River DPS population is approximately 830 deer (Table 1).

The JBHR Mainland Unit subpopulation has fluctuated in numbers since regular surveys began, with a high of 500 deer in 1987 to a low of 51 deer in 1996 (after a catastrophic flood event). The declining population trend seen in the JBHR Mainland Unit subpopulation over the last 30 years (Table 1) is likely the result of overpopulation that occurred after the area became a refuge in 1971. With the protected status of the refuge and the cessation of hunting, the deer increased in numbers to levels that were unsustainable given the amount of available habitat, culminating with the peak of 500 CWTD. Refuge biologists established a goal of approximately 125 deer for the JBHR Mainland Unit to maintain long-term stability (U.S. Fish and Wildlife Service 2010, p. 2:62). Flooding on the JBHR Mainland Unit has occurred three times over the history of the refuge, in 1996, 2006 and 2009. Although the refuge saw short-term population declines after each flood, the numbers returned to prior levels within a few years. From 1997 to the present, the JBHR Mainland Unit subpopulation stabilized and consistently maintains population numbers above the recovery criteria minimum of 50 deer (Table 1).

In March of 2011, JBHR personnel discovered erosion of the dike that protects the Mainland Unit from flooding by the Columbia River. The progressive erosion led to the closure of Steamboat Slough Road, which runs on top of the dike. A geotechnical assessment determined that the dike was at ''imminent risk'' of failure (U.S. Fish and Wildlife Service 2013b, p. 2) and a breach at that location would result in the flooding of the JBHR Mainland Unit at high tides. In response to this threat, the Service conducted an emergency translocation of 37 CWTD from the JBHR Mainland Unit to unoccupied but suitable habitat at Ridgefield NWR in early 2013 (U.S. Fish and Wildlife Service 2013c, p. 8). The U.S. Army Corps of Engineers subsequently constructed a set-back levee on JBHR to prevent flooding of the refuge and to restore salmonid habitat (U.S. Army Corps of Engineers 2013, p. 11). Though the set-back dike, completed in fall 2014, reduces available CWTD habitat on the JBHR Mainland Unit by approximately 28 ha (70 ac), or approximately 3.5 percent of the total 797 ha (1,970 ac), it will restore the stability of the remaining habitat for the Mainland Unit subpopulation. After the removal of 37 CWTD in 2013, the population of the JBHR Mainland Unit has rebounded quickly to an estimated 88 deer (2014).

The JBHR also includes Tenasillahe Island in Oregon. The 1983 Revised Recovery Plan recommended increasing the Tenasillahe Island subpopulation to a minimum viable herd of 50 deer. The Service has accomplished this recovery goal through several translocation efforts and habitat enhancement, and the island's subpopulation, though still affected by flood events, has remained relatively stable. The most current FLIR survey at this location (in 2014) estimated the population at 154 deer (Table 1).

The Revised Recovery Plan identified a series of islands near Longview, Washington, as suitable habitat to create a third subpopulation. These islands, known as the Upper Estuary Islands, included Fisher, Hump, Lord, and Walker, with a total area of 400 ha (989 ac), under a mix of private and State ownership. Fisher Island is a naturally occurring tidal wetland dominated by black cottonwood (*Populus trichocarpa*), willow (*Salix* spp.), and dogwood (*Cornus nuttallii*) (U.S. Fish and Wildlife Service 2005, p. 1). The remaining three islands are dredge material sites with dense cottonwood and shrub habitat. Translocations of CWTD to Fisher/Hump and Lord/Walker Islands began in 2003, and a total of 66 deer (33 to each set of islands) have been relocated there to date (U.S. Fish and Wildlife Service 2013a, p. 23). The population goal for the 4-island complex is at least 50 CWTD (U.S. Fish and Wildlife Service 2005, p. 1), but as a unit, this complex has yet to maintain the target population of 50 deer. The 4-island complex currently contains 10 CWTD. It is suspected that the low numbers of CWTD in the complex are a result of deer finding higher quality habitat in areas adjacent to the island complex. Telemetry data indicate that CWTD frequently move between the island complex and adjacent areas of Willow Grove, the Barlow Point industrial area, and Dibblee Point (U.S. Fish and Wildlife Service 2005, p. 3), so many of the translocated deer may be in these other locations. These adjacent areas averaged 44 CWTD between 2009 and 2011 (U.S. Fish and Wildlife Service 2013a, p. 23). However, further range expansion in this region is limited by its direct proximity to urban development. The potential for problems associated with translocations, particularly damage to private gardens and commercial crops, remains an issue with local landowners and therefore limits CWTD range expansion at this time.

Crims Island was also designated in the Revised Recovery Plan as a suitable translocation site and has subsequently been added to the Upper Estuary Islands subpopulation for recovery purposes. Crims Island lies 1.6 km (1 mi) downstream from the original Upper Estuary Islands, and contributes to the interchange among CWTD of neighboring islands and mainland subpopulations (U.S. Fish and Wildlife Service 2005, p. 4). It was secured for CWTD recovery in a 1999 agreement between the Bonneville Power Administration, the Columbia Land Trust, and the Service (U.S. Fish and Wildlife Service 2010, p. 1:19). Crims Island has received 66 CWTD through several translocation efforts (U.S. Fish and Wildlife Service 2013a, p. 21). The protected portion of the island (approximately 191 ha (473 ac)) contains about 121 ha (300 ac) of deciduous forest (black cottonwood, Oregon ash (*Fraxinus latifolia*), and willow), pasture, and marsh. Crims Island was formerly grazed but remains undeveloped. This area was originally considered able to support 50 to 100 deer (U.S. Fish and Wildlife Service 2000, p. 2) but has only supported between 8 and 33 deer since 2000, with the latest population estimate at 29 deer in 2014.

Puget Island has supported one of the largest and most stable subpopulations of CWTD. While densities have historically been lower than refuge lands, the size of Puget Island (about 2,023 ha (5,000 ac)) has enabled it to support a healthy number of deer. Since regular surveys began in 1984, the population at Puget Island has averaged between 175 and 200 deer. The latest survey (2014) estimated the population at a high of 227 deer. Eleven deer were removed from the area for the 2014 translocation to Ridgefield NWR. Puget Island is a mix of private and public land. The private land consists mainly of pasture for cattle and goats, residential lots, and hybrid cottonwood plantations that provide food and shelter for the deer. Farmers and ranchers on the island often implement predator (coyote, *Canis latrans*) control on their lands to protect poultry and livestock, and this management activity likely benefits the CWTD population on the island.

The Westport/Wallace Island subpopulation has also been stable and relatively abundant since regular surveys began. After reaching a peak of approximately 225 deer in 1995, the subpopulation's last estimate from 2010 was 164 deer (Table 1). However, 10 deer were removed from the area for the 2014 translocation to Ridgefield NWR, so the most current estimate is approximately 154 deer. Habitat in the Westport area consists mainly of cottonwood/willow swamp and scrub-shrub tidal wetlands. In 1995, Wallace Island, Oregon, was purchased by the Service for CWTD habitat. Though the habitat is now protected for the recovery of CWTD, the 227-ha (562-ac) island alone is considered too small to support a viable population (U.S. Fish and Wildlife Service 2010, p. 4:39). Because it is located adjacent to Westport, Oregon, Wallace Island is considered part of the Westport/Wallace Island CWTD subpopulation. Acquisitions by JBHR also include a 70-ha (173-ac) area of Westport called the Westport Unit.

Ridgefield NWR is located in Clark County, Washington, approximately 108 km (67 mi) southeast of JBHR, and is comprised of 2,111 ha (5,218 ac) of marshes, grasslands, and woodlands with about 1,537 ha (3,800 ac) of upland terrestrial habitat. As part of the 2013 emergency translocation, the Service moved 37 deer from the JBHR Mainland Unit to Ridgefield NWR in Clark County, Washington (U.S. Fish and Wildlife Service 2013c, p. 8). Eleven of the deer suffered either capture-related mortality or post-release mortality within 2 months, mainly due to predation (U.S. Fish and Wildlife Service, unpublished data). In 2014, another 21 deer were translocated to Ridgefield NWR from Puget Island and Westport, and the current estimated population based on FLIR surveys is 48 deer (Table 1).

Cottonwood Island lies approximately 1.6 km (1 mi) upriver from Dibblee Point on the Washington side of the Columbia River. The 384-ha (948-ac) island was considered in the Revised Recovery Plan as a potential relocation site; it was thought that the island could support up to 50 deer. The island is a recreational site for camping and fishing with the surrounding waters used for waterfowl hunting. Cottonwood Island has multiple landowners, primarily a coalition of ports administered by the Port of Portland, but there are no people living on the island and no commercial interests (U.S. Fish and Wildlife Service 2013b, p. 15). In the fall of 2010, 15 deer were moved to Cottonwood Island from the Westport population in Oregon (Cowlitz Indian Tribe 2010, p. 1). Seven confirmed mortalities resulted from vehicle collisions as CWTD dispersed off the island (Cowlitz Indian Tribe 2010, p. 3). Telemetry monitoring by Washington Department of Fish and Wildlife (WDFW) personnel in the spring of 2011 detected three radio-collared CWTD on Cottonwood Island and two on the Oregon mainland near Rainier, Oregon. A second translocation of 12 deer to Cottonwood Island (from Puget Island) occurred in conjunction

with the 2013 emergency translocation effort (U.S. Fish and Wildlife Service 2013a, p. 24). All but four of these new CWTD subsequently died or moved off the island, with five deer dying from vehicle strikes (U.S. Fish and Wildlife Service, unpublished data). Habitat quality may be a factor in the movement of CWTD off the island, so habitat restoration of about 6 ha (15 ac) was conducted in 2013. Staff at JBHR and the Cowlitz Indian Tribe are conducting periodic monitoring of CWTD translocated to Cottonwood Island.

While the overall population trend for the Columbia River DPS appears to decline over time along a similar trajectory as the JBHR Mainland Unit subpopulation until 2006, closer examination reveals that the overall trend is strongly influenced by the decline of the unsustainable highs that the JBHR Mainland Unit experienced in the late 1980s. The other subpopulations did not undergo a similar decline, and when the JBHR Mainland Unit is left out of the analysis, the overall Columbia River DPS population demonstrates a more positive trend.

Page 37 of the Revised Recovery Plan states, ''. . . protection and enhancement (of off-refuge CWTD habitat) can be secured through local land use planning, zoning, easement, leases, agreements, and/or memorandums of understanding'' (U.S. Fish and Wildlife Service 1983, p. 37). In the 30 years following the development of the Revised Recovery Plan, the Service interpreted this to mean that the only acceptable methods of securing habitat in order to meet recovery criteria were the ones listed in the above citation. This led the Service to focus most CWTD recovery efforts on increasing and maintaining the subpopulations within the boundaries of the JBHR rather than working in areas that did not meet the narrow interpretation of ''secure'' habitat. These efforts resulted in some successful recovery projects such as growing and stabilizing the subpopulation on Tenasillahe Island, which is part of JBHR and currently one of the largest subpopulations in the Columbia River DPS. However, it also led the Service to put significant resources and time toward efforts that have shown less consistent success, such as establishing viable and stable herds on the Upper Estuary islands. At present, a total of 314 deer have been translocated in an effort to move CWTD to ''secure'' habitats. As discussed earlier in this section, some translocations yielded success (Ridgefield) and some failed to increase subpopulation numbers (Cottonwood Island and the Upper Estuary Islands).

Two subpopulations, Puget Island and Westport/Wallace Island, have maintained relatively large and stable numbers over the last 3 decades even though these areas are not under conservation ownership or agreement. The number of CWTD in these two areas clearly demonstrates a measure of security in the habitat regardless of the ownership of the land. If we look at population trends and stability, these two locations have provided more biological security to CWTD than the flood prone JBHR Mainland Unit, which is protected for the conservation of CWTD.

The 30-year population trends from Puget Island and Westport/Wallace Island make it clear that CWTD can maintain secure and stable populations on suitable habitat that is not formally set aside by acquisition, conservation easement, or agreement for the protection of the species. Within this context, we have re-evaluated the current status of CWTD under a broadened framework for what constitutes ''secure'' habitat. This now includes locations that, regardless of ownership status, have supported viable subpopulations of CWTD for 20 or more years, and have no anticipated change to land management in the foreseeable future that would make the habitat less suitable to CWTD.

While Puget Island and Westport/Wallace Island had previously not been considered ''secure'' habitat, they have been supporting two of the largest and most stable subpopulations in the Columbia River DPS since listing. Although CWTD numbers at these 2 locations have fluctuated, the Westport/Wallace Island subpopulation had 150 deer in 1984 and 164 deer in 2010, and the Puget Island population had 170 deer in 1984 and 227 deer in 2014 (Table 1). The Revised Recovery Plan identified Puget Island and the Westport area as suitable sources for CWTD translocations due in large part to their population stability. Subsequently, these two locations have been the donor source for numerous translocations over the last 30 years, including the removal of 23 deer from Puget Island and 10 deer from Westport as part of the 2013–2014 translocation effort. Removal of CWTD from these two locations on multiple occasions for the purpose of translocation has not resulted in any decrease in donor population numbers.

Since the late 1980s, the total acreage of tree plantations on Puget Island decreased by roughly half (Stonex 2012, pers. comm.). However, a proportional decrease in the numbers of CWTD did not occur. Furthermore, though Puget Island has experienced changes in land use and increases in development over time, such as the break-up of large agricultural farms into smaller hobby farms, the changes have not inhibited the ability of CWTD to maintain a very stable population on the island. The Wahkiakum Comprehensive Plan (2006) anticipates that future development on Puget Island will continue to be tree farms, agricultural farms, and rural residential (both low density with 1- to 2-ha (2.5- to 5-ac) lots and medium density with 0.4- to 1-ha (1- to 2.5-ac) lots), with a goal of preserving the rural character of the area (Wahkiakum County 2006, p. 392). Puget Island's population has grown at a nominal rate of 1 to 1.5 percent over the past 15 years; that past rate along with building permit growth over the last 5 years leads Wahkiakum County to project a population growth rate on the island of 1.5 percent through the 20-year ''plan horizon'' that extends through the year 2025 (Wahkiakum County 2006, p. 379). Because CWTD have demonstrated the ability to adapt to the type of development on the island, continued development of this type is not expected to impact CWTD on the island in the foreseeable future (Meyers 2013, pers. comm.). Therefore, the Service considers Puget Island secure habitat.

Apart from Wallace Island and the Westport Unit, most of the area where the Westport/Wallace Island subpopulation is located is under private ownership and a large portion of that land is owned and managed by one individual family. The family has managed the land for duck hunting for many years, implementing intensive predator control and maintaining levees as part of their land management activities. The Service suspects that CWTD reproduction in the Westport/Wallace Island subpopulation has benefited from this intensive predator control (Meyers 2013, pers. comm.). If the property owners alter the management regime or the property should change hands, the Westport/Wallace Island subpopulation could be negatively affected, particularly if the owners decide to remove the current levees, thereby inundating some of the CWTD habitat (Meyers 2013, pers. comm.). Because the stability of CWTD in this area appears to be so closely tied to one private landowner and their land management choices, there is less certainty as to the long-term security of this subpopulation and its associated habitat. As a result, although a small portion of the habitat for this subpopulation is protected for CWTD,

the Service does not currently recognize Westport/Wallace Island as secure habitat. However, given that the area has supported a healthy subpopulation of CWTD for several decades, the Service should consider securing this property through purchase or conservation agreement to ensure a stable management regime, thereby increasing recovery prospects for the Columbia River DPS.

With respect to the species' recovery criteria (U.S. Fish and Wildlife Service 1983, pp. 31–33), we currently have 4 viable subpopulations of CWTD: (1) Tenasillahe Island at 154 deer, (2) Puget Island at approximately 227 deer, (3) Westport/Wallace Island at 154 deer, and (4) the JBHR Mainland Unit at 88 deer (Table 1). Furthermore, because two of these viable subpopulations, Tenasillahe Island and Puget Island, are now considered secure, the Columbia River DPS has met the recovery criteria for downlisting to threatened status under the Act. The Westport/Wallace Island subpopulation has shown consistent stability over the last 30 years, on par with Puget Island and Tenasillahe Island, but its long-term security is less certain. The JBHR Mainland Unit has already rebounded in numbers to over 50 animals (2014 population estimate was 88 deer), and the set-back dike is in place to restore the stability of the habitat. In order for the Service to determine that the population has regained its secure status, several years of monitoring will be necessary to accurately assess the long-term response of the JBHR Mainland Unit population to both the removal of half its numbers in 2013, and the reduction in habitat from the construction of the setback dike.

**Summary of Factors Affecting the Species**

Section 4 of the Act and its implementing regulations (50 CFR part 424) set forth the procedures for listing species, reclassifying species, or removing species from listed status. ''Species'' is defined by the Act as including any species or subspecies of fish or wildlife or plants, and any distinct vertebrate population segment of vertebrate fish or wildlife that interbreeds when mature (16 U.S.C. 1532(16)). A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We must consider these same five factors in reclassifying (*i.e.,* downlisting) a species. We may downlist a species if the best available scientific and commercial data indicate that the species no longer meets the definition of endangered, but instead meets the definition of threatened due to: (1) The species' status has improved to the point that it is not in danger of extinction throughout all or a significant portion of its range, but the species is not recovered (as is the case with the CWTD); or (2) the original scientific data used at the time the species was classified were in error.

Determining whether a species has improved to the point that it can be downlisted requires consideration of whether the species is endangered or threatened because of the same five categories of threats specified in section 4(a)(1) of the Act. For species that are already listed as endangered or threatened, this analysis of threats is an evaluation of both the threats currently facing the species and the threats that are reasonably likely to affect the species in the foreseeable future following the delisting or downlisting and the removal or reduction of the Act's protections.

A species is ''endangered'' for purposes of the Act if it is in danger of extinction throughout all or a ''significant portion of its range'' and is ''threatened'' if it is likely to become endangered within the foreseeable future throughout all or a ''significant portion of its range.'' The word ''range'' in the significant portion of its range (SPR) phrase refers to the general geographical area in which the species occurs at the time a status determination is made. We published a final policy interpreting the phrase ''Significant Portion of its Range'' (SPR) (79 FR 37578). The final policy states that (1) if a species is found to be endangered or threatened throughout a significant portion of its range, the entire species is listed as an endangered species or a threatened species, respectively, and the Act's protections apply to all individuals of the species wherever found; (2) a portion of the range of a species is ''significant'' if the species is not currently endangered or threatened throughout all of its range, but the portion's contribution to the viability of the species is so important that, without the members in that portion, the species would be in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range; (3) the range of a species is considered to be the general geographical area within which that species can be found at the time Service or the National Marine Fisheries Service makes any particular status determination; and (4) if a vertebrate species is endangered or threatened throughout an SPR, and the population in that significant portion is a valid DPS, we will list the DPS rather than the entire taxonomic species or subspecies. For the purposes of this analysis, we will evaluate whether the currently listed species, the Columbia River DPS of CWTD, continues to meet the definition of endangered or threatened.

In considering what factors might constitute threats, we must look beyond the exposure of the species to a particular factor to evaluate whether the species may respond to the factor in a way that causes actual impacts to the species. If there is exposure to a factor and the species responds negatively, the factor may be a threat, and during the five-factor analysis, we attempt to determine how significant a threat it is. The threat is significant if it drives or contributes to the risk of extinction of the species, such that the species warrants listing as endangered or threatened as those terms are defined by the Act. However, the identification of factors that could impact a species negatively may not be sufficient to compel a finding that the species warrants listing. The information must include evidence sufficient to suggest that the potential threat is likely to materialize and that it has the capacity (*i.e.,* it should be of sufficient magnitude and extent) to affect the species' status such that it meets the definition of endangered or threatened under the Act.

In the following analysis, we evaluate the status of the Columbia River DPS of CWTD throughout all its range as indicated by the five-factor analysis of threats currently affecting, or that are likely to affect, the species within the foreseeable future.

*A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range.*

CWTD evolved as a prairie edge/woodland-associated species with historically viable populations that were not confined to river valleys (Bailey 1936, pp. 92–93). CWTD were then extirpated in all but two areas of their historical range: the Columbia River DPS area and the Douglas County DPS area. The remnant Columbia River DPS population was forced by anthropogenic factors (residential and commercial development, roads, agriculture, etc., causing fragmentation of natural habitats) into the lowland areas it now

inhabits. Urban, suburban, and agricultural areas now limit population expansion, and existing occupied areas support densities of CWTD indicative of low-quality habitats, particularly lower lying and wetter habitat than where the species would typically be found.

Loss of habitat is suspected as a key factor in historical CWTD declines; 12,140 ha (30,000 ac) of habitat along the lower Columbia River were converted for residential and large-scale agricultural use from 1870 to 1970 (Northwest Power and Conservation Council 2004, p. B4:13). Over time, CWTD were forced into habitat that was fragmented, wetter, and more lowland than what would be ideal for the species. The recovery of the Douglas County DPS reflects the availability of more favorable habitat (a mix of conifer and hardwood-dominated vegetation communities, including oak woodlands and savannah) and compatible land use practices, such as intensive sheep grazing (Franklin and Dyrness 1988, p. 110).

Though limited access to high-quality upland habitat in the Columbia River DPS remains the most prominent hindrance to CWTD dispersal and recovery today, the majority of habitat loss and fragmentation has already occurred. The most dramatic land use changes occurred during the era of hydroelectric and floodplain development in the Columbia River basin, beginning with the construction of Willamette Falls Dam in 1888 and continuing through the 1970s (Northwest Power and Conservation Council 2013, p. 1). Compared to the magnitude of change that occurred to CWTD habitat through activities associated with these types of development (*e.g.,* dredging, filling, diking, and channelization) (Northwest Power and Conservation Council 2004, p. III, 13–15), significant future changes to currently available habitat for the Columbia River DPS are not anticipated.

Recovery efforts for CWTD have, in large part, focused on formally protecting land for the recovery of the species through acquisitions and agreements such as JBHR, Crims Island, Cottonwood Island, and Wallace Island, as well as restoration activities to increase the quality of existing available habitat. To date, the Service has worked to conserve 3,604 ha (8,918 ac) of habitat for the protection of CWTD (U.S. Fish and Wildlife Service 2013, p. 20). Habitat restoration and enhancement activities on JBHR have improved the quality of habitat since the publication of the Revised Recovery Plan in 1983, and Ridgefield NWR now has an active habitat enhancement program in place to support the translocated CWTD. These efforts have added to the available suitable habitat for the Columbia River DPS and helped to offset some of the impacts from previous habitat loss.

Though much of the occupied habitat in the Columbia River DPS is fragmented, wetter than the species prefers, and more vulnerable to flooding, many variables influence CWTD survival. A mosaic of ownerships and protection levels does not necessarily hinder the existence of CWTD when land-use is compatible with the habitat needs of the deer. For example, on Puget Island, which is not formally set aside for the protection of CWTD, the fawn:doe (F:D) ratios are higher than on the protected JBHR Mainland Unit, and the area has supported a stable CWTD population without active management in the midst of continued small-scale development for several decades. Additionally, the Westport/Wallace Island subpopulation has long maintained stable numbers, even though most of the area is not managed for the protection of CWTD. The level of predation, level of disturbance, and condition of habitat all influence how CWTD can survive in noncontiguous habitats.

Flooding is a threat to CWTD habitat when browsing and fawning grounds become inundated for prolonged periods. In the past, significant flooding events have caused large-scale CWTD mortality and emigration from the JBHR Mainland Unit (U.S. Fish and Wildlife Service 2007, p. 1). The JBHR Mainland Unit experienced three major storm-related floods in 1996, 2006, and 2009. These flooding events were associated with a sudden drop in population numbers, followed by population recovery in the next few years. During some historical flooding events, CWTD abandoned and have not returned to low-lying areas that became inundated, particularly areas that continued to sustain frequent flooding such as Karlson Island.

A large proportion of all occupied CWTD habitat is land that was reclaimed from tidal inundation in the early 20th century by construction of dikes and levees for agricultural use (U.S. Fish and Wildlife Service 2010, p. 1:17). In recent years, there has been interest in restoring the natural tidal regime to some of this land, mainly for fish habitat enhancement. This restoration could reduce habitat for CWTD in certain areas where the majority of the subpopulation relies upon the reclaimed land. Since 2009, three new tide gates were installed on the JBHR Mainland Unit to improve fish passage and facilitate drainage in the event of large-scale flooding. When the setback levee on the refuge was completed in fall 2014, the original dike under Steamboat Slough Road was breached and the estuarine buffer created now provides additional protection from flooding to the JBHR Mainland Unit. However, it has also resulted in the loss or degradation of about 28 ha (70 ac) of CWTD habitat, which amounts to approximately 3.5 percent of the total acreage of the JBHR Mainland Unit.

The persistence of invasive species, especially reed canary grass, has reduced forage quality over much of CWTD's range, but it remains unclear as to how much this change in forage quality is affecting the overall status of CWTD. While CWTD will eat the grass, it is only palatable during early spring growth, or about 2 months in spring, and it is not a preferred forage species (U.S. Fish and Wildlife Service 2010, p. 3:12). Cattle grazing and mowing are used on JBHR lands to control the growth of reed canary grass along with tilling and planting of pasture grasses and forbs. This management entails a large effort that will likely be required in perpetuity unless other control options are discovered. Reed canary grass is often mechanically suppressed in agricultural and suburban landscapes, but remote areas, such as the upriver islands, experience little control. Reed canary grass thrives in wet soil and excludes the establishment of other grass or forb vegetation that is likely more palatable to CWTD. Increased groundwater due to sea level rise or subsidence of diked lands may exacerbate this problem by extending the area impacted by reed canary grass. However, where groundwater levels rise high enough and are persistent, reed canary grass will be drowned out and may be eradicated, though this rise in water level may also negatively affect CWTD. The total area occupied by reed canary grass in the future may therefore decrease, remain the same, or increase, depending on topography, land management, or both.

Competition with elk (*Cervus canadensis*) for forage on the JBHR Mainland Unit has historically posed a threat to CWTD (U.S. Fish and Wildlife Service 2004, p. 5). To address these concerns, JBHR staff trapped and removed 321 elk during the period from 1984 to 2001. Subsequently, JBHR staff conducted two antlerless elk hunts, resulting in a harvest of eight cow elk (U.S. Fish and Wildlife Service 2004, p. 13). The combination of these efforts and elk emigration reduced the elk population to fewer than 20 individuals.

The JBHR considers their elk reduction goal to have been met. Future increases in the population above 20 individuals may be controlled with a limited public hunt (U.S. Fish and Wildlife Service 2010, p. B–20). In a related effort, JBHR personnel have constructed roughly 4 miles (6.4 km) of fencing to deter elk immigration onto the JBHR (U.S. Fish and Wildlife Service 2004, p. 10).

*Climate Change*

Our analyses under the Act include consideration of ongoing and projected changes in climate. The terms ''climate'' and ''climate change'' are defined by the Intergovernmental Panel on Climate Change (IPCC). ''Climate'' refers to the mean and variability of different types of weather conditions over time, with 30 years being a typical period for such measurements, although shorter or longer periods also may be used (Intergovernmental Panel on Climate Change 2013, p. 1450). The term ''climate change'' thus refers to a change in the mean or variability of one or more measures of climate (*e.g.,* temperature or precipitation) that persists for an extended period, typically decades or longer, whether the change is due to natural variability, human activity, or both (Intergovernmental Panel on Climate Change 2013, p. 1450). Various types of changes in climate can have direct or indirect effects on species. These effects may be positive, neutral, or negative and they may change over time, depending on the species and other relevant considerations, such as the effects of interactions of climate with other variables (*e.g.,* habitat fragmentation) (Intergovernmental Panel on Climate Change 2007, pp. 8–14, 18–19). In our analyses, we use our expert judgment to weigh relevant information, including uncertainty, in our consideration of various aspects of climate change.

Environmental changes related to climate change could potentially affect CWTD occupying low-lying habitat that is not adequately protected by well-maintained dikes. Furthermore, even in areas that have adequate dikes built, the integrity of those dikes could be at risk of failure from climate change. Climatic models have predicted significant sea-level rise over the next century (Mote *et al.* 2014, p. 492). Rising sea levels could degrade or inundate current habitat, forcing some subpopulations of CWTD to move out of existing habitat along the Columbia River into marginal or more developed habitat. A rise in groundwater levels could alter vegetation regimes, lowering forage quality of CWTD habitat and allowing invasive plants to expand their range into new areas of CWTD habitat. The increase in ground water levels due to sea-level rise could also allow the threat of hoof rot to persist or increase.

Maintaining the integrity of existing flood barriers that protect CWTD habitat will be important to the recovery of the Columbia River DPS until greater numbers of CWTD can occupy upland habitat through recruitment, additional translocations, and natural range expansion. The JBHR Mainland Unit has experienced three major storm-related floods since 1996. While this could be a cluster of storms in the natural frequency of occurrence, it could also indicate increased storm intensity and frequency due to climate change effects. These flooding events have been associated with a sudden drop in the CWTD population (Table 1), which then slowly recovers. An increased rate of occurrence of these events, however, could permanently reduce the size of this subpopulation. The potential for increased numbers of flood events could also lead to increases in the occurrence of hoof rot and other deer maladies.

The National Wildlife Federation has employed a model to predict changes in sea level in Puget Sound, Washington, and along areas of the Oregon and Washington coastline. The study predicted an average rise of 0.28 m (0.92 ft) by 2050, and 0.69 m (2.26 ft) by 2100, in the Columbia River region (Glick *et al.* 2007, p. 73). A local rise in sea level would translate into the loss of some undeveloped dry land and tidal and inland fresh marsh habitats. By 2100, projections show that these low-lying habitats could lose from 17 to 37 percent of their current area due to an influx of saltwater. In addition, since the JBHR Mainland Unit and Tenasillahe Island were diked in the early 1900s, the land within the dikes has subsided and dropped to a level near or below groundwater levels. This in turn has degraded CWTD habitat quality in some areas. Although salt-water intrusion does not extend this far inland, the area experiences 2- to 2.5-m (7- to 8-ft) tidal shifts due to a backup of the Columbia River. Sea-level rise may further increase groundwater levels on both of these units, as levees do not provide an impermeable barrier to groundwater exchange.

Due to the reasons listed above, we find the effects of climate change to be a potential threat to some subpopulations of CWTD in the future, particularly the JBHR Mainland Unit and Tenasillahe Island subpopulations, but not the entire Columbia River DPS. Because of the low-lying nature of some currently occupied CWTD habitat in the Columbia River DPS, the long-term stability of the subpopulations in those areas may rely on the availability of and access to high-quality upland habitat protected from the effects of projected sea-level rise. The Columbia River DPS would benefit from the identification of additional suitable high-quality upland habitat and the development of partnerships with State wildlife agencies to facilitate the translocation of CWTD to these areas, as well as securing land with existing stable subpopulations, such as the Westport area.

Summary of Factor A

Habitat loss still remains a threat today, though a greater understanding of CWTD adaptation and persistence clearly indicates that the severity of the threat is less than previously thought. Stable populations of the species do persist in habitat that was previously dismissed as inadequate for long-term survival such as the subpopulations on Puget Island, Washington, and in Westport, Oregon (Westport/Wallace Island subpopulation). Historical habitat loss was largely a result of development and while this activity is still a limiting factor, we now understand that the type of development influences how CWTD respond. Areas such as Puget Island have been and are expected to continue experiencing the breakup of large agricultural farms into smaller hobby farms with a continued focus on low- to medium-density rural residential development. This type of change has not inhibited the ability of CWTD to maintain a stable population on Puget Island. Therefore, this type of development is not expected to impact CWTD on Puget Island in the foreseeable future. In contrast, areas like Willow Grove will likely see a continued change from an agricultural to a suburban landscape; this type of development may have a negative impact on CWTD depending on the density of development.

The Service's recovery efforts involving habitat acquisition and restoration have led to a corresponding increase in the amount and quality of habitat specifically protected for the benefit of CWTD. Habitat enhancement efforts have been focused primarily on the JBHR Mainland Unit, followed by Tenasillahe Island and Crims Island where attention has been focused on increasing the quality of browse, forage, and cover. There is also a new habitat enhancement program at Ridgefield NWR that is focused on increasing the amount of browse and forage available to CWTD. Finally, CWTD now have access to the upland areas at Ridgefield NWR, and it is expected that they will

respond positively to the higher quality habitat.

The rise in sea level predicted by climate change models could threaten any low-lying habitat of the Columbia River DPS not adequately protected by dikes, and also threaten the integrity of dikes providing flood control to certain subpopulations of CWTD. Therefore, the effects of climate change could potentially impact certain subpopulations of CWTD in the future, but climate change does not constitute a threat to the entire DPS now or in the foreseeable future. Overall, although the threat of habitat loss and modification still remains, it is lower than thought at the time the Recovery Plan was developed; this is due to habitat acquisition and enhancement efforts, as well as an overall better understanding of the influence of different types of development on CWTD populations.

*B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes*

Overutilization for commercial, scientific, or educational purposes is not a threat to CWTD. While historical overharvest of CWTD contributed to population decline, all legal harvest of CWTD in the Columbia River DPS ceased when CWTD was federally listed as endangered. Just after the establishment of the JBHR, poaching was not uncommon. Public understanding and views of CWTD have gradually changed however, and poaching is no longer considered a threat. Regulations and enforcement are in place to protect CWTD from overutilization, and a downlisting (and associated 4(d) rule) would not change this. There have only been a few cases of intentional shooting of CWTD through poaching in the 48 years since CWTD were first listed (Bergh 2014, pers. comm.). Though poaching cannot be completely ameliorated, this current level of poaching is not considered a threat. If subpopulations should decline, poaching could have a greater impact on CWTD numbers and would need to be monitored. Though overutilization was a factor that led to the listing of CWTD as federally endangered in 1967, it does not constitute a threat now or in the foreseeable future.

*C. Disease or Predation*

Disease

The Revised Recovery Plan lists necrobacillosis (hoof rot) as a primary causal factor in CWTD mortality on the JBHR (U.S. Fish and Wildlife Service 1983, p. 13). *Fusobacterium necrophorum* is identified as the etiological agent in most cases of hoof rot, although concomitant bacteria such as *Arcanobacterium pyogenes* may also be at play (Langworth 1977, p. 383). Damp soil or inundated pastures increase the risk of hoof rot among CWTD with foot injuries (Langworth 1977, p. 383). Among 155 carcasses recovered from 1974 to 1977, hoof rot was evident in 31 percent (n=49) of the cases, although hoof rot only attributed directly to 3 percent (n=4) of CWTD mortalities (Gavin *et al.* 1984, pp. 30–31). Currently, CWTD on the JBHR Mainland Unit have occasionally displayed visible evidence of hoof rot, and recent cases have been observed on Puget Island, but its prevalence is not known to be a limiting factor in population growth (U.S. Fish and Wildlife Service 2010, p. 4:53). Of the 49 CWTD captured from the JBHR Mainland Unit and Puget Island in 2013, none displayed evidence of hoof rot at the time of capture (U.S. Fish and Wildlife Service, unpublished data).

Deer hair loss syndrome (DHLS) was documented in black-tailed deer in northwest Oregon from 2000 to 2004 (Biederbeck 2004, p. 4). DHLS results when a deer with an immune system weakened by internal parasites is plagued with ectoparasites such as deer lice (*Damalinia* (*Cervicola*) spp.). The weakened deer suffer increased inflammation and irritation, which result in deer biting, scratching, and licking affected areas and, ultimately, removing hair in those regions. This condition is found most commonly among deer occupying low-elevation agricultural areas (below 183 m (600 ft) elevation). While the study found a higher instance in black-tailed deer, cases in CWTD have also been observed. Most cases (72 percent) of DHLS detected at the Saddle Mountain Game Management Unit in northwest Oregon were associated with black-tailed deer. Twenty-six percent of black-tailed deer surveyed in the Saddle Mountain Game Management Unit showed symptoms of DHLS, while only 7 percent of CWTD were symptomatic (Biederbeck 2004, p. 4). Additionally, cases were identified in CWTD in 2002 and 2003, but none of the CWTD surveyed in 2004 showed evidence of the disease (Biederbeck 2004, p. 4). CWTD captured during translocations in recent years have occasionally exhibited evidence of hair loss. Mild hair loss has been observed in a few fawns and yearlings (U.S. Fish and Wildlife Service 2010, p. 4:53).

DHLS is not thought to be highly contagious, nor is it considered to be a primary threat to CWTD survival, although it has been associated with deer mortality (Biederbeck 2002, p. 11; 2004, p. 7). Reports of DHLS among black-tailed deer in Washington have indicated significant mortality associated with the condition. In 2006, a high number of Yakima area mule deer (*Odocoileus hemionus*) mortalities were reported with symptoms of DHLS (Washington Department of Fish and Wildlife 2010, p. 1), although their mortality may be more related to a significant outbreak of lice in the population at the time. With respect to CWTD, however, there has been no documented mortality associated with the disease on the JBHR Mainland Unit (U.S. Fish and Wildlife Service 2010, p. 4:53) and DHLS is not a current or foreseeable threat.

Parasite loads were tested in 16 CWTD on the JBHR Mainland Unit and Tenasillahe Island in February of 1998 (Creekmore and Glaser 1999, p. 3). All CWTD tested via fecal samples showed evidence of the stomach worm *Haemonchus contortus.* Lung worm (*Parelaphostrongylus* spp.) and trematode eggs, possibly from liver flukes (*Fascioloides* spp.), were also detected. These results are generally not a concern among healthy populations, and even though the Columbia River DPS of CWTD has less than optimal forage and habitat quality available in some subpopulations, their relatively high parasite load has never been linked to mortality in the DPS. Parasites are not a current or future threat to CWTD, as the parasite load appears to be offset by a level of fecundity that supports stable or increasing populations.

Predation

Coyote predation on CWTD has been a problem for the Columbia River DPS, but careful attention to predator control has demonstrated that predation can be managed. Since 1983, studies have been conducted to determine the primary factors affecting fawn survival throughout the range of the Columbia River DPS of CWTD (U.S. Fish and Wildlife Service, unpublished data), and coyote predation is thought to be the most significant impact on fawn recruitment. On the JBHR Mainland Unit, Clark *et al.* (2010, p. 1) fitted 131 fawns with radio collars and tracked them for the first 150 days of age from 1978 to 1982, and then again from 1996 to 2000 (16 deer were dropped from the analyses due to collar issues). The authors found only a 23 percent survival rate. Coyote predation was determined to be the primary cause of fawn mortality, accounting for 69 percent (n=61) of all documented mortalities. In comparison, disease and starvation accounted for 16 percent of known fawn mortalities. The cause(s) of the

remaining 15 percent of mortalities was unknown.

Between 1997 and 2008, 46 coyotes were removed from the JBHR Mainland Unit by the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (U.S. Fish and Wildlife Service 2010, p. 4:62). In some cases, removal has been correlated with an increase in fawn survival. In 1996, the estimated JBHR Mainland Unit Fawn:Doe (F:D) ratio was 15:100. The following year, after 9 coyotes were removed, the F:D ratio increased to 61:100 (U.S. Fish and Wildlife Service 2010, p. 4:54). On Tenasillahe Island, the average F:D ratio between 2001 and 2003 was 6:100. No coyotes were removed during that time. Over the next 5 years (2004 to 2008), 31 coyotes were removed, and the F:D ratio improved and averaged 37:100. Clark *et al.* (2010, p. 14) suggested shifting the timing of coyote removal from winter/early spring to the critical fawning period of June to September. This suggestion has been included in the comprehensive conservation plan for the JBHR and has been implemented since 2008. Since shifting the timing of predator control, a F:D ratio of 37:100 has been maintained on the JBHR Mainland Unit. Due to the evident success of predator control efforts at JBHR, Ridgefield NWR began implementing a coyote control program in May 2013, to support the newly translocated CWTD.

It is common for private landowners in the region to practice predator control on their property, and we have no information that leads us to anticipate a change in the level of predator control on these lands in the foreseeable future (Meyers 2013, pers. comm.). Additionally, coyote control has been in practice on refuge lands for some time and will continue to be implemented on both JBHR and Ridgefield NWR to support the translocated populations. While coyote control efforts in the Columbia River DPS have met with some success, there may be other factors, such as habitat enhancement, also influencing increased ratios in certain CWTD subpopulations. Doe survival in the DPS has been shown to rely more heavily on the availability of nutritious forage than predation pressures, even though fawn predation within subpopulations is most likely influenced by coyote population cycles (Phillips 2009, p. 20). Furthermore, deer and elk populations can be depressed by the interplay between various factors such as habitat quality and predation pressures (Oregon Department of Fish and Wildlife 2013, p. 8).

As CWTD move towards full recovery and increase in numbers as well as occupation of higher quality habitat such as Ridgefield NWR, predation will be offset by increased fecundity. Also, the rate of predator control currently in place is not anticipated to change in the foreseeable future. An intermediate focus on coyote control for the translocated populations on refuge lands (and monitoring of predation by other species such as bobcat), used in conjunction with long-term improvement of habitat conditions, is anticipated to yield fecundity increases that will lead to self-sustaining population levels. While predator control is in practice in some subpopulations, predation at the DPS scale is not a threat.

Summary of Factor C

Diseases naturally occur in wild ungulate populations. Diseases such as hoof rot, DHLS, and parasite loads can often work through a population without necessarily reducing the overall population abundance. Even though the relatively high parasite load in the Columbia River DPS of CWTD is compounded by the additional stressor of suboptimal forage and habitat quality for some subpopulations, the load itself has never been linked to mortality in the DPS. Disease in the Columbia River DPS of CWTD is not a threat now or in the foreseeable future.

Predation in the Columbia River DPS of CWTD is not a threat now or in the foreseeable future. Depredation of fawns by coyotes is common in the Columbia River DPS; however many factors work in conjunction with each other to determine overall level of fawn recruitment. Coyote control is in practice on some private lands in the region as well as both JBHR and Ridgefield NWR, and the level of control is not anticipated to change in the foreseeable future. As CWTD increase in numbers through continued recovery efforts, population increases will offset the impact of predation.

*D. The Inadequacy of Existing Regulatory Mechanisms*

Under this factor, we examine whether existing regulatory mechanisms are inadequate to address the threats to the CWTD discussed under other factors. Section 4(b)(1)(A) of the Act requires the Service to take into account ''those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species. . . .'' In relation to Factor D under the Act, we interpret this language to require the Service to consider relevant Federal, State, and Tribal laws, regulations, and other such mechanisms that may minimize any of the threats we describe in threat analyses under the other four factors, or otherwise enhance conservation of the species. We give strongest weight to statutes and their implementing regulations and to management direction that stems from those laws and regulations. An example would be State governmental actions enforced under a State statute or constitution, or Federal action under statute.

The following section includes a discussion of State, local, or Federal laws, regulations, or treaties that apply to CWTD. It includes legislation for Federal land management agencies and State and Federal regulatory authorities affecting land use or other relevant management. Before CWTD was federally listed as endangered in 1967, the species had no regulatory protections. Existing laws were considered inadequate to protect the subspecies. The CWTD was not officially recognized by Oregon or Washington as needing any special protection or given any special consideration under other environmental laws when project impacts were reviewed.

The CWTD is now designated as ''State Endangered'' by the WDFW. Although there is no State Endangered Species Act in Washington, the Washington Fish and Wildlife Commission has the authority to list species (Revised Code of Washington (RCW) 77.12.020), and they listed CWTD as endangered in 1980. State listed species are protected from direct take, but their habitat is not protected (RCW 77.15.120). Under the Washington State Forest Practices Act, the Washington State Forest Practices Board has the authority to designate critical wildlife habitat for State-listed species affected by forest practices (Washington Administrative Code (WAC) 222–16–050, WAC 222–16–080), though there is no critical habitat designated for CWTD.

The WDFW's hunting regulations remind hunters that CWTD are listed as endangered by the State of Washington (Washington Department of Fish and Wildlife 2015, pp. 18, 20). This designation means it is illegal to hunt, possess, or control CWTD in Washington. There has been one documented case of an accidental shooting of CWTD by a black-tailed deer hunter due to misidentification, and a few cases of intentional shooting of CWTD through poaching in the 48 years since CWTD were first listed (Bergh 2014, pers. comm.). The State endangered designation adequately protects individual CWTD from direct

harm, but offers no protection to CWTD habitat.

The Washington State Legislature established the authority for Forest Practices Rules (FPR) in 1974. The Forest Practices Board established rules to implement the Forest Practices Act in 1976, and has amended the rules continuously over the last 30 years. The WDNR is responsible for implementing the FPR and is required to consult with the WDFW on matters relating to wildlife, including CWTD. The FPR do not specifically address CWTD, but they do address endangered and threatened species under their ''Class IV-Special'' rules (WAC 222–10–040). If a landowner's forestry-related action would ''reasonably . . . be expected, directly or indirectly, to reduce appreciably the likelihood of the survival or recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species,'' the landowner would be required to comply with the State's Environmental Policy Act guidelines before they could perform the action in question. The guidelines can require the landowner to employ mitigation measures, or they may place conditions on the action such that any potentially significant adverse impacts would be reduced. Compliance with the FPR does not substitute for or ensure compliance with the Federal Endangered Species Act. A permit system for the scientific taking of State-listed endangered and threatened wildlife species is managed by the WDFW.

Though CWTD (Columbia River DPS) are not listed as endangered or threatened by the State of Oregon, they are classified as a ''protected mammal'' by the State of Oregon because of their federally endangered designation, and this will not change if CWTD are federally downlisted to threatened (Oregon Department of Fish and Wildlife 2012, p. 1). The CWTD is designated as ''Sensitive-Vulnerable'' by the Oregon Department of Fish and Wildlife (ODFW). The ''Sensitive'' species classification was created under Oregon's Sensitive Species Rule (Oregon Administrative Rules (OAR) 635–100–040) to address the need for a proactive species conservation approach. The Sensitive Species List is a nonregulatory tool that helps focus wildlife management and research activities, with the goal of preventing species from declining to the point of qualifying as ''endangered'' or ''threatened'' under the Oregon Endangered Species Act (Oregon Revised Statutes (ORS) 496.171, 496.172, 496.176, 496.182 and 496.192). Species designated as Sensitive-Vulnerable are those facing one or more threats to their populations, habitats, or both. Vulnerable species are not currently imperiled with extirpation from a specific geographic area or the State, but could become so with continued or increased threats to populations, habitats, or both. This designation encourages but does not require the implementation of any conservation actions for the species. The ODFW does not allow hunting of CWTD, except for controlled hunt of the federally delisted Douglas County DPS in areas near Roseburg, Oregon (Oregon Department of Fish and Wildlife 2015, p. 39). There have been no documented cases of accidental or intentional killing of CWTD in Oregon (Boechler 2014, pers. comm.).

The State may authorize a permit for the scientific taking of a federally endangered or threatened species for ''activities associated with scientific resource management such as research, census, law enforcement, habitat acquisition and maintenance, propagation and transplantation.'' An incidental taking permit or statement issued by a Federal agency for a species listed under the Federal Endangered Species Act ''shall be recognized by the state as a waiver for any state protection measures or requirements otherwise applicable to the actions allowed under the federal permit'' (ORS 96.172(4)).

The Oregon Forest Practices Act (ORS 527.610 to 527.992 and OAR Chapter 629, Divisions 600 to 665) lists protection measures specific to private and State-owned forested lands in Oregon. These measures include specific rules for overall maintenance of fish and wildlife, and specifically federally endangered and threatened species including the collection and analysis of the best available information and establishing inventories of these species (ORS 527.710 section 3(a)(A)). Compliance with the forest practice rules does not substitute for or ensure compliance with the Endangered Species Act.

The Oregon Department of Forestry recently updated their Northwest Oregon Forest Plan (Oregon Department of Forestry 2010). There is no mention of CWTD in their Forest Plan, but they do manage for elk and black-tailed deer. Landowners and operators are advised that Federal law prohibits a person from taking certain endangered or threatened species that are protected under the Endangered Species Act (Act) (OAR 629–605–0105).

Federal status under the Act continues to provide additional protections to CWTD not available under State laws. Other than the ''take'' that would be allowed for the specific activities outlined in the accompanying proposed 4(d) rule, ''take'' of CWTD is prohibited on all lands without a permit or exemption from the Service. Furthermore, the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd *et seq.*) provides additional protection to CWTD. Where CWTD occur on NWR lands (JBHR and Ridgefield NWR), this law protects CWTD and their habitats from large-scale loss or degradation due to the Service's mission ''to administer a national network of lands . . . for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats.''

The JBHR was established in Washington in 1971, specifically to protect and manage the endangered CWTD. The JBHR includes several subpopulations (Mainland Unit, Tenasillahe Island, and a portion of Westport/Wallace Island), supporting a total of approximately one third of the DPS population of CWTD. The JBHR's CCP includes goals for the following: (1) Protecting, maintaining, enhancing, and restoring habitats for CWTD; (2) contributing to the recovery of CWTD by maintaining minimum population sizes on JBHR properties; and (3) conducting survey and research activities, assessments, and studies to enhance species protection and recovery (U.S. Fish and Wildlife Service 2010, pp. 2:48–76). The JBHR implements habitat improvement and enhancement actions on a regular basis as well as predator management. As of early 2013, Ridgefield NWR is home to a new subpopulation of CWTD. Habitat conditions on Ridgefield NWR are favorable for CWTD, and predator control is being implemented. Regular monitoring will occur to assess the viability of the subpopulation over time. Both JBHR and Ridgefield NWR must conduct section 7 consultations under the Act for any refuge activity that may result in adverse effects to CWTD.

Summary of Factor D

Although additional regulatory mechanisms have been developed for the Columbia River DPS since its listing under the Act and these mechanisms are working as designed and help to minimize threats, they do not fully ameliorate the threats to the species and its habitat. At present without the protections of the Act, the existing regulatory mechanisms for the Columbia River DPS remain inadequate.

*E. Other Natural or Manmade Factors Affecting Its Continued Existence*

Hybridization

Hybridization with black-tailed deer was not considered a significant threat to the Columbia River DPS of CWTD at the time of the development of the Revised Recovery Plan (U.S. Fish and Wildlife 1983, p. 40). Later studies raised some concern over the presence of black-tailed deer genes in the isolated Columbia River DPS population. Gavin and May (1988, p. 1) found evidence of hybridization in 6 of 33 samples of CWTD on the JBHR Mainland Unit and surrounding area. A subsequent study revealed evidence of hybridization on Tenasillahe Island, but not the JBHR Mainland Unit (Piaggio and Hopken 2009, p. 18). On Tenasillahe Island, 32 percent (8) of the 25 deer tested and identified as CWTD contained genes from black-tailed deer. Preliminary evidence shows no morphological differences in CWTD/black-tailed deer hybrids, suggesting molecular analysis may be the only analytic tool in tracking hybridization. These data suggest that these genes may have been due to a single hybridization event that is being carried through the Tenasillahe Island population.

Translocation efforts have at times placed CWTD in areas that support black-tailed deer populations. While few black-tailed deer inhabit the JBHR Mainland Unit or Tenasillahe Island, the Upper Estuary Islands population may experience more interspecific interactions. Aerial FLIR survey results in 2006 detected 44 deer on the 4-island complex of Fisher/Hump and Lord/Walker. Based upon the proportion of CWTD to black-tailed deer sightings using trail cameras on these islands, Service biologists estimated that, at most, 14 of those detected were CWTD (U.S. Fish and Wildlife Service 2007, p. 1). A study conducted in 2010 by the JBHR and the National Wildlife Research Center using fecal samples collected on Crims, Lord, and Walker Islands showed no hybridization in any of the samples collected, suggesting a low tendency to hybridize even in island situations (Piaggio and Hopken 2010, p. 14). The actual magnitude of hybridization has probably not changed since the listing of CWTD; however there is not enough data available to confirm this assumption. Hybridization might affect the genetic viability of the Columbia River DPS, and additional research regarding hybridization could give broader insight to the implications and occurrence of this phenomenon, and how it may influence subspecies designation. Although a more complete data set would provide more conclusive information regarding hybridization in CWTD, based upon the minor level of detections of black-tailed deer genetic material and the complete lack of any evidence of hybridization on several islands, we find that hybridization is not a threat to the Columbia River DPS.

Vehicle Collisions

Because deer are highly mobile, collisions between CWTD and vehicles do occur, but the number of collisions in the Columbia River DPS has not prevented the DPS population from increasing over time and meeting some recovery criteria. The frequency of collisions is dependent on the proximity of a subpopulation to roads with high traffic levels, and collisions with CWTD have been most frequent among deer that have been translocated to areas that are relatively close to high trafficked roads. In 2010, 15 deer were translocated to Cottonwood Island, Washington, from Westport, Oregon. Seven of those translocated deer swam off the island and were killed by collisions with vehicles on U.S. Highway 30 in Oregon, and on Interstate 5 in Washington (Cowlitz Indian Tribe 2010, p. 3). By contrast, of the 58 deer that were translocated to Ridgefield NWR in 2013 and 2014, only 3 have been struck by vehicles, and all 3 were struck after wandering off refuge land. Because of its proximity to Highway 4 in Washington, JBHR sees occasional collisions between vehicles and CWTD on or near the refuge. Refuge personnel recorded four CWTD killed by vehicle collisions in 2010, along Highway 4 and on the JBHR Mainland Unit. These were deer that were either observed by Service personnel or reported directly to the JBHR.

The Washington Department of Transportation removes road kills without reporting species details to the JBHR, so the actual number of CWTD struck by cars in Washington is probably slightly higher than the number of cases of which JBHR staff is aware. Since the 2013 translocation, ODFW has an agreement with the Oregon Department of Transportation (ODOT) that ODOT personnel assigned to stations along Highway 30 will report any CWTD mortalities. So far, they have been contacting the Oregon State Police and occasionally ODFW staff when they find a mortality with a collar or ear tags. It is uncertain if the ODOT staff report unmarked CWTD mortalities (VandeBergh 2013, pers. comm.).

Although the number of deer collisions may increase over time as CWTD populations expand in both numbers and range, the rate of collisions in proportion to the Columbia River DPS population size is not currently a problem and is not expected to rise in the future. Therefore, vehicle collisions are unlikely to ever be a threat to the Columbia River DPS.

Summary of Factor E

Low levels of hybridization have recently been detected between black-tailed deer and CWTD on JBHR (Piaggio and Hopken 2010, p. 15). Future genetics work could give a broader insight into the implications and occurrence of this phenomenon. Piaggio and Hopken revealed a low genetic diversity among CWTD, which compounds the threat of hybridization (2010, pp. 16–17). An increase in the incidence of hybridization beyond current levels could potentially affect the subspecies designation of CWTD. However, Piaggio and Hopken concluded that although hybridization can occur between CWTD and black-tailed deer, it is not a common or current event (2010, p. 16). The two species will preferentially breed within their own taxa, and their habitat preferences differ somewhat. Therefore, hybridization does not constitute a threat now or in the foreseeable future. The number of deer/vehicle collisions may increase over time as CWTD expand in numbers and range, but the overall rate of collisions is not expected to increase. Therefore, vehicle collisions do not constitute a threat now or in the foreseeable future.

**Overall Summary of Factors Affecting CWTD**

Based on the most recent comprehensive survey data from 2011 and 2014, the Columbia River DPS has approximately 830 CWTD, with 4 viable subpopulations, 2 of which are considered secure (Tenasillahe Island and Puget Island). The current range of CWTD in the lower Columbia River area has been expanded approximately 80.5 km (50 mi) upriver from its easternmost range of Wallace Island in 1983, to Ridgefield, Washington, presently. The Ridgefield NWR population is expected to grow and represent an additional viable subpopulation, as defined in the recovery plan. Furthermore, the JBHR Mainland unit has returned to a level above 50 animals and will likely regain its secure status in the near future. The Columbia River DPS has consistently exceeded the minimum population criteria of 400 deer over the past 2 decades, and though the JBHR Mainland Unit subpopulation has experienced a decline from the unsustainable levels of the late 1980s, it has stabilized to

population levels at or near the carrying capacity of the habitat.

Threats to the Columbia River DPS from habitat loss or degradation (Factor A) still remain and will likely continue into the foreseeable future in the form of habitat alteration, but are less severe than previously thought due to a greater understanding of the effects of land use and habitat management on CWTD. Overutilization (Factor B) is not a threat. Predation and disease (Factor C) in the Columbia River DPS of CWTD are not threats. Depredation of fawns by coyotes does occur in the Columbia River DPS; however many factors work in conjunction with each other to determine overall level of fawn recruitment. Without the protections of the Act, the existing regulatory mechanisms for the Columbia River DPS remain inadequate (Factor D). Vehicle collisions, disease, and hybridization (Factor E) are not threats.

**Proposed Determination**

As required by the Act, we considered the five factors in assessing whether the Columbia River DPS of CWTD is endangered or threatened throughout all or a significant portion of its range. We carefully examined the best scientific and commercial information available regarding the past, present, and future threats faced by the DPS. We reviewed the information available in our files and other available published and unpublished information, and we consulted with recognized experts and State and Tribal agencies. During this process, we found the Columbia River DPS is still affected by habitat loss and degradation, and some subpopulations may potentially be affected in the future by habitat changes resulting from the effects of climate change, but we did not identify any factors that are likely to reach a magnitude that currently threatens the continued existence of the DPS.

Our analysis indicates that the Columbia River DPS of CWTD is not in danger of extinction throughout all of its range and does not, therefore, meet the definition of an endangered species. The Act defines ''endangered species'' as any species which is ''in danger of extinction throughout all or a significant portion of its range,'' and ''threatened species'' as any species which is ''likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.'' The term ''species'' includes ''any subspecies of fish or wildlife or plants, and any distinct population segment [DPS] of any species of vertebrate fish or wildlife which interbreeds when mature.'' Furthermore, as described in our 2014 policy (79 FR 37578, July 1, 2014), a portion of the range of a species is 'significant' (SPR) if the species is not currently endangered or threatened throughout all of its range, but the portion's contribution to the viability of the species is so important that, without the members in that portion, the species would be in danger of extinction, or likely to become so in the foreseeable future, throughout all of its range. Because we find the CWTD is threatened (still in danger of extinction in the foreseeable future) based on its status throughout all its range due to the continued threat of habitat loss, that ends the SPR inquiry. Therefore, we propose to reclassify the Columbia River DPS of CWTD from an endangered species to a threatened species under the Act. Additionally, although the DPS has yet to fully meet the Recovery Plan criteria for delisting, it now meets the definition of a threatened species.

**Effects of the Proposed Rule**

This proposal, if made final, would revise 50 CFR 17.11(h) to reclassify the Columbia River DPS of CWTD from endangered to threatened. Reclassification of CWTD from endangered to threatened would provide recognition of the substantial efforts made by Federal, State, and local government agencies; Tribes; and private landowners to recover the species. Adoption of this proposed rule would formally recognize that this species is no longer at risk of extinction and therefore does not meet the definition of endangered, but is still impacted by habitat loss and degradation of habitat to the extent that the species meets the definition of a threatened species (a species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range) under the Act. However, this proposed reclassification would not significantly change the protection afforded this species under the Act. Other than the ''take'' that would be allowed for the specific activities outlined in the accompanying proposed 4(d) rule, the regulatory protections of the Act would remain in place. Anyone taking, attempting to take, or otherwise possessing a CWTD, or parts thereof, in violation of section 9 of the Act would still be subject to a penalty under section 11 of the Act, except for the actions that would be covered under the 4(d) rule. Whenever a species is listed as threatened, the Act allows promulgation of a rule under section 4(d). These rules may prescribe conditions under which take of the threatened species would not be a violation of section 9 of the Act. A 4(d) rule is proposed for CWTD.

**4(d) Rule**

The purposes of the Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in the Act. When a species is listed as endangered, certain actions are prohibited under section 9 of the Act, as specified in 50 CFR 17.21. These include, among others, prohibitions on take within the United States, within the territorial seas of the United States, or upon the high seas; import; export; and shipment in interstate or foreign commerce in the course of a commercial activity.

The Act does not specify particular prohibitions and exceptions to those prohibitions for threatened species. Instead, under section 4(d) of the Act, the Secretary is authorized to issue regulations deemed necessary and advisable to provide for the conservation of threatened species. The Secretary also has the discretion to prohibit by regulation with respect to any threatened species any act prohibited under section 9(a)(1) of the Act. Exercising this discretion, the Service has by regulation applied those prohibitions to threatened species unless a special rule is promulgated under section 4(d) of the Act (''4(d) rule'') (50 CFR 17.31(c)). Under 50 CFR 17.32, permits may be issued to allow persons to engage in otherwise prohibited acts for certain purposes unless a special rule provides otherwise.

A 4(d) rule may include some or all of the prohibitions and authorizations set out at 50 CFR 17.31 and 17.32, but also may be more or less restrictive than those general provisions. For the Columbia River DPS of CWTD, the Service has determined that a 4(d) rule is appropriate. As a means to facilitate conservation of CWTD in the Columbia River DPS and expansion of their range by increasing flexibility in management activities for our State and Tribal partners and private landowners, we propose to issue a rule for this species under section 4(d) of the Act. This 4(d) rule would only apply if and when the Service finalizes the reclassification of the Columbia River DPS of CWTD as threatened.

Under the proposed 4(d) rule, the following forms of take would not be prohibited:

• Take by landowners or their agents conducting intentional harassment not likely to cause mortality if they have obtained a permit from the applicable State conservation agency;

• Take of problem CWTD (as defined under Provisions of the 4(d) Rule, below) by Federal or State wildlife management agency or private landowners acting in accordance with a permit obtained from a State conservation agency;

• Take by private landowners that is accidental and incidental to an otherwise permitted and lawful activity to control damage by black-tailed deer, and if reasonable due care was practiced to avoid such taking;

• Take by black-tailed deer hunters if the take was accidental and incidental to hunting done in full compliance with the State hunting rules, and if reasonable due care was practiced to avoid such taking;

• Take by designated Tribal employees and State and local law enforcement officers to deal with sick, injured, or orphaned CWTD;

• Take by State-licensed wildlife rehabilitation facilities when working with sick, injured, or orphaned CWTD; and

• Take under permits issued by the Service under 50 CFR 17.32. Other than these exceptions, the provisions of 50 CFR 17.31(a) and (b) would apply.

The proposed 4(d) rule targets these activities to facilitate conservation and management of CWTD where they currently occur through increased flexibility for State wildlife management agencies, and to encourage landowners to facilitate the expansion of CWTD's range by increasing the flexibility of management of the deer on their property (see Justification, below). Activities on Federal lands or with any Federal agency involvement will still need to be addressed through consultation under section 7 of the Act. Take of CWTD in defense of human life in accordance with 50 CFR 17.21(c)(2) or by the Service or designated employee of a State conservation agency responding to a demonstrable but nonimmediate threat to human safety in accordance with 50 CFR 17.21(c)(3)(iv) (primarily in the event that a deer interferes with traffic on a highway) is not prohibited. Any deterence activity that does not create a likelihood of injury by significantly disrupting normal CWTD behavioral patterns such as breeding, feeding, or sheltering is not take and is therefore not prohibited under section 9. Noninjurious deterrence activities for CWTD damage control may include yelling at the deer, use of repellants, fencing and other physical barriers, properly deployed noise-making devices (including explosive devices such as propane cannons, cracker shells, whistlers, etc.), scarecrows, plant protection devices (bud caps, netting, tree tubes, etc.), and artificial lighting.

If there is potential that an activity would interrupt normal CWTD behavior to the point where the animal would stop feeding or not find adequate cover, creating a likelihood of injury, then the activity would have the potential to cause take in the form of harassment. Under this proposed 4(d) rule, if the activity is not likely to be lethal to CWTD, it would be classified as intentional harassment not likely to cause mortality and would be allowed if the activity is carried out under and according to a legally obtained permit from the Oregon or Washington State conservation agency. Actions that may create a likelihood of injury, but are determined by State wildlife biologists not likely to cause mortality, may include the use of nonlethal projectiles (including paintballs, rubber bullets, pellets or ''bb's'' from spring- or air-propelled guns, etc.) or herding or harassing with dogs, and would only be allowed if the activity is carried out under and according to a legally obtained permit from the Oregon or Washington State conservation agency.

This proposed 4(d) rule would also allow a maximum of 5 percent of the DPS to be lethally taken annually for the following activities combined: (1) Damage management of problem CWTD, (2) misidentification during black-tailed deer damage management, and (3) misidentification during black-tailed deer hunting. The identification of a problem CWTD will occur when the State conservation agency or Service determines in writing that: (1) A CWTD is causing more than *de minimus* negative economic impact to a commercial crop; (2) previous efforts to alleviate the damage through nonlethal methods have been ineffective; and (3) there is a reasonable certainty that additional property losses will occur in the near future if a lethal control action is not implemented.

The current estimated population of the DPS is 850 deer; therefore 5 percent would currently equate to 43 deer. We would set the annual allowable take at 5 percent of the most current annual population estimate of the DPS to provide sufficient flexibility to our State wildlife agency partners in the management of CWTD and to strengthen our partnership in the recovery of the DPS. Although the fecundity and overall recruitment rate is strong and will allow the DPS to persist and continue to recover even with take up to the maximum allowable 5 percent, we do not expect that the number of deer taken per year will ever exceed 2 percent of the DPS per year for the reasons detailed in the following paragraph.

In 2013 and 2014, the Service conducted an exceptional amount of direct management on CWTD populations through translocation events; during that time, out of the 47 CWTD that were translocated, only 3 were injured or killed during capture or release. Because no damage management activities have been required for successfully translocated CWTD, no CWTD have been injured or killed as a result of damage management activities. Furthermore, the Service expects that most CWTD will respond to noninjurious or nonlethal means of dispersal and that take of problem CWTD will not often be necessary. We are, therefore, confident that the amount of CWTD taken under this proposed 4(d) rule during CWTD damage management actions would be relatively low. Additionally, the Service expects that the potential for accidental shooting by mistaking a CWTD for a black-tailed deer would be quite low because there has been only one documented case of an accidental shooting of CWTD by a black-tailed deer hunter due to misidentification (Bergh 2014, pers. comm.) and there are no documented accidental shootings of CWTD during black-tailed deer damage management. The 2015 big game hunting regulations in both Oregon and Washington provide information on distinguishing between black-tailed deer and CWTD and make it clear that shooting CWTD is illegal under State law (Oregon Department of Fish and Wildlife 2015, p. 39; Washington Department of Fish and Wildlife 2015, pp. 18, 20). Even with this proposed 4(d) rule in place, a hunter who shot a CWTD due to misidentification would still be required under the Act to report the incident to the Service, required under State law to report the incident to State authorities, and would still be subject to potential prosecution under State law.

Because the maximum amount of take allowed for these activities would be a percentage of the DPS population in any given year, the exact number of CWTD allowed to be taken would vary from year to year in response to each calendar year's most current estimated population. As mentioned above, we do not expect that the number of deer taken would ever exceed 2 percent of the DPS per year. If take does go beyond 2 percent of the DPS population in a given year, the Service would convene a meeting with the Oregon Department of

Fish and Wildlife and the Washington Department of Fish and Wildlife to discuss CWTD management and strategies to minimize further take from these activities for the rest of the year. If take should exceed 5 percent of the total DPS population in any given year, no further take would be allowed for these activities in the DPS as a whole, and, should any further take occur, it would be subject to potential prosecution under the Act.

**Justification**

As the Columbia River DPS of CWTD grows in number and range, the deer are facing increased interaction and potential conflict with the human environment. If finalized, the reclassification of the Columbia River DPS of CWTD would allow employees of State conservation agencies operating a conservation program pursuant to the terms of a cooperative agreement with the Service in accordance with section 6(c) of the Act, and who are designated by their agencies for such purposes, and who are acting in the course of their official duties, to take CWTD to carry out conservation programs (see 50 CFR 17.31(b)). However, there are many activities carried out or managed by the States, Tribes, and private landowners that help reduce conflict with CWTD and thereby facilitate the movement of CWTD across the landscape, but would not be afforded take allowance under reclassification alone. These activities include CWTD damage management, black-tailed deer damage management, and black-tailed deer hunting. The proposed 4(d) rule would provide incentive to States, Tribes, and private landowners to support the movement of CWTD across the landscape by alleviating concerns about unauthorized take of CWTD.

One of the limiting factors in the recovery of the Columbia River DPS has been the concern of landowners regarding CWTD on their property due to the potential property damage from the species. Landowners express concern over their inability to prevent or address the damage because of the threat of penalties under the Act. Furthermore, State wildlife agencies expend resources addressing landowner complaints regarding potential CWTD damage to their property, or concerns from black-tailed deer hunters who are hunting legally but might accidentally shoot a CWTD even after reasonable due care was practiced to avoid such taking. By providing more flexibility to the States, Tribes, and landowners regarding management of CWTD, we would enhance support for both the movement of CWTD within areas where they already occur, as well as the expansion of the subspecies' range into additional areas of Washington and Oregon through translocations.

The proposed 4(d) rule would address intentional CWTD damage management by private landowners and State and Tribal agencies; black-tailed deer damage management and hunting; and management of sick, injured, and orphaned CWTD by Tribal employees, State and local law enforcement officers, and State licensed wildlife rehabilitation facilities. Addressing these targeted activities that may normally result in take under section 9 of the Act would increase the incentive for landowners and land managers to allow CWTD on their property, and provide enhanced options for State wildlife agencies with respect to CWTD damage management and black-tailed deer management, thereby encouraging the States' participation in recovery actions for CWTD.

We believe the actions and activities that would be allowed under the 4(d) rule, while they may have some minimal level of harm or disturbance to individual CWTD in the Columbia River DPS, would not be expected to adversely affect efforts to conserve and recover the DPS and, in fact, should facilitate these efforts. The take of CWTD from these activities would be strictly limited to a maximum of 5 percent of the most current annual DPS population estimate in order to have a negligible impact on the overall DPS population. Though there would be a chance for lethal take to occur, recruitment rates are high enough in the DPS to allow for continued population growth despite the take that would be allowed in this proposed rule. This proposed special rule would not be made final until we have reviewed and fully considered comments from the public and peer reviewers.

**Provisions of the 4(d) Rule**

The increased interaction of CWTD with the human environment increases the potential for property damage caused by CWTD, as well as the potential for conflict with legal black-tailed deer management activities. Therefore, this proposed 4(d) rule would increase the flexibility of CWTD management for the States, Tribes, and private landowners by allowing take of CWTD resulting from CWTD damage management, and black-tailed deer damage management and hunting. The maximum allowable annual take per calendar year for these activities combined would be 5 percent of the most current annual CWTD DPS population estimate.

A State conservation agency would be able to issue permits to landowners or their agents to harass CWTD on lands they own, rent, or lease if the State conservation agency determines in writing that such action is not likely to cause mortality of CWTD. The techniques employed in this harassment must occur only as specifically directed or restricted by the State permit in order to avoid causing CWTD mortality. The State conservation agency would also be able to issue a permit to landowners or their agents to take problem CWTD on lands they own, rent, or lease. A CWTD would only be identified as a problem deer if the State conservation agency or Service determines in writing that: (1) The CWTD are causing more than *de minimus* negative economic impact to a commercial crop; (2) previous efforts to alleviate the damage through nonlethal methods have been ineffective; and (3) there is a reasonable certainty that additional property losses will occur in the near future if a lethal control action is not implemented. Take of problem CWTD would have to be implemented only as directed and allowed in the permit obtained from the State conservation agency. Additionally, any employee or agent of the Service or the State conservation agency, who is designated by their agency for such purposes and when acting in the course of their official duties, would be able to take problem CWTD.

Take of CWTD in the course of carrying out black-tailed deer damage control would be a violation of this rule unless: The taking was accidental; reported within 72 hours; reasonable care was practiced to avoid such taking; and the person causing the take was in possession of a valid black-tailed deer damage control permit from a State conservation agency. Take of CWTD in the course of hunting black-tailed deer would be a violation of this rule unless: The take was accidental; reported within 72 hours; the take was in the course of hunting black-tailed deer under a lawful State permit; and reasonable due care was exercised to avoid such taking.

The increased interaction of CWTD with the human environment increases the likelihood of encounters with injured or sick CWTD. Therefore, take of CWTD would also be allowed by Tribal employees, State and local government law enforcement officers, and State-licensed wildlife rehabilitation facilities to provide aid to injured or sick CWTD. Tribal employees and local government law enforcement officers would be allowed take of CWTD for the following purposes: Aiding or euthanizing sick, injured, or orphaned CWTD; disposing

of a dead specimen; and salvaging a dead specimen that may be used for scientific study. State-licensed wildlife rehabilitation facilities would also be allowed to take CWTD for the purpose of aiding or euthanizing sick, injured, or orphaned CWTD.

**Required Determinations**

*Clarity of This Proposed Rule*

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

(a) Be logically organized;

(b) Use the active voice to address readers directly;

(c) Use clear language rather than jargon;

(d) Be divided into short sections and sentences; and

(e) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

*National Environmental Policy Act*

We have determined that an environmental assessment or an environmental impact statement, as defined under the authority of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

*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), E.O. 13175, 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 have coordinated the proposed rule with the Cowlitz Indian Tribe who manages land where one subpopulation of CWTD population is located, Cottonwood Island. Biologists from the Cowlitz Indian Tribe are members of the CWTD Working Group and have worked with the Service, WDFW, and ODFW to incorporate conservation measures to benefit CWTD into their management plan for the island.

**References Cited**

A complete list of all references cited in this proposed rule is available at *http://www.regulations.gov* at Docket No. FWS–R1–ES–2014–0045, or upon request from the Oregon Fish and Wildlife Office (see **ADDRESSES**).

**Authors**

The primary authors of this document are staff members of the Oregon Fish and Wildlife Office in Portland, Oregon (see **FOR FURTHER INFORMATION CONTACT**).

**List of Subjects in 50 CFR Part 17**

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

**Proposed Regulation Promulgation**

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

## PART 17—[AMENDED]

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

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

■ 2. Amend § 17.11(h) by revising the entry for ''Deer, Columbian white-tailed'' under MAMMALS in the List of Endangered and Threatened Wildlife 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 | | | | | | |
| MAMMALS | | | | | | | |
| * | * | * | * | * | * | | * |
| Deer, Columbian white-tailed. | *Odocoileus virginianus leucurus.* | U.S.A. (WA, OR) ... | Columbia River (Clark, Cowlitz, Pacific, Skamania and Wahkiakum Counties, WA, and Clatsop, Columbia and Multnomah Counties, OR). | T | 1, 738 | NA | 17.40(r) |
| * | * | * | * | * | * | | * |

■ 3. Amend § 17.40 by adding a paragraph (r) to read as follows:

**§ 17.40 Special rules—mammals.**

* * * * *

(r) Columbian white-tailed deer (*Odocoileus virginianus leucurus*) (CWTD), the Columbia River distinct population segment.

(1) *General requirements.* Other than as expressly provided at paragraph (r)(3) of this section, the provisions of § 17.31(a) apply to the CWTD.

(2) *Definitions.* For the purposes of this entry:

(i) *CWTD* means the Columbia River distinct population segment (DPS) of Columbian white-tailed deer.

(ii) *Intentional harassment* means an intentional act which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Intentional harassment may include prior purposeful actions to attract, track, wait for, or search out CWTD, or purposeful actions to deter CWTD.

(iii) *Problem CWTD* means a CWTD that has been identified in writing by a State conservation agency or the Service as meeting the following criteria:

(A) The CWTD is causing more than *de minimus* negative economic impact to a commercial crop;

(B) Previous efforts to alleviate the damage through nonlethal methods have been ineffective; and

(C) There is a reasonable certainty that additional property losses will occur in the near future if a lethal control action is not implemented.

(iv) *Commercial crop* means commercially raised horticultural, agricultural, or forest products.

(v) *State conservation agency* means the State agency in Oregon or Washington operating a conservation program for CWTD pursuant to the terms of a cooperative agreement with the Service in accordance with section 6(c) of the Endangered Species Act.

(3) *Allowable forms of take of CWTD.* Take of CWTD resulting from the following legally conducted activities is allowed:

(i) Intentional harassment not likely to cause mortality. A State conservation agency may issue permits to landowners or their agents to harass CWTD on lands they own, rent, or lease if the State conservation agency determines in writing that such action is not likely to cause mortality of CWTD. The techniques employed in this harassment must occur only as specifically directed or restricted by the State permit in order to avoid causing CWTD mortality.

(ii) Take of problem CWTD. Take of problem CWTD is authorized under the following circumstances.

(A) Any employee or agent of the Service or the State conservation agency, who is designated by their agency for such purposes, may, when acting in the course of their official duties, take problem CWTD. This take must occur in compliance with all other applicable Federal, State, and local laws and regulations.

(B) The State conservation agency may issue a permit to landowners or their agents to take problem CWTD on lands they own, rent, or lease. Such take must be implemented only as directed and allowed in the permit obtained from the State conservation agency.

(iii) Accidental take of CWTD when carrying out State-permitted black-tailed deer damage control. Take of CWTD in the course of carrying out black-tailed deer damage control will be a violation of this rule unless the taking was accidental; reasonable care was practiced to avoid such taking; and the person causing the take was in possession of a valid black-tailed deer damage control permit from a State conservation agency. When issuing black-tailed deer damage control permits, the State conservation agency will provide education regarding identification of target species. The exercise of reasonable care includes, but is not limited to, the review of the educational material provided by the State conservation agency and identification of the target before shooting.

(iv) Accidental take of CWTD when carrying out State-permitted black-tailed deer hunting. Take of CWTD in the course of hunting black-tailed deer will be a violation of this rule unless the take was accidental; the take was in the course of hunting black-tailed deer under a lawful State permit; and reasonable due care was exercised to avoid such taking. The State conservation agency will provide educational material to hunters regarding identification of target species when issuing hunting permits. The exercise of reasonable care includes, but is not limited to, the review of the educational materials provided by the State conservation agency and identification of the target before shooting.

(4) *Take limits.* The amount of take of CWTD allowed for the activities in subparagraphs (r)(3)(ii), (r)(3)(iii), and (r)(3)(iv) of this section will not exceed 5 percent of the CWTD population during any calendar year as determined by the Service. By December 31 of each year, the Service will use the most current annual DPS population estimate to set the maximum allowable take for these activities for the following calendar year. If take exceeds 2 percent of the DPS population in a given calendar year, the Service will convene a meeting with the Oregon Department of Fish and Wildlife and the Washington Department of Fish and Wildlife to discuss CWTD management and strategies to minimize further take from these activities for the rest of the year. If take exceeds 5 percent of the CWTD population in any given calendar year, no further take under subparagraphs (r)(3)(ii), (r)(3)(iii), and (r)(3)(iv) will be allowed during that year and any further take that does occur may be subject to prosecution under the Endangered Species Act.

(5) *Reporting and disposal requirements.* Any injury or mortality of CWTD associated with the actions authorized under paragraphs (r)(3) and (r)(7) of this section must be reported to the Service within 72 hours, and specimens may be disposed of only in accordance with directions from the Service. Reports should be made to the Service's Law Enforcement Office at (503) 231–6125, or the Service's Oregon Fish and Wildlife Office at (503) 231–6179. The Service may allow additional reasonable time for reporting if access to these offices is limited due to closure.

(6) *Additional taking authorizations for Tribal employees, State and local law enforcement officers, and State-licensed wildlife rehabilitation facilities.*

(i) Tribal employees and State and local government law enforcement officers. When acting in the course of their official duties, both Tribal employees designated by the Tribe for such purposes, and State and local government law enforcement officers working in the States of Oregon or Washington, may take CWTD for the following purposes:

(A) Aiding or euthanizing sick, injured, or orphaned CWTD;

(B) Disposing of a dead specimen; and

(C) Salvaging a dead specimen that may be used for scientific study.

(ii) Such take must be reported to the Service within 72 hours, and specimens may be disposed of only in accordance with directions from the Service.

(7) *Wildlife rehabilitation facilities licensed by the States of Oregon or Washington.* When acting in the course of their official duties, a State-licensed wildlife rehabilitation facility may take CWTD for the purpose of aiding or euthanizing sick, injured, or orphaned CWTD. Such take must be reported to the Service within 72 hours as required by paragraph (r)(5) of this section, and specimens may be retained and disposed of only in accordance with directions from the Service.

(8) *Take authorized by permits.* Any person with a valid permit issued by the Service under § 17.32 may take CWTD, pursuant to the special terms and conditions of the permit.

Dated: September 11, 2015.

**James W. Kurth,**

*Acting Director, U.S. Fish and Wildlife Service.*

[FR Doc. 2015–25260 Filed 10–7–15; 8:45 am]

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