DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R8–ES-2011–0097]

[4500030114]

RIN 1018–AX41

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Lost River Sucker and Shortnose Sucker

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule; reproposal.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for the Lost River sucker (*Deltistes luxatus*) and shortnose sucker (*Chasmistes brevirostris*) under the Endangered Species Act of 1973, as amended (Act). In total, we are proposing as critical habitat approximately 146 miles (234 kilometers) of

streams and 117,848 acres (47,691 hectares) of lakes and reservoirs for Lost River sucker and approximately 128 miles (207 kilometers) of streams and 123,590 acres (50,015 hectares) of lakes and reservoirs for shortnose sucker. The proposed critical habitat is located in Klamath and Lake Counties, Oregon, and Modoc County, California. On December 1, 1994, we published proposed critical habitat for Lost River sucker and shortnose sucker. This new proposed rule uses updated information concerning Lost River sucker's and shortnose sucker's ecology, as well as the technological advancements made available since preparing the 1994 proposed rule, to inform our proposed critical habitat designation for Lost River sucker and shortnose sucker.

DATES: We will accept comments received or postmarked on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. We must receive requests for public hearings, in writing, at the address shown in the **FOR FURTHER INFORMATION CONTACT** section by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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 Enter Keyword or ID box, enter Docket No. FWS–R8–ES–2011–0097, which is the docket number for this rulemaking.

(2) *By hard copy*: Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R8–ES-2011–0097; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042–PDM; Arlington, VA 22203.

We will not accept e-mail or faxes. 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 **Public Comments** section below for more information).

FOR FURTHER INFORMATION CONTACT: Laurie R. Sada, Field Supervisor, U.S. Fish and Wildlife Service, Klamath Falls Fish and Wildlife Office, 1936 California Avenue, Klamath Falls, OR 97601; telephone 541–885–8481; facsimile 541–885–7837. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Public Comments

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from government agencies, the

scientific community, industry, or any other interested party concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not designate habitat as "critical habitat" under section 4 of the Act (16 U.S.C. 1531 *et seq*.), including whether there are threats to the species from human activity, the degree of which can be expected to increase due to the designation, and whether that increase in threat outweighs the benefit of designation such that the designation of critical habitat may not be prudent.

(2) Specific information on:

(a) The amount and distribution of Lost River sucker and shortnose sucker habitat;

(b) What areas, that were occupied at the time of listing (or are currently occupied) contain physical and biological features essential to the conservation of the species, should be included in the designation and why;

(c) Special management considerations or protection that may be needed for the physical and biological features essential to the conservation of the species in critical habitat areas we are proposing, including managing for the potential effects of climate change; and

(d) What areas not occupied at the time of listing that meet our criteria for being essential for the conservation of the species should be included in the designation and why.

(3) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed critical habitat.

(4) Information on the projected and reasonably likely impacts of climate change on the Lost River sucker and shortnose sucker, the features essential to its conservation, and the areas proposed as critical habitat.

(5) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and whether the benefits of potentially excluding any specific area outweigh the benefits of including that area under section 4(b)(2) of the Act;

(6) Any probable economic, national security, environmental, cultural, or other relevant impacts of designating as critical habitat any area that may be included in the final designation. In particular, we seek information on any impacts on small entities, and the benefits of including or excluding areas that exhibit these impacts; and

(7) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section. We will not accept comments

sent by e-mail or fax or to an address not listed in the **ADDRESSES** section. We will post your entire comment—including your personal identifying information—on *http://www.regulations.gov*. You may request at the top of your document that we withhold personal information such as your street address, phone number, or e-mail address from public review; however, we cannot guarantee that we will be able to do so.

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, Klamath Falls Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Background

It is our intent to discuss only those topics directly relevant to the designation of critical habitat for these species in this proposed rule. For further information on the Lost River sucker's and shortnose sucker's biology and habitat, population abundance and trend, distribution, demographic features, habitat use and conditions, threats, and conservation measures, please see the final listing rule (53 FR 27130; July 18, 1988), the 2007 5–year reviews completed for the Lost River sucker and shortnose sucker (Service 2007a and 2007b), and the Draft Revised Lost River Sucker and Shortnose Sucker Recovery Plan (Service 2011). These documents are available on the Klamath Falls Fish and Wildlife Office web site at http://www.fws.gov/klamathfallsfwo/ or on the Environmental Conservation Online System http://ecos.fws.gov/ecos/indexPublic.do).

Lost River sucker and shortnose sucker are members of the fish family Catostomidae and are endemic to the upper Klamath River basin (National Research Council of the National Academies (NRC) 2004, pp. 184, 189). Both species predominantly inhabit lake environments but also utilize riverine, marsh, and shoreline habitats for portions of their life history. Lost River sucker and shortnose sucker spawn in the spring in rivers and creeks in areas with a moderate velocity of water flow containing gravel or cobble substrate at depths less than 1.3 meters (m) (4.3 feet (ft)) (Moyle 2002, pp. 200, 204). In addition, a small group of Lost River sucker spawns at several shoreline springs along the eastern portion of Upper Klamath Lake (Janney *et al*. 2008, p. 1813).

Lost River sucker are distributed within Upper Klamath Lake and its tributaries (Klamath County, Oregon), Clear Lake Reservoir and its tributaries (Modoc County, California), Tule Lake (Siskiyou and Modoc Counties, California), Lost River (Klamath County, Oregon, and Modoc County, California), Link River (Klamath County, Oregon), and the Klamath River mainstem, including Keno, J.C. Boyle, Copco, and Iron Gate Reservoirs (Klamath County, Oregon, and Siskiyou County, California; Moyle 2002, p. 199; NRC 2004, pp. 190–192). The distribution of shortnose sucker overlaps with that of Lost River sucker, but shortnose sucker also occurs in Gerber Reservoir (Klamath County, Oregon) and upper Willow Creek (Modoc County, California, and Lake County, Oregon), a tributary to Clear Lake Reservoir (Buettner and Scoppettone 1991, p. 18; Moyle 2002, p. 203; NRC 2004, pp. 190–192).

Lost River sucker and shortnose sucker were once widespread in the upper Klamath River basin and were important to subsistence, commercial, and recreational fishers (Moyle 2002, pp. 200–201, 204; Service 2011, pp. 1, 28–29). Lost River sucker and shortnose sucker have been extirpated from portions of their historic range (Moyle 2002, pp. 200, 204), and previous efforts to monitor angler catch rates have indicated extreme population declines relative to former levels (Scoppettone and Vinyard 1991, p. 367; NRC 2004, p. 203). Putative factors for declines include introduction of exotic species and habitat loss and alteration, primarily due to construction of dams, water diversions, and draining of wetlands (Scoppettone and Vinyard 1991, pp. 368–369, 371; Moyle 2002, pp. 200–201, 204).

Previous Federal Actions

The Lost River sucker and shortnose sucker were listed as endangered on July 18, 1988 (53 FR 27130). A recovery plan for Lost River sucker and shortnose sucker was finalized on March 17, 1993 (Service 1993). Five-year reviews for the Lost River sucker and shortnose sucker were completed on July 19, 2007 (73 FR 11945; March 5, 2008). A considerable amount of scientific information has been collected since the 1993 recovery plan and an updated, revised draft recovery plan for the Lost River sucker and shortnose sucker was released in 2011 (Service 2011).

On September 9, 1991, the Service received a 60–day notice of intent to sue from

the Oregon Natural Resources Council (ONRC) for failure to prepare a recovery plan and to designate critical habitat for the Lost River sucker and shortnose sucker. On November 12, 1991, ONRC filed suit in Federal Court (*Wendell Wood et al.* v. *Marvin Plenert, et al.* (Case No. 91–06496–TC (D. Or.))). The Service entered into a settlement agreement and agreed to complete a final recovery plan by March 1, 1993, and a proposal to designate critical habitat on or before March 10, 1994, and publish a final critical habitat rule by November 29, 1994.

On December 1, 1994, we published proposed critical habitat for Lost River sucker and shortnose sucker (59 FR 61744); that proposal was never finalized. The ONRC (now known as Oregon Wild) recently contacted the Department of Justice and requested that we issue a final critical habitat rule within a reasonable amount of time. On May 10, 2010, a settlement agreement was reached that stipulated the Service submit a final rule designating critical habitat for the Lost River sucker and the shortnose sucker to the **Federal Register** no later than November 30, 2012 (*Wood et al*. v. *Thorson et al*., No. 91–cv–6496–TC (D. Or.)). Given this settlement agreement, advancement in our understanding of Lost River sucker's and shortnose sucker's ecology, and the technological advancements made available since preparing the former proposed rule, we now issue a new proposed critical habitat rule.

Critical Habitat

Background

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

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

(a) Essential to the conservation of the species and

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

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

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

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies insure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse

modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner seeks or requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

For inclusion in a critical habitat designation, the habitat within the geographical area occupied by the species at the time it was listed must contain physical and biological features which are essential to the conservation of the species and which may require special management considerations or protection. Critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical and biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat), focusing on the principal biological or physical constituent elements (primary constituent elements) within an area that are essential to the conservation of the species (such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type). Primary constituent elements are the elements of physical and biological features that, when laid out in the appropriate quantity and spatial

arrangement to provide for a species' life-history processes, are essential to the conservation of the species.

Under the Act, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. We designate as critical habitat areas outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species. When the best available scientific data do not demonstrate that the conservation needs of the species require such additional areas, we will not designate critical habitat in areas outside the geographical area occupied by the species. An area currently occupied by the species but that was not occupied at the time of listing may, however, be essential to the conservation of the species and may be included in the critical habitat designation.

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

of information as the basis for recommendations to designate critical habitat.

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

Habitat is dynamic, and species may move from one area to another over time. Climate change will be a particular challenge for biodiversity because the interaction of additional stressors associated with climate change and current stressors may push species beyond their ability to survive (Lovejoy 2005, pp. 325–326). The synergistic implications of climate change and habitat fragmentation are the most threatening facet of climate change for biodiversity (Hannah *et al.* 2005, p.4). Current climate change predictions for terrestrial areas in the Northern Hemisphere indicate warmer air temperatures, more intense precipitation events, and increased summer continental drying (Field *et al.* 1999, pp. 1–3; Hayhoe *et al*. 2004, p. 12422; Cayan *et al.* 2005, p. 6; Intergovernmental Panel on Climate Change (IPCC) 2007, p. 1181). Climate change may lead to increased frequency and duration of severe storms and droughts (McLaughlin *et al*. 2002, p. 6074; Cook *et al*. 2004, p. 1015; Golladay *et al*. 2004, p. 504).

The specific effects of climate change on the upper Klamath River basin have not

been thoroughly investigated; however, potential effects include increased temperatures, drier summers, and higher snowpack elevation (Koopman *et al*. 2009, p. 3). As a result of increased temperatures, it is anticipated the peak spring runoff of tributary streams will shift earlier in the year from spring to late winter (Poff *et al*. 2002, p. 11). Thus, we anticipate Lost River sucker and shortnose sucker may experience altered timing of spawning migrations, i.e., spawning migrations may occur earlier in the year. Furthermore, altered stream flow into lakes may lead to lower lake levels (Poff *et al*. 2002, p. 15). Lower lake levels may prevent fish from accessing refugia or shoreline spawning areas, such as spring-influenced habitat, that may be important during periods of poor water quality (Banish *et al*. 2009, p. 165). As lakes warm in response to increased temperatures, algal production increases (Poff *et al*. 2002, p. 13), which may exacerbate hypereutrophic (nutrient rich) systems, such as Upper Klamath Lake. Nuisance algal blooms are already considered a threat to Lost River sucker and shortnose sucker (Perkins *et al*. 2000, pp. 24–25, 30), and therefore may be a heightened threat in the face of climate change. Diseases such as gill rot caused by the Columnaris bacterium also are likely to become more of a concern with higher water temperatures (NRC 2004, p. 201).

We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be required for recovery of the species. Areas that are important to the conservation of the species, both inside and

outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) the prohibitions of section 9 of the Act if actions occurring in these areas may affect the species. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Physical or Biological Features

In accordance with sections 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical and biological features essential to the conservation of the species which may require special management considerations or protection. These include, but are not limited to:

(1) Space for individual and population growth and for normal behavior;

(2) Food, water, air, light, minerals, or other nutritional or physiological requirements;

(3) Cover or shelter;

(4) Sites for breeding, reproduction, or rearing (or development) of offspring; and

(5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derive the specific physical or biological features required for Lost River sucker and shortnose sucker from studies of this species' habitat, ecology, and life history as described below. Additional information can be found in the final listing rule published in the **Federal Register** on July 18, 1988 (53 FR 27130), and the Draft Revised Recovery Plan for the Lost River Sucker and Shortnose Sucker (Service 2011). We have determined that Lost River sucker and shortnose sucker require the following physical or biological features:

Space for Individual and Population Growth and for Normal Behavior

Lakes, streams, marshes, and spring habitats with migratory corridors between these habitats provide space for individual and population growth and for normal behavior of Lost River sucker.

Lost River sucker spend most of their lives within lakes although they primarily spawn in streams (Moyle 2002, p. 199). Spawning occurs in late winter and early spring in major tributaries to lakes where they occur. In addition, a small proportion of Lost River sucker utilize spring areas within Upper Klamath Lake for spawning (Janney *et al*. 2008, p. 1813). After hatching, larval Lost River sucker drift downstream within

spawning tributaries and reach lakes by mid-summer. Larval habitat is generally along the shoreline, in water 10 centimeters (cm) to 50 cm (6 inches (in) to 20 in) deep where emergent vegetation provides cover from predators, protection from currents and turbulence, and abundant food (Cooperman and Markle 2004, p. 375). As larval suckers grow into the juvenile stage, they increasingly use deeper habitat with and without emergent vegetation. Adult Lost River sucker primarily use deep (greater than 2.0 m (6.6 ft)), open-water habitat as well as spring-influenced habitats that act as refugia during poor water quality events (Banish *et al*. 2009, pp. 159–161, 165).

Reservoirs also figure prominently in meeting the requirements for space for individual and population growth and for normal behavior of Lost River sucker. Much of the upper Klamath River basin landscape has been hydrologically altered since Anglo-European settlement, including construction of reservoirs. Some reservoirs have adversely affected Lost River sucker, while others may provide benefits. For example, the dam on Malone Reservoir blocks access to historical Lost River sucker habitat for individuals migrating in the mainstem Lost River. In contrast, construction of hydroelectric dams on the mainstem Klamath River and construction of Clear Lake Reservoir likely have increased the amount of available habitat.

Because shortnose sucker share the same habitats as Lost River sucker, the lakes, reservoirs, streams, marshes, and spring habitats with migratory corridors between these habitats also provide space for individual and population growth and for normal behavior of shortnose sucker. Therefore, based on the information above, we identify lakes,

reservoirs, streams, marshes, and spring habitats with migratory corridors between these habitats to be a physical or biological feature essential for the conservation of both Lost River sucker and shortnose sucker.

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

Adult Lost River sucker have subterminal mouths and gill raker structures that are adapted for feeding primarily on benthic macroinvertebrates in lake environments (NRC 2004, p. 190). Prey selection, however, appears to be a function of developmental shifts in habitat use. Lost River sucker larvae feed near the surface of the water column, primarily on chironomids (commonly called "midges"; a family of small flies whose larval and pupal stages are mainly aquatic) (Markle and Clauson 2006, pp. 494–495). Juvenile Lost River sucker rely less on surface-oriented feeding and shift to prey items from benthic areas. For instance, Markle and Clauson (2006, pp. 495–496) documented that juvenile Lost River suckers consumed chironomid larvae as well as micro-crustaceans (amphipods, copepods, cladocerans, and ostracods). As adults, Lost River sucker consume many of these same items (Moyle 2002, pp. 199–200).

Shortnose sucker have terminal mouths and gill raker structures adapted for feeding on zooplankton (Moyle 2002, p. 203; NRC 2004, p. 190). Similar to Lost River sucker, shortnose sucker also exhibit an ontogenetic shift in prey selection (Markle and Clauson 2006, pp. 494–495). Adult shortnose sucker also consume many of the same prey items as juveniles, including chironomid larvae, amphipods, copepods, cladocerans,

and ostracods (Moyle 2002, p. 203; Markle and Clauson 2006, pp. 494–495).

Habitats must provide the necessary conditions, including water with sufficient phytoplankton and fine aquatic substrate, to harbor prey species in sufficient quantity and diversity to meet the nutritional and physiological requirements necessary to maintain Lost River sucker and shortnose sucker populations. Therefore, based on the information above, we identify an abundant food base, including a broad array of chironomids, micro-crustaceans, and other small aquatic macroinvertebrates, to be a biological feature necessary for both Lost River sucker and shortnose sucker.

Cover or Shelter

The cover and shelter components, including emergent vegetation and depth, are the same for shortnose sucker as for Lost River sucker. Lost River sucker and shortnose sucker larvae density is generally higher within and adjacent to emergent vegetation than in areas devoid of vegetation (Cooperman and Markle 2004, p. 374; Crandall *et al*. 2008, p. 413; Erdman and Hendrixson 2009, p. 18; Cooperman *et al*. 2010, p. 34). Emergent vegetation provides cover from predators and habitat for prey such as zooplankton, macroinvertebrates, and periphyton (Klamath Tribes 1996, p. 12; Cooperman and Markle 2004, p. 375). Such areas also may provide refuge from wind-blown current and turbulence, as well as areas of warmer water temperature, which may facilitate larval growth (Cooperman and Markle 2004, p. 375; Crandall 2004, p. 7; Cooperman *et al*. 2010, pp. 35–36).

Different life stages use different water depths as cover or shelter. Juvenile Lost River sucker and shortnose sucker primarily use relatively shallow (less than approximately 1.2 m (3.9 ft)) vegetated areas, but may also begin to move into deeper, unvegetated, off-shore habitats (Buettner and Scoppettone 1990, pp. 33, 51; Markle and Clauson 2006, p. 499). Data from Upper Klamath Lake indicate juveniles of less than 1 year often are found at depths less than 1.0 m (3 ft) in May and June, but shift in late July to water 1.5 to 2.0 m (5 to 6.5 ft) deep (Burdick and Brown 2010, p. 50; no similar data exist from other occupied water bodies). Similarly, 1-year-old juveniles occupy shallow habitats during April and May, but may move into deeper areas along the western shore of Upper Klamath Lake (e.g., Eagle Ridge trench) until dissolved oxygen levels become reduced in mid- to late-July (Bottcher and Burdick 2010, p. 17; Burdick and VanderKooi 2010, p. 13). Juveniles then appear to move into shallower habitat along the eastern shore or main part of Upper Klamath Lake (Bottcher and Burdick 2010, p. 17).

It is assumed that sub-adults, i.e., individuals that display all of the characteristics of adults with the exception of reproductive maturity and reproductive structures (e.g., tubercles), utilize habitats similar to adults (NRC 2004, p. 199). Adult Lost River sucker and shortnose sucker inhabit water depths of 0.9 to 4.8 m (3.0 to 15.7 ft) (Reiser *et al*. 2001, p. 5–26; Banish *et al*. 2009, p. 161). In addition, cover (e.g., large woody debris) is sparse in many of the lentic habitats occupied by adult Lost River sucker and shortnose sucker, so water depth or turbidity may provide concealment from avian predators (Banish *et al*. 2009, p. 164).

Therefore, based on the information above, we identify lakes and reservoirs with adequate amounts of emergent vegetation of appropriate depth and water quality to provide for cover and shelter as described above to be a physical or biological feature for Lost River sucker and shortnose sucker.

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

Throughout their range, Lost River sucker ascend large tributary streams to spawn, generally from February through April, often corresponding with spring snowmelt (Moyle 2002, p. 200; NRC 2004, p. 194). They have been documented migrating upstream as many as 120 kilometers (km) in the Sprague River (75 miles (mi)) (Ellsworth *et al*. 2007, p. 20). Beginning at the same time, a segment of the Lost River sucker population uses shoreline areas affected by input of spring discharge for spawning in Upper Klamath Lake (Janney *et al*. 2008, p. 1813). In rivers, spawning occurs in riffles and pools over gravel and cobble substrate at depths less than 1.3 m (4.3 ft) and velocities up to 85 cm per second (2.8 ft per second; Buettner and Scoppettonne 1990, p. 20; Moyle 2002, p. 200; NRC 2004, p. 194). At shoreline spring habitat, spawning occurs over similar substrate and at similar depths. Females broadcast their eggs, which are fertilized most commonly by two accompanying males (Buettner and Scoppettone 1990, p. 17). The fertilized eggs settle within the top few inches of the substrate until hatching, around 1 week later. Generally, larvae spend little time in rivers after swim-up, but quickly drift downstream to lakes (Cooperman and Markle 2003, pp. 1147–1149). Downstream

movement occurs mostly at night near the water surface (Ellsworth *et al*. 2010, pp. 51–52). Larvae transform into juveniles by mid-July at about 25 mm (0.98 in) total length. Juvenile Lost River sucker primarily occupy relatively shallow (less than approximately 50 cm (1.6 ft)), vegetated areas, but also may begin to move into deeper, unvegetated, off-shore habitats as they grow (Buettner and Scoppettone 1990, pp. 32–33; NRC 2004, p. 198).

Throughout their range, shortnose sucker ascend large tributary streams to spawn, generally from February through May, often corresponding with spring snowmelt (Moyle 2002, p. 204; NRC 2004, p. 194). Shortnose sucker have been documented migrating upstream as far as 13 km (8 mi) in the Sprague River (Ellsworth *et al*. 2007, p. 20). Spawning at shoreline springs in Upper Klamath Lake by shortnose sucker is presently rare (NRC 2004, p. 194). In lotic habitat, spawning occurs in similar habitat as Lost River sucker spawning, although spawning may occur in areas with greater stream flow (up to 125 cm per second (4.1 ft per second); Moyle 2002, p. 204). At shoreline spring habitat, spawning occurs over similar substrate and at similar depths to Lost River sucker spawning. Females broadcast their eggs, which are fertilized most commonly by two accompanying males (Buettner and Scoppettone 1990, p. 44). Larval out-migration, and larval and juvenile rearing patterns, are similar to Lost River sucker (Buettner and Scoppettone 1990, p. 51; Cooperman and Markle 2004, pp. 374–375; NRC 2004, p. 198; Ellsworth *et al*. 2010, pp. 51–52).

Therefore, based on the information above, we identify accessible lake and river

spawning locations with suitable water flow, gravel and cobble substrate, and water depth (as well as flowing water) for larval out-migration and juvenile rearing habitat as described above to be physical features for both Lost River sucker and shortnose sucker.

Primary Constituent Elements for Lost River Sucker and Shortnose Sucker

Under the Act and its implementing regulations, we are required to identify the physical and biological features essential to the conservation of Lost River sucker and shortnose sucker in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the specific elements of physical and biological features that are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the primary constituent elements specific to self-sustaining Lost River sucker and shortnose sucker populations are:

(1) *Water*. Areas with sufficient water quantity and depth within lakes, reservoirs, streams, marshes, springs, groundwater sources, and refugia habitats with minimal physical, biological, or chemical impediments to connectivity. Water should exhibit depths ranging from less than 1.0 m (3.28 ft) up to 4.5 m (14.8 ft) to accommodate each life stage. The water quality characteristics should include water temperatures of less

than 28.0 °Celsius (82.4 °Fahrenheit); pH less than 9.75; dissolved oxygen levels greater than 4.0 mg per L; algal toxins (less than 1.0 microgram (µg) per L); and un-ionized ammonia (less than 0.5 mg per L). Elements also include natural flow regimes that provide flows during the appropriate time of year or, if flows are controlled, minimal flow departure from a natural hydrograph.

(2) *Spawning and rearing habitat*. Streams and shoreline springs with gravel and cobble substrate at depths typically less than 1.3 m (4.3 ft) with adequate stream velocity to allow spawning to occur. Areas identified in PCE1 containing emergent vegetation adjacent to open water that provides habitat for rearing . This facilitates growth and survival of suckers, as well as protection from predation and protection from currents and turbulence.

(3) *Food*. Areas that contain an abundant forage base, including a broad array of chironomidae, crustacea, and other aquatic macroinvertebrates.

With this proposed designation of critical habitat, we intend to identify the physical and biological features essential to the conservation of the species, through the identification of the appropriate quantity and spatial arrangement of the primary constituent elements sufficient to support the life-history processes of the species.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. Special management considerations or protection may be necessary to eliminate or reduce the magnitude of threats that affect these species. Threats identified in the final listing rule for these species include: (1) Poor water quality; (2) potential entrainment at water diversion structures; (3) lack of access to essential spawning habitat; (4) lack of connectivity to historical habitat (i.e., migratory impediments); (5) degradation of spawning, rearing, and adult habitat; and (6) predation by or competition with nonnative fish.

Poor water quality is particularly associated with high abundance of the blue-green alga *Aphanizomenon flos-aque*. Core samples of bottom sediments indicate that *A. flos-aque* was not present in Upper Klamath Lake prior to the 1900s (Bradbury *et al*. 2004, p. 162; Eilers *et al*. 2004, p. 14). Its appearance is believed to be associated with increases in productivity of the lake through human influence (NRC 2004, pp. 108–110). This alga now dominates the algal community from June to November, and, because of the high phosphorus concentrations and its ability to fix nitrogen, is able to reach seasonally high biomass levels that eventually produce highly degraded water quality (Boyd *et al*. 2002, p. 34). Once the algal bloom subsides, decomposition of the massive amounts of biomass can lower dissolved oxygen and raise pH to levels harmful or fatal to fish (Perkins *et al*. 2000, pp. 24–25; Wood *et al*. 2006, p. 1). Additionally, other cyanobacteria (*Microcystis* sp.) may produce toxins harmful to sucker liver tissue

(VanderKooi *et al*. 2010, p. 2). Special management considerations or protections are therefore needed to protect water quality from the deleterious effects of algal blooms and may include reducing excess phosphorus concentrations by fencing cattle out of riparian areas, reconfiguring agricultural waterways, increasing riparian stands of vegetation, and restoring wetland habitat that is crucial for filtering sediment and nutrients.

Hydrographs of both Clear Lake Reservoir and Upper Klamath Lake exhibit patterns of a snow-melt driven system with highest inflows and levels during spring and early summer, although groundwater also is a significant contributor to Upper Klamath Lake (Gannett *et al*. 2007, p. 1). However, Clear Lake Reservoir, Gerber Reservoir, and Upper Klamath Lake are managed to store and divert water for irrigation every year. Clear Lake Reservoir is highly sensitive to drought and downstream water delivery because of its small watershed, low precipitation, minimal groundwater input, and high evaporation rates (NRC 2004, p. 129). In the dry years of 1991 and 1992, the U.S. Bureau of Reclamation (BOR) drew down the level of Clear Lake Reservoir to extremely low levels for irrigation supply (Moyle 2002, p. 201). In 1992, Lost River sucker within Clear Lake Reservoir were examined and exhibited signs of stress, including high rates of parasitism and poor body condition (NRC 2004, p. 132). These signs of stress began to decline as the water level in Clear Lake Reservoir rose in 1993, at the end of the drought (NRC 2004, p. 132). In 2009, when lake levels were again low due to drought, diversions from Clear Lake Reservoir were halted in mid-summer, and there were no diversions in 2010. Additionally, low lake levels adversely affect Clear Lake Reservoir sucker populations by limiting access to Willow Creek, the sole spawning tributary

(Barry *et al*. 2009, p. 3). Likewise, the amount of available larval habitat and suitable shoreline spring spawning habitat in Upper Klamath Lake is significantly affected by even minor changes in lake elevation (Service 2008, p. 79). Therefore, special management considerations or protections are needed to address fluctuations in water levels due to regulated flow and lake elevation management. Special management may include the following actions: managing bodies of water such that there is minimal flow departure from a natural hydrograph; maintaining, improving, or reestablishing instream flows to improve the quantity of water available for use; and maintaining or improving groundwater use.

The effects of fluctuations in water levels due to regulated flow management may affect the ability of Lost River sucker and shortnose sucker to access refugia during periods of poor water quality. For example, Pelican Bay appears to act as a key refugium during periods of poor water quality, and efforts to maintain the quality and quantity of the habitat there may be beneficial for suckers (Banish *et al*. 2009, p. 167). Therefore, special management considerations or protections are needed to address access to refugia and may include the following: maintaining appropriate lake depths to allow access to refugia; restoring degraded habitats to improve quantity of flow at refugia as well as refugia quality; and maintaining or establishing riparian buffers around refugia to improve refugia water quality.

The Klamath Project (Project) stores and later diverts water from Upper Klamath Lake for a variety of Project purposes. These operations result in lake levels and flows at

the outlet of the lake that differ from historic conditions, some of which increase movement of juvenile fish downstream of Upper Klamath Lake. As such, special management considerations or protections for water quantity may be needed to address water intake at water diversion structures to improve water diversion efficiency to increase the quantity of water available as habitat.

Throughout the Upper Klamath Lake and Lost River Basin, timber harvesting and associated activities (e.g., road building) by Federal, State, tribal, and private landowners have resulted in soil erosion on harvested lands and transport of sediment into streams and rivers adjacent to or downstream from those lands (Service 2002, p. 65; NRC 2004, pp. 65–66). Past logging and road building practices often did not provide for adequate soil stabilization and erosion control. A high density of forest roads remain in the upper Klamath River basin, and many of these are located near streams where they likely contribute sediment (USFS 1995, p. 7), which results in an increase of fine soil particles that can cover spawning substrata. The major agricultural activity in the upper Klamath River basin, livestock grazing, also has likely led to an increase in sediment and nutrient loading rates by accelerating erosion (Moyle 2002, p. 201; Service 2002, pp. 56, 65; McCormick and Campbell 2007, pp. 6–7). Livestock, particularly cattle, have heavily grazed flood plains, wetlands, forest, rangelands, and riparian areas, resulting in the degradation of these areas. Grazing alters the streamside riparian vegetation and compacts soil surfaces, increasing groundwater runoff, lowering streambank stability, and reducing cover. The increase in sediment accumulation and nutrient loading is consistent with the changes in land use in the upper Klamath River basin occurring over the last century (Bradbury *et al*. 2004, pp. 163–164; Eilers *et al*. 2004, pp. 14–16). Therefore, special

management considerations or protections may be required to improve water quality and include: reducing sediment and nutrient loading by protecting riparian areas from agricultural and forestry impacts, reducing road density to prevent excess sediment loading, and improving cattle management practices.

Lost River sucker and shortnose sucker have limited hydrologic connection to spawning or rearing habitat. For example, low lake levels adversely affect Clear Lake Reservoir sucker populations by limiting access to the Willow Creek drainage, the sole spawning tributary (Barry *et al*. 2009, p. 3). Likewise, the amount of suitable shoreline spring spawning habitat in Upper Klamath Lake is significantly affected by even minor changes in lake elevation, but it is unknown exactly how such levels directly affect annual productivity. Several shoreline spring-spawning populations, including Harriman Springs and Barkley Springs, have been lost or significantly altered due to railroad construction (Andreasen 1975, pp. 39–40; NRC 2004, p. 228). Historically, wetlands comprised hundreds of thousands of hectares throughout the range of the species (Gearhart *et al*. 1995, pp. 119–120; Moyle 2002, p. 200; NRC 2004, pp. 72–73), some of which likely functioned as crucial habitat for larvae and juveniles. Other wetlands may have played vital roles in the quality and quantity of water. Loss of ecosystem functions such as these, due to alteration or separation of the habitat, is as detrimental as physical loss of the habitat. Approximately 70 percent of the original 20,400 ha (50,400 ac) of wetlands surrounding Upper Klamath Lake was diked, drained, or significantly altered beginning around 1889 (Akins 1970, pp. 73–76; Gearhart *et al*. 1995, p. 2). Additionally, of the approximately 13,816 ha (34,140 ac) of wetlands connected to Upper Klamath

Lake, relatively little functions as rearing habitat for larvae and juveniles, partly due to lack of connectivity with current spawning areas (NRC 2004, pp. 72–73). Therefore, special management considerations or protections may be needed for water quantity to improve access to spawning locations and quality and quantity of wetlands used as rearing habitat. This may be accomplished by: improving lake level management to allow access to spawning locations during late winter and early spring, restoring access to wetland rearing habitat, and creating wetland rearing habitat adjacent to lakes and reservoirs.

The exotic fish species most likely to affect Lost River sucker and shortnose sucker is the fathead minnow. This species may prey on young Lost River sucker and shortnose sucker and compete with them for food or space (Markle and Dunsmoor 2007, pp. 571–573). For example, fathead minnow were first documented in the upper Klamath River basin in the 1970s and are now the numerically dominant exotic fish in Upper Klamath Lake (Simon and Markle 1997, p. 142; Bottcher and Burdick 2010, p. 40; Burdick and VanderKooi 2010, p. 33). Additional exotic, predatory fishes found in sucker habitats, although typically in relatively low numbers, include yellow perch (*Perca flavescens*), bullhead (*Ameiurus* species), largemouth bass (*Micropterus salmoides*), crappie (*Pomoxis* species), green sunfish (*Lepomis cyanellus*), pumpkinseed (*Lepomis gibbosus*), and Sacramento perch (*Archoplites interruptus*) (NRC 2004, pp. 188–189). Special management considerations or protections may be needed to protect the forage base from predation by exotic fish species and could be accomplished by the following: reducing conditions that allow exotic fishes to be successful and restoring

conditions that allow Lost River sucker and shortnose sucker to thrive, conducting evaluations to determine methods to remove exotic fish species, and determining methods to reduce or eliminate competition for the forage base upon which Lost River sucker and shortnose sucker depend to survive.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(1)(A) of the Act, we use the best scientific and commercial data available to designate critical habitat. We review available information pertaining to the habitat requirements of the species. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we consider whether designating additional areas—outside those currently occupied as well as those occupied at the time of listing—are necessary to ensure the conservation of the species. We are proposing to designate only areas within the geographical area occupied by the species at the time of listing, and that are also presently occupied, because these areas are sufficient for the conservation of Lost River sucker and shortnose sucker and have all of the physical or biological features essential to the conservation of Lost River sucker and shortnose sucker. The Draft Lost River Sucker and Shortnose Sucker Recovery Plan (Service 2011) recognizes two recovery units, each containing occupied management units. The steps we followed in identifying critical habitat were:

1. Our initial step in identifying critical habitat was to determine, in accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, the physical or biological

habitat features essential to the conservation of the species, as explained in the previous section.

2. We reviewed the best available scientific data pertaining to the habitat requirements of this species, including information obtained from the Lost River and Shortnose Sucker Recovery Team and the Recovery Implementation Committee, which included biologists from partner agencies and entities including Federal, State, tribal, and private biologists; experts from other scientific disciplines, such as hydrology and forestry; resource users; and other stakeholders with an interest in Lost River sucker and shortnose sucker and the habitats they depend on for survival or recovery. We also reviewed available data concerning Lost River sucker and shortnose sucker habitat use and preferences, habitat conditions, threats, population demographics, and known locations, distribution, and abundances of Lost River sucker and shortnose sucker.

We identified the geographical areas occupied by Lost River sucker and shortnose sucker at the time of listing that contain the PBFs essential for the conservation of the species and which contained one of more of the primary constituent elements identified above. This was done by gathering information from the entities listed above and mapping Lost River sucker and shortnose sucker distribution.

We used data gathered during the Lost River sucker and shortnose sucker recovery planning process and the Draft Lost River Sucker and Shortnose Sucker Recovery Plan (Service 2011), and supplemented those data with recent data developed

by State agencies, tribes, the U.S. Forest Service, Bureau of Land Management, and other entities. These data were used to update Lost River sucker and shortnose sucker status and distribution data for purposes of the proposed critical habitat designation.

For areas where we had data gaps, we solicited expert opinions from knowledgeable fisheries biologists in the local area. Material reviewed included data in reports submitted during section 7 consultations, reports from biologists holding section 10(a)(1)(A) recovery permits, research published in peer-reviewed scientific journals, academic theses, State and Federal government agency reports, and GIS data.

In streams, critical habitat includes the stream channel within the designated stream reach and a lateral extent as defined by the bankfull elevation on one bank to the bankfull elevation on the opposite bank. The lateral extent of critical habitat in lakes and reservoirs is defined by the perimeter of the water body as mapped according to the U.S. Geological Survey 2009 National Hydrography Dataset. Land ownership calculations were based on 2011 Oregon and California Bureau of Land Management State office data layers. An updated data layer of Upper Klamath Lake and newly restored wetlands was provided by the U.S. Geological Survey (USGS), Western Fisheries Research Center, and Klamath Falls Field Station.

3. In selecting areas to propose as critical habitat, we considered factors such as size, connectivity to other aquatic habitats, and rangewide recovery considerations. We took into account the fact that Lost River sucker and shortnose sucker habitats include streams

used largely for spawning and outmigration; lakes and reservoirs used for rearing, foraging, and migration; and springs used for spawning and refugia.

4. In determining areas to propose as critical habitat, we relied upon principles of conservation biology, including: (a) Resistance and resiliency, to ensure sufficient habitat is protected throughout the range of the species to support population viability (e.g., demographic parameters); (b) Redundancy, to ensure multiple viable populations are conserved throughout the species' range; and (c) Representation, to ensure the representative genetic and life history of suckers (e.g., spring spawning and river spawning) were conserved.

5. Using the conservation biology principles and primary constituent elements, we examined the distribution of Lost River sucker and shortnose sucker to determine critical habitat based on the following criteria: largest occupied areas or populations, most highly connected populations and habitat, areas that can contribute to Lost River sucker and shortnose sucker conservation, and areas with highest conservation potential (e.g., essential PBFs). We then used these criteria to identify those areas that contain habitats essential to the conservation of Lost River sucker and shortnose sucker. Using the conservation biology principles and primary constituent elements, we examined the distribution of Lost River sucker and shortnose sucker to assess whether or not to propose areas as critical habitat. We emphasized areas as essential to the conservation of the Lost river and shortnose sucker which contained populations of highest conservation value with characteristics such as: (a) The largest occupied areas or populations, (b) the most

highly connected populations and habitat, (c) areas that can contribute to Lost River sucker and shortnose sucker conservation and recovery.

6. We examined geographic locations currently occupied by Lost River sucker and shortnose sucker and determined that certain areas that did not contain the PBFs essential for the conservation of these species, and we have not proposed these areas as critical habitat. Such determinations include those areas where Lost River sucker or shortnose sucker: are not viable, are not connected to spawning habitat, occur in low densities or abundances in very isolated populations, are greatly impacted by nonnative species, have very low potential for conservation or restoration, or have low connectivity among populations and severe habitat degradation.

When determining proposed critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical and biological features for Lost River sucker and shortnose sucker. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical and biological features

in the adjacent critical habitat.

We are proposing for designation of critical habitat lands that we have determined were occupied at the time of listing and contain sufficient elements of physical and biological features to support life-history processes essential to the conservation of the Lost River sucker and shortnose sucker.

Proposed Critical Habitat Designation

We are proposing two units as critical habitat for Lost River sucker and two units for shortnose sucker with each unit being composed of streams, lakes, and reservoirs. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for Lost River sucker and shortnose sucker.

The two units we propose as critical habitat for the Lost River sucker, which were both occupied at the time of listing, are:

(1) Upper Klamath Lake Unit, including Upper Klamath Lake and tributaries as well as the Link River and Keno Reservoir.

(2) Lost River Basin Unit, including Clear Lake Reservoir and tributaries.

The two units we propose as critical habitat for the shortnose sucker, which were occupied at the time of listing, are:

(1) Upper Klamath Lake Unit, including Upper Klamath Lake and tributaries as well as the Link River and Keno Reservoir.

(2) Lost River Basin Unit, including Clear Lake Reservoir and tributaries, and Gerber Reservoir and tributaries.

The approximate area and stream length within each proposed critical habitat unit is shown in Tables 1 through 4.

Table 1. Area of lakes and reservoirs proposed as critical habitat for Lost River sucker.

[Area estimates reflect all land within critical habitat unit boundaries.]

Critical Habitat Unit	**Land Ownership by Type**	**Acres (Hectares)**
1. Upper Klamath Lake	Federal	15,198 (6,151)
	State	533 (216)
	Private/Other	74,684 (30,224)
2. Lost River Basin	Federal	27,238 (11,023)
	State	0
	Private/Other	194 (79)
Total	Federal	42,437 (17,174)
	State	533 (216)
	Private/Other	75,249 (30,452)
	Total	**118,219 (47,842)**

Note: Area sizes may not sum due to rounding.

Table 2. Stream length proposed as critical habitat for Lost River sucker.

[Area estimates reflect all land within critical habitat unit boundaries.]

Critical Habitat Unit	**Land Ownership by Type**	**Miles (Kilometers)**
1. Upper Klamath Lake	Federal	13 (21)
	State	0
	Private/Other	106 (171)
2. Lost River Basin	Federal	23 (37)

	State	Less than 1
	Private/Other	3 (5)
Total	Federal	36 (58)
	State	Less than 1
	Private/Other	109 (176)
	Total	**146 (234)**

Note: Lengths may not sum due to rounding.

Table 3. Area of lakes and reservoirs proposed as critical habitat for shortnose sucker.

[Area estimates reflect all land within critical habitat unit boundaries.]

Critical Habitat Unit	**Land Ownership by Type**	**Acres (Hectares)**
1. Upper Klamath Lake	Federal	15,198 (6,151)
	State	533 (216)
	Private/Other	74,684 (30,224)
2. Lost River Basin	Federal	32,051 (12,971)
	State	0
	Private/Other	1,124 (455)
Total	Federal	47,250 (19,121)
	State	533 (216)
	Private/Other	76,179 (30,829)
	Total	**123,961 (50,166)**

Note: Area sizes may not sum due to rounding.

Table 4. Stream length proposed as critical habitat for shortnose sucker.

[Area estimates reflect all land within critical habitat unit boundaries.]

Critical Habitat Unit	**Land Ownership by Type**	**Miles (Kilometers)**
1. Upper Klamath Lake	Federal	6 (9)
	State	0
	Private/Other	34 (54)
2. Lost River Basin	Federal	72 (116)
	State	Less than 1
	Private/Other	16 (26)
Total	Federal	78 (125)
	State	Less than 1

	Private/Other	50 (80)
	Total	**128 (207)**

Note: Length may not sum due to rounding.

We present brief descriptions of the two critical habitat units for Lost River sucker and two critical habitat units for shortnose sucker and the reasons why they meet the definition of critical habitat, below. The areas we are proposing as critical habitat below satisfy each of the criteria stated above under "Criteria Used to Identify Critical Habitat" considerations. These areas will:

- Provide sufficient habitat throughout the range of the species to ensure multiple populations are conserved throughout the species' range;
- Support viability of each population;
- Ensure Lost River sucker and shortnose sucker are distributed across various habitat types required by different life stages; and
- Conserve the full genetic variability and variable life histories (e.g., stream-spawning and lake-spawning) of Lost River sucker and shortnose sucker.

Each unit for Lost River and shortnose sucker was occupied at the time of listing.

Unit 1: Upper Klamath Lake

Lost River sucker

The Upper Klamath Lake unit is located in south-central Oregon within Klamath County and consists of 90,415 ac (36,590 ha) and 119 mi (192 km) of proposed critical habitat. This unit includes Upper Klamath Lake and Agency Lake, together with some wetland habitat; portions of the Williamson and Sprague Rivers; Link River; Lake Ewauna; and the Klamath River from the outlet of Lake Ewauna downstream to Keno

Dam. This unit is proposed as critical habitat for Lost River sucker because it contains those physical or biological features essential to the conservation of the species which may require special management or protection. This unit, at least seasonally, contains primary constituent elements 1, 2, and 3. The unit represents the largest population of Lost River sucker and provides redundancy in the number of Lost River sucker populations that are needed for conservation. Additionally, this unit contains areas for both river and spring spawning life histories, which is not known to occur elsewhere throughout the range of the species. The physical and biological features which may require special management or protection include maintaining: water quality by preventing the deleterious effects of nuisance algal blooms, increased sedimentation, excess nutrients, and other factors affecting water quality; water quantity to prevent reductions in water levels that may limit access to spawning locations or refugia and reduce the depth of water used as cover, and cause a lack of access to essential rearing habitat (i.e., marsh and wetland areas); gravel and cobble substrata to prevent the degradation of spawning, rearing, and adult habitat caused by past land management practices; and the forage base to prevent predation by or competition with nonnative fish that may reduce available forage for Lost River sucker.

Shortnose sucker

The unit is the same as for Lost River sucker, except that it contains 40 mi (63 km) of streams in proposed critical habitat (because shortnose sucker are not known to occur as far upstream within the Sprague River), along with the 90,415 ac (36,590 ha) of lakes and reservoirs. This unit is proposed as critical habitat for shortnose sucker because

it contains those physical and biological features essential to the conservation of the species and which may require special management or protection. This unit, at least seasonally, contains primary constituent elements 1, 2, and 3. This unit is essential to shortnose sucker conservation because it supports the largest population of shortnose sucker and provides redundancy in the number of shortnose sucker populations that are needed for conservation. Additionally, this unit ensures shortnose sucker are distributed across various habitat types required by different life stages. The physical and biological features which may require special management or protection include maintaining: water quality by preventing the deleterious effects of nuisance algal blooms, increased sedimentation, excess nutrients, and other factors affecting water quality; water quantity to prevent reductions in water levels that may limit access to spawning locations or refugia and reduce the depth of water used as cover, and cause a lack of access to essential rearing habitat (i.e., marsh and wetland areas); gravel and cobble substrata to prevent the degradation of spawning, rearing, and adult habitat caused by past land management practices; and the forage base to prevent predation by or competition with nonnative fish that may reduce available forage for shortnose sucker.

Unit 2: Lost River Basin

Lost River sucker

The Lost River Basin unit is located in south-central Oregon in Klamath and Lake Counties as well as northeastern California in Modoc County and consists of 27,432 ac (11,102 ha) and 26 mi (42 km) of proposed critical habitat. This unit includes Clear Lake Reservoir and its principal tributary. This unit is proposed as critical habitat for Lost

River sucker because it contains those physical and biological features essential to the conservation of the species and which may require special management or protection. This unit, at least seasonally, contains primary constituent elements 1, 2, and 3. This unit supports a large population of Lost River sucker and provides redundancy in the number of Lost River sucker populations that are needed for conservation. Additionally, this unit ensures Lost River sucker are distributed across various habitat types required by different life stages. The physical and biological features which may require special management or protection include maintaining: water quality by preventing the deleterious effects of nuisance algal blooms, increased sedimentation, excess nutrients, and other factors affecting water quality; water quantity to prevent reductions in water levels that may limit access to spawning locations or refugia and reduce the depth of water used as cover, and cause a lack of access to essential rearing habitat (i.e., marsh and wetland areas); gravel and cobble substrata to prevent the degradation of spawning, rearing, and adult habitat caused by past land management practices; and the forage base to prevent predation by or competition with nonnative fish that may reduce available forage for Lost River sucker.

Shortnose sucker

The unit is the same as for Lost River sucker, but also includes Gerber Reservoir and its principal tributaries. This unit contains 33,175 ac (13,426 ha) and 88 mi (142 km) of proposed critical habitat. This unit is proposed as critical habitat for shortnose sucker because it contains those physical and biological features essential to the conservation of the species and which may require special management or protection. This unit, at least

seasonally, contains primary constituent elements 1, 2, and 3. This unit represents a large population of shortnose sucker and provides redundancy in the number of shortnose sucker populations that are needed for conservation. Additionally, this unit is essential because it ensures shortnose sucker are distributed across various habitat types required by different life stages. The physical and biological features which may require special management or protection include maintaining: water quality by preventing the deleterious effects of nuisance algal blooms, increased sedimentation, excess nutrients, and other factors affecting water quality; water quantity to prevent reductions in water levels that may limit access to spawning locations or refugia and reduce the depth of water used as cover, and cause a lack of access to essential rearing habitat (i.e., marsh and wetland areas); gravel and cobble substrata to prevent the degradation of spawning, rearing, and adult habitat caused by past land management practices; and the forage base to prevent predation by or competition with nonnative fish that may reduce available forage for shortnose sucker.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In

addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our regulatory definition of "destruction or adverse modification" (50 CFR 402.02) (see *Gifford Pinchot Task Force* v. *U.S. Fish and Wildlife Service*, 378 F. 3d 1059 (9th Cir. 2004) and *Sierra Club* v. *U.S. Fish and Wildlife Service et al*., 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq*.) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not

affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

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

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

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

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

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

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

(3) Are economically and technologically feasible, and

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

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

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies may sometimes need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Application of the "Adverse Modification" Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may

destroy or adversely modify critical habitat are those that alter the physical and biological features to an extent that appreciably reduces the conservation value of critical habitat for Lost River sucker and shortnose sucker. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

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

(1) Actions that would significantly alter the level of lakes or reservoirs. Such activities could include, but are not limited to, water diversions or water withdrawals. These activities could reduce the amount of habitat necessary for rearing of larvae and juvenile Lost River sucker and shortnose sucker, preclude access to spawning habitat, reduce or prevent access to refugia, and reduce the amount of water needed to provide the physical and biological features necessary for adult Lost River sucker and shortnose sucker.

(2) Actions that would significantly increase sediment deposition within stream channels. Such activities could include, but are not limited to, excessive sedimentation from livestock grazing, road construction, channel alteration, timber harvest and management, off-road vehicle use, and other watershed and floodplain disturbances. These activities could reduce and degrade spawning habitat of Lost River sucker and shortnose sucker by increasing the sediment deposition to deleterious levels.

(3) Actions that would significantly alter lake, reservoir, and/or channel morphology or geometry. Such activities could include, but are not limited to, channelization, impoundment, road and bridge construction, mining, dredging, and destruction of riparian vegetation. These activities may lead to changes in water flows and levels that would degrade or eliminate Lost River sucker and shortnose sucker habitats. These actions can also lead to increased sedimentation and degradation in water quality to levels that are beyond the tolerances of Lost River sucker and shortnose sucker.

Exemptions

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

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates

implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

(1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;

(2) A statement of goals and priorities;

(3) A detailed description of management actions to be implemented to provide for these ecological needs; and

(4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: "The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation."

There are no Department of Defense lands within the proposed critical habitat designation; as a result no lands are being exempted under section 4(a)(3) of the Act.

Exclusions

Application of Section 4(b)(2) of the Act

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

Under section 4(b)(2) of the Act, we may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we must identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and determine whether the benefits of exclusion

outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise his discretion to exclude the area only if such exclusion would not result in the extinction of the species.

Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we are preparing an analysis of the economic impacts of the proposed critical habitat designation and related factors.

An economic analysis was conducted for the December 1, 1994, proposed rule (59 FR 61744) to estimate the economic effects of the proposed critical habitat designation. The previous economic analysis acknowledges the proposed designation would constrain the ability of Federal agencies to engage in activities, or to support the activities of others, that would adversely modify or destroy critical habitat. Major Federal agencies in the upper Klamath River basin indicated their activities would be altered to protect Lost River sucker and shortnose sucker. However, different conclusions were reached by these agencies as to whether these changes were a result of Lost River sucker and shortnose sucker being listed as endangered, from proposed critical habitat designation, or both. The economic analysis further indicated critical habitat designation would negatively affect local employment due to a change in the output of goods and services, primarily from the resource extraction businesses. Conversely,

designation also would enhance natural resource amenities, causing economic growth as a result of immigration of people seeking a heightened local and regional quality of life. The economic analysis concluded by determining the effect of designation would be neutral. Additional details can be found in that 1994 proposed rule (59 FR 61750–61753; December 1, 1994).

We are conducting a new economic analysis for this proposed rule, and we will announce the availability of that draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic analysis will be available for downloading from the Internet at *http://www.regulations.gov*, or by contacting the Klamath Falls Fish and Wildlife Office directly (see **FOR FURTHER INFORMATION CONTACT** section). During the development of a final designation, we will consider economic impacts, public comments, and other new information, and areas may be excluded from the final critical habitat designation under section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19.

Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense where a national security impact might exist. In preparing this proposal, we have determined that the lands within the proposed designation of critical habitat for Lost River sucker and shortnose sucker are not owned

or managed by the Department of Defense, and, therefore, we anticipate no impact on national security. Consequently, the Secretary does not propose to exercise his discretion to exclude any areas from the final designation based on impacts on national security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

In preparing this proposal, we have determined that there are currently no HCPs or other management plans for Lost River sucker and shortnose sucker, and the proposed designation does not include any tribal lands or trust resources. We anticipate no impact on tribal lands, partnerships, or HCPs from this proposed critical habitat designation. Accordingly, the Secretary does not propose to exercise his discretion to exclude any areas from the final designation based on other relevant impacts.

Peer Review

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), we are seeking the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our critical habitat designation is based on scientifically sound data, assumptions, and analyses. We have invited these peer reviewers to comment during this public comment period on our specific assumptions and conclusions in this proposed designation of critical habitat.

We will consider all comments and information we receive during the comment period on this proposed rule during our preparation of a final determination. Accordingly, the final decision may differ from this proposal.

Public Hearings

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days after the date of publication of this proposed rule in the **Federal Register**. Such requests must be sent to the address shown in the **FOR FURTHER INFORMATION CONTACT** section. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the hearing.

Required Determinations

Regulatory Planning and Review—Executive Order 12866

The Office of Management and Budget (OMB) has determined that this rule is not significant and has not reviewed this proposed rule under Executive Order 12866 (Regulatory Planning and Review). OMB bases its determination upon the following four criteria:

(1) Whether the rule will have an annual effect of $100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(2) Whether the rule will create inconsistencies with other Federal agencies' actions.

(3) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

(4) Whether the rule raises novel legal or policy issues.

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

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq*.) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C 801 *et seq.*), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory

flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

At this time, we lack the available economic information necessary to provide an adequate factual basis for the required RFA finding. Therefore, we defer the RFA finding until completion of the draft economic analysis prepared under section 4(b)(2) of the Act and Executive Order 12866. This draft economic analysis will provide the required factual basis for the RFA finding. Upon completion of the draft economic analysis, we will announce availability of the draft economic analysis of the proposed designation in the **Federal Register** and reopen the public comment period for the proposed designation. We will include with this announcement, as appropriate, an initial regulatory flexibility analysis or a certification that the rule will not have a significant economic impact on a substantial number of small entities accompanied by the factual basis for that determination.

The previous economic analysis (see our 1994 proposed rule at 59 FR 61750–61753, December 1, 1994) indicated dislocation of workers in the local resource extraction industries would be offset, in the long run, by the creation of additional jobs in

other sectors locally or in other areas. At that time, the analysis determined the national adjustment to the proposed designation would be essentially imperceptible as the U.S. economy redeployed labor and other resources that might become unemployed because of the designation. Further, the analysis stated that as buyers, sellers, workers, firms, households, and communities adjusted to the proposed designation, its economic impacts would be spread over a broad economic and spatial landscape.

We have concluded that deferring the RFA finding until completion of the new draft economic analysis is necessary to meet the purposes and requirements of the RFA. Deferring the RFA finding in this manner will ensure that we make a sufficiently informed determination based on adequate, current economic information and provide the necessary opportunity for public comment.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. We do not expect that the proposed critical habitat designation for the Lost River sucker and shortnose sucker would significantly affect energy supplies, distribution, or use.

Although there is a large, natural gas pipeline within the Lost River Basin Unit, the Federal Energy Regulatory Commission recently completed a formal biological

opinion and conference report with the Service regarding the effect of those operations on Lost River sucker and shortnose sucker and proposed critical habitat. The biological opinion (Service 2010) established strict Terms and Conditions for the conservation of Lost River sucker and shortnose sucker in those habitats that would be impacted by pipeline operations; several of these habitats are included in this proposal. The designation of critical habitat in the areas adjacent to the pipeline will not change current Lost River sucker and shortnose sucker conservation practices surrounding pipeline operations. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

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

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

(1) This rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or tribal governments" with two exceptions. It excludes "a condition of Federal

assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding," and the State, local, or tribal governments "lack authority" to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. "Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program."

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are

indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule would significantly or uniquely affect small governments because, based in part on an analysis conducted for the previous proposed designation of critical habitat and extrapolated to this designation, we do not expect this rule to significantly or uniquely affect small governments. Therefore, a Small Government Agency Plan is not required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment if appropriate.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for Lost River sucker and shortnose sucker in a takings implications assessment. Critical habitat designation does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. The takings implications assessment concludes that this proposed designation of critical habitat for Lost River sucker and shortnose sucker does not pose significant takings implications for

lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), this proposed rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this proposed critical habitat designation with appropriate State resource agencies in Oregon and California. The designation of critical habitat in areas currently occupied by the Lost River sucker and shortnose sucker imposes no additional restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments because the areas that contain the physical and biological features essential to the conservation of the species are more clearly defined, and the elements of the features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding,

assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. This proposed rule uses standard property descriptions and identifies the elements of physical and biological features essential to the conservation of the Lost River sucker and shortnose sucker within the designated areas to assist the public in understanding the habitat needs of the species.

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

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq*.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it

displays a currently valid OMB control number.

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

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

Clarity of the 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:

(1) Be logically organized;

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

(3) Use clear language rather than jargon;

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

(5) 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 the **ADDRESSES** section. 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.

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes.

We determined that there are no tribal lands that were occupied by the Lost River sucker and shortnose sucker at the time of listing that contain the features essential for conservation of the species, and no tribal lands unoccupied by the Lost River sucker and

shortnose sucker that are essential for the conservation of the species. Therefore, we are not proposing to designate critical habitat for the Lost River sucker and shortnose sucker on tribal lands.

References Cited

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

Authors

The primary authors of this package are the staff members of the Klamath Falls Fish and Wildlife Office.

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of

the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

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

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.11(h), revise the entry for "Sucker, Lost River" and "Sucker, shortnose" under "FISHES" 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						
* * * * * * *							
FISHES							
* * * * * * *							
Sucker, Lost River	*Deltistes luxatus*	U.S.A. (CA, OR)	Entire	E	313	17.95(e)	NA
* * * * * * *							
Sucker, shortnose	*Chasmistes brevirostris*	U.S.A. (CA, OR)	Entire	E	313	17.95(e)	NA
* * * * * * *							

3. In § 17.95, amend paragraph (e) by adding entries for "Lost River Sucker (*Deltistes luxatus*)" and "Shortnose Sucker (*Chasmistes brevirostris*)," in the same alphabetical order that the species appear in the table at § 17.11(h), to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(e) *Fishes*.

* * * * *

Lost River Sucker (*Deltistes luxatus*)

(1) Critical habitat units are depicted for Klamath and Lake Counties, Oregon, and Modoc County, California, on the maps below.

(2) Within these areas, the primary constituent elements of the physical and biological features essential to the conservation of Lost River sucker consist of three components:

(i) *Water*. Areas with sufficient water quantity and depth within lakes, reservoirs, streams, marshes, springs, groundwater sources, and refugia habitats with minimal physical, biological, or chemical impediments to connectivity. Water should exhibit

depths ranging from less than 1.0 m (3.28 ft) up to 4.5 m (14.8 ft) to accommodate each life stage. The water quality characteristics should include water temperatures of less than 28.0 °Celsius (82.4 °Fahrenheit); pH less than 9.75; dissolved oxygen levels greater than 4.0 mg per L; algal toxins (less than 1.0 microgram (µg) per L); and un-ionized ammonia (less than 0.5 mg per L). Elements also include natural flow regimes that provide flows during the appropriate time of year or, if flows are controlled, minimal flow departure from a natural hydrograph.

(ii) *Spawning and rearing habitat*. Streams and shoreline springs with gravel and cobble substrate at depths typically less than 1.3 m (4.3 ft) with adequate stream velocity to allow spawning to occur. Areas identified in PCE1 containing emergent vegetation adjacent to open water that provides habitat for rearing . This facilitates growth and survival of suckers, as well as protection from predation and protection from currents and turbulence.

(iii) *Food*. Areas that contain an abundant forage base, including a broad array of chironomidae, crustacea, and other aquatic macroinvertebrates.

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

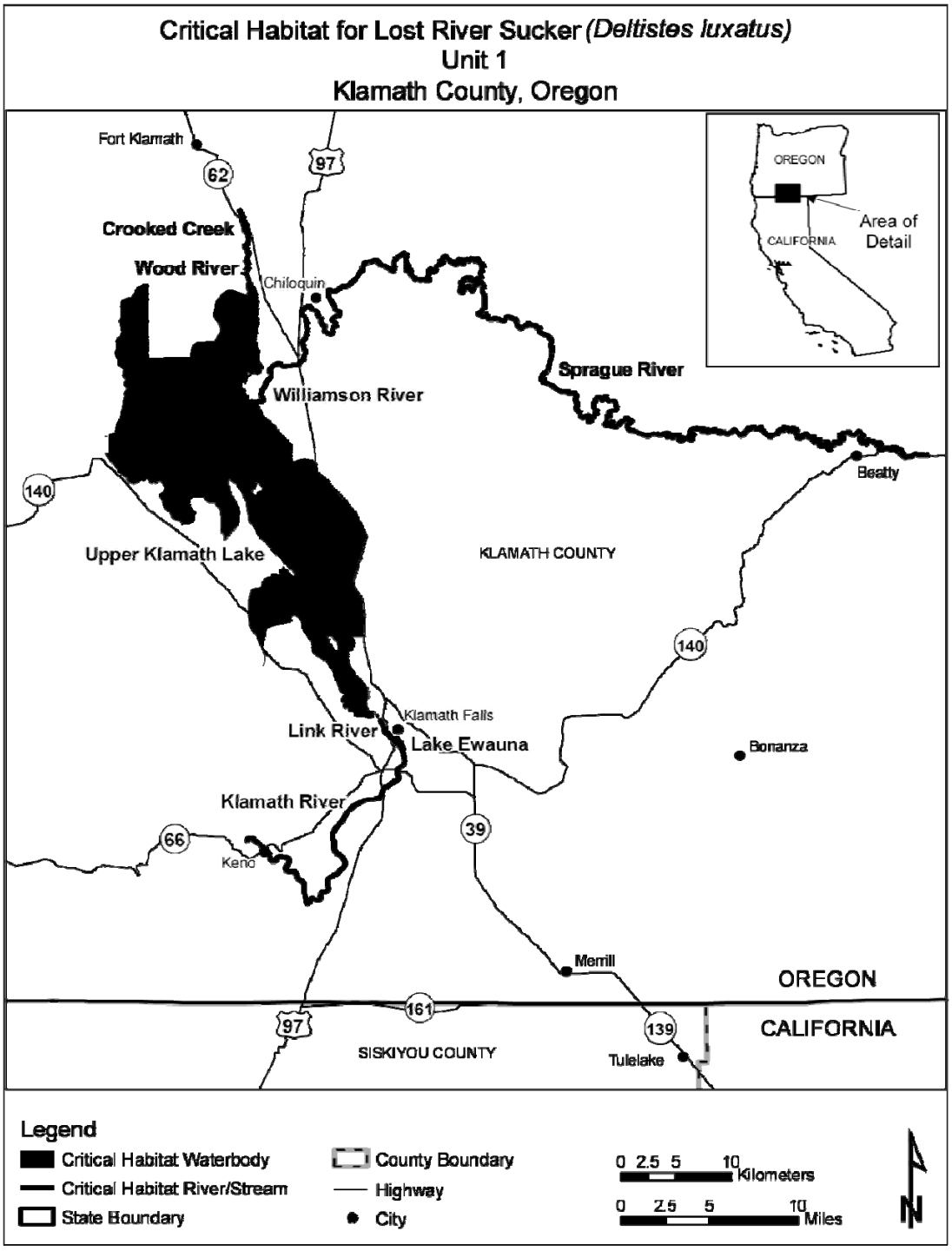
(4) *Critical habitat map units*. Data layers defining map units were created on a

base of the U.S. Geological Survey 2009 National Hydrography Dataset, and critical habitat was then mapped using North American Datum (NAD) 83, Universal Transverse Mercator Zone 10N coordinates.

(5) Unit 1: Upper Klamath Lake Unit, Klamath County, Oregon.

(i) [Reserved for textual description of Unit 1.]

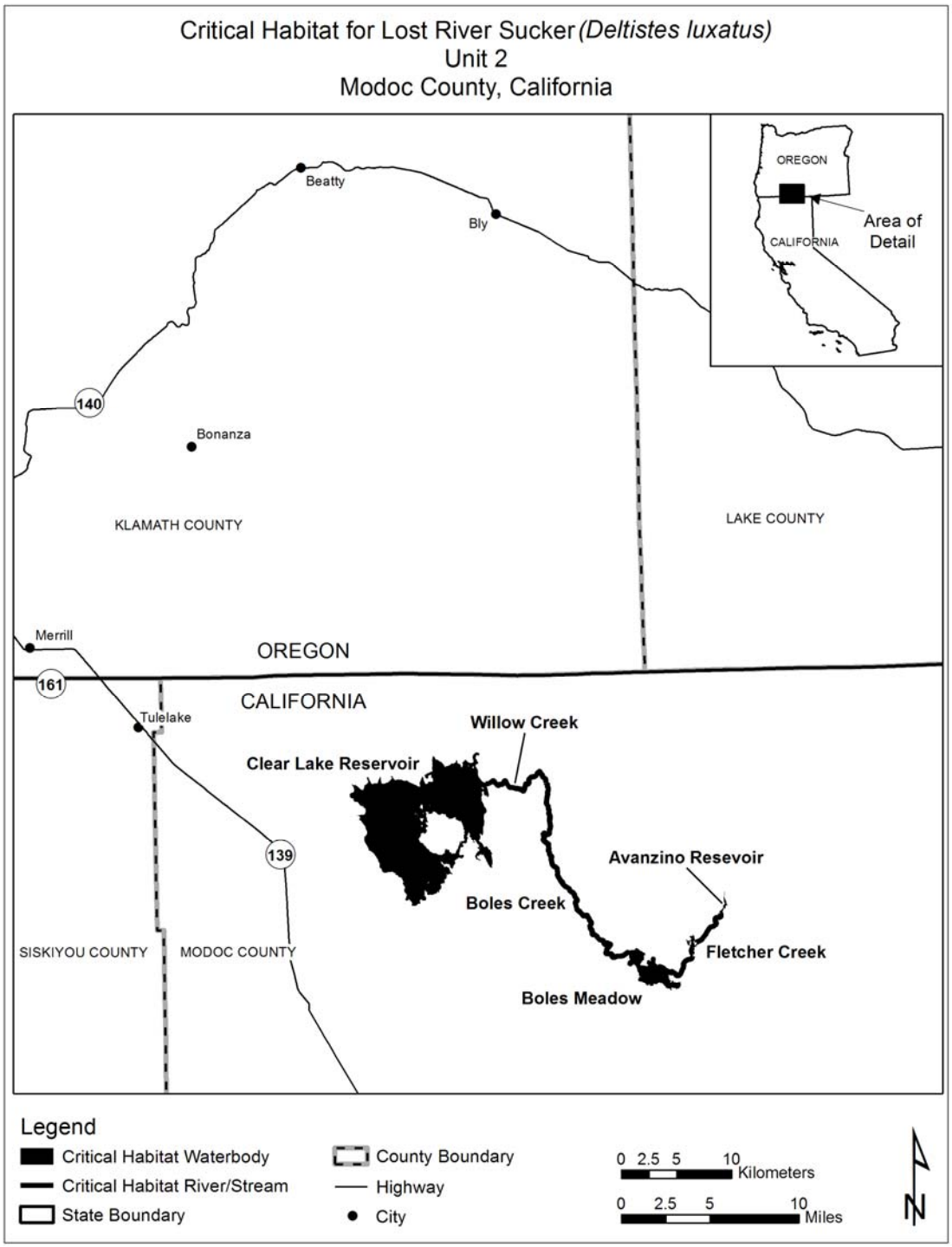
(ii) **Note**: Map of Unit 1, Upper Klamath Lake, follows:


Critical Habitat for Lost River Sucker (Deltistes luxatus)
Unit 1
Klamath County, Oregon
Fort Klamath
62
97
Crooked Creek
Wood River
Chiloquin
Williamson River
Sprague River
Beatty
140
Upper Klamath Lake
KLAMATH COUNTY
140
Klamath Falls
Link River
Lake Ewauna
Bonanza
Klamath River
66
Keno
39
Merrill
OREGON
161
97
139
CALIFORNIA
SISKIYOU COUNTY
Tulelake
OREGON
CALIFORNIA
Area of Detail
Legend
Critical Habitat Waterbody
Critical Habitat River/Stream
State Boundary
County Boundary
Highway
City
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
N

(6) Unit 2: Lost River Basin Unit, Modoc County, California.

(i) [Reserved for textual description of Unit 2.]

(ii) **Note**: Map of Unit 2, Lost River Basin, follows:


Critical Habitat for Lost River Sucker (Deltistes luxatus)
Unit 2
Modoc County, California
OREGON
CALIFORNIA
Area of Detail
Beatty
Bly
Bonanza
140
KLAMATH COUNTY
LAKE COUNTY
Merrill
OREGON
161
CALIFORNIA
Tulelake
Willow Creek
Clear Lake Reservoir
139
Avanzino Resevoir
Boles Creek
Fletcher Creek
Boles Meadow
SISKIYOU COUNTY
MODOC COUNTY
Legend
Critical Habitat Waterbody
Critical Habitat River/Stream
State Boundary
County Boundary
Highway
City
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
N

* * * * *

Shortnose Sucker (*Chasmistes brevirostris*)

(1) Critical habitat units are depicted for Klamath and Lake Counties, Oregon, and Modoc County, California, on the maps below.

(2) Within these areas, the primary constituent elements of the physical and biological features essential to the conservation of the shortnose sucker consist of three components:

(i) *Water*. Areas with sufficient water quantity and depth within lakes, reservoirs, streams, marshes, springs, groundwater sources, and refugia habitats with minimal physical, biological, or chemical impediments to connectivity. Water should exhibit depths ranging from less than 1.0 m (3.28 ft) up to 4.5 m (14.8 ft) to accommodate each life stage. The water quality characteristics should include water temperatures of less than 28.0 °Celsius (82.4 °Fahrenheit); pH less than 9.75; dissolved oxygen levels greater than 4.0 mg per L; algal toxins (less than 1.0 microgram (µg) per L); and un-ionized ammonia (less than 0.5 mg per L). Elements also include natural flow regimes that provide flows during the appropriate time of year or, if flows are controlled, minimal flow departure from a natural hydrograph.

(ii) *Spawning and rearing habitat*. Streams and shoreline springs with gravel and cobble substrate at depths typically less than 1.3 m (4.3 ft) with adequate stream velocity to allow spawning to occur. Areas identified in PCE1 containing emergent vegetation adjacent to open water that provides habitat for rearing . This facilitates growth and survival of suckers, as well as protection from predation and protection from currents and turbulence.

(iii) *Food*. Areas that contain an abundant forage base, including a broad array of chironomidae, crustacea, and other aquatic macroinvertebrates.

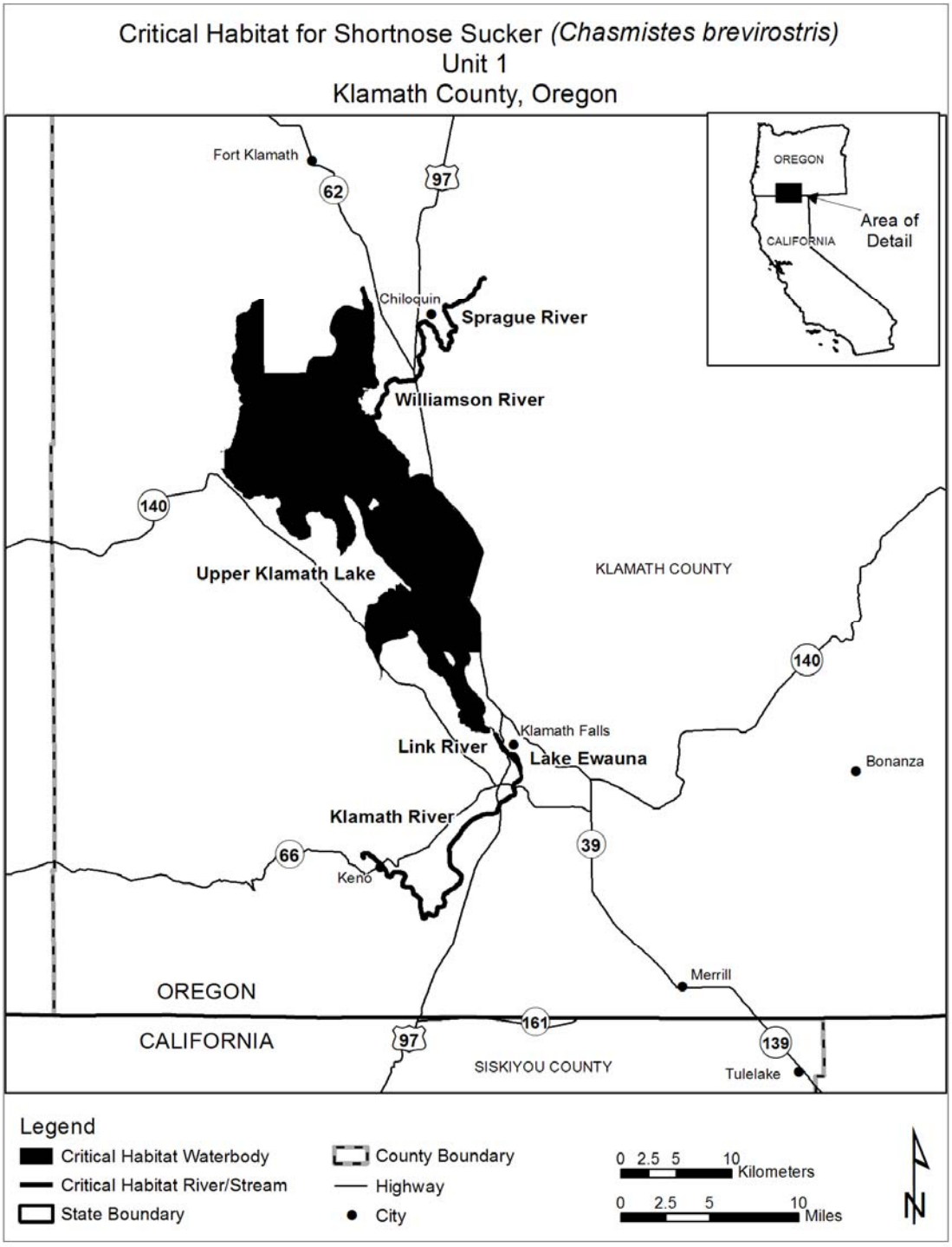
(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule.

(4) *Critical habitat map units*. Data layers defining map units were created on a base of the U.S. Geological Survey 2009 National Hydrography Dataset, and critical habitat was then mapped using North American Datum (NAD) 83, Universal Transverse Mercator Zone 10N coordinates.

(5) Unit 1: Upper Klamath Lake Unit, Klamath County, Oregon.

(i) [Reserved for textual description of Unit 1.]

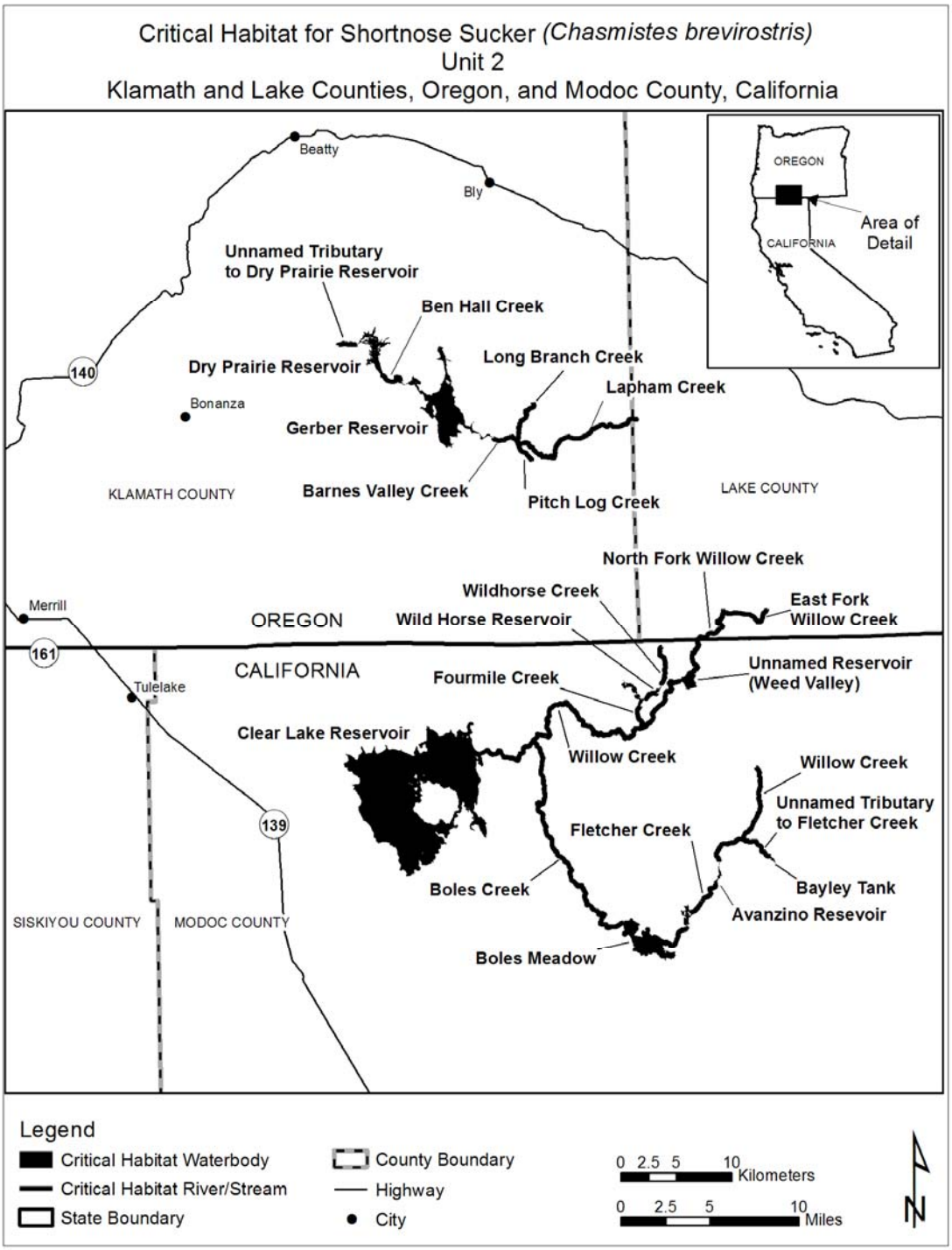
(ii) **Note**: Map of Unit 1, Upper Klamath Lake, follows:


Critical Habitat for Shortnose Sucker (Chasmistes brevirostris)
Unit 1
Klamath County, Oregon
Fort Klamath
62
97
Chiloquin
Sprague River
Williamson River
140
Upper Klamath Lake
KLAMATH COUNTY
140
Klamath Falls
Link River
Lake Ewauna
Bonanza
Klamath River
66
Keno
39
Merrill
OREGON
CALIFORNIA
97
161
139
SISKIYOU COUNTY
Tulelake
OREGON
CALIFORNIA
Area of Detail
Legend
Critical Habitat Waterbody
Critical Habitat River/Stream
State Boundary
County Boundary
Highway
City
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
N

(6) Unit 2: Lost River Basin Unit, Klamath and Lake Counties, Oregon, and Modoc County, California.

(i) [Reserved for textual description of Unit 2.]

(ii) **Note**: Map of Unit 2, Lost River Basin, follows:


Critical Habitat for Shortnose Sucker (Chasmistes brevirostris)
Unit 2
Klamath and Lake Counties, Oregon, and Modoc County, California
Beatty
Bly
OREGON
CALIFORNIA
Area of Detail
Unnamed Tributary to Dry Prairie Reservoir
Ben Hall Creek
Dry Prairie Reservoir
Long Branch Creek
Lapham Creek
140
Bonanza
Gerber Reservoir
KLAMATH COUNTY
Barnes Valley Creek
Pitch Log Creek
LAKE COUNTY
North Fork Willow Creek
Wildhorse Creek
East Fork Willow Creek
Merrill
OREGON
Wild Horse Reservoir
161
CALIFORNIA
Unnamed Reservoir (Weed Valley)
Tulelake
Fourmile Creek
Clear Lake Reservoir
Willow Creek
Willow Creek
Unnamed Tributary to Fletcher Creek
139
Fletcher Creek
Bayley Tank
Boles Creek
Avanzino Resevoir
SISKIYOU COUNTY
MODOC COUNTY
Boles Meadow
Legend
Critical Habitat Waterbody
Critical Habitat River/Stream
State Boundary
County Boundary
Highway
City
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
N

* * * * *

Dated: November 22, 2011

/s/ Eileen Sobeck

Acting Assistant Secretary for Fish and Wildlife and Parks

Billing Code 4310–55–P

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