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50 CFR Part 17

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

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: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service, designate critical habitat for the Lost River sucker and shortnose sucker under the Endangered Species Act. In total, approximately 146 miles (234 kilometers) of streams and 117,848 acres (47,691 hectares) of lakes and reservoirs for Lost River sucker and approximately 136 miles (219 kilometers) of streams and 123,590 acres (50,015 hectares) of lakes and reservoirs for shortnose sucker in Klamath and Lake Counties, Oregon, and Modoc County, California, fall within the boundaries of the critical habitat designation. The effect of this regulation is to conserve Lost River sucker's and shortnose sucker's habitat under the Endangered Species Act.

DATES: This rule becomes effective on January 10, 2013.

ADDRESSES: This final rule is available on the Internet at *http://www.regulations.gov.* Comments and materials received, as well as supporting documentation used in preparing this final rule, are available for public inspection, by appointment, during normal business hours, at the 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.

The coordinates or plot points or both from which the maps are generated are included in the administrative record for this critical habitat designation and are available at *http://www.fws.gov/klamathfallsfwo,* at *http://www.regulations.gov* in Docket No. FWS–R8–ES–2011–0097, and at the Klamath Falls Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we may develop for this critical habitat designation will also be available at the Fish and Wildlife Service Web site and Field Office set out above, and may also be included in the preamble and/or at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Laurie R. Sada, Field Supervisor, U.S. Fish and Wildlife Service, Klamath Falls Fish and Wildlife Office, 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:

Executive Summary

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

We, the U.S. Fish and Wildlife Service (Service), listed these two species as endangered on July 18, 1988 (53 FR 27130). On December 1, 1994, we published in the **Federal Register** a proposed critical habitat designation for Lost River sucker and shortnose sucker (59 FR 61744); that proposal was never finalized. On December 7, 2011, we published a revised proposed critical habitat designation in the **Federal Register** (76 FR 76337). Section 4(b)(2) of the Act states that the Secretary shall designate critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat.

The critical habitat areas we are designating in this rule constitute our current best assessment of the areas that meet the definition of critical habitat for Lost River sucker and shortnose sucker. We are designating:

- Approximately 146 miles (mi) (234 kilometers (km)) of streams and 117,848 acres (ac) (47,691 hectares (ha)) of lakes and reservoirs for Lost River sucker.
- Approximately 136 mi (219 km) of streams and 123,590 ac (50,015 ha) of lakes and reservoirs for shortnose sucker.

We have prepared an economic analysis of the designation of critical habitat. In order to consider economic impacts, we have prepared an analysis of the economic impacts of the critical habitat designations and related factors. We announced the availability of the draft economic analysis (DEA) in the **Federal Register** on July 26, 2012 (77 FR 43796), allowing the public to provide comments on our analysis. We have incorporated the comments and have completed the final economic analysis (FEA) concurrently with this final determination.

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

Background

It is our intent to discuss in this final rule only those topics directly relevant to the development and designation of critical habitat for the Lost River sucker and shortnose sucker under the Act. For more information on the biology and ecology of the Lost River sucker and shortnose sucker, refer to the final listing rule published in the **Federal Register** on July 18, 1988 (53 FR 27130), and to the Draft Revised Recovery Plan for the Lost River Sucker and Shortnose Sucker (Service 2011), which is available from the Klamath Falls Fish and Wildlife Office (see **ADDRESSES** section). For information on Lost River sucker and shortnose sucker critical habitat, refer to the proposed rule to designate critical habitat for the Lost River sucker and shortnose sucker published in the **Federal Register** on December 7, 2011 (76 FR 76337). Information on the associated draft economic analysis for the proposed rule to designate revised critical habitat was published in the **Federal Register** on July 26, 2012 (77 FR 43796).

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). We have collected a considerable amount of

scientific information since we issued the 1993 recovery plan, and we issued an updated Draft Revised Recovery Plan for the Lost River Sucker and Shortnose Sucker 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.)). As per the settlement agreement, a revised proposed critical habitat rule was published in the **Federal Register** on December 7, 2011 (76 FR 76337). The notice of availability for the draft economic analysis accompanying this rule was published in the **Federal Register** on July 26, 2012 (77 FR 43796).

Summary of Comments and Recommendations

We requested written comments from the public on the proposed designation of critical habitat for the Lost River sucker and shortnose sucker during two comment periods. The first comment period associated with the publication of the proposed rule (76 FR 76337) opened on December 7, 2011, and closed on February 6, 2012. We also requested comments on the proposed critical habitat designation and associated draft economic analysis during a comment period that opened July 26, 2012, and closed on August 27, 2012 (77 FR 43796). We did not receive any requests for a public hearing. We also contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed rule and draft economic analysis during these comment periods.

During the first comment period, we received 15 comment letters directly addressing the proposed critical habitat designation. During the second comment period, we received three comment letters addressing the proposed critical habitat designation or the draft economic analysis. All substantive information provided during comment periods has either been incorporated directly into this final determination or addressed below. Comments received were grouped into general issues specifically relating to the proposed critical habitat designation for Lost River sucker and shortnose sucker, and are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Review

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

We reviewed all comments received from the peer reviewers for substantive issues and new information regarding critical habitat for the Lost River sucker and shortnose sucker. The peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve the final critical habitat rule. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Reviewer Comments

(1) Comment: One peer reviewer stated that the Service should consider riparian and wetland habitats along river corridors as cover for rearing in the Cover or Shelter section.

Our Response: We agree with the peer review comment and have included these areas in the *Cover or Shelter* section of this rule.

(2) *Comment:* One peer reviewer questioned our use of the term ''small group'' and thought the term is subjective and does not provide an accurate description of the Lost River sucker population that spawns at Upper Klamath Lake shoreline areas. The peer reviewer stated that the subpopulation of Lost River suckers in the Upper Klamath Lake consists of at least several thousand individuals and could very well be greater in number than the entire number of adult Lost River suckers in the Lost River subbasin.

Our Response: We agree with the peer reviewer comment and have not referred to this component of the Lost River sucker population as a ''small group'' in this rule.

(3) *Comment:* One peer reviewer stated that most Lost River sucker and shortnose sucker larvae spawned in the Williamson and Sprague River drift downstream very rapidly after swim-up and are in the lake by May, which they considered spring and not mid-summer as stated in the proposed rule.

Our Response: We agree and have made this correction in this rule.

(4) *Comment:* One peer reviewer stated that larval shortnose suckers appear to have a greater affinity for shoreline and marsh habitat than larval Lost River suckers though this differentiation is absent by the time they are juveniles.

Our Response: The updated information provided by the peer reviewer has been noted, and we have changed the text in this rule accordingly.

(5) *Comment:* One peer reviewer stated that the construction of the dams on the Klamath River and creation of Clear Lake Reservoir did create more habitat, but changed the type of habitat from lotic (river) to lentic (lake). The peer reviewer also stated uncertainty about the regulatory implications of what a critical habitat designation means for habitats that have been altered.

Our Response: We agree with the peer reviewer that construction of dams did create more habitat, but changed the type of habitat from lotic (river) to lentic (lake). Though altered from historical conditions, these areas currently provide space for individual and population growth and for normal behavior of Lost River sucker and shortnose sucker (see *Space for Individual and Population Growth and for Normal Behavior* section) and contain the features essential to the conservation of these species. As such, areas designated as critical habitat are subject to regulations under the Act.

(6) *Comment:* One peer reviewer stated that most (but probably not all) Lost River sucker and shortnose sucker larvae in the Sprague River rapidly outmigrate to Upper Klamath Lake. This same pattern of rapid outmigration has not been shown in the Clear Lake or Gerber Reservoir spawning tributaries.

Our Response: We agree and have noted this pattern is known to occur in the Upper Klamath Lake system but not within the Clear Lake or Gerber

spawning tributaries, and we have included this information in this final rule.

(7) *Comment:* One peer reviewer noted that in the proposed rule we identified the maximum algal toxin concentration identified in Primary Constituent Element (PCE) 1 to be less than 1.0 microgram (μg) per liter (L). The peer reviewer stated that this is the World Health Organization maximum concentration of microcysin in drinking water and is probably conservative for suckers. The peer reviewer also stated that the term ''algal toxin'' does not reflect the specific information available on the effects of toxins on fish and should be changed to ''microcystin.''

Our Response: The peer reviewer suggests 1.0 microgram per liter is probably a strict criterion for Lost River sucker and shortnose sucker exposure to microcystin through their environment. However, VanderKooi *et al.* (2010, p. 2) indicate the route of sucker exposure to microcystin is orally via the food chain (from chironomids that feed on *Microcystis* sp.) rather than via environmental exposure at the gills. During their investigation, water quality samples revealed microcystin levels as high as 17 and 6 micrograms per liter in 2007 and 2008, respectively. Because we are unaware at what levels microcystin has a negative effect on suckers, we have changed the PCE to reflect ''low levels'' of microcystin as opposed to a World Health Organization concentration threshold for human drinking water.

(8) *Comment:* One peer reviewer pointed out that preliminary tag-return data indicate that bird predation could substantially affect juvenile Lost River sucker and shortnose sucker survival, and that predation may affect other life stages as well. The peer reviewer suggested that management that reduces bird–fish interactions could improve Lost River sucker and shortnose sucker survival and may warrant a mention in the special management considerations.

Our Response: We have included the updated information provided by the peer reviewer in this rule.

(9) *Comment:* One peer reviewer stated that it did not appear, based on 2011 passive integrated transponder (PIT) tag detections at a remote station on Willow Creek and data collected from adult suckers fitted with radio transmitters, that the relatively low lake levels observed in 2011 adversely affected suckers' ability to access Willow Creek.

Our Response: We have reviewed the information submitted by the peer reviewer and have modified the text to clarify the relationship between flows in Willow Creek, Clear Lake elevation, and access to sucker spawning areas.

(10) *Comment:* One peer reviewer asked whether the most up-to-date lake bathymetry data indicate that access by Lost River sucker and shortnose sucker to Pelican Bay in Upper Klamath Lake could be affected at lower lake levels and if so, at what lake elevation would this occur?

Our Response: We have in our files the most up-to-date bathymetry data acquired from the U.S. Bureau of Reclamation (USBOR 2012) and are in the process of validating the data to determine how lake level alterations may affect access to Pelican Bay. However, this validation process does not influence our decision to designate Pelican Bay in Upper Klamath Lake as critical habitat because that area provides the physical and biological features essential to the conservation of the Lost River sucker and shortnose sucker.

(11) *Comment:* One peer reviewer stated that the pH does not rise as a result of algal decomposition. As a result of photosynthesis, pH is elevated in Upper Klamath Lake during the peak of the *Aphanizomenon flos-aque* bloom. When the bloom subsides and cells decompose pH decreases to around or just above neutral (pH 7).

Our Response: We agree and have addressed the peer reviewer comments for this section.

(12) *Comment:* One peer reviewer notified us that Larson and Brush (2010) have an updated estimate of the amount of wetland acreage converted to agriculture and may be a good updated source to cite.

Our Response: The Larson and Brush (2010) reference provides consistent information on amount of wetland loss surrounding Upper Klamath Lake; they state 66 percent has been converted to agriculture, and the proposed rule states approximately 70 percent. However, the citation is more contemporary, and we agree that it is a good source to cite and have therefore done so.

(13) *Comment:* One peer reviewer questioned our rationale for designating the Wood River as critical habitat for Lost River suckers but not shortnose suckers. The reviewer stated that almost all suckers captured at the mouth of the Wood River by the U.S. Geological Survey (USGS) in 2001 were either shortnose suckers or Klamath largescale suckers.

Our Response: After careful review of the peer reviewer comment and data provided, as well as review of additional information from USBOR that was not in our files when we were developing the proposed rule, we have determined that portions of the Wood River and Crooked Creek contain the features essential to the conservation of the shortnose sucker, and we have designated those areas as critical habitat for the species. The approximate area identified includes 0.31 miles (mi) (0.50 kilometers (km)) of Wood River and 7.26 mi (11.67 km) of Crooked Creek. Our determination to include this additional area as critical habitat for the shortnose sucker is based on information that the area contains the features essential for ensuring that multiple viable spawning populations are conserved throughout the species' range and the area provides spawning and rearing habitat for the species. The additional area we determined and have designated as critical habitat for the shortnose sucker coincides with the area we previously proposed and are now designating for the Lost River sucker. Information documenting shortnose sucker in the Wood River and Crooked Creek is on file and available upon request (see **FOR FURTHER INFORMATION CONTACT** section).

(14) *Comment:* One peer reviewer questioned our rationale for designating the upper Sprague River as critical habitat for Lost River suckers but not shortnose suckers. The reviewer provided USGS tagging data to indicate that at least a small percentage of shortnose suckers ascend the Sprague River at least as far upstream as Braymill, and the peer reviewer stated that some likely go further.

Our Response: The upper Sprague River (upstream of Braymill) was not designated as critical habitat for shortnose sucker because a very small percentage of the radio-tagged individuals have been documented in that reach. In fact, the vast majority of radio-tagged shortnose sucker were not observed migrating upstream beyond Braymill, suggesting that they spawn further downstream than Lost River sucker. Based on this information, we have determined that, although the area on the Sprague River upstream of Braymill contains physical and biological features used by the shortnose sucker, those features are not essential to the conservation of the species in this location. The area, therefore, does not meet the definition of critical habitat for shortnose suckers. However, this finding does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. As such, no change has been made to include shortnose sucker critical habitat on Sprague River above Braymill.

(15) *Comment:* One peer reviewer commented on the *Application of the ''Adverse Modification'' Standard*

section of the proposed rule and stated that other activities that may affect critical habitat include groundwater use and wetland alteration and that these two activities should be specifically mentioned. Water quantity is covered under 1 and sedimentation is covered under 2, but other activities that may affect water quality should be mentioned in adverse modification.

Our Response: We agree that groundwater use and wetland alteration are important factors that may affect habitat for Lost River sucker and shortnose sucker. We have included both of these activities in the *Application of the ''Adverse Modification'' Standard* section.

(16) *Comment:* One peer reviewer stated that the rationale for all water quality limits should be stated and citations given.

Our Response: The water quality limits for temperature, dissolved oxygen, and pH were based on stress thresholds developed by Loftus (2001). We have included this information in the Critical Habitat section below.

(17) *Comment:* One peer reviewer and several commenters stressed that Tule Lake and segments of the Lost River are essential to the conservation and recovery of the species and should therefore be designated as critical habitat.

Our Response: Outside of Upper Klamath Lake, Clear Lake Reservoir, and Gerber Reservoir, Tule Lake is the only known water body where significant Lost River sucker and shortnose sucker populations occur. Historically, Tule Lake was approximately 110,000 ac (44,516 ha) in size during high water times (NRC 2004, p. 96) and was connected to spawning habitat within the Lost River (a tributary of Tule Lake); fish movement occurred between Tule Lake and the upper Lost River basin. Due to habitat alterations from construction of the Klamath Reclamation Project (Project), Tule Lake currently has a maximum size of approximately 13,000 ac (5261 ha; NCR 2004, p. 96) during high water times and fish movement to the upper Lost River basin is no longer possible. Currently, Lost River sucker and shortnose sucker larvae can pass through the fish screen on the A-canal diversion on Upper Klamath Lake, upstream of Tule Lake, and are found throughout the canal system on the Project. We believe Lost River sucker and shortnose sucker in Tule Lake originate from Upper Klamath Lake and move through the canals on the Project to Tule Lake, which serves as a drainage sump for the Project for used agricultural runoff. Fish collected from fish salvage efforts from Project canals at the end of the irrigation season also provide Lost River sucker and shortnose sucker individuals to Tule Lake.

The habitat of Tule Lake, although able to support Lost River sucker and shortnose sucker, does not provide spawning habitat or contain a viable self-sustaining population of Lost River suckers or shortnose suckers (see *Criteria Used To Identify Critical Habitat* item (4) below). Without the inadvertent influx of additional fish from Upper Klamath Lake, the population of Lost River sucker and shortnose sucker would most likely dissipate. In addition, as planned water conservation efforts are implemented in the water service area and on the Project, water within the drainage system would most likely be reduced. This reduction in water may limit future movement of Lost River sucker and shortnose sucker from Upper Klamath Lake to Tule Lake. With less water in the system, fish salvage efforts and the number of fish collected and provided to Tule Lake would be further reduced.

In determining which areas to identify as critical habitat, we examined the geographic locations currently occupied by Lost River sucker and shortnose sucker, like Tule Lake, to see if the physical or biological features (PBFs) essential to the conservation of these species were present. Anderson-Rose Dam completely blocks access to suitable spawning habitat for Lost River sucker and shortnose sucker in Tule Lake. Habitat downstream of the dam does not appear to provide suitable spawning and rearing habitat, and no successful spawning or recruitment is known to occur in Tule Lake or its tributaries. Currently, Tule Lake functions only as a sink for Lost River sucker and shortnose sucker populations and does not meet the criteria used to identify critical habitat (see *Criteria Used To Identify Critical Habitat*). Therefore, we are not designating Tule Lake as critical habitat as this habitat does not provide the physical or biological features essential to the conservation of either species.

Although the current habitat conditions in Tule Lake fail to meet the definition of critical habitat, the Lost River sucker and shortnose sucker populations in this water body remain important for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. The Tule Lake populations of Lost River sucker and shortnose sucker are important because they represent additional populations of suckers throughout the species' ranges and may provide source populations of suckers for potential augmentation or research opportunities. Furthermore, the Draft Revised Recovery Plan for the Lost River Sucker and Shortnose Sucker (Service 2011) includes high-priority actions to improve conditions for these populations and restore access to sufficient suitable spawning habitat, and as a result, Tule Lake may be able to contribute even more substantially to recovery in the future.

Comments From State(s)

Section 4(i) of the Act states, ''the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency's comments or petition.'' Comments received from the State of Oregon regarding the proposal to designate critical habitat for the Lost River sucker and shortnose sucker are addressed below. We did not receive comments from the State of California.

(18) *Comment:* The State suggested that the Wood River, Sycan River, Lost River, and Miller Creek should be designated as critical habitat since Lost River sucker and shortnose sucker are present.

Our Response: We agree with the commenter and, as a result of the information that was not available to us at the time of writing the proposed critical habitat rule, as well as new information that has been gathered since the proposed rule was published, we have refined this final designation and included additional areas we have determined to meet the definition of critical habitat for the shortnose sucker in the Wood River. These areas coincide with areas we previously proposed as critical habitat for the Lost River sucker. However, we have determined that the areas identified within the Sycan River, Lost River, and Miller Creek do not meet the criteria we used to identify critical habitat for the shortnose or Lost River

sucker (see *Criteria Used To Identify Critical Habitat*). Therefore, we are not designating these areas as critical habitat as these areas do not provide the essential physical or biological features necessary for contribution to conservation of either species.

Public Comments

Expansion of Designation

(19) *Comment:* Several commenters suggested that wetlands, including Agency Ranch and Barnes Ranch, surrounding Upper Klamath Lake and Agency Lake, should be designated as critical habitat to maximize Lost River sucker and shortnose sucker recovery potential.

Our Response: Major wetland areas surrounding Upper Klamath Lake, including the Williamson River delta and the Upper Klamath National Wildlife Refuge, were proposed and are being included in the designation of critical habitat. However, some lands adjacent to these areas (i.e., Barnes Ranch, Agency Ranch) have not been included because they do not meet the definition of critical habitat. Although Lost River sucker and shortnose sucker are present occasionally on the ranches, they enter via an unscreened diversion. Once on the ranches, they are considered lost to the population. We will continue to work on restoration of these ranches and issues related to water diversion in the future for the benefit of sucker recovery.

(20) *Comment:* A commenter suggested that the Service needs to designate the entire Clear Lake National Wildlife Refuge as critical habitat for the two species.

Our Response: We have defined the lateral extent of critical habitat in Clear Lake Reservoir by the perimeter of the water body as mapped according to the USGS 2009 National Hydrography Dataset. Designating the surrounding Refuge uplands would be inconsistent with designating lateral extent of critical habitat in other waterbodies because the Refuge uplands do not contain the physical or biological features essential to the conservation of these species.

(21) *Comment:* A commenter stated that Lower Klamath Lake should be included as critical habitat.

Our Response: Please see the definition of critical habitat in the rule below. Although Lower Klamath Lake was occupied historically, it was not occupied at the time of listing. Lower Klamath Lake was historically connected to the Klamath River, but the construction of the railroad, dikes, and water management facilities has significantly altered this habitat. Lower Klamath Lake is no longer connected to the Klamath River and is dry in portions of the year. Because the habitat within Lower Klamath Lake is significantly altered and no longer connected to the Klamath River, we have determined that this area does not meet the definition of critical habitat under section 3(5)(A)(ii) of the Act.

(22) *Comment:* One commenter was opposed to the designation and/or apparent expansion of critical habitat for the Lost River sucker and shortnose sucker.

Our Response: Under section 4(b)(3)(A) of the Act, we are required to designate critical habitat to the maximum extent prudent and determinable for any endangered or threatened species. On December 1, 1994, we published in the **Federal Register** proposed critical habitat for Lost River sucker and shortnose sucker (59 FR 61744); that proposal was never finalized. In a stipulated settlement agreement we agreed to submit to the **Federal Register** a final critical habitat designation for the Lost River sucker and the shortnose sucker no later than November 30, 2012 (*Wood et al.* v. *Thorson et al.,* No. 91–cv–6496–TC (D. Or.)). Due to advancement in our understanding of Lost River sucker and shortnose sucker ecology and habitat requirements, and technological advancements in mapping made available since preparing the 1994 proposed rule, we published a revised proposed critical habitat rule in the **Federal Register** on December 7, 2011 (76 FR 76337). This final critical habitat rule does not represent an expansion of the 1994 proposed rule. Rather, this rule represents approximately 73 percent less habitat than was proposed for designation in the 1994 rule.

(23) *Comment:* One commenter stated the Service should consider expanding the lateral reach of critical habitat to include a riparian buffer zone that is fully adequate to ensure water quality is maintained within the designated waters.

Our Response: We used bankfull conditions to determine the aquatic limits of critical habitat for the Lost River sucker and shortnose sucker. Bankfull width can be described as the flow that just fills the stream channel to the top of its nearest banks but below a point where the water begins to overflow onto a floodplain. Most aquatic systems, including those in the Klamath Basin, do not maintain water year-round at the bankfull limits even during years with high water availability. As a result, the actual aquatic limit (and by default the habitat available to the Lost River sucker and shortnose sucker) for the majority of time is well below the bankfull limit. Therefore, some riparian and wetland vegetation likely occurs in most of these areas and are by default part of the designation. These riparian and wetland vegetation areas below the bankfull limit assist in providing protection from erosion and help maintain water quality. However, we acknowledge that certain activities that occur outside of the lateral extent of critical habitat may impact critical habitat. For example, upland management practices such as road construction and maintenance or timber harvest may affect adjacent aquatic habitat if measures are not in place to alleviate any negative effects. We will implement this rule consistent with our analysis of these effects, and work closely and cooperatively with Federal agencies (or other entities where a Federal nexus exists), to ensure any such actions do not adversely modify designated critical habitat and that conservation measures are in place to protect the habitat and the two species.

Grazing and Agriculture

(24) *Comment:* Several commenters stated grazing can be beneficial for watershed health and are opposed to citing grazing as a threat to Lost River sucker and shortnose sucker habitat. Additionally, one commenter stated that if there is no risk to Lost River sucker and shortnose sucker habitat from grazing then there is no valid reason to designate critical habitat.

Our Response: The Lost River sucker and shortnose sucker listing rule (53 FR 27130) first identified livestock grazing (among other factors) as a threat to both species. We agree with the commenters that depending on how grazing is managed, there can be beneficial watershed effects from grazing. However, the purpose of this rule is to determine the areas that contain the physical and biological features essential to the conservation of the Lost River sucker and shortnose sucker and areas otherwise essential for the conservation of the species and not to discuss the factors leading to the species' decline.

(25) *Comment:* One commenter stated that the designation of critical habitat will equate to maintaining elevated water levels in reservoirs thereby reducing water for agriculture.

Our Response: In and of itself, critical habitat does not have implications for changes in lake level management or water delivery. Where a Federal nexus exists, consideration of any effects to the physical or biological features essential to the conservation of Lost River sucker and shortnose sucker from water

delivery and distribution operations, including water quantity and water quality, would be undertaken to assess the potential for adverse modification or destruction of habitat. We will continue to work cooperatively with land managers and water operators to implement Lost River sucker and shortnose sucker conservation measures in a manner consistent with the operators' needs to the maximum extent of the law.

Economic Analysis

(26) *Comment:* One commenter stated that the economic analysis noted the Service would not anticipate any differences in the recommendation for avoiding jeopardy versus adverse modification. Thus, the additional application of the adverse modification standard (i.e., designation of critical habitat) would be inconsequential and essentially redundant.

Our Response: Under section 4(b)(3)(A) of the Act, we are required to designate critical habitat to the maximum extent prudent and determinable for any endangered or threatened species. Although there may appear to be redundancy in a section 7 analysis on a proposed Federal action, the purposes of a jeopardy analysis and adverse modification determination are not the same. A jeopardy analysis determines if implementation of a proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of a listed species in the wild. In contrast, an adverse modification analysis determines if the physical or biological features of critical habitat would remain functional to serve the intended recovery role for the species as a result of implementation of a proposed Federal action. Because all the areas being designated are occupied by the species during some period of its life history, our effects analysis also includes potential effects to the habitat not under just an extinction standard but also a conservation standard for the species. The analysis of effects of a proposed Federal action on critical habitat is both separate from and different from that of the effects of a proposed project on the species itself. The jeopardy analysis evaluates whether a proposed action would appreciably reduce the likelihood of both survival and recovery of a listed species, while the destruction or adverse modification analysis evaluates how the action could affect the conservation value of designated critical habitat to the listed species. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. The addition of this regulatory benefit for these species may, in many instances, lead to different results and give rise to different regulatory requirements, which may then apply to a proposed Federal action. However, as we stated in the economic analysis, in most cases for this designation the difference between the two standards would be minimal.

(27) *Comment:* One commenter noted an area can be designated as critical habitat only if it includes both features essential to the conservation of the species and which may require special management considerations or protection. Appendix C of the draft economic analysis specifically demonstrates that the areas of interest to the Klamath Water Users Association (KWUA) do not require special management considerations or protection. Thus, the areas of interest to the KWUA do not qualify as critical habitat under the statutory definition.

Our Response: Appendix C of the economic analysis, which is the ''Incremental Effects Memorandum for the Economic Analysis of the Proposed Rule To Designate Critical Habitat for Lost River Sucker and Shortnose Sucker,'' was written to provide information to serve as a basis for conducting an economic analysis. The focus of the incremental analysis is to determine the impacts on land uses and activities from the designation of critical habitat that are above and beyond those impacts resulting from listing. The incremental analysis does not focus on special management considerations or protection. Additionally, under section 3(5)(A)(i) of the Act, the term critical habitat is defined as the specific areas within the geographic area occupied by the species at the time it is listed on which are found those physical or biological features that are (I) essential to the conservation of the species and (II) which may require special management considerations or protection. The definition does not state that an area must require special management consideration or protection for it to be designated as critical habitat. Special management considerations or protection are specifically discussed in the critical habitat rule (see *Special Management Considerations or Protection* section below). We designated the areas of interest to KWUA because we determined that they meet the definition of critical habitat.

(28) *Comment:* One commenter noted the Act authorizes the Service to exclude otherwise eligible areas from designation if it is determined that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat. The proposed rule has not identified any benefit of specifying Project-related waters as part of critical habitat. The draft economic analysis has, however, identified benefits of exclusion, including administrative costs that would arise if critical habitat was designated. Thus, the areas of interest to the KWUA should not qualify as critical habitat as the costs of exclusion outweigh the benefits of designation.

Our Response: As previously noted, under section 4(b)(3)(A) of the Act, we are required to designate critical habitat to the maximum extent prudent and determinable for any endangered or threatened species. In making this determination the Secretary shall designate areas based on the best scientific data available after taking into consideration the economic, national security, or any other impact of specifying any such area as critical habitat. Also under section 4(b)(2) of the Act, the Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of inclusion unless such a failure to designate the area would result in the extinction of the species concerned. We designated the identified areas as critical habitat because they contain the physical or biological features essential to the conservation of Lost River sucker and shortnose sucker. We also completed an economic analysis on the proposed designation and did not identify any areas or activities that may incur disproportionately higher incremental economic impacts as a result of the designation, and no changes in land or water management are expected to result from the critical habitat designation. We believe any administrative costs associated with consultation for adverse modification would be minimal as these areas are considered occupied and used by the two species, and consultation on actions with a Federal nexus would need to occur under section 7 of the Act regardless of whether the area is designated as critical habitat or not. As a result of these areas being designated as critical habitat, having no disproportionately higher incremental economic impacts, and additional consultation impacts being minimal, the Secretary is not exercising discretion to exclude the areas of interest to the KWUA under section 4(b)(2) of the Act.

(29) *Comment:* One commenter was unable to discern from the draft economic analysis the estimated total non-Federal costs, or the split between Federal and non-Federal costs.

Our Response: Although the draft economic analysis does not explicitly differentiate between Federal and non-Federal costs, Exhibits 2–2 and 4–2 provide a breakdown of the per-consultation costs to the Service, the consulting Federal agency, and third parties involved in the consultation. In addition, Exhibit A–1 of the draft economic analysis provides the projected annualized impacts to small entities anticipated to be third parties to future consultations. As the majority of consultations forecasted in the economic analysis involves only Federal agencies, the majority of costs are anticipated to be borne by Federal agencies.

(30) *Comment:* One commenter notes that the draft economic analysis makes reference to the California Environmental Quality Act (CEQA). Assuming there might be a project in critical habitat that is subject to CEQA, the draft economic analysis states that the designation ''may'' prevent certain types of projects from ''claiming a categorical exemption from CEQA.'' The commenter states that there is no analysis, explanation, or justification for this statement.

Our Response: As noted on page ES–3 of the draft economic analysis, the designation for the suckers is not expected to result in indirect impacts resulting from CEQA or other regulations. GIS analysis indicates that areas proposed as critical habitat in Modoc County, California, are managed either as national wildlife refuge lands or as Federal grazing allotments. In addition, no projects on private lands in these areas were identified during the public comment period. Therefore, the analysis does not forecast any indirect impacts from CEQA in these areas. Language on pages ES–3, 4–10, and 4–11 of the Final Economic Analysis has been updated to clarify this finding.

General Comments

(31) *Comment:* Designation of critical habitat amounts to Federal possession of private land.

Our Response: Designation of critical habitat does not affect land ownership or establish a refuge or preserve, and has no impact on private landowners implementing actions on their land that do not require Federal funding or permits. In addition, 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 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.

(32) *Comment:* One commenter requested that lands covered under the draft habitat conservation plan being developed by PacifiCorp and the Service should be excluded from designated critical habitat.

Our Response: We are in the process of developing a Habitat Conservation Plan (HCP) with PacifiCorp for the Lost River sucker and shortnose sucker. The goal of the HCP is to minimize impacts to covered species, and to permit incidental take resulting from the operation of their hydroelectric facilities on the Klamath River. Covered lands in the draft HCP include: (1) The Klamath River (also containing the Link River), between the outlet of Upper Klamath Lake (River Mile 255) and the Iron Gate Fish Hatchery below Iron Gate Dam (River Mile 189.3); (2) lands within 300 feet (ft) (91 meters (m)) of the ordinary high water line of the Klamath River and its reservoirs between these two locations; and (3) land areas owned by PacifiCorp adjacent to the Klamath River that are associated with the hydroelectric facilities.

The PacifiCorp lands adjacent to the Klamath River (identified in (1) above) do not support the physical or biological features essential to the conservation of the Lost River sucker and shortnose sucker and have not been proposed as critical habitat.

The portion of PacifiCorp lands covered by the draft HCP that meets the definition of critical habitat for the Lost River sucker and shortnose sucker is within 300 ft (91 m) of the ordinary high water line (analogous to bankfull width) of the Klamath River downstream to Keno Dam. However, PacifiCorp's operation of the hydroelectric facilities do not impact these lands. PacifiCorp has not proposed conservation activities for these areas. Therefore, the Secretary is not exercising discretion to exclude these areas under section 4(b)(2) of the Act.

(33) *Comment:* One commenter suggested a more current reference (i.e., USFS 2010, p. 7) for our statement: ''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).''

Our Response: We acknowledge the updated reference and have included it in the rule.

(34) *Comment:* One commenter could find no definition for the acronym ''PBF.''

Our Response: PBF is physical or biological feature. We neglected to parenthetically reference PBF after its first use but have corrected this oversight in this final rule.

(35) *Comment:* One commenter stated that including the unnamed tributary to Dry Prairie Reservoir, which does not have consistent habitat available, seems to contradict the sixth criterion used to identify critical habitat (p. 76345).

Our Response: Despite not having consistent flows each spring, when flows are present, shortnose suckers have been documented ascending this unnamed tributary to spawn. We have determined that this unnamed tributary provides the physical or biological features essential to the conservation of shortnose sucker and thus provides for the conservation of the species. As such, we have included this unnamed tributary in this designation.

(36) *Comment:* One commenter urged the Service to consider modifying its special management provisions for exotic predatory fish to include exotics from other Orders, such as bullfrogs (*Lithobates catesbeianus*), that are potential predators on sucker fry.

Our Response: We are unaware of any studies, and the commenter did not provide studies, documenting bullfrog predation on Lost River sucker or shortnose sucker. Thus, we have not included bullfrog in the list of predators.

(37) *Comment:* Several commenters stated it is premature to issue the proposed rule absent an economic analysis of the designation.

Our Response: Under our current regulations at 50 CFR 424.19, the Secretary shall identify any significant activities that would either affect an area considered for designation as critical habitat or be likely to be affected by the designation, and shall, after proposing designation of such an area, consider the probable economic and other impacts of the designation upon proposed or ongoing activities (77 FR 51503; August 24, 2012). We interpret ''after proposing'' to mean after publication of the proposed rule. As a result, we issued a draft economic analysis along with our revised critical habitat proposal in the **Federal Register** on July 26, 2012 (77 FR 43796), and

solicited public comment on both documents.

(38) *Comment:* One commenter stated that recreational fishing should be included as one of the factors leading to the decline of suckers.

Our Response: We agree with the reviewer's comment and note that, although recreational angling for these species is presently prohibited, historic recreational angling was a reason for decline of Lost River sucker and shortnose sucker (53 FR 27132). However, the purpose of this rule is to determine the areas that meet the definition of critical habitat for the Lost River sucker and shortnose sucker and identify these areas for designation, not to discuss the factors leading to the species decline.

(39) *Comment:* One commenter stated that the natural eutrophication process of Upper Klamath Lake should be addressed in greater detail, including a discussion of pre- and post-1900 water quality.

Our Response: This rulemaking is for designating critical habitat. As a result, we do not think an extended discussion of this topic in a critical habitat rule is an appropriate venue for dissemination of such information. We point to several references within the *Special Management Considerations or Protection* section below related to a changing algal community and the hypereutrophic nature of Upper Klamath Lake, which are available upon request (see **FOR FURTHER INFORMATION CONTACT** section).

(40) *Comment:* One commenter requested that the term ''bankfull'' should be defined.

Our Response: Bankfull width can be described as the flow that just fills the stream channel to the top of its nearest banks but below a point where the water begins to overflow onto a floodplain. In lakes or reservoirs, the lateral extent of bankfull conditions and boundaries are defined according to the USGS 2009 National Hydrography Dataset. We used bankfull conditions to determine the aquatic limits of critical habitat for the Lost River sucker and shortnose sucker. We have defined the term ''bankfull'' in our *Criteria Used To Identify Critical Habitat* section.

(41) *Comment:* One commenter stated that in the ''Exclusions Based on Other Relevant Impacts'' section of the proposed rule, we indicated that there are no other management plans for these species. However, the Klamath Basin Restoration Agreement (KBRA) is one such example.

Our Response: While the KBRA holds much promise for enhancing survival and recovery of Lost River sucker and shortnose sucker, it was not included in this section because the agreement has yet to be authorized and funded by Congress.

Summary of Changes From Proposed Rule

In preparing this final critical habitat designation, we reviewed and considered comments from peer reviewers and the public on the revised proposed critical habitat rule. We also made a draft economic analysis available and solicited comment from the public on both the revised proposed designation and the draft economic analysis (77 FR 43796; July 26, 2012). As a result of the peer review and public comments received, we made slight changes to this final rule as described in the **Summary of Comments and Recommendations** section above.

During finalization of our critical habitat designation, we discovered errors in the calculation of some of the totals for the proposed units in Table 1 and Table 3 in the revised proposed designation (76 FR 76337; December 7, 2011). The ownership totals for Table 1 and Table 3 were incorrect; however, the individual ownership totals for each unit were correctly identified. We have corrected these errors, and the correct totals can be found in Table 1 and Table 3 of this final rule.

In addition, based on a peer review comment we received regarding the absence of critical habitat for shortnose sucker in the Wood River, we have reevaluated whether we should include the Wood River as critical habitat for shortnose sucker. In our revised proposed rule, we identified this area as critical habitat for the Lost River sucker but not for the shortnose sucker. As a result of the information that was not available to us at the time of writing the proposed critical habitat rule, as well as new information that has been gathered since the rule was published, we have refined this final designation and included additional areas for shortnose sucker in the Wood River as critical habitat to coincide with areas also identified as critical habitat for the Lost River sucker. This information documents shortnose sucker habitat and presence in the Wood River, and likely Crooked Creek, and that these areas are presumably being used by the species for spawning. Our determination to include this additional area as critical habitat for the shortnose sucker is based on information that the area provides spawning and rearing habitat for the species and contains the physical or biological features and as a result is important for ensuring multiple viable spawning populations are conserved throughout the species' range. As such, we have designated approximately an additional 7 mi (12 km) of stream length in Unit 1 for shortnose sucker that includes the same sections of the Wood River and Crooked Creek that were proposed and now designated in Unit 1 for the Lost River sucker (see Table 4 below).

Critical Habitat

Background

Critical habitat is defined in section 3(5)(A) of the Act as:

(i) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Act, on which are found those physical or biological features

(I) Essential to the conservation of the species and

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

(ii) Specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Act, upon a determination that such areas are essential for the conservation of the species.

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

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery,

or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

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

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

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

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

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, 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 section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

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

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

(3) Cover or shelter;

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

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

We derive the specific physical or biological features essential for Lost River sucker and shortnose sucker from studies of this species' habitat, ecology, and life history as described in the **Critical Habitat** section of the proposed rule to designate critical habitat published in the **Federal Register** on December 7, 2011 (76 FR 76337), and in the information presented 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.

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 subpopulation of Lost River sucker utilizes 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 spring. Larval habitat is generally along the shoreline, in water 6 inches (in) to 20 in (10 centimeters (cm) to 50 cm) 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 6.6 ft (2.0 m)), 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. In contrast to larval Lost River sucker, larval shortnose sucker are more closely associated with shoreline and marsh habitat, although this distinction appears to disappear by the time both species become juveniles. 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 bottom-dwelling (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 microcrustaceans (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 a shift in prey selection as they mature (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, microcrustaceans, and other small aquatic macroinvertebrates, to be a biological feature essential 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 3.9 ft (1.2 m)) 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 less than 1 year of age often are found at depths less than 3 ft (1.0 m) in May and June, but shift in late July to water 5 to 6.5 ft (1.5 to 2.0 m) 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 subadults (individuals that display all of the characteristics of adults with the exception of reproductive maturity and reproductive structures (tubercles)) utilize habitats similar to adults (NRC 2004, p. 199). Adult Lost River sucker and shortnose sucker inhabit water depths of 3.0 to 15.7 ft (0.9 to 4.8 m) (Reiser *et al.* 2001, pp. 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 essential for the conservation of the Lost River sucker and shortnose sucker. Although specific data are lacking, it is also likely that wetland and riparian vegetation along river corridors are important for juvenile sucker cover and rearing.

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 75 mi (120 km) in the Sprague River (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 4.3 ft (1.3 m) and velocities up to 2.8 ft per second (85 cm 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. In the Sprague and Williamson Rivers that drain into Upper Klamath Lake, larvae spend little time in these rivers after swim-up, but quickly drift downstream (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 0.98 in (25 mm) total length. Juvenile Lost River sucker primarily occupy relatively shallow (less than approximately 1.6 ft (50 cm)), 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 8 mi (13 km) 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 4.1 ft per second (125 cm 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 that contain suitable water flow, gravel and cobble substrate, and water depth (as well as flowing water) that provide for larval out-migration and juvenile rearing habitat as described above to be essential physical or biological 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 or 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. Primary constituent elements (PCEs) are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the primary constituent elements specific to Lost River sucker and shortnose sucker 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 must have varied depths to accommodate each life stage: Shallow water (up to 3.28 ft (1.0 m)) for larval life stage, and deeper water (up to 14.8 ft (4.5 m)) for older life stages. The water quality characteristics should include water temperatures of less than 28.0 °Celsius (82.4 °F); pH less than 9.75; dissolved oxygen levels greater than 4.0 mg per L; low levels of microcystin; 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 4.3 ft (1.3 m) with adequate stream velocity to allow spawning to occur. Areas containing emergent vegetation adjacent to open water, provides habitat for rearing and 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 designation of critical habitat, we have identified the physical or biological features essential to the conservation of the species, through the identification of the features' primary constituent elements that 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 that are essential to the conservation of the species and which may require special management considerations or protection. 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) avian predation and 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). As a result of photosynthesis during algal blooms, pH levels increase to stressful levels for fish (Wood *et al.* 2006, p. 1). Once the algal bloom subsides, decomposition of the massive amounts of biomass can lower dissolved oxygen 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 protection 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 level of Clear Lake Reservoir was drawn down to extremely low levels for irrigation supply (Moyle 2002, p. 201). In 1992, Lost River sucker within Clear Lake Reservoir that were examined 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 again in 2010 in order to comply with the biological opinion's requirements for minimum lake elevations to avoid harm to listed fish. 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 protection 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 managing 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 fluctuating 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 protection may be needed to address the timing and volume of water that is diverted to maintain sufficient lake elevations.

Throughout the Upper Klamath Lake and Lost River Basin, timber harvesting and associated activities (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 remains in the upper Klamath River basin, and many of these are located near streams where they likely contribute sediment (USFS 2010, p. 7). These sediments result 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 floodplains, wetlands, forests, rangelands, and riparian areas, and this activity has resulted in the degradation of these areas. Poorly managed grazing operations can alter the streamside riparian vegetation and compact soil surfaces, increasing groundwater runoff, lowering streambank stability, and reducing fish 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 protection 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, lake levels in Clear Lake Reservoir in conjunction with flows in Willow Creek, the sole spawning tributary (Barry *et al.* 2009, p. 3), may adversely affect sucker populations during the spawning migration. Lake levels may be especially pertinent during years when spring runoff is intermediate and flows are sufficient for spawning migration by the suckers, but are not sufficient enough to increase lake elevations substantially during the narrow spawning window. This situation could create a condition in which flow is adequate for both species to spawn but lake elevation precludes suckers ability to access the habitat, although further research is needed to clarify this dynamic. 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. Roughly 66–70 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; Larson and Brush 2010, p. 19). 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 protection 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). In addition to exotic fish species, recent information has shown that American white pelican (*Pelecanus erythrorhynchos*) and double-crested cormorant (*Phalacrocorax auritus*) prey on Lost River sucker and shortnose sucker (Burdick 2012, p. 1). Special management considerations or protection 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; determining methods to reduce avian predation; 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 used the best scientific and commercial data available to designate critical habitat. We reviewed available information pertaining to the habitat requirements of this species. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we considered 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 not designating any areas outside the geographical area occupied by the species because the areas occupied at the time of listing (and which continue to be occupied) are sufficient for the conservation of the species. All units are designated based on sufficient elements of physical and biological features being present to support Lost River sucker and shortnose sucker life-history processes.

In determining which areas to consider as critical habitat, we reviewed the best available scientific data pertaining to the habitat requirements of this species, including information obtained from the Lost River sucker and shortnose sucker Recovery Team and the Recovery Implementation Committee. This review included participation and information from 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 considered the following criteria in identifying critical habitat:

(1) In determining areas occupied by the Lost River and shortnose sucker to designate as critical habitat, we relied upon principles of conservation biology, including: (a) Representation 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 (Shaffer and Stein 2000, pp. 301–321; Tear *et al.* 2005, p. 841).

(2) Using the conservation biology principles and species-specific habitat needs, we examined the distribution of Lost River sucker and shortnose sucker to determine critical habitat based on the following criteria: (a) Largest occupied areas or populations; (b) most highly connected populations and habitat; (c) areas that can contribute to Lost River sucker and shortnose sucker conservation; and (d) areas with highest conservation potential. We then used these criteria to identify those areas that are necessary to conserve Lost River sucker and shortnose sucker and which also contain the physical or biological features that are essential to the conservation of these species. These criteria reflect the need to protect habitat that can support resilient populations, as well as habitat that supports life-history diversity in the species.

(3) In selecting areas to designate as critical habitat, we considered factors such as size, connectivity to other aquatic habitats, and rangewide recovery considerations, including the importance of spawning and rearing habitat and sufficient water quality (Service 2011). 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) We examined geographic locations currently occupied by Lost River sucker and shortnose sucker and determined that certain areas did not contain elements essential to the conservation of these species, and we did not consider these areas as essential to the

conservation of the species. Based on the following criteria, such determinations include those areas that have had severe habitat degradation and very low potential for conservation or restoration, areas that do not contribute to connectivity among populations, and areas where Lost River sucker or shortnose sucker populations are not viable; are not connected to spawning habitat; occur in low densities or abundances in very isolated populations; occur only as sink populations; and are greatly impacted by nonnative species.

Based on the preceding criteria, we applied the following methods to identify and map critical habitat:

(1) We identified the geographical areas occupied by Lost River sucker and shortnose sucker at the time of listing that contain the physical and biological features essential for the conservation of the species and which contain one or 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. As a result of this review, Upper Klamath Lake and its major tributaries, the head of the Klamath River downstream to Iron Gate Dam, Clear Lake and its tributaries, Gerber Reservoir and its tributaries, Tule Lake and the Lost River proper were considered in this assessment.

(2) We used data gathered during the Lost River sucker and shortnose sucker recovery planning process and the Revised Draft Recovery Plan for the Lost River Sucker and Shortnose Sucker (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 critical habitat.

(3) 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.

(4) 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, as well as the distribution information for the Lost River sucker and shortnose sucker. Bankfull is defined as the flow that just fills the stream channel to the top of its nearest banks but below a point where the water begins to overflow onto a floodplain. 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 and distribution information for each species. 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 USGS, Western Fisheries Research Center, and Klamath Falls Field Station.

(5) When determining critical habitat boundaries within this final rule, we made every effort to avoid including developed areas such as docks and bridges and other structures because such lands lack physical or 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 final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

The critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on *http://www.regulations.gov* at Docket No. FWS–R8–ES–2011–0097, on our Internet sites *http://www.fws.gov/klamathfallsfwo,* and at the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT** above).

We are designating as critical habitat lands that we have determined were occupied at the time of listing and continue to be occupied that contain the physical or biological features to support life-history processes essential to the conservation of the Lost River sucker and shortnose sucker.

Two units were designated for each species based on sufficient elements of physical or biological features being present to support Lost River sucker and shortnose sucker life processes. Some units contained all of the identified elements of physical or biological features and supported multiple life processes. Some segments contained only some elements of the physical or biological features necessary to support the Lost River sucker and shortnose suckers' particular use of that habitat.

Final Critical Habitat Designation

We are designating two units as critical habitat for Lost River sucker and two units as critical habitat for shortnose sucker. The critical habitat areas described below constitute our best assessment at this time of areas that meet the definition of critical habitat. For Lost River sucker, those two units, which were occupied at the time of listing and are still occupied, are: (1) Upper Klamath Lake Unit, including Upper Klamath Lake and tributaries as well as the Link River and Keno Reservoir, and (2) Lost River Basin Unit, including Clear Lake Reservoir and tributaries. For shortnose sucker, those two units, which were occupied at the time of listing and are still occupied, are: (1) Upper Klamath Lake Unit, including Upper Klamath Lake and tributaries as well as the Link River and Keno Reservoir, and (2) Lost River Basin Unit, including Clear Lake Reservoir and tributaries, and Gerber Reservoir and tributaries.

The approximate area of each critical habitat unit is shown in tables 1 through 4.

TABLE 1—AREA OF LAKES AND RESERVOIRS DESIGNATED AS CRITICAL HABITAT FOR LOST RIVER SUCKER

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

Critical habitat unit	Land ownership by type	Size of unit in acres (hectares)
1. Upper Klamath Lake	Federal	15,198 (6,151)
	State	533 (216)
	Private/Other	74,684 (30,224)
Unit Total		90,415 (36,590)
2. Lost River Basin	Federal	27,238 (11,023)
	State	0
	Private/Other	194 (79)
Unit Total		27,432 (11,102)
Total		117,848 (47,691)

Note: Area sizes may not sum due to rounding.

TABLE 2—STREAM LENGTH DESIGNATED AS CRITICAL HABITAT FOR LOST RIVER SUCKER

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

Critical habitat unit	Land ownership by type	Size of Unit in miles (kilometers)
1. Upper Klamath Lake	Federal	13 (21)
	State	Less than 1
	Private/Other	106 (171)
Unit Total		119 (191)
2. Lost River Basin	Federal	23 (37)
	State	Less than 1
	Private/Other	3 (6)
Unit Total		27 (43)
Total		146 (234)

Note: Area sizes may not sum due to rounding.

TABLE 3—AREA OF LAKES AND RESERVOIRS DESIGNATED AS CRITICAL HABITAT FOR SHORTNOSE SUCKER

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

Critical habitat unit	Land ownership by type	Size of unit in acres (hectares)
1. Upper Klamath Lake	Federal	15,198 (6,151)
	State	533 (216)
	Private/Other	74,684 (30,224)
Unit Total		90,415 (36,590)
2. Lost River Basin	Federal	32,051 (12,971)
	State	0
	Private/Other	1,124 (455)
Unit Total		33,175 (13,426)
Total		123,590 (50,015)

Note: Area sizes may not sum due to rounding.

TABLE 4—STREAM LENGTH DESIGNATED AS CRITICAL HABITAT FOR SHORTNOSE SUCKER

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

Critical habitat unit	Land ownership by type	Size of unit in miles (kilometers)
1. Upper Klamath Lake	Federal	6 (9)
	State	Less than 1
	Private/Other	41 (66)

TABLE 4—STREAM LENGTH DESIGNATED AS CRITICAL HABITAT FOR SHORTNOSE SUCKER—Continued

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

Critical habitat unit	Land ownership by type	Size of unit in miles (kilometers)
Unit Total		47 (76)
2. Lost River Basin	Federal	72 (116)
	State	Less than 1
	Private/Other	16 (26)
Unit Total		89 (143)
Total		136 (219)

Note: Area sizes may not sum due to rounding.

We present brief descriptions of all units, and reasons why they meet the definition of critical habitat for Lost River sucker and shortnose sucker, below.

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 approximately 90,415 ac (36,590 ha) of lakes and 119 mi (191 km) of rivers. 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 was occupied at the time of listing and contains those physical or biological features essential to the conservation of the Lost River sucker that 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 are not known to occur elsewhere throughout the range of the species.

The physical or biological features and the special management or protection they may require include: Maintaining water quality by preventing the deleterious effects of nuisance algal blooms, increased sedimentation, excess nutrients, and other factors affecting water quality; maintaining 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); maintenance of gravel and cobble substrata to prevent the degradation of spawning, rearing, and adult habitat caused by past land management practices; and protection of the forage base by management of nonnative fish to reduce competition for available forage with Lost River sucker and minimize predation on Lost River sucker.

Shortnose Sucker

The unit is the same as for Lost River sucker, except that it contains only approximately 47 mi (76 km) of streams because shortnose sucker are not known to occur as far upstream as Lost River suckers within the Sprague River. As with the Lost River sucker, this unit also includes the 90,415 ac (36,590 ha) of lakes and reservoirs. This unit was occupied at the time of listing and contains those physical or 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 or biological features and the special management or protection they may require include: maintaining water quality by preventing the deleterious effects of nuisance algal blooms, increased sedimentation, excess nutrients, and other factors affecting water quality; maintaining 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); maintenance of gravel and cobble substrata to prevent the degradation of spawning, rearing, and adult habitat caused by past land management practices; and protection of the forage base by management of nonnative fish to reduce competition for available forage with shortnose River sucker and minimize predation on 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 approximately 27,432 ac (11,102 ha) of lake area and 27 mi (43 km) of river length. This unit includes Clear Lake Reservoir and its principal tributary. This unit was occupied at the time of listing and contains those physical or 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 or biological features and the special management or protection they may require include: maintaining water quality by preventing the deleterious effects of nuisance algal blooms, increased sedimentation, excess nutrients, and other factors affecting water quality; maintaining 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); maintenance of gravel and cobble substrata to prevent the degradation of spawning, rearing, and adult habitat caused by past land management

practices; and protection of the forage base by management of nonnative fish to reduce competition for available forage with Lost River sucker and minimize predation on 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 approximately 33,175 ac (13,426 ha) of lake area and 88 mi (142 km) of river length. This unit was occupied at the time of listing and contains those physical or 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 or biological features and the special management or protection they may require include: maintaining water quality by preventing the deleterious effects of nuisance algal blooms, increased sedimentation, excess nutrients, and other factors affecting water quality; maintaining 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); maintenance of gravel and cobble substrata to prevent the degradation of spawning, rearing, and adult habitat caused by past land management practices; and protection of the forage base by management of nonnative fish to reduce competition for available forage with Lost River sucker and minimize predation on 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 any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

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

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

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

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

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

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

(3) Are economically and technologically feasible, and

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

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

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

Application of the ''Adverse Modification'' Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or 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, groundwater use, 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, livestock grazing that causes excessive sedimentation, 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, wetland alteration, 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 with a completed INRMP within the proposed critical habitat designation. Therefore, we are not exempting lands from this final designation of critical habitat for Lost River sucker and shortnose sucker pursuant to section 4(a)(3)(B)(i) 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. The statute on its face, as well as the legislative history, is clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor in making that determination.

Under section 4(b)(2) of the Act, the Secretary 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 identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate 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 prepared a draft economic analysis of the proposed critical habitat designation and related factors (IEc 2012a). The draft analysis, dated April 17, 2012, was made available for public review from July 26, 2012, through August 27, 2012 (77 FR 43796). Following the close of the comment period, a final analysis (dated September 25, 2012) of the potential economic effects of the designation was developed taking into consideration the public comments and any new information (IEc 2012b).

The intent of the final economic analysis (FEA) is to quantify the economic impacts of all potential conservation efforts for Lost River sucker and shortnose sucker; some of these costs will likely be incurred regardless of whether we designate critical habitat (baseline). The economic impact of the final critical habitat designation is analyzed by comparing scenarios both ''with critical habitat'' and ''without critical habitat.'' The ''without critical habitat'' scenario represents the baseline for the analysis, considering protections already in place for the species (e.g., under the Federal listing and other Federal, State, and local regulations). The baseline, therefore, represents the costs incurred

regardless of whether critical habitat is designated. The ''with critical habitat'' scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts are those not expected to occur absent the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat above and beyond the baseline costs; these are the costs we consider in the final designation of critical habitat. The analysis looks retrospectively at baseline impacts incurred since the species was listed, and forecasts both baseline and incremental impacts likely to occur with the designation of critical habitat.

The FEA also addresses how potential economic impacts are likely to be distributed, including an assessment of any local or regional impacts of habitat conservation and the potential effects of conservation activities on government agencies, private businesses, and individuals. The FEA measures lost economic efficiency associated with residential and commercial development and public projects and activities, such as economic impacts on water management and transportation projects, Federal lands, small entities, and the energy industry. Finally, the FEA looks retrospectively at costs that have been incurred since 1988 (year of the species' listing) (53 FR 27130), and considers those costs that may occur in the 20 years following the designation of critical habitat, which was determined to be the appropriate period for analysis because limited planning information was available for most activities to forecast activity levels for projects beyond a 20-year timeframe. The FEA quantifies economic impacts of Lost River sucker and shortnose sucker conservation efforts associated with the following categories of activity: (1) Activities affecting water supply—these activities may include water management activities such as dam operation and hydropower production within the reservoirs comprising critical habitat, particularly the Klamath Project on Upper Klamath Lake; (2) activities affecting water quality—these activities may include agricultural activities, including livestock grazing, as well as in-water construction activities; and (3) activities affecting fish passage—these activities may include flood control or water diversions that may result in entrainment or lack of access to spawning habitat.

Our economic analysis did not identify any disproportionate costs that are likely to result from the designation. Consequently, the Secretary is not exercising his discretion to exclude any areas from this designation of critical habitat for the Lost River sucker and shortnose sucker based on economic impacts.

A copy of the FEA with supporting documents may be obtained by contacting the Klamath Falls Fish and Wildlife Office (see **ADDRESSES**) or by downloading from the Internet at *http://www.regulations.gov* or *http://www.fws.gov/klamathfallsfwo.*

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

Required Determinations

Regulatory Planning and Review (Executive Order 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. OIRA has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

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

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (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 an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. In this final rule, we are certifying that the critical habitat designation for Lost River sucker and shortnose sucker will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

According to the Small Business Administration, small entities include small organizations, such as

independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; as well as small businesses. Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than $5 million in annual sales, general and heavy construction businesses with less than $27.5 million in annual business, special trade contractors doing less than $11.5 million in annual business, and agricultural businesses with annual sales less than $750,000. To determine if potential economic impacts on these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule, as well as the types of project modifications that may result. In general, the term ''significant economic impact'' is meant to apply to a typical small business firm's business operations.

To determine if the rule could significantly affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (e.g., water management, grazing, transportation, herbicide and pesticide application, forest management, restoration, or installation of fish passage). We apply the ''substantial number'' test individually to each industry to determine if certification is appropriate. However, the SBREFA does not explicitly define ''substantial number'' or ''significant economic impact.'' Consequently, to assess whether a ''substantial number'' of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the number of small entities potentially affected, we also consider whether their activities have any Federal involvement.

Designation of critical habitat only affects activities authorized, funded, or carried out by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they authorize, fund, or carry out that may affect the Lost River sucker and shortnose sucker. Federal agencies also must consult with us if their activities may affect critical habitat. Designation of critical habitat, therefore, could result in an additional economic impact on small entities due to the requirement to reinitiate consultation for ongoing Federal activities (see *Application of the ''Adverse Modification Standard''* section).

In our final economic analysis of the critical habitat designation, we evaluated the potential economic effects on small business entities resulting from conservation actions related to the listing of the Lost River sucker and shortnose sucker and the designation of critical habitat. The analysis is based on the estimated impacts associated with the rulemaking as described in Chapters 4 through 5 and Appendix A of the analysis and evaluates the potential for economic impacts related to: (1) Activities affecting water supply—these activities may include water management activities such as dam operation and hydropower production within the reservoirs comprising critical habitat, particularly the Klamath Project on Upper Klamath Lake; (2) activities affecting water quality—these activities may include agricultural activities, including livestock grazing, as well as in-water construction activities; and (3) activities affecting fish passage—these activities may include flood control or water diversions that may result in entrainment or lack of access to spawning habitat.

Small entities may participate in section 7 consultation as a third party (the primary consulting parties being the Service and the Federal action agency). It is therefore possible that the small entities may spend additional time considering critical habitat during section 7 consultation for the suckers. Additional incremental costs of consultation that would be borne by the Federal action agency and the Service are not relevant to this screening analysis as these entities (Federal agencies) are not small.

Chapter 4 of the FEA projects section 7 consultations associated with seven types of activities. Of these activities, small entities are not anticipated to incur incremental costs associated with water management, transportation, herbicide and pesticide application, forest management, restoration, or installation of fish passage. As described in Chapter 4, impacts to these activities are expected to be incurred largely by Federal and State agencies, including the Bureau of Reclamation, Oregon Department of Transportation, the Federal Highway Administration, the Federal Aviation Administration, the Forest Service, the Bureau of Land Management, and the Klamath Basin National Wildlife Refuge. The analysis does forecast that PacifiCorp will engage in two section 7 consultations related to its HCP. However, PacifiCorp not a small entity.

The FEA focused its analysis on the incremental impacts associated with section 7 consultation on grazing activities, which may be borne by small entities. Across the study area, which includes the 3 counties overlapping the proposed critical habitat designation, 125 businesses are engaged in the beef cattle ranching and farming industry. Of these, 121, or 97 percent, have annual revenues at or below the small business threshold of $750,000, and thus are considered small (see Exhibit A–1 of the FEA). A section 7 consultation on grazing activity may cover one or more grazing allotments, and a small entity may be permitted to graze on one or more of these allotments. Because the number of allotments and grazing permittees varies from consultation to consultation, this analysis makes the simplifying assumption that 1 small entity is affected in each of the 20 allotments adjacent to proposed critical habitat. These 20 small entities represent approximately 16.5 percent of small grazers across the study area.

The total annualized impacts to the 20 entities that may incur administrative costs is approximately $24,600, with annualized impacts of $2,170. Assuming 20 affected small entities and that each entity has annual revenues of $132,000, these annualized impacts per small entity are expected to comprise 0.08 percent of annual revenues.

In summary, we considered whether this designation would result in a significant economic effect on a substantial number of small entities. Based on the above reasoning and currently available information, we concluded that this rule would not result in a significant economic impact on a substantial number of small entities. Therefore, we are certifying that the designation of critical habitat for Lost River sucker and shortnose sucker will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB

has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute ''a significant adverse effect'' when compared to not taking the regulatory action under consideration.

The economic analysis finds that none of these criteria are relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with Lost River sucker and shortnose sucker conservation activities within critical habitat are not expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

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

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

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

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because it would not produce a Federal mandate of $100 million or greater in any year; that is, it is not a ''significant regulatory action'' under the Unfunded Mandates Reform Act. The FEA concludes incremental impacts may occur due to administrative costs of section 7 consultations for water management, grazing, transportation, herbicide and pesticide application, forest management, restoration, or installation of fish passage; however, these impacts are not expected to significantly affect small governments. Consequently, we do not believe that the critical habitat designation would significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for Lost River sucker and shortnose sucker in a takings implications assessment. As discussed above, the designation of critical habitat affects only Federal actions. Although private parties that receive Federal funding, assistance, or 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. We believe that the takings implications associated with this critical habitat designation will be insignificant, in part, because only lands that are considered occupied by the Lost River sucker and shortnose sucker are being included in the designation. While private property owners may experience impacts from this designation of critical habitat related to activities requiring a Federal permit (e.g., an individual requiring a permit from the U.S. Army Corps of Engineers to develop a retaining wall or boat dock within critical habitat) they are not expected to be significant. With the exception of some new consultations and additional administrative costs related to addressing critical habitat in future consultation efforts, future impacts related to section 7 consultations and project modifications are expected to remain largely the same or fewer than they have in the past. The takings implications assessment concludes that this 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 rule does not have significant Federalism effects. A federalism impact summary 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 critical habitat designation with appropriate State resource agencies in California and Oregon. We received comments from the Oregon Department of Fish and Wildlife and have addressed them in the Summary of Comments and Recommendations section of the rule. The designation of critical habitat in areas currently occupied by the Lost River sucker and shortnose sucker imposes nominal additional restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities The designation of critical habitat in areas currently occupied by the Lost River sucker and shortnose sucker may impose nominal additional regulatory restrictions to those currently in place and, therefore, may have some incremental impact on State and local governments and their

activities. 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 applicable standards set forth in sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. This final rule uses standard property descriptions and identifies the elements of physical or 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)).

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes. We determined that there are no tribal lands occupied by the 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 designating critical habitat for the Lost River sucker and shortnose sucker on tribal lands.

References Cited

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

Author(s)

The primary authors of this rulemaking 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.

Regulation Promulgation

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

PART 17—[AMENDED]

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

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

■ 2. Amend § 17.11(h) by revising 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 an entry for ''Lost River Sucker (*Deltistes luxatus*)'' and an entry for ''Shortnose Sucker (*Chasmistes brevirostris*)'', in the same order that these 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 or 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 must have varied depths to accommodate each life stage: Shallow water (up to 3.28 ft (1.0 m)) for larval life stage, and deeper water (up to 14.8 ft (4.5 m)) for older life stages. The water quality characteristics should include water temperatures of less than 82.4 °Fahrenheit (28.0 °Celsius); pH less than 9.75; dissolved oxygen levels greater than 4.0 mg per L; low levels of microcystin; 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 4.3 ft (1.3 m) with adequate stream velocity to allow spawning to occur. Areas containing emergent vegetation adjacent to open water, provides habitat for rearing and 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 docks and bridges) and the land on which they are located existing within the legal boundaries on January 10, 2013.

(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. The maps in this entry establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's Internet site, *http://www.fws.gov/klamathfallsfwo,* at *http://www.regulations.gov* at Docket No. FWS–R8–ES–2011–0097, and at the field office responsible for the designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) **Note:** An index map for designated critical habitat units for the Lost River sucker follows:

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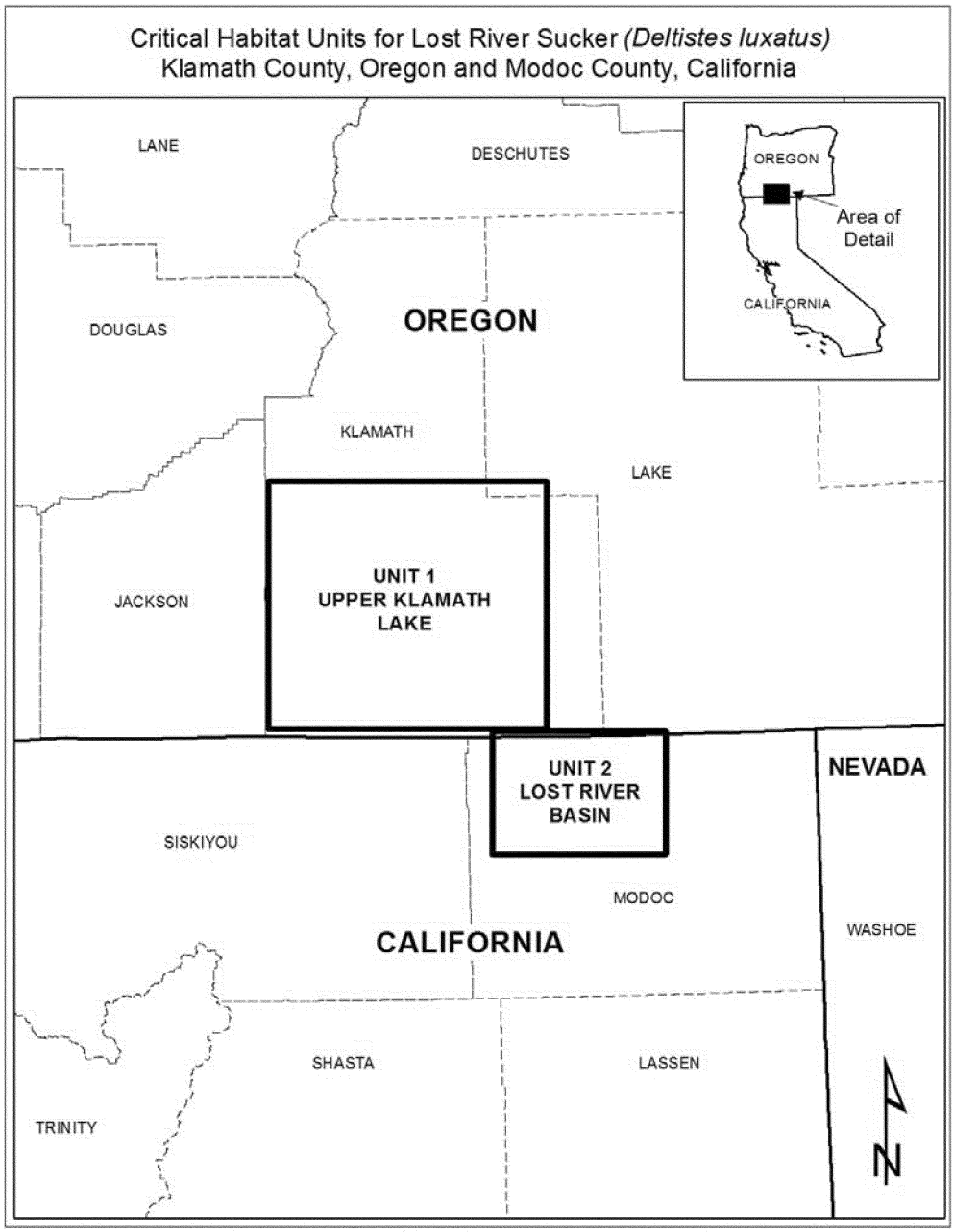
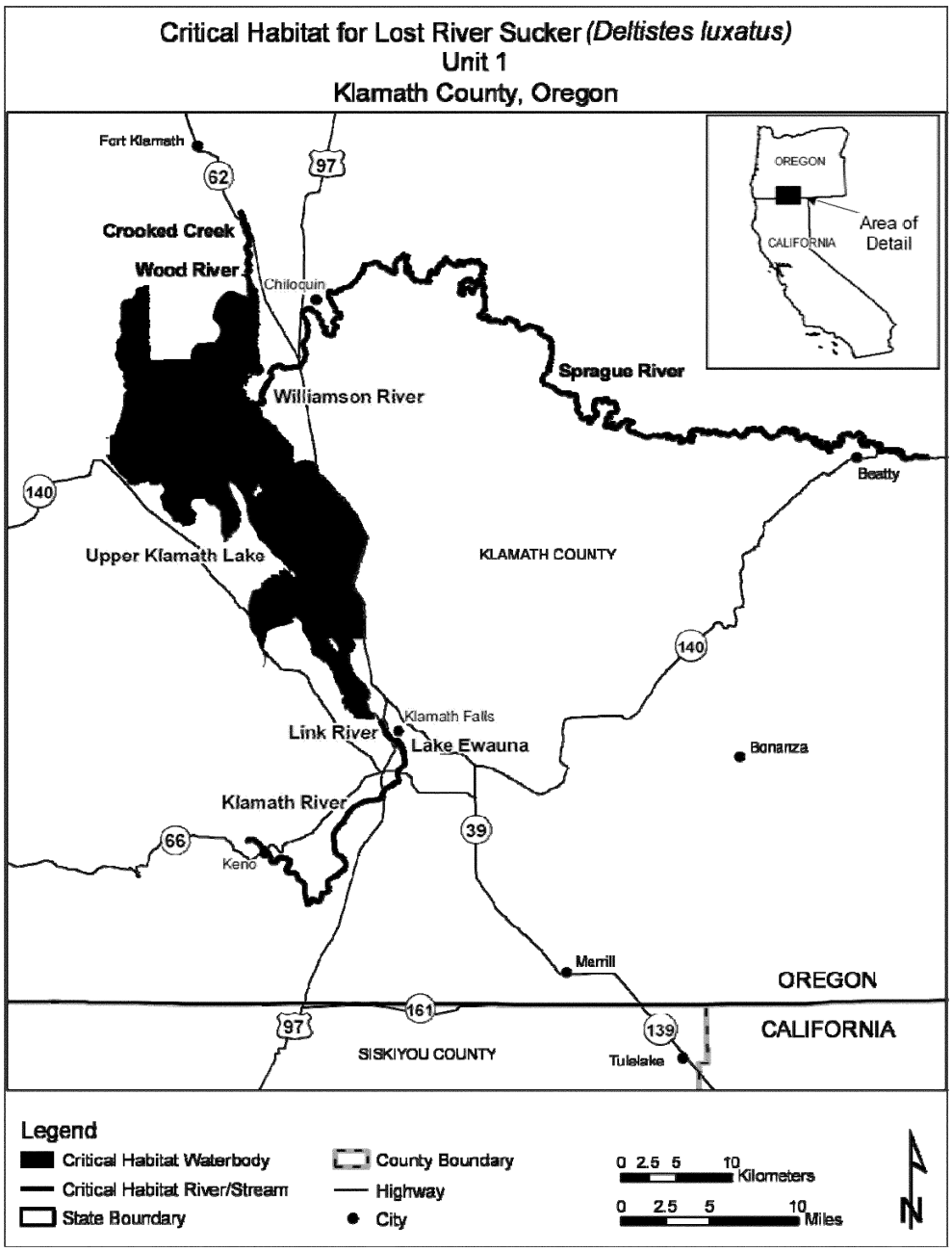
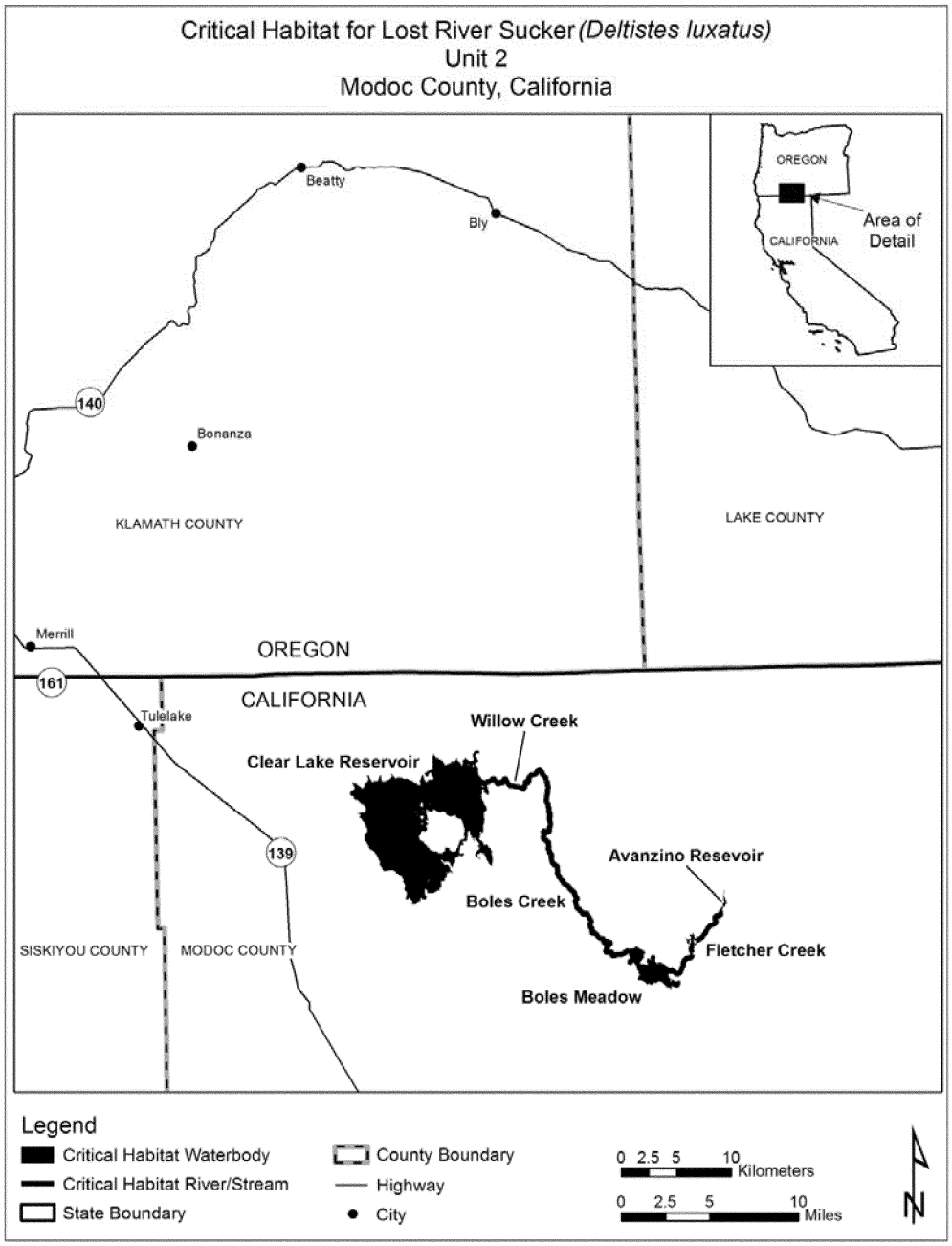


(6) Unit 1: Upper Klamath Lake Unit, Klamath County, Oregon. **Note:** Map of Unit 1, Upper Klamath Lake Unit, of critical habitat for Lost River sucker follows:



(7) Unit 2: Lost River Basin Unit, Klamath County, Oregon. **Note:** Map of Unit 2, Lost River Basin Unit, of critical habitat for Lost River sucker follows:



* * * * *

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 or biological features essential to the conservation of 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 must have varied depths to accommodate each life stage: Shallow water (up to 3.28 ft (1.0 m)) for juveniles, and deeper water (up to 14.8 ft (4.5 m)) for adults. The water quality characteristics should include water temperatures of less than 82.4 °F (28.0 °Celsius); pH less than 9.75; dissolved oxygen levels greater than 4.0 mg per L; low levels of microcystin; 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 4.3 ft (1.3 m) with adequate stream velocity to allow spawning to occur. Areas containing

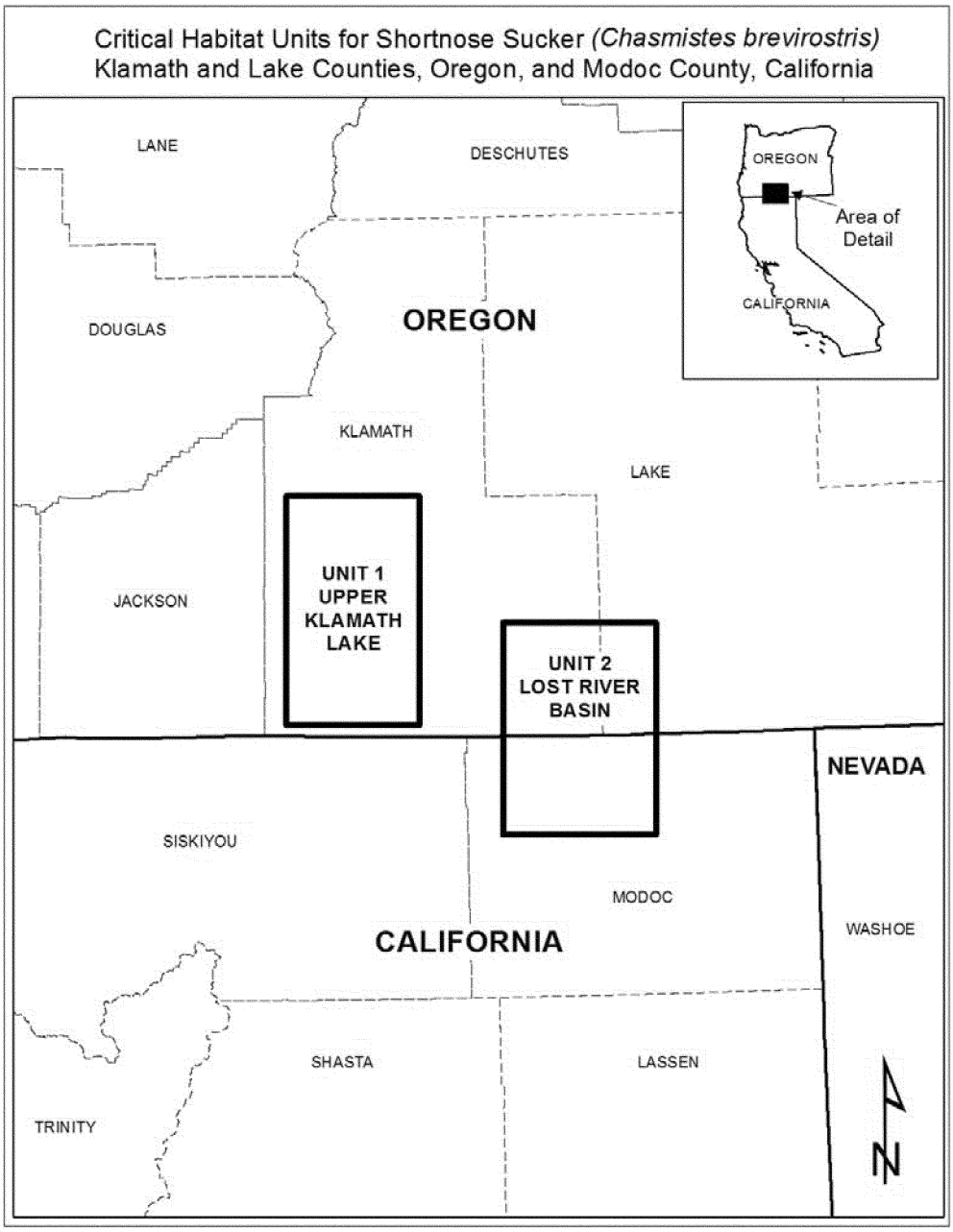
emergent vegetation adjacent to open water provides habitat for rearing and facilitates growth and survival of suckers, as well as protection from predation and protection from currents and turbulence.

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

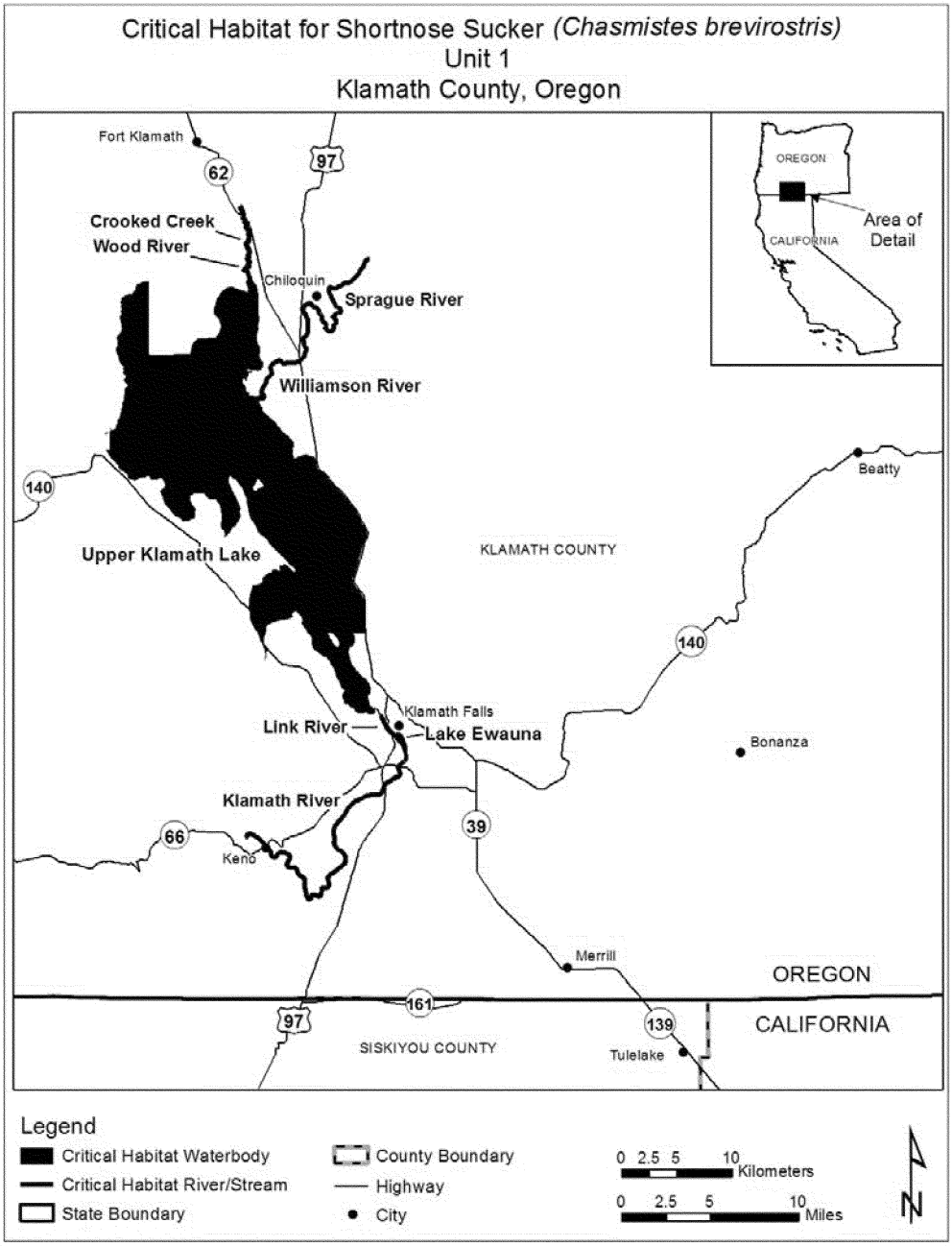
(3) Critical habitat does not include manmade structures (such as docks and bridges) and the land on which they are located existing within the legal boundaries on January 10, 2013.

(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. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site, *http://www.fws.gov/klamathfallsfwo,* at *http://www.regulations.gov* at Docket No. FWS–R8–ES–2011–0097, and at the field office responsible for the designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

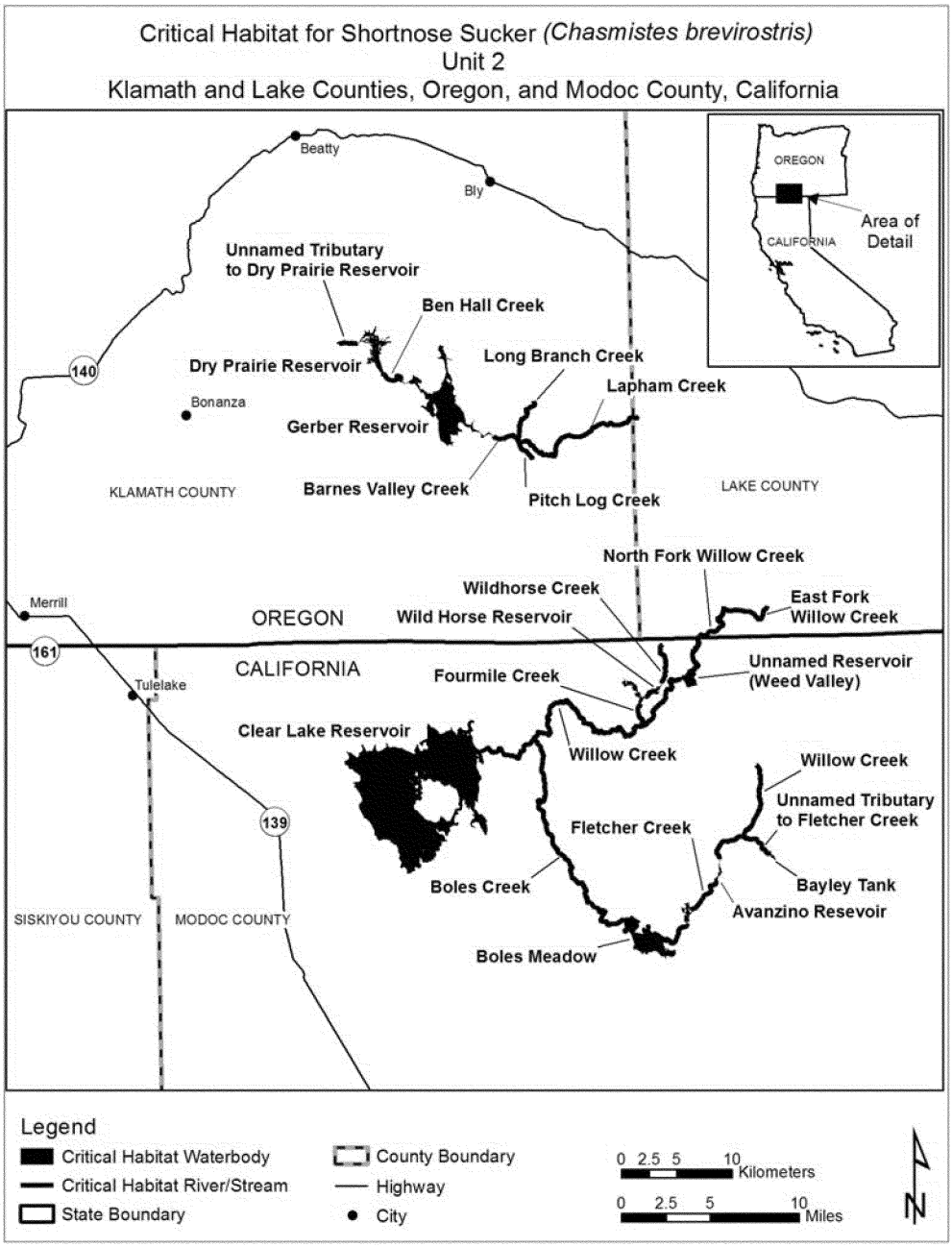
(5) **Note:** An index map for designated critical habitat units for the Lost River sucker follows:



(6) Unit 1: Upper Klamath Lake Unit, Klamath County, Oregon. **Note:** Map of Unit 1, Upper Klamath Lake Unit, of critical habitat for shortnose sucker follows:



(7) Unit 2: Lost River Basin Unit, Klamath County, Oregon. **Note:** Map of Unit 2, Lost River Basin Unit, of critical habitat for shortnose sucker follows:



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Dated: November 20, 2012.

Rachel Jacobson,

Principal Deputy Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 2012–29332 Filed 12–10–12; 8:45 am]

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