



United States Department of the Interior

FISH AND WILDLIFE SERVICE

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March 28, 2002

In Reply Refer To: 1-10-02-F-107

Memorandum

To: David Sabo
Area Manager, Bureau of Reclamation, Klamath Falls, OR

From: Steven A. Lewis
Project Leader, Klamath Falls Fish and Wildlife Office

Subject: Final Biological Opinion for the Bureau of Reclamation's Proposed Operation of the Klamath Project for the Period April 1 through May 31, 2002.

Attached is the Fish and Wildlife Service's (Service), final biological opinion and conference report regarding the effects of operation of the Bureau of Reclamation's Klamath Project during the period April 1, 2002, through May 31, 2002 on the endangered Lost River sucker (*Deltistes luxatus*), endangered shortnose sucker (*Chasmistes brevirostris*), threatened Bald Eagle (*Haliaeetus leucocephalus*), and proposed critical habitat for the Lost River and shortnose suckers.

Biological/conference Opinion
Regarding the Effects of Operation of the
Bureau of Reclamation's Klamath Project
During the Period April 1, 2002, Through May 31, 2002
On the
Endangered Lost River Sucker (*Deltistes luxatus*)
Endangered Shortnose Sucker (*Chasmistes brevirostris*)
Threatened Bald Eagle (*Haliaeetus leucocephalus*)
And
Proposed Critical Habitat for the Lost River/shortnose Suckers

Prepared
by
United States Fish and Wildlife Service
Klamath Falls Fish and Wildlife Office
March 28, 2002



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Subject: Bureau of Reclamation's Proposed Operation of the Klamath Project for the Period April 1 through May 31, 2002.

This document represents the Fish and Wildlife Service's (Service or FWS) biological opinion and conference report (BO), based on our review of the subject action in accordance with section 7 of the Endangered species Act of 1973, as amended (Act; 16 U.S.C. 1531 *et seq.*). At issue are the effects of the proposed operation of the Klamath Project (Project) by the Bureau of Reclamation (Reclamation) for an interim period, April 1 through May 31, 2002, on the endangered Lost River Sucker (*Deltistes luxatus*), endangered shortnose sucker (*Chasmistes brevirostris*), threatened bald eagle (*Haliaeetus leucocephalus*) and proposed critical habitat for the Lost River and shortnose suckers (collectively referred to as "suckers").

This BO was prepared with the knowledge that the Natural Resource Conservation Service's predicted inflows for 2002 into Project reservoirs are likely to result in a below average inflow year, as defined by Reclamation's February 25, 2002, biological assessment (BA) on proposed operation of the Project for a 10-year period from April 1, 2002 to March 31, 2012.

Reclamation, in consultation and with the assistance of the Service, is charged with ensuring that operation of the Klamath Project is not likely to jeopardize the continued existence of endangered and threatened species or adversely modify their critical habitat. Incorporated in this BO are conservation recommendations intended to encourage long-term survival of the species.

This BO was prepared in response to Reclamation's letter of March 22, 2002, requesting formal consultation on their operation of the Project during April and May 2002. This BO covers the period from April 1, 2002, through May 31, 2002. We also are consulting with Reclamation on their proposed operation of the Project over a 10-year period (April 1, 2002 through March 31, 2012). The BO addressing that action will be issued by June 1, 2002, and will supercede this BO.

This BO is based on: (1) information contained in Reclamation's letter of March 22, 2002; (2) information presented in Reclamation's final BA dated February 25, 2002 addressing operation of the Project over a 10-year period; (3) information in the Services' April 5, 2001, BO addressing operation of the Project from April 2001 to April 2002; (4) information in Reclamation's February 13, 2001, BA; and (5) new information developed since completion of the 2001 BO. A complete administrative record of this consultation is on file at the Service's Klamath Falls Fish and Wildlife Office.

This interim opinion recognizes the ongoing and required studies, monitoring, reporting, restoration activities, and other efforts to reduce entrainment, enhance fish passage, and minimize incidental take within the Project. The status of these activities is being reviewed as we analyze the proposed action for the 10-year period beginning in 2002.

Introduction

The action as proposed by Reclamation would operate Project reservoirs (Upper Klamath Lake, Gerber Reservoir, and Clear Lake) at elevations during April and May 2002, that would equal or exceed the hydrologic baseline (i.e., lake elevations that would occur without project operations).

In February 2002, the National Research Council issued an Interim Report entitled, "Scientific Evaluation of Biological Opinions on Endangered and Threatened Fishes in the Klamath River Basin." That report is considered in this interim BO and will be fully integrated into the Service's BO for the 10-year plan of operations, to be issued no later than June 1, 2002.

1. CONSULTATION HISTORY

On April 5, 2001, the Service issued a jeopardy BO with a Reasonable and Prudent Alternative on the operation of the Klamath Project.

On February 27, 2002, Reclamation formally requested consultation on the proposed operation of the Project from April 1, 2002 through March 31, 2012; their BA dated February 25, 2002, was provided with that request. On March 22, 2002, Reclamation provided the Service with a memorandum requesting formal consultation on Project operations for April and May 2002, based on the February 25, 2002, BA. A list of previous consultations on the Klamath Project was provided in our April 5, 2001, BO.

The February 13, 2001, BA describes Reclamation's compliance with reasonable and prudent

alternatives, and terms and conditions associated with the Services' 1992, 1994, and 1996 BOs (USBR 2001, USFWS 1992, 1994b, 1996). Reclamation's February 25, 2002, BA, also includes a proposal to provide screening at A-canal and to develop fish passage at the Link River Dam. These actions would fulfill two of the most significant requirements from previous BOs.

According to the BA, Reclamation has initiated or completed most of the Priority 1 and 2 action items identified in the *Lost River and Shortnose Sucker Recovery Plan* (USFWS 1993). Reclamation has funded over \$10.5 million in ecosystem restoration projects benefitting the recovery of these species and has purchased the 7,200-acre Agency Lake Ranch.

2. DESCRIPTION OF PROPOSED ACTION

Definition of the Action Area

The "action area" is defined as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action" (50 CFR 402.02). Based on information contained in the description of the proposed action, the status of the species, and the effects of the action, we have determined that the action area for this consultation extends from Iron Gate Dam upstream in the Klamath River to Link River Dam, including Lake Ewauna and Link River; Upper Klamath Lake to its highwater line, and tributaries as far upstream as are affected by Project operations; Clear Lake and Gerber Reservoir to their high water lines, and tributaries as far upstream as are affected by Project operations; the entire Lost River from Clear Lake Dam to the Tule Lake sumps, including all of Miller Creek, and any tributaries of the Lost River that are affected by Project actions. Also included in the action area are dams, canals, drains, and facilities owned or operated, or related by contract or agreement to Reclamation's Klamath Project, and the approximately 220,000 acres of irrigated land serviced by the Project. Service actions on Refuge lands serviced by the Project are not included in this consultation because they are subject to separate section 7 consultations.

Reclamation's Proposed Action

Reclamation requested consultation for the period April 1 to May 31, 2002, for a below average year type, as described in the February 25, 2002, BA, concurrent with a consultation on the 10-year plan of operations for the Project, as described in the February 25, 2002, BA.

Reclamation's proposed action (as described in the February 25, 2002, and March 22, 2002, BAs) for a below average water year type is expected to result in Upper Klamath Lake levels no lower than 4142.7 feet from the end of March through May, which represent levels higher than the natural hydrologic baseline for this time of the year.

The proposed Upper Klamath Lake water levels are based on Reclamation's predicted inflows, at the 70% exceedence level, and a "hydrologic baseline" for the lake developed by Philip Williams & Associates (2001). The hydrologic baseline assumes: 1) inflows are impaired by up-basin

withdrawals; 2) there are no Project diversions from the lake; and 3) a gate opening at Link River Dam that mimics the former reef, which acted as a water level control.

For Gerber Reservoir, Reclamation's proposed action in April and May for a below average water year results in elevations no lower than 4821.3, 4821.2, and 4818.9 feet at the end of March, April and May, respectively. Although the Service did not identify specific minimum elevations for these months in the 2001 BO, we did specify a minimum elevation of 4802 feet at the end of September.

Clear Lake elevations resulting from the proposed action are likely to be well above the minimum end of September elevation of 4521.0 feet required in the 2001, BO. However, due to Safety of Dams lake level restrictions and construction of the roller compacted concrete replacement dam at Clear Lake, lake levels will be lower than the average monthly elevations identified in the BA for a below average year. For the end of March, April and May, elevations in the BA for a below average water year type are 4531.5, 4531.2 and 4530.6 feet, respectively. Clear lake elevation on March 19, 2002, was 4527.65 feet. It is anticipated that the lake level will increase a few feet in the next couple of months because of the runoff before it recedes during the summer.

Reclamation proposes to reduce entrainment at the A-canal by installing a deflection curtain adjacent to the A-canal and parallel to the current to guide larval suckers away from and downstream of the canal entrance. The polypropylene curtain will be approximately 600 feet long and 3 feet deep. It will be maintained in position by a float line at the top and secured at both ends with anchors. The curtain will hang down in the water by use of a weighted line along the bottom and frequent anchor lines.

Reclamation also proposes to install and maintain a barrier net in front of the A-canal from April to June, 2002, to minimize entrainment of juvenile and adult suckers. The barrier net will be approximately 600 feet long and 8 feet deep with a small opening, delta-style mesh. The top line has large floats every 12 inches and the bottom line has a 1/4-inch coil steel chain attached for weight. Reclamation will monitor the net regularly to ensure the net has a good seal to the lake bottom along its entire length. A temporary barrier net is already installed and will be replaced as soon as the new net is available (personal communication, M. Buettner, USBR).

The net dimensions are intended to exclude all suckers greater than about 50 mm in length and allow blue-green algae to easily pass through the net, to minimize clogging. The approach velocity target is 0.4

feet per second or less to reduce impingement of small suckers. This is the same velocity criterion required by the Service for the permanent screen criteria.

Reclamation will implement a hydraulic monitoring program from April to June, 2002, to document velocities along the net. This would consist of measuring and recording flow velocity through the net (approach velocity) and the velocity along the face of the net (sweep velocity).

These measurements would be taken at 50-foot intervals at mid-depth. Measurements will be taken weekly and during any major increase in the A-canal diversion rate.

In addition, Reclamation will monitor the effectiveness of the temporary entrainment minimization program at A-canal by operating an 8-foot diameter rotary trap in the A-canal using methods similar to the entrainment studies in 1997 and 1998 (Gutermuth et al. 2000). At the end of the irrigation season, Reclamation will conduct intensive canal salvage to remove entrained suckers, similar to that performed annually since 1991.

All other Project features will be operated as described in the February 25, 2002, BA (personal communication, D. Sabo, USBR).

3. STATUS OF SPECIES/ENVIRONMENTAL BASELINE

The status and environmental baseline as they relate to the bald eagle and two endangered suckers were updated in the 2001, BO (USFWS 2001), and is included here by reference (USFWS 2001). We do not have any new information to conclude that the status and baseline for the bald eagle either range-wide or within the action area has changed. New information on the suckers developed since the 2001, BO will be fully summarized in the BO addressing the proposed 10-year operation of the Project now being prepared by the Service.

Pertinent new information includes: (1) USGS studies on the Williamson River and lake populations completed in 2001, indicates that Upper Klamath Lake spawning populations increased in 2002 and 2001; (2) USGS sucker age data compiled in 2002, indicate some survival of 1988-1996 year classes; (3) USGS analysis of water quality and fish die-off information suggests that Winter/Spring storm events, which flush nutrients into Upper Klamath Lake, may lead to adverse water quality later in Summer that create lethal conditions for fish; (4) small fish kills occurred in 2001, but no large die-offs were observed; and (5) Oregon State University studies indicate that 2001 was poor in terms of age 0 sucker recruitment.

Overall, these studies mentioned above indicate an adult sucker population in Upper Klamath Lake whose status appears to be slowly improving from catastrophic losses that occurred in the mid-1990s. No new data are available for other sucker populations.

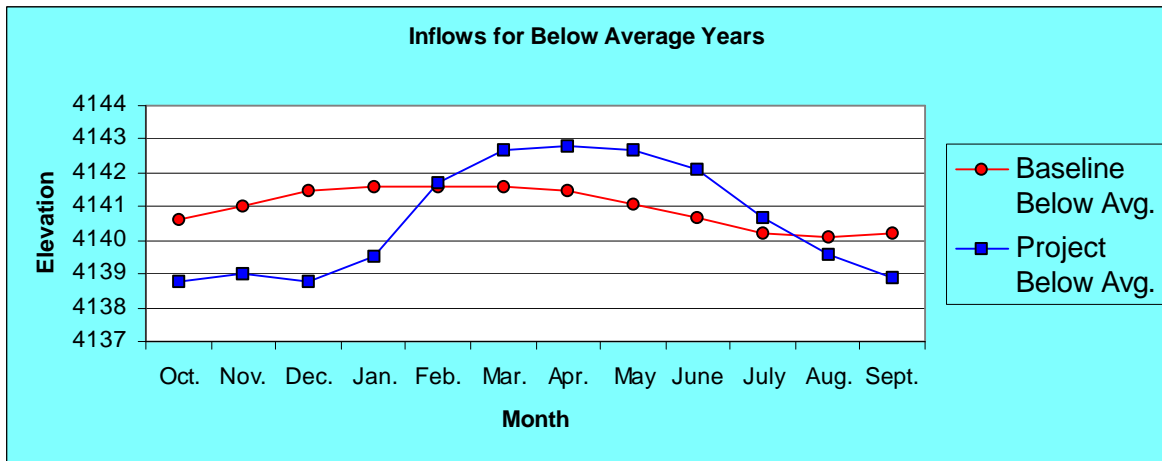
New information provided by USGS (Wood 2002) indicates that operation of the lake in spring above the baseline could have adverse effects on water quality later in summer. These adverse effects are most likely to occur in a year with a high inflow event when nutrient-rich sediments are flushed into the lake. This apparently happens at intervals of 5 to 20 years, therefore these adverse water quality effects are unlikely to occur this year.

4. EFFECTS OF THE ACTION

Under the proposed action, minimum Upper Klamath Lake elevations in April and May would be

at least 4142.7 feet. Baseline hydrologic elevations (i.e., estimated lake elevations during the two-month period under consultation), as modeled by Philip Williams & Associates, during this same period would range from 4141.1 to 4141.6 feet (Figure 1). Thus, elevations under the proposed action are approximately 1 foot higher than baseline. The higher lake levels should be beneficial by providing improved water quality, greater access to spawning habitat, and more habitat for larval suckers, compared to the hydrologic baseline levels.

Figure 1. End-of-month elevations for Upper Klamath Lake, based on Reclamation's 10-year BA



Lake levels in Upper Klamath Lake, Gerber Reservoir, and Clear Lake during April and May, 2002, are anticipated to exceed elevations that would occur without Reclamation's operation of the Klamath Project and the impacts of lake levels on factors that affect suckers and bald eagle are not anticipated to exceed those identified previously.

Operation at these levels will not preclude development of operational criteria for end of irrigation season lake levels which will be considered as part of the ongoing 10-year consultation. Therefore, the effects analysis for this consultation is centered on effects of the operation of the Project during the 2- month period.

Entrainment of suckers in Project facilities during these 2 months will primarily consist of larval suckers. Proposed conservation actions (i.e., deflection curtain, barrier net, hydraulic monitoring, effectiveness monitoring and salvage) will minimize entrainment.

Reclamation believes that sucker entrainment associated with the proposed action period of April and May, 2002, would be relatively low due, in part, to the timing of the proposed action relative to sucker life stages. Larval suckers in Upper Klamath Lake are most abundant in May and June (USBR 2001), thus few larvae will likely be entrained in April diversions. The earliest date larval suckers were collected in the A-canal was April 21 (Gutermuth et al. 2000), but peak larval entrainment occurred during June.

Previous entrainment studies at the A-canal and Link River Dam documented over 90% of the annual post-larval entrainment consisted of age 0 suckers during August and September (Gutermuth et al. 2000). Age 0 sucker entrainment from April to June was low (<2%). Adult Lost River and shortnose suckers sampled from the A-canal and Link River Dam diversions were rare, particularly from April through May. Adult sucker radio telemetry studies documented that most adult suckers occupy the upper portion of UKL and therefore are not very vulnerable to entrainment (Peck 2000). Canal salvage operations in the A-canal from 1991 to 2001 also documented entrainment of few adult Lost River and shortnose suckers.

Entrainment will occur at the Link River Dam associated with both the operation of the Dam and the associated penstocks that provide water for the PacifiCorp's power generation facility.

Entrainment of suckers will occur at Clear Lake and Gerber dams. No data are available to estimate levels, but it is likely to be relatively much smaller in comparison to Upper Klamath Lake, owing to larger populations of suckers in Upper Klamath Lake, and larger numbers of larvae produced by Upper Klamath Lake sucker populations.

Overall, we anticipate that the proposed action will result in entrainment of up to 100,000 larvae and 5,000 juvenile, sub-adult, and adult Lost River and shortnose sucker from April 1 to May 31, 2002. We don't believe this adverse effect is highly significant because: (1) this represents a small fraction of the larval, juvenile, sub-adult, and adult sucker populations; (2) larvae experience high levels of natural mortality owing to starvation and predation; and (3) the proposed deflection curtain, barrier net, salvage, hydraulic monitoring, and effectiveness monitoring, should minimize the adverse effects of entrainment.

The Service concludes that the proposed action may affect, but is not likely to adversely affect the bald eagle. We base this conclusion on the presumption that the proposed action is for April and May 2002, and that even though the manipulation of water levels in the Klamath Project will affect waterfowl, the prey-base of nesting bald eagles, those impacts to eagles will be discountable or insignificant..

5. CUMULATIVE EFFECTS

Cumulative effects in the action area were addressed in the April 5, 2001, BO, and are included here by reference. The Service is not aware of any new information indicating that those effects have significantly changed in a way that would affect our analysis of project operation during April and May, 2002.

6. CONCLUSION

After reviewing the current status of the species, the effects of the proposed action, and the cumulative effects, it is the Services' biological opinion that the action, as proposed from April 1,

2002 to May 31, 2002, is not likely to jeopardize the continued existence of the suckers or bald eagle.

The Service reached this conclusion for the following reasons:

1. The proposed action provides for higher elevations in Upper Klamath Lake in April and May 2002, compared to the baseline hydrologic levels, providing improved water quality, greater access to spawning habitat, and more habitat for larval suckers.
2. The levels of entrainment caused by the proposed action do not affect a significant proportion of the larval, juvenile, sub-adult, and adult populations, and these levels will be minimized by proposed actions involving a deflection curtain, barrier net, hydraulic and effectiveness monitoring, and canal salvage.
3. The proposed action provides for adequate elevations in Clear Lake and Gerber Reservoir in April and May 2002. Water quality, access to spawning habitat, and habitat for larval suckers should be adequate.

Consultation on the remainder of the irrigation season is underway and is anticipated to be completed before this BO expires.

The Service finds that the proposed action will lead to incidental take of endangered suckers, as described in the section on incidental take. This level of take is not likely to jeopardize the continued existence of the shortnose and Lost River suckers because, during April and May, 2002, take of adults and sub-adults is small relative to the likely population sizes, and take will consist primarily of larvae, which are produced in large numbers and most of which will not contribute to the future population owing to natural mortality.

7. INCIDENTAL TAKE STATEMENT

This incidental take statement applies to incidental take of Lost River and shortnose suckers resulting from the operation of the Project. This interim opinion recognizes the ongoing studies, monitoring, reporting, restoration activities, and efforts to reduce entrainment, enhance fish passage, and minimize incidental take within the Project as described in the February 25, 2002, BA.

Sections 4(d) and 9 of the Act, as amended, prohibit taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harassment is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or

sheltering. Incidental take is any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or the applicant. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary, and must be implemented by Reclamation so they become binding conditions of project authorization for the exemption under 7(o)(2) to apply. Reclamation has a continuing duty to regulate the activity that is covered by this incidental take statement. If Reclamation (1) fails to adhere to the terms and conditions of the incidental take statement through enforceable terms, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, Reclamation must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement 50 CFR §402.14(i)(3).

Reclamation anticipates that incidental take may occur as a result of entrainment at Project reservoirs. Based on previous entrainment studies, the Service estimated that up to 6 million total individuals of Lost River and shortnose suckers may be taken by Project operations for the entire irrigation season (mostly larvae and age 0 juvenile suckers) at all project facilities (2001 BO). Based on the analysis in the Effects section, the Service anticipates that approximately 100,000 suckers will be taken by Project operations during the period April 1 to May 31, 2002. Approximately 95% would be age 0 suckers. Total entrainment over the 2-month period represents 2% of the annual estimated entrainment of 6 million suckers. Adult mortalities are anticipated to be small and will effect a small component of the population. The barrier net and salvage will reduce incidental take.

Amount or Extent of Anticipated Take

Based on the above analysis in the Effect section, the Service anticipates that approximately up to 100,000 larvae and 5,000 juvenile, sub-adult, and adult Lost River and shortnose sucker will be taken by Project operations during April and May 2002.

Effect of the Take

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of proposed critical habitat.

The Service establishes the following reasonable and prudent measures to minimize anticipated incidental take of listed suckers.

Reasonable and Prudent Measure and Term and Condition

The Service believes that Reclamation is implementing most measures needed to reduce incidental take over the two-month period of the proposed action. The Service believes the following reasonable and prudent measure (RPM) with the following term and condition is necessary to minimize impacts of incidental take of the suckers.

1. Monitor effectiveness of fish curtain and barrier net and repair if necessary.

Term and Condition

The following term and condition is provided to implement RPM #1:

1. The effectiveness of the curtain and net at A-canal shall be monitored every 2 days. Holes shall be repaired to maintain effectiveness.

This incidental take statement applies to Project operations from April 1 through May 31, 2002, and will be superceded by a new statement when the consultation on the 10-year plan of operations is completed. Therefore, section 9 exemptions provided herein will expire at the end of the day on May 31, 2002.

Monitoring Requirements Under the Term and Condition

When incidental take is anticipated, the term and condition must include provisions for monitoring to report the progress of the action and its impact on the species [50 CFR, 402.14(i)(3)]. Reclamation proposes to operate a rotary trap in A-canal to monitor entrainment and should report the results of any entrainment to the Service in the 2002, annual salvage report. Reclamation needs to provide the Service with a brief report on monitoring of nets by June 15, 2002.

Reporting Requirements

Upon locating a dead, injured, or sick endangered or threatened species specimen, initial notification must be made to the nearest Service Law Enforcement Office. In Oregon, contact the U.S. Fish and Wildlife Service, Division of Law Enforcement, 301 Post Office Bldg., Klamath Falls, Oregon 97601 (phone: 541/883-6900). In California, contact the U.S. Fish and Wildlife Service, Division of Law Enforcement, District 1, 2800 Cottage Way, Room W-2928, Sacramento, California 95825 (phone: 916/414-6660). Care should be taken in handling sick or injured specimens to ensure effective treatment and care and in handling dead specimens to preserve biological material in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered species or preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.

The Service is to be notified within three (3) working days of the finding of any endangered or threatened species found dead or injured in the Klamath Project service area. Notification must include the date, time, and precise location of the injured animal or carcass, and any other pertinent information. In California and Oregon, the Service contact person for this information is Mr. Steven A. Lewis (541/885-8481).

If, during the course of the action, the amount or extent of the incidental take limit is exceeded, the Federal agency must immediately reinstate consultation with the Service.

8.0 CONFERENCE REPORT

Critical habitat for the suckers was proposed in 1994, but has not been finalized. The primary constituent elements identified in the proposal are as follows: (1) water of sufficient quantity and suitable quality; (2) sufficient physical habitat, including water quality refuge areas, and habitat for spawning, feeding, rearing, and travel corridors; and (3) a sufficient biological environment, including: adequate food levels, and natural patterns of predation, parasitism, and competition.

The proposed action will likely affect the primary constituent elements of the proposed critical habitat in Project reservoirs by: increasing water levels; improving water quality; and increasing access to water quality refuge areas, spawning, and larval and juvenile rearing habitats. The Service's preliminary determination is that these effects will be beneficial and therefore will not likely lead to adverse modification of proposed critical habitat.

9.0 CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. The term "conservation recommendations" is defined as suggestions from the Service regarding discretionary measures to: (1) minimize or avoid adverse effects of a proposed action on listed species or critical habitat; (2) conduct studies and develop information; and (3) promote the recovery of listed species. The recommendations provided here relate only to the proposed action and do not necessarily represent complete fulfillment of the agency's 7(a)(1) responsibilities under the Act.

1. The Service recommends that Reclamation begin an analysis of potential factors that might lead to catastrophic fish kills and determine what actions can be taken to reduce the threat of these events.
2. Closely monitor nutrient concentrations in Upper Klamath Lake if a storm event occurs resulting in a 5- to 20-year runoff event in the Williamson River (as determined by USGS gage data), and in coordination with the Service, implement actions that minimize amounts of nutrients that enter Upper Klamath Lake.

3. Reclamation should implement measures such as barrier nets, fish screens, or angled trash racks at the Link River hydroelectric diversions to minimize entrainment of juvenile, sub-adult, and adult suckers. At this time, the Service recognizes Reclamation's position that they lack the authority to require the operator of the hydroelectric project (PacifiCorp) to implement such measures but we encourage the Bureau to pursue all available avenues to address this issue.

In order to be kept informed of actions that either minimize or avoid adverse effects or that benefit listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

This concludes the consultation and conference for the Klamath Project for the April to May, 2002, time period. You may ask the Service to confirm the conference opinion as a biological opinion issued through formal consultation if the critical habitat is designated. The request must be in writing. If the Service reviews the proposed action and finds that there have been no significant changes in the action as planned or in the information used during the conference, the Service will confirm the conference opinion as the biological opinion on the Project and no further section 7 consultation will be necessary.

10. REINITIATION NOTICE

Reclamation shall request reinitiation of consultation if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect the species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

If you have any questions regarding this opinion, please contact the Klamath Falls Fish and Wildlife Office Project Leader at (541) 885-8481.

11. LITERATURE CITED

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Personal Communications:

David Sabo, Bureau of Reclamation, Klamath Project, Klamath Falls, Oregon.

Mark Buettner, Bureau of Reclamation, Klamath Project, Klamath Falls, Oregon.