

**U.S. FISH AND WILDLIFE SERVICE - SPOTLIGHT SPECIES ACTION PLAN
2010-2014**

Common Name: Lost River sucker and Shortnose sucker

Scientific Name: *Deltistes luxatus*, *Chasmistes brevirostris*

Lead Region: Region 8

Lead Field Office: Klamath Falls Fish and Wildlife Office

Species Information:

Status: Endangered – Lost River sucker; Endangered – Shortnose sucker

Recovery Priority Number or Listing Priority Number: 4C - Lost River sucker; 8C - Shortnose sucker

Recovery Plan or Candidate Assessment Form: March 17, 1993 (both species covered in a single plan)

Most Recent 5-year Review: July 19, 2007 - Lost River sucker; July 19, 2007 - Shortnose sucker

Other: Critical Habitat was proposed in 1994 (59 FR 61744) but not finalized. Proposed Critical Habitat is the same for both species.

Threats: The threats are similar for both species: Adverse water quality, entrainment, disease and parasites, and competition/predation with non-native fish.

Target: Species status improved by continuing to reduce and remove threats from adverse water quality by reducing stream sediment and nutrient input into Upper Klamath Lake, providing better access to and quality of groundwater spring habitat, decreasing entrainment into unscreened diversions, and increasing spawning and larval and juvenile rearing habitat to enhance sucker survival and recruitment. Enhance partnerships to accomplish actions, in part by finalizing the recovery plan.

Measure: Change in Recovery Priority Number to 10C for Lost River sucker and 11C for shortnose sucker by improving recovery potential through identification of objective and measurable demographic recovery criteria, and decreasing threats by continuing to work with partners under a finalized recovery plan to improve water quality, reduce entrainment, restore habitat and reduce non-native species threats.

Actions:

1. Improve habitat quality over the next five years by:
 - a. Increasing ground water spring dominant shoreline habitat in Upper Klamath Lake by restoring habitat at Barkley Springs and two other spring dominant areas on the west side of the lake (e.g., Odessa, Camporee, Harriman, Short Creek). Habitat improvements will include spawning gravel placement and other habitat features such as cover and improved littoral/riparian conditions.
 - b. Enhancing spawning habitat at two locations in the Sprague and Williamson Rivers by spawning gravel augmentation.
 - c. Increase habitat quality over 10 river miles of the Sprague and Williamson River and their tributaries by reducing water temperatures and stream sediment/nutrient

input through increased stream shading and stream bank protection and increasing habitat complexity by providing instream structure, cover, and depth and velocity gradients. Habitat improvement projects may include fencing, bank stabilization, floodplain reconnection, instream structures, meander activation, grazing management, and revegetation.

- d. Increase groundwater spring dominant river habitat by reestablishing connectivity (barrier removal), changing the location of a water diversion (from spring to river water), or enhancing riparian and instream habitat quality at two spring dominant areas in the Sprague River.
2. Reduce the risk of entrainment mortality at irrigation diversions.
 - a. Decrease entrainment at 5 water diversion structures in Upper Klamath Lake or the Sprague and Williamson rivers.
 3. Revise the recovery plan with partners, and use to guide recovery actions more precisely and effectively.

Identify responsible parties for the actions: U.S. Fish and Wildlife Service (Klamath Falls Fish and Wildlife Office), U.S. Bureau of Reclamation (Reclamation), The Nature Conservancy, The Klamath Tribes, National Fish and Wildlife Foundation, Natural Resource Conservation Service, U.S. Forest Service, Bureau of Land Management, Oregon Department of Fish and Wildlife (ODFW), and others.

Estimated costs of the actions: Costs for habitat quality improvements will be approximately \$400,000 (\$30,000-\$50,000/action) funded primarily by the Service and Reclamation. Costs for entrainment reduction actions will be approximately \$150,000 (\$30,000/action) funded primarily ODFW and Reclamation. Costs for revising the recovery plan will be approximately \$250,000 for contracting with Desert Research Institute and approximately \$200,000 for staff time within the Service and among Service partners.

Role of other agencies: Other Federal, state and local agencies, private conservation organizations, and landowners are critical to the recovery of the Lost River sucker and shortnose sucker. These agencies and organizations have been involved in the development of a revised recovery plan and have been actively implementing species and habitat management actions to conserve endangered suckers, including restoring habitat on federal, state and private lands.

Role of other ESA programs: Endangered Species Act Section 7 consultation will continue to facilitate conservation actions on federal lands, which harbor much of the Lost River and shortnose sucker habitat, and habitat enhancement actions on private lands that receive federal funding (e.g. Partners for Fish and Wildlife Program, Wetland Reserve Program). The Service may develop Habitat Conservation Plans or Safe Harbor Agreements on private lands that will support endangered sucker conservation. The Service will continue to support enforcement of take prohibitions under Section 9, when and where appropriate. Under Section 10, the Service provides Recovery Permits that advances recovery of the species through conservation planning and research and monitoring.

Role of other FWS programs: The Partners for Fish and Wildlife Program works with private landowners in the Upper Klamath Basin to enhance aquatic habitats with focus on threatened and endangered fish.

Additional funding analysis: Additional funding for Lost River and shortnose sucker conservation would be used to secure habitat improvements, reduce entrainment losses, and reduce non-native fish threats. For example, over 80 miles of the Sprague River and its tributaries need habitat improvements to increase riparian cover, stabilize streambanks, and encourage natural geomorphic processes and connectivity to floodplain wetlands. The species action plan only identifies habitat improvements on 5 miles of the Sprague River. Additional funds could be used to make improvements on more reaches along the Sprague River. Costs for restoration per mile of river vary depending on the type of action needed. Riparian fencing and planting costs range from \$20,000-\$30,000 per mile while levee removal and channel reconstruction costs from \$200,000-\$400,000 per mile. Also, there are dozens of unscreened diversions around Upper Klamath Lake and the Sprague and Williamson Rivers. Additional funding could be targeted to screening more diversions over the next 5 years at an estimated cost of about \$30,000 per screen. The National Fish and Wildlife Foundation has an initiative to increase the distribution and abundance of Lost River and shortnose suckers and redband trout in the Sprague River and Wood River and key tributaries over the next ten years. Approximately \$5 million is targeted for habitat restoration and conservation, \$3 million for water use management (improve water flows and quality through irrigation efficiency), integrated strategic planning and coordination (\$600,000), and research (\$1,300,000).

FIELD OFFICE APPROVAL:

Lead Field Supervisor, Fish and Wildlife Service

Approve

Lauree B. Auda

Date

6/30/09

REGIONAL OFFICE CONCURRENCE:

Assistant Regional Director Ecological Services, Fish and Wildlife Service

Michelle

Date

8/27/09