



Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California

Questions and Answers

Q. What is the scope of the Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California (TMRP)?

A. Second in scope only to restoration efforts in the Florida Everglades, the TMRP is the largest tidal marsh recovery effort ever attempted on the west coast. With a focus on tidal landscapes of the beloved San Francisco Bay, the plan also covers smaller marshes along 500 plus miles of the California coastline from Humboldt Bay to the southern tip of Morro Bay. By restoring healthy tidal marsh ecosystems, the TRMP aims to recover six endangered species, 11 additional imperiled species and will benefit countless others.

Q. What is the purpose of the recovery plan?

A. The recovery plan describes recommended actions that will contribute to the conservation of these species. It also includes estimates of the time and costs necessary to implement the recommended actions to recover the listed species to the point where they can be downlisted or removed from the endangered species list.

Release of the recovery plan is intended to pull together and inspire stakeholders and the public alike for purposes of recovery implementation. It triggers the development of regional working groups for purposes of more in-depth implementation of recovery actions at a local level.

Q. What species are covered by the Plan?

A. The TMRP is a revision of *The California Clapper Rail and Salt Marsh Harvest Mouse Recovery Plan* (U.S. Fish and Wildlife Service 1984). It also covers three plant species that were listed as federally endangered in the 1990s (*Cirsium hydrophilum* var. *hydrophilum* [Suisun thistle], *Cordylanthus mollis* ssp. *mollis* [soft bird's-beak], and *Suaeda californica* [California sea-blite]) and discusses 11 species of concern, plus additional species associated in some way with tidal marsh habitats. This recovery plan focuses on restoration over land acquisition, covers a geographic area that is highly urbanized, and carries a high level of interest with the conservation community.

The TMRP includes six federally-listed species: the federally endangered California clapper rail (*Rallus longirostrus obsoletus*), salt marsh harvest mouse (*Reithrodontomys raviventris*), California sea-blite (*Suaeda californica*), soft bird's-beak (*Cordylanthus mollis* ssp. *mollis*),

Suisun thistle (*Cirsium hydrophilum* var. *hydrophilum*) and salt marsh bird's-beak (*Corylanthus maritimus* ssp. *maritimus*).

Also treated in this TMRP are 11 non-listed tidal marsh species of concern: two tidal marsh shrew species (*Sorex vagrans halicoetes* and *S. ornatus sinuosus*), San Pablo vole (*Microtus californicus sanpabloensis*), California black rail (*Laterallus jamaicensis coturniculus*), three local tidal marsh races of song sparrows (*Melodia melospiza* spp.) saltmarsh common yellowthroat (*Geothlypis trichas sinuatus*), old man tiger beetle (*Cicindela senilis senilis*), delta tule pea (*Lathyrus jepsonii* ssp. *jepsonii*), and Pacific cordgrass (*Spartina foliosa*).

In addition, six associated federally listed species are considered in this recovery plan: the Pacific coast population of western snowy plover (*Charadrius alexandrinus nivosus*), California least tern (*Sterna antillarum browni*), tidewater goby (*Eucyclogobius newberryi*), delta smelt (*Hypomesus transpacificus*), Chinook salmon (*Oncorhynchus tshawytscha*), and steelhead (*Oncorhynchus mykiss irideus*).

Q. What are the threats to the tidal marshes and these species?

A. These species occur in a variety of tidal marsh habitats where they are limited by the requirements of moisture, salinity, topography, soil types, and climatic conditions. Adjacent uplands and ecotone areas are also crucial habitats for many of these species. Primary threats to all the species include historic and current habitat loss and fragmentation (due to urban development, agriculture, and diking related to duck hunting), altered hydrology and salinity, non-native invasive species, predation, disturbance, contamination, sea level rise due to climate change, and vulnerability of small populations to extirpation due to random naturally occurring events.

Q. Where can I get more information about the plan?

A. The full plan is available on-line: http://www.fws.gov/sacramento/es/Recovery-Planning/Tidal-Marsh/es_recovery_tidal-marsh-recovery.htm

Q. Will this plan limit my ability to use and enjoy the Bay?

A. No. The plan is an entirely voluntary program in which we expect many people and groups to participate. Certainly there are recreational impacts affecting the species in some cases, but our intent is to guide landowners and managers of these lands in reducing those threats in a way that highlights community cooperation.

Q. Does the plan consider climate change and the possible impacts on the tidal lands?

A. Yes, it identifies the anticipated threats from climate change, primarily due to sea level rise, and calls for collaborative approaches to meeting this substantial challenge. These approaches

include research and monitoring in an effort to develop potential management actions to take in response to climate change.

Q. Cargill owns a major piece of South Bay tidal land that seems key. Is it designated for restoration?

A. The Cargill parcels are within the recovery units, but not all Cargill lands are recommended for immediate restoration. All lands could become restoration sites in the future, but only if the property owners were to decide upon restoration. It is important to remember that this recovery plan relies upon voluntary participation. It is not a regulatory document.

Q. How long will the plan take to complete and how much will it cost?

A. The plan has a 50-year time horizon. A long time horizon is typical for ecosystem-based recovery plans. It must be recognized that the complex threats and challenges facing native species involve long-term processes such as sedimentation, learning from long-term research and obtaining support and resources to achieve success. The ultimate goal is to restore the protected populations to a healthy enough condition that they no longer need the protection of the Endangered Species Act. The plan projects a potential cost of about \$1.2 billion over the 50-year time frame of the plan.

Q. What is the significance of this document?

A. With some exceptions, for every listed species there must be developed a recovery plan which delineates reasonable actions that are believed to be required to recover and/or protect the species. The draft recovery plan was published on Feb 10, 2010, marking the start of a 120 day public comment period. This recovery plan represents the finalization of that document and incorporates revisions to the plan, given feedback received during the public comment period.

Q. What are the concrete steps that you're going to take?

A. We are going to achieve recovery using the overarching strategies of habitat acquisition and protection, habitat management and restoration, species surveys, research and outreach. Recovery actions are too numerous to list, but can be found in the Stepdown Narrative, which breaks down the necessary recovery strategies into more detailed, on-the-ground actions. In the near term, regional working groups will be formed to help implement recovery on a local level.

Q. What does this mean on the ground/what will change?

A. Publication of this document gives our public and private partners in conservation the ability to help us recover the species by providing the detailed actions we think are necessary to do that. Availability of this document can help our partners leverage discretionary funds for tidal marsh recovery efforts from various sources. It does not, in itself, change property boundaries, management practices, etc. Implementation of this document relies on the voluntary participation of willing landowners/land managers.

Q. Does this come with funding?

A. Recovery plans do not come with associated funding. However, FWS funds could be made available subject to budgetary and other constraints affecting the parties involved. Also, as mentioned above, a published recovery plan can help our partners leverage funds for recovery efforts from various sources outside of FWS.

Q. Why did you pick the geographic range for the plan (why not include San Diego)?

A. The historic distribution of the California clapper rail encompasses major tidal marshes between Humboldt Bay and Morro Bay, and defines the approximate geographic scope of this recovery plan.