

# **FRANKS TRACT FUTURES?**

EXPLORING OPTIONS FOR MULTI-BENEFIT RESTORATION AND INCREASED RESILIENCE IN THE CENTRAL DELTA CORRIDOR

#### JUNE 2018 SYNTHESIS REPORT

In the heart of California's Sacramento-San Joaquin River Delta lies a 3,000-acre flooded island called Franks Tract. Various partners, led by the California Department of Fish & Wildlife (CDFW), are now proposing to restore about 1,000 acres of the Tract to tidal marsh. Franks Tract is not only a publicly-owned state recreation area but also one of the least subsided flooded islands in the central Delta, two conditions that make it a strong candidate for large, landscape scale, improvements.

The proposed restoration, still in the idea stage, could shrink waterweeds, grow fish food, create habitat for Delta smelt and other declining pelagic species, and prevent salinity intrusion into the south Delta. With some fine-tuning, it might also help improve recreational opportunities for residents and visitors, as well as long-term state parks management of the area.

This report summarizes the restoration design concepts developed to date, early stakeholder feedback from state parks and neighboring communities, and results from initial hydrodynamic modeling and



#### **RESTORING FRANKS TRACT**

650 – 1,000 acres of tidal marsh 2.85 miles of new channel 9,000 – 18,000 feet levee edge 2,200 – 2,600 acres of shallow and deep open water habitat.

#### **Restoration Benefits**

#### HYDRODYNAMICS & WATER QUALITY

- Reduces False River flows and isolates the tidal pumping region from the Old River fresh water corridor
- Shields regions upstream of the restoration site from ocean saltwater intrusion
- Freshens the central Delta
- Augments benefits of Dutch Slough, Prospect Island, and McCormack-Williamson Tract restoration projects. If all four together went ahead, Franks Tract would still reduce or offset central Delta salinity

#### **FISH & HABITAT**

- Creates intertidal marsh habitat in the much-subsided central Delta
- Creates dead-end sloughs where native fish can hide from predators
- Creates conditions conducive to phytoplankton and zooplankton growth (fish food) along marsh edges
- Deepens a large area of Franks Tract enough that submerged aquatic vegetation cannot take root
- Creates edge habitats along new levees where valued non-native sport fish can be enhanced

#### **DELTA SUSTAINABILITY**

- Reduces long-term expense of short term, emergency salinity barriers
- Relies on natural physical and biological processes to sustain new habitats
- Creates new habitat on a sustainable scale (~1,000 acres, SFEI Delta Renewed)
- Offers opportunities to improve the local landscape and levees in ways more adaptable to recurring drought, rising sea levels, and extreme flood events
- Engages waterfront communities in considering future sustainability of Delta landscapes and lifestyles

engineering studies. A rough estimate suggests construction of the CDFW design could cost about \$315 million dollars. Costs could be reduced substantially if the restoration of little Franks Tract was not included.

Before humans diked and



Photo: Rick Lewis

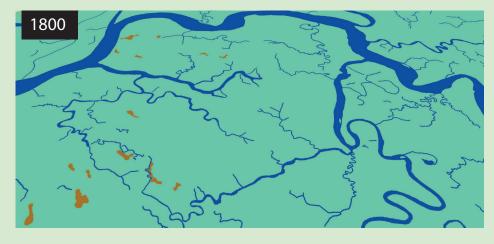
drained Franks Tract to grow potatoes, grains, asparagus and corn, the island was part of a vast freshwater marsh. Breaches in the levees flooded the island in 1937, and farmers never reclaimed Franks Tract. Over the decades, weeds invaded the shallows, displacing native species and inviting newcomers from the Mississippi River like large-mouth bass to make themselves at home, so much so that adjacent Bethel Island is now a frequent launch point for national bass fishing tournaments. In these same waters, native fish now find little hospitable habitat, food, shelter, and refuge from predators.

Franks Tract today is a nexus point of many delta uses, ranging from duck hunting and bass fishing to fresh water supply for California cities and farms. This supply, in the form of reservoir releases and river outflows, moves along the eastern edge of Franks Tract on its way south to the intakes of the Contra Costa Water District and the state and federal water projects. Droughts reduce these flows, leaving the water in and around Franks Tract increasingly salty. To reduce tidal salinity intrusion in 2015, the state had to place 150,000 tons of rock in the West False River near Franks Tract (and then take the barrier out again, at a total cost to taxpayers of \$37 million). Rather than continuing to invest in these expensive, engineered, emergency fixes, CDFW and its partners are suggesting the creation of a permanent dead end slough in West False River culminating in the restored tidal marsh.

Early results of hydrodynamics modeling by the Department of Water Resources indicate that the proposed restoration would freshen the central Delta. Early evaluation by Moffat & Nichol of potential sources of fill to create intertidal marsh elevations, as well as of engineering constraints, indicate that the easiest and cheapest approach would be to build a new berm across part of the Tract, then dredge on one side of the berm and place the dredged material on the other.

Early efforts to assess current uses of the Tract, and how local communities might view any kind of restoration initiative, included a survey by UC Davis. The 2017 survey documents year-round use of Franks Tract and surrounding channels by locals, visitors, and researchers, and seasonal use by hunters, anglers, and boaters. Many survey respondents were concerned about changes in their access

## **EVOLUTION OF FRANKS TRACT?**



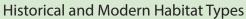
Historical freshwater marsh drained by numerous long dead-end channels providing fish habitat.



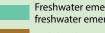
Today's flooded island, 6-8 feet deep, with a direct connection between False River and Old River and to other waterways on all sides.



Future marsh habitats with dendritic channels, and deeper adjacent open water habitats. Improved habitats for native and pelagic fish. New levees preventing salinity intrusion.

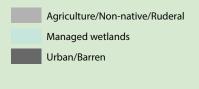


#### Water



Freshwater emergent wetland; non-tidal freshwater emergent wetland Stabilized interior dune vegetation

Woody Riparian Vegetation Wet meadow/Seasonal wetland Grassland



5 Miles

2.5

1.25

1:172,427

0

### Restoration Considerations

#### PARK MANAGEMENT

- Consistent with general state
  parks resource management
  objectives and policies
- Needs to be made more
  consistent with long-standing
  recreational use goals
- May require additional support and funding for maintenance and patrols of the state recreation area

#### LOCAL CONCERNS

- Franks Tract is one of the most popular and most heavily used tracts, flooded or dry, in the Delta.
- Neighboring Bethel Island hosts numerous worldwide bass fishing tournaments.
- Navigability in and around Franks Tract directly affects recreation and the economic health of the local communities (Bethel Island, Oakley, and Discovery Bay), as well as regional and national users of Franks Tract
- A survey of local use of the Tract and concerns about the preliminary DFW restoration design yielded useful information for the next, more detailed, planning and design round including a locally proposed alternative design

For the full Franks Tract synthesis report and supporting appendices see www.wildlife.ca.gov/Conservation/ Watersheds/DCF#41062618-frankstract-restoration-feasiblity

For other info, contact Carl Wilcox, CDFW, carl.wilcox@wildlife.ca.gov



to the water, and effects on the local economy and sport fishing, which is dependent on that access. However, resources to support continued recreational management and enhancement of the area are limited. Stakeholders and management agencies could all benefit from new "resources" directed at positive change on Franks Tract.

In terms of the regulatory and management context, CDFW's proposed restoration is consistent with the Delta Smelt Resiliency Strategy, state goals for the Franks Tract State Recreation Area, and state water quality control plans for the San Francisco Estuary. The effort also aligns with the multi-agency Delta Conservation Framework and the Central Delta Corridor Partnership.

If approved for further development, the Franks Tract restoration proposal would enter a second more detailed phase of planning, design, and environmental review with a target end date of December 2020. CDFW is hopeful that it can continue to work with local communities and stakeholders to find a configuration of new berms, marshes, sloughs and channels that not only addresses state habitat and water quality priorities, but also enhances recreational and sport fishing opportunities.