

Panel Discussions



Potential Phase 2 studies: Sediment Dynamics

- Evaluate amount of **sediment flux** entering far South Bay
- **Sediment accumulation in breached ponds** of Eden Landing and Ravenswood Complexes.
- Assess **landscape level changes in vegetation** from Phase 1 restoration actions.
- Develop cost-effective and accurate methods to map baseline **mudflat habitat** and track future changes, and to determine how restoration actions may affect the extent of mudflats.
- Map the **extent and quality of biofilm**, understand its role in shorebird feeding, and how restoration actions might alter biofilm.
- Better understanding of **sea level rise impacts** on marsh habitat.



Potential Phase 2 studies: Aquatic Species and Water Quality

- Continue **steelhead smolt studies** to support continued management of Pond A8.
- Conduct studies assessing the **growth and reproductive success** of aquatic organisms, especially **fish**.
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- Contribution of **local wastewater treatment plants** to nutrient and low dissolved oxygen conditions.
- How **pond management influences water quality**, phytoplankton and fish diversity and abundance and food web dynamics in all the Complexes.



Potential Phase 2 studies: Mercury

- How to **manage ponds to reduce mercury**. Continued assessment of Pond A8 complex is needed. Other complexes?
- Assess **other newly breached habitats** to understand mercury accumulation over time.
- Establish a **long-term mercury monitoring program** at set marsh sites and indicator species.
- The effect of mercury on **breeding birds**.
- **Effects of mercury on marsh species**, such as the Ridgway's rail.



Potential Phase 2 studies: Bird Use of Changing Habitats

- Continued **high-tide bird surveys** on all the ponds to assess long term impacts of marsh restoration
- Develop **optimal or target salinity and water levels** for bird guilds and species.
- Continue **enhancing habitat diversity** to enhance carrying capacity and support species diversity.
- Study how to **enhance food availability and the carrying capacity** of the ponds.
- Continue studying **bird nest abundance/nest success** in relation to island habitat creation/enhancement.
- Directed studies of **specific guilds such as grebes and phalaropes?**



Potential Phase 2 studies: Bird Use of Changing Habitats

- Continue **enhancement and predator management of plover nesting** areas and study the effectiveness.
- Monitoring of waterbird abundance and behavior **in tidal ponds at low tide** to assess use of marsh/panne habitat.
- Continue understanding carrying capacity of **mudflat habitat** and biofilm for shorebirds.
- Monitoring of **Ridgway rail breeding success** in newly restored areas.
- Use of telemetry studies to understand bird use of **upland transition zone or marsh islands** by rail.