



Real Property and Asset Management

Update on Delta Island Initiatives

Item 6a
August 16, 2022

An aerial photograph of a large, winding reservoir or canal system in a flat, agricultural landscape. The water is a vibrant blue, contrasting with the brownish-grey earth. A long, straight earthen dam or levee runs along the left side of the reservoir. The surrounding land is divided into rectangular plots, typical of farmland. The sky is clear and light-colored.

Focus of Presentation

- Overview & History
- Collaborative Efforts & Accomplishments
- Discussion – Opportunities, Considerations & Process

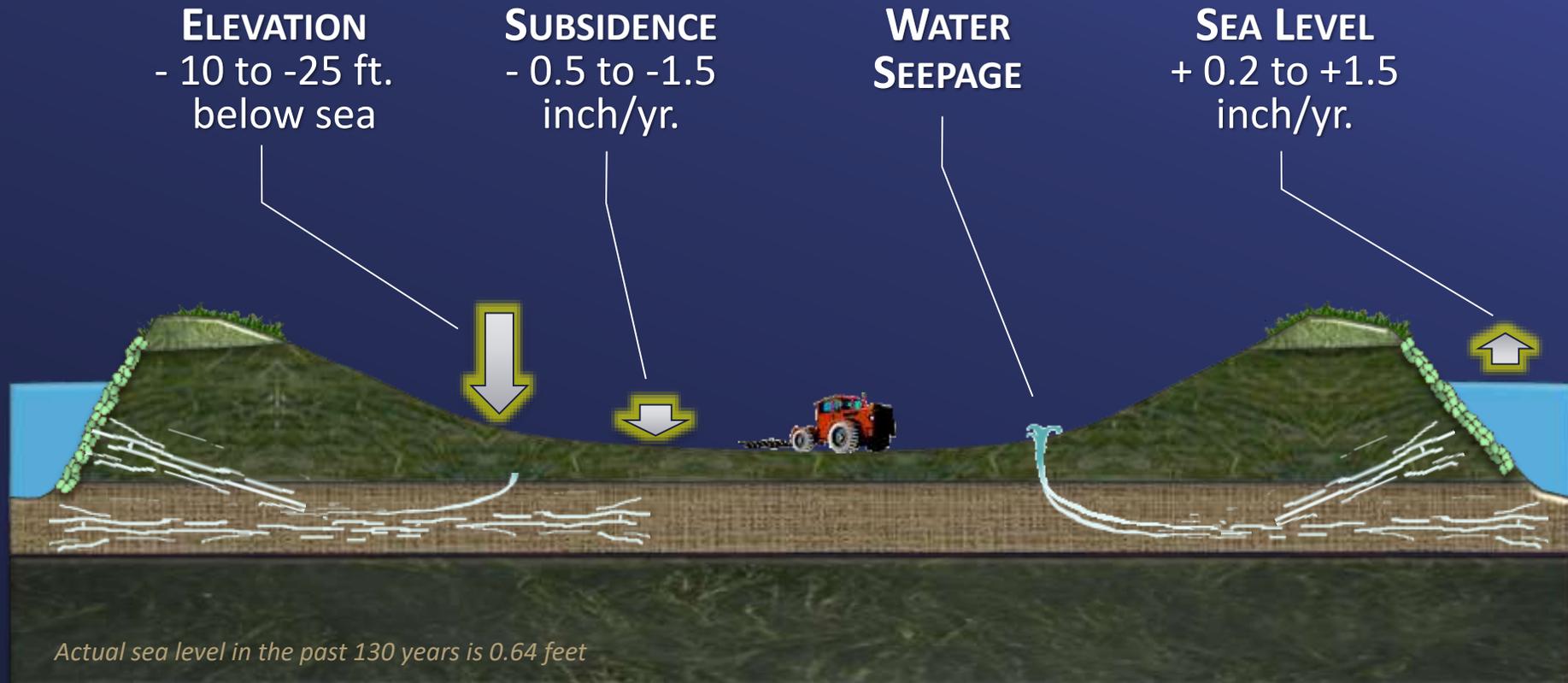
Overview & History

- 2016 purchase
- 13 sq. miles; 20,400 acres
- 111 structures
- 2021 Chipps Island sold

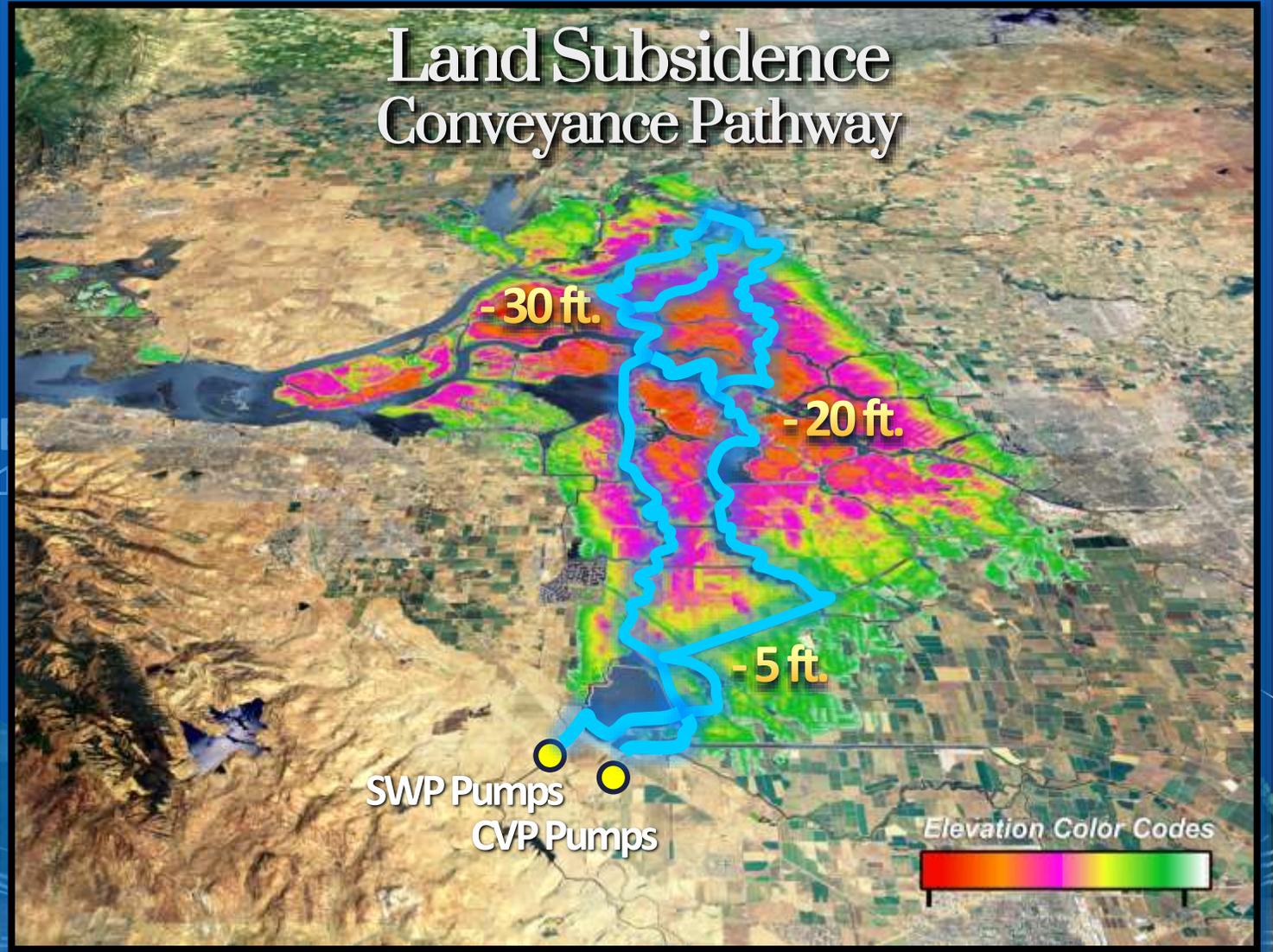


Overview & History

CURRENT LANDSCAPE

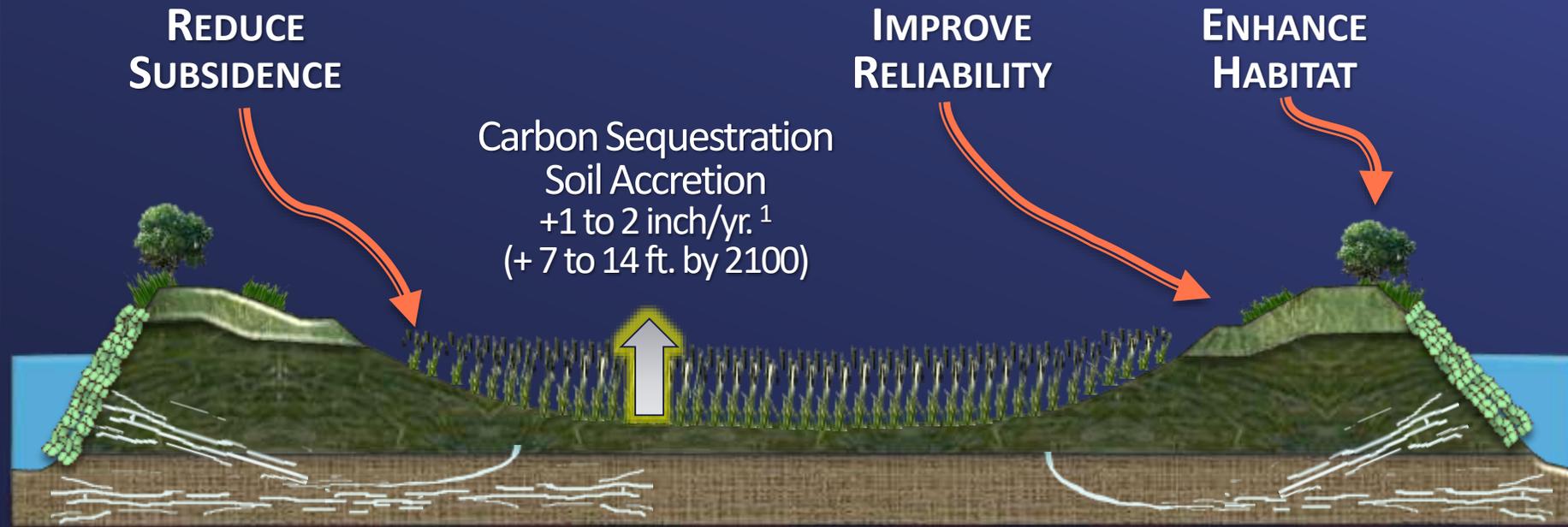


Overview & History



Overview & History

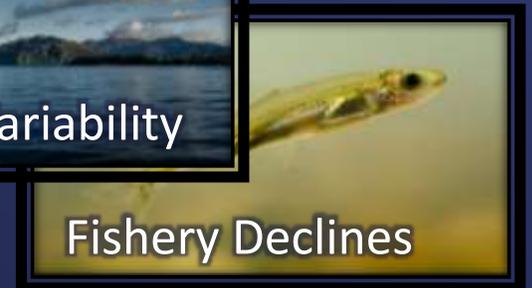
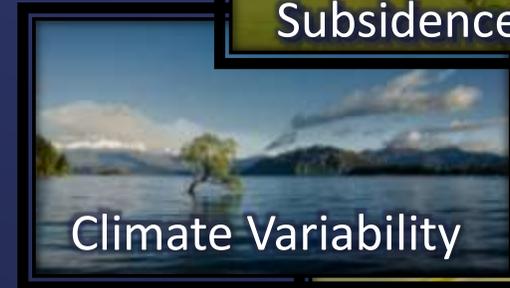
FUTURE OPPORTUNITIES



Actual sea level in the past 130 years is 0.64 feet

Overview & History

- Board Policies
 - Staff guided by existing Board Policies
 - Currently being reviewed & updated in WP&S Committee
- Focus
 - Levee integrity
 - Subsidence control
 - Climate variability
 - Fishery declines



Collaborative Efforts Ongoing

A Collaborative Partnership Landscape Sustainability & Restoration

An open partnership that designs & recommends multi-benefit landscape opportunities

PARTNERS

- California Audubon Society
- Point Blue Conservation Science
- The Nature Conservancy
- Ducks Unlimited
- California Waterfowl Association
- Miwok Nation, Don Hankins
- Delta Conservancy
- California Dept. Fish & Wildlife
- Department of Water Resources
- Delta Stewardship Council
- Delta Protection Commission
- San Francisco Estuary Institute
- East Bay Parks

TECHNICAL ADVISORS

- UC Merced
- CSU Chico State
- UC Davis
- SF Estuary Institute
- Natural Resources Grp
- GEI
- MBK Engineers
- Hydrofocus

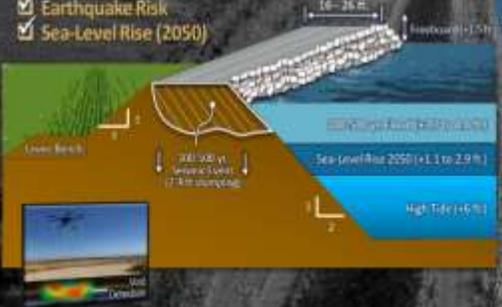


Securing the Delta's Future Community Protection & Levee Modernization

An inclusive stakeholder effort to improve levee reliability, enhance Delta ecosystem, & meet the challenges of climate change

Mitigates

- ✓ Flood Risk
- ✓ Earthquake Risk
- ✓ Sea-Level Rise (2050)



COLLABORATORS

UC Davis, UC Los Angeles, UC Berkeley, MBK Engineers, KSN Engineers, Hultgren-Tillis Engineers, AECOM, Lettis, Schnabel, Moffatt & Nichol, Central Delta Water Agency, Dept. of Water Resources, Metropolitan Water District, others

A Faster Way to Restoration Floating Peat Wetlands

Observed in pre-development Delta, floating peat wetlands can assist in reducing land subsidence and provide benefits to terrestrial and aquatic species

Wetland Research



Floating Peat Wetland



COLLABORATORS

Hydrofocus, Dept. of Water Resources, UC Davis, UC Berkeley, U.S. Geological Survey, CBEC, Louisiana State Univ., Univ. of Montana, MWD, others

Collaborative Efforts In Process

A Nature-Based Solution Saving the Smelt's Future



Existing Smelt Tanks ...



"Time is of the essence; we need to start field experiments and applied science starting this fall or it may be too late to have any chance of saving wild smelt populations."
— Dr. Peter Moyle, Professor Emeritus, UC Davis

... Proposed Smelt Lakes?



A Local Food Market for Fish Riverine Landscape Restoration



A multi-benefit effort to improve Delta smelt and salmon fishery habitat, and enhance food-web production for terrestrial and aquatic species

COLLABORATORS
Dept of Water Resources,
Reclamation District 756,
Metropolitan Water District,
others —

Bringing Back Small Farms Local Family Farm Program

A community program to invest in new generations of small farmers through on-farm experience.





COLLABORATORS
Universities, environmental justice groups, farm and other interests

Conservation in Action Integrated Research, Training & Education Center

An integrated conservation research, training and education center (K-12 thru college). Tribal and Indigenous Peoples ceremonies




LOCATION
Bouldin Island, CA

Collaborative Efforts Outreach

- NGO Tours
- Tribal Meetings
- Directors Inspection

August 16, 2022



Collaborative Efforts Summary

- Completed
 - ✓ \$54+ million in grants received
 - ✓ 15 miles of water conveyance levees improved
 - ✓ First to have on-island emergency flood fight material warehouse & stockpile
 - ✓ First to install water meters on diversions
 - ✓ First to install real-time levee monitoring tech
- Ongoing
 - ✓ Collaborative Landscape Restoration Planning
 - ✓ Proposed Levee Modernization Design
 - ✓ Floating Wetland Research
- New
 - ❑ Delta Smelt Preservation Program
 - ❑ Riverine Restoration
 - ❑ Bringing Back Small Farms
 - ❑ Integrated Research, Training, Education Center



Levee Improvement



Invasive Species Control



Salmon Study



Peat Wetland Research

Discussion Opportunities

- Opportunities
 - Evolved since purchase
 - But still focused on meeting Board policies
- Value in Many Areas
 - Carbon sequestration & subsidence control
 - Levee integrity & conveyance reliability
 - Real-time monitoring & early warning system
 - Delta Smelt preservation & science
 - Delta Conveyance Project mitigation
- Collaborative Partnership
 - NGO community & local stakeholders
 - Native American & Indigenous Peoples
 - Universities
 - Fish agencies/regulators

Discussion Considerations

- Approached by Other Interests
 - Farming, habitat, carbon sequestration
- Potential Options for Future Consideration
 - Own, sell, partnership
 - All or selected islands

Discussion Process

- Staff Information Gathering
 - Other interested partners (NGOs, for-profit entities, others)
 - Potential Request for Statement of Interest
 - Benefits & costs
 - Does it meet Board policies? Does it enhance local collaboration? Etc.
- Board Engagement
 - Fall/Winter 2022 – Staff updates to get board feedback on options
 - Spring 2023 – Staff recommendation based on Board feedback

