Day 1: May 13, 2021

WHAT IS NATURE-BASED ADAPTATION & WHY DO WE NEED IT

9:00 am Welcome James Eggers

Introduction Exec. Director, Sierra Club, Loma Prieta Chapter

9:10 am Why we need Nature Based Adaptation

Bay as living ecosystem and value of marshes, inter-tidal habitats, sub-tidal habitats,

9:30 am Adapting to Rising Seas using Nature's Jurisdictions

The Adaptation Atlas -A critical science-based framework for adaptation strategies appropriate for the diverse shoreline of the Bay providing guidance for using nature-based options

9:50 am The Importance of the Bay's Habitats to Migratory and Resident Birds and its International Importance

The threats to these habitats from sea level rise

10:10 am Panel Q&A 3 speakers

10:30 am --5 minute break

10: 35 am Carbon Sequestration and Greenhouse Gas Budgets in Restored Tidal Wetlands Importance of restoration, ability of tidal wetlands to sequester carbon – findings from a Bay Area study,

Voluntary carbon credit for blue carbon in Climate Action Plans

10:55 am Federally Listed Species: the Value of Marshes and Urgency of Partnerships

Tidal wetlands endangered species & why should we care?

11:15 am How Tidal Wetlands and Nature-Based Infrastructure Support a Clean, Healthy San Francisco Bay

How tidal wetlands help protect water quality and beneficial uses of waters of the state, Multi-benefit projects

11:35 am Panel Q&A 3 speakers

11:55 am Closing Remarks James Eggers

Patty Oikawa

John Bourgeois,

Julie Beagle

Julian Wood

Valley Water, formerly with

US Army Corps of Engineers

Point Blue Conservancy

formerly with SF Estuary Institute

South Bay Salt Pond Restoration Project

California State University, East Bay

Valary Bloom

US Fish and Wildlife Service, Sacramento

Christina Toms

Regional Water Quality Control Board

DAY 2: May 20, 2021

WHERE TO USE NATURE-BASED ADAPTATIONS

How does Nature-Based Adaptation work; how long does it last; where is it best used

9:00 am Welcome: Recap of first webinar, topics of this webinar Virginia Reinhart series, topics of third webinar series Exec. Director, Sierra Club SF Bay Chapter 9:10 am Introduction: "A levee is not always the answer" **Dave Pine** Establish urgency and Importance of planning for a healthy Bay with San Francisco Bay Restoration Authority living shorelines. How to get there? Projects that have been funded and those that can be funded. Phased adaptation projects 9:30 am Ecology of the Bay Past and Future **Robin Grossinger** Ecological history of the bay, wetland formation and loss, future San Francisco Estuary Institute expansion. Importance of living solutions for long term benefits 9:50 am Climate Change, Bay Wetlands, and Actions we can take **Letitia Grenier** How projected climate change may impact Bay wetlands and how to San Francisco Estuary Institute make them more resilient 10:10 am Panel Q&A 3 speakers 10:30 am 5 minute break 10:35 am Beaches as an Alternative to Riprap and Walls for Eroding **Roger Leventhal Shorelines** Marin County Public Works Aramburu Island Beach creation for resilience and other locations 10:55 am Value of Oyster beds and Eelgrass Meadows **Marilyn Latta** Potential for submerged and intertidal habitats to provide shoreline California State Coastal Conservancy protection, habitat and food resources, carbon sequestration and other Eco-services as part of a Living Shoreline. 11:15 am Funding Sources and Funding Requirements: SFBay **Amy Hutzel** Restoration Authority, USACA, Coastal conservancy, Fed funds thru California State Coastal Conservancy EPA, SFBay Jt Venture 11:35 am Panel Q&A 3 speakers 11:55 am Closing Remarks Virginia Reinhart

DAY 3: May 27, 2021

GREENING THE PROJECT: FUNDING AND CASE STUDIES

Nature Based Adaptation strategies are now solicited by many agencies funding resilience solutions

9:00 am Welcome, recap of first two webinars, topics of this webinar series

Jeff Morris

Exec. Dir, Sierra Club Redwood Chapter

9:10 am Case Studies of Natural and Nature-Based Features in Adaptation Strategies

Jeremy Lowe

Sonoma Baylands, Hamilton Airfield, Middle Harbor Oakland Richmond Marsh, Alameda creek, Ora Loma - horizontal levee, Hwy 37

and marsh restoration, Sediments, Station Island

San Francisco Estuary Institute

9:40 am North Richmond Shoreline Multi-Benefit Project

A community-informed plan for climate-ready adaptations along the North Richmond shoreline with a focus on the upland transition zone, environmental justice and resiliency Josh Bradt

San Francisco Estuary Partnership

10:00 am Summary of sea level rise adaptation legislation

Bills on Sea Level Rise and Resilience Bond

Hon. Kevin Mullin

Assembly Speaker Pro-Tem, District 22

10:20 am Panel Q&A 3 speakers

3 speakers

10:35 am 5 min break

10:40 am San Francisco Bay Water Quality Improvement Fund

Integration of Clean Water Act programs including wetlands and watershed planning, SFBay Water Quality Improvement Fund and restoration of wetlands

Luisa Valiela

Environmental Protection Agency

11: 00 am Easing the Funding Challenge

Meeting goals of the SFEP or Comprehensive Conservation Management Plan helps get applicants EPA funds and with cross agency partnerships SFEP will play a role in getting other EPA money. James Muller

San Francisco Estuary Partnership

11:20 am FEMA's Funding and Requirements for Nature Based

Adaptation Solutions FEMA is prioritizing funding for nature-based projects to mitigate natural hazards, with exciting new opportunities in the Building Resilient Infrastructure and Communities (BRIC) grant program. Hear from FEMA Region 9, out of Oakland, about this funding source, considerations for nature-based solutions, and keys for success.

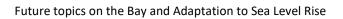
Alison Kearns

Federal Emergency Management Agency (FEMA)

11:40 am Panel Q&A 3 speakers

11:55 am Closing Remarks for webinar series

James Eggers



Exec. Director, Sierra Club Loma Prieta