Developing the Wetland Recovery Project (WRP)
Regional Monitoring Program: Building Capacity
for Assessing Wetland Recovery Efforts in
Southern California





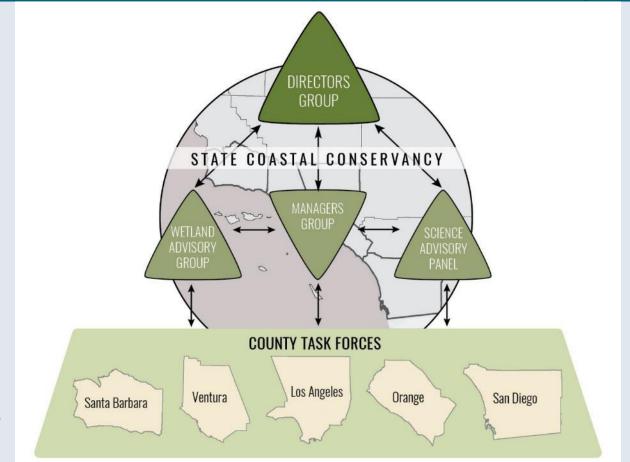
March 2, 2022



- Overview of the Wetlands Recovery Project (WRP)
- Need for a Regional Monitoring Program
- Long-term Goals of the Regional Monitoring Program
- What has been done so far
- Anticipated deliverables from WPDG



### The Southern California Wetlands Recovery Project







### Wetland Recovery Project Partners

#### Federal Partners

- US Environmental Protection Agency
- National Marine Fisheries Service
- Natural Resources Conservation Service
- US Army Corps of Engineers
- US Fish and Wildlife Service

#### State Partners

- California Natural Resources Agency
- State Coastal Conservancy
- California Coastal Commission
- California Department of Fish and Wildlife
- California Department of Parks and Recreation
- State Lands Commission
- Wildlife Conservation Board
- California Environmental Protection
   Agency
- State Water Resources Control Board
- Central Coast, Los Angeles, Santa Ana, and San Diego Regional Water Quality Control Boards

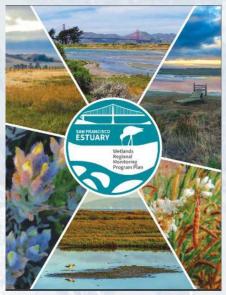


#### The Core Team and Where We Are Now



Photo: Anita Arenas







#### California Estuarine Wetland Monitoring Manual (Level 3)

March 2021 (Version 2.0)

The Bay Foundation California State University, Long Beach Tijuana River National Estuarine Research Reserve Southern California Coastal Water Research Project University of Southern California Sea Grant Program California State University, Channel Islands

## Estuary Marine Protected Area (EMPA) Monitoring Project

Monitoring protocol and data

The main objective of the EMPA project is to develop an enhanced, coordinated Statewide Estuarine Monitoring Program called out in the California Marine Life Protection Act (MLPA) Monitoring Action Plan.

This project includes the compilation and analysis of select, currently available data sets, a focused field data collection effort to fill data gaps through implementation of standard protocols (abiotic, biotic, habitat, and stressor parameters), quantification of the current benefits of MPA status, and the development of long-term monitoring and management recommendations to expand the benefits of SMPA designation and document changes through time.

This website provides access to the technical reports generated from the project, monitoring protocols, field data sheets, and instructions for accessing and uploading data generated using the EMPA monitoring protocol.





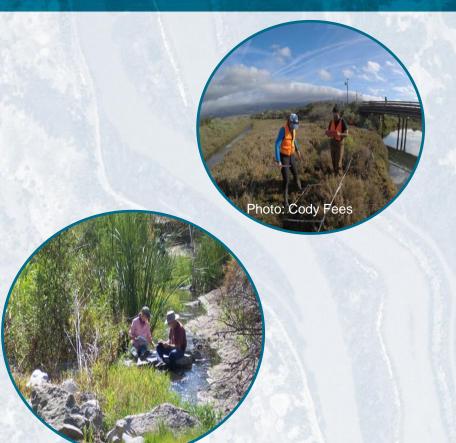
## Function-Based Assessment

		Indicators												
		Water quality	Water nutrient concentration	General community composition (eDNA)	Sediment characteristics	Benthic infauna abundance/diversity	SAV/macroalgae distribution	Fish abundance/ diversity	Crab abundance/ diversity	Marsh vegetation distribution/ diversity/ invasives	Marsh plain elevation	Sediment accretion rates	Mouth dynamics	General habitat condition
	Nekton Habitat													
	Primary Production													
	Secondary Production													
	Protected Species Support													
Ecosystem Functions	Nutrient Cycling													
tem Fu	SLR Amelioration													
Ecosyst	Bird Habitat													
	Shellfish Support													
	Nursery Habitat													
	Support Vascular Plants													
	Wildlife Support													

- Standardized Monitoring Protocols
- Regional wetland data made available to decision-makers
- California Wetland Program Plan
   Core Elements
  - Monitoring and Assessment
  - Regulatory Activities
  - Voluntary Restoration and Protection
- EPA Region 9 Priority Areas 1 & 2







- Development of Project Governance and Priorities
- Development of WRP L-3 Regional Monitoring Program
- Development of an Example WRP Site-Specific Monitoring Plan
- Communications

# Thank You!

Questions?

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