

California State Wildlife Action Plan Update 2015

South Coast Marine

DRAFT STRATEGY: Bays, Estuaries & Lagoons



GOALS

- 1. Area/extent: In coordination with partners, the sea level rise buffer area is increased by at least 5% by 2025.
- 2. Biotic assemblage: By 2025, reproductive success of shore birds and shore bird habitat protection are increased by 5% and native oyster populations are increased by 10%.
- 3. Biotic interactions: By 2025, invasive species populations are reduced by
- 4. Biogenic habitat: By 2025, native seagrass (eelgrass) bed acreage is increased by 10%.
- 5. Surface water flow regime: In coordination with partners, surface water flow (both ephemeral and permanent) is increased by at least 5% into these water bodies by 2025.
- 6. Watershed water quality: In coordination with State Water Boards and other partners, TMDLs for 10-25% of the tributaries into estuaries/lagoons/bays are met by 2025.
- 7. Soil/sediment quality: In coordination with State Water Boards and other partners, the sediment quality objectives for 25% of these water bodies are met by 2025.
- 8. Circulation/connectivity: In coordination with partners, restoration activities to improve circulation and connectivity are completed by 2025 year for 20% of these water bodies.
- 9. Estuary/bay/lagoon water quality: In coordination with State Water Boards and other partners, the water standards for 50% of water bodies are met by 2025.

Bays, Estuaries & Lagoons Smith River Lake Earl Crescent City Klamath River-**Batiquitos Lagoon** Big Lagoon Humboldt Bay-Eel River-Mattole River-Ten Mile River-Fort Bragg Navarro River-Garcia River Alder Creek-Gualala River-Russian River-Bodega Bay-Drakes Estero-San Francisco Bay Pescadero Creek-Elkhorn Slough-Carmel River Big Sur River-San Carpoforo Creek-Morro Bay Santa Maria River Santa Ynez River-Bays, Estuaries & Lagoons North Coast Marine Region North Central Coast Marine Region Central Coast Marine Region South Coast Marine Region Batiquitos Lagoon-Counties San Diego Bay-

The State Wildlife Action Plan examines the health of wildlife and prescribes actions to conserve wildlife and vital habitat before they become more rare and more costly to protect. The plan also promotes wildlife conservation while furthering responsible development and addressing the needs of a growing human population.

SENSITIVE SPECIES

Seagrass (Eelgrass)

California Halibut

Native Oyster

Tidewater Goby

Seagrass (Eelgrass). Kirsten Ramey, CDFW

Native Oysters. Tom Moore, CDFW retired.

California Halibut. Ian Culbertson.

Tidewater Goby. Mike Wallace, CDFW. Tidewater goby.

American White Pelicans, Kirsten Ramey, CDFW

California Least Terns. Tim Dillingham, CDFW

Southern CA Steelhead

Soupfin Shark

American White Pelican

California Clapper Rail

Light-footed Clapper

California Least Tern

Black Skimmer

ENVIRONMENTAL STRESSES

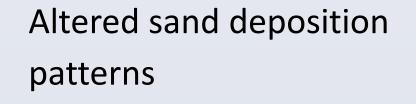
Reduction in area in which to expand

Decrease in shorebird populations

Decrease in bivalve populations

Decrease in native species populations

Decrease in seagrass beds



Change in freshwater flow into water bodies

Decrease in water quality of freshwater flow

Altered residence time

Change in circulation pattern

Altered tidal mixing

Change or loss in connectivity within water bodies

Decrease in water quality of water bodies

Decrease in quality of sediments

HUMAN RELATED **IMPACTS**

Climate Change and Ocean Acidification (Rank: 1)

Shoreline Development (2)



Diversion/Control of Freshwater (3)

Agricultural Runoff (4)



Hazardous Spills (6)

Modification of

Mouth/Channels (7)

Invasive Species (8)

Urban Runoff (9)



Aquatic Sciences.

Aqua Hedionda Lagoon. Tim Dillingham, CDFW

Pathogens (10)



Artificial Structures (12)

Aquaculture (14)

Ocean/Estuary Water Diversion/Control (16)

Timber Harvest (17)

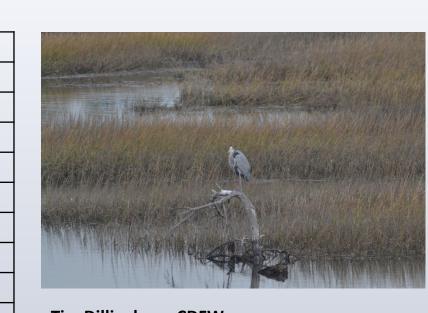
Ballast Water (19)

Fishing (20)

TEAM



Organization **Position** Leader; Team Member Debbie Aseltine-Neilson CDFW-R7 Staff Environmental Scientis CDFW-R7 Senior Environmental Scientist Team Member Staff Environmental Scientist Team Member Holly Gellerman CDFW-OSPR CDFW-R7 Staff Environmental Scientist Team Member Bill Paznokas CDFW-R7 Team Member Kirsten Ramey Environmental Scientist CDFW-R7 Research Analyst II Feam Member; GIS support CDFW-R7 Геат Member Environmental Scientist CDFW-R7 Environmental Scientist Team Member CDFW-R7 Staff Environmental Scientist Team Member



Tim Dillingham, CDFW.

STRATEGIES, OBJECTIVES AND **ACTIVITIES**

I. Improve engagement in decision-making process

- a. Objectives
- i. Increase capacity
- ii. Increase internal and external communication and coordination iii. Develop collaborations
- iv. Increase review of CEQA documents and local coastal plans
- v. Review and provide input on all relevant permits and monitoring plans
- vi. Develop criteria and standards for reviewing above documents b. Activities
- i. Analyze staffing needs and identify priorities
- ii. Identify funding sources and apply for funding for new positions iii. Identify state and local groups and staff that are involved in priority
- iv. Communicate and coordinate with identified groups to determine priorities and update management plans
- v. Participate in state and local planning meetings and decisions to ensure that efforts address Marine Region concerns/issues
- vi. Integrate Marine Region needs into other CDFW planning efforts vii. Identify and prioritize efforts that would benefit from increased
- collaboration viii. Consider cooperative agreements with regulatory agencies to
- promote consistent resource protection ix. Coordinate with local and state agencies on review of proposals,
- permits, monitoring plans, and project recommendations
- x. Encourage and support local agency implementation of permits
- xi. Determine what criteria and standards should be used for reviewing documents and provide these to staff
- II. Implement non-structural and structural Best Management Practices (BMPs)
 - a. Objectives i. Review and provide input on BMP implementation
 - ii. Increase communication with municipalities to ensure that they are complying with permits
 - iii. Coordinate with partners to reduce runoff effluents
 - b. Activities
 - i. Coordinate with regional water boards regarding implementation of **BMPs and Total Maximum Daily Limits**
 - ii. Collaboratively develop process with local agencies for determining status of municipal compliance on permit implementation
- iii. Work with local and state agencies to identify ways to reduce storm water/runoff effluents III. Improve restoration activities
 - a. Objectives
 - i. Increase restoration efforts for seagrass ii. Increase restoration efforts to improve circulation within estuaries,
 - bays and lagoons
 - iii. Increase restoration efforts for native oysters
 - b. Activities
 - i. Identify and Prioritize areas where seagrass (eelgrass) restoration
 - ii. Finalize list of water bodies that need improved water circulation iii. Identify where additional restoration efforts are needed for native
 - iv. Identify partners
- v. In coordination with partners, find funding, apply for funding, design restoration plans, and implement restoration projects IV. Improve Marine Region's management of resources that are vulnerable to climate
- change and ocean acidification a. Objectives
- i. Generate climate vulnerability assessment
 - ii. Develop and implement plan to incorporate vulnerability information into management actions iii. Incorporate climate tools into management toolbox
 - b. Activities
 - i. Develop work plan
 - ii. Identify collaborators
 - iii. Identify funding source and apply for funding
 - iv. Work with collaborators to develop vulnerability assessment
 - v. Using information from assessment, identify management actions that will decrease vulnerability of sensitive resources and incorporate
 - these into the appropriate management plans vi. Identify useful climate tools and work with tool developers to
- incorporate into management V. Advocate for policies and practices that minimize impacts on shorelines and wetlands
 - a. Objectives
 - i. Identify and implement practices and incentives that result in minimal impacts on resources
 - b. Activities
 - i. Determine what types of practices and incentives are available, or develop new ones
 - ii. Incorporate practices, including smart growth, into permit process iii. Develop incentives for low growth/impact development