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 native shore birds and shorebird 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 10%.
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, TRUs for 60-25% 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.

ENVIRONMENTAL STRESSES

- Seagrass (Eelgrass)
- Native Bivalves
- Dungeness Crab
- Longfin Smelt
- Tidewater Goby
- Coho and Chinook Salmon
- Green Sturgeon
- Seventy Shark
- California Halibut
- Brown Pelican
- California Clapper and Black Rails
- Snowy Plover

SPECIES OF INTEREST

- Green Sturgeon
- Salmon
- Coho and Chinook Salmon
- California Clapper and Black Rails
- Snowy Plover

ENVIRONMENTAL STRESSES

- Reduction in area
- Decrease in native species populations, including shorebirds and bivalves
- Decrease in seagrass bed acreage
- Altered sand deposition patterns
- Change in freshwater flow into water bodies
- Decrease in water quality of freshwater flow
- Change in circulation pattern
- Altered residence time
- 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)
- Point Discharges (5)
- Hazardous Spills (6)
- Modification of Mouth/Channels (7)
- Invasive Species (8)
- Urban Runoff (9)
- Pathogens (10)
- Artificial Structures (12)
- Aquaculture (14)
- Ocean/Estuary Water Diversion (16)
- Timber Harvest (17)
- Ballast Water (19)
- Fishing (20)

TEAM

- Terry Tillman, CDFW-R7 Staff Environmental Scientist Team Member
- Travis Tanaka, CDFW-R7 Environmental Scientist Team Member
- Kirsten Ramey, CDFW-R7 Environmental Scientist Team Member
- Bill Paznokas, CDFW-R7 Staff Environmental Scientist Team Member
- Jerry Kashiwada, CDFW-R7 Environmental Scientist Team Member
- Vicki Frey, CDFW-R7 Senior Environmental Scientist Team Member

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 CSWMA 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. Analysis 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 efforts
      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 efforts address Marine Region concerns/needs
      vi. Through internal taskforce, identify key habitats within this target and coordinate management of these habitats and the associated wetlands
      vii. Integrate Marine Region needs into other CDFW planning efforts
      viii. Identify and prioritize efforts that would benefit from increased collaboration
      ix. Consider cooperative agreements with regulatory agencies to promote consistent resource protection
      x. Coordinate with local and state agencies on review of proposals, permits, monitoring plans, and project recommendations
      xi. Encourage and support local agency implementation of permits
      xii. Determine what criteria and standards should be used for reviewing documents and provide these to staff

II. Advocate for policies and practices to minimize impacts on shorelines and wetlands
   a. Objectives
      i. Identify and implement incentives that encourage, and practices 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

III. Improve rapid response capabilities to events that degrade target
   a. Objectives
      i. Increase response to hazardous spills of less than 42 gallons
      ii. Create early detection rapid response program for new invasive species
   b. Activities
      i. Identify funding sources and secure funds to support rapid response activities
      ii. Review existing rapid response programs for invasive species
      iii. Develop list of target species
      iv. In collaboration with partners, develop procedure for how to prepare and respond to new invasion of non-native species
      v. Identify funding sources for invasive species rapid response pilot study and in collaboration with partners, apply for funding
      vi. With partners, develop and implement pilot study

IV. Expand restoration activities
   a. Objectives
      i. Increase development and implementation of restoration projects
   b. Activities
      i. Identify and prioritize areas where seagrass [eelgrass] restoration needed
      ii. Create list of water bodies that need improved water circulation
      iii. Identify additional restoration efforts for Olympia oysters
      iv. Following events that degrade target (e.g., hazardous spills), evaluate damage and identify appropriate restoration activities
      v. Identify partners and form partnerships
      vi. In coordination with partners, find and apply for funding, design restoration plans, and implement restoration projects

V. Incorporate considerations of the vulnerability of marine resources to climate change and ocean acidification into management
   a. Objectives
      i. Generate climate vulnerability assessment
      ii. Develop and implement plans 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 collaborations to develop vulnerability assessments
      v. Using information from assessments, identify management actions that will decrease vulnerability of sensitive resources and incorporate these into appropriate management plans
      vi. Identify useful climate tools and work with tool developers to incorporate into management