COASTAL WETLANDS, BEACHES AND WATERSHEDS INVENTORY

Elephant seals at a San Luis Obispo County beach
(photo by Peter Thoeny, courtesy of CC BY 2.0)

*The **Ocean Protection Council (OPC)** and SFEI are mapping the wetlands, beaches and related habitats of California's coastal watersheds, to help implement the **OPC's 2020-2025 Strategic Plan** and the **California Wetland Program Plan**. The specific objectives of the inventory are:*

1. Map the **abundance, distribution, and diversity** of wetlands and related habitats;
2. Support **coordinated climate adaptation** by coastal communities;
3. Create **community capacity** to update the inventory as needed.

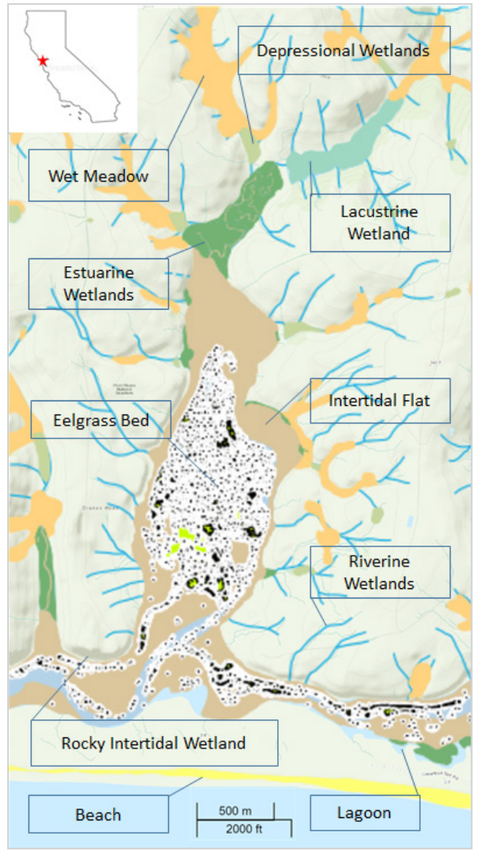
The inventory will:

- incorporate a **crosswalk among regional classification systems**, allowing existing habitat maps to be compiled coast-wide;
- provide **dashboards and other online tools** for the public to track progress toward multiple OPC strategic targets for habitat protection and restoration;
- **summarize local and regional information** about the current distribution, abundance, and diversity of aquatic habitats;
- enable the public to **visualize changes in habitats over time.**

WHY IS THE COASTAL INVENTORY NEEDED?

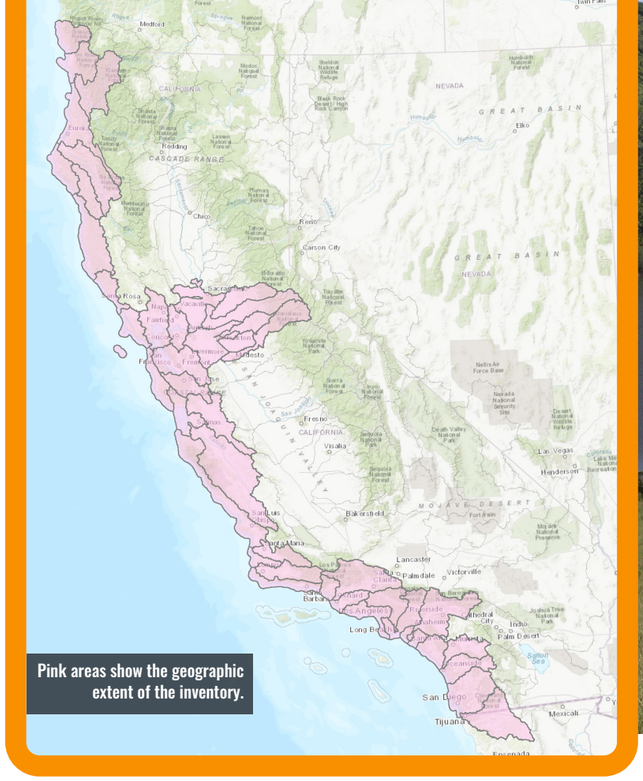
Wetlands and related habitats improve the resilience of coastal watersheds to climate change, population growth, among other threats. They protect water quality, provide flood control, prevent shoreline erosion, and support abundant wildlife and recreation. The historical habitats have great cultural value. The new inventory of wetlands and related habitats is essential for their protection. The new inventory will be part of the California Aquatic Resource Inventory (CARI), which includes the following habitats.

CARI Habitat Names	Common Synonyms
depressional wetland	bog, fen, marsh, pond, swamp, flood water retention basin
vernal pool	hog wallow, mima mound, mound-field
playa	alkali flat, desert basin, dry lake bed, salt pond
riverine wetland	stream, river, brook, canal, channel, creek, ditch, slough
wet meadow	flat wetland, groundwater wetland, marshy area
seep and spring	seep, spring, flush, headwaters
estuarine wetland	tidal marsh, saltmarsh, estuarine marsh
coastal lagoon	lagoon, laguna, estuarine lagoon
lacustrine wetland	lake, reservoir, forebay
beach	beach, shore, seashore, lakeshore
intertidal flat	tidal flat, mudflat, sand flat
rocky intertidal wetland	rocky intertidal, rocky shore, tide pools
eelgrass bed	eelgrass, eelgrass flat, Zostera bed



Many of these types of surface waters coexist in California coastal watersheds, as evidenced for the watershed of Limantour Estero at Point Reyes National Seashore (see map, upper right). The level of detail will vary based on data availability.

Looking into a tide pool at Fitzgerald Marine Reserve
(photo by Elaine with Grey Cats, courtesy of CC BY 2.0)



Pink areas show the geographic extent of the inventory.

Drakes Estero, Point Reyes National Seashore
(photo by Josh Collins, SFEI)

WHAT IS ITS STRATEGIC IMPORTANCE?

The new inventory is needed to ensure that habitat protection is built into climate change adaptation programs, plans, and projects by helping local agencies and communities:

- **Identify and visualize habitats threatened by sea level rise and extreme storms (OPC Targets 1.1.4-1.1.7; 1.3.1);**
- **Identify sensitive eelgrass beds (OPC Targets 3.1.3-3.1.4);**
- **Track habitat change and model watershed sources of sediment and runoff (OPC Targets 3.1.5-3.1.6).**

Rocky shoreline and tidal pools at Fitzgerald Marine Reserve
(photo by CSCF1598, courtesy of CC BY 2.0)

HOW WILL THE COASTAL INVENTORY BE DEVELOPED?

The inventory will be guided by a new mapping committee of the **California Wetland Monitoring Workgroup** of the **California Water Quality Monitoring Council**. The committee will represent the best existing and developing new science and technology for mapping habitats and land use in California, and beyond.

The inventory will become the new basemap in **EcoAtlas,** an important part of the growing toolset for coordinated watershed planning and management.

Lands End Beach, San Francisco
(photo by Nicolas Raymond, courtesy of CC BY 2.0)

HOW WILL THE INVENTORY BE MAINTAINED?

Going forward, local agencies and communities will have access to standard methods for revising the inventory as needed for land use planning and management. The Inventory can be more detailed and updated more frequently where habitats are more likely to be impacted by land use or climate change. The Inventory will help planners include habitat protection and restoration in their climate change adaptation plans and projects. Ways for the public to track and visualize progress will continue to be improved.

Project funding and oversight provided by OPC and the California Wetland Monitoring Workgroup (CWMW). For more information: www.sfei.org/projects/coastal-inventory

CONTACT: Justine Kimball - Justine.Kimball@resources.ca.gov •
Maria Rodriguez - maria.rodriguez@resources.ca.gov • Cristina Grosso - cristina@sfei.org

OCEAN PROTECTION COUNCIL

California Wetland Monitoring Workgroup

SFEI SAN FRANCISCO ESTUARY INSTITUTE

EcoAtlas

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