

Welcome

Planning for Sea Level Rise and Flooding in the Lower Eel River Estuary

Community Meeting
March 2, 2026

Humboldt
County



RESOURCE
CONSERVATION DISTRICT



CALIFORNIA
OCEAN
PROTECTION
COUNCIL



→ **Agenda**

1:00-1:10 Welcome & Meeting Overview

1:10-1:40 Project Overview Presentation

1:40-2:00 Mapping Activity & Q&A



→ **Safety & Accessibility**

Restrooms

Emergency Exits

Other

Study Area

We acknowledge that we are gathering on the traditional territory and homelands of the Wiyot peoples which include the Wiyot Tribe, Bear River of the Rohnerville Rancheria, and Blue Lake Rancheria.

The Eel River is known as *Wiyat* in the Soulatluk (Wiyot) language . The Wiyot peoples continue their relationships with these lands and waters through ceremony, culture, and stewardship.



Study Area

Lower estuary at or below the 23 feet NAV88 elevation

~ 31 square miles

Based on the High sea level rise scenario for 2150 (13 ft of SLR + 100 year tidal level)



1889

- Water depths of 9-15 ft
- Complex network of sloughs and water bodies
- 2 dikes southwest and west of Morgan's slough
- Cannery east of Morgan's slough

McNulty's Slough

Mosley's Cut-off

Eastlake Slough

Morgan Slough

Salt River

Centerville Slough



1916-1921

- Greater water depths of 10-27 feet
- Increased channelization and diking
- Reduced wetland extent
- Cock Robin Island

1916 Map

McNulty's Slough

Mosley's Cut-off

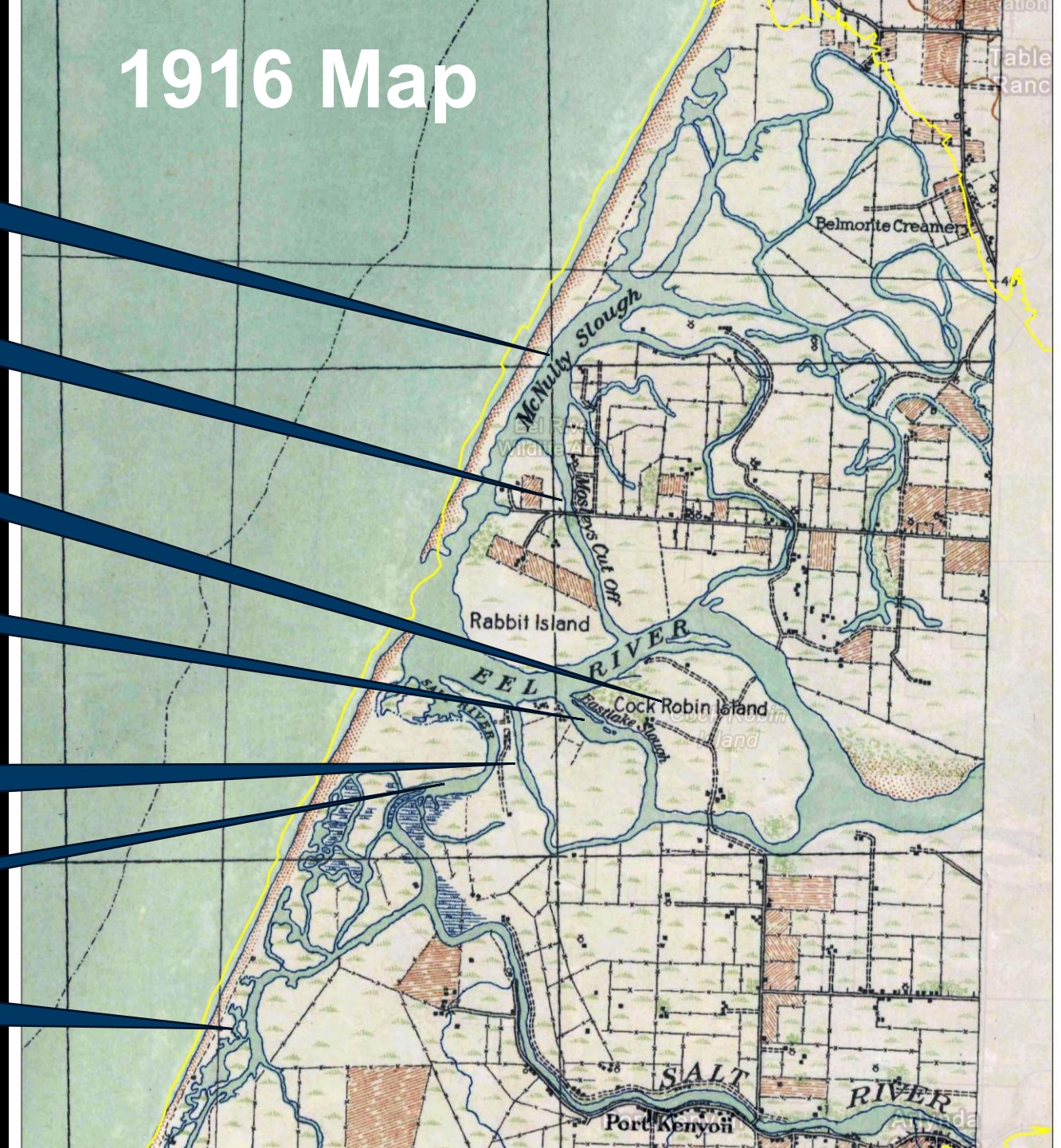
Cock Robin Island

Eastlake Slough

Morgan's Slough

Salt River

Centerville Slough



1977-1994

- Channelization of Salt River, reduction in size
- Highway and Navy station near Centerville Beach
- Mosley's Cut-off disappears
- Eel River mouth migrates to the north
- Erosion of shoreline south of the mouth, increasing shoreline north of the mouth

1981 – Designated a National Wild and Scenic River

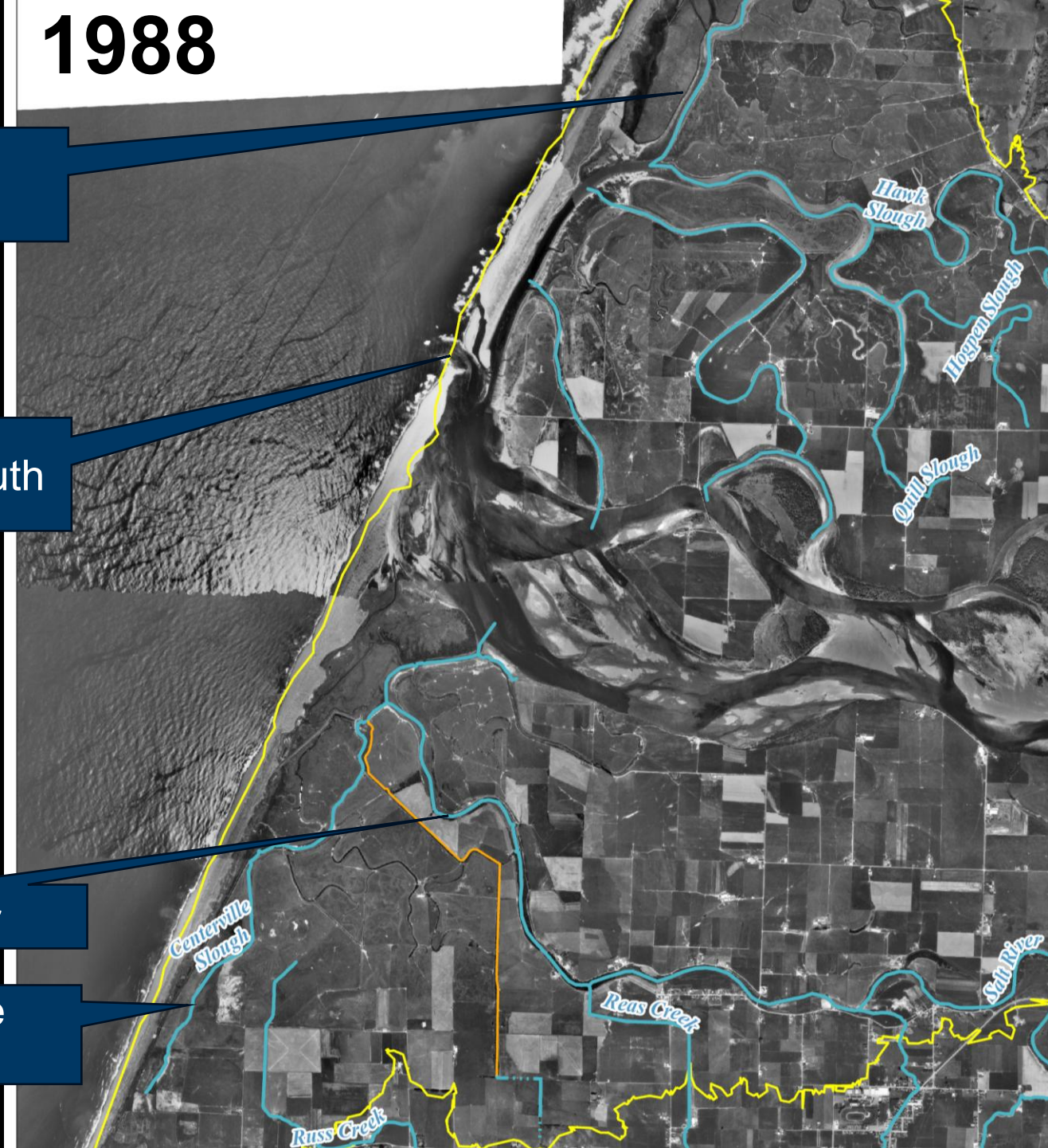
1988

McNulty's Slough

Eel River Mouth

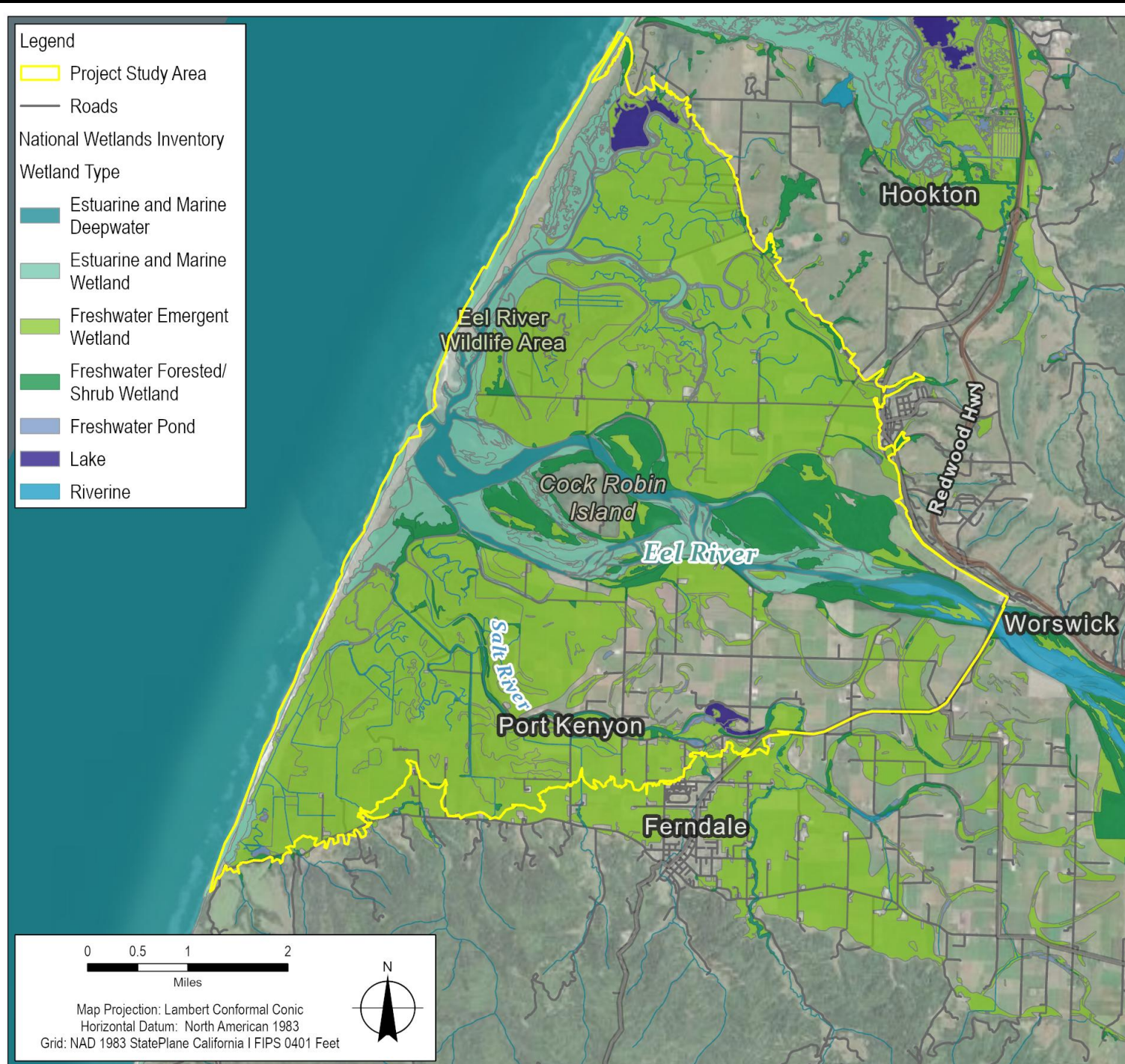
Salt River

Centerville Slough



Current Conditions: Geomorphology

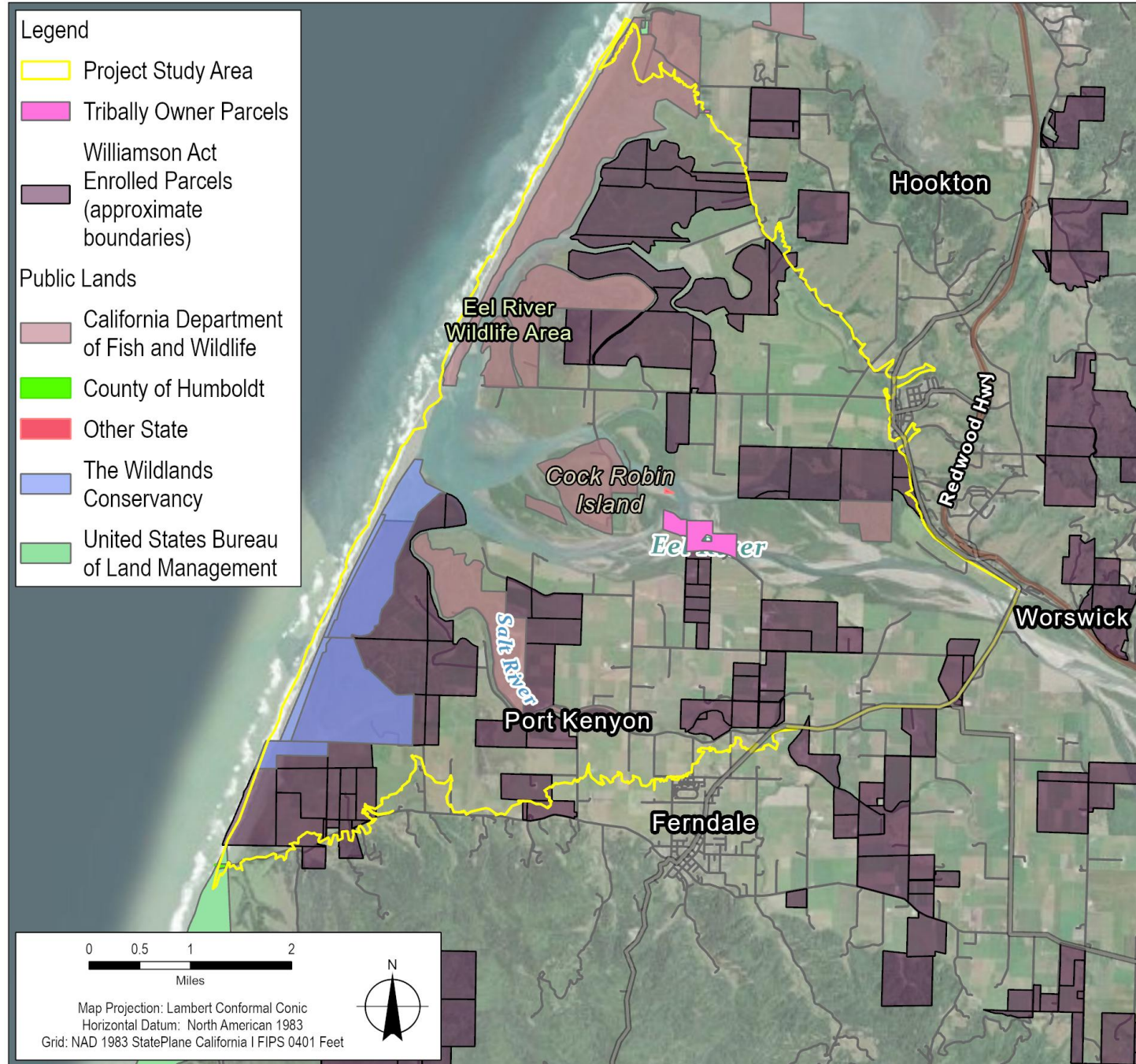
1. Subtidal and intertidal
Sloughs, mudflats, tidal marshes and
mouths of tributary creeks
2. Constructed landforms
Earthen levees, dikes, and tide gates
3. Diked former tidelands
Tidal marsh converted to agricultural
use
4. Uplands
5. Coastal beach and dunes



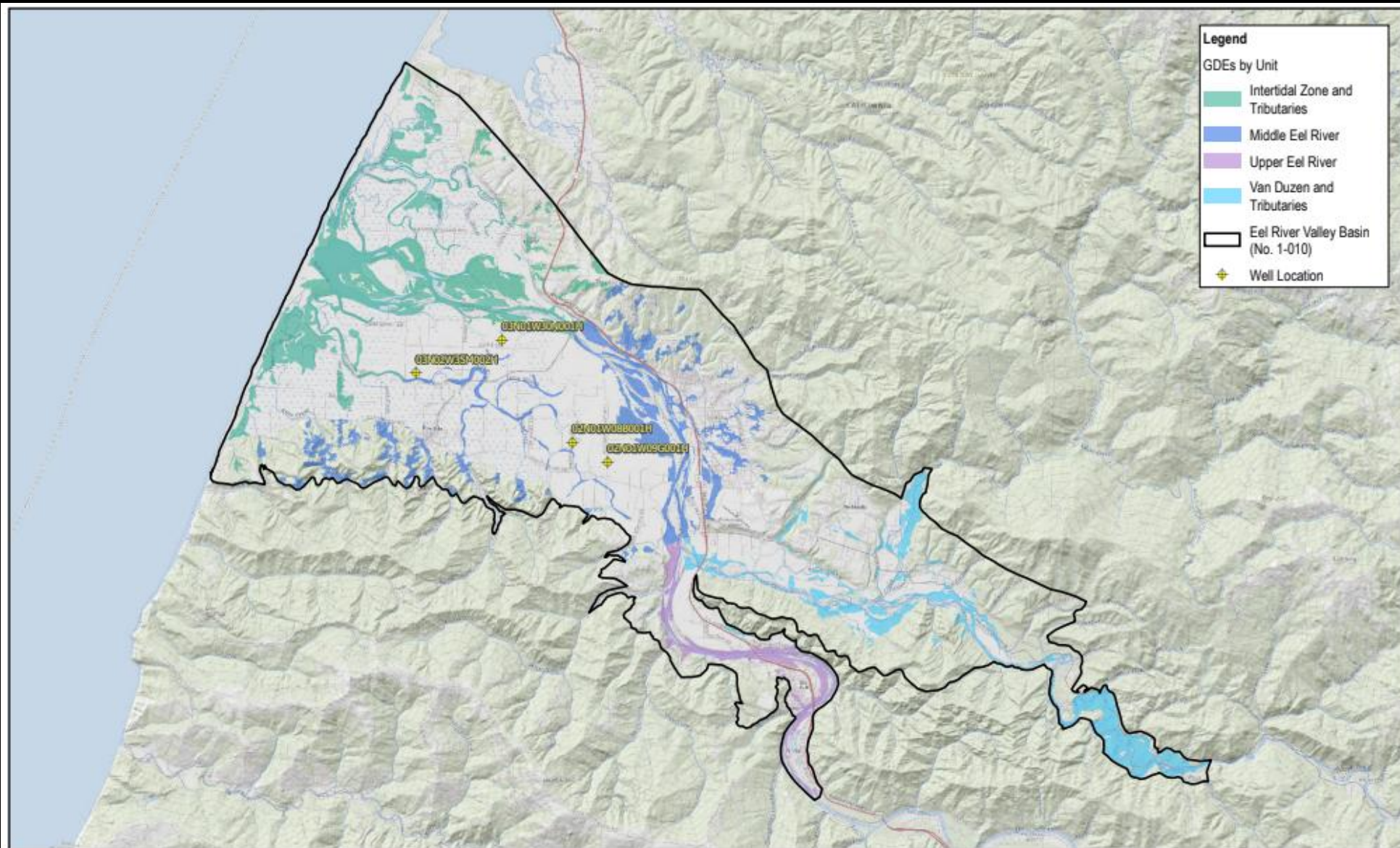
Current Conditions:

Land Management

- Humboldt County/
private lands
- Tribal lands
- State of California
- Wildlands Conservancy



Current Conditions: Groundwater



Paper Size ANSIA

Miles

Humboldt County Groundwater Sustainability Agency
Eel River Valley Groundwater Sustainability Plan

Project No. 11217388
Revision No. -
Date Jan 2022

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Print date: 30 Jan 2022 - 11:09

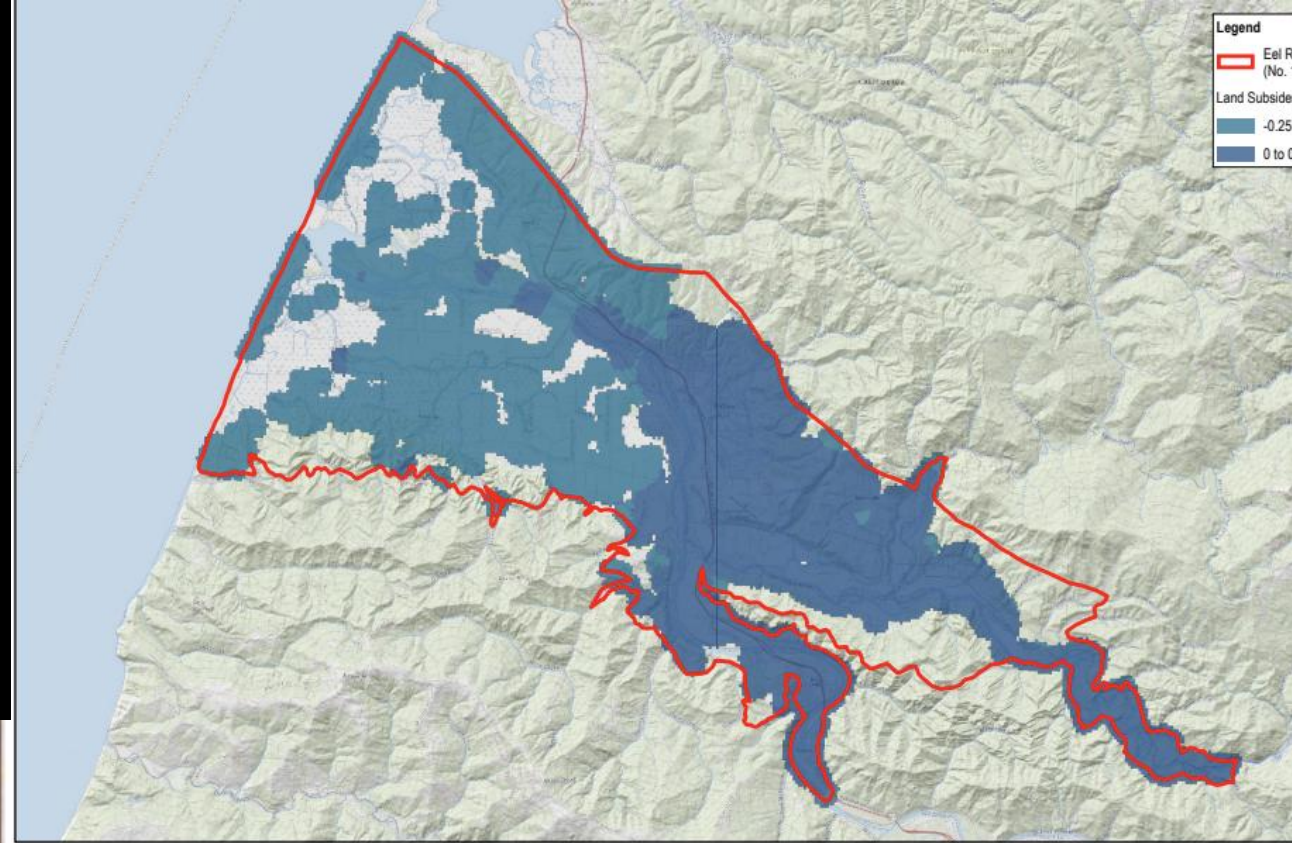
Data source: DWR basin, 2013; GDE, Stillwater Sciences; USGS National Map; USGS The National Map; National Boundaries Dataset, National Elevation Dataset, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset, U.S. Census Bureau - TIGER/Line; HERE Road Data. Created by: jlanK2

**Potential Groundwater
Dependent Ecosystems**

FIGURE 33

Ongoing Landscape Changes:

Land Subsidence



SW Engineers & Geologists Stillwater Sciences GHD

Paper Size ANSI A
0 1 2 3 Miles
Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 5401 Feet

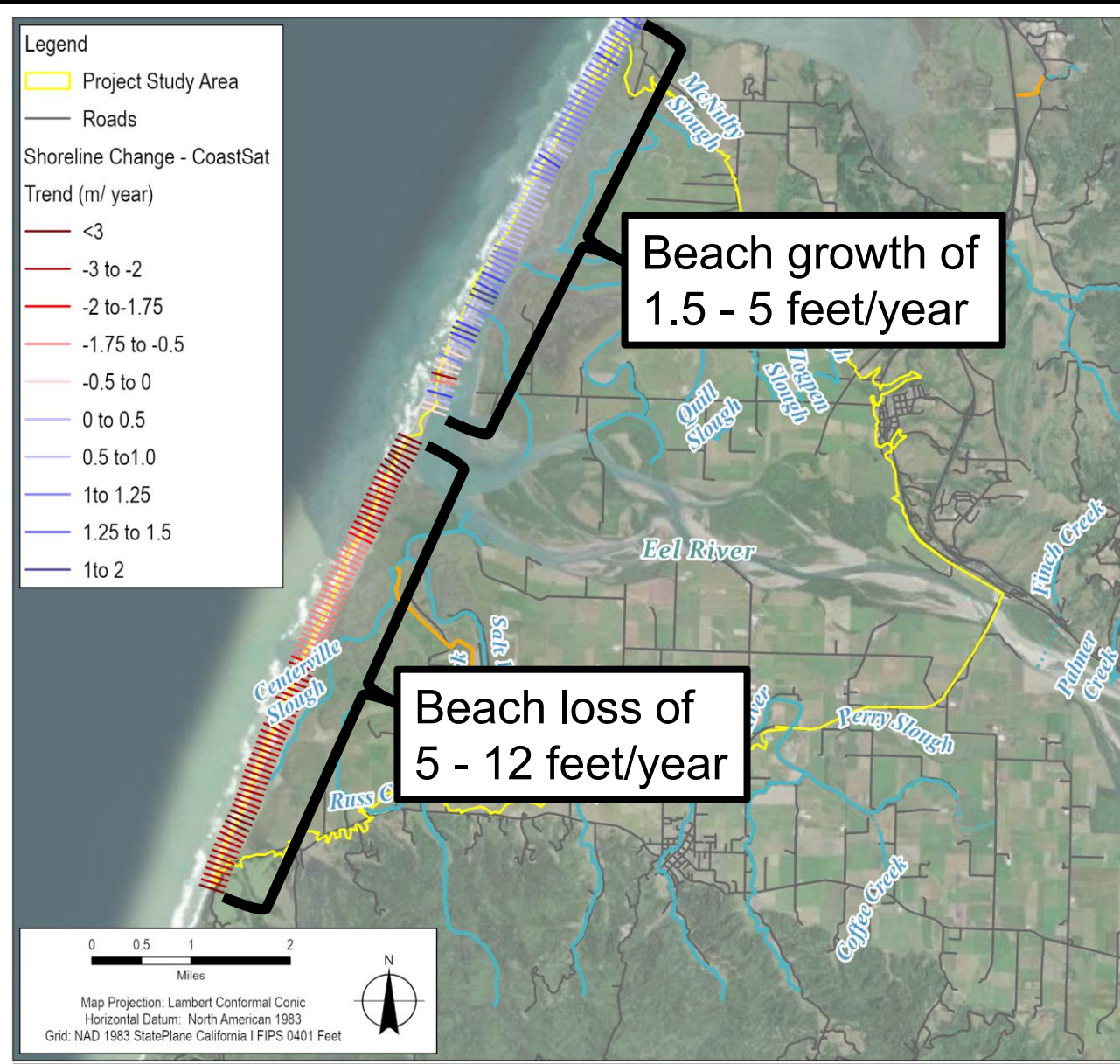
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COUNTY OF HUMBOLDT
Humboldt County Groundwater Sustainability Agency
Eel River Valley Groundwater Sustainability Plan

Land Subsidence

Data source: DWR basin, 2012; SAG Vertical Displacement, TRE, ALDAMRA, USGS, Total, Snow, 2015/2013, Mosaic; Ca F10, LandSubsidence; Print date: 20 Jan 2022 - 10:38

Tectonics - Cascadia
Global vertical land movement
Consolidation of marsh soils due to diking

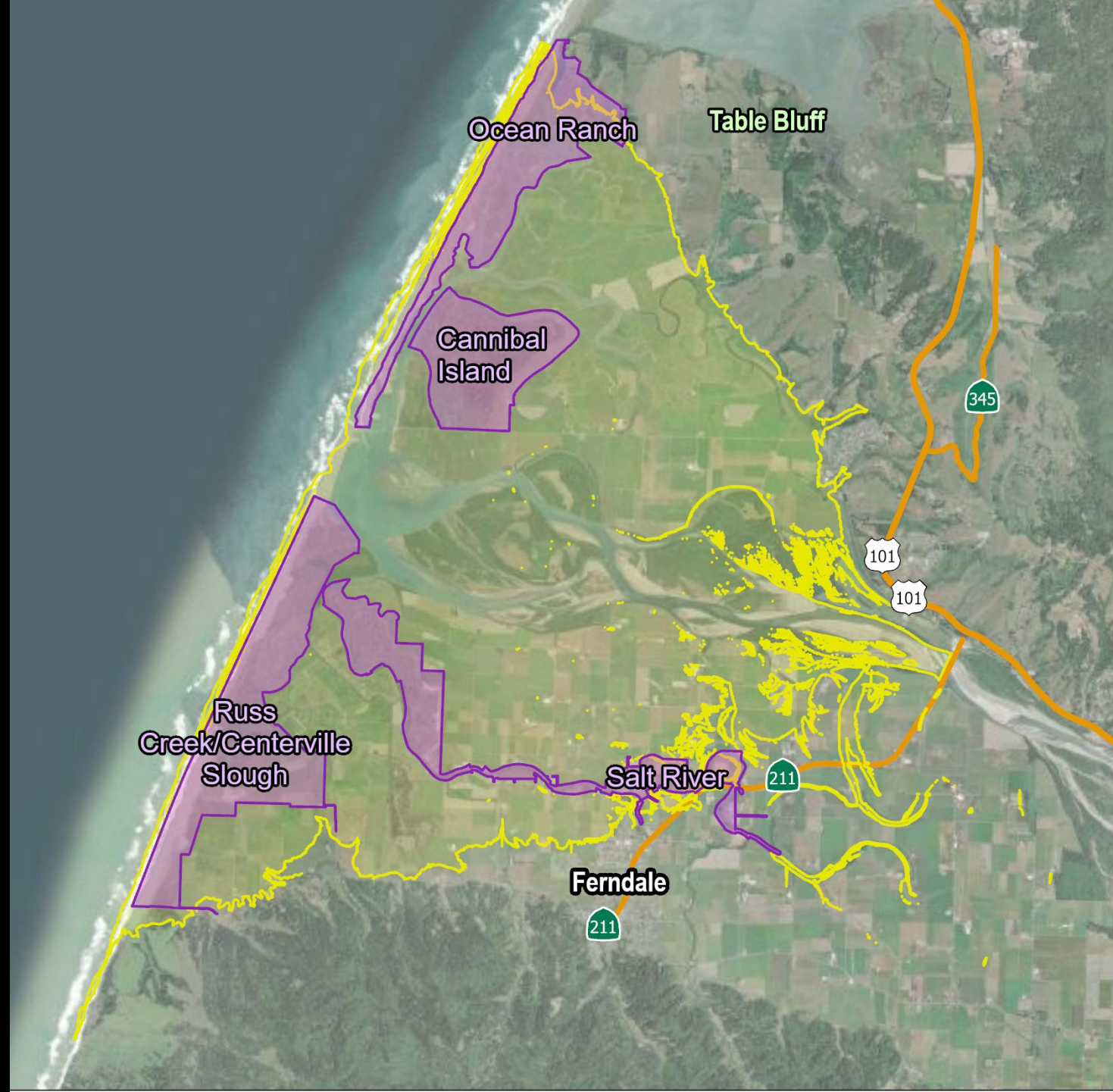
Beach Erosion and Accretion



Ongoing Landscape Changes:

Ecological Restoration Projects

- Ocean Ranch
- Cannibal Island
- Salt River
- Russ Creek / Centerville Slough



Flooding and Future Sea Level Rise



Scope of Work

Data Collection

Historic and current conditions to provide more accurate evaluation of future flooding risks with sea level rise

- *Lower Eel River Estuary Background Report*

Community Engagement

Community meetings, Tribal engagement, meetings with focused stakeholders

- *Community visioning report – summary of efforts and recommendations*



Scope of Work

Estuary Flood Hazard Assessment

- *Flood inundation maps showing various sea level rise scenarios*
- *Groundwater maps showing depth, duration, and salinization for various sea level rise scenarios*

Sea Level Rise Impact and Vulnerability Assessment

- *Report summarizing potential flooding exposure and risks*

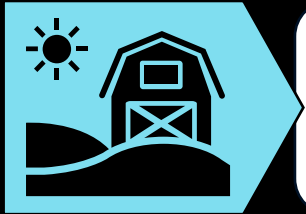


Timeline: September 2025 – December 2026



More participation opportunities

Ongoing



**Landowner Interviews
& Site Visits**



Website Updates



Email:
eelsealevelrise@googlegroups.com
HCRCD Program Manager:
(707) 498-1072

Upcoming



**Community Meeting
on Draft Report**



Online Survey



→ Community Visioning

What do you love about the Lower Eel River Valley area?



Mapping Activity

Flooding Experiences

Where/When did it happen?

What impact did it have on you?

What do you wish could change/improve?





*** Thank you**