WATERBODY TYPE: PERENNIAL ESTUARINE WETLANDS

MEASURE: **EXTENT & HEALTH OF WETLANDS**

MESSAGE: *85% of the State's estuarine wetland acreage scored within the top two categories: Good-Excellent & Medium-Good*
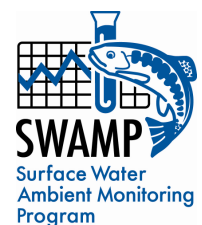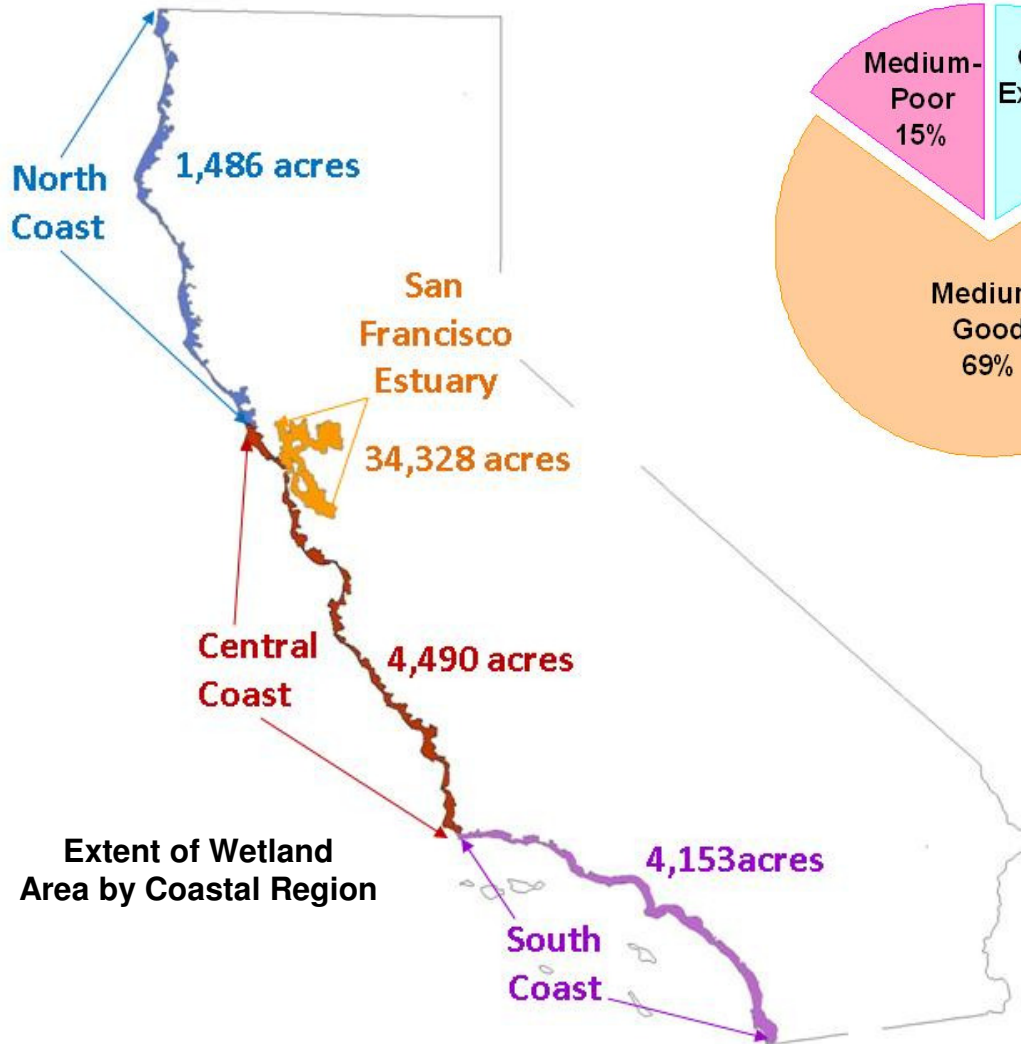
KEY STATISTICS

PERCENT OF STATE'S HISTORICAL WETLANDS LOST: 91

ACRES OF EXISTING ESTUARINE WETLANDS: 44,456

MEASUREMENTS:

Extent of Wetland Area by Coastal Region

North Coast — 1,486 acres

San Francisco Estuary — 34,328 acres

Central Coast — 4,490 acres

South Coast — 4,153 acres

Statewide Estuarine Wetland Health

Medium-Poor 15%

Good-Excellent 16%

Medium-Good 69%

SWAMP
Surface Water Ambient Monitoring Program

WHAT IS THE MEASURE SHOWING?

This measure shows how much estuarine wetland exists in California and the health of those wetlands. Most of the historical estuarine wetland has been converted into agriculture, commercial salt ponds, and urban development. In the San Francisco Estuary only about 15% of the nearly 190,000 acres of historical salt wetlands remain. This new survey establishes a baseline of wetlands acreage that managers can use to ensure that no further loss of wetlands is allowed. Researchers used the California Rapid Assessment Method (CRAM) to assess the health of the remaining estuarine wetlands. The results show that 85% of estuarine wetland is in good to excellent or medium to good health while 15% is in medium to poor health. Wetland scientists, managers, and the concerned public can use these results to determine how to manage the wetland areas and where restoration is needed.

WHY IS THIS MEASURE IMPORTANT?

Wetlands are beneficial for many reasons and should be protected. They support unique and diverse aquatic and wildlife species and provide a number of important benefits to humans as well. One important benefit is protecting and improving water quality by storing water and filtering out pollutants. Wetlands also serve to control erosion, supply fish and wildlife habitat, store floodwaters, and provide recreation and economic benefits.

WHAT FACTORS INFLUENCE THE MEASURE?

Land use has severely affected the distribution, abundance, size, and shape of estuarine wetlands. Not only have most of the State's historical wetlands been destroyed, but many of the remaining wetlands are disconnected from each other and do not have adequate buffers to protect them from neighboring land uses, which puts their health at risk. Many wetlands are being squeezed between rising sea level and shoreline development. Some wetlands are being invaded by alien plants and animals. Others are also impacted by pollution and trash. These factors, called stressors, increase health risks for wetlands. By knowing these stressors, managers can work on corrective health measures.

TECHNICAL CONSIDERATIONS:

- Data source: Wetland Demonstration Grant (US EPA funding) Period 2007.
- Unit of Measure: California Rapid Assessment Method (CRAM). CRAM is a field-based tool for rapidly assessing the overall condition and identifying the major stressors of wetlands in California, based on visible indicators of landscape and buffer condition, hydrology, and physical and biological structure.

- Wetlands health categories were determined by equally dividing the range of possible CRAM scores (from the lowest score of 25 to the highest of 100) into four equal parts. Scores above 82 were assigned Category 1 (Good-Excellent); scores between 63 and 82 were assigned Category 2 (Medium-Good); scores between 44 and 63 were assigned Category 3 (Medium-Poor) and scores below 44 were assigned category 4 (Poor). In the pie chart above, Category 3 and 4 were combined.
- The statewide results presented here are strongly influenced by the San Francisco Estuary where most of the estuarine wetlands are found.
- The California Rapid Assessment Method does not take into account contaminant stressors so the health of some wetlands affected by pollution may be overestimated.
- Public report and fact sheet are available at:
  http://www.waterboards.ca.gov/water_issues/programs/swamp/wetlands.shtml

GLOSSARY:
Estuary
Coastal water body where ocean tides and river water merge.
Perennial Estuarine Wetland
Wetlands that are influenced by ocean tidal flows year-round.