



REM

road ecology meeting

Wetland Mitigation under a Changing Climate: Recognizing the Significance of Riparian Swamp Restoration on Agriculturally Degraded Wetlands within the Humboldt Bay Area of California

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Wetland Mitigation Under a Changing Climate

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Project Details

- Documentation of $\geq 90\%$ loss of historic forested wetland, and use of “climate-smart conservation” planning for the Humboldt Bay area of California, has allowed the California Coastal Commission to override policies that previously preserved the agricultural use of a wetland—in favor of a forested wetland restoration and enhancement, for mitigation credit.

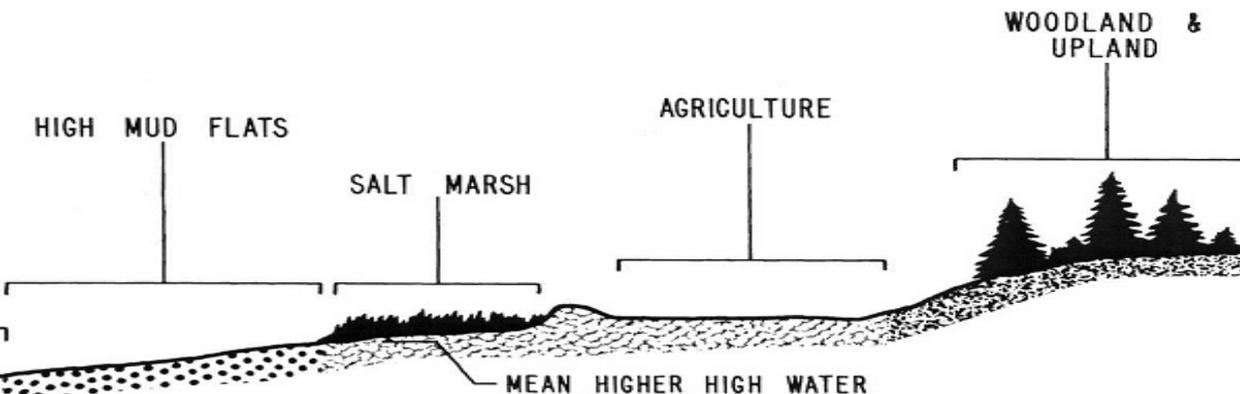
Research

- To understand the watershed need, the historical ecology of the Humboldt Bay was investigated, and a $\geq 90\%$ loss of coastal plain forested wetland due to agricultural development, was documented.
- Due to changing climatic conditions and localized projections for sea-level rise, planning principles of “climate-smart conservation” were investigated and applied to mitigation planning—thus ensuring current and future benefits.



Climate-Smart Conservation

Putting Adaptation Principles into Practice



Results

Caltrans is now in the design phase for 80-acres of forested wetland restoration (i.e. Palustrine Forested/Palustrine Scrub-shrub seasonal wetland) in northern Humboldt Bay.

- The restoration project will provide wetland rehabilitation and enhancement credits to be used for the offsetting of transportation-related impacts to jurisdictional wetlands.

