

CITY OF DEL MAR

SAN DIEGUITO LAGOON WETLAND HABITAT MIGRATION ASSESSMENT

The **San Dieguito Wetland Habitat Migration Assessment** was developed in response to the results from the Del Mar **Vulnerability Assessment Report**, which showed significant vulnerabilities and risks to Del Mar, including wetland habitat loss (ESA 2016). To address this issue, the City developed a Wetland Habitat Migration Assessment, which serves as a companion document to the Del Mar **Community Plan, Adaptation Plan** and **Local Coastal Program**. The assessment evaluates habitat migration in the San Dieguito Lagoon under varying levels of sea-level rise.



Wetland vegetation establishes in different areas within the lagoon based on the elevation of the area relative to the tides, as shown in the cross-section above. In the future, sea-level rise will cause existing wetland habitats within the San Dieguito Lagoon to be inundated more frequently. Too much inundation can kill wetland plants, but if higher elevations are available, the vegetation can migrate to higher elevations around the lagoon and upstream along the San Dieguito River. If areas are not available for this migration, vegetated wetland habitats will be “drowned out” and converted to intertidal mudflats and subtidal habitat.



- The majority of existing vegetated salt marsh habitats are **projected to convert to tidal flat and open water** by 2100.
- Geography and existing development constrain the San Dieguito Lagoon marsh habitats and do not permit much habitat migration with sea-level rise.
- The best opportunity for improving marsh habitat resiliency is the potential to convert or restore the **North County Transit District’s stormwater detention** and seasonal wetland area between the railroad bridge and Jimmy Durante Boulevard.
- The east overflow lot of the Del Mar Fairgrounds has the potential to convert to salt marsh habitat; however, this would conflict with existing use as parking.
- Migration options exist beyond the City boundary (east of the I-5). While the elevations and freshwater influence limit the inland migration of saline habitats, conversion of uplands to salt marsh with high sea-level rise is possible
- **Sediment placement** to maintain existing salt marsh habitats may warrant further consideration as a sea-level rise adaptation measure
- **Policy-based adaptation measures** include options to identify potential conservation areas, limit allowable uses, apply zoning setbacks, secure conservation easements, and acquire land.