

WETLANDS ON THE EDGE: *The Future of Southern California's Wetlands*: REGIONAL STRATEGY 2018

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ABSTRACT

Southern California's coastal wetland systems have been greatly diminished and altered. For the past two centuries of U.S. history, wetlands have been regarded by European settlers as wastelands to be drained and filled, despite the invaluable role that wetlands played in the lives of coastal Native American tribes for millennia. Most of the wetlands that existed in California at the time of statehood were lost within the following hundred years. This story holds true in coastal Southern California, where urbanization has destroyed over 62 percent of the historical intertidal wetlands.

Of the 330 coastal wetlands that historically existed between Santa Barbara and San Diego, there are only 105 remaining today, and those systems are smaller than they used to be, fragmented, and many are cut-off from their natural sources of water and sediment. The diversity of coastal wetland types has also suffered—lagoons, river mouths and small creeks have been modified for navigation and flood protection, and filled by development. This has left the remaining wetlands in a poor state, more vulnerable to disturbance and stress. While urbanization will continue to impact wetland habitats, the added stress of climate change and sea-level rise further challenges the survival of these delicate ecosystems.

Southern California has already lost 62% of its historic 33,400 acres of coastal wetlands, without intervention an additional 800 acres will be lost after 24 inches of sea-level rise, and a further 2,900 acres will be inundated by a 66-inch rise (predicted to occur by 2100). Predicted wetland losses could be offset by facilitating the migration of wetlands into adjacent uplands that will be inundated as sea levels rise.

With 24 inches of sea-level rise (currently predicted to occur around 2050), 7,700 acres of current upland habitat could become wetlands if actions are taken to facilitate, or not impede, that migration.

The drastic loss of wetlands together with an increasing understanding of their value have spawned an era of much-needed wetland protection and restoration. To that end, the Southern California Wetlands Recovery Project (WRP) is a group of federal and state agencies that have been coordinating their efforts around wetlands protection and restoration for almost 20 years. For the past 15 years, the WRP agencies have recognized the need for a better roadmap of how and where to restore wetlands, to coordinate efforts and maximize financial investments. To develop this roadmap, the WRP called upon scientific experts,

wetland managers, and restoration practitioners to help develop a science-based plan to guide wetlands protection and restoration from a regional perspective

The result of this collaboration is *Wetlands on the Edge: The Future of Southern California's Wetlands, Regional Strategy 2018*, a comprehensive guide for the recovery and long-term survival of Southern California's wetlands. In this report, over 50 scientists and resource managers analyze how our wetlands have changed, their future potential and threats, and how we can ensure their health into the future. The Regional Strategy was developed through a four-year process. This strategy provides quantitative objectives for wetlands recovery that are based on our understanding of historical wetland location and area, current stressors on wetland ecosystems, such as development, and the future threat that is posed by sea-level rise and climate change.

Full Text:

http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/1055_SouthernCaliforniaWetlandRegionalStrategy.pdf