I: Introduction

A. Coastal Southern California and its Wetlands

Southern California's vitality depends in large part on the appeal of its natural environment, especially its rivers, streams, wetlands, and nearshore waters (collectively "wetlands"). The state's five southernmost coastal counties, which constitute only 8.6 percent of the state's land area, are home to half the state's inhabitants and account for 42% percent of its economy. The \$500 billion annual regional output is larger than the gross national product of all but 11 of the world's nations and constitutes six percent of the nation's gross national product. The Los Angeles-Long Beach Port Complex is the largest in the United States and the third largest in the world, placing it at the center of the nation's vast trade network. People continue to flock here to enjoy the warm, dry summers and mild winters, the dramatic coastline and famous beaches. By 2020, the population is expected to rise from 16 million to 23 million.

While the natural environment continues to act as magnet for people and commerce, the resulting pressures have radically altered and degraded its waters, threatening to undermine public health, economic wellbeing, and the quality of life. The National Research Council has determined that California has lost a greater percentage of its wetlands than any other state, especially in the southern region, which comprises San Diego, Orange, Los Angeles, Ventura, and Santa Barbara Counties. In Los Angeles County, wetland losses exceed 95 percent.

Southern California has more flood control dams, debris basins, and miles of concrete-encased stream channels than any other region in the nation. Waterways and wetlands have been dammed, diverted, channelized, filled, and polluted. Flood waters are typically shunted to the sea rather than used to recharge aquifers. Meanwhile, the enormous infrastructure constructed to import water has drastically altered the natural hydrologic regime and deprived beaches of sand supplies.

Water pollution is a growing concern. Southern California is one of the few major urban regions in the nation where contaminated runoff flows directly into streams and drains to nearshore waters rather than being diverted to wastewater treatment plants first. Over 150 beach closures occurred during summer 2000, undermining a \$7 billion tourism and recreation industry.

The rich biodiversity of the region is rapidly being lost. Noted biologist E.O Wilson has designated southern California as one of the world's eighteen "hotspots" – the only one in North America – because of the scale of the threat to its biodiversity. At this time, 150 animal and 52 plant species that depend on rivers, streams, and wetlands are considered as threatened or endangered by either state or federal agencies. The region's coastal wetlands from Point Mugu to Tijuana Estuary have been nominated by the U.S. Fish and Wildlife Service as wetlands of international significance under the Ramsar Convention because of their importance to migratory birds, fisheries, endangered species, and biodiversity.

Despite staggering losses, however, precious natural areas survive or can be recovered. To be sure, restoration in this heavily urbanized region is a daunting task. The physical and hydrological landscape has been irreversibly altered and it is often impossible to re-establish historic conditions. Opportunities for coastal wetland restoration are limited by extensive development, as well as by geologic and topographic constraints. Opportunities to preserve and restore stream corridors and riparian habitat are more numerous but are constrained by encroaching development and flood management concerns.

Nonetheless, the values resulting from strategically planned restoration are momentous, not only for the economic potential of their hydrological, habitat, and water purification functions, but for their potential to enhance the quality of life in this highly developed region. The lure of rivers, streams, wetlands, and nearshore waters is powerful. These are favored destinations for school trips, family outings, contemplative and recreational activities, and vacations. They offer a welcome contrast to the uniformity of the urban landscape and kindle curiosity about the natural world and the role of humans in it.

Coastal Southern California is a region like no other in terms of the growth and environmental transformation it has experienced. It also

stands alone in terms of its geologic, hydrologic, climatic, and ecological characteristics. Wetlands research that has been based primarily on coastal systems of the Atlantic and Gulf region, has resulted in scientific findings, public policies, and educational programs that show little understanding of coastal Southern California's distinctive, highly dynamic wetland conditions. Against this backdrop of loss and lack of understanding, the Southern California Wetlands Recovery Project was formed to develop a more coordinated and comprehensive strategy for preserving and restoring the region's waters.

B. The Wetlands Recovery Project

The Southern California Wetlands Recovery Project (WRP) is a novel and broad-based partnership of 17 state and federal agencies working in concert with scientists, local governments, environmental organizations, business leaders, and educators. The geographic scope of the WRP includes coastal wetlands and watersheds from Point Conception (in Santa Barbara County) south to the U.S.-Mexico border. The WRP employs three primary strategies to recover wetlands: (1) acquisition of property from willing sellers, (2) restoration and enhancement of wetlands where allowed by landowners and land managers, and (3) outreach and education about best practices to protect wetlands. The California State Coastal Conservancy manages the WRP and assists local partners in developing and implementing projects. The WRP ultimately seeks to reestablish a mosaic of functioning wetland and riparian systems that supports a diversity of species, while also providing refuges for humans within the urban landscape.

While some of the WRP's partner agencies protect wetlands through regulation, the WRP partnership itself was created to pool resources and recover wetlands using non-regulatory

Common Wetlands Functions

- Fish and wildlife
 habitat
- Food chain support (primary productivity)
- Flood water storage
 Shoreline and streambank
- anchoring
- Sediment Trapping
- Water quality and
- nutrient processingGroundwater

strategies.¹ Over 50 percent of wetlands nationwide have disappeared, with over 90 percent lost in California. Federal and state regulations have stemmed losses, but have not reached the "no net loss" objective. As the value of services performed by wetlands becomes clearer, the motivation to protect existing wetlands and recover lost wetlands increases. The WRP, because it seeks to recover functioning systems, does not limit its preservation and restoration activities to "wetlands" as defined by regulatory agencies, but includes within its ambit historic wetlands, areas fringing wetlands, and uplands integrally related to a healthy wetland ecosystem.

Weaving together an integrated structure in a region as large and fragmented as coastal Southern California presents formidable challenges. The WRP began as an agency initiative in 1998 with the execution of a memorandum of understanding—the Working Agreement—which committed the signatories to develop and carry out a "regional prioritization plan" for acquisition and restoration in order to increase "the quantity and quality of the region's wetlands." The Working Agreement described an organizational framework which has continued to evolve (Figure A).

The Secretary of the State Resources Agency chairs the **Governing Board**, the overarching policy making body for the WRP, which comprises the top officials

Figure A: Organizational Chart



from the 17 state and federal partner agencies as well as the chairs the Science Advisory Panel and Public Advisory Committee. High-level staff representing the Government Board members constitute the **Wetlands Managers Group**, whose role is to identify for the Board a set of projects and activities to implement the regional strategy, facilitate interagency coordination, and generate policy proposals for Governing Board consideration. The **Science Advisory Panel** consists of leading researchers and restoration practitioners in fields related to wetlands science. They identify key scientific questions for research funding, develop position papers for the Board's consideration, and help to ensure WRP actions are informed by sound science. Local elected officials, environmental leaders, business people, and educators serve on the **Public Advisory Committee.** They engender support for wetlands recovery throughout the region and represent community interests in the WRP partnership.

The innovative structure of the five **County Task Forces** endows the WRP with its distinctive vitality. Each is co-chaired by a County Supervisor and an environmental leader, both of whom sit on the Public Advisory Committee. The Task Forces provide a county-wide forum for public, private, and non-profit wetlands and watershed stakeholders. Participants work collaboratively to

¹ Partner agencies with regulatory authority include both federal agencies (Environmental Protection Agency, the Fish and Wildlife Service, the National Marine Fisheries Service, the Army Corps and Engineers) and state agencies (California Coastal Commission, Department of Fish and Game, State and Regional Water Boards).

identify critical wetland resources, help implement feasible projects, and promote wetlands education and information-gathering. The Task Forces are creating integrated watershed networks throughout each county to share information, mobilize support for funding, channel community concerns to the PAC and WRP as a whole, and incorporate wetlands protection and recovery more fully into local government processes.

The breadth of the WRP's participation requires skillful management. The **State Coastal Conservancy** administers the WRP partnership. It helps staff the different organizational units the Managers Group, the Science Advisory Panel, the Public Advisory Committee, and the County Task Forces. It serves as the fiscal agent for the majority of the state funding that comes to the WRP; it implements or oversees implementation of the WRP's acquisition and restoration projects; and it manages several communication channels including a web site and an electronic newsletter.

C. The Regional Strategy

The Regional Strategy articulates long-term goals and specific implementation strategies to guide the efforts of the WRP and its partners. These goals will serve as a point of reference for all of the partners of the WRP– at the federal, state, and local level—to ensure that individual wetlands projects are part of a comprehensive and coordinated recovery effort.

The Regional Strategy has been evolving along with the WRP. An early iteration resulted from the first meeting of the Science Advisory Panel (SAP) in October 1997 which identified some criteria for regional wetlands planning and recommended an initial set of acquisition and restoration priorities. Strategic thinking has been refined during the formulation of each Annual Work Plan-the set of projects approved by the Governing Board. State funds to implement projects on the Work Plan are typically routed through the State Coastal Conservancy budget. The Work Plan, however, also serves as the template to guide funding by state, federal, and local partners through their distinct budget processes. The Wildlife Conservation Board, for example, uses the Work Plan to target some of its Southern California spending. Work Plan discussions within the Managers Group and Task Forces have served to clarify goals and to highlight some of the perplexing issues that attend restoration in a highly urbanized environment. In October 2000, the WRP hosted a Symposium for over 100 participants, representing all of the WRP's organizational units, to further consider the WRP's regional goals and priorities. From this material, the WRP Managers Group prepared a draft Regional Strategy, and oversaw a year-long process through which the draft was extensively reviewed, commented upon, revised, and then endorsed by each of the WRP's constituent units. With this underlying collaborative effort, the Regional Strategy represents a truly collective vision for the recovery of the region's wetlands.

This Regional Strategy is divided into five chapters and two appendices. This chapter has provided an introductory overview of the region, the wetlands, the WRP and the development of this Regional Strategy. Chapter 2 summarizes the conditions prevailing in the region's coastal wetlands and coastal watersheds, which are described in Appendix A in greater detail. The goals framing the Regional Strategy and selected strategies for realizing these goals are described in Chapter 3, and are followed by a description of county-specific objectives in Chapter 4. Finally, Chapter 5, which is bound separately, contains the WRP's five year implementation plan,

explaining how the goals are to be implemented over the next phase of the WRP's evolution. Appendix B summarizes regional plans that relate to wetlands recovery and have been integrated into the WRP's deliberations.

The WRP encompasses wetlands recovery efforts at the federal, state, and local level. The Regional Strategy articulates a shared vision that each partner can turn to for guidance in how to manage staff effort, direct resources, and measure progress. Success depends not only on a few agencies actively engaged, but on each and every partner, at all levels, seeking to enhance the overall program with the particular resources that they wield. A key to success will be ongoing integration – integration of the Regional Strategy into the decision-making processes of the WRP partners, integration of t related regional planning resources and objectives into WRP deliberations, and, ultimately, the integration of wetlands and watershed recovery into the thinking of all of those who affect the vitality of these critical resources. This Regional Strategy is one step in that direction. Much information remains to be collected and analyzed. More research remains to be done. Better integrative tools need to be developed. One important outcome of the Regional Strategy is that it sets the course for this further evolution.