Summary of Funding Models for Watershed Organizations

Prepared by:

Heidi M. Hoven, PhD
Director of The Institute for Watershed Sciences

May 4th, 2007

Table of Contents

SECTION 1. INTRODUCTION ……1
SECTION 2. NON-PROFIT MODELS ……..1
2.1. Mono Lake Committee ……1
2.2. San Francisco Estuary Institute ……2
2.2-I. Organization ……2
2.2-I.A. Members ……...2
2.2-I.A.i. General Duties of the Board of Directors ……...2
2.2-I.B. Committee of Science Advisors ……...3
2.2-I.C. Executive Officer ……..3
2.2-II. SFEI Programs and Funding ……...3
SECTION 3. JOINT POWERS AGENCY/AUTHORITY MODELS ……..3
3.1. Southern California Coastal Water Research Project Authority (SCCWRP) …….3
3.1.i How it works ……4
3.2. Salton Sea Authority ……...5
3.2-A. Overview ……5
3.2-B. Cost Estimate, Financing Plan & Implementation ……5
3.3. CALFED Bay-Delta Program ……6
3.3-A. Overview ……6
3.3-B. Watershed Program ……6
3.3-C. Water Quality Programs ……7
SECTION 4. PARTNERSHIP MODELS ……7
4.1. The Comprehensive Everglades Restoration Plan (CERP) ……7
4.1-A. Overview ……7
4.1-B. Fiscal Year 2007 Budget ……8
4.1-B.i. From the SFWMD 2006-2016 Strategic Plan ……...8
4.2. Chesapeake Bay Program ……...9
4.2-A. Structure of the Bay Program ……9
4.2-A.i. The Partnership ……9
4.2-A.ii. The Executive Council ……9
4.2-A.iii. The Chesapeake Bay Commission ……...10
4.2-B. Regional Finance Authority ……..10
4.2-B.i. Key Recommendations ……...12
4.3. Great Lakes Commission ……..12
4.3- Overview ……12
4.3-B. Great Lakes Coastal Wetlands Consortium ……..13
4.3-B.i. Funding ……...13
4.4. Puget Sound Partnership ……...13
4.4-A. Organizational Structure ……...14
4.4-A.i. Ecosystem Coordination Board ……..14
4.4-A.ii. Puget Sound Science Panel ……...15
4.4-B. Biennial Budget Requests and Implementation ……16
4.4-B.i. New State Treasury Accounts ……17
4.5. Lower Columbia River Estuary Partnership ……18

4.5-A. Organizational Structure ……...18
4.5-B. Funding and Plan Framework ……...18
4.5-Bi. Partners ……19

Summary of Funding Models for Watershed Organizations

i. Executive Summary

This report summarizes the nature of various watershed organizations across the country with particular focus on their organizational structure, watershed issues, funding mechanisms, and examples of and funding sources for their work (appended to this document). Most of the text in the report was extracted from the individual websites and thus varies in the level of detail and writing style. This document was prepared to provide a reference and framework for a growing interest to form a Utah-based council or commission to address Great Salt Lake watershed issues.

Non-profits, Joint Powers Agencies/Authorities, and partnerships were explored as examples from which to draw and develop a model for Utah. Consideration of the scale of Great Salt Lake watershed issues, participant stakeholders, and potential funding mechanisms in comparison with those presented in this report will help identify a framework for developing a Utah model. It is not the intension of IWSciences to promote or determine a particular model for Utah but to provide a resource so that discussions and decisions for developing a model are well informed.

ii. Non-profit Models

a. Mono Lake Committee (www.monolake.org/)

The Mono Lake Committee is a non-profit citizens' group who are influential in water policies toward the protection and restoration of the Mono Basin ecosystem. Its 2006 1.6 million operating budget came from various sources of public support (member contributions, donations and bequests and assets released from restriction) and other sources of revenue (grants and contracts, sales and program services, etc.).

b. San Francisco Estuary Institute (SFEI, www.sfei.org/)

SFEI is a non-profit organization founded in 1986 to foster the development of the scientific understanding needed to protect and enhance the San Francisco Estuary. They are governed by a Board of Directors composed of Bay Area scientists, environmentalists, regulators, local governments, and industries. SFEI fills the niche between environmental science and environmental management and policy for San Francisco Estuary and its watershed. They conduct science studies, synthesize data and information, and collaborate with other scientists to provide a holistic integration of information from many disciplines that supports management activities or demonstrates the potential implications of different management scenarios to environmental management agencies and other stakeholders.

SFEI is governed by a 7 – 15 member Board of Directors. Members of the Board are selected so as to assure a balance of environmental, business and user groups, so that

regulatory and management and scientific interests are represented. The Board of Directors receives the advice, analysis, and guidance of a Committee of Science Advisors and appoints a full-time Executive Officer to supervise the day-to-day work of all agents and employees of the corporation.

One of the key sources of funding for SFEI is through their Regional Monitoring Program for Water Quality (RMP). The RMP is an innovative collaborative effort between SFEI, the Regional Water Quality Control Board, and the regulated discharger community. In the RMP, financial resources ($3 million per year in 2007) from the discharger community are pooled and applied in a strategic, comprehensive manner toward understanding contaminant levels and impacts on beneficial uses of the Bay. Other SFEI programs are funded by federal and state grants and funds (see Appendix A).

iii. Joint Powers Agency/Authority Models

a. Southern California Coastal Water Research Project Authority (SCCWRP, www.sccwrp.org/)

The Southern California Coastal Water Research Project Authority (SCCWRP) is a joint powers agency focusing on marine environmental research. A joint powers agency is one that is formed when several government agencies have a common mission that can be better addressed by pooling resources and knowledge. In this case, the common mission is to gather the necessary scientific information so that member agencies can effectively, and cost-efficiently, protect the Southern California marine environment.

SCCWRP is governed by a twelve member commission that includes representatives of city, county, state, and federal government agencies responsible for monitoring and protecting the marine environment. SCCWRP was formed in 1969 to address a limited knowledge of the effects of wastewater and other discharges to the Southern California coastal marine environment.

The SCCWRP commission's Technical Advisory Group (CTAG) is a panel including representatives of each of the SCCWRP member agencies. The purpose of CTAG is to act as the primary link between the SCCWRP Commission and member agencies and SCCWRP staff.

The original basis for JPA funding was a self-imposed tithe per 1 million gallons per day of wastewater discharged by each of the five initial JPA sponsors. In recent years, the JPA prescribed an incremental decrease in the tithe, while depending more on supplemental grants and contracts with State and Federal agencies, municipalities and other public utility agencies. The 2006-7 SCCWRP Research Plan and programs are listed in Appendix B.

b. Salton Sea Authority (www.saltonsea.ca.gov/)

Salton Sea Authority is a Joint Powers Authority (JPA) whose goal is the revitalization of the Salton Sea. The Authority has developed and is advancing a combined, multi-purpose revitalization/restoration project.

The Authority Plan includes a local funding component that includes: (1) the formation of tax-increment financing and benefit assessment districts; (2) public land acquisitions, transfers, and sales; (3) developer payments and impact fees; and (4) use of public-private partnerships for the construction and operation of the treatment plants. The critical components in the Authority project design can be financed in significant part with local funds and all project components can be completed within 20 years. Overall the project is envisioned as a jointly funded project that will have Federal, State and local participation.

c. CALFED Bay-Delta Program (http://calwater.ca.gov/)

The CALFED Bay-Delta Program is a unique collaboration among 25 state and federal agencies that came together with a mission to develop a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system (San Francisco Bay/Sacramento-San Joaquin River Delta).

In 2000, CALFED drafted a 30-year plan described in its programmatic Record of Decision or ROD that set forth general goals and laid out a science-based planning process through which the collaborative was able to make better, more informed decisions on future projects and programs within their purview. Two years later, the California Bay-Delta Authority was created to oversee the program's implementation and Congress adopted the plan in 2004.

CALFED proposes investing $300 million in this watershed program in Stage 1. CALFED Agencies also propose investing approximately $950 million during Stage 1 in water quality programs. Of this investment, more than $500 million would come from State and Federal sources and the remainder from local sources.

iv. Partnership Models

a. The Comprehensive Everglades Restoration Plan (CERP)
(http://www.evergladesplan.org)

In 2000, Congress authorized the Comprehensive Everglades Restoration Plan (CERP), the largest environmental restoration effort in history. The estimated cost of the plan, to be shared equally (50/50) by the federal government and the state of Florida, is $10.5 billion.

The U.S. Army Corps of Engineers (USACE) is the lead federal agency and the South Florida Water Management District (SFWMD) is the lead state agency for the effort. The SFWMD is the oldest and largest of the state's five water management districts. A nine-member Governing Board sets policy and provides overall direction for the agency.

Board members are appointed by the Governor, confirmed by the Florida Senate, and generally serve four-year terms. The District's annual budget is funded by a combination of property taxes and other sources such as federal, state and local revenue, licenses, permit fees, grants, agricultural taxes and investment income.

b. Chesapeake Bay Program (www.chesapeakebay.net/)

The Chesapeake Bay Program is a unique regional partnership that directs and conducts the restoration of the Chesapeake Bay. The Bay Program formed after the governors of Maryland, Virginia and Pennsylvania; the mayor of the District of Columbia; and the administrator of the U.S. Environmental Protection Agency signed *The Chesapeake Bay Agreement of 1983*.

The 1983 Agreement established an Executive Council designed to establish the policy direction for the restoration and protection of the Chesapeake Bay and its living resources. A series of Directives, Agreements and Amendments signed by the Executive Council set goals and guide policy for the Bay restoration. The Executive Council is guided by several advisory committees (Citizens Advisory Committee, Local Government Advisory Committee and the Scientific and Technical Advisory Committee).

The Chesapeake Bay Commission is a tri-state legislative commission which advises the General Assemblies of Virginia, Maryland and Pennsylvania in cooperatively managing the Chesapeake Bay.

The Chesapeake Bay Watershed Blue Ribbon Finance Panel called on Bay states and the federal government to make a six-year, $15 billion investment in the creation of a **regional Finance Authority** charged with prioritizing and distributing restoration funds throughout the Bay's 64,000-square-mile watershed. A regional Financing Authority would be funded though an **80/20 ratio of federal and state funds.**

The Financing Authority will also require that sustainable revenue streams be identified and leveraged. This will mean floating bonds, already under way in some areas, but identifying new revenue streams as well, such as sewer surcharges, or public grants and loan funds. Combined revenue sources must be sought, given the large sums of money required to finance the Chesapeake Bay cleanup.

c. Great Lakes Commission (www.glc.org/)

The Great Lakes Commission (GLC) was established by joint legislative action of the Great Lakes states in 1955 (the Great Lakes Basin Compact) and granted congressional consent in 1968. A Declaration of Partnership (PDF) established associate membership for the provinces in 1999. The Commission is a binational public agency dedicated to the use, management and protection of the water, land and other natural resources of the Great Lakes-St. Lawrence system. GLC priorities are listed in Appendix C.

GLC has convened the Great Lakes Coastal Wetlands Consortium to expand the monitoring and reporting capabilities of the U.S. and Canada under the Great Lakes Water Quality Agreement. The Consortium consists of scientific and policy experts drawn from key U.S. and Canadian federal agencies, state and provincial agencies, non-governmental organizations, and other interest groups with responsibility for coastal wetlands monitoring. It is coordinated by staff at the GLC in Ann Arbor, Michigan and has been funded by the U.S. EPA Great Lakes National Program Office (GLNPO) in Chicago, Illinois. U.S. EPA's GLNPO provides funding pursuant to (i) §104 of the Clean Water Act and (ii) §118 of the Clean Water Act calling for the achievement of the goals in the Great Lakes Water Quality Agreement, the principal goal of that Agreement being the restoration and maintenance of the chemical, physical, and biological integrity of the Great Lakes basin.

d. Puget Sound Partnership (www.psat.wa.gov/)

The Puget Sound Partnership (formerly Puget Sound Action Team**)** defines, coordinates and implements Washington state's environmental agenda for Puget Sound. It was recently created through Washington state legislature, who identified its mission, organizational structure and funding mechanisms.

The Partnership will define a strategic action agenda prioritizing necessary actions, both basin-wide and within specific areas, and creating an approach that addresses all of the complex connections among the land, water, web of species, and human needs. The action agenda will be based on science and include clear, measurable goals for the recovery of Puget Sound by 2020. The agency shall consist of a **leadership council, an executive director, an ecosystem coordination board, and a Puget Sound science panel**. Upon approval of the council, the executive director may take action to create a **private nonprofit entity**.

State agencies responsible for implementing elements of the action agenda work with the partnership in the development of biennial budget requests to achieve consistency with the action agenda to be submitted to the governor for consideration in the governor's biennial budget request. Additionally, the legislature created new state treasury accounts (state and local toxics control, aquatic lands enhancement, habitat conservation, salmon recovery, and oyster reserve land) to make funds available for goals specifically identified in the action agenda. The 2007-2009 Puget Sound Conservation and Recovery Plan and Budget are listed in Appendix D.

e. Lower Columbia River Estuary Partnership (www.lcrep.org/)

The Lower Columbia River Estuary Partnership mission is to preserve and enhance the water quality of the estuary to support its biological and human communities. The Estuary Partnership, one of 28 programs U.S. EPA's National Estuary Program, is a two-state, public-private initiative. It is a 501(C)(3) non-profit corporation with a 21 member Board of Directors representing the diverse interests and geography of northwest Oregon and southeastern Washington.

The partnership's responsibility is to implement the Comprehensive Conservation and Management Plan for the Lower Columbia River (Management Plan). The Management Plan was developed by bringing together diverse interests to reach consensus on how to protect this complex portion of the Columbia River. The Management Plan has no regulatory authority, and the Management Plan actions rely on voluntary participation. The plan continues to be supported by a broad stakeholder group now engaged in its implementation.

The Estuary Partnership provides a regional framework to support and enhance local efforts. That support includes providing funds to local entities. Many public and private partners help the Estuary Partnership accomplish its work. Funding from the states of Oregon and Washington and Congress – through the National Estuary Program – supports base operations and help secure matching public and private dollars. Every dollar invested in the Estuary Partnership currently leverages eight additional dollars. EPA's Nation Estuary Program sustainable financing strategies are listed in Appendix E.

Summary of Funding Models for Watershed Organizations

SECTION 1. INTRODUCTION

This report summarizes the nature of various watershed organizations across the country with particular focus on their organizational structure, watershed issues, funding mechanisms, and examples of and funding sources for their work (appended to this document). Most of the text in the report was extracted from the individual websites and thus varies in the level of detail and writing style. This document was prepared to provide a reference and framework for a growing interest to form a Utah-based council or commission to address Great Salt Lake watershed issues.

Non-profits, Joint Powers Agencies/Authorities, and partnerships were explored as examples from which to draw and develop a model for Utah. Consideration of the scale of Great Salt Lake watershed issues, participant stakeholders, and potential funding mechanisms in comparison with those presented in this report will help identify a framework for developing a Utah model. It is not the intension of IWSciences to promote or determine a particular model for Utah but to provide a resource so that discussions and decisions for developing a model are well informed.

SECTION 2. NON-PROFIT MODELS

2.1. Mono Lake Committee

(text extracted from http://www.monolake.org/committee/index.html)

The Mono Lake Committee is a non-profit citizens' group dedicated to protecting and restoring the Mono Basin ecosystem, educating the public about Mono Lake and the impacts on the environment of excessive water use, and promoting cooperative solutions that protect Mono Lake and meet real water needs without transferring environmental problems to other areas. One-quarter of the Committee's Board of Directors is governed by top water policy people in California. The committee is influential in water policies through its active role in the Los Angeles Conservation Council and its meetings of the Metropolitan Water District and the Department of Water and Power. The Committee collaborates with the Northern California Water Caucus, and represents Southern California environmental groups on the Bay Delta Advisory Council.

Its 2006 1.6 million operating budget came from various sources of public support (member contributions, donations and bequests and assets released from restriction) and other sources of revenue (grants and contracts, sales and program services, etc.)

2.2. San Francisco Estuary Institute (text extracted from http://www.sfei.org/)

SFEI is a non-profit organization founded in 1986 to foster the development of the scientific understanding needed to protect and enhance the San Francisco Estuary. They are governed by a Board of Directors composed of Bay Area scientists, environmentalists, regulators, local governments, and industries. SFEI fills the niche between environmental science and environmental management and policy for San Francisco Estuary and its watershed. They conduct science studies, synthesize data and information, and collaborate with other scientists to provide a holistic integration of information from many disciplines that supports management activities or demonstrates the potential implications of different management scenarios to environmental management agencies and other stakeholders.

The following text extracted from the SFEI Bylaws, Amended May 28, 2002 (pdf of bylaws available through IWSciences upon request):

2.2-I. Organization

2.2-I.A. Members: The corporation shall have at least seven (7) and no more than fifteen (15) directors and collectively they shall be known as the Board of Directors. The Board of Directors shall be composed of persons with demonstrated interest or expertise related to the goals and objectives of this corporation. Members of the Board shall be selected so as to assure a balance of environmental, business and user groups, regulatory and management and scientific interests are represented. The Board shall include, at all times, two or more members who represent organizations which participate financially in the Regional Monitoring Program for Trace Substances, two or more members with a demonstrated commitment to protection of the Estuary, and two or more members of the Institute's Committee of Science Advisors. The Board shall take care to ensure that a balance of interests in use and protection of the Estuary is maintained within its membership and that expertise in science and management is present. [The Board may also enlist non-voting members.]

2.2-I.A.i. General Duties of the Board of Directors

a) Perform any and all duties imposed on them collectively or individually by law, by the Articles of Incorporation of this corporation, or by these Bylaws, b) Appoint and remove, employ and discharge, and, except as otherwise provided in these Bylaws, prescribe the duties and fix the compensation of the Executive Officer and employees and agents of the corporation, c) Meet at such times and places as required by these Bylaws, d) Register their addresses with the Secretary of the corporation, and notices of meetings mailed or electronically transmitted to them at such addresses shall be valid notices thereof, e) Accept or reject all proposed contracts with the Institute for monitoring or special studies, unless specifically delegated to the Executive Officer, f) Adopt, amend, and implement a Regional Monitoring Strategy and a Regional Research Plan for the Estuary, g) Adopt an annual work plan and budget for the Institute, h) Adopt the annual report of the Institute, and i) Appoint committees as needed to assist the Board.

2.2-I.B. Committee of Science Advisors

The Board of Directors shall receive the advice, analysis, and guidance of a Committee of Science Advisors on the following matters:
(a) Adoption, amendment and implementation of a Regional Monitoring Strategy and a Regional Research Plan for the Estuary,
(b) Adoption of an annual work plan and budget for the Institute,
(c) Studies, reports, or analyses prepared by the Board, Executive Officer, or Board staff.
(d) The implications of the findings of research and monitoring programs to management and regulatory programs.

2.2-I.C. Executive Officer

The Corporation shall employ a full-time Executive Officer whose qualifications shall be determined by the Board of Directors. The Executive Officer shall supervise the day-to-day work of all agents and employees of the corporation. The Executive Officer shall carry out those duties specified by the Board of Directors, including but not limited to: ensuring the employment of a sufficient office staff and employment of an accountant, by contract or otherwise, to keep proper fiscal records and make necessary tax filings; coordinating of activities of the corporation with other environmental monitoring, research, data management, and public education activities performed on the San Francisco Estuary; preparing contracts, and funding and working agreements; and arranging for Board meetings.

2.2-II. SFEI Programs and Funding (text extracted from the 2007 Program Plan on the SFEI website):

Regional Monitoring Program for Water Quality (RMP)

The Regional Monitoring Program for Trace Substances in the San Francisco Estuary (RMP) is the primary source of information used to evaluate chemical contamination in the Bay. The RMP is an innovative collaborative effort between SFEI, the Regional Water Quality Control Board, and the regulated discharger community. In the RMP, financial resources ($3 million per year in 2007) from the discharger community are pooled and applied in a strategic, comprehensive manner toward understanding contaminant levels and impacts on beneficial uses of the Bay. Funding for other SFEI programs is solicited from federal and state grants and funds (see Appendix A).

SECTION 3. JOINT POWERS AGENCY/AUTHORITY MODELS

3.1. Southern California Coastal Water Research Project Authority (SCCWRP) (text extracted from **http://www.sccwrp.org/**)

The Southern California Coastal Water Research Project Authority (SCCWRP) is a joint powers agency focusing on marine environmental research. A joint powers agency is one that is formed when several government agencies have a common mission that can be better addressed by pooling resources and knowledge. In this case, the common mission

is to gather the necessary scientific information so that member agencies can effectively, and cost-efficiently, protect the Southern California marine environment.

SCCWRP is governed by a twelve member commission that includes representatives of city, county, state, and federal government agencies responsible for monitoring and protecting the marine environment. SCCWRP was formed in 1969 to address a limited knowledge of the effects of wastewater and other discharges to the Southern California coastal marine environment. One of the keys to SCCWRP's success is the multi-disciplinary composition of its technical staff; SCCWRP maintains internationally recognized units in analytical chemistry, benthic ecology, fish biology, and toxicology, providing ready access to the range of skills needed to address complex problems.

The SCCWRP commission's Technical Advisory Group (CTAG) is a panel including representatives of each of the SCCWRP member agencies. The purpose of CTAG is to act as the primary link between the SCCWRP Commission and member agencies and SCCWRP staff. It fulfills this purpose by performing the following functions:

- *Technical & Scientific Review*
- *Liaison:* by keeping their respective agencies informed of SCCWRP activities
- *Technology Transfer to member agencies*
- *Interagency Interaction*
- *Special Projects:* through collaboration with SCCWRP staff to provide the insights of the regulatory and regulated agencies.

3.1.i How it works

Since its inception in 1969, sponsoring wastewater agencies have provided primary funding to support a unique approach to understanding the coastal environment and human impacts. The original basis for JPA funding was a self-imposed tithe of approximately 50 cents per 1 million gallons per day of wastewater discharged by each of the five initial JPA sponsors. During this time, JPA agency funding was $500,000 per year from 1973 through 1983, which increased to a maximum of $1.4 million in 1996 and 1997. As prescribed in the 1997 JPA, that funding began decreasing by $100,000 per year in 1997. The JPA was the dominant funding source through the entire period, but in 2000, contracts and grants contributed the majority of the funding. The grants and contracts have been awarded by the National Oceanic and Atmospheric Administration (NOAA), the U.S. EPA's Office of Research and Development, Minerals Management Service (Outer Continental Shelf surveys and a synthesis book on the Southern California Bight) and the U.S. Geological Survey. State agencies, most notably the State Water Resources Control Board and the State Department of Health Services, municipalities and other local government public utility agencies provided other sources of funding. For many years during the 1980s and 1990s, SCCWRP also received funding from affiliate local wastewater management agencies. Total funding has increased almost continuously over the 30-year period. After an initial installment of several hundred thousand dollars during FY 1970 (1969-1970), annual funding increased to about $700,000 –to $900,000 per year during the 1970s with a maxima of $2.1 million in 1996 and [an estimated] $2.7 million in FY 2000. The 2006-7 SCCWRP Research Plan and programs are listed in Appendix B.

3.2. Salton Sea Authority (text extracted from executive summary of the Salton Sea Authority Plan for Multi-Purpose Project: **http://www.saltonsea.ca.gov/**)

3.2-A. Overview

Salton Sea Authority is a Joint Powers Authority (JPA) whose goal is the revitalization of the Salton Sea. The Authority has developed and is advancing a combined, multi-purpose revitalization/restoration project aimed at concurrently: (1) restoring the Sea as a nationally important wildlife refuge; (2) maintaining the Sea as a vital link along the international Pacific Flyway; (3) preserving local tribal heritage and cultural values associated with the Sea; (4) reducing odor and other water and air quality problems; (5) reestablishing the Sea as a tourist destination and recreational playground; and (6) revitalizing the Sea as a local economic development engine. These project objectives are derived from and consistent with the Salton Sea Authority (Authority) Board Policy Positions that were enacted in October 2005 and reaffirmed at an Authority Board workshop meeting held in April 2006 and are listed in no order of priority. The Authority's Plan implements these objectives.

Additionally, the Authority Plan includes a local funding component. The critical components in the Authority project design can be financed in significant part with local funds and all project components can be completed within 20 years. Overall the project is envisioned as a jointly funded project that will have Federal, State and local participation.

3.2-B. Cost Estimate, Financing Plan & Implementation

The total preliminary capital cost estimate is $2.2 billion for all components of the current Authority Plan. A significant portion of the capital costs of a locally supported Plan can be locally financed through the funding mechanisms applied within the Authority's 300,000- acre planning and financing district around the Sea. These local funding mechanisms include a combination of: (1) the formation of tax-increment financing and benefit assessment districts; (2) public land acquisitions, transfers, and sales; (3) developer payments and impact fees; and (4) use of public-private partnerships for the construction and operation of the treatment plants.

The balance of the required capital funding is presumed to come from State and/or Federal sources including: local taxincrement bonds, community facility district funds, private investor funding, a portion of local funds in the Salton Sea Restoration Fund controlled by the State legislature, and Federal contributions.

The desired … funding obligations of the Federal and State governments are as follows:

1. **Federal loan guarantee** on the $400 to $600 million in local tax-increment municipal bonds to be issued by the Salton Sea Authority to provide funding for constructing the water infrastructure components of the project.

2. **Conveyance of fee title** to certain Federal lands, including the 7,240 acres of BLM land comprising the closed Salton Sea Test Base, to the Salton Sea Authority so the Authority may sell and/or exchange such lands with private developers as a way to raise funding for the restoration project.
3. Continued annual funding for the construction of **water treatment wetlands** on the New and Alamo River Direction by the Citizens Congressional Task Force and funding for wetlands construction on the Whitewater River.
4. Allocate to the Salton Sea Authority "first use" of funds from the **Salton Sea Restoration Fund** to provide a 25% cost-share of the Authority's capital costs for design, permitting and construction of the water infrastructure and water quality improvement facilities in the Salton Sea Authority Plan. The remaining funds in the SSRF shall be used, to the extent available, to provide 25% cost-share funding for items #3 and #4 below.
5. Support the Salton Sea Authority's request to obtain **Implementation Grant** funds under the Integrated Regional Water Management Program (Chapter 8, Proposition 50) being managed by the State Water Quality Control Board for the construction of water-quality improvement wetlands and/or selenium removal facilities on the New and Alamo Rivers in Imperial County and on the Whitewater River in Riverside County.
6. Support funding in future State bond measures for the purchase of private lands for the creation of **additional habitat areas** and/or for the **acquisition of wildlife easements** on private farmland around the Sea.

3.3. CALFED Bay-Delta Program (text extracted from http://calwater.ca.gov/)

3.3-A. Overview

The CALFED Bay-Delta Program is a unique collaboration among 25 state and federal agencies that came together with a mission to develop a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system (San Francisco Bay/Sacramento-San Joaquin River Delta).

In 2000, CALFED drafted a 30-year plan described in its programmatic Record of Decision or ROD that set forth general goals and laid out a science-based planning process through which the collaborative was able to make better, more informed decisions on future projects and programs within their purview. Two years later, the California Bay-Delta Authority was created to oversee the program's implementation and Congress adopted the plan in 2004.

3.3-B. Watershed Program

The goal of the CALFED Watershed Program is to promote locally led watershed management activities and protections that contribute to the achievement of CALFED goals for ecosystem restoration, water quality improvement, and water supply reliability. The CALFED Agencies will encourage and support local efforts to resolve issues throughout watersheds in the solution area (both above and below the primary tributary

dams). The CALFED Program will support local implementation with funding, coordination, and technical assistance. CALFED proposes investing $300 million in this watershed program in Stage 1.

3.3-C. Water Quality Programs

CALFED Agencies propose investing approximately $950 million during Stage 1 in water quality programs. Of this investment, more than $500 million would come from State and Federal sources and the remainder from local sources. Sources of Federal funding, in addition to future direct appropriations, include State direction of a portion of its share of Federal Safe Drinking Water Act State Revolving Fund (SRF), Clean Water Act Section 319 funds, Clean Water Act SRF and other Federal grant programs under State control. The State may use these funding sources, as available, in accordance with applicable criteria. The State's budget for FY 2000-01 includes more than $68 million from the Proposition 13 Interim Reliable Water Supply and Water Quality Program for water quality improvement projects. Additional Proposition 13 funds will be available during Stage 1 from the Safe Drinking Water, Flood Protection Corridor, Urban Streams Restoration, Watershed Protection, Nonpoint Source Pollution Control, Clean Water, and Water Recycling programs to fund projects with water quality benefits.

SECTION 4. PARTNERSHIP MODELS

4.1. The Comprehensive Everglades Restoration Plan (CERP) (text extracted from http://www.evergladesplan.org)

4.1-A. Overview

In 2000, Congress authorized the Comprehensive Everglades Restoration Plan (CERP), the largest environmental restoration effort in history. CERP will enhance Everglades wetlands and associated lakes, rivers, and bays in the 16-county region of south Florida. CERP projects will capture and store much of the 1.7 billion gallons of water a day currently lost to the Atlantic Ocean and Gulf of Mexico, to revitalize south Florida's natural environment. This water will be stored in above and underground reservoirs. When needed, it will be directed to the wetlands, lakes, rivers and estuaries of south Florida –providing abundant clean, fresh water –while also ensuring future urban and agricultural water supplies.

The estimated cost of the plan, to be shared equally by the federal government and the state of Florida, is $10.5 billion.

The following text extracted from the CERP 2006 Annual Report available on the CERP website:

Over time, however, that unique ecosystem has experienced the negative affects of human development – loss of 50 percent of its wetlands, disrupted timing and flows of

water, deterioration of water quality, reductions in wading birds, declining lake and estuary health, and loss of native habitat to exotic species.

The federal government and the state of Florida have entered into an unprecedented 50/50 partnership to restore the Everglades. Costs will be shared equally by the federal and state governments. The U.S. Army Corps of Engineers (USACE) is the lead federal agency and the South Florida Water Management District (SFWMD) is the lead state agency for the effort.

Florida is fast-tracking eight critical multi-component Everglades restoration projects to achieve benefits ahead of schedule, known as Acceler8. This Florida initiative is financing, designing and constructing projects, or portions of projects, identified in the CERP to provide a wide variety of restoration benefits to both the natural and the human environment sooner than would otherwise be possible.

4.1-B. Fiscal Year 2007 Budget

The President's Budget Request for Fiscal Year 2007 (which starts October 1, 2006) includes 64 million federal dollars for work on CERP implementation. In FY07, the U.S. Army Corps of Engineers (USACE), together with the South Florida Water Management District (SFWMD) and other local sponsors, is expected to continue ongoing Feasibility Studies, installation and testing of the Aquifer Storage and Recovery (ASR) Pilot Projects, PIR studies, data collection and analyses for Adaptive Assessment and Monitoring and other activities.

The Governor's FY06-07 budget proposal includes $135 million toward land acquisition to support Everglades Restoration initiatives. The Florida Forever Program, the largest conservation program of its kind in the world, will add approximately $25 million in FY07. In addition to the Governor's proposed budget, the SFWMD's FY07 plan includes approximately $111 million for the implementation of CERP and Acceler8, plus approximately $235 million in funding for Acceler8 construction.

4.1-B.i. From the SFWMD 2006-2016 Strategic Plan

(available on https://my.sfwmd.gov/)

The SFWMD is the oldest and largest of the state's five water management districts. A nine-member Governing Board sets policy and provides overall direction for the agency. Board members are appointed by the Governor, confirmed by the Florida Senate, and generally serve four-year terms. The District's annual budget is funded by a combination of property taxes and other sources such as federal, state and local revenue, licenses, permit fees, grants, agricultural taxes and investment income.

F U N D I N G S O U R C E S F O R F Y 2 0 0 6

- Ad Valorem 22.1%
- State 73.0%
- License, permit and fee 0.4%
- Grant 2.4%
- Federal 2.1%

4.2. Chesapeake Bay Program (text extracted from http://www.chesapeakebay.net/)

The Chesapeake Bay Program is a unique regional partnership that directs and conducts the restoration of the Chesapeake Bay. As a partnership, the Chesapeake Bay Program brings together members of various state, federal, academic and local watershed organizations to build and adopt policies that support Bay restoration. Each organization in the partnership has a unique set of strengths, and by combining resources from the individual organizations, the Bay Program is able to follow a unified plan for restoration.

4.2-A. Structure of the Bay Program

The Bay Program works within a collaborative organizational structure: members from partner organizations participate in a series of committees that drive and implement the Bay Program's efforts. There are three main types of committees:

- committees that govern the Bay Program and guide policy changes
- advisory committees that provide external perspectives on current issues and events
- subcommittees that work internally to coordinate restoration activities

This committee structure is designed to encourage partner organizations to share information and ideas and work cooperatively on Bay restoration.

4.2-A.i. The Partnership

The Bay Program formed after the governors of Maryland, Virginia and Pennsylvania; the mayor of the District of Columbia; and the administrator of the U.S. Environmental Protection Agency signed *The Chesapeake Bay Agreement of 1983*. The *1987 Chesapeake Bay Agreement* (429 kb) established the Bay Program's goal to reduce the amount of nutrients-primarily nitrogen and phosphorous-that enter the Bay by 40 percent by 2000. In June 2000, the Bay Program partners adopted *Chesapeake 2000* (95 kb), a Bay agreement intended to guide restoration activities throughout the Bay watershed through 2010. In addition to identifying key measures necessary to restore the Bay, *Chesapeake 2000* provided the opportunity for Delaware, New York and West Virginia to become more involved in the Bay Program partnership. These headwater states now work with the Bay Program to reduce nutrients and sediment flowing into rivers from their jurisdictions.

4.2-A.ii. The Executive Council

The Chesapeake Executive Council was established by the *Chesapeake Bay Agreement* of 1983. Under the 1987 *Agreement* membership changed from cabinet secretaries to the

Governors of Maryland, Pennsylvania, and Virginia, the Administrator of the U.S. Environmental Protection Agency, the Mayor of the District of Columbia and the Chair of the Chesapeake Bay Commission, a legislative body serving Maryland, Pennsylvania, and Virginia. The Executive Council establishes the policy direction for the restoration and protection of the Chesapeake Bay and its living resources. A series of Directives, Agreements and Amendments signed by the Executive Council set goals and guide policy for the Bay restoration.

The Executive Council exerts leadership to marshall public support for the Bay effort and is accountable to the public for progress made under the Bay Agreements. The Council meets annually. Its Principal Staff Committee meets as needed to facilitate communication among the Implementation Committee, the advisory committees (Citizens Advisory Committee, Local Government Advisory Committee and the Scientific and Technical Advisory Committee), and the Chesapeake Executive Council.

4.2-A.iii. The Chesapeake Bay Commission **(text extracted from http://www.chesbay.state.va.us/)**

The Chesapeake Bay Commission is a policy leader in the restoration of the Chesapeake Bay. It is a tri-state legislative commission which advises the General Assemblies of Virginia, Maryland and Pennsylvania in cooperatively managing the Chesapeake Bay. As a signatory, the Commission serves as the legislative arm of the Chesapeake Bay Program and is fully involved in all Bay Program policy and implementation decisions. By combining its unique access to both the legislative and executive branches of each Bay state with well-honed skills in research, policy-development and consensus building, the Commission has achieved consistently strong and effective results in pursuit of Bay restoration goals.

It has made remarkable strides in learning the complex workings of an enormous estuary, determining the federal and state actions that are needed to sustain its living resources, and persuading its colleagues in the general assemblies and executive branches to take action.

Today, despite over two decades of effort, restoration continues to face daunting challenges. Having piloted Chesapeake 2000 (C2K) to its successful adoption during more financially solvent times, the Chesapeake Bay Commission must now help to stay the course by ensuring that sufficient resources are committed and equitable policies are adopted that will keep the restoration effort on track.

4.2-B. Regional Finance Authority

To identify potential funding mechannisms, the Chesapeake Bay Watershed Blue Ribbon Finance Panel was charged with developing innovative solutions to financing the multi-billion dollar Bay restoration effort. On October 27, 2004, the Chesapeake Bay Watershed Blue Ribbon Finance Panel called on Bay states and the federal government to make a six-year, $15 billion investment in the creation of a **regional Finance Authority**

charged with prioritizing and distributing restoration funds throughout the Bay's 64,000-square-mile watershed.

In the report, "Saving a National Treasure: Financing the Cleanup of the Chesapeake Bay", the panel dedicated most of its focus on the creation of a regional Financing Authority that would:

- be funded though a **80/20 ratio of federal and state funds** – resulting in a $12 billion investment from the federal government and $3 billion from Bay watershed states;
- **generate sustainable revenue streams** to adequately fund long-term Bay restoration programs;
- provide funds to all sectors of Bay pollution, but **specifically address agriculture and wastewater treatment** , and
- **prioritize and distribute funds across state boundaries** in all parts of the Bay watershed.

The regional Financing Authority would be based on several principles:

- **Cleaning up the Chesapeake Bay will cost many billions of dollars.** The Bay needs a renewed commitment to this funding from federal, state and local governments, private individuals and industry.
- **The Financing Authority must be capable of filling the funding gap between existing programs and the cost of a clean Bay.** We must secure the necessary resources to meet our commitment to remove the Bay from the Clean Water Act list of impaired waters by 2010.
- **The Financing Authority must receive significant federal funding in partnership with state and local funding.** The authority must be able to sustain itself, and also direct funds toward the highest priority needs in the Bay watershed.
- **The Financing Authority must be simple and flexible.** It must be capable of adapting to local needs, understanding that cleaning up the Bay will not have the same priority in each jurisdiction.
- **The Financing Authority should, wherever possible, use existing structures and mechanisms.**
- **Federal leadership, and state and local government support are key to protecting the Chesapeake Bay.** As the report attests, saving this "national treasure" must be a priority.

The Blue Ribbon Panel recommended that the Financing Authority be established in such a manner that makes much-needed funds available as soon as possible, and that secures and leverages funds, using competition to unleash innovation and efficiency.

4.2-B.i. Key Recommendations

- The seven watershed jurisdictions should develop a shared sense of funding priorities, and use existing structures, such as SRFs, to create a voluntary funding coalition, which could immediately begin to receive funds and disburse loans and grants.

- Members of the finance authority should include representatives of the EPA, the Chesapeake Bay watershed states, the Chesapeake Bay Commission, advocate communities and important stakeholders, such as those involved with agriculture, wastewater treatment plants and business.

- The Financing Authority should develop and prioritize projects based on the 'best' project funded, according to effectiveness, efficiency and innovation, regardless of geography.

- The task of cleaning up the Bay is enormous, and will be enormously expensive. Consequently there must be sustainable, dedicated state and federal funding for the Financing Authority, which it should guarantee by developing a mechanism for creating a sustainable revenue stream, collected by the states.

- The Authority should be empowered to issue grants in addition to revolving loans. The greatest impact will result from active participation by the agricultural and urban communities, which will not be as likely to participate if the program relies solely on revolving loan structures.

The Financing Authority will also require that sustainable revenue streams be identified and leveraged. This will mean floating bonds, already under way in some areas, but identifying new revenue streams as well, such as sewer surcharges, or public grants and loan funds. Combined revenue sources must be sought, given the large sums of money required to finance the Chesapeake Bay cleanup.

4.3. Great Lakes Commission (text extracted from http://www.glc.org/)

4.3 Overview

The Great Lakes Commission (GLC) was established by joint legislative action of the Great Lakes states in 1955 (the Great Lakes Basin Compact) and granted congressional consent in 1968. A Declaration of Partnership (PDF) established associate membership for the provinces in 1999. The Commission is a binational public agency dedicated to the use, management and protection of the water, land and other natural resources of the Great Lakes-St. Lawrence system. In partnership with the eight Great Lakes states and provinces of Ontario and Québec, the Commission applies sustainable development principles in addressing issues of resource management, environmental protection, transportation and sustainable development. GLC priorities are listed in Appendix C.

4.3-B. Great Lakes Coastal Wetlands Consortium

GLC has convened the Great Lakes Coastal Wetlands Consortium to expand the monitoring and reporting capabilities of the U.S. and Canada under the Great Lakes Water Quality Agreement. In recognition of the need to assess the health of Great Lakes coastal wetlands, which are an integral part of the Great Lakes basin ecosystem the Consortium's purpose is to design an implementable, long-term program to monitor Great Lakes coastal wetlands. This is being accomplished through the development of indicators to assess the condition of Great Lakes coastal wetlands.

The Great Lakes Coastal Wetlands Consortium consists of scientific and policy experts drawn from key U.S. and Canadian federal agencies, state and provincial agencies, non-governmental organizations, and other interest groups with responsibility for coastal wetlands monitoring. Approximately two dozen agencies, organizations and institutions have been brought into the Consortium as Project Management Team members. This is an unprecedented assembly of coastal wetlands expertise. In addition, other members are brought in as small project teams are formed to address discrete project elements and pilot studies. The Consortium is coordinated by staff at the GLC in Ann Arbor, Michigan and has been funded by the U.S. EPA Great Lakes National Program Office (GLNPO) in Chicago, Illinois.

4.3-B.i. Funding

USEPA's GLNPO provides funding pursuant to (i) §104 of the Clean Water Act and (ii) §118 of the Clean Water Act calling for the achievement of the goals in the Great Lakes Water Quality Agreement, the principal goal of that Agreement being the restoration and maintenance of the chemical, physical, and biological integrity of the Great Lakes basin. The GLNPO has a staff of 46 and a budget of almost $15 million. GLNPO brings together Federal, state, tribal, local, and industry partners in an integrated, ecosystem approach to protect, maintain, and restore the chemical, biological, and physical integrity of the Great Lakes. The program monitors Lake ecosystem indicators; manages and provides public access to Great Lakes data; helps communities address contaminated sediments in their harbors; supports local protection and restoration of important habitats; promotes pollution prevention through activities and projects such as the Canada-U.S. Binational Toxics Strategy (BNS); and provides assistance for community-based Remedial Action Plans for Areas of Concern and for Lakewide Management Plans. Each year, GLNPO uses its funding to assist Great Lakes partners in these areas through grants, interagency agreements, and contracts.

4.4. Puget Sound Partnership (www.psat.wa.gov/)

The Puget Sound Partnership (formerly the Puget Sound Action Team) defines, coordinates and implements Washington state's environmental agenda for Puget Sound. It was recently created through Washington state legislature, who identified it's mission,

organizational structure and funding mechanisms in the Engrossed Substitute Senate Bill 5372 as amended by the House (Passed Legislature - 2007 Regular Session State of Washington 60th Legislature).

4.4-A. Organizational Structure

The following text is extracted from ESSB 5372 (the full bill is available on the PSAT website):

The legislature … creates a new Puget Sound partnership to coordinate and lead the effort to restore and protect Puget Sound, and intends that all governmental entities, including federal and state agencies, tribes, cities, counties, ports, and special purpose districts, support and help implement the partnership's restoration efforts. The legislature further intends that the partnership will:

(a) Define a strategic action agenda prioritizing necessary actions, both basin-wide and within specific areas, and creating an approach that addresses all of the complex connections among the land, water, web of species, and human needs. The action agenda will be based on science and include clear, measurable goals for the recovery of Puget Sound by 2020.

(b) Determine accountability for performance…

(c) Not have regulatory authority…

The agency shall consist of a **leadership council, an executive director, an ecosystem coordination board, and a Puget Sound science panel**.

Upon approval of the council, the executive director may take action to create a **private nonprofit entity**, which may take the form of a nonprofit corporation, to assist the partnership in restoring Puget Sound by:

(a) Raising money and other resources through charitable giving, donations, and other appropriate mechanisms;

(b) Engaging and educating the public regarding Puget Sound's health, including efforts and opportunities to restore Puget Sound ecosystems; and

(c) Performing other similar activities as directed by the partnership.

4.4-A.i. Ecosystem Coordination Board

The council shall convene the **ecosystem coordination board** not later than October 1, 2007. The board shall advise and assist the council in carrying out its responsibilities in implementing this chapter, including development and implementation of the action agenda. The board's duties include:

(a) Assisting cities, counties, ports, tribes, watershed groups, and other governmental and private organizations in the compilation of local programs for consideration for inclusion in the action agenda as provided in section 8 of this act;

(b) Upon request of the council, reviewing and making

recommendations regarding activities, projects, and programs proposed for inclusion in the action agenda, including assessing existing ecosystem scale management, restoration and protection plan elements, activities, projects, and programs for inclusion in the action agenda;
(c) Seeking public and private funding and the commitment of other resources for plan implementation;
(d) Assisting the council in conducting public education activities regarding threats to Puget Sound and about local implementation strategies to support the action agenda; and
(e) Recruiting the active involvement of and encouraging the collaboration and communication among governmental and nongovernmental entities, the private sector, and citizens working to achieve the recovery of Puget Sound.

The executive director, working with the board representatives from each action area, shall invite appropriate tribes, local governments, and watershed groups to convene for the purpose of compiling the existing watershed programs relating or contributing to the health of Puget Sound. The participating groups should work to identify the applicable local plan elements, projects, and programs, together with estimated budget, timelines, and proposed funding sources, that are suitable for adoption into the action agenda. This may include a prioritization among plan elements, projects, and programs.

4.4-A.ii. Puget Sound Science Panel

The council shall appoint a nine-member **Puget Sound science panel** to provide independent, nonrepresentational scientific advice to the council and expertise in identifying environmental indicators and benchmarks for incorporation into the action agenda.

The executive director shall designate a lead staff scientist to coordinate panel actions, and administrative staff to support panel activities. The legislature intends to provide ongoing funding for staffing of the panel to ensure that it has sufficient capacity to provide independent scientific advice.

The executive director of the partnership and the science panel shall explore a shared state and federal responsibility for the staffing and administration of the panel. In the event that a federally sponsored Puget Sound recovery office is created, the council may propose that such office provide for staffing and administration of the panel.

(1) The panel shall:
(a) Assist the council, board, and executive director in carrying out the obligations of the partnership, including preparing and updating the action agenda;
(b) As provided in section 11 of this act, assist the partnership in developing an ecosystem level strategic science program that:
(i) Addresses monitoring, modeling, data management, and research; and (ii) Identifies science gaps and recommends research priorities;
(c) Develop and provide oversight of a competitive peer-reviewed process for soliciting, strategically prioritizing, and funding research and modeling projects;

(d) Provide input to the executive director in developing biennial implementation strategies; and
(e) Offer an ecosystem-wide perspective on the science work being conducted in Puget Sound and by the partnership.
(2) The panel should collaborate with other scientific groups and consult other scientists in conducting its work. To the maximum extent possible, the panel should seek to integrate the state-sponsored Puget Sound science program with the Puget Sound science activities of federal agencies, including working toward an integrated research agenda and Puget Sound science work plan.
(3) By July 31, 2008, the panel shall identify environmental indicators measuring the health of Puget Sound, and recommend environmental benchmarks that need to be achieved to meet the goals of the action agenda. The council shall confer with the panel on incorporating the indicators and benchmarks into the action agenda.
(4) The strategic science program shall be developed by the
panel with assistance and staff support provided by the executive director.
(a) The strategic science program may not become an official document until a majority of the members of the council votes for its adoption.
(b) A Puget Sound science update shall be developed by the panel with assistance and staff support provided by the executive director. The panel shall submit the initial update to the executive director by April 2010, and subsequent updates as necessary to reflect new scientific understandings.
(c) The executive director shall provide the Puget Sound science update to the Washington academy of sciences, the governor, and appropriate legislative committees…
(d) A biennial science work plan shall be developed by the panel, with assistance and staff support provided by the executive director, and approved by the council.

4.4-B. Biennial Budget Requests and Implementation

(1) State agencies responsible for implementing elements of the action agenda shall:
(a) Provide to the partnership by June 1st of each even-numbered year their estimates of the actions and the budget resources needed for the forthcoming biennium to implement their portion of the action agenda; and
(b) Work with the partnership in the development of biennial budget requests to achieve consistency with the action agenda to be submitted to the governor for consideration in the governor's biennial budget request. The agencies shall seek the concurrence of the partnership in the proposed funding levels and sources included in this proposed budget.
(2) The council shall adopt measures to ensure that funds appropriated for implementation of the action agenda and identified by proviso or specifically referenced in the omnibus appropriations act pursuant to RCW 43.88.030(1)(g) are expended in a manner that will achieve the intended results. In developing such performance measures, the council shall establish criteria for the expenditure of the funds consistent with the responsibilities and timelines under the action agenda, and require reporting and tracking of funds expended.

The 2007-2009 Puget Sound Conservation and Recovery Plan and Budget are listed in Appendix D.

4.4-B.i. New State Treasury Accounts

The legislature created new state treasury accounts (state toxics control, local toxics control, aquatic lands enhancement, habitat conservation, salmon recovery, and oyster reserve land) to make funds available for goals specifically identified in the action agenda.

(1) The state toxics control account and the local toxics control accounts are hereby created in the state treasury.
(2) The following moneys shall be deposited into the state toxics control account: (a) Those revenues which are raised by the tax imposed under RCW 82.21.030 and which are attributable to that portion of the rate equal to thirty-three one-hundredths of one percent; (b) the costs of remedial actions recovered under this chapter or chapter 70.105A RCW; (c) penalties collected or recovered under this chapter; and (d) any other money appropriated or transferred to the account by the legislature.
(3) After deduction for management costs as provided in RCW 79.64.040 and payments to towns under RCW 79.115.150(2), all moneys received by the state from the sale or lease of state-owned aquatic lands and from the sale of valuable material from state-owned aquatic lands shall be deposited in the aquatic lands enhancement account which is hereby created in the state treasury. After appropriation, these funds shall be used solely for aquatic lands enhancement projects; for the purchase, improvement, or protection of aquatic lands for public purposes; for providing and improving access to the lands; and for volunteer cooperative fish and game projects.
(4) Moneys appropriated for this chapter to the habitat conservation account shall be distributed in the following way:
(a) Not less than forty percent through June 30, 2011, at which time the amount shall become forty-five percent, for the acquisition and development of critical habitat;
(b) Not less than thirty percent for the acquisition and development of natural areas;
(c) Not less than twenty percent for the acquisition and development of urban wildlife habitat; and
(d) Not less than ten percent through June 30, 2011, at which time the amount shall become five percent, shall be used by the committee to fund restoration and enhancement projects on state lands. Only the department of natural resources and the department of fish and wildlife may apply for these funds to be used on existing habitat and natural area lands.
(5) The salmon recovery funding board shall develop procedures and criteria for allocation of funds for salmon habitat projects and salmon recovery activities on a statewide basis to address the highest priorities for salmon habitat protection and restoration.
(6) The oyster reserve land account is created in the state treasury. All receipts from revenues from the lease of land or sale of shellfish from oyster reserve lands must be deposited into the account.

4.5. Lower Columbia River Estuary Partnership

(text extracted from http://www.lcrep.org/)

The Lower Columbia River Estuary Partnership mission is to preserve and enhance the water quality of the estuary to support its biological and human communities.

4.5-A. Organizational Structure

The Estuary Partnership, one of 28 programs in the National Estuary Program, is a two-state, public-private initiative. It is a 501(C)(3) non-profit corporation with a 21 member Board of Directors representing the diverse interests and geography of northwest Oregon and southeastern Washington.

Our primary responsibility is to implement the Comprehensive Conservation and Management Plan for the Lower Columbia River (Management Plan). The Management Plan was developed by bringing together diverse interests to reach consensus on how to protect this complex portion of the Columbia River. The Management Plan has no regulatory authority, and the Management Plan actions rely on voluntary participation. The plan continues to be supported by a broad stakeholder group now engaged in its implementation.

The Estuary Partnership provides a regional framework to support and enhance local efforts. That support includes providing funds to local entities. Many public and private partners help the Estuary Partnership accomplish its work. Funding from the states of Oregon and Washington and Congress – through the National Estuary Program – supports base operations and help secure matching public and private dollars. Every dollar invested in the Estuary Partnership currently leverages eight additional dollars. EPA's Nation Estuary Program sustainable financing strategies are listed in Appendix E.

4.5-B. Funding and Plan Framework

- Awarded 51 small grants totaling over $430,000 since between 1996 and 2003
- Worked with Association of National Estuary Programs and secured 25% increase in authorization and appropriation to EPA NEP base budget, additional funds beginning in '03
- Initiated corporate and individual partnerships options and increased corporate sponsorships from one in 2000 to over 40 in 2004.
- Host an annual Dinner and Auction to raise funds and awareness of the program. Over 40 sponsors and hundreds of guests participated in 2004.
- Secured a signed Management Plan Implementation Agreement amongst the Governors of Oregon and Washington and US EPA that committed the parties to implement the Management Plan
- Completed the Management Plan for the Lower Columbia River- first two-state framework for estuary ecosystem restoration and protection

4.5-Bi. Partners

The Lower Columbia River Estuary Partnership is truly a partnership. The program works across an area encompassing two states, nine counties and more than 25 cities and engages groups ranging from federal and state agencies, to local governments, to watershed councils, to friends groups and local high school and elementary schools.

In addition, the Estuary Partnership depends to a great extent on the support and contributions of foundations, businesses, and private individuals who give time, energy, and financial resources necessary for the Estuary Partnership to accomplish the actions necessary to protect and restore the lower Columbia River.

APPENDIX A. SFEI 2007 PROJECTS (from http://www.sfei.org/)

Contaminant Monitoring and Research Program

Project Title: Fish Mercury Project (1036)
Total Funding: $4,731,106
Project Funder: CALFED
Lead Scientist: Jay Davis
Collaborators: Department of Health Services Environmental Health Investigations Branch, University of California at Davis, San Jose State University Foundation, Office of Environmental Health Hazard Assessment

Project Title: Mercury and Methyl mercury Processes in North San Francisco Bay (1039) Tidal Wetland Ecosystems
Total Funding: $1,941,293 for 3 years ($608,987 for 2007, of which $144,672 is for SFEI, the remainder for expenses and partner subcontracts)
Project Funder: CALFED
Lead Scientist: Don Yee
Collaborators: Josh Collins, Letitia Grenier, SFEI; John Takekawa, Steve Schwarzbach, USGS WERC/BRD; Jules Evens, Avocet Research Associates; Mark Marvin-DiPasquale, USGS Menlo Park; David Krabbenhoft, USGS Wisconsin

Project Title: Grasslands Bypass Project Compliance Monitoring 2007 (1012.5)
Total Funding: $63,030
Project Funder: USBR
Lead Scientist: Nicole David
Collaborators: USBR, CVRWQCB, USGS, USFWS, Block Env. Services, Summers Eng., Grassland Area Farmers, (multiple people from each institution)

Project Title: San Joaquin Water Quality Monitoring and Assessment (1053) San Joaquin Monitoring and Assessment Strategy
Total Funding: $232,000
Project Funder: USEPA
Lead Scientist: Thomas Jabusch
Collaborators: Great Valley Center, Dr. Brock Bernstein

Project Title: CMARP III Technical Support (1055)
Total Funding: $104,828
Project Funder: DFG
Lead Scientist: Mike Connor/Thomas Jabusch
Collaborators: PRBO

Project Title: CCMP Science Support (1049)
Project Funder: SFEP
Lead Scientist: Rainer Hoenicke
Collaborators: The Bay Institute, PRBO, CEMAR
Total Funding: $45,000, SFEI portion: $31,000

Project Title: Surface Water Ambient Monitoring Program (SWAMP) (1041)
Project Funder: SWRCB, MLML
Lead Scientist: Rainer Hoenicke
Collaborators: Karen Taberski, RWQCB
Total Funding: $512,580, $444,780 for SFEI – Three-year Project, directly funded by SWRCB. $130,000 sub agreement through MLML for 2007.
Estimated budget for 2006: $146,000

Regional Watershed Science Program

Project Title: Regional Stormwater Monitoring and Urban BMP Evaluation: A Stakeholder-Driven Partnership to Reduce Contaminant Loadings. (5031)
Project Funder: Proposition 13 (State Board)
Lead Scientist: Lester McKee
Collaborators: PWA, Oakland Museum of California, William Lettis and Associates, GeoSyntec,
MLML, AXYS Analytical
Total Funding: $440,000 for SFEI ($200k remaining)

Project Title: Alameda Creek Sediment Budget (5046)
Project Funder: Alameda County (Subcontract through PWA)
Lead Scientist: Lester McKee
Collaborators: PWA, SFPUC, Laurel Collins
Total Funding: $55,000 for SFEI

Project Title: Going Organic (5036)
Project Funder: SWRCB
Lead Scientist: Nicole David
Collaborators: Fred Thomas, California Certified Organic Farmers (CCOF)
Total Funding: $130,000 for SFEI – Three-year Project

Project Title: Environmentally Responsible Management Practices for Tree Crops in the Feather River Basin (5037)
Project Funder: SWRCB
Lead Scientist: Nicole David
Collaborators: Mark Cady, Community Alliance with Family Farmers (CAFF
Total Funding: $99,000 for SFEI – Three-year Project

Project Title: Sustainable Cotton Project (5038)
Project Funder: SWRCB
Lead Scientist: Nicole David
Collaborators: Marcia Gibbs, Community Alliance with Family Farmers (CAFF)
Total Funding: $77,000 for SFEI – Three-year Project

Project Title: Critical Coastal Areas Pilot, Phase I (5047)
Project Funder: SWRCB
Lead Scientist: Kat Ridolfi
Collaborators: Kathleen Van Velsor, ABAG, Becca Lawton, Sonoma Ecology Center, Lea Haratani, Santa Cruz County RCD
Total Funding: $200,000; $87,000 for SFEI

Project Title: Critical Coastal Areas Pilot, Phase II
Project Funder: SWRCB
Lead Scientist: Rainer Hoenicke
Collaborators: Kathleen Van Velsor, ABAG, Becca Lawton, Sonoma Ecology Center, Lea Haratani, Santa Cruz County RCD, Kelly Nelson, San Mateo County RCD, Susan Haydon, Southern Sonoma County RCD, William Lettis and Associates
Total Funding: $900,000, SFEI portion to be determined during agreement negotiations

Project Title: Miller Creek Stewardship
Project Funder: NBWA
Lead Scientist: Robin Grossinger
Collaborators: The Watershed Project
Total Funding: $50,000, SFEI portion: $36,000

Project Title: Watershed Score Card Project (5051)
Project Funder: Sonoma Ecology Center
Lead Scientist: Kat Ridolfi
Collaborators: Sonoma Ecology Center, The Bay Institute, Napa County RCD
Total Funding: $41,000

Regional Wetlands Science Program

Project Title: Montezuma Technical Review Team Year 3
Total Funding: $65,000
Project Funder: Montezuma Wetlands Project
Lead Scientist: Joshua N. Collins
Collaborators: Robert Batha, SF Bay Conservation and Development Commission, Andree Breaux, SF Bay Regional Water Quality Control Board, Jane Hicks, USACE, Eric Polson, private consultant, Karl Malamud-Roam, Contra Costa County Mosquito Abatement District, Howard Shellhammer, San Jose State University, Bruce Herbold and Paul Jones, USEPA, Joe Didonato, East Bay Parks

District, Jay Davis, Ben Greenfield, Don Yee, Cristina Grosso, SFEI, Steve Culberson, DWR.

Project Title: State Wetlands Program Demonstration (WDP)
Total Funding: $337,000
Project Funder: California Resources Agency
Lead Scientist: Joshua N. Collins
Collaborators: Chris Potter, CA State Resources Agency, Martha Sutula, Southern California Coastal Water Research Project, Richard Sumner and Paul Jones, USEPA, Marcia Brockbank, SFEP, Ross Clark, California Coastal Commission, Adam Wiskind, Moss landing Marine Laboratories, Letitia Grenier, Sarah Pearce, Mike May, Eric Zhang, Meredith Williams, Cristina Grosso, SFEI

Project Title: South Bay Salt Pond Restoration Science Team
Funding: $15,000
Project Funder: State Coastal Conservancy
Lead Scientist: Joshua N. Collins
Collaborators: Letitia Grenier, SFEI; Cristina Grosso, SFEI; plus the SBSPRP Science Team.

Project Title: SBSPRP Mercury Monitoring
Total Funding: $750,000
Project Funder: South Bay Salt Pond Restoration Project
Lead Scientist: Letitia Grenier, Joshua N. Collins
Collaborators: Josh Collins and Jay Davis, SFEI, Mark Marvin-DiPasquale, USGS, Dave Drury, Santa Clara Valley Water District, SBSPRP Science Team.

Project Title: Bay Area Stream Goals Prospectus
Total Funding: $10,000
Project Funder: USFWS San Francisco Bay Program
Lead Scientist: Joshua N. Collins, Lester McKee, Rainer Hoenicke, Robin Grossinger
Collaborators: Trish Mulvey, Clean South Bay, Jim Fiedler and Ann Draper, Santa Clara Valley Water District, Mitch Avalon, Contra Costa County Flood Control District, Paul Amato, Bay Area Water Board, Jessica Hamburger, Contra Costa County Resource Conservation District

PENDING PROJECTS

Project Title: SF Bay Area Regional Wetlands Monitoring Program
Funding: $1,250,000
Project Funder: State Coastal Non-point Source Program
Lead Scientist: Joshua N. Collins
Collaborators: Elaine Blok, USFWS, Chris Potter, Ca Resources Agency, Martha Sutula, Southern California Coastal Water Research Project, Richard Sumner and Paul Jones, USEPA, Marcia Brockbank, SFEP, Andree Breaux, An Riley and Shin

Roei-Lee, Bay Area Water Board, Bay Area Habitat Joint Venture, Bay Area Open Space Council, Letitia Grenier, Sarah Pearce, Meredith Williams, Eric Zhang, Kristen Larned, Mami Odaya, Mike May, Eric Zhang, Cristina Grosso, SFEI.

Project Title: Elkhorn Slough Technical Advisory Committee
Total Funding: $10,000
Project Funder: Elkhorn Slough National Estuary Program
Lead Scientist: Joshua N. Collins
Collaborators: John Largier, University of California at Davis, US Geological Survey

Biological Invasions Program

Project Title: Herring Spawning Habitat Assessment: Fouling Growth at Pier 45
Total Funding: $28,000, with expected $46,000 extension
Project Funder: National Fish and Wildlife Foundation
Lead Scientist: Andrew N. Cohen
Collaborators: Port of San Francisco

Project Title: Assistance with Subtidal Goals Report
Total Funding: $25,000 currently budgeted; SFEI is engaged on a cost basis
Project Funder: ABAG (on behalf of NOAA, SCC & BCDC)
Lead Scientist: Andrew N. Cohen

Project Title: San Francisco Bay Non-native Oyster Removal Project
Total Funding: $25,000
Project Funder: State Coastal Conservancy
Lead Scientist: Andrew N. Cohen

Historical Ecology
Project Title: Santa Clara Valley Historical Ecology Project (5027)
Total Funding: $212,000 (~$130,000 in 2007)
Project Funder: Silicon Valley Pollution Prevention Center
Lead Scientist: Robin Grossinger
Collaborators: Ruth Askevold, Chuck Striplen, SFEI ; Elise Brewster, Brewster Design Arts; Technical Advisors Group: Josh Collins, Lester McKee (SFEI), Robert Leidy (USEPA), SCVWD Staff

Project Title: Napa Valley Historical Ecology component of the Napa Agricultural Water Quality Project (5039)
Total Funding: to be determined
Project Funder: State Water Resources Control Board
Lead Scientist: Robin Grossinger, SFEI

Project Title: South County Historical Ecology Study
Total Funding: $230,000 (~$170 ,000 in 2007)
Project Funder: Santa Clara Valley Water District
Lead Scientist: Robin Grossinger
Collaborators: SFEI staff; Elise Brewster, Brewster Design Arts; SCVWD staff; Technical Advisors Group; The Nature Conservancy

Project Title: Ventura County Historical Ecology Study
Total Funding: ~$235,000 (~$35,000 in 2007)
Project Funder: California Coastal Conservancy
Lead Scientist: Robin Grossinger
Collaborators: CSU-Northridge, SCCWRP, Stillwater Sciences, URS

Information Technology

Project Title: Montezuma Data Management (6504)
Total Funding for Project: ~$14,000 (estimated for 2007)
Project Funder: Montezuma Wetlands, LLC
SFEI Project Manager: Cristina Grosso/Sarah Lowe

Project Title: SFEI Data Center (1041 & 3007 & pending)
Total Funding: $174,000 ($86,000 from SWAMP – 2007; $38,000 from RMP-2007; pending - $50,000 from USEPS/DWR-FY04Grant)
Project Funder: US EPA/DWR, SWRCB (SWAMP), RMP
Project Manager: Sarah Lowe

Project Title: Information technology purchasing for 2007
Total Funding: $113,850
Project Funder: SFEI
Project Manager: Michael May

Project Title: South Bay Salt Pond Restoration Project: GIS & Web
Total Funding: $261,000 ($130,000 for 2007)
Project Funder: Coastal Conservancy
Project Manager: Eric Zhang/Michael May

Project Title: Wetland Tracker Expansion
Total Funding: $80,000 EPA, $20,000 match
Project Funder: EPA
Project Manager: Michael May

Project Title: NHD Stewardship (National Hydrology Dataset (NHD) for the Bay region)
Total Funding: $9,500

Project Funder: USGS
Project Manager: Eric Zhang

APPENDIX B. SCCWRP 2006/07 Research Plan (from http://www.sccwrp.org/)

Welcome to the SCCWRP 2006/07 Research Plan. This Plan describes 38 projects, laid out by habitat, which demonstrates the range of interdisciplinary science we conduct and illustrates both the process-oriented and applied types of studies we perform. Although there are four different habitats targeted in this Plan (watersheds, wetlands and estuaries, beaches and shorelines, and the coastal ocean), you will see a thread of five common research themes throughout each habitat.

The first research theme is understanding background contaminant concentrations and natural variability (*Water quality and loadings from natural landscapes, Historic ecology of southern California wetlands, Sediments as reservoirs of fecal indicator bacteria*). This research helps put into focus what our environmental conditions should (or could) be and provides a baseline for comparison to areas where anthropogenic inputs are known to occur.

The second research theme is identifying and quantifying sources of anthropogenic pollutants. Some of these sources we have been tracking for decades (*Characteristics of effluents from municipal wastewater facilities*), while other projects explore new sources and types of contaminants (*Large and small scale atmospheric deposition, Emerging contaminants of concern*). Sometimes, our ideas require the development of new technology to be effective (*Source apportionment of pesticides in Newport Bay, In situ measurements of toxic organic compounds in sediment porewater*).

The third research theme is development of assessment tools. Some of these tools are for assessing impacts to human health (*Epidemiology study of beaches impacted by nonhuman sources of fecal indicator bacteria, Bioaccumulation in fishes consumed by freshwater anglers*) and others are for biological systems (Refinement of freshwater bioassessments, Development of bioindicators for ephemeral streams). Some projects are specifically directed towards setting thresholds for protecting ecosystems (*Development of sediment quality objectives for bays and estuaries, Technical support for development of nutrient criteria*). Altogether, the goal of this research theme is to enable managers to determine if environmental resources are at risk from manmade impacts.

The fourth research theme is understanding how management actions can affect positive changes by mitigating potential impacts (*Development of watershed models, Effectiveness of treatment wetlands as stormwater BMPs, Evaluation of the impact of terrestrial runoff on biological responses in the coastal ocean*). This research helps managers determine not only the most effective methods for reducing anthropogenic impacts, but also with the greatest cost-efficiency.

Our fifth research theme comprises projects dedicated towards bringing scientists and stakeholders together to achieve common regional, statewide, and national goals (*Southern California Bight regional monitoring, Southern California Ocean Observing System, Statewide assessment of wetland status and trends, Western Environmental*

Monitoring and Assessment Program). These programs cover a wide array of disciplines including microbiology, oceanography, remote sensing, chemistry, toxicology, and biology. One area in particular that requires regional coordination is data management and SCCWRP is focused on coalescing and distributing not just data, but information (*Web based data discovery and analysis tools, Augmenting fixed grid designs to improve local mapping, Statewide microbiology database*).

As you can see, this years' Research Plan pursues research themes that address some of the most pressing needs of the southern California environmental management community. By spreading these research themes across the habitats of greatest concern, SCCWRP can place the most salient information into the hands of both the regulated and regulatory agencies that use our products to improve their decision-making and stewardship of our natural resources.

WATERSHEDS

Assessment of water quality and loadings from natural landscapes; Lead Investigator: E. Stein

Collaborators: This project is being conducted in collaboration with University of California at Los Angeles and is partially funded by the Los Angeles Regional Water Quality Control Board (RWQCB) and the United States (US) Environmental Protection Agency (EPA) Region IX.

Development and Evaluation of Watershed Models; Lead Investigator: E. Stein

Collaborators: This project is being conducted in collaboration with the Los Angeles/San Gabriel Rivers Watershed Council and Santa Monica Baykeeper and partially funded by the Los Angeles RWQCB, San Diego RWQCB, City of Los Angeles, Los Angeles County Department of Public Works, Orange County Resources and Development Management Department, Los Angeles Contaminated Sediments Task Force, Los Angeles County Sanitation District, and US EPA Region IX.

Development of linked watershed-estuarine hydrodynamic and water quality models; Lead Investigator: E. Stein

Collaborators: This project is being conducted in collaboration with US Environmental Protection Agency, US Geological Survey, the Los Angeles Regional Water Quality Control Board, San Diego Regional Water Quality Control Board, Port of Los Angeles, Los Angeles Department of Water and Power, City of Los Angeles, City of San Diego, Santa Monica Bay Restoration Commission, U.S. Army Corps of Engineers, and California State Coastal Conservancy.

Effects Of Regionwide Fires on Depostion, Runoff, and Emissions to the Southern California Bight; Lead Investigators: E. Stein and K. Maruya

Collaborators: This project is being conducted in collaboration with the US Geological Survey, the Ventura County Watershed Protection District and Environment Canada. Researchers at UCLA and CSULA are also conducting related research at our study sites.

Refinement of Freshwater Bioassessments in Southern California; Lead Investigator: K. Schiff

Collaborators: This project is being conducted in collaboration with the CDFG and is partially funded by the Stormwater Monitoring Coalition, the Los Angeles County Sanitation District, and the SWRCB Surface Water Ambient Monitoring Program.

Development of Bioindicators for Ephemeral Streams; Lead Investigator: E. Stein

Collaborators: This project is being conducted in collaboration with California State University San Marcos, California Academy of Sciences, and Scripps Institute of Oceanography

Bioaccumulation in Fishes Consumed by Anglers in Ventura and Los Angeles County Watersheds; Lead Investigator: J. Allen

Collaborators: None at present.

Characteristics of Effluents From Large Municipal Wastewater Treatment Facilities; Lead Investigator: E. Stein

Collaborators: This project is being conducted in collaboration with the City of Los Angeles (Environmental Monitoring Division), County Sanitation Districts of Los Angeles County, Orange County Sanitation District, and City of San Diego (Metropolitan Wastewater Department).

Large and Small Scale Deposition of Atmospheric Trace Metals in Southern California; Lead Investigator: K. Schiff

Collaborators: This project is being conducted in collaboration with the University of California Los Angeles (Dr. Keith Stolzenbach) and is partially funded by the San Diego and Los Angeles RWQCBs.

Comparison of Mass Emissions Among Sources in the Southern California Bight; Lead Investigator: E. Stein

Collaborators: There currently are no collaborators for this project.

WETLANDS AND ESTUARIES

Historic Ecology of Southern California's Coastal Watershed and Wetlands; Lead Investigators: E. Stein and M. Sutula

Collaborators: This project is being conducted in collaboration with the University of Southern California, California State University Northridge, San Francisco Estuary Institute, and the Los Angeles and San Gabriel River Watershed Council. The project is funded by grants from the Rivers and Mountains Conservancy and from USC Sea Grant.

Relationships Between Dissolved Oxygen and Algae Distribution in Newport Bay; Lead Investigator: E. Stein

Collaborators: This project is being conducted in collaboration with the Orange County Resources and Development Management Department, Irvine Ranch Water District and Moss Landing Marine Laboratories (Dr. Krista Kamer). This project is partially funded with a Proposition 13 grant to the County of Orange.

Source Apportionment of Pesticides in the Upper Newport Bay Watershed; Lead Investigator: K. Maruya

Collaborators: This project is being conducted in collaboration with University of California, Riverside (Dr. Jay Gan) and is partially funded by a joint State Water Resources Control Board/Department of Pesticide Regulation PRISM grant.

Investigation of Contaminants in the Upper Newport Bay Picivorous Food Web; Lead Investigator: J. Allen

Collaborators: This project is being conducted in collaboration with California State University, Long Beach (Dr. Zed Mason) and University of California, Riverside (Dr. Daniel Schlenk), and Santa Ana Regional Water Quality Control Board. It is partially funded by the State Water Resources Control Board through a Proposition 13 grant.

Effectiveness of Treatment Wetlands as Stormwater BMPs and Compatibility With Wildlife Beneficial Uses; Lead Investigator: M. Sutula

Collaborators: This project is being conducted in collaboration with the Los Angeles, Santa Ana and San Diego Regional Water Quality Control Boards, the California State Coastal Conservancy, and member agencies from the Southern California Wetland Recovery Project. This project is partially funded by the State Water Resources Control Board through a Proposition 13 grant.

Regional Monitoring/Assessment Program for Southern California Wetlands; Lead Investigators: E. Stein and M. Sutula

Collaborators: This project is being conducted in collaboration with the Southern California Wetland Recovery Project, California State Coastal Conservancy, San Francisco Estuary Institute (SFEI), California Coastal Commission, Moss Landing Marine Laboratory, and the US EPA – Region IX and Office of Research and Development and is funded by the EPA Office of Water.

Landscape-Scale Assessment Of Southern California Riparian Ecosystems Condition; Lead Investigator: M. Sutula

Collaborators: This work is being conducted in collaboration with the Southern California Wetland Recovery Project, the California State Coastal Conservancy and the Conception Coast Project, with funding from the NOAA Coastal Services Center.

Southern California Wetland Recovery Project Science Advisory Panel; Lead Investigator: E. Stein

Objectives: Southern California has experienced one of the highest proportional loss of wetlands relative to any state in the country. Both the Federal and State governments have expressed goals of short-term, no-net loss and long-term, net gain of wetlands. However, coordination of a comprehensive wetland protection and recovery strategy in California has been hindered by the fact that 17 Federal and State agencies share jurisdiction and responsibility for wetland stewardship, leading to administrative and bureaucratic challenges.

In 1997, the 17 Federal and State wetland management agencies formed the Southern California Wetland Recovery Project (WRP) with a goal of increasing regional coordination of wetland preservation, restoration and management. The WRP is now a partnership of Federal and State agencies working in concert with local government, environmental organizations, and scientists to develop and implement a comprehensive plan for preserving and restoring the region's wetlands. The WRP consists of a Board of Governors and three standing committees: The Wetlands Managers Group (WMG) is responsible for drafting the regional restoration plan and advising the Governing Board on regional acquisition, restoration, and enhancement priorities; the Public Advisory Committee that represents community and interest group views to the Governing Board; and the Science Advisory Panel (SAP) that ensures that the best available science is incorporated into the decision-making processes of the WRP.

At the request of Board of Governors, SCCWRP staff provides technical assistance to the Science Advisory Panel, with the ultimate goal of improving the regional planning of wetland conservation, restoration, and management in southern California. SCCWRP staff provide technical assistance to the WRP by 1) developing and administering an extramurally-funded research program on the constraints to wetland restoration in Southern California, 2) procuring funding and technical assistance to implement the development of condition assessment, decision support, and other tools to aid the WRP in prioritizing and evaluating preservation and restoration projects, and 3) procuring funding and provide technical assistance to develop a regional wetlands monitoring program.

Collaborators: This project is being conducted in collaboration with the Southern California Wetland Recovery Project and its 17 member agencies.

COASTAL OCEAN

Development of Sediment Quality Objectives for Bays and Estuaries; Lead Investigator: S. Bay

Collaborators: This project is being conducted in collaboration with numerous regulated, regulatory and non-governmental organizations and is funded by the SWRCB.

Development of Methods to Characterize Sediment Toxicity in the Southern California Bight; Lead Investigator: S. Bay

Collaborators: This study is being conducted in coordination with the U.S. EPA Environmental Research Laboratory in Narragansett (Rhode Island) and the UC Davis Environmental Toxicology Department.

In Situ Measurement of Toxic Organic Compounds in Sediment Porewater; Lead Investigator: K. Maruya

Collaborators: This project is conducted in collaboration with the Chinese Academy of Sciences and is partially funded by the Cooperative Institute for Coastal and Estuarine Technology (CICEET).

Estimating Pollutant Loadings and Fluxes in Impaired Coastal Waterways; Lead Investigator: K. Maruya

Collaborators: This project is conducted in collaboration with Loyola Marymount University (Dr. Rachel Adams) and is partially funded by the City of Los Angeles and the USC Sea Grant Program.

Emerging Contaminants of Concern Ni Coastal Waters, Sediment, And Biota; Lead PI: K. Maruya

Collaborators: This research is being conducted in collaboration with the University of California San Diego (Dr. Michael Baker), University of California Riverside (Dr. Daniel Schlenk), California State University Long Beach (Dr. Kevin Kelley), the Southern Nevada Water Authority (Dr. Shane Snyder), the Mississippi State Chemistry Lab (Dr. Kang Xia), Orange County Sanitation District, and the Los Angeles County Sanitation Districts.

Endocrine Disruption in Coastal Fish; Lead Investigator: S. Bay

Collaborators: This research is being conducted in collaboration with the University of California San Diego (Dr. Michael Baker), University of California Riverside (Dr. Daniel Schlenk), California State University Long Beach (Dr. Kevin Kelley), and the Ocean Institute. Additional collaboration and partial funding for this project is provided by the Orange County Sanitation District, City of San Diego, City of Los Angeles, and Los Angeles County Sanitation Districts.

Evaluation of the Impact of Terrestrial Nutrient Runoff on the Biological Response of the Coastal Ocean; Lead Investigator: E. Stein

Collaborators: This project is being conducted in collaboration with the NASA Jet Propulsion Laboratory, University of California Los Angeles, University of Southern California, and the U.S. Geological Survey.

Relative Contaminant Concentrations In Whole Fish, Liver, And Muscle Tissue In Demersal Fishes Used In Environmental Monitoring; Lead Investigator: J. Allen

Collaborators: This project is being conducted in collaboration with the City of San Diego and the Los Angeles County Sanitation Districts.

BEACHES AND SHORELINES

Epidemiology Study to Assess Swimmer Health Risk from NPS Sources of Bacteria; Lead Investigator: K. Schiff

Collaborators: This project is being conducted in collaboration with the University of California Berkeley (Dr. Jack Colford), the US EPA, the Orange County Sanitation Districts, and Heal the Bay. This project is funded by a Consolidated Grant (Prop 50) from the State Water Resources Control Board and by the City of Dana Point.

Rapid Indicator Methodology for Measuring Fecal Indicator Bacteria; Lead Investigator: S. Weisberg

Collaborators: We will collaborate with the Orange County Sanitation District. This project is partially funded by the SWRCB (Prop 50).

Storm Drains and Sediments as Reservoirs of Fecal Indicator Bacteria; Lead Investigator: J. Griffith

Collaborators: Collaborators for this project include University of Minnesota (Dr. Mike Sadowsky) and University of California, Los Angeles (Dr. Jennifer Jay).

Statewide Microbiology Monitoring Database; Lead Investigator: L. Cooper

Collaborators: This project is funded by the SWRCB and the State Department of Health Services.

Marine: Multi Agency Rocky Intertidal Network; Lead Investigator: L. Cooper

Collaborators: This project is being conducted in collaboration with the MARINe member organizations including the University of California at Santa Barbara, University of California at Santa Cruz, California State University Fullerton, National Park Service, University of California at Los Angeles, National Center for Environmental Analysis and Synthesis, and Minerals Management Service (MMS). This project is funded by MMS.

REGIONAL MONITORING AND ASSESSMENT

Southern California Bight Regional Monitoring: 2003; Lead Investigator: S. Weisberg

Collaborators: This project is being conducted in close cooperation with all of the Authority's member organizations, which will be represented on the Regional Monitoring Steering Committee and its associated working groups. Over 60 different organizations including regulated, regulatory, and non-governmental agencies are collaborating on this study.

Western Environmental Monitoring and Assessment Program (EMAP); Lead Investigator: S. Weisberg

Collaborators: This project is being conducted in collaboration with USEPA, the State Water Resources Control Board, the San Francisco Estuary Institute, Moss Landing Marine Lab, and the California Department of Fish and Game. This project is funded by the USEPA Office of Research and Development.

Augmenting Fixed Grid Designs to Improve Local Mapping of Environmental Conditions in the Southern California Bight; Lead Investigator: K. Ritter

Collaborators: This project is being conducted in collaboration with the City of San Diego and Colorado State University (Dr. Scott Uruqhart, Dr. Jennifer Hoetig).

Statewide Assessment of Wetland Status and Trends; Lead Investigator: E. Stein

Collaborators: This work is being conducted in collaboration with the California State Resources Agencies, the State Water Control Board, the Regional Water Quality Control Boards 1,2,3,4,8, and 9, the California Coastal Commission, the California State Coastal Conservancy, and the San Francisco Estuary Institute, with funding from US EPA Region IX.

Statewide Surface Water Ambient Monitoring Program Data Management Node; Lead Investigator: L. Cooper

Collaborators: This work is being conducting in collaboration with Moss Landing Marine Laboratories, Department of Water Resources, SWRCB, and San Francisco Estuary Institute, with funding from the SWRCB.

Web Based Data Discovery and Analysis Tool; Lead Investigator: L. Cooper

Collaborators: None.

Southern California Coastal Ocean Observing System; Lead Investigator: S. Weisberg

Collaborators: This project is being conducted in collaboration with the Scripps Institute of Oceanography and the other members of SCCOOS.

COOPERATIVE RESEARCH

Member Agency Technical Consulting

Objectives: One of SCCWRP's functions is to provide SCCWRP's member agencies with scientific and technical assistance as requested. In the past, cooperative research activities have primarily involved assistance with field sampling activities, but have also included assistance with laboratory procedures and other related issues. In addition, SCCWRP has provided its member agencies with statistical and data base support. More recently, SCCWRP has assisted its member agencies in extensive long-term planning issues.

Collaborators: Staff will coordinate with all of the SCCWRP member agencies.

APPENDIX C: Great Lakes Commission Priorities (from http://www.glc.org/)

The full list of near-term priorities presented to Congress during an annual Great Lakes Day, included specific legislation is as follows:

- Stop aquatic invasive species by passing the National Aquatic Invasive Species Act, legislation (H.R. 553 and S. 336) that authorizes construction and maintenance of the dispersal barrier to prevent the introduction and spread of harmful aquatic invasive species – such as the Asian carp – and appropriate $20.2 million to the Great Lakes Fishery Commission to control sea lamprey and manage fishery resources.
- Clean Up Toxic Sediments by appropriating $54 million for the Great Lakes Legacy Act to clean up contaminated sediments and restore Great Lakes "toxic hot spots."
- Restore Great Lakes Wetlands by appropriating $28.5 million to partner with the states in restoring 200,000 acres of valuable Great Lakes wetlands and $16 million for the Great Lakes Fish and Wildlife Restoration Act.
- Protect Water Quality by appropriating $1.35 billion for the Clean Water State Revolving Fund (CWSRF) to update sewerage systems, safeguard drinking water and protect coastal health in the Great Lakes. Reauthorize the CWSRF in order to provide additional funding in future years.
- Enact Great Lakes Restoration Legislation by authorizing the recommendations from the Great Lakes Regional Collaboration restoration strategy and funding coordinated implementation actions.

APPENDIX D. ***2007-2009 Puget Sound Conservation and Recovery Plan and Budget*** **(from** http://www.psat.wa.gov/)

D:1 Letter from PSAT Chair:
December 15, 2006
To: All those interested in a healthy Puget Sound

I am pleased to present the draft ***2007-2009 Puget Sound Conservation and Recovery Plan*** on behalf of the Puget Sound Action Team and the Puget Sound Council. The Action Team, created in law in 1996, is responsible for defining, coordinating and putting into action the state's environmental protection and restoration agenda for Puget Sound. I am formally submitting this biennial plan to the Legislature for consideration as it develops the state's budget for the coming biennium.

The Puget Sound ecosystem is one of Washington's crown jewels. The Sound is home to a magnificent array of life, including 200 species of fish, 26 kinds of marine mammals, 100 species of sea birds, and thousands of species of marine invertebrates and plants. However, while the Sound appears beautiful on the surface, beneath its waters the news is troubling.

Significant declines in populations of salmon, orcas and certain species of marine birds and fish, closures of shellfish beds, and a growing dead zone in Hood Canal are all warning signals that the very best of Puget Sound is still at risk. The building blocks of a healthy environment—clean water, healthy and connected habitat and an intact food web —continue to erode. The Action Team's ***State of the Sound Report 2007*** (available in January 2007) reports in greater detail on the status and trends in Puget Sound's environment.

In response to continuing declines in Puget Sound, Governor Chris Gregoire created the Puget Sound Partnership in December 2005. This high-level, broad-based commission was charged with charting a new course to reach a healthy Puget Sound by 2020. The Partnership delivered its final report to Governor Gregoire in November 2006 with a suite of recommendations to scale up our region's efforts to save Puget Sound. Governor Gregoire used the Puget Sound Partnership recommendations, along with an earlier draft of this 2007-2009 plan and budget, to develop her 2007-2009 budget proposal on Puget Sound.

This plan contains the Governor's proposed budget for Puget Sound over the next two years. The plan combines existing levels of funding with significant new targeted investments to drive key actions needed to achieve a healthy Puget Sound by 2020.

The ***2007-2009 Puget Sound Conservation and Recovery Plan*** focuses on eight core priorities, which address critical threats to the ecosystem:

· Clean up contaminated sites and sediments.
· Prevent toxic contamination.
· Prevent harm from stormwater runoff.
· Prevent nutrient and pathogen pollution.
· Protect functioning marine and freshwater habitats.
· Restore degraded marine and freshwater habitats.
· Protect species diversity.
· Prepare for and adapt Puget Sound efforts to a changing climate.

While this plan details only the work of the state agencies, we recognize that protecting and restoring Puget Sound requires all levels of government and the private sector to work together effectively. Every day, thousands of people in local governments, tribal governments, federal agencies, the business sector and the environmental community as well as individual citizens lend their energy and creativity to the conservation challenges in Puget Sound. By clearly describing the state's proposed agenda in Puget Sound, we hope that all of our partners will be able to better plan their efforts and to see where we have opportunities for collaborative and complementary work in a broader partnership.

After the Legislature approves a budget for the 2007-2009 biennium, we will issue a final work plan based on that budget.

For a cleaner and healthier Puget Sound,

Brad Ack
Chair

D:2 GOVERNOR'S 2007-09 PUGET SOUND BUDGET

Detailed Description by Action Area

Prevent and Cleanup Toxics Pollution ($54.7 million)

1. Accelerate Clean-ups through on the Ground Actions ($50.6 Million)

a. Puget Sound Clean-ups Aquatic - $40 million ($39M Local Toxics, $1M Local) Grants will be provided to local governments and ports for clean-up work at 18 contaminated sites within ½ mile of Puget Sound including $14.5 million in Bellingham Bay;$17.6 million for Elliot Bay and $5.5 million for Commencement Bay.

b. **Puget Sound Upland Sites - $4.7 million (State Toxics)** The Department of Ecology will initiate or continue cleanup work at 25 sites within ½ mile of Puget Sound. This represents 20 percent of the 115 identified sites for which clean-up has not begun.

c. **Clean up State owned Aquatic Lands - $5.9 million (State Toxics)** The Department of Ecology will initiate or continue focused cleanup work at 25 sites within ½ mile of Puget Sound on state owned aquatic lands. Work will occur in Port Gardner, Fidalgo Bay, Kitsap Peninsula/Port Gamble, Port Angeles, Shelton/Oakland Bay, and Dumas Bay.

2. **Help Local Governments and Business Prevent Toxic Contamination ($4.1 million)**

a. **Prevent contamination of Urban Bays - $1.7 million ($1.3 million State Toxics Account, $360,000 Local Toxics Account)** The Department of Ecology will work with permitted and unpermitted facilities in Commencement Bay and the Duwamish River to prevent contamination and recontamination from stormwater. Work will include technical assistance to 225 businesses in reducing toxics and additional compliance inspections.

b. **Local Toxics Control Specialist - $2 million (Local Toxics)** In Puget Sound it is estimated that there are 30,000 businesses that likely generated hazardous waste, yet less than 1,000 are state permitted facilities. The Department of Ecology will provide grants to local governments to hire ten toxics control specialists to provide assistance to 1,000 to 3,000 businesses on ways to reduce solid waste and toxics. Theses efforts are estimated to reduce 25 tons of hazardous waste and 3,000 tons of solid waste a year.

c. **Finding Safer Chemical Alternatives - $400,000 (State Toxics)** One roadblock to using less toxic materials is the lack of information on safer alternatives**.** DOE would review and compile research on alternatives toxics for chemical included in chemical action plans and provide this information to 37,000 businesses, state agencies, and local governments. Information would be available to and estimated 50,000 citizens through a state website, 1-800 number, publications and presentations.

Restore Damaged Forest, Rivers, Shorelines and Marine Waters ($37.4 Million)

1. Protect Essential Habitat through on the Ground Actions ($35.5 Million)

a. **Salmon Habitat Restoration - Salmon Recovery Funding Board - $24 Million (State Bonds)** Grants would be provided to local governments and tribes for projects to restore salmon habitat including removal of fish passage barriers, restoration of estuaries, flood plains riparian areas and

remove riverbank armoring. These funds will leverage federal and local fund sources.

b. **Restore Nearshore and Shoreline Habitats - $7 million (State Bonds)** Continues the Department of Fish and Wildlife's successful efforts to restore neashore and shoreline habitat in Puget Sound. This funding will concentrate upon restoring natural marine shoreline process including protection and restoration of beach sediments and removal of existing bulkheads. These funds will leverage federal and local fund sources.

c. **Remove creosote pilings - $4 million (State Toxics)** The Department of Natural Resources will remove 700-800 tons of creosote logs from Puget Sound beaches.

d. **Improve and restore farmland - $1.2 million (Water Quality Account)** The State Conservation Commission would provide grants to Puget Sound Conservation Districts to provide technical assistance and project match to farmers, and horse owners to implement projects and develop management plans to restore habitat and improve water quality.

e. **Remove Derelict Vessels - $500,000 (Derelict Vessel Acct.)** The Department of Natural Resources would remove at least 26 derelict and abandoned vessels in Puget Sound. These vessels are high risk for oil spills and their removal was recommended by the Oil Spill Advisory Council.

f. **Aquatic Restoration Projects - $200,000 (ALEA)** The Department of Natural Resources will undertake restoration projects on aquatic lands in Pierce, Thurston, Kitsap and King Counties.

2. State Agency Actions

1. **Control Invasive Tunicates - $500,000 (ALEA)** The Department of Fish and Wildlife and the Puget Sound Action Team would continue efforts to control and remove invasive tunicates which threaten native Puget Sound species and habitats.

Reduce Stormwater Runoff ($25.3 million)

1. **Prevent further contamination with on the Ground Actions ($14.6 Million)**

a. **Local Innovative Stormwater Pilots and Retrofit Projects - $14.1 million ($9.1 Million State Bonds, $5 million Local Toxics Account)** Grants will be provided to local governments to retrofit existing stormwater projects to handle stormwater in more effective manner and to pilot low impact development techniques such as

pervious pavement, rain gardens and bioswales. These projects prevent toxic stormwater from entering Puget Sound as well as demonstrate the effectiveness of these techniques.

b. **State Parks Stormwater Improvements - $571,000 (State Bonds)** State Parks would permit and design projects to reduce stormwater entering Puget Sound at Saltwater and Belfair State Parks

2. Enhance Local Government Programs to Control Stormwater ($9.5 million)

a. **Phase II Stormwater Jumpstart Grants - $9 million ($7 million Local Toxics Account, $2 million Federal)** Approximately 100 cities and counties will be required to meet new standards to reduce stormwater. DOE will provide grants to local governments to help them develop and implement revised local stormwater management programs including; local stormwater ordinances, and proper operation and maintenance of stromwater facilities.

b. **Low Impact Stormwater Project Assistance - $500,000 (Water Quality Account)** The Puget Sound Action Team or its successor will continue to provide technical assistance to local governments to revise their stormwater regulations and development standards to allow for low impact stormwater projects.

3. Ramp-up Stormwater Compliance - $280,000 (Other Funds) In November 2005, the DOE revised construction stormwater permit requirements. An additional 2,400 permits are anticipated next biennium. Additional staff will issue permits, provide technical assistance, and conduct compliance inspections.

4. Monitor the Effectiveness of Stormwater Controls - $800,000 ($400,000 Water Quality Account. $400,000 WQPFA) New stormwater permits require additional monitoring by local governments. In order to reduce costs for state agencies and local governments the Department of Ecology would institute a monitoring consortium to coordinate water quality monitoring for stormwater, wastewater and other pollutants. Other parties to the consortium would also contribute funds or in-kind resources. Additional stormwater monitoring will also be initiated.

Clean-up Areas with Immediate Septic and Nutrient Problems ($56.3 million)

1. Clean-ups areas with on the Ground Actions ($50 Million)

a. On Site Septic Replacement - $3 million (Water Quality Account) Through a partnership with Shorebank and the Hood Canal

Coordinating Council, grants and loans will be provided to repair or replace approximately 200 failing septic systems in Hood Canal. State funds will be matched by $3.4 million in private funding.

b. Reduce Pollution through Reclaimed Water - $6.3 million ($4.8 million State Bonds, $1.5 million Water Quality Account) Grants are provided to help local government implement projects to reclaim wastewater. Increasing water reuse helps increase streamflows and reduces toxics, nutrients and pathogen discharges in wastewater. The Department of Ecology will also adopt new rules for reclaimed water.

c. Wastewater Treatment Upgrades - $31.7 million (Public Works Trust Fund) Additional loans will be provided through the Public Works Board for projects to upgrade wastewater systems around Puget Sound. Projects will help to eliminate combined sewer overflows in Anderson Cove (Bremerton) and Port Angeles Harbor as well as construct new treatment plant in Blain and Lake Stevens.

d. Belfair Sewer - $4.8 million (State Bonds) Additional grants are provided to provide wastewater treatment around Belfair on Hood Canal

e. **State Parks Wastewater Improvements - $4.2 million ($2.1 million State Bonds, $2.2 State Toxics Account)** Installs a park-wide wastewater treatment system at Bay View State Park to replace 30- to 50-year old septic tanks and all beach area tanks. All sink waste drains will be tied in into the wastewater treatment system. Other work will be conducted at Fort Flagler, Larabee and Belfair state park.

2. **Help Local Governments Manage Septic Systems - $4 million ($3.6 million GF-S, $600,000 ALEA)** Support local health districts as they implement programs in marine protected areas to prevent contamination from septic systems. Programs will include monitoring, education, technical assistance and enforcement. This is a follow up to legislation (HB 1458) passed in 2006 requiring local health districts to develop plans to protect high priority marine waters. Monitoring contamination sources of shellfish beds will be increased to meet federal requirements. Regulatory oversight and technical assistance to Large Onsite Sewage systems will also increase.

3. **Identify Sources and Distribution of Nutrients - $1.89 million (Federal and other funds)** Understanding the sources and fate of nutrients entering Puget Sound is necessary to make decisions on the best ways of cleaning up pollutants. DOE will create an environmental model of South Puget Sound (below the Tacoma Narrows) which will be used to establish discharge limits and to evaluate the potential results of different management actions. Additionally work will continue to evaluate the effectiveness of advanced

septic systems in removing nitrogen and continue to determine how nitrogen from septic systems enters marine waters in Hood Canal.

Protect Essential Habitat and Prevent Further Losses ($40.7 Million)

1. **Protect Essential Habitat through on the Ground Actions ($33 Million capital)**

    a. **Salmon Habitat Protection Grants- Salmon Recovery Funding Board - $21.75 Million (State Bonds)** Grants would be provided to local governments and tribes through the SRFB for projects to protect riparian areas, floodplains and forested habitats and marine shorelines to maintain natural process and functions.

    b. **Washington Wildlife and Recreation Program (WWRP) - $12 million (State Bonds)** As part of the WWRP there is anticipated to be $12 million worth of habitat and recreation projects in Puget Sound. The most significant of these includes a 91 acre expansion of the Woodard Bay Natural Resource Conservation Area; adds 57 acres to Deception Pass State Park; protects 500 acres of riparian/wetland habitat on Decker Creek (Mason County) and purchases development rights on a 24 acre farm in the Dungeness River Delta.

2. **Support local governments ($2.32 million GF-S)**

    a. **Enhance Shoreline Protection - $320,000 (GF-S)** The Department of Fish and Wildlife will work with PSAT, DNR, and the Army Corps to develop guidance and permitting documents for improved methods of shoreline protection.

    b. **Enhancing local compliance – $2 million (GF-S)** A grant program would be established for local governments to hire staff in ten watersheds to improve compliance with state and local habitat laws particularly critical area and shoreline ordinances. A local match would be required to access these funds.

3. **Improve wetlands mitigation and hydraulic permits - $1.5 million (GF-S)** The Department of Ecology will increase compliance checks of wetland mitigation projects to ensure that developers are meeting the wetland permit conditions. WDFW would hire an outside consultant to evaluate the effectiveness of WDFW's hydraulic permit conditions.

4. **Salmon and Eelgrass Monitoring - $759,000 ($691,000 GF-S, $68,000 ALEA)** In order to determine the effectiveness of current salmon recovery strategies and effectively make management decisions, monitoring of smolts and returning salmon would be expanded into new areas currently without

adequate monitoring. This effort would provide the information necessary for federal agencies need to make delisting decisions and is based upon the recommendations of the Governor's Monitoring Forum. The Department of Natural Resources will also acquire site-specific monitoring equipment that allows the Department to assess eelgrass loss in Hood Canal and Wescott Bay adjacent to San Juan Island.

Citizens Partnership ($5.75 million)

1. **Citizen Partnership -$5.0 million ($2.5 million Water Quality Account, $2.5 million private)** A multi-year campaign would be initiated to build public awareness about the problems facing Puget Sound, explain how the public can change their behavior and engage in direct actions to support and protect the Sound. State funds would be required to be matched by an equal amount of non state funding.

2. **Public Participation Grants - $750,000 (Local Toxics)** The Department of Ecology will also provide grants to communities, neighbor and watershed groups for environmental activities, outreach and education in Puget Sound.

APPENDIX E: EPA's National Estuaries Program: a model for financing

(text extracted from http://www.epa.gov/owow/estuaries/fund.htm)

Sustainable Financing Strategies

On average, the National Estuary Programs (NEPs) raise $16.50 for every $1 provided by EPA. The NEPs successfully leverage federal seed money by:

- Developing finance plans that identify and evaluate funding sources and financing strategies to implement their priority actions.
- Building strategic alliances with implementing partners to obtain their financial support.
- Demonstrating environmental results that convince stakeholders that the NEPs are effective, can be trusted with their resources, and will give them credit for their contributions.
- Providing seed money or staff to initiate and develop new funding sources.

Figure 1: This additional funding comes from a variety of federal, state, local, and private sources. There are many sustainable funding examples from the NEPs. For example, they raise money from annual membership appeals, special appeals, grants, license plate revenues, fines and penalties, taxes, and intergovernmental agreements.

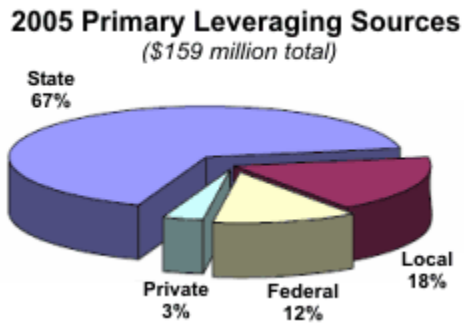
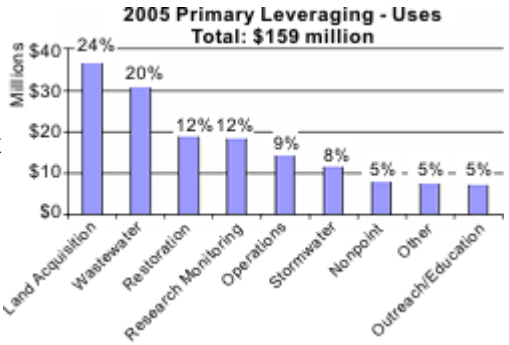


Figure 2: This money is used to implement priority actions, such as land acquisition, outreach and education, and habitat restoration, outlined in each of the NEPs Comprehensive Conservation Management Plans.



Additional Resources:

Watershed Funding Web site provides links to requests for proposals, tools, databases, and information about sources of funding to practitioners and funders that serve to protect watersheds.

Community-Based Watershed Management: Lessons from the National Estuary Program (NEP) highlights the highly successful approaches to watershed management implemented by the 28 National Estuary Programs (NEPs). Chapter 4: Developing a Management Plan contains additional information on how the NEPs have developed sustainable finance strategies and plans. Chapter 5: Implementing a Management Plan outlines how the NEPs have obtained funds for operating costs and project implementation.

EPA Watershed Funding Programs

Nonpoint Source Pollution Funding
Provides information on grant opportunities to implement efforts to address nonpoint source pollution, including Clean Water Act Section 319 grants and Nonpoint Source Minigrants.

Targeted Watershed Grants
The Targeted Watershed Grants Program is designed to encourage successful community-based approaches and management techniques to protect and restore the nation's waters. Any governmental or nonprofit non-governmental entity is eligible to receive a grant under this program, and inter jurisdictional watershed partnerships are encouraged. Through these grants, EPA expects to see real environmental results, such as the return of native fish species and increased recreational opportunities and to discover innovative solutions to improving and sustaining water quality.

Wetlands Funding
Includes information on EPA grant opportunities including Wetlands Program Development Grants, Five Star Restoration Grants, the State Revolving Fund program, and other sources of federal funding for protecting wetlands.

National Estuary Program Assistance Agreements
EPA's National Estuary Program was established by Congress in 1987 to improve the quality of estuaries of national importance. The Clean Water Act Section 320 directs EPA to develop plans for attaining or maintaining water quality in those estuaries. This page includes information on EPA grant opportunities and requirements for the 28 participants currently in the National Estuary Program.

Additional EPA Funding Opportunities for Water
Includes information on other sources of funding for projects that address waste water and drinking water issues (Clean Water State Revolving Fund and Drinking Water State Revolving Fund), and improve water quality (Beach Act Grants, Water Pollution Control Program Grants, and Water Quality Cooperative Agreements). Additionally, specific information for Tribes is available.

Regional Grant Opportunities

EPA's ten regional offices provide information on both regional and national sources of funding for a variety of water and watershed related projects.

Environmental Education Grants Program

This program supports environmental education projects that increase the public awareness about environmental issues and increase people's ability to make informed decisions that impact environmental quality. EPA awards between $2 and $3 million annually. More than 75 percent of these grant recipients receive less than $15,000.