Protecting Our Ocean
CALIFORNIA'S ACTION STRATEGY

Final Report to Governor Arnold Schwarzenegger

PREPARED BY
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EXECUTIVE SUMMARY

PLAN OF ACTION

INTRODUCTION

Both the U.S. Commission on Ocean Policy and the Pew Oceans Commission have identified an emerging national crisis situation regarding this nation's ocean and coastal resources. On June 4, 2004 Governor Arnold Schwarzenegger submitted his comments on the Preliminary Report of the U.S. Commission on Ocean Policy, which documented California's leadership in ocean and coastal management and provided the Governor's call for strong actions at all levels of government to protect and manage these resources. In his comments the Governor stated, "Your report is a wake-up call that the oceans are in trouble and in need of help. In response to this need, actions must take place at the international, national, state, regional and local levels, as these issues are just as important globally as they are to the citizen trying to protect the waters off a local beach." The Governor's comments were clear – action is needed to protect and manage our ocean and coastal resources.

Governor's Directive

Recognizing the need for strong leadership by the State of California, Governor Schwarzenegger directed Secretary for Resources Mike Chrisman and Secretary for Environmental Protection Terry Tamminen to "develop a plan of action for ocean and coastal management in California." The Governor's directive requires that the Action Plan explore important actions that can be taken by the Schwarzenegger Administration, the legislature, or by partners in industry, academia, public interest groups, and philanthropic interests. At a minimum, this plan is required to address actions that the state can take to address Governance; Economics and Funding; Research, Education, and Technology Development; and Stewardship. The Governor directed that this plan be on his desk within 90 days.

A History of Leadership

California has been a leader in ocean and coastal management and continues to lead important initiatives for improving the management of fisheries, marine protected areas, water quality, shoreline erosion, and coastal development. The need for enhanced ocean and coastal management measures is underscored by the demands of California's growing population, both along the coast and inland. There is a clear need for action to address our current management challenges and those that will be faced by future generations of Californians. California will use this action plan to guide future efforts to protect and manage its ocean and coastal resources and to continue in its role as a national leader.

General Approach

The intent of this Action Plan is to recommend initial actions that the state should pursue to maintain its nationally recognized leadership role in managing and protecting ocean and coastal resources. A substantial amount of information was submitted to the

Governor to assist him in his review of the Preliminary Report of the U.S. Commission on Ocean Policy from federal, state and local agencies, industry, academia, non-governmental organizations, the legislature, members of Congress, the military, and the general public. This information was extremely valuable for the preparation of this Action Plan.

The goals of the Plan for leadership are both simple and bold. The Action Plan seeks to:

- Increase the abundance and diversity of aquatic life in California's ocean, bays, estuaries, and coastal wetlands;
- Make the water in those bodies cleaner;
- Provide a marine and estuarine environment that Californians can productively use and safely enjoy; and
- Support ocean dependent economic activities.

The draft Action Plan was extensively circulated for comment and was the subject of two public workshops, one in San Francisco on August 19, 2004 and one in Newport Beach on August 20, 2004. The substantial input received (over 80 letters and 45 people testified at the two workshops) were almost entirely supportive, but comments, suggestions, and recommendations resulted in significant revisions and improvements to the Action Plan.

The Action Plan has been organized to *provide* the following:

- Overview of immediate and ongoing actions,
- A complete listing of the comprehensive and long-term findings and recommended actions,
- A summary and overview of major ocean and coastal issues facing the State of California (Appendix I), and
- A list of all acronyms used in the Action Plan (Appendix II).

IMMEDIATE AND ONGOING ACTIONS

California's Ocean Agenda, developed in 1997, set forth a mission to ensure comprehensive and coordinated management, conservation, and enhancement of California's ocean resources for their intrinsic value and for the benefit of current and future generations. This Action Plan builds on California's legacy of leadership by determining how the state can continue to take proactive approaches to ocean and coastal management with a specific emphasis on improving coordination of policy and funding for all ocean and coastal programs, evaluating all relevant California laws and regulations regarding ocean/coastal management, and identifying existing and potential

new governance approaches, and recommending how these approaches can be improved and enhanced to address a variety of the state's most pressing issues.

The following is a summary of just some of the major actions that are either ongoing or recommended in the Action Plan.

- ***Sign the California Ocean Policy Act (COPA) into Law.*** The Schwarzenegger administration has worked closely with the Legislature and interest groups to help craft the California Ocean Protection Act, SB 1319, which will establish the California Ocean Council to coordinate and fund new actions to protect and manage California's Ocean and Coastal Resources. The FY 04/05 Budget for the State of California, approved by the legislature and signed into law by Governor Schwarzenegger, provides $10 million in Tidelands Revenues for implementing ocean and coastal management objectives. This money becomes available with the enactment of SB 1319 and when sufficient Tidelands funds become available.

- ***Demand Improvements in National Ocean Policy.*** The Schwarzenegger Administration will meet with the President's Council of Environmental Quality within 30 days of the release of the final report of the U.S. Commission on Ocean Policy to demand strong federal action to protect and manage California's (and this nation's) ocean and coastal resources.

- ***Eliminate Adverse Impacts of Offshore Oil and Gas Development.*** The Schwarzenegger Administration will continue to defend California's right and duty to protect the California coast from the impacts of new offshore oil and gas leasing, exploration, or development on the federal Outer Continental Shelf and will encourage the federal government to seek a settlement to extinguish the 36 leases off the California Coast.

- ***Support the California Coastal Commission and Coastal Management.*** The Schwarzenegger Administration took rapid action to make three new appointments to the California Coastal Commission and has called on the federal government (in his comments to the U.S. Commission on Ocean Policy) to support and strengthen state coastal management programs and the nation's Coastal Zone Management Program.

- ***Implement the Marine Life Protection Act Initiative.*** The Schwarzenegger Administration has launched a unique new effort to implement the Marine Life Protection Act, which had been put on hold due to lack of funding. The administration has crafted a partnership between the California Resources Agency, Department of Fish and Game, Resources Legacy Fund Foundation and others to implement the Marine Life Protection Act (MLPA). Implementation of the MLPA will lead to a network of marine reserves, marine parks, and marine conservation areas along the California Coast.

- ***Launch the Coastal Currents Monitoring System (Ocean Observation Systems).*** The Schwarzenegger administration has recently approved the final funding for a $21 million investment to establish a statewide coastal currents monitoring system that will provide real-time information to assist with fisheries management, oil spill movement, and even search and rescue operations. It will be the first step in establishing a statewide Ocean Observation System making California a national leader in such systems.

- ***Complete the California Coastal Sediment Management Plan.*** The Schwarzenegger administration has been working with members of the National Shoreline Study at the U.S. Army Corps of Engineers to make the California Coastal Sediment Management Plan (CCSMP) a pilot approach for the nation. This plan will help address sediment management issues regarding coastal erosion, port maintenance, and wetland restoration.

- ***Develop an Ocean and Coastal Stewardship Campaign.*** The Schwarzenegger administration will work with members of government, academia, industry, and non-governmental organizations to develop a series of public service announcements to help get the word out regarding the role of average citizens in protecting and managing California's ocean and coastal resources.

- ***Identify, Assess, and Enforce Existing Laws.*** The Schwarzenegger administration is conducting an inventory of all existing laws that impact ocean and coastal resources and their management which will be followed by an assessment of law enforcement effectiveness.

- ***Develop a Long-Term Funding Strategy for Ocean and Coastal Protection and Management.*** The Schwarzenegger administration will identify California's current level of investment in ocean and coastal management, enforcement, monitoring, research and education and use this information to identify gaps, areas of overlap, and to develop a long-term funding strategy.

- ***Continue Support for the Clean Beaches Initiative.*** The Schwarzenegger administration will continue to support the Clean Beaches Initiative to improve water quality at recreational beaches.

COMPREHENSIVE AND LONG-TERM ACTIONS

A. Governance

Ocean planning and regulation is fragmented at both the federal level and within California resulting in reduced efficiency and effectiveness of efforts to ensure clean water, productive habitats, sustainable fisheries, and functioning recreational beaches. We need to address fragmentation that impedes the implementation of the most effective and efficient approaches. California remains a

leader in ocean and coastal management despite these challenges, so improvements can and should be made to maintain and enhance this leadership role.

Action 1

The Schwarzenegger Administration should call on the President of the United States and the Council of Environmental Quality to support the major provisions of the final report of the U.S. Commission on Ocean Policy, and other national ocean and coastal recommendations from the Pew Ocean Commission report or other sources, that are acceptable to California. To achieve this coordination and to urge action at the federal level, California will pursue the following actions:

- *Conduct a thorough review of the Final Report of the U.S. Commission on Ocean Policy and communicate the findings of that analysis to the California Congressional delegation, members of the legislature, and other interested parties;*

- *Consult with the Coastal States Organization, the Western Governors Association, and the National Governors Association to identify consensus concerns among states regarding the findings contained within the final report;*

- *Schedule a meeting with the chair of the President's Council of Environmental Quality within 30 days of the release of the Final Report of the U.S. Commission to request strong actions to address California concerns and those shared with other states; and*

- *Work with the administration and members of Congress to ensure the implementation of long-term measures to improve the management and protection of ocean and coastal resources that coincide with the recommendations included in this Action Plan.*

Action 2

Continue California's ocean and coastal leadership role by signing the California Ocean Protection Act (SB 1319) into law to establish a cabinet-level California Ocean Council with a mission to help ensure comprehensive and coordinated management, conservation, and enhancement of California's ocean and coastal resources for their intrinsic value and for the benefit of current and future generations. The California Ocean Council will evaluate the comprehensive or "big picture" needs of California ocean and coastal management and create a strategic vision for the future that improves coordination and provides more efficient and effective methods of managing ocean and coastal resources. Some of the major actions of the California Ocean Council will include the following:

- *Update the California inventory of ocean and coastal laws and regulations and determine if these laws are being enforced;*

- *Identify successful California models of regional ocean and coastal stewardship and design new federal and state approaches to support them and to use them as models for future management approaches;*

- *Develop enhanced partnerships with other levels of government (federal and local), industry, academia, non-governmental organizations, and philanthropic organizations to carry out ocean and coastal management objectives;*

- *Monitor California's interests regarding international treaties (such as the Law of the Sea);*

- *The California Ocean Council will help ensure adequate planning, readiness and coordination of ocean and coastal emergency response;*

- *Consistent with the August 2003 Report to the Legislature - Regulation of Large Passenger Vessels in California by the Cruise Ship Environmental Task Force, the California Ocean Council should evaluate this issue and consider if the state should pursue changes in federal law to allow California to establish a discharge prohibition in state waters*;

- *Consider Native American Rights and Cultural Resources in implementing any recommendations contained within this Action Plan; and*

- *Coordinate California ocean and coastal management activities that impact military facilities/operations with the Department of Defense, as well as requesting the Department of Defense to coordinate their activities and operational needs with the State of California to the extent possible without compromising national security objectives.*

B. Economics and Funding

There is no accounting system in place in the United States or in California to regularly assess the economic benefits derived from the ocean and coast. In addition, there is no comprehensive evaluation of the levels of investment in California to fund ocean and coastal management and protection programs.

Action 3

Finalize, distribute, and make use of the California portion of the National Ocean Economics Project (California's Ocean Economy) to help inform decision makers and members of the public about the economic benefits derived from the ocean and the coast. California, as a national leader in conducting this analysis in the past, can continue in that role by completing this analysis and widely distributing the results.

Some major actions of the California Ocean Council will include:

- *Hold an "Ocean and Coastal Economic Symposium" to seek consensus from leading economists from government, academia, the private sector, and the non-governmental community regarding the economic contribution of the ocean and coast to the California and national economies;*

- *Identify California's current level of investment in ocean and coastal management, enforcement, monitoring, research and education and use this information to identify gaps, areas of overlap, and to develop a long-term funding strategy;*

- *Support the establishment of the National Ocean Policy Trust Fund recommended in the Preliminary Report of the U.S. Commission on Ocean Policy, as long as there are no incentives for future offshore oil and gas development; and*

- *Pursue the development of significantly more federal matching funds for ocean, coastal, and estuarine conservation projects.*

C. Research, Education, and Technology Development

Government, academia, industry, and the non-governmental community need to seek consensus (where possible) on the highest priority research and outreach objectives to assist ocean and coastal management needs. It will be important to seek consensus (where possible) on ocean and coastal research priorities for California and then to work with all these entities to obtain the funding, to share resources, and to apply the knowledge gained to real world management challenges.

Action 4

Develop a state-wide ocean and coastal research and outreach strategy with clearly stated priorities for California. The California Ocean Council will identify and evaluate the ocean and coastal research and outreach needs for the State of California with the assistance and cooperation of participants from academia, industry, government, and members of the public.

Action 5

Ensure that ocean and coastal education is included in the environmental principles and concepts being developed pursuant to the implementation of the Education and the Environment Initiative (Pavley, Chapter 665, Statutes of 2003 - AB 1548). The California Ocean Council will closely participate in this process as part of the education partnership that will address the incorporation of environmental principles and concepts into the K-12 curriculum.

Action 6

Form collaborative partnerships with not only those providing K-12 and collegiate formal education, but also with institutions, organizations, and governmental agencies providing informal education opportunities for pre-schoolers to senior citizens, including the underserved minorities. These programs are offered through aquariums; state programs such as the Coastal Commission, Fish and Game, and State Parks; federal programs such as the National Marine Sanctuaries; National Estuarine Research Reserves; National Estuary Programs; and programs run by non-governmental organizations.

Action 7

Launch an ocean and coastal stewardship media campaign by working with members of government, academia, industry, and non-governmental organizations. This would, at a minimum, include a series of public service announcements to help inform citizens about their role in protecting and managing California's ocean and coastal resources.

Action 8

Develop a Coastal Ocean Observation Strategic Plan (Strategic Plan) to guide the allocation of the state's $21 million investment in the Ocean Currents Monitoring System and its integration with all existing and future observing and monitoring systems. The Strategic Plan should be designed to meet the information needs of likely end users from government, academia, industry, and the public, and identify gaps in coastal ocean observing that need to be filled.

Action 9

Revitalize the California Ocean and Coastal Environmental Access Network (CalOcean) on the California Resources Agency Website in order to provide access to marine data sets, geographic information systems, electronic documents, information regarding organizations, and marine and coastal news. The system has become outdated and there is clearly a need to upgrade it to provide up-to-date and accurate information to policy-makers, industry, academia and the public.

D. Ocean and Coastal Stewardship

The recommendations of the U.S. Commission on Ocean Policy, and the ocean and coastal protection and management needs of the State of California, make a compelling case for ecosystem management approaches. The National Ocean Council recommended in the report of the U.S. Commission on Ocean Policy and the California Ocean Council can provide a significant role in developing new ecosystem based approaches to ocean and coastal management.

Action 10

Pursue, support, implement, and establish long-term funding for coordinated ecosystem management approaches at the federal, state, and local levels to guide and improve the stewardship of ocean and coastal resources. The successful long-term implementation of ecosystem management will require a commitment of political will and funds from the highest levels of both the federal and state government.

Action 11

Restructure, focus, and strengthen the "California Watershed Management Memorandum of Understanding (MOU)" to identify priority watersheds for resource protection and use, fishery recovery, and water quality, and improve delivery of state technical and financial assistance to impaired coastal watersheds. Multiple state entities within the California Environmental Protection Agency (Cal/EPA) and California Resources Agency currently administer programs that provide technical assistance or financial support for various aspects of watershed management, and hundreds of local watershed partnerships exist in the state and all these efforts need to be coordinated.

Action 12

Integrate coastal water quality programs to improve their efficiency and effectiveness in cleaning up coastal watersheds, estuaries, bays, beaches, and near-shore waters. The California Ocean Council will develop an action plan to coordinate state financial and technical assistance programs to facilitate projects and programs that restore and protect coastal and nearshore resources, habitats, and water quality.

Action 13

Identify and prioritize issues that may benefit from additional coordination by the California Ocean Council. California faces ongoing challenges in its efforts to manage and protect marine habitats, living marine resources, the very existence of beaches, and to maintain substantial economic uses and infrastructure. Appendix I provides a summary and overview of many of those issues which the Council will consult in determining its priorities.

Appendix I
Summary of Ocean and Coastal Protection and Management Issues

California faces ongoing challenges in its efforts to manage and protect marine habitats, living marine resources, and the very existence of beaches. These issues include, but are not limited to, the Summary of Issues included in this Appendix. This Summary of

Issues is divided into the Management of Resources and the Management of Economic Uses and Infrastructure and can serve as a general identification of issues that may benefit from additional coordination by the California Ocean Council.

Appendix II Acronyms
Listing of the acronyms used in the Action Plan

This section provides a listing of acronyms used in the document for easy reference.

PLAN OF ACTION

INTRODUCTION

Both the U.S. Commission on Ocean Policy and the Pew Oceans Commission have identified an emerging national crisis regarding this nation's ocean and coastal resources. Admiral James D. Watkins, the Chair of the U.S. Commission on Ocean Policy, recently stated, "Our oceans and coasts are in trouble, and we as a nation have a historic opportunity to make a positive and lasting change in the way we manage them before it is too late." On June 4, 2004 Governor Arnold Schwarzenegger submitted his comments on the Preliminary Report of the U.S. Commission on Ocean Policy, which documented California's leadership in ocean and coastal management and provided the Governor's call for strong actions at all levels of government to protect and manage these resources. In his comments the Governor stated, "Your report is a wake-up call that the oceans are in trouble and in need of help. In response to this need, actions must take place at the international, national, state, regional and local levels, as these issues are just as important globally as they are to the citizen trying to protect the waters off a local beach."

If Californians ask themselves what is at stake, the response is compelling. We need to manage the ocean and coastal ecosystems to support all forms of marine life for their intrinsic value and to ensure that economic activities such as commercial and recreational fishing are sustainable now and long into the future. We need to protect water quality so we can continue to safely swim in coastal waters and to ensure that fish are safe to eat. We need to manage the sediment resources that create wide sandy beaches that support tourism and recreation, as well as habitat for shorebirds and other species. Californians have strong concerns about the protection of ocean, coastal, and watershed resources which has been verified by recent polling conducted by the Public Policy Institute of California. They understand the challenges faced in managing these resources and are willing to support strong actions to protect them. The significant contribution of ocean dependent industry to the state's economy makes a compelling argument that an investment in ocean and coastal management and protection is an investment in the economic well-being of this state. The need for action is clear.

Governor's Directive

Recognizing the need for strong leadership by the State of California, Governor Schwarzenegger directed Secretary for Resources Mike Chrisman and Secretary for Environmental Protection Terry Tamminen to "develop a plan of action for ocean and coastal management in California." The Governor's directive specifies that this plan of action (Action Plan) shall assess what has changed since the publication of the state's 1997 ocean strategy, *California's Ocean Resources: An Agenda for the Future* (California Ocean Agenda*)*. The Governor's directive requires that the Action Plan recommend important actions that can be taken by the Schwarzenegger Administration, the legislature, or by partners in industry, academia, public interest groups, and philanthropic interests. This plan addresses the challenges faced by California to protect and manage its watersheds, marine resources, water quality, world-class recreational beaches, and the ocean dependent economic uses that depend on these resources. The Governor directed that this plan be on his desk within 90 days.

At a minimum, the Governor directed that this Action Plan address the following:

- ***Governance.*** Actions that can be taken to improve the ocean and coastal governance structure in California and to institute a new era in protecting and managing our ocean and coastal resources with measurable results.

- ***Economics and Funding.*** Actions that can be taken to support adequate funding from a variety of sources for ocean and coastal management activities, and ways in which ocean and coastal dependent industries can function more efficiently.

- ***Research, Education and Technology Development.*** Actions that can be taken to support increased funding for a more robust system of research, education, and technology, including the development and implementation of a national integrated ocean observing system.

- ***Stewardship.*** Actions that can be taken to apply the evolving expertise and experience with ecosystem management to all matters dealing with ocean and coastal management in California.

A History of Leadership

California has been a leader in ocean and coastal management and continues to lead important initiatives for improving the management of fisheries, marine protected areas, water quality, shoreline erosion, and coastal development. California established the first coastal management program in the world with the creation of the San Francisco Bay Conservation and Development Commission (BCDC) in 1969. The 1972 California Coastal Conservation Initiative (Proposition 20) followed that trend for the rest of the coast and in 1976 both the California Coastal Commission and the California State Coastal Conservancy were formed. In 2000, California established the first comprehensive statewide and coastal non-point source pollution control program in the nation (implemented by the State Water Resources Control Board [SWRCB] and the California Coastal Commission) to receive full federal approval under both the Clean Water Act and the Coastal Zone Management Act. Innovations continue to occur with the management of ocean and coastal resources led by other California boards, commissions, and departments such as the Department of Fish and Game, the Department of Parks and Recreation, the State Lands Commission, the Department of Boating and Waterways, and the State Water Resources Control Board.

California chairs the Ocean Policy Committee of the Coastal States Organization and has helped develop state positions at the national level regarding revenue sharing, U.S. ocean policy, research needs, coastal zone management, and other pressing ocean and coastal issues. California served on the team to develop the unified position of coastal states submitted to the U.S. Commission on Ocean Policy. In the past four years, California has provided testimony on national ocean governance at hearings and forums before the U.S. Commission, the Pew Oceans Commission, the National Governors Association, and at the Pacific Islands Ocean Forum urging the adoption of strong protection and management measures. The California Resources Agency and California Environmental Protection Agency organized two international ocean conferences (California and the World Ocean 1997 and 2002) focusing on the development and

implementation of California's Ocean Agenda. The 2002 event included over 950 attendees from throughout the United States and six other nations.

The need for enhanced ocean and coastal management measures is underscored by the demands of California's growing population, both along the coast and inland. Approximately 34 million Californians were counted in the 2000 census; however, new data from the California Department of Finance indicates that the state is projected to pass the 40 million mark in 2012 and to top 50 million people by 2036. Population growth, and the attendant development of residential, industrial, commercial, and recreational facilities, will undoubtedly place additional stress on ocean and coastal ecosystems. There is a clear need for action to address our current management challenges and to prepare for the challenges that will be faced by future generations of Californians.

General Approach

The intent of this Action Plan is to recommend initial actions that the state should pursue to maintain its nationally recognized leadership role in managing and protecting ocean and coastal resources**.** A substantial amount of information was submitted to the Governor to assist him in his review of the Preliminary Report of the U.S. Commission on Ocean Policy from federal, state and local agencies, industry, academia, non-governmental organizations, the legislature, members of Congress, the military, and the general public. This information was extremely valuable for the preparation of this Action Plan. In addition to the extensive written comments received during the U.S. Commission report review, Secretary Chrisman and Secretary Tamminen co-sponsored the May 6, 2004 California Ocean Summit to solicit testimony from 21 California and national experts to provide perspectives and recommendations regarding the ocean/coastal research and education community, economic interests, and non-governmental organizations. The written comments, combined with the testimony received at the California Ocean Summit, provide an extensive record of the issues that need to be addressed at the national and state level.

The draft Action Plan was extensively circulated for comment and was the subject of two public workshops; one in San Francisco on August 19, 2004 and one in Newport Beach on August 20, 2004. The substantial input received (over 80 letters and 45 people testified at the two workshops) were almost entirely supportive, but comments, suggestions, and recommendations resulted in significant revisions and improvements to the Action Plan. The Action Plan now provides additional emphasis in the beginning of the document on some ongoing activities (or more immediate activities) that are recommended to occur.

Declines in the abundance and diversity of marine life have recently been documented; however, enlightened and proactive leadership can help reverse these declines. California is ready to do what it has done successfully so many times in the past − lead the nation. The goals of this Action Plan for leadership are both simple and bold. The Action Plan seeks to increase the abundance and diversity of aquatic life in California's ocean, bays, estuaries, and coastal wetlands; to make the water in those bodies cleaner; to provide a marine and estuarine environment that Californians can productively use and safely enjoy; and to support ocean dependent economic activities. These goals are generally consistent with the goals adopted by both the U.S. Commission on Ocean Policy and the Pew Oceans Commission.

This effort builds on California's legacy of leadership by determining how California can continue to take proactive approaches to ocean and coastal management with a specific emphasis on the following:

- Improving coordination of policy and funding for all ocean and coastal programs;
- Evaluating all relevant California laws and regulations regarding ocean/coastal management;
- Identifying existing and potential new governance and funding approaches; and
- Recommending how these approaches can be improved and enhanced to address a variety of the state's most pressing issues.

The Action Plan recognizes the interrelationships between governance; economics and funding; research, education, and technology development; and stewardship. For example, it includes actions to improve the efficiency and effectiveness of governance, to identify and support the science necessary to support decisions, to identify and support funding for these efforts, and to identify stewardship needs and priority actions. The Action Plan has been organized to *provide* the following:

- Immediate and Ongoing Actions;
- Comprehensive and Long-Term Actions;
- A summary and overview of major ocean and coastal issues facing the State of California (I), and
- A list of all acronyms used in the Action Plan (Appendix II).

IMMEDIATE AND ONGOING ACTIONS.

This Action Plan is based on establishing a long-term strategy for the management and protection of California's ocean and coastal resources. It identifies a systematic approach to ensure that California will be moving forward with a comprehensive approach to issues of governance; economics and funding; research, education, and technology development; and stewardship. The following is a summary of some of the major actions that are either ongoing or are will be immediate actions in the Action Plan.

- ***Sign the California Ocean Policy Act (COPA) into Law.*** The Schwarzenegger administration has worked closely with the Legislature and interest groups to help craft the California Ocean Protection Act, SB 1319. This bill will establish the California Ocean Council initiating a new era in ocean and coastal protection and management in California. The Council will coordinate and fund new actions to protect and manage California's Ocean and Coastal Resources and will be consistent with Governor Schwarzenegger's strong recommendations to the U.S. Commission on Ocean Policy to establish such a council at the federal level. Once again California will lead the nation

by example by taking this bold new step. The Fiscal Year 04/05 Budget for the State of California, approved by the legislature and signed into law by Governor Schwarzenegger, provides $10 million in Tidelands Revenues for implementing ocean and coastal management objectives. This money becomes available with the enactment of SB 1319 and when sufficient Tidelands funds become available.

- ***Demand Improvements in National Ocean Policy.*** The Schwarzenegger Administration will meet with the President's Council of Environmental Quality immediately following the release of the final report of the U.S. Commission on Ocean Policy to demand strong federal action to protect and manage California's (and this nation's) ocean and coastal resources. The Administration will urge immediate action on those portions of the U.S. Commission on Ocean Policy report, and those within the Pew Oceans Commission report or other sources, that will assist California and other coastal states to protect and manage ocean and coastal resources.

- ***Eliminate Adverse Impacts of Offshore Oil and Gas Development.*** The Schwarzenegger Administration will continue to defend California's right and duty to protect the California coast from the impacts of new offshore oil and gas leasing, exploration, or development on the federal Outer Continental Shelf. Specifically, the Governor will continue to urge the federal government and the oil and gas industry to reach a settlement agreement that will result in the extinction of the 36 leases in dispute located in the Outer Continental Shelf off the California Coast.

- ***Support the California Coastal Commission and Coastal Management.*** The Schwarzenegger Administration took rapid action to make three new appointments to the California Coastal Commission and has called on the federal government in his comments to the U.S. Commission on Ocean Policy to support and strengthen state coastal management programs and the nation's Coastal Zone Management Program.

- ***Implement the Marine Life Protection Act Initiative.*** The Schwarzenegger Administration has launched a unique new effort to implement the Marine Life Protection Act, which had been put on hold due to lack of funding. The administration has created a partnership among the California Resources Agency, Department of Fish and Game, Resources Legacy Fund Foundation, and others to implement the Marine Life Protection Act (MLPA). Implementation of the MLPA will lead to a network of marine reserves, marine parks, and marine conservation areas along the California Coast. California is the only state in the nation with this type of comprehensive legislation. The MLPA process has been identified by the National Oceanic and Atmospheric Administration's (NOAA) National Marine Protected Area Center as a national model for other coastal states to follow.

- ***Launch the Coastal Currents Monitoring System (Ocean Observation Systems).*** The Schwarzenegger administration has recently approved the final funding approval of a $21 million investment to establish a statewide coastal currents monitoring system that will provide real-time information to assist with fisheries management, oil spill movement, and even search and rescue operations. It will be the first step in

establishing a statewide Ocean Observation System making California a national leader in such systems.

- ***Complete the California Coastal Sediment Management Plan.*** The Schwarzenegger administration has been working with members of the National Shoreline Study at the U.S. Corps of Engineers to make the California Coastal Sediment Management Plan (CCSMP) a pilot approach for the nation. The CCSMP is providing a first-ever statewide assessment of sediments (sand) from watersheds and along the coast to help develop regional sediment management solutions to addressing issues such as coastal erosion, port maintenance, and wetland restoration.

- ***Develop an Ocean and Coastal Stewardship Campaign.*** The Schwarzenegger administration will work with members of government, academia, industry, and non-governmental organizations to develop a series of public service announcements to help get the word out regarding the role of average citizens in protecting and managing California's ocean and coastal resources. Through a variety of partnerships, this could be achieved at little or no cost to the state and could have a significant impact.

- ***Identify, Assess, and Enforce Existing Laws.*** The Schwarzenegger administration is conducting an inventory of all existing laws that impact ocean and coastal resources and their management. This inventory will be followed by an assessment to determine the effectiveness of these laws and regulations, areas where more vigorous enforcement may be needed, and to identify any gaps in enforcement resources.

- ***Develop a Long-Term Funding Strategy for Ocean and Coastal Protection and Management.*** The Schwarzenegger administration will identify California's current level of investment in ocean and coastal management, enforcement, monitoring, and research and education and use this information to identify gaps, areas of overlap, and to develop a long-term funding strategy.

- ***Continue Support for the Clean Beaches Initiative.*** The goal of the California Clean Beaches Initiative (CBI) is to improve water quality at recreational beaches. The SWRCB is the primary entity responsible for implementing the CBI and is delivering grant funds to local agencies to control pollution sources.

COMPREHENSIVE AND LONG-TERM ACTIONS

The following provides analysis and recommended actions for Governance; Economics and Funding; Research, Education, and Technology Development; and Ocean and Coastal Stewardship.

A. GOVERNANCE

The Governor's comments on the Preliminary Report of the U.S. Commission on Policy focused on the degree of fragmentation, duplication, and confusion that is present in the federal system of ocean and coastal governance. The Governor concurred with

recommendations to elevate ocean and coastal governance issues at the federal level and to provide the most effective and efficient ways to coordinate agency actions that are both necessary and warranted. It is clear that California must pursue similar actions at the state level to improve the comprehensive and coordinated management, conservation, and enhancement of its ocean and coastal resources. This Action Plan is a first step in that process.

Governance Analysis

Ocean and coastal planning and regulation is fragmented at both the federal level and within California resulting in reduced efficiency and effectiveness of efforts to ensure clean water, productive habitats, sustainable fisheries, and functioning recreational beaches. The fragmentation at the federal level has been documented in the reports of the U.S. Commission on Ocean Policy and the Pew Ocean Commission. Of primary importance to the future of California ocean and coastal management is the ability of the federal government to make needed reforms that improve access, accountability, and responsiveness to management efforts at the state and local levels.

Fragmentation at the state level was well documented in the California Ocean Agenda in 1997, as well as in more recent findings and analyses. Authority for ocean and coastal management is currently included in a variety of statutes located in seven different California codes: Fish and Game, Government, Harbors and Navigation, Health and Safety, Penal, Public Resources, and Water. Statutes crisscross various code sections to achieve a variety of single-issue purposes, but their historic development on an incremental basis has led to a body of law lacking cohesion. This fragmented approach often results in confusion over agency roles and responsibilities, making it difficult for ocean and coastal users and government regulators to understand legal requirements relating to a specific issue. Many improvements have been made since these findings were first made in 1997. Legislation and administrative initiatives have provided badly needed coordination of many programs and our ability to address many issues such as fisheries, marine protected areas, water quality protection, and shoreline protection has improved significantly. We need to build on those successes and to address those areas where fragmentation still impedes the implementation of the most effective and efficient approaches. California remains a leader in ocean and coastal management despite these remaining challenges; however, improvements can and should be made.

The challenges that we face are substantial, but not insurmountable. In fisheries, we are experiencing significant declines in some species, but also have witnessed that species can move toward recovery with new management approaches and a little help from Mother Nature. New statewide fishery management approaches are in the early stages of implementation and new ones are being considered; it is anticipated that these efforts will yield future benefits.

Terrestrially based sources of ocean pollution in California contribute to significant water quality degradation, impacting public health and marine ecosystems, as well as coastal and recreational economics that are essential to California's future. The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) have made significant progress, and continue to do so, in controlling point sources of industrial and

sanitary sewage in our coastal waters and bays. Standards have been set by the SWRCB, and approved by the US Environmental Protection Agency (US EPA), in state water quality control plans such as the California Ocean Plan, and in the Basin Plans of the coastal RWQCBs. Yet many of California's coastal watersheds, beaches, bays, and nearshore waters are impaired (i.e., do not meet these standards) to some degree, often due to agricultural drainage, storm water pollution, the introduction of trash, and other nonpoint source runoff. However, we are making further progress with programs like the coastal Nonpoint Source Pollution Control Program (implemented cooperatively by the Coastal Commission and SWRCB), the Clean Beaches Initiative, the regulatory control of storm water discharges by SWRCB and Regional Boards, and a variety of watershed, beach cleanup, and stewardship programs. Some of our beaches have lost their supply of sand due to the construction of dams, coastal armoring, and other impediments to sand movement. We are working on ways to re-establish natural sources of sand and to better manage our sediment (sand) resources.

While regulatory activities have made significant progress in reducing the flow of sewage and waste materials released into the ocean from the shore, one source that has had little or no state regulation is pollution from vessels. Sewage, sludge, blackwater, graywater, bilge water, and other waste materials are routinely discharged from vessels into California's coastal waters. To address some of these concerns, the State Legislature passed legislation (Assembly Bills AB 121 and 906) in 2003 and is currently considering (AB 2093 and 2672) legislation that prohibit certain waste discharges from large passenger vessels into California marine waters. This legislation also requires reporting of prohibition violations to the State Water Resources Control Board (SWRCB).

The fact is that protection and management measures, when based on sound science, can yield significant results. California must systematically re-assess the governance system that guides its protection of ocean and coastal resources. This assessment must reach from our inland watersheds to the deep ocean waters off our coast.

Action 1

The Schwarzenegger Administration will call on the President of the United States and the Council of Environmental Quality to support the major provisions of the final report of the U.S. Commission on Ocean Policy, and other national ocean and coastal recommendations from the Pew Ocean Commission report or other sources, that are acceptable to California. The Oceans Act of 2000 requires the President of the United States to submit to Congress a statement of proposals to implement or respond to the Commission's recommendations within 90 days of the receipt of the report. The President is further required to consult with state and local governments and non-federal organizations and individuals involved in ocean and coastal activities during the preparation of his report to Congress. To achieve this coordination and to urge action at the federal level, California will pursue the following actions:

- *Conduct a thorough review of the Final Report of the U.S. Commission on Ocean Policy to determine if it addresses California concerns.* The findings of that analysis should be communicated to the California Congressional delegation, members of the legislature, and other interested parties.

- *Consult with the Coastal States Organization, the Western Governors Association, and the National Governors Association to identify consensus concerns among states regarding the findings contained within the final report.* Principle among these would likely be the need to re-authorize a strong Coastal Zone Management Act, but there are many other issues where clear agreement exists between states.

- *Schedule a meeting with the chair of the President's Council of Environmental Quality within 30 days of the release of the Final Report of the U.S. Commission to demand strong actions to address California concerns and those shared with other states.* Use this meeting to urge the President to submit a strong statement of proposals to Congress that advance coordinated and appropriately funded management efforts at the federal, state, and local levels.

- *Work with the administration and members of Congress to ensure the implementation of long-term measures to improve the management and protection of ocean and coastal resources that coincide with the recommendations included in this Action Plan.*

Action 2

Continue California's ocean and coastal leadership role by signing the California Ocean Protection Act (SB 1319) into law to establish a cabinet-level California Ocean Council with a mission to help ensure comprehensive and coordinated management, conservation, and enhancement of California's ocean and coastal resources for their intrinsic value and for the benefit of current and future generations. The Schwarzenegger administration has worked closely with the Legislature and interest groups to help craft the California Ocean Protection Act, SB 1319. This bill will initiate a new era in ocean and coastal protection and management in California. The Council will be chaired by the California Secretary for Resources and will include the California Secretary for Environmental Protection and the chair of the California State Lands Commission. It will also include ex-officio representation by members of both the California State Senate and the State Assembly. The Council will seek the active participation of all relevant state departments, boards, and commissions, other levels of government, and ocean and coastal stakeholders from industry, academia, and the public in its deliberations.

The Council will coordinate and fund new actions to protect and manage California's Ocean and Coastal Resources and will be consistent with Governor Schwarzenegger's strong recommendations to the U.S. Commission on Ocean Policy to establish such a council at the federal level. Once again California will lead the nation by example by taking this bold new step. The Fiscal Year 04/05 Budget for the State of California, approved by the legislature and signed into law by Governor Schwarzenegger, provides $10 million in Tidelands Revenues for implementing ocean and coastal management objectives. This money becomes available with the passage of SB 1319 and when sufficient Tidelands funds become available.

This Council will re-evaluate the comprehensive, or "big picture," needs of California ocean and coastal management and create a strategic vision for the future that improves coordination and provides more efficient and effective methods of managing ocean and coastal resources.

A foundation of the mission of this Council will be to encourage the implementation of ongoing and new ecosystem approaches to ocean and coastal management. These activities will require a thorough identification and examination of existing laws, regulations, programs, and funding streams to implement them. Critical to these efforts will be for the Council to set firm deadlines for the development a strategic and infrastructure needs plan for managing California's ocean and coastal resources. It will also require an examination of how state agencies can do a better job addressing specific issues facing the state regarding water quality, habitat protection, fisheries management, maintenance of our beaches and shoreline infrastructure, and other issues.

Some major actions of the California Ocean Council will include the following:

- *Update the California inventory of ocean and coastal laws and regulations for use by the California California Ocean Council, legislators, industry, and the public by January 1, 2005 and determine if these laws are being enforced.* California was one of the first states in the nation to provide a directed inventory of its ocean and coastal laws and regulations. This inventory was prepared for inclusion in the 1997 California Ocean Agenda, and helped policy makers and legislators better understand the magnitude of the legal and regulatory structure in California for ocean and coastal management. One of the first actions of the U.S. Commission on Ocean Policy was to create for the first time an inventory of all federal laws (144 laws were identified). The new federal inventory provided a basis for the U.S. Commission analysis of program efficiency and for ways to improve it. An updated state inventory can serve the same purpose for California.

  The Council will commission a law enforcement assessment to determine the effectiveness of these laws and regulations, areas where more vigorous enforcement may be needed, and to identify any gaps in enforcement resources. This assessment should also be crafted so that periodic updates can be conducted to determine if progress is being made to achieve enforcement goals over time.

- *Identify successful California models of regional ocean and coastal stewardship and design new federal and state approaches to support them and to use them as models for future management approaches.* A major aspect of ecosystem management is to move beyond case-by-case or species-by-species approaches to management that focuses instead on ecosystem protection needs – often at a regional scale. This makes sense on an ecological basis, but also because such approaches can mobilize multiple levels of government and stakeholders to more efficiently and effectively address these issues.

  One example is the approach taken in the implementation of the Southern California Wetlands Recovery Project (SCWRP) for wetland acquisition and enhancement. Regional wetland partnerships such as the SCWRP focus on a defined regional area and incorporate the resources, views, and expertise of agencies and organizations at the federal, state, and local level. Since its inception in 1998, the SCWRP has acquired 4,700 acres and restored 552 acres of coastal wetlands. The total number of projects it has funded to date is 68, with 25 of these already being completed. Other regional

wetland partnerships operating in California include the Pacific Coast Joint Venture, Central Valley Habitat Joint Venture, the San Francisco Bay Joint Venture and San Francisco Bay Wetlands Restoration Program, and the Riparian Habitat Joint Venture. The California Resources Agency in cooperation with the State Coastal Conservancy is currently funding an effort to evaluate the potential for establishing a Central Coast wetlands partnership. These efforts have a proven success record and projects are moving forward more rapidly and for less cost because of the efficient use of the combined resources and expertise of SWRCP participants.

Regional approaches are now being used for the creation of the statewide Coastal Sediment Management Master Plan (evaluating issues with sand movement and erosion along the coast) and will be the focus of efforts in the implementation of the Marine Life Protection Act (evaluating the need for systems of marine protected areas such as marine reserves, parks, and conservation areas). The Southern California Coastal Water Research Project has used a regional approach which combines the resources of government, dischargers, and other partners to support regional monitoring that assesses the status of water quality throughout the entire Southern California Bight, instead of measuring pollutants at the end of a pipe. Reforms to management at the state and federal level should be designed to support these regional efforts and to consider new ones which can demonstrate more efficient and effective use of limited resources.

Acting as the coordinating body for these regional partnerships, the Council will create a summary of projects along the entire coast, identify gaps, and create a system for prioritizing, funding, and implementing projects over time.

- *Develop enhanced partnerships with other levels of government (federal and local), industry, academia, non-governmental organizations, and philanthropic organizations to carry out ocean and coastal management objectives.* Limited funding at the federal, state, and local levels emphasizes the enhanced need for more efficient and effective processes and partnerships for ocean and coastal management. For example, the renewed implementation effort for the Marine Life Protection Act simply could not have gone forward absent a combination of resources from the state and federal government, academia, and philanthropic organizations. The California Ocean Council can also build on existing partnerships such as the state-federal designation of the three California National Estuarine Research Reserves (San Francisco Bay, Elkhorn Slough, and Tijuana River), the three National Estuary Programs (Santa Monica Bay, Morro Bay, and San Francisco Bay), the San Francisco Bay Restoration Program, and the California Coastal Nonpoint Source Pollution Control Program. New organizations such as the California Ocean Science Trust are intended to help fund research partnerships to improve the translation of science to management. The regional efforts described previously are also dependent on the development of such partnerships.

  Acting as a coordinating body for these efforts, the Council will set a goal to establish a network of coastal and water quality monitoring projects, integrating academic, volunteer, and government programs to ensure the maximum monitoring that can feasibly be provided to assess biological productivity and water quality. This effort

should be closely coordinated with, if not incorporated into, the U.S. EPA Western Environmental Monitoring and Assessment Program (EMAP), the Surface Water Ambient Monitoring Program (SWAMP) of the SWRCB and Regional Boards, and the ocean observation system currently under development in California. This effort will help inform policy makers and the public on additional coastal management and protection needs and help measure our progress toward ocean and coastal management goals.

- *Monitor California's interests regarding international treaties (such as Law of the Sea) and its relationships with international organizations such as the International Maritime Organization regarding ocean and coastal management needs.* California has interests in international treaties and organizations for management issues that directly or indirectly impact the state. The Governor has expressed his support for the ratification of the Law of the Sea Treaty, for example, which would allow the United States to be fully engaged in management and commerce matters at the international level. California has specifically benefited from intervention in international processes just off its coast. California worked with the U.S. Coast Guard, the National Marine Sanctuary Program, and the International Maritime Organization (IMO) to alter the location and configuration of the vessel traffic scheme for ship traffic off the central California coast to increase the safety of these operations. The result is that vessels with the potential to spill oil or other hazardous cargoes are now routed farther off the coast to reduce the risk of groundings, to lessen the chance of spilled oil reaching shore, and to provide more response time for spills that do occur.

California needs to continue working with these and other organizations such as the European Union (EU) to improve the water quality of the ocean by reducing vessel waste. The EU prohibits the dumping of sewage and effluents in the waters of all its member nations and requires all ships to use waste reception facilities in port. All EU member nations have installed waste reception facilities to handle all of the vessels that call upon their ports. In addition, the nations have developed various methods to pay for the construction and operation of their facilities and a disincentive fine process for vessels that do not use the waste reception facilities. The individual countries have an inspection process to verify wastes contained aboard the vessels, vessel's records of waste disposal, and a facilities records cross-check procedure. California does not have reception facilities capable of handling ship-generated sewage and wastewater; however, it can learn from the EU how to fund construction of reception facilities and vessel inspection programs. The IMO has international sewage regulations that become effective in 2004. These regulations require the mandatory use of port reception facilities if they are available. This and emerging ocean management issues in the Exclusive Economic Zone and along our border with Mexico will necessitate ongoing attention to international issues.

- *The California Ocean Council will help ensure adequate planning, readiness, and coordination of ocean and coastal emergency response.* The Office of Oil Spill Prevention and Response (OSPR) has prepared an environmental sensitivity index to address fish, wildlife, and habitat concerns which help guide response actions. The Council will ensure that this database is current at all times and that guidance is provided to ensure the frequency and minimum criteria for emergency response training

and exercises. These actions will be necessary to ensure that coastal resources are adequately protected to the maximum extent practical when emergencies occur.

- Consistent with the August 2003 *Report to the Legislature - Regulation of Large Passenger Vessels in California* by the Cruise Ship Environmental Task Force, the California Ocean Council should evaluate this issue and consider if the state should pursue changes in federal law to allow California to establish a discharge prohibition in state waters.

- *Sponsor a California and the World Ocean conference for the spring of 2006.* Nearly 40 years ago California sponsored the first California and the World Ocean conference, the 1964 *Governor's Conference on California and the World Ocean,* in Los Angeles to discuss the emerging issues surrounding ocean and coastal management. The conference was re-established in 1997 and held again in 2002. These more recent conferences have focused on the many challenges facing our state with a current population of 35 million and climbing, as well as the challenges faced nationally and internationally in anticipation of the release of the Pew and U.S. Commission reports. Another conference in 2006 would be well timed to assess and help drive new directions in California, at the national level, and throughout the world. The California Ocean Council will sponsor a conference every four years thereafter to report on progress made on water quality, habitat restoration and protection, law enforcement, fisheries protection, and other shared ocean and coastal values and goals.

- *Consider Native American Rights and Cultural Resources.* It is important that our state's cultural, historic, prehistoric, and archeological features be protected for current and future generations. California and federal law focus special attention on the protection and preservation of burial sites and other sacred sites of Native Americans. For example, CEQA requires a lead agency to take into consideration whether a project will have a significant effect on archeological resources, which may include California Native American culturally significant sites. (See Cal. Pub. Res. Code section 21083.2.) Other state statutes set forth procedures relating to the discovery of human remains of Native Americans. (See, e.g., Health & Safety Code section 7050.5 and Pub. Res. Code section 5097.98.) Under federal law, federal agencies must take into account the impact of an action on sites eligible for inclusion in the National Register, which may include properties of traditional religious and cultural importance to Native American tribes. (See 16 U.S.C. § 470a(d)(6)(A); 16 U.S.C. § 470f.) Therefore, in implementing any recommendations of this Action Plan, agencies should consider the interests of Native American communities as well as comply with all state and federal statutes protecting Native American burials and artifacts.

- *Coordination with the Department of Defense.* It is important to coordinate California ocean and coastal management activities that impact military facilities/operations with the Department of Defense, as well as requesting the Department of Defense to coordinate their activities and operational needs with the State of California to the extent possible without compromising national security objectives.

B. ECONOMICS AND FUNDING

California's 1997 Ocean Agenda included the first assessment of the economic contribution of ocean dependent industry ever conducted in California, and probably the first such comprehensive analysis to be conducted for any coastal state in the nation. The 1995 *Economic Assessment of Seven Ocean-Dependent Activities* prepared by the California Research Bureau for the California Resources Agency established that the ocean plays a critical role in the statewide and national economies. Although this analysis is over 14 years old, it continues to be used and cited extensively. The Resources Agency has contracted for a new California ocean and coastal economic analysis, which is being conducted as part of the National Ocean Economics Project.

California does not have a comprehensive assessment of its major investments in ocean and coastal management, enforcement, monitoring, research, and education. Part of the problem with assessing this investment is that many departments, boards, offices, conservancies, and commissions have lead or partial roles in these issues. In order for California to maximize its investment in protecting and managing its ocean and coastal resources, it needs to examine the thrust of these investments to identify gaps and areas of overlap.

Economics and Funding Analysis

There is no accounting system in place in the United States or in California to regularly assess the economic benefits derived from the ocean and coast. In addition, there is no comprehensive evaluation of the levels of investment in California to fund ocean and coastal management and protection programs. Actions are necessary to improve our understanding of the economic benefits of the ocean and coast and to determine the most effective and efficient management investments. The California Resources Agency has contracted for a new and updated economic analysis to be prepared by members of the National Ocean Economics Project so that the results will be consistent with data being produced in other coastal states. This will permit comparability between states and will allow the results to contribute to a national database. In addition to the need to complete an analysis of the economic benefits derived from the ocean and coast, there currently exists no comprehensive analysis to assess the level of investment that California is making in ocean and coastal management activities.

Action 3

Finalize, distribute, and make use of the California portion of the National Ocean Economics Project (California's Ocean Economy) to help inform decision makers and members of the public about the economic benefits derived from the ocean and the coast. California, as a national leader in conducting this analysis in the past, can continue in that role by completing this analysis and widely distributing the results.

Some major actions of the California Ocean Council will include:

- *Hold an "Ocean and Coastal Economic Symposium" to seek consensus from leading economists from government, academia, the private sector, and the non-governmental*

community regarding the economic contribution of the ocean and coast to the California and national economies. The overall objective of the symposium will be to seek agreement from a wide range of economists about how to identify and express the economic contribution of the ocean and coast to California and how to continue this process on an annual basis. This session can also be used to identify additional areas of inquiry to be considered for future economic data gathering and analysis.

- *Identify California's current level of investment in ocean and coastal management, enforcement, monitoring, research, and education and use this information to identify gaps, areas of overlap, and to develop a long-term funding strategy.* Request the California Legislative Analysts Office, in collaboration with the Joint Committee on Fisheries and Aquaculture, to conduct an inventory and analysis of state funding for important ocean and coastal management, enforcement, monitoring, research, and education programs. Key to this analysis will be to use the information to help determine if California's investment is providing the most effective and efficient management and protection of California's ocean and coastal resources.

  This information will be used to support the formation of a long-term funding strategy that places significant emphasis on seeking funding assistance and partnerships with the federal government, non-governmental organizations, industry, and philanthropic interests. Testimony and written comments received from the Pacific Coast Federation of Commercial Fishermen and the Institute of Fisheries Resources indicate that consideration be given to establishing a fishery trust fund supported by fees on seafood sales in the United States. These and other long-term funding alternatives need to be systematically identified and evaluated.

- *Support the establishment of the National Ocean Policy Trust Fund recommended in the Preliminary Report of the U.S. Commission on Ocean Policy.* The Governor should continue to support the establishment of a National Ocean Policy Trust Fund, or similar federal funding mechanism, on the assumption that such a fund could provide a sustainable source of funding and that such a fund would not provide incentives for future offshore oil and gas development or other activities that may have unacceptable adverse impacts to ocean and coastal resources. California is opposed to new offshore oil and gas development along its coast. The state has prevailed in litigation against the U.S. Department of the Interior regarding its right and duty to ensure that any re-issuance of oil and gas tracts on the Outer Continental Shelf (OCS) be consistent with the requirements of the National Environmental Policy Act and the Coastal Zone Management Act (CZMA). California would vigorously oppose any funding process that would provide incentives for new offshore oil and gas development on the OCS.

- *Pursue the development of significantly more federal matching funds for ocean, coastal, and estuarine conservation projects.* Leverage of federal funds would significantly advance the state's efforts to implement conservation projects to address ecosystem management, water quality, public health, and recreation needs. For example, California has had a long standing relationship with programs such as the California Sea Grant Program where the federal government provides substantial funding compared to the state investment and works cooperatively with the state to help direct

those funds to help serve important management objectives. Such partnerships need to be extended to other aspects of California ocean and coastal management. Some initiatives to provide additional federal funds for such projects include: 1) the amendment of the Coastal Zone Management Act to authorize funding for acquisition of coastal and estuarine areas, and 2) the development of competitive matching grants, such as under the existing Coastal and Estuarine Land Protection Program. The California Ocean Council will work with relevant departments, boards, and commissions to identify all such opportunities (particularly with the potential for upcoming improvements to governance at the national level) and develop a program to systematically pursue them.

C. RESEARCH, EDUCATION AND TECHNOLOGY DEVELOPMENT

The State of California has collaborated on research and monitoring initiatives on a long-term basis with entities such as the California Cooperative Oceanic Fisheries Investigations (55 years), the University of California (UC) and University of Southern California (USC) Sea Grant Programs (over 30 years), and collaborations with organizations such as the Southern California Coastal Water Research Project (35 years). There have also been investments in more recent endeavors such as the California Data Information Program (CDIP), marine managed area research through California Sea Grant, and new bond fund investments in the emerging California Ocean Currents Monitoring Program. Education programs exist at a variety of levels from technical doctorate programs and field programs to the education of school children at the K-12 level. Partnership programs exist with the University of California, the California State University System, and private institutions, as well as with federal programs such as the National Marine Sanctuary Program, National Estuary Program, and National Estuarine Research Reserve Program. Non-profit organizations also provide an impressive array of research, education, and outreach initiatives.

California has led the nation in its ocean and coastal science research and monitoring programs over the years. Continuing in that leadership role California is launching a $21 million Ocean Currents Monitoring System that is being designed primarily to provide water quality and spill transport information, but will also be useful in climate research, fisheries management, and even search and rescue operations. This new monitoring system will provide the structure for an overall ocean observation system for California, which would be one of the first such systems in the nation. This system, along with the research initiatives mentioned above, is being designed to help support California ocean and coastal management and protection objectives.

Research, Education, and Technology Development Analysis

Government, academia, industry, and the non-governmental community need to develop a strategy to identify and pursue the highest priority research and outreach objectives to assist ocean and coastal management needs. Research should be the foundation of good public policy, but often it is not. Therefore, it is important to identify and pursue the research that will address the highest priority management questions facing the State of California. California is blessed with world-class research institutions, substantial expertise within its boards, departments, and commissions, as well as expertise from industry

and non-governmental organizations. It will be important to seek consensus where possible on ocean and coastal research priorities for California and then to work with all these entities to obtain the funding, to share resources, and to apply the knowledge gained to real world management challenges.

Action 4

Develop a state-wide ocean and coastal research and outreach strategy with clearly stated priorities for California. The California Ocean Council will identify and evaluate the ocean and coastal research and outreach needs for the State of California and develop a statewide strategy in a process sponsored by, and in collaboration with, the University of California Marine Council (UCMC), the California Ocean Science Trust (CalOST), and California Sea Grant.

The UCMC, CalOST, and California Sea Grant are willing to partner with the California Resources Agency and California Environmental Protection Agency (Cal/EPA) and their constituent departments, boards, and commissions to help fund and participate in a facilitated meeting which has been scheduled for November 2004. All three of these entities are already in the process of strategic planning for their organizations. These strategic planning efforts would coincide with the development of this California Research and Outreach Strategy and participants will include representatives from government, industry, academia, and non-governmental organizations. The result will be the concurrent development of information leading to a state-wide strategy for the State of California and the strategic plans of the three other partners. This approach will provide for a consistent and cost-effective process for all participants with the added benefit that money saved can be directed to research, instead of conducting four duplicative planning processes. The California Ocean Council will use information from this facilitated meeting to develop a draft statewide strategy which would then be circulated for full public review and comment prior to final adoption.

Action 5

Ensure that ocean and coastal education is included in the environmental principles and concepts being developed pursuant to the implementation of the Education and the Environment Initiative (Pavley, Chapter 665, Statutes of 2003 - AB 1548). The California Ocean Council will closely participate in this process as part of the education partnership that will address the incorporation of environmental principles and concepts into the K-12 curriculum. Principle among them will be the need the incorporate ocean and coastal learning opportunities.

Action 6

Form collaborative partnerships with not only those providing K-12 and collegiate formal education, but also with institutions, organizations, and governmental agencies providing informal education opportunities for pre-schoolers to senior citizens, including the underserved minorities. These programs are offered through aquariums; state programs such as the Coastal Commission, Department of Fish and Game, and State Parks; federal programs such as the National Marine Sanctuaries; National Estuarine

Research Reserves; National Estuary Programs; and programs run by non-governmental organizations. Testimony and written comments received on the development of this Action Plan have identified many such programs located throughout the state. As part of this collaboration, the California Ocean Council will work to develop and organize a statewide database that captures information about ocean related informal education programs offered in non-academic settings. In addition, some comments have suggested the need for more training programs for professionals in the maritime industry or for training programs by state or federal technical experts for local governments. These professionals are often at the front lines of ocean and coastal management issues and are responsible for complying with federal or state mandates.

Action 7

Launch an ocean and coastal stewardship media campaign by working with members of government, academia, industry, and non-governmental organizations. This campaign would, at a minimum, include a series of public service announcements to help inform citizens about their role in protecting and managing California's ocean and coastal resources. Through a variety of partnerships with business, media, formal and informal educational institutions, the tourism industry, and governmental agencies, this could be achieved at little or no cost to the state; however, such a campaign could have a significant impact. Existing programs that address polluted runoff, fisheries management, protection of sensitive habitats, and other ocean and coastal issues provide excellent written publications, information via the internet, and information via public presentations; however, it remains difficult to get the word out to the public that simple actions can make a difference. For example, simple messages such as not putting oil in a storm drain require broad distribution to the general public in a simple, yet compelling way. In 2002, the California Resources Agency, Cal/EPA, the Earth Communications Office, Warner Brothers, and other partners worked together over a five week period to produce a video for the California and the World Ocean '02 conference held in Santa Barbara, California. The video was a success and it was clear from that experience that successful collaborations can occur. The California Ocean Council will pursue the development of this stewardship campaign so that these important messages can get broader distribution.

Action 8

Develop a Coastal Ocean Observation Strategic Plan (Strategic Plan) to guide the allocation of the state's $21 million investment in the Ocean Currents Monitoring System and its integration with all existing and future observing and monitoring systems*. Existing systems include the following:*

- *Systems in which the state has taken the lead, such as the State Coastal Conservancy's Coastal Ocean Currents Monitoring Program and the Department of Fish and Game's Cooperative Research and Assessment of Nearshore Ecosystems program (CRANE);*

- *Collaborations among marine science institutions and agencies, such as the California Cooperative Oceanic Fisheries Investigations (CalCOFI), Southern California Coastal*

Ocean Observing System (SCCOOS), Central and Northern California Coastal Ocean Observing System (CeNCOSS), and the California Current Joint Venture;

- *Regional monitoring programs such as the Southern California Coastal Water Research Project;*
- *Academic collaborations, such as the Partnership for Interdisciplinary Studies (PISCO); and*
- *Federal programs, such as the National Marine Fisheries Service annual juvenile rockfish surveys.*

The Strategic Plan should be designed to meet the information needs of likely end users from government, academia, industry, and the public, and identify gaps in coastal ocean observing that need to be filled. The development of this Strategic Plan should proceed in close coordination with the research and education needs evaluation described previously, relevant research institutions, and the National Oceanic and Atmospheric Administration. California is demonstrating national leadership in this effort and has developed collaborations with marine science institutions and agencies in Southern California (SCCOOS) and in Central and Northern California (CeNCOOS). The Strategic Plan must be designed to integrate the products of the wide range of existing and potential future observing systems.

Action 9

Revitalize the California Ocean and Coastal Environmental Access Network (CalOcean) on the California Resources Agency Website to provide access to marine data sets, geographic information systems, electronic documents, information regarding organizations, and marine and coastal news. The California Resources Agency currently hosts the CalOCEAN website which allows users to learn about the California Ocean Resources Management Program and to search for information regarding ocean and coastal management. However, budget cuts over the years have reduced the ability to maintain this system with up-to-date links and state-of-the-art data access systems. There is clearly a need to upgrade this system to provide information to policy makers, industry, academia, and the public. In addition to providing access to existing data, CalOcean could play a critical role in identifying the need for additional information such as baseline parcel data for the coastal properties to assist local governments and the Coastal Commission in their planning and regulatory activities.

D. OCEAN AND COASTAL STEWARDSHIP

California has played a leading role in developing and implementing an ecosystem approach to managing fisheries, marine and estuarine habitats, water quality, shorelines, and other resources. As the Preliminary Report of the U.S. Commission on Ocean Policy states, ecosystem management “looks at all the links among living and nonliving resources, rather than considering single issues in isolation.” California’s Ocean Agenda made clear in 1997 that ocean and coastal management must consider all the linkages within California’s entire ocean

ecosystem, including inland watersheds; bays, estuaries, and coastal lagoons; nearshore ocean waters; and deep ocean waters. All of these areas are biologically connected, and the challenge has been and will continue to be to make our system of governance responsive to these ecological relationships.

Ocean and Coastal Stewardship Analysis

The recommendations of the U.S. Commission on Ocean Policy, and the ocean and coastal protection and management needs of the State of California, make a compelling case for ecosystem management approaches. Although there appears to be broad agreement regarding the logic and theory of ecosystem management, the conversion of federal and state processes to adhere to these principles is not simple. California is using ecosystem approaches in many of its management processes now, and many of these efforts are being done in collaboration with the federal government. These include processes such as the implementation of the Marine Life Management Act offshore, and new watershed based management approaches onshore. It is clear that our long-term ocean and coastal protection and management programs must address the relationship between land and sea which often crosses many jurisdictional boundaries. However, these processes are often difficult to initiate and sustain as they combine new innovative approaches with a body of law, policy, and funding practices that often do not encourage such approaches. The challenge at the federal and state levels is to coordinate agencies and other partners to work on such initiatives, to identify changes in law and policy that will actually encourage, rather than discourage, such innovation, and to help get these initiatives funded. This leadership can start with the California Ocean Council and with the formation of the National Ocean Council recommended by the U.S. Commission on Ocean Policy.

Action 10

Increase efforts to pursue, support, implement, and establish long-term funding for coordinated ecosystem management approaches at the federal, state, and local levels to guide and improve the stewardship of ocean and coastal resources. The successful long-term implementation of ecosystem management will require a commitment of political will and funds from the highest levels of both the federal and state government. Neither can achieve this form of management alone, but both must work together and with other stakeholders to identify changes in laws, policies, and funding approaches that can make these complex processes a reality in the long-run. The California Ocean Council and the recommended national ocean council can help by providing greater support for existing ecosystem processes and by identifying other management areas that can be modified to adopt this approach. This Action Plan recommends the building blocks for California to achieve these advances (i.e., establishing a California Ocean Council). The Council will examine existing law and policy, evaluate the economic contribution of the ocean and coast and the current level of investment in management, and develop a clear ocean and coastal research, outreach and education approach to support these efforts. Examples of these types of coordinated management approaches include the Marine Life Protection Act, the Marine Life Management Act, the Southern California Wetlands Recovery Project, the Coastal Nonpoint Source Program, and others which are, and should remain, a top priority for the State of California.

Action 11

Restructure, focus, and strengthen the "California Watershed Management Memorandum of Understanding (MOU)" to identify priority watersheds for resource protection and use, fishery recovery, and water quality, and improve delivery of state technical and financial assistance to impaired coastal watersheds. Multiple state entities within the California Environmental Protection Agency (Cal/EPA) and California Resources Agency currently administer programs that provide technical assistance or financial support for various aspects of watershed management and hundreds of local watershed partnerships. The 103 Resource Conservation Districts within the state play a critical role in watershed planning and management. Improved watershed management can start at the state level with the coordination of state technical assistance and funding and the integration of state regulatory programs to address the most impaired coastal watersheds and the most critical resource protection needs. Critical to the success of these state efforts will be coordination with other levels of government and other stakeholders must be partners in future approaches.

Specific actions include the following:

- *Draft and execute a new MOU requiring coordination of existing state programs;*
- *Evaluate and prioritize coastal watersheds and focus state resources and efforts in cleaning up, protecting, and/or restoring these watersheds as soon as possible; and*
- *Facilitate development and implementation of one or more integrated coastal watershed management plans.*

Action 12

Integrate coastal water quality programs to improve their efficiency and effectiveness in cleaning up coastal watersheds, estuaries, bays, beaches, and near-shore waters. The state currently has several programs focused on coastal water quality and fisheries recovery including the Total Maximum Daily Load (TMDL) program of the SWRCB and Regional Boards, Clean Beaches, Coastal Nonpoint Source Pollution Control, Integrated Watershed and Integrated Regional Water Management programs, Fishery Grants programs, Coho Recovery Plan, as well as numerous other programs housed in Cal/EPA and the California Resources Agency. The California Ocean Council will develop an action plan to coordinate state financial and technical assistance programs to facilitate projects and programs that restore and protect coastal and nearshore resources, habitats, and water quality. To focus implementation on the most impaired watersheds, the state will use the SWRCB's Clean Water Act Section 303(d) listings of impaired waters that do not meet the water quality standards of the California Ocean Plan, the State Implementation Policy (SIP) for the California Toxics Rule, and the Regional Board Basin Plans. TMDLs will be developed to restore water quality in these watersheds based on the prioritization established by the TMDL programs of the Regional Boards in consultation with other state agencies. Through these processes the state should establish

clear limitations on the quantity and quality of pollution discharges that are plain and unambiguous and contain readily identifiable indications of success or failure.

Action 13

Identify and prioritize issues that may benefit from additional coordination by the California Ocean Council. California faces ongoing challenges in its efforts to manage and protect marine habitats, living marine resources, the very existence of beaches, and to maintain substantial economic uses and infrastructure. Appendix I provides a summary and overview of many of those issues which the Council will consult in determining its priorities.

APPENDIX I

Summary and Overview of Ocean and Coastal Protection and Management Issues

Pursuant to Action 13, this Appendix provides an initial summary and overview for the California Ocean Council to use to identify and prioritize issues that could benefit from additional Council coordination. Issues to be considered by the Council include, but are not limited to, the summary included in this Appendix. This overview addresses:

- Coastal Management, Habitats, Living Marine Resources, and Water Quality
- Coastal Sediment Management and Coastal Erosion
- Bays, Estuaries, and Coastal Lagoons
- Ports, Harbors, and Maritime Industries
- Fisheries and Aquaculture
- Oil and Gas Development
- Tourism and Recreation
- Infrastructure

A. Coastal Management, Habitats, Living Marine Resources, and Water Quality

California Coastal Management Program

The CZMA established a unique relationship between federal and state governments to carry out ocean and coastal management objectives. California's Coastal Management Program includes the California Coastal Commission (CCC), the San Francisco Bay Conservation and Development Commission (BCDC), and the California State Coastal Conservancy (Coastal Conservancy). In San Francisco Bay, the San Francisco Bay Conservation and Development Commission (BCDC) became the first coastal management program in the nation in 1965, leading the way for the subsequent establishment of the Coastal Zone Conservation Commission by public initiative in 1972, and later the legislatively established the CCC and the Coastal Conservancy in 1976. The CCC and BCDC implement the planning and regulatory functions of the program. The Coastal Conservancy uses non-regulatory means to resolve conflicts and provides financial and technical aid to address a wide variety of issues ranging from urban waterfront development to projects to help purchase, protect, restore, and enhance wetlands and other habitats. These agencies, and their enabling statues, comprise California's federally approved Coastal Management Program.

Key challenges include the need to maintain a strong California coastal management program which is considered to be one of the finest in the nation. As part of that support, the Governor has urged that the federal CZMA be re-authorized with strong provisions to support the non-point source pollution control program, federal consistency provisions of the statute (provides authority over federal permit activities such as OCS oil and gas development), and appropriate levels of federal funding to help support these programs. The Coastal Commission has long struggled with the

ability to get all local coastal governments to complete their local coastal programs, or for the Commission to be able to review and ensure updates to those that were previously certified but have become outdated. This is challenging because some local governments are reluctant to complete their local coastal programs and the cost for reviews of existing programs will be substantial.

Marine Life Protection Act (MLPA)

The 1999 Marine Life Protection Act (MLPA) was established to protect California's marine natural heritage through the establishment of a network of marine protected areas, to be designed, created, and managed according to sound science in order to protect the diversity and abundance of marine life and the integrity of marine ecosystems. The Resources Agency and the Department of Fish and Game are leading a renewed effort to implement the MLPA through a cooperative effort funded by a public-private partnership, and enhanced by the advice of scientists, resource managers, experts, stakeholders, and interested members of the public. This new approach will combine the development of a statewide Master Plan, with a series of focused regional projects beginning with an initial effort in the central coast. The MLPA initiative is being designed to use an open and transparent process to achieve these goals. The key components of the program include the following:

- Submission of a draft Master Plan Framework to the Fish and Game Commission by May 2005 for proposed adoption by the Commission in August 2005.

- Prepare a comprehensive strategy for long-term funding of planning, management, and enforcement of marine protected areas by December 2005 .

- Design and submit to the Fish and Game Commission by March 2006 alternatives for a marine protected area network within the Central Coast for proposed adoption by the commission by November 2006.

- Present recommendations to the California Resources Agency, Department of Fish and Game, and the key responsible federal agencies for coordinating the management of marine protected areas with the federal government by November 2006.

- Secure agreement and commitment among state agencies to ensure statewide implementation of the Master Plan by 2011.

California's approach to the MLPA is receiving national, if not, international attention and is being viewed by NOAA's Marine Protected Area Center as a model for other states to follow.

Key challenges with the implementation of the MLPA will be to ensure that stakeholders are able to participate in all stages of the effort, it can be coordinated with federal agency processes, and long term funding can be secured for the monitoring, research, enforcement, and management that will be required to support these areas.

Marine Life Management Act (MLMA)

The Marine Life Management Act (MLMA), administered by the Department of Fish and Game, opened a new era in the management and conservation of California's marine living resources. Intended to manage marine resources on an ecosystem basis, the Act applies not only to fish and shellfish taken by commercial and recreational fishermen, but to all marine wildlife. Rather than assuming that exploitation should continue until damage has become clear, the MLMA shifts the burden of proof toward demonstrating that fisheries and other activities are sustainable. Through the MLMA, the Legislature delegates greater management authority to the Fish and Game Commission and the Department of Fish and Game. Rather than focusing on single fisheries management, the MLMA requires an ecosystem perspective including the whole environment. The MLMA strongly emphasizes science-based management developed with the help of all those interested in California's marine resources.

The State is being viewed as a pioneer in the introduction of ecosystem-based management to fisheries through the MLMA. Pursuant to the MLMA, the Fish and Game Commission has adopted the state's Nearshore Fishery Management Plan (FMP). This plan was used as the basis for an article in the July 2004 issue of *Science* which featured ecosystem approaches to fisheries. In 2003, the Nearshore FMP approach was also the featured example cited by the Ecosystem Approach Task Force in their report to NOAA's Marine Fisheries Advisory Committee.

Key challenges with the implementation of the MLMA are the requirement for science-based management, constituent involvement, and the development of fishery management plans. However, due primarily to funding challenges many key elements of the Nearshore FMP have yet to be implemented, including scientific research and regional management, and much of the Master Plan of December 2001 has not been implemented.

Cooperative Research and Assessment of Nearshore Ecosystems (CRANE)

The Cooperative Research and Assessment of Nearshore Ecosystems program (CRANE) was developed by the Department of Fish and Game to establish a model of ecosystem-based information collection to serve both fisheries and marine protected area management. The CRANE program conducts integrated and collaborative monitoring of some of the most important aspects of California's nearshore ecosystems. California should continue to invest in the development of this program, which gathers information all along the coast and brings together public and private institutions. The program seeks to evaluate changes in ocean resources over time, identify emerging threats to ocean resources, and determine appropriate management goals. The current program is funded through a mix of department funding, federal funding (Coastal Impact Assistance Program administered by the Resources Agency), and collaborative efforts with other research and monitoring efforts. CRANE is currently involved in monitoring efforts between along the central coast and is a key participant in the monitoring of the recently created system of reserves and conservation areas at the Santa Barbara Channel Islands. This program is intended to help determine baseline conditions prior to the imposition of new management measures, and then to assess the impact of those measures.

Key challenges include the need to maintain the CRANE program which will play an important role in the successful implementation of the Channel Islands reserves and conservation areas, the MLMA, and the MLPA.

Aquatic Nuisance Species

California waters are being substantially impacted by the introduction of plants, fish, and other animals from around the world – often known as aquatic nuisance species. Principle pathways for these species include introduction from the ballast water in large commercial ships, aquaculture, dumping from recreational aquariums, or occasionally intentional introductions. While they may be harmless in their native waters, once introduced to a new area without their native predators, aquatic nuisance species can transform entire ecosystems. Further, aquatic nuisance species that survive in California waters often have high reproductive rates, can disperse easily, and can tolerate a wide range of environmental conditions, making them very difficult to eradicate. In recent years California's waters have been impacted by a number of aquatic invasive species, including the European green crab, the Chinese mitten crab, *Caulerpa taxifolia*, *Arundo donax*, New Zealand mudsnail and non-native Spartina species.

Key challenges include the need to support efforts to eradicate species that have taken hold such as through the Invasive Spartina Project and the Southern California Caulerpa Action Team. Recent legislation requires the Department of Fish and Game and an Interagency Aquatic Species Council to develop a comprehensive plan for dealing with aquatic invasive species in California. A preliminary draft of the plan has been completed, but has yet to be finalized and adopted, consequently the Interagency Aquatic Species Council has yet to be appointed. The project has been stalled due to funding limitations. It will be necessary to identify funding to implement actions outlined in the plan. The State Lands Commission is required to develop and adopt ballast water regulations governing discharges by vessels arriving at California ports from other West Coast ports by July 2005. The Commission is also tasked with developing a report on hull fouling that includes recommendations on ways to minimizing its role in invasive species introduction, making recommendations with regard to performance standards related to ballast water discharges, and sponsoring a pilot program to evaluate alternatives for treating and managing ballast water. The California Ocean Council will need to help determine how to best to complete these efforts and to move them toward implementation.

Watershed Management

Managing our coastal and inland watersheds is critical for managing our coastal bays, lagoons, and nearshore ocean waters. However, the implementation of the principles of watershed management in California is challenging. At the state level, there are numerous programs that provide technical assistance or financial support for various aspects of watershed management or restoration. At the local and regional level, hundreds of watershed partnerships exist throughout the state. In 2002, California set priorities for coordination of state programs supporting watershed protection, restoration and stewardship efforts with the passage the Watersheds, Clean Beaches and Water Quality Act, (AB 2534, Pavley). As a result, the California Resources Agency and the California Environmental Protection Agency (Cal/EPA) are mandated to improve coordination of watershed programs and approaches among state agencies, to work closely with watershed groups, local agencies, and

other stakeholders to secure funding and implementation of watershed activities to improve water quality, upland conditions, water supply, fisheries and habitat, recreation, and other watershed uses. They are also working together to establish a new Integrated Watershed Management Program to help guide the issuance of grants to support planning, management, and monitoring activities.

Key challenges include the need to coordinate California's watershed management programs to ensure that federal, state, and local resources are being used as efficiently and effectively as possible, while building local capacity for long-term stewardship and working locally to leverage private and non-profit resources. Examples of broad regional partnerships that can form the basis of such a system include the Water Quality Protection Program of the Monterey Bay National Marine Sanctuary; the watershed programs of the Santa Monica Bay Restoration Commission; regional watershed (multi-county) salmonid conservation efforts such as the Five County Salmon Conservation Program; and the CalFed Watershed Program, which funds activities at various watershed scales in the Sierras, Central Valley, and Southern California areas.

Control of Polluted Runoff (Nonpoint Source Pollution)

Polluted runoff, or non-point source pollution (NPSP), is considered the major remaining cause of impairment of state waters. In July 2000, California was the first state in the nation to receive full federal approval of its Coastal Nonpoint Source Pollution Control Program by the U.S. Environmental Protection Agency (US EPA) and the National Oceanic and Atmospheric Administration (the lead federal agencies that administer the Clean Water Act and CZMA respectively). The program includes the coordinated participation of the California Coastal Commission (CCC), the State Water Resources Control Board (SWRCB), the nine Regional Water Quality Control Boards (RWQCBs), and a Non-Point Source Interagency Coordinating Committee. The program is currently implementing the second of three sequential five-year implementation plans. The current plan, covering the years 2003 to 2008, was submitted to US EPA and NOAA in January 2004. Although the SWRCB and CCC have lead roles in developing and coordinating the implementation of the program, they are not solely responsible for solving the problem. Over 20 other state agencies have authorities, programs, or responsibilities relating to the control of NPSP.

Farm runoff, timber operations, and septic systems are major nonpoint sources of pollution impacting our coast. California has taken a leadership role in farm runoff control by becoming the first state in the nation to set mandatory requirements in selected areas. Water quality controls on timber operations have also been recently expanded. Lastly, the SWRCB is developing regulations for control of pollution from septic systems. This year the state budget includes 21.2 personnel years (PYs) and $3.1 million to control nonpoint source runoff statewide through waste discharge requirements and waivers of waste discharge requirements, funding that will come from fees on dischargers.

Key challenges include reducing the impacts of this ubiquitous form of pollution over our large and geographically diverse state, coordinating the efforts of many responsible entities, and evaluating the effectiveness of the program statewide. The Critical Coastal Area (CCA) Committee, which is composed of staff from the CCC, SWRCB, RWQCBs, the San Francisco Bay Conservation and Development Commission, other state agencies, and The Ocean

Conservancy is working to restore and protect water quality by incorporating watershed planning into the cooperative efforts of federal, state, and local agencies and local stakeholders. The CCA Committee is currently working to identify watersheds along the coast where expedited implementation of the Nonpoint Source Program is needed to restore impaired water quality in or tributary to Marine Managed Areas, protect water quality in Areas of Special Biological Significance (a.k.a., State Water Quality Protection Areas), and to restore and protect similar areas in San Francisco Bay. The recent addition of personnel to address nonpoint source runoff is a major step forward, but ultimate success will require a dedicated and sustained long-term effort.

Clean Beaches Initiative

The goal of the California Clean Beaches Initiative (CBI) to improve beach water quality. The State Water Resources Control Board (SWRCB), which has the primary responsibility for implementing the CBI, has developed four major program elements to achieve this goal: 1) grant programs to local agencies, 2) a rapid test for indicator bacteria, 3) improved public reporting and accountability, and 4) enhanced interagency communication and collaboration. Further, the SWRCB's own strategic plan, which was adopted in 2001, states that by the year 2010 beach closures and advisories are to be reduced by 75% (i.e., from 2000 numbers). The SWRCB is also developing a public reporting system, "Beach Watch," to provide information to the public on the water quality history at beaches via the Internet. The SWRCB will use "Beach Watch" as its report card and it will be used to determine how the state is doing at reaching its strategic goal. The SWRCB also formed the Beach Water Quality Workgroup (BWQW), a coalition of federal, state, and local governmental agencies, environmental advocacy groups, environmental consultants, and scientific researchers. The mission of BWQW is to improve inter-agency collaboration. The BWQW is leading the development of better public health protection tools and is coordinating the development of research tools and consistent monitoring and reporting protocols throughout California.

The key challenges that lay ahead include the following: 1) Eliminating sewage spills, 2) reducing contaminated storm water, urban runoff, and marine debris, 3) developing quicker and more cost effective source identification tools, and 4) maximizing the use of citizen volunteer organizations. Addressing all of these challenges will require additional levels of funding.

Total Maximum Daily Loads (TMDLs)

Section 303(d) of the federal Clean Water Act requires states to identify water bodies that do not meet water quality standards. TMDLs are documents that prescribe a water quality attainment strategy for these water bodies. Specifically, TMDLs identify sources of pollutants and define how much of a pollutant a water body can tolerate and still meet water quality standards. TMDLs account for all the sources of a pollutant, including discharges from wastewater treatment facilities; runoff from homes, agriculture, and streets or highways; "toxic hot spots;" and deposits from the air. In addition to accounting for past and current activities, TMDLs may consider projected growth that could increase pollutant levels.

In addition to identifying non-attainment water bodies, states are required to prioritize waters/watersheds for TMDL development and submit a list of priority watersheds to the U.S. Environmental Protection Agency (US EPA) for review and approval. This list, known as the

303(d) list of impaired waters, is the responsibility of the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs). In addition to preparing the list, the SWRCB and the RWQCBs are required to monitor and assess water quality and develop TMDLs.

Key challenges for the state include the challenge of completing existing TMDLs by a date certain. The staff of the SWRCB has indicated that completion of existing TMDLs by 2012 and meeting water quality standards by 2020 are goals that they will try to achieve; however, as monitoring improves, the SWRCB will need to continue to add new water bodies and pollutants to the 303(d) list. Obviously, this process has the potential to continue for many years as more areas are identified as not meeting water quality standards.

Storm Water

Storm water runoff is problematic because of its potential to become contaminated with pollutants such as oil and grease, chemicals, nutrients, metals, and bacteria as it travels over land. Adding to the problem is the fact that storm water runoff is frequently directed into storm drains which then discharge into nearby creeks and rivers.

Mandated by Congress under the Clean Water Act, the Nation Pollution Discharge Elimination System (NPDES) Storm Water Program addresses non-agricultural sources of storm water discharges that adversely affect the quality of the nation's waters. The Storm Water Program relies upon discharging entities to implement “best management practices” to prevent harmful pollutants in their storm water runoff from reaching water bodies, as prescribed in storm water permits. Most storm water discharges are considered point sources and thus require coverage by a storm water permit by the SWRCB and the RWQCBs. Types of activities and entities that require storm water permits include large cities or other municipalities for discharges of urban runoff from municipal storm drain systems, construction activities that involve more than five acres of land disturbance, companies involved in manufacturing operations, vehicle maintenance facilities, landfills, and hazardous waste sites.

Key challenges lie ahead for municipalities that must implement the requirements of storm water permits. Storm water discharges must be controlled to eliminate ocean pollution. The California Ocean Council will work with the SWRCB, RWQCBs, Coastal Commission, and others to help ensure that the most efficient and effective process is pursued to address the impacts of polluted storm water.

Areas of Special Biological Significance/ State Water Quality Protection Areas

In the mid-1970’s, 34 areas on the coast were designated by the SWRCB as requiring extraordinary protection and were called Areas of Special Biological Significance (ASBS). The California Ocean Plan prohibits waste discharges into ASBS unless the SWRCB issues an exception for the discharge.

As of January of 2003, all ASBS have been classified as State Water Quality Protection Areas (SWQPAs). The Public Resources Code states that point source waste and thermal discharges into SWQPAS are prohibited or limited by special conditions, and nonpoint sources discharging into SWQPAs must be controlled to the extent practicable. Currently, various

individual ASBS/SWQPAs are being renamed, as are many of the other Marine Managed Areas in accordance with the Marine Managed Areas Improvement Act (AB 2800).

A 2003 SWRCB study, performed by the Southern California Coastal Water Research Project (SCCWRP), identified over 1600 discharges, principally nonpoint sources, into the 34 ASBS/SWQPAs. Of these discharges, few have been allowed by the SWRCB as Ocean Plan exceptions. Exceptions issued prior to 1991 include treated wastewater discharges into the Kings Range, Carmel Bay, and San Clemente Island SWQPAs, as well as a desalination brine discharge into the San Nicolas Island SWQPA. The SWRCB is now working to control or eliminate waste discharges to ASBS/SWQPAs. In 2004, the SWRCB issued a conditional exception to the Scripps Institution of Oceanography that will control 93 discharges from the campus and therefore protect natural water quality in the San Diego Marine Life Refuge ASBS/SWQPA in La Jolla.

A major challenge will be to eliminate or establish appropriate controls on the remaining discharges into ASBS/SWQPAs statewide, thereby preserving natural water quality and protecting marine communities in these special areas from pollution.

Air Quality

The California Air Resources Board (CARB) has identified marine vessels as a major source of diesel exhaust emissions in California. Ship operations at dockside and as far as 100 miles offshore are of concern due to prevailing winds that can transport these pollutants to coastal and inland regions. Pollutants of most concern include nitrogen oxides, particulate matter, sulfur oxides, air toxics, and greenhouse gases. Regions surrounding California's large commercial ports are of particular concern due to the high concentration of diesel sources operating at these locations i.e., ships, locomotives, diesel trucks, and cargo handling equipment, and the projected increase in emissions associated with increasing trade with Asia. These emissions also threaten the ability of coastal regions, such as Los Angeles, to attain federal air quality standards.

To address marine emissions, the CARB adopted a comprehensive strategy that proposes a variety of different control strategies. The CARB staff is in the early stages of implementing many of these strategies including the following:

- Using cleaner CARB diesel by harbor craft and locomotives,
- Using low-sulfur distillate diesel fuel in ship auxiliary engines at California ports,
- Investigating shore-side power connections for ships at dockside,
- Retrofitting existing harbor craft engines with emission controls,
- Developing port-specific regulations for diesel powered cargo-handling equipment,
- Working with the U.S. EPA to develop a "Sulfur Emission Control Area" on the West, Coast that would limit the sulfur content of bunker fuels used by oceangoing ships, and
- Working with the U.S. EPA and the IMO to encourage the development of more, and stringent new engine standards for marine vessels.

Key challenges include the rapid expansion of sea-borne trade which plays an critical role in the California economy. By many estimates, trade through California is projected to triple in the next twenty years. In addition, a large percentage of marine emissions are contributed by

foreign-flagged cargo vessels, which may require alternative regulatory approaches such as cooperative efforts with other states or nations. Many ships also pose technical challenges to emission control due to unique engine designs and poor fuel quality that is not amendable to traditional emission control equipment.

Noise Pollution

Noise pollution in the marine environment is still an emerging, but undoubtedly serious concern. Compared to other problems, such as nonpoint source pollution, its implications are less well understood and usually largely undetectable to anyone but specialists. Naturally occurring environmental noises include the sound of weather, wind and waves, tides and currents, tectonic and volcanic activity, as well as all of the sounds produced by ocean animals. Anthropogenic noises (i.e., noise pollution) include the sound of watercraft (from jet skis to supertankers); offshore oil/gas exploration and production; sonar, especially military high-power active sonar; underwater telemetry and communication for exploration and research; mining and minerals extraction; "fish bombing" and other underwater explosives; civil engineering projects (e.g., pile driving and blasting); and over-flying aircraft.

At present we know little about the effects of anthropogenic noise on marine life, though rapidly mounting evidence indicates that increasing noise pollution is compromising many marine ecosystems. Most of what we do know about ocean bio-acoustics is focused on marine mammals, especially cetaceans. In order to craft policy around a broader understanding of the marine ecosystems, much more research will be needed on how fish and invertebrates use and perceive sound.

Key challenges include conducting additional research on the affects of anthropogenic noise on the marine life, establishing environmental noise criteria for the many ocean habitats (based on biological evidence) and determining the noise profiles of the many human enterprises in the ocean.

B. Coastal Sediment Management and Coastal Erosion

California's spectacular coastline includes sandy beaches, sheer bluffs, rocky headlands, intertidal zones, and other diverse shoreline types. This narrow interface between land and sea is the focus of much interest with those concerned with coastal resource protection, preservation and restoration, public access, sustaining the economic vitality of tourism, preserving recreation and protecting habitats. Although coastal erosion is a natural process, it has been considerably acerbated by human activities both inland and along the coast. Waterways and rivers that historically delivered natural sediment renourishment to the beach now deliver a fractional amount. As a result, coastal erosion rate are accelerated in many portions of the state. High erosion rates then precipitate a common reaction, the building of structural protection. This approach can have general as well as specific long-term detrimental impacts to coastal resources. Better management of it, is a long-term goal that will help address California's erosion and shoreline management concerns.

The California Coastal Sediment Management Master Plan (Sediment Master Plan) is a collaborative effort among federal, state, and local agencies and non-governmental

organizations to evaluate California's coastal sediment management needs on a regional and system-wide basis. In short, this plan will help identify the location and reduction of sediment delivered to the coast from inland waterways, impediments to sediment movement along the coast, resulting in areas that are considered problematic and synergistic means for better sediment management. This analysis is intended to help develop regional coastal sediment management efforts and allow agencies, communities, and industry to work together to leverage financial and technical resources. Workshops on this process have been held along the California coast to obtain input from all interested parties.

The Resources Agency was previously working on the development of a shoreline erosion strategy to consider a set of principles for addressing coastal erosion, potential legislative changes, and by including a requirement for the completion of the Master Plan mentioned previously. This effort is on hold due to lack of funding.

Key challenges are to complete the Sediment Master Plan and to incorporate its findings into on-the-ground efforts to manage our shoreline. Several groups from industry, public interest groups, and research interests have indicated an interest in participating in the Coastal Sediment Management Working Group discussions. The Workgroup is establishing a process to involve these groups in regular meetings and will be announcing these procedures in the near future.

The California Ocean Council should re-evaluate the development of the Resources Agency coastal erosion strategy that was put on hold due to budget concerns. The Council should enter into discussions with various interest groups to determine the relative merits of moving forward with the ongoing development of this strategy given limited fiscal resources.

C. Bays, Estuaries, and Coastal Lagoons

Our bays, estuaries, and coastal lagoons are ecologically, economically and recreationally important to California, as these are the major transition zones between land-based fresh water resources and the sea. Freshwater originating from as far away as the Sierra Nevada and the Cascade Ranges in Oregon mixes with saltwater from the Pacific Ocean and, in the process, creates some of the state’s most unique and sensitive habitats. Resource protection issues in these waters involve management of wetlands, sub-tidal habitats, water quality, and mineral resources. Uses in these waters range from ports, ferry transportation systems, parks, restaurants, reserves, and coastal-dependent industries. Issues include concerns regarding dredging and fill operations, protection of coastal-dependent uses, restoration of threatened habitats, water quality, and other impacts from developments.

The Regional Water Quality Control Boards have adopted Basin Plans to protect water quality in bays, estuaries, and inland freshwater water bodies within their jurisdictions. These Basin Plans include watershed management chapters and have been approved by the SWRCB and the US EPA. The Basin Plans are frequently amended to incorporate Total Maximum Daily Loads (TMDLs) designed to restore impaired waters. In addition, the state has worked with its federal and local partners to establish National Estuary Programs in three nationally significant estuaries in California, San Francisco, Morro, and Santa Monica Bays. Under Clean Water Act

Section 302, each estuary program is required to develop a "Comprehensive Conservation and Management Plan" (CCMP) for attaining or maintaining water quality in the estuary. The CCMPs for San Francisco Bay, Morro Bay, and Santa Monica Bay have been approved by the Governor and the US EPA Administrator. In addition, the state has also formed partnerships with NOAA under the National Estuarine Research Reserve System. National Estuarine Research Reserves in San Francisco Bay, Elkhorn Slough, and the Tijuana River provide essential habitat for wildlife; offer educational opportunities for students, teachers and the public; and serve as living laboratories for scientists.

As noted above, San Francisco Bay is the beneficiary of many partnership programs between federal, state, and local governments and serves as a good example of the complexity that can be involve in the protection and management of a major estuary. The San Francisco Bay Estuary has a coastal management program dedicated to its conservation and management (San Francisco Bay Conservation and Development Commission in 1965) and was incorporated into the National Estuary Program in 1987. The San Francisco Bay Restoration Program is one multi-partner program established to build upon the success of many comprehensive efforts that are now being implemented for the Bay. Some examples of ongoing programs include, but are not limited to, the San Francisco Estuary Project's *Comprehensive Conservation and Management Plan, (CCMP)*, 1993; U.S. Environmental Protection Agency/San Francisco Bay Regional Water Quality Control Board's, *Baylands Ecosystem Habitat Goals Project*, 1999; The Bay Institute/California State Coastal Conservancy/U.S. Army Corps of Engineer's *San Pablo Bay Watershed Restoration Framework Program*, 2000; The San Francisco Bay Joint Venture's *Restoring the Estuary: An Implementation Strategy for the San Francisco Bay Joint Venture*, 2001; and the U.S. Environmental Protection Agency/Resources Agency *San Francisco Bay Wetlands Restoration Project*. Long-standing issues with dredging in the Bay are now being facilitated by a unique group of about 45 federal, state, and local agencies which embarked on a *San Francisco Bay Long-Term Management Strategy* (LTMS) for dredging with input from dredgers, industry, environmental groups, and members of the public. The use of clean dredge material from these operations is pivotal to the completion of some of the large restoration efforts being conducted, or planned for, the San Francisco Bay.

Key challenges include addressing and coordinating those issues mentioned above, as well as the many issues identified in this Action Plan that occur along the open coast, but also within bays, estuaries, and coastal lagoons. An important challenge is to recognize the importance of our bays, estuaries and coastal lagoons as we consider new statewide approaches to coastal management, watershed and water quality protection, monitoring, research, enforcement, and other issues of statewide significance.

D. Ports, Harbors, and Maritime Industries

California's local agency port system is a collection of city departments, special districts, and charter ports. California's ports are one of the largest generators of economic activity of the ocean-dependent industries in California. Of nine ocean-dependent industries evaluated by the California Research Bureau in 1995, ports were second only to coastal tourism in their contribution to the economy through wages and income. A pressing issue for ports is water

depth and the dredging needed to construct and maintain navigation channels that allow fully loaded ships to come and go without delays. Another pressing issue for ports is landside access. Intermodal connections between transportation modes are typically the weakest links in the Nation's transportation system.

Key to these operations is the ability to have predictable regulatory processes to use to maintain infrastructure, dredging needs, and fill operations where necessary. These ports are critical to the movement of cargo, oil and other products, and passengers. Innovative processes have been developed such as the San Francisco Bay Long-Term Management Strategy (LTMS) for the placement of dredged material in the San Francisco Bay region, the state and federal multi-agency San Francisco Bay Dredged Material Management Office (DMMO), and the multi-agency Los Angeles Region Contaminated Sediment Task Force charged with the preparation of a long-term management plan for dredging and disposal of contaminated sediments in the Los Angeles area. Port development comes under the jurisdiction of a variety of federal, state, and local agencies including, but not limited to, the US Army Corps of Engineers, the US EPA, the National Marine Fishery Service, the National Fish and Wildlife Service, the Coastal Commission, the Department of Fish and Game, the State and regional water boards, the San Francisco Bay Conservation and Development Commission (San Francisco Bay), and the State Lands Commission.

In addition to the commerce value of the ports, these waters provide important sheltered water habitat for a wide variety of ocean and coastal species that are ecologically important, as well as being important to commercial and recreational fishery interests. For example, the waters within the Ports of Los Angeles and Long Beach include some of the last sheltered sub-tidal habitat in southern California, providing nursery habitat for some species and year-round habitat for others. San Francisco Bay provides important habitat for commercial Dungeness crab, chinook salmon, and Pacific herring.

Key challenges include the need to assess whether these relatively new multi-agency entities are fulfilling their role in providing a predictable process for necessary port improvements, while ensuring the protection of critical habitats. Ports and harbors often require mitigation to offset the impacts of projects within harbor waters. However, because of the typically large scale of port and harbor projects, it is often a challenge for ports and harbors to find suitable mitigation. As mentioned previously, there is ongoing concern regarding the introduction of aquatic nuisance species from the release of ballast water from vessels using these port facilities.

E. Fisheries and Aquaculture

Fisheries Management

Fisheries management and allocation issues in California are addressed by the state Department of Fish and Game (DFG), state Fish and Game Commission (FGC), California Legislature, and U.S. Department of Commerce's National Marine Fisheries Service (NMFS) and Pacific Fishery Management Council (PFMC). DFG is mandated to balance the protection of marine resources with the needs of the commercial and recreational fishing industries to maximize their long-term fishery yields. The FGC has the authority to set policy for sport

fisheries, some commercial fisheries (such as market squid, mackerel, and herring), and kelp harvesting. Policy issues not determined by the FGC are addressed through the enactment of new legislation. The NMFS is responsible for assessing fishery stock size, determining sustainable harvest rates, minimizing bycatch, and protecting essential fish habitat for federally managed species. As a regional body funded through the Department of Commerce, the PFMC primarily develops, monitors, and revises management plans for fisheries between 3 and 200 miles of the U.S. coast. Important ocean and coastal fisheries in California include, but are not limited to abalone, albacore, Dungeness crab, groundfish, market squid, Pacific herring, salmon, sea urchin, and rockfish. Managing California's ocean and coastal fishery stocks at sustainable levels is complex and depends on such things as accurately assessing wild stocks and judging the impacts that multiple harvesters have on a resource. The previous discussion of management approaches describe new authorities such as the Marine Life Management Act (MLMA) or the Marine Life Protection Act (MLPA) provided to the DFG to guide the management and protection of marine resources on an ecosystem basis.

Key challenges, including significant funding limitations, have made it difficult to assess the full impact of all fishery activities (particularly sport fishing), but the available information indicates that some fishery stocks are substantially stressed and declining, while others remain at sustainable levels. Determining the cause of stock declines and implementing solutions is challenging for managers attempting to assess the health of California's fishery stocks, involving analysis of habitat modifications, weather conditions, fishing practices, and water quality conditions. But, reversing these declines is important since California's fishing industry is substantial, ranking fourth in the nation in total seafood landed for 1991, while Californians consume more seafood per capita than the national average. Declining fishery populations have created substantial economic hardships on a number of northern California communities.

Also, much concern has been raised regarding the enforcement of fish and game laws (and related federal statutes) intended to maintain fishery stocks at sustainable levels. The DFG has entered into several partnership agreements with other state and federal agencies, and in some cases private entities, to increase enforcement of a wide variety of marine protection laws - including those dealing with maintenance of fisheries stocks. However, reversing fishery declines and protecting sustainable coastal fisheries can also be achieved through coordinated partnerships that maximize conservation funding opportunities for projects such as the removal of barriers to fish passage, and the implementation of projects that protect and restore watersheds and important intertidal and subtidal habitats. A key challenge will be to identify a sustainable, long-term funding source for fisheries management for the DFG and the Fish and Game Commission to accomplish its mission and mandates. The DFG is pursuing the development of an automated license data system for sport fishing which is discussed later in this discussion.

Marine Aquaculture

Commercial marine aquaculture in California includes, almost exclusively, the production of molluscan shellfish. Four types comprise the bulk of the production: oysters, clams, mussels, and abalone. Production methods and infrastructure needs vary with the type of organism and the facility; however, all types rely on natural plant production for feed. The preliminary report of the U.S. Commission on Ocean Policy discussed the benefits of these operations. For

example, farmed oysters, clams, mussels, and abalone are all listed as "best choices" in the Monterey Bay Aquarium's Seafood Watch program. Some of the issues raised with marine aquaculture include the potential for the introduction of aquatic nuisance species, concerns about impacts to water quality, challenges presented by anticipated proposals for new open ocean aquaculture operations, and competition for space within California's port facilities. The State of California has adopted far-sighted legislation and regulations aimed at assuring offshore aquaculture in state waters is conducted in such a way as to not adversely affect the state's native fish populations. A key goal for state resource managers must be to insist that similar precautions be exercised by federal agencies for marine aquaculture operations being considered in federal waters.

Key challenges include the fact that new, larger scale, and potentially innovative marine aquaculture operations are anticipated to be proposed in the coming years. The state should continue to support research to help determine how best to address the impacts of these operations to ensure that they can be operated safely within California waters. Recent permit requirements have required strict monitoring of these operations which can help provide the data for such research.

F. Offshore Oil and Gas Development

California is opposed to new offshore oil and gas development along its coast, and has prevailed in litigation against the U.S. Department of the Interior regarding California's right and duty to ensure that any re-issuance of 36 oil and gas tracts on the Outer Continental Shelf be consistent with the requirements of the National Environmental Policy Act (NEPA) and the Coastal Zone Management Act (CZMA).

Key challenges regarding this issue include the need for a long-term solution to this issue off the California coast. The options include the oil and gas industry complying with federal and state law and submitting the re-issuance of their leases for State review with full compliance with the National Environmental Policy Act, the California Environmental Quality Act, and the Coastal Zone Management Act (consistency with California's federally approved Coastal Management Program). The other option would be for the federal government to consider buying the leases back from the oil and gas industry. Finally, any federal funding mechanism for ocean and coastal management that relies on offshore oil and gas revenues must be crafted in a manner that does not provide incentives for new offshore oil and gas development.

G. Tourism and Recreation

<u>Ocean and Coastal Tourism</u>
Ocean and coastal tourism and recreation are the largest economic drivers on the coast. The California Travel and Tourism Commission (CTTC) is the lead organization responsible for promoting travel to California. The Commission's structure is similar to an agricultural commodity board, because the organization is funded solely by approximately 5,000 self-assessed tourism related businesses. Tourism is one of California's top three industries, generating over $78 billion annually in direct expenditures, directly employing nearly one

million Californians, and generating nearly $5 billion in annual tax revenue. As the number one destination in the U.S, it is one and one half times the size of the Florida tourism economy and five times the size of the Hawaiian tourism economy. The ocean and coast play a significant role in drawing tourism to California, and their contribution has been estimated to be as high as $14 billion annually in direct expenditures, contributing to as many as 900,000 jobs across the United States. It is in the best interests of both the California and the national economies to take actions to ensure that ocean and coastal tourism remains vibrant and sustainable.

Key challenges are the need to maintain the quality of the nationally-recognized ocean and coastal resources that people come here to visit. It is critical that ocean and coastal waters be safe to swim in, that fish be safe to eat, and that large recreational beaches be maintained. Future opportunities may exist to work with the tourism and recreation industries to support public service announcements to advertise the attraction of California coast and ocean, and the need for all Californians and visitors to help take care of it.

Sport Fishing Licenses – Automated License Data System

Over 1.5 million people fish in California's marine waters every year. Currently, the Department of Fish and Game (DFG) utilizes an antiquated system for issuing sport fishing licenses and collecting data. Recognizing this problem, DFG developed a proposal for an Automated License Data System (ALDS). The goal of ALDS is to automate DFG's current manual issuance, accounting and management of recreational sport fishing and hunting licenses. When implemented, ALDS would enable License Agents throughout the state, and in bordering states, to utilize point of sale terminals for the sale of sport fish and hunting licenses. The ALDS will also enable DFG to control permissive use, meet state and federal mandates, and recover revenues more quickly and easily.

The ALDS's current funding plan includes new revenues and federal reimbursements resulting in a net zero cost to the state. DFG has begun the formal procurement phase for ALDS with the release of a Request for Interest on May 19, 2004. DFG is awaiting final approval of the ALDS Special Project Report from the Department of Finance (DOF) in order to release the Request for Proposal. The plan includes new legislation to create authority for the DFG to establish a small surcharge on the sale of licenses and to collect a fee from license agents to fund the project. Any fee or surcharge would be publicly reviewed and approved by the Fish and Game Commission.

Key challenges include working with the Department of Finance and the Fish and Game Commission to resolve outstanding funding and other technical issues to implement the ALDS in Fiscal Year 2006/07.

H. Infrastructure

Saltwater Desalinaton

In order the meet the needs of California's growing population, Californians must be encouraged to continue to expand efforts to recycle and conserve water. However, it remains clear that additional sources of water will need to be developed. According to the Department of Water Resources Desalination Task Force Report, interest in desalination as one potential

water source is on the increase as demands for water supply have increased and improvements in technology have significantly reduced the cost of desalination. The report states that there is a significant potential for desalination to augment the state's fresh water supply by providing fresh water to coastal communities, especially along the South and Central Coast.

According to a recent Coastal Commission report there are already 11 seawater desalination facilities existing along the California Coast and approximately 12 under consideration, including some that would be the largest in the United States. The Coastal Commission report raises concerns about the impacts of the intake and outfall structures, the disposal of brine wastes, growth-inducing impacts, and some policy issues regarding the ownership of these facilities. The San Francisco Bay Conservation and Development Commission is currently updating its regulations regarding the review of these facilities in anticipation of proposals within San Francisco Bay. The SWRCB will play a key role in the evaluation of these impacts.

Key challenges regarding desalination will be the determination of where these facilities can be sited to help meet water use needs, consistent with all coastal protection laws and water quality standards.

Urban Waterfront Restoration

Exciting opportunities exist to revitalize urban coastal communities and habitats by linking habitat restoration efforts with broader socio-economic improvement projects. Redevelopment of urban waterfronts, including Brownfield sites, can be designed to support coastal-dependent industry, increased public access and tourism, and habitat restoration projects.

Key challenges include issues with cleanup of toxic sites, maintenance of historic architectural standards, preserving coastal-dependent industry, and the timing of financing and permitting of the projects under consideration.

ACRONYMS

BCDC	San Francisco Bay Conservation and Development Commission
BWQW	Beach Water Quality Workgroup
CalCOFI	California Cooperative Oceanic and Fisheries Investigations
Cal/EPA	California Environmental Protection Agency
CalOCEAN	California Ocean and Coastal Environmental Access Network
CalOST	California Ocean Science Trust
CBI	Clean Beaches Initiative
CCC	California Coastal Commission
CCMP	Comprehensive Conservation and Management Plan
CDIP	California Data Information Program
CENCOOS	Central California Ocean Observation System
CZMA	Coastal Zone Management Act
DFG	Department of Fish and Game
EMAP	Environmental Monitoring and Assessment Program
EU	European Union
LTMS	San Francisco Bay Long-Term Management Strategy
MLMA	Marine Life Management Act
MLPA	Marine Life Protection Act
MW	megawatts
NEPA	National Environmental Policy Act
NERR	National Estuarine Research Reserve
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPSP	nonpoint source pollution
OCS	Outer Continental Shelf
OSPR	Office of Oil Spill Prevention and Response
PFMC	Pacific Fishery Management Council
RWQCBs	Regional Water Quality Control Boards
SCCAT	Southern California Caulerpa Action Team
SCCWRP	Southern California Coastal Water Research Project
SCOOS	Southern California Ocean Observation System
SCWRP	Southern California Wetlands Recovery Project
SWRCB	State Water Resources Control Board
UC	University of California
UCMC	University of California Marine Council
USC	University of Southern California
US EPA	U.S. Environmental Protection Agency