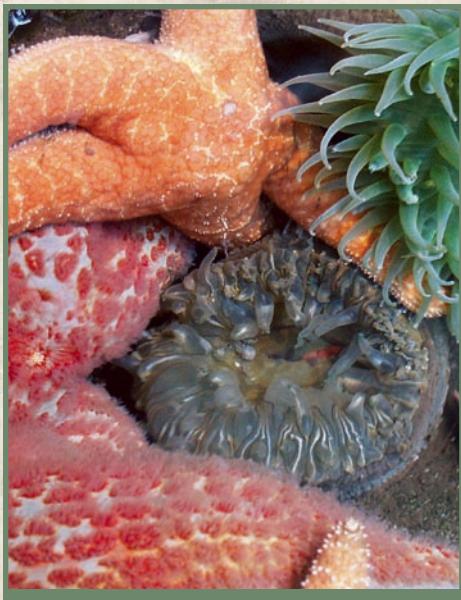




HUMBOLDT BAY MANAGEMENT PLAN

EXECUTIVE SUMMARY



www.humboldtbay.org

May 2007



Photographic Credits

All photographs were provided by Schubert's Classic Photography, Eureka, California and Jeff Robinson, Humboldt Bay Harbor, Recreation and Conservation District except as noted.

Historical photographs used in this Plan were provided courtesy of the Clarke Historical Museum, Eureka, California

Our appreciation to Bug Press for their contribution to this undertaking.

HUMBOLDT BAY MANAGEMENT PLAN

EXECUTIVE SUMMARY

**Humboldt Bay Harbor, Recreation
and Conservation District**

**601 Startare Drive
P.O. Box 1030
Eureka, CA 95502-1030**

707-443-0801

www.humboldtbay.org

May 2007

HUMBOLDT BAY HARBOR DISTRICT BOARD OF COMMISSIONERS

First Division	Second Division	Third Division	Fourth Division	Fifth Division
Ronnie Pellegrini	Roy Curless	Mike Wilson	Dennis Hunter	Charles Ollivier

Harbor District Administrative HBMP Development Team

Board of Commissioners Advisory Committee Members
Commissioners Ronnie Pellegrini and Dennis Hunter

Former Commissioners
Ron Fritzsche and Jimmy Smith

Chief Executive Officer
David Hull

Director of Conservation
Jeff Robinson

Environmental Planning Consultants
Chad Roberts and Bruce Kemp Roberts,
Kemp and Associates LLC

HBMP Task Force Representatives

City of Eureka
Gary Bird

Humboldt County Resource Conservation District
Otis Skaggs

City of Arcata
Juli Neander

Recreational User Group Representative
Pete Oringer

County of Humboldt
Supervisor Jimmy Smith
Kirk Girard

Environmental Group Representative
Jim Clark

U. S. Environmental Protection Agency
Gail Louis

Commercial/Industrial Group Representative
Andy Westfall

Bureau of Land Management
Bruce Cann

Mariculture Industry Group Representative
Greg Dale

Humboldt Bay National Wildlife Refuge
Shannon Smith

Commercial Fishing Industry Group Representative
Ken Bay

California Department of Fish & Game
Region 1: Mark Wheatley
Marine Region: Vicki Frey

Education Group Representative
Bill Schaser

California State Coastal Conservancy
Jim King

Past HBMP Task Force Representatives

California Department of Fish and Game
Tim Burton **Craig Martz**
Jim Nelson **John Siperek**

Humboldt Bay National Wildlife Refuge
Richard Guadagno

U. S. Environmental Protection Agency
Chris Heppe

California State Coastal Conservancy
Sheila Semans

HUMBOLDT BAY MANAGEMENT PLAN

Humboldt Bay Harbor, Recreation and Conservation District

Executive Summary Contents

1.0	INTRODUCTION	7
2.0	THE HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT	7
2.1	Territory and Jurisdiction	8
2.2	Organizational Structure	8
2.3	Examples of Projects and Activities	8
2.3.1	Harbor	8
2.3.2	Recreation	8
2.3.3	Conservation	8
3.0	HUMBOLDT BAY MANAGEMENT PLAN	10
3.1	Planning Process	12
3.1.1	Planning Boundary	12
3.1.2	Mission Statement	12
3.2	Plan Development	12
3.3	Document Structure	17
3.3.1	Section I – Introduction	17
3.3.2	Section II – State of the Bay	18
3.3.3	Section III – Policy Document	18
3.3.4	Volume II – Appendices	27
3.3.5	Compact Disc Contents	27

FIGURES

Executive Summary	Figure ES-1: Humboldt Bay Management Plan Location	9
	Figure ES-2: Humboldt Bay Primary & Secondary Boundaries	13
	Figure ES-3: Humboldt Bay Watershed Area	16
	Figure ES-4: Humboldt Bay Water Use Designation	20

TABLES

Executive Summary	Table ES-1: Humboldt Bay Management Plan Project Organization	11
	Table ES-2: Harbor Element Policies	21
	Table ES-3: Recreation Element Policies	23
	Table ES-4: Conservation Element Policies	25



Humboldt Bay Management Plan

1.0 INTRODUCTION

As California's second largest natural bay, Humboldt Bay (Figure ES-1) is a complex ecosystem and valuable resource for California and the nation because of its natural and environmental resources, its aesthetic appeal and recreational opportunities, its ecological services, economic benefits, and its vital transportation links. Visitors and Humboldt County residents alike value Humboldt Bay for its natural and man-made attributes.

Because there is a need to balance port-related commercial and industrial uses, expanding recreational uses, and environmental protection, a planning document for Humboldt Bay was deemed necessary by the Humboldt Bay Harbor, Recreation and Conservation District (District). The District considered that this planning document should consider population growth, existing uses in the bay, the best natural and environmental resource and physical information available, and the best understanding that could be mustered regarding potential future needs in both the biological and human environment, and should involve appropriate agency land managers and user-group stakeholders. This planning document, and the effort is embodied in its creation, is the Humboldt Bay Management Plan and represents the region's first ecosystem-based management approach intended to improve the management of Humboldt Bay.

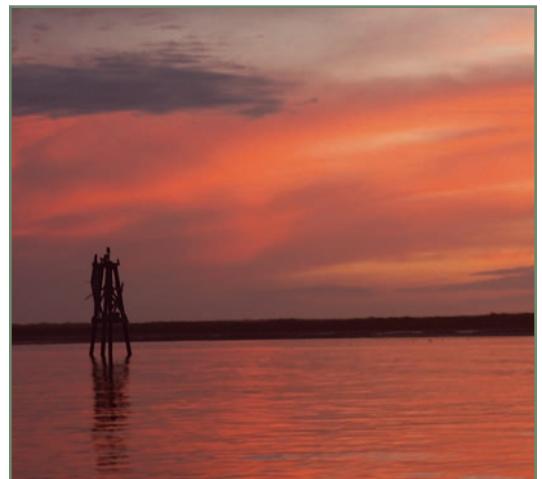
2.0 THE HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

In order to efficiently balance the variety of uses in Humboldt Bay, the State of California established the Humboldt Bay Harbor, Recreation and Conservation District (District) in 1970. The enabling legislation may be found in the California Harbors and Navigation Code, Appendix II.

The statutory purpose of the District is to manage Humboldt Bay for the promotion of commerce, navigation, fisheries, recreation, and the protection of natural resources, and to acquire, construct, maintain, operate, develop, and regulate harbor works. The important point in this statement of purposes is the balance among potentially



Recreation



Conservation



Harbor

conflicting uses of Humboldt Bay, which the District continually strives to achieve, and which the Humboldt Bay Management Plan is intended to facilitate.

2.1 Territory and Jurisdiction

The District is a County-wide public local agency, with regulatory jurisdiction in Humboldt Bay shoreward to mean higher high water (MHHW) elevation.

2.2 Organizational Structure

The District is governed by five elected commissioners, who are elected within the same jurisdictional boundaries as the Humboldt County Supervisors. The District staff of 13 people is comprised of management, maintenance, and clerical personnel. The District is divided internally into three main functional divisions, namely the Port of Humboldt Bay Division, the Woodley Island Marina Division, and the Resource Conservation Division. Within these three divisions a variety of projects and activities occur that are aimed at fulfilling the District's mission regarding Harbor, Recreation, and Conservation duties.

2.3 Examples of Projects and Activities

2.3.1 Harbor

The District oversees, coordinates or participates in a variety of harbor-related activities including, channel maintenance, channel improvement, dredging projects, port marketing and shipping facility improvements, oil spill response, navigation safety education, and oceanographic research. In April 2000 the Harbor Deepening Project was completed, which deepened the Harbor entrance to -48 feet Mean Lower Low Water (MLLW) and the North Bay and Samoa shipping channels to -38 feet (MLLW). This project was needed to improve navigation safety and to accommodate the needs of the current international shipping fleet. Other Harbor-related projects the District is involved in include participating in a commercial/industrial siting study for the harbor portion of Humboldt Bay, entitled the "Harbor Revitalization Plan;" cruise ship planning; employ the Bar Pilots; assist in the research of navigation and safety improvements for Humboldt Bay; coordinate the Humboldt Bay Oil Spill Cooperative;

operate a marina and a boat yard; support commercial fishing and mariculture activities; and numerous other activities. Except for mariculture activities located in Arcata Bay, commercial/industrial harbor uses are limited to mid-Humboldt Bay (or Entrance Bay), an area extending from the Samoa Bridge south to the southern end of the Fields Landing Channel.

2.3.2 Recreation

The District owns and operates Woodley Island Marina, serving commercial and recreational vessels since 1981; and the Fields Landing Boat Yard, a self-service facility equipped with a 150-ton boat hoist. Woodley Island Marina is the largest marina in Humboldt County, with 237 berths.

Other recreational projects that the District is involved in include the Humboldt Bay water trail project; the Shelter Cove boat launching facility which serves southern Humboldt County and numerous visitors from elsewhere; providing assistance and support for other agencies' designs and improvements of boat launching facilities (Eureka Public Marina, Fields Landing, Hookton Slough); assistance in promoting and funding the Bay-wide interpretive signing program; sponsoring and coordinating the annual Humboldt Bay Maritime Expo; participating in other recreational events such as Paddlefest; Festival on the Bay; and supporting a variety of other recreational activities in and around Humboldt Bay.

2.3.3 Conservation

Humboldt Bay Harbor, Recreation and Conservation District, as the name implies, has ongoing involvements in a multitude of conservation activities around Humboldt Bay. These include managing three wildlife areas (Gerald O. Hansen Wildlife Area on Woodley Island, the King Salmon restoration area, and the Park Street wetland at Eureka Slough); educational outreach, including an "Adopt-the-Bay" program; assisting in planning and funding biological research projects around the Bay, including yearly native eelgrass (*Zostera marina*) surveys; and a monitoring and removal program for a non-indigenous eelgrass (*Zostera japonica*); and development regulatory authority.

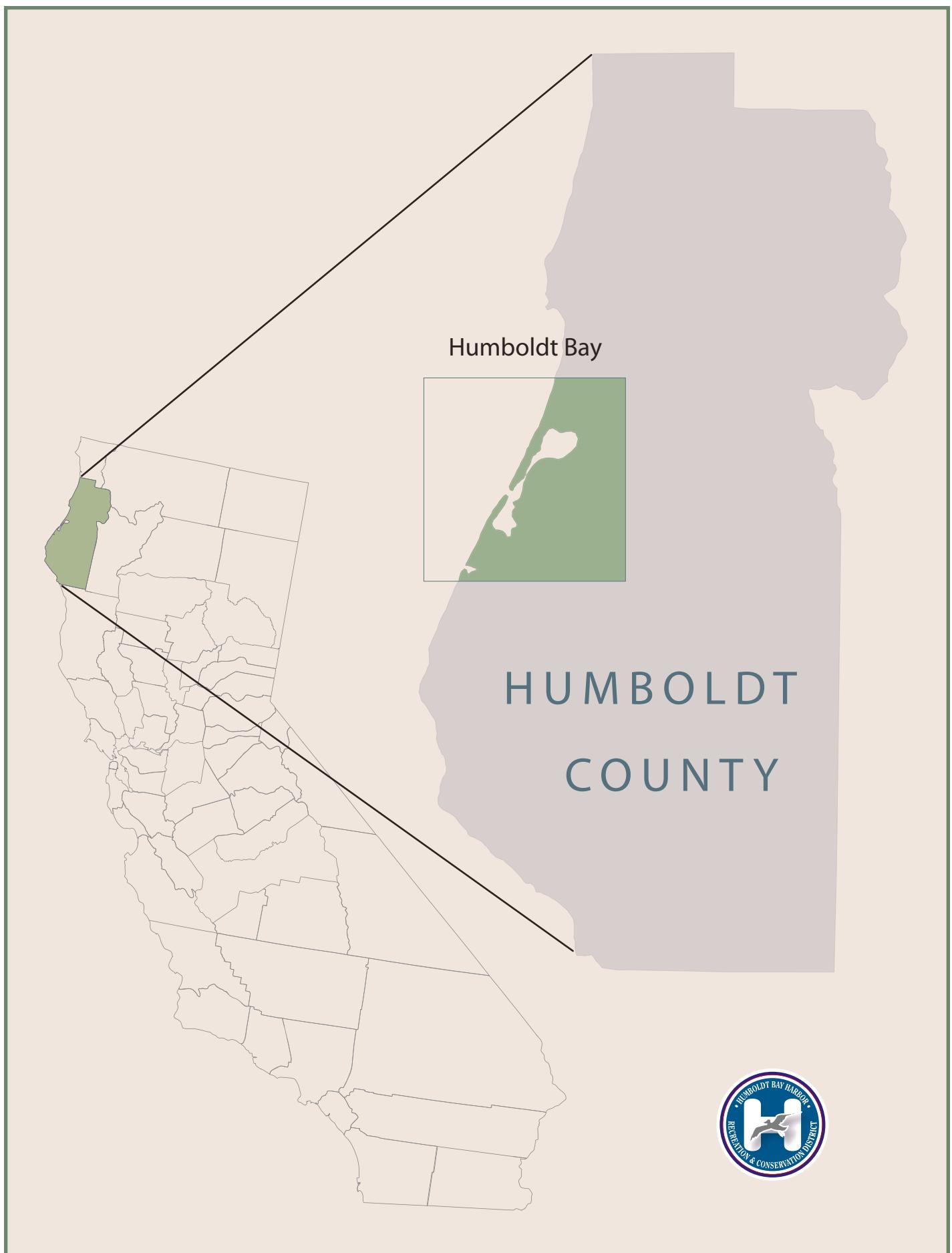


Figure ES-1: Humboldt Bay Management Plan Location

The District was the first local agency on the west coast of North America to develop and implement a ballast water exchange program, in an attempt to limit the introduction of invasive species from other ports (now overseen by the State of California). The District also oversees, coordinates or participates in the ongoing removal of non-indigenous species in wildlife areas as well as supporting and participating in other agencies' conservation programs. The District sponsors and coordinates the biennial Humboldt Bay Symposium held every even year.

The District has regulatory jurisdiction over all of the tide and submerged lands of Humboldt Bay. Therefore, the District's Board of Commissioners exercises development authority over every development project proposed in Humboldt Bay; in many cases the Board of Commissioners is also the lead agency for compliance with the requirements of the California Environmental Quality Act (CEQA).

For more information on the Humboldt Bay Harbor, Recreation and Conservation District's programs and activities, please consult the District's website at www.humboldtbay.org.

3.0 HUMBOLDT BAY MANAGEMENT PLAN

The concept of a Humboldt Bay Management Plan originated in 1997 when the need arose to update and develop a common database for use by Bay landowners and agency land managers to guide planning and research around Humboldt Bay. The District had previously created an ad-hoc agency/citizens committee labeled the Interagency Coordination Committee (ICC). The ICC's original purpose was to create a regular forum wherein agencies could report ongoing or upcoming Bay-related projects or issues. Early in the history of the ICC, it became evident that there was a lack of common base maps, resource databases, and coordinated Bay management among agencies. In order to improve Bay management in the future, the ICC recommended that an overall Bay management plan be developed by the District in coordination with other agency land managers and with input from Bay

stakeholders representing the vast array of recreational, commercial, and conservation uses. This coordinated effort was titled the Humboldt Bay Management Plan.

With the assistance of the staff from Region 1 of the California Department of Fish and Game, the District was successful in obtaining a \$17,000 grant from U.S. Fish and Wildlife Service to develop a Bay-wide parcel and ownership database and map; and a \$202,304 grant from U.S. Environmental Protection Agency to assist in developing a database of 22 separate maps, in GIS format, representing all of the existing biological and physical characteristics of Humboldt Bay. Although some of the data sets were several years old, they still represented the best existing information for these resources. A conscious effort was made to focus on building this baseline database with the best existing information rather than embarking on new Bay-wide data-collecting efforts. The premise was that this baseline database would expose the needs for updating certain data sets, which then would be recommended as implementation measures in the Humboldt Bay Management Plan. The only data set deemed vital enough to deviate from this approach was Bay-wide eelgrass (*Zostera marina*) spatial distribution. As eelgrass is an important species throughout Humboldt Bay, updated eelgrass distribution information was necessary. Therefore, a new set of aerial photographs of the entire Bay was taken in September 2000 and subjected to a multi-spectral analysis. The entire baseline database was completed in 2002. The GIS information database is currently accessible on the District's website.

In order to formalize the Humboldt Bay Management Plan planning process, the District Board of Commissioners appointed the Humboldt Bay Management Plan Task Force (Task Force), made up of agency land managers and representatives of various Bay-user stakeholder groups, many of whom were regular participants in the ICC. These representatives are identified in Table ES-1. As the planning process began to take shape, the depth and importance of this effort became evident. Therefore, in order to assure proper stewardship over the planning process, the District appointed two of its own Board members,

Humboldt Bay Harbor, Recreation and Conservation District Board of Commissioners

District Administrative Core Team

Board Advisory Committee:

Commissioners Ronnie Pellegrini/ Dennis Hunter

Chief Executive Officer: David Hull

Conservation Specialist: Jeff Robinson

Environmental Planning Consultants:

Chad Roberts/Bruce Kemp

Task Force Representatives

City of Eureka: Gary Bird

City of Arcata: Juli Neander

County of Humboldt: Jimmy Smith

County of Humboldt: Kirk Girard

U. S. Environmental Protection Agency: Gail Louis

Bureau of Land Management: Bruce Cann

Humboldt Bay National Wildlife Refuge: Shannon Smith

California Department of Fish & Game:

Region 1: Mark Wheatley

Marine Region: Vicki Frey

Humboldt County Resource Conservation District: Otis Skaggs

Recreational User Group Representative: Pete Oringer

Environmental Group Representative: Jim Clark

Commercial/Industrial Group Representative: Andy Westfall

Mariculture Industry Group Representative: Greg Dale

Commercial Fishing Industry Group Representative: Ken Bay

Education Group Representative: Bill Schaser

California State Coastal Conservancy: Jim King

Table ES-1: Humboldt Bay Management Plan Project Organization

created and filled the Conservation Specialist position, and retained consultant Roberts, Kemp and Associates LLC to assist with Plan preparation and oversee the Plan's compliance with the California Environmental Quality Act (CEQA). It also became evident that additional funding would be required to complete the Plan. A \$100,000 grant was awarded to the District in 2000 from the California State Coastal Conservancy to augment and expand the planning effort and to supplement existing funding from U.S. EPA and U.S. Fish and Wildlife Service.

3.1 Planning Process

One of the Task Force's first tasks was to develop project boundaries and a mission statement to guide the production of the Humboldt Bay Management Plan.

3.1.1 Planning Boundary

The planning area of the Humboldt Bay Management Plan consists of three components: (1) the Primary Area of Concern, (2) the Sphere of Interest, (Figure ES-2) and (3) the Humboldt Bay watershed (Figure ES-3).

The *Plan Boundary* is defined as all of the tidelands and submerged lands of Humboldt Bay shoreward to a tidal elevation of mean higher high water (MHHW), an area covering approximately 27 square miles. This planning boundary was chosen because it represents that portion of Humboldt Bay under the regulatory jurisdiction of the District.

The *Sphere of Interest* (SOI) is defined as those lands surrounding Humboldt Bay from MHHW inland to the established California Coastal Zone boundary. Although the Task Force realized that the Humboldt Bay Management Plan could not specify land uses within the sphere of interest, it was felt that the Plan should take into consideration the existing and planned land uses adjacent to the Bay in order to avoid land use conflicts and to provide the basis for considering adjacent land uses that actually or potentially affect Bay resources and activities. The intent of the SOI was to identify existing and future uses compatible with Humboldt Bay Management Plan recommendations within the Plan Boundary.

Activities and land uses that take place in the larger *Humboldt Bay watershed*, the larger geographical area that includes the District's "primary" and "secondary" areas of concern, may also directly or indirectly affect the subjects addressed in this Plan; such activities are, however, outside of both the District's area of direct or "primary" jurisdiction and the Public Trust lands that constitute the District's "secondary" area of concern. Accordingly, the District has identified the remainder of the Humboldt Bay watershed as a "tertiary" area of concern.

3.1.2 Mission Statement

Based on the aforementioned needs and purpose, the Mission Statement developed for the Humboldt Bay Management Plan is to:

"Provide a comprehensive framework for balancing and integrating conservation goals and economic opportunities in a cooperative manner for the management of Humboldt Bay's resources."

3.2 Plan Development

As the database was nearing completion, District staff and consultants were in place, and the planning boundaries and mission statement had been defined, the Task Force moved ahead with Plan development.

The District's Board of Commissioners desired to involve Bay stakeholders in the planning process early in the process so that the public would have the opportunity to provide input into the Plan, and the Task Force could develop management policies based on this input rather than merely receiving comment on the prepared document at the end of the process. Using this "bottom up" approach, the Task Force identified a number of Bay user/stakeholder groups and hosted a series of workshops to obtain stakeholder input for the Plan. Stakeholder workshops were held in 2001-2002 to address the following topics:

- Commercial/Industrial Waterfront Development
- Agriculture
- Environment
- Recreation
- Education

Humboldt Bay Plan Boundary

This map shows the extent of the Harbor District Management Plan's jurisdiction as the "Primary" Area of Concern and the Harbor District Management Plan's "Secondary" Sphere of Interest.



Figure ES-2: Humboldt Bay Primary & Secondary Boundaries



Humboldt Bay 2005



Humboldt Bay Watershed (Major Tributary Stream Basins)

Humboldt Bay Drainage Boundary

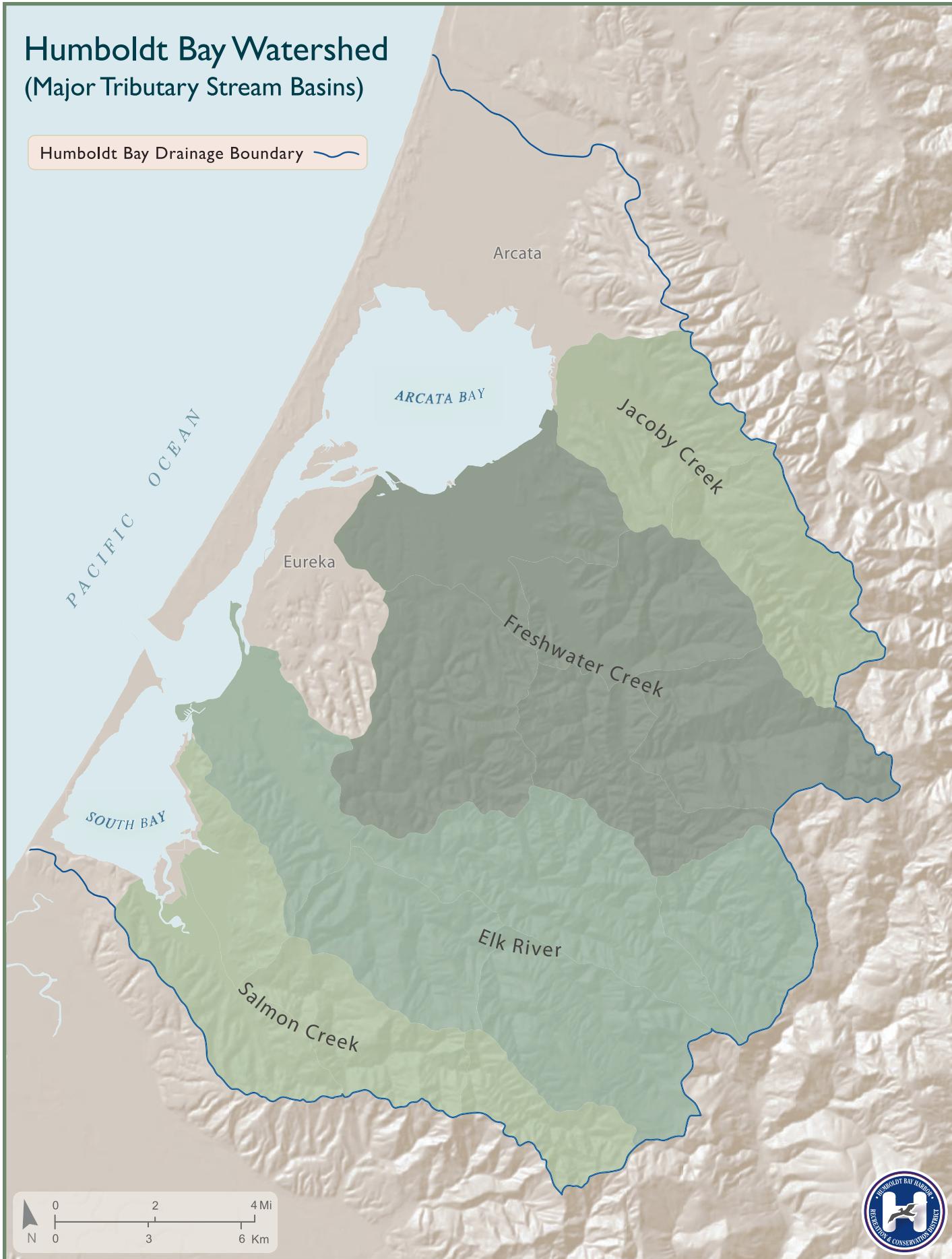


Figure ES-3: Humboldt Bay Watershed Area

- Commercial fishing
- Mariculture

Citizen participation at these workshops led to the identification of more than 350 substantive topics, which the Task Force distilled into the following issue categories for the Humboldt Bay Management Plan to address:

- Habitat and Living Resources
- Human Activities and Competing Uses
- Water Quality and Sediment Quality
- Public Participation and Education
- Research and Monitoring

Following the conclusion of the stakeholder meetings in May 2002, District staff began analyzing the comments and reviewing preliminary summaries of the information with each of the Task Force's stakeholder representatives. Based on stakeholder and Task Force input, the first internal draft of the Humboldt Bay Management Plan was produced in January 2004. In June 2004 Roberts, Kemp and Associates were retained by the District to assist in the assimilation and compilation of information and the preparation of the final Humboldt Bay Management Plan. The Plan and associated Programmatic Environmental Impact Report were adopted by the Board of Commissioners on August 24, 2006.

3.3 Document Structure

The Humboldt Bay Management Plan has been organized to contain the following elements:

- Volume I, including:
 - Executive Summary
 - Section I: Introduction
 - Section II: State of the Bay
 - Section III: Management Policies
- Volume II: Appendixes

3.3.1 Section I – Introduction

Section I introduces the background and history, as well as the need and origin, of the Humboldt Bay Management Plan. In addition, Section I describes the role and make-up of the Humboldt Bay Management Plan Task Force and the Plan development process.



Recreation



Conservation



Harbor

Section I also introduces the structure of the Humboldt Bay Management Plan by briefly describing the contents of each of the Volumes contained in the Plan. Generally, both the State of the Bay (Section II) and the Management Policies (Section III) are divided into the District's three main areas of focus, namely Harbor, Recreation, and Conservation. These three focus areas are further focused into geographic regions of Humboldt Bay consisting of Arcata (North) Bay, Entrance Bay (or Middle Bay), and South Bay.

3.3.2 Section II – State of the Bay

Section II consists of four chapters:

- Chapter 1.0 – Introduction
- Chapter 2.0 – The Harbor/Port Setting for Humboldt Bay
- Chapter 3.0 – The Recreation Setting for Humboldt Bay
- Chapter 4.0 – The Conservation Setting for Humboldt Bay

Chapter 1.0 of Section II provides a general summary of the policy framework in which the Humboldt Bay Management Plan is embedded. The District operates within its own legislatively established mandates, in a larger context that includes other, independent local agencies (which follow their own planning policy framework), state agencies carrying out established state programs, and federal agencies carrying out the provisions of federal programs. The information addressed in the Plan has been abstracted from existing adopted planning documents, as well as through consultations with staff from relevant agencies.

Chapters 2.0, 3.0, and 4.0 address specific setting conditions that are important for the policy framework laid out in Section III. These chapters reflect the District's three focus areas of Harbor, Recreation, and Conservation. Some of the information required in this Plan to address the ***Port/Harbor Setting*** (Chapter 2.0) has been abstracted from the recent Humboldt Bay Harbor Revitalization Plan and other recent planning documents.

The ***Recreation Setting*** summary in Chapter 3.0

identifies recreational uses and opportunities throughout the Humboldt Bay watershed, with a particular focus on how those uses and opportunities relate to Humboldt Bay. The content of this chapter is based on adopted plans and addresses the requirements of local, state, and federal laws with respect to recreational opportunities.

The discussion in the ***Conservation Setting*** in Chapter 4.0 is focused on environmental conditions and “resources” that are the subject of policy considerations in Section III. That is, the topics in this chapter are “key issues” for the policy document (Section III). As in the general discussion, this chapter is not encyclopedic in coverage, but it is intended to present the current understanding of basic and applied scientists, agency staff, and informed members of the public regarding ecological processes and the biological and physical conditions in Humboldt Bay that are necessary to carry out informed considerations of the policy framework in Section III.

3.3.3 Section III – Policy Document

Section III of the Humboldt Bay Management Plan consists of six chapters:

- Chapter 1.0 – Introduction
- Chapter 2.0 – Humboldt Bay Water Use Designations
- Chapter 3.0 – Harbor Element Planning Policies
- Chapter 4.0 – Recreation Element Planning Policies
- Chapter 5.0 – Conservation Element Planning Policies
- Chapter 6.0 – Implementation

Chapter 1.0 of Section III is a brief introduction to the overall Policy Document framework.

The discussion of ***Water Use Designations*** in Chapter 2.0 describes the District's intended focus on primary and secondary water use areas in Humboldt Bay. This chapter is similar to a land use designation section in the general plan for a local governmental jurisdiction. This chapter features text and a map delineating the use

designations considered for Humboldt Bay, including “primary” designations for ***Harbor*** and ***Bay Conservation*** and “combining” designations for ***Marine Recreation*** and ***Mariculture*** (Figure ES-4).

Chapters 3.0, 4.0, and 5.0 of the Humboldt Bay Management Plan identify a policy focus for the District’s management actions in Humboldt Bay. These policies identify District responsibilities in the three primary areas (Harbor, Recreation, and Conservation) that the Task Force identified as the Plan’s focus. As requested by the Task Force, each policy document chapter cross-references relevant policies in other chapters.

An ecosystem-based management approach requires a balancing of priorities and policies outlined in this Humboldt Bay Management Plan. It should be noted that the 104 policies specified in the Plan have not been prioritized. Instead, no one policy is considered to be more important than another policy, rather they are equals.

The Humboldt Bay Management Plan policy framework clearly establishes management directions for the following uses; harbor-related, recreation, and conservation therefore addressing the District’s legislative mandates.

The tables below contains the heart of this Plan that is the policies; 38 harbor-related, 39 recreation, and 27 conservation policies. Each policy in the Plan is entered under a category which includes a full textual description as well as a discussion to further enumerate the policy. It is important to read the policy in its full entirety.

The Plan reflects a policy balance that recognizes the District’s legislatively directed obligations to manage harbor-related, recreation-related, and conservation-related management goals for Humboldt Bay. Specifically there are three sets of management policies for Humboldt Bay:

1. policies for managing harbor functions
2. policies for managing recreation functions, and
3. policies for managing conservation functions.



Recreation



Conservation



Harbor

Water Use Designations of Humboldt Bay

This map depicts water use classification types, based upon the 2007 Humboldt Bay Management Plan. Primary water use designations are: harbor and bay conservation. Combined water use designations are: marine recreation and mariculture.



Figure ES-4: Humboldt Bay Water Use Designations

Chapter 3.0 presents the ***Harbor Element Planning Policies*** that carry out the District's obligations for managing Humboldt Bay as a port. In addition, this policy chapter addresses the District's approach to the ongoing maintenance of levees, dredged areas, and other elements of the human-modified bayscape, while also presenting policies that will help guide future restoration and enhancement planning work within the Bay.

Table ES-2: Harbor Element Policies

Harbor-Related Land Use and Development	Page
HLU-1: Harbor-related uses shall have priority under this Plan within the portions of Humboldt Bay designated for port-related or harbor-related uses	164
HLU-2: Assist local, regional, and state agencies in identifying and protecting harbor-related land uses in Humboldt Bay, and in developing increased institutional capability in the planning, regulatory, and development programs related to such uses	165
HLU-3: Assist in removing potential constraints for marine-dependent or coastal-dependent land uses along the Samoa Peninsula, Fields Landing Channel, Eureka shorelines, and other harbor-related areas (from Harbor Revitalization Plan)	165
HLU-4: Assist in removing potential constraints for marine-dependent or coastal-dependent land uses on harbor-related parcels in the South Bay (from Harbor Revitalization Plan)	165
HLU-5: Provide information for the public, and for decision-makers and staff of government institutions, to facilitate protecting and enhancing harbor-related opportunities for Humboldt Bay	166
HLU-6: Develop “specific plans” for District-owned parcels	166
HLU-7: Proposals for bay-related activities approved by the District shall incorporate appropriate noise control measures to avoid or reduce noise effects on events and activities carried out near the bay, to the extent feasible	166
Shoreline Management	Page
HSM-1: Develop an inventory of shipping terminal facilities necessary to carry out adopted harbor-related planning policies for Humboldt Bay	167
HSM-2: Develop an inventory of shoreline protection devices, identify potential needs for additional protection, and develop standards for new and existing Humboldt Bay shoreline protection	167
HSM-3: Develop appropriate, consistent shoreline protection guidelines for commercial, industrial, and residential development around Humboldt Bay	168
HSM-4: Require maintenance according to the District's adopted shoreline protection standards	169
HSM-5: Require evidence that shoreline protection proposals protect the environment and meet District requirements	169
HSM-6: Require the use of non-structural shoreline protection where feasible and appropriate	169
HSM-7: Identify needs for potential shoreline improvements necessary to accommodate bay water surface elevation changes, including potential effects of climate change	169
HSM-8: Develop coordinated plan for addressing seismic effects, land stability, and tsunami response plan for Humboldt Bay	170

Dredging and Waterway Maintenance	Page
HWM-1: Safe navigation in Humboldt Bay is a priority	171
HWM-2: Dredging may be authorized to meet Plan purposes	171
HWM-3: Re-deposition of dredged materials within Humboldt Bay may be authorized to meet Plan purposes	171
HWM-4: Placement of fill within Humboldt Bay may be authorized to meet Plan purposes	171
HWM-5: Potential dredged-material management options and alternative disposal methods shall be identified in a Long Term Management Strategy for Humboldt Bay	172
HWM-6: Sediment dynamics in Humboldt Bay shall be identified and a sediment management approach for Humboldt Bay shall be developed	172
HWM-7: Evaluate the extent of maintenance dredging required to meet the Management Plan's objectives	172
HWM-8: Evaluate channel maintenance alternatives for the community of King Salmon	173
Commercial Fishing and Aquaculture	Page
HFA-1: The District shall plan for, designate locations for, and seek to provide adequate berthing, marina space, moorage, and other facilities necessary to meet the operational and maintenance needs of commercial fishing vessels, recreational boats, and other small watercraft	174
HFA-2: Support the improvement of existing fish landing, buying, and processing facilities in the Humboldt Bay area	174
HFA-3: Protect appropriately designated shoreside areas for the development, maintenance, or expansion of commercial fish processing and aquaculture facilities or activities	175
HFA-4: Assist in developing agency approval strategies and funding for commercial fishing and aquacultural marketing and outreach activities in Humboldt Bay	175
HFA-5: Identify additional aquaculture opportunities in Humboldt Bay	175
HFA-6: Designate a Preferred Aquaculture Use Area in Arcata Bay, and require Best Management Practices to meet environmental constraints	175
HFA-7: Identify ecological and environmental factors affecting Humboldt Bay's fish populations, and the ecosystem elements that support them	175
HFA-8: Identify and implement the requirements for Bay management with respect to Essential Fish Habitat	176
HFA-9: Develop agreement with Wiyot Tribe to facilitate cultural resource management	177
HFA-10: Institute procedures to ensure compliance regarding cultural resources and related matters	177



Toxic Materials Management	Page
HTM-1: Enhance public outreach and educational programs addressing the impacts of toxic materials to Humboldt Bay and surrounding lands, and assist in educational efforts to prevent toxic spills	178
HTM-2: Monitor, comply with, and assist in updating as necessary the oil spill contingency plans for Humboldt Bay	178
HTM-3: Assure compliance with North Coast Air Quality Management District Rules for Particulates	178
HTM-4: Projects shall incorporate appropriate odor-control measures	178
Regulatory Streamlining	Page
HRS-1: Develop and implement a regulatory coordination process for projects around Humboldt Bay that are consistent with adopted plans	179

The **Recreation Element Planning Policies** in Chapter 4.0 address the interrelationships among the District's jurisdiction with those of other local agencies, including access "across" the shoreline. The requirements of various state and federal acts have been considered. To the extent possible, long-range plans for recreational improvements have also been incorporated.

Table ES-3: Recreation Element Policies

Recreational Administration	Page
RA-1: Humboldt Bay Management Plan Advisory Committee as a forum for recreation opportunities	184
RA-2: Partnerships with other recreation providers	185
RA-3: Recreation opportunities to be integrated with other District functions	185
RA-4: Capital improvement program and recreation budgeting	185
Recreational – Opportunities Planning	Page
ROP-1: Recreation planning to be an ongoing and coordinated function	186
ROP-2: Needs assessment and related use preference data	186
ROP-3: Identification of designated recreational use areas	186
ROP-4: Future recreation areas to be reserved as needed	186
Recreational Facilities and Access	Page
RFA-1: Safe and appropriate public recreational access to and use of the Bay	187
RFA-2: Project approvals shall incorporate public access and associated services and amenities where appropriate	187
RFA-3: Water-oriented recreation facilities; access for fishing and shellfish harvesting	187
RFA-4: Coastal-dependent industrial and commercial uses may take priority in designated Harbor areas	188
RFA-5: Environmentally and culturally sensitive areas	188

Recreational Facilities and Access—<i>continued</i>	Page
RFA-6: Prevention of significant adverse environmental effects	188
RFA-7: Protection of recreational areas	188
RFA-8: Minor amounts of fill authorized	188
RFA-9: Support public transportation	189
RFA-10: Signage and parking for public recreation areas, access points, and trails	189
RFA-11: Signage for boating safety	189
Recreation – Specific Activities	Page
RSA-1: Improvement and provision of boat launch sites	190
RSA-2: Assistance to, maintenance of, and consideration of marinas	190
RSA-3: Considerations for live-aboard boats	190
RSA-4: Anchorage, security, and disposition of recreational boats	190
RSA-5: Support opportunities for recreational fishing	190
RSA-6: Protect District-owned beaches for visitor-serving uses	191
RSA-7: Prohibition of off-highway vehicles on District-controlled properties	191
RSA-8: Use of concessionaires	191
RSA-9: Support for a water trails program for Humboldt Bay	191
Recreation – Interpretation and Outreach	Page
RIO-1: Interpretive program	191
RIO-2: Public interpretive center	192
RIO-3: Directing recreational users toward appropriate areas of the bay	192
RIO-4: Support for consistency in interpretive signs and displays.	192
Recreation – Visual Resources	Page
RVR-1: Views of Humboldt Bay shall be protected	192
RVR-2: Coastal-dependent uses shall facilitate public viewing, if feasible	193
RVR-3: Scenic views and vistas map	193
RVR-4: Trash and debris removal	193
RVR-5: Coordination with other jurisdictions on visual quality	193
RVR-6: Lighting shall meet federal and state guidelines	193
RVR-7: District to consider future policy on billboard controls	194

The growing attention to the ecological or conservation importance of Humboldt Bay, regionally, nationally, and internationally, requires a policy framework found in the ***Conservation Element Planning Policies*** in Chapter 5.0. This chapter addresses the District's conservation-related responsibilities and powers while attending to the statewide and national policy framework that is of interest to many Humboldt Bay stakeholders.

Table ES-4: Conservation Element Policies

Maintaining and Enhancing Aquatic Ecosystem Functions	Page
CAE-1: Base management decisions on maintaining the Humboldt Bay ecosystem, including the bay, the watershed, and the nearby ocean	200
CAE-2: Maintain, restore, and enhance aquatic ecosystem integrity	201
CAE-3: Protect and maintain environmentally sensitive habitat areas	201
CAE-4: Work cooperatively to develop and implement a restoration and enhancement plan for Humboldt Bay's aquatic ecosystems	202
CAE-5: Work cooperatively to develop and implement a water-quality maintenance plan for Humboldt Bay	202
Aquatic Species Management	Page
CAS-1: Maintain biological diversity and important habitats throughout Humboldt Bay	203
CAS-2: Maintain and enhance conditions required by commercially important fish, invertebrate, and plant species	204
CAS-3: Maintain and enhance habitat for sensitive species	204
CAS-4: Control or remove non-indigenous invasive species	205
CAS-5: Fill placement may be used for habitat enhancement purposes	205
CAS-6: Fill placement may be used for cultural resource protection purposes	205
Humboldt Bay Ecosystem Management Program Elements	Page
CEP-1: Impacts to streams, wetlands, estuaries, and coastal waters may be authorized for specific purposes or project types	206
CEP-2: Dredging may be approved under specified conditions	207
CEP-3: Revetments, breakwaters, and other shoreline structures may be approved under specified conditions	207
CEP-4: Functional capacity of aquatic ecosystems must be maintained	207
CEP-5: Water quality protection is required	208
CEP-6: Mitigation program requirements are identified	209
CEP-7: Mitigation efforts must follow an identified sequence, with avoidance preferred and compensation least-favored	209
CEP-8: Mitigation proposal elements are defined	210
CEP-9: Mitigation must be implemented before or at the same time as the impact being mitigated	210

Humboldt Bay Ecosystem Management Program Elements—<i>continued</i>	Page
CEP-10: Buffer requirements are defined for proposals affecting the Bay and other aquatic ecosystems	210
CEP-11: Determinations about boundaries, buffers, or other environmentally sensitive areas require specific information	211
CEP-12: Indian Island use shall be restricted to environmental and Native American purposes, and management decisions shall be made cooperatively	211
CEP-13: Greenhouse gas emissions to be considered	211
Public Involvement and Outreach	
CPE-1: District maintenance of communications with media	212
CPE-2: Increased use of District website for communicating about Bay management	212
CPE-3: Humboldt Bay Management Plan Advisory Committee as forum for environmental resources and other management considerations	212

Chapter 6.0 identifies the general **Implementation Program** anticipated for enactment by the District's Board of Commissioners in order to enable and carry out the Plan's recommendations. The primary responsibility for the Plan's implementation lies with the Board of Commissioners and with District staff, working in collaboration with applicants, other agencies, and the public. The implementation program also includes the development of an Advisory Committee of interested citizens and agency representatives, which will coordinate with District staff to review and establish priorities for implementation tasks. The role of the Advisory Committee is expected to be focused on providing advice to the District's staff and the District's Board of Commissioners regarding implementation priorities.

The implementation approach described in Chapter 6.0 incorporates three general courses of action, depending on specific circumstances:

- When the implementation involves a proposed project or other definite action, the District's staff will review the proposed application with respect to the Plan's policies, recommending action to the Board of Commissioners.
- When the implementation of the Plan's policies involves the development by the District of procedures (e.g., a "shoreline protection manual" or similar standardized approach to Bay

management), District staff and the Advisory Committee will consider the relative priorities for District implementation, and the Advisory Committee will recommend priorities for staff development of the relevant materials. Staff will develop the procedural guidance, consulting with other agencies and with appropriate experts and interested parties. When the appropriate procedures have been developed, District staff will present the material to the District's Board of Commissioners for consideration and adoption, including public review elements. When adopted by the Board, these procedures will become standards for implementing the Plan.

- When the implementation of Plan policies includes collaborative planning or action by the District and other agencies (e.g., the development of a Bay-wide wetland enhancement or restoration plan, or the development and enactment of a memorandum of agreement that the District will act jointly with another agency to carry out a policy that covers a shared interest), District staff and the Advisory Committee will consider the relative priorities for District implementation, and the Advisory Committee will recommend priorities for staff development of appropriate memoranda. These recommendations will be presented to the District's Board; upon direction from the Board, staff will convene

the work-group necessary to carry out the policy recommendation, meeting with interested parties and/or with the staff or decision-makers of the relevant agencies in order to develop the appropriate plan or memoranda of understanding/agreement (MOU/MOA). The resulting plan or MOU/MOA will be considered by the District's Board, including public review elements. When the plan or MOU/MOA is adopted or executed by all appropriate parties, the plan or memorandum will become a standard for District implementation of the Management Plan.

3.3.4 Volume II – Appendices

Volume II of the Management Plan incorporates three broad components. One component contains text references of laws, rules, and regulations relevant to Bay management, from the District as well as from

other relevant agencies. This portion of the Appendices contains a synopsis of selected agency and stakeholder contact information.

The second component of the Appendices includes a variety of background information relevant for the Plan, such as a glossary of selected terms, and guides to selected lists of species identified in the Bay. These guides are intended for general reference and educational purposes and are not intended as a characterization of the ecological setting of Humboldt Bay.

Finally, Volume II contains a summary of advisory group comments developed during the preparation of the Humboldt Bay Management Plan, as well as complete copies of all public comments received by the District regarding the Public Draft Management Plan in March and April of 2005.



3.3.5 Compact Disc Contents

The compact disc enclosed with this Plan contains the following:

- Humboldt Bay Management Plan – Volume I – The Plan, May 2007
- Volume II – Appendices, July 2005
- Final Environmental Impact Report, August 2006
- Draft Environmental Impact Report, April 2006



**Humboldt Bay Harbor, Recreation
and Conservation District**

**601 Startare Drive
P.O. Box 1030
Eureka, CA 95502-1030**

Telephone: 707-443-0801