

#### **Section IX**

### **Appendices**

- Ecosystem Management Strategies
- Education and Outreach Related Activities
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# Appendix A – Ecosystem Management Strategies

#### **Ecosystem Management**

Habitat: Beaches

	Action Plan	Management Strategy
Coastal Development	Coastal Armoring	CA-1: Conduct Issue Characterization and Needs Assessment CA-2: Develop and Implement Regional Approach to Coastal Armoring
	Desalination	DESAL-2: Develop Facility Siting Guidelines DESAL-3: Identify Environmental Standards for Desalination Facilities
	Harbors & Dredge Disposal	HDD-5: Alternative Disposal Sites
_	Submerged Cables	SC-1: Identify Routing and Zones for Submerged Cable Projects
Ecosystem Protection	Big Sur Coastal Ecosystem Protection	BSP-2: Develop an Interagency Coordination Program
	Introduced Species	IS-1: Address Known Pathways of Introduction IS-3 Develop Baseline Information, Research & Monitoring Program
_	SIMoN	SI-4: Integrate, Synthesize, and Analyze New and Existing Data
	Marine Protected Areas	MPA-2: Define Conservation Goals/Objectives/Habitats & Resources to be MPA-5 Develop Integrated Management System
Partnerships & Opportunities	Fishing Related Education and Research	FER-5: Collect and Distribute Fisheries and Habitat Related Data FER-7: Conduct Public Outreach on Links Between Healthy Ecosystems
L	Interpretive Facilities	IF-3: Increase Sanctuary-wide Interpretive Signage
Water Quality	Beach Closures and Microbial Contamination	BC-1: Enhance Use of Geographic Information Systems (GIS) BC-2: Expand Pathogen and Contamination Research BC-3: Increase Monitoring Network BC-4: Enhance Notification Program BC-5: Increase Source Control Program BC-6: Increase Technical Training for Industry Professionals BC-7: Enhance Public Outreach of Contaminations Sources and Solutions BC-8: Increase and Coordinate Enforcement BC-9: Improve Emergency Response Program
L	Water Quality Protection Program Implementation	WQPP-3: Collaborate with Regional Urban Runoff Management Efforts WQPP-6: Increase Storm Drain Inspections WQPP-9: Increase Access to Monitoring Data
Wildlife Disturbance	Marine Mammal, Seabird and Turtle Disturbance	MMST-3 Mitigate Impacts From Shore-Based Activities MMST-4 Mitigate Impacts From Marine Debris

Habitat: Deep Sea

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Action Plan	Management Strategy
Harbors & Dredge Disposal	HDD-2 Review Offshore Dredge Disposal Activities
Submerged Cables	SC-1 Identify Routing and Zones for Submerged Cable Projects
Big Sur Coastal Ecosystem Protection	BSP-2 Interagency Coordination Program
Bottom Trawling Effects on	BH-2 Assess Trawl Activity
Benthic Habitats	BH-6 Identify and Implement Potential Ecosystem Protection
Davidson Seamount	DS-1 Conduct Site Characterization
	DS-2 Conduct Ecological Processes Investigations
	DS-3 Develop Resource Protection Program
	DS-4 Conduct Seamount Education and Outreach Initiatives
Introduced Species	IS-3 Develop Baseline Information, Research & Monitoring Program
SIMoN	SI-4 Integrate, Synthesize, and Analyze New and Existing Data
Marine Protected Areas	MPA-2 Define Conservation Goals and Objectives and Habitats and Resources to be Protected
	MPA-5 Develop Integrated Management System
Interpretive Facilities	IF-1 Construct and Operate Visitor Center
	MERITO-2 Community-Based Bilingual Outreach Program
Cruise Ship Discharges	CS-1 Increase Outreach and Coordination CS-2 Develop Enforcement and Monitoring Program
Marine Mammal, Seabird	MMST-1 Mitigate Impacts From Marine Vessels MMST-4 Mitigate Impacts From Marine Debris
Marine Mammal, Seabird and Turtle Disturbance	MMST-4 Mitigate Impacts From Marine Debris
	Submerged Cables  Big Sur Coastal Ecosystem Protection  Bottom Trawling Effects on Benthic Habitats  Davidson Seamount  Introduced Species  SIMoN  Marine Protected Areas  Interpretive Facilities

Habitat: Estuaries

	Action Plan	Management Strategy
Coastal Development	Coastal Armoring	CA-2: Develop and Implement Regional Approach to Coastal Armoring
	Desalination	DESAL-2: Develop Facility Siting Guidelines
	Harbors & Dredge Disposal	HDD-3: Coordinate with Sediment Monitoring and Reduction Programs
	Submerged Cables	SC-1: Identify Routing and Zones for Submerged Cable Projects
Ecosystem Protection	Big Sur Coastal Ecosystem Protection	BSP-2: Interagency Coordination Program
	Introduced Species	IS-1: Address Known Pathways of Introduction IS-2: Develop Prevention Program for Known Pathways of Introduction IS-3: Develop Baseline Information, Research & Monitoring Program
	SIMoN	SI-1: Implement Monitoring Programs Needed to Support Management SI-4: Integrate, Synthesize, and Analyze New and Existing Data
	Marine Protected Areas	MPA-2: Define Conservation Goals and Objectives and Habitats and Resources to be Protected MPA-5: Develop Integrated Management System
Partnerships & Opportunities	Interpretive Facilities	IF-2: Develop Smaller Regional Interpretive Facilities
Opportunities	Ocean Literacy	Strategy OLCB-5: Implement the MBNMS Multicultural Education for Resource Issues Threatening Oceans (MERITO) Program
Water Quality	Beach Closures and Microbial Contamination	BC-1: Research BC-2: Monitoring BC-4: Geographic Information System (GIS)
	Water Quality Protection Program Implementation	WQPP-16: Establish Agricultural Industry Networks to Address Water WQPP-17: Strengthen Technical Information and Outreach to WQPP-18: Improve Education and Public Relations on Watersheds and WQPP-21: Improve Water Quality Management on Public Lands and WQPP-22: Develop Wetlands and Riparian Corridor Action Plan
Wildlife Disturbance	Marine Mammal, Seabird and Turtle Disturbance	MMST-1: Mitigate Impacts From Marine Vessels MMST-2: Mitigate Impacts From Low Flying Aircraft MMST-3: Mitigate Impacts From Shore-Based Activities MMST-4: Mitigate Impacts From Marine Debris MMST-8: Maintain and Enhance Enforcement

Habitat: Kelp Forests

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	Action Plan	Management Strategy	
Coastal	Desalination	DESAL-2: Develop Facility Siting Guidelines	
Development			
<u>'</u>	Submerged Cables	SC-1: Identify Routing and Zones for Submerged Cable Projects	
Ecosystem	Big Sur Coastal Ecosystem	BSP-1: Provide Integrated Data and Information to the Public	
Protection	Protection	BSP-2: Interagency Coordination Program	
ŀ	Introduced Species	IS-1: Address Known Pathways of Introduction	
	_	IS-3: Develop Baseline Information, Research & Monitoring Program	
-	SIMoN	SI-3: Integrate Regional Monitoring Efforts	
		SI-4: Integrate, Synthesize, and Analyze New and Existing Data	
L	Marine Protected	MPA-2: Define Conservation Goals and Objectives and Habitats and	
	Areas	Resources to be Protected	
		MPA-5: Develop Integrated Management System	
Partnerships &	Fishing Related Education	FER-5: Fisheries Related Data Collection and Distribution	
Opportunities	and Research		
-	Interpretive Facilities	IF-1: Construct and Operate Visitor Center	
L	Ocean Literacy	Strategy OLCB-5: Implement the MBNMS Multicultural Education	
		For Resource Issues Threatening Oceans (MERITO) Program	
Wildlife	Marine Mammal, Seabird and	MMST-1: Mitigate Impacts From Marine Vessels	
Disturbance	Turtle Disturbance	MMST-4: Mitigate Impacts From Marine Debris	
		MMST-5: Evaluate Impacts From Commercial Harvest	
		MMST-8: Maintain and Enhance Enforcement	
L	Motorized Personal Watercraft	MPWC-1: Maintain Motorized Personal Watercraft Zones	

Habitat: Open Ocean

	Action Plan	Management Strategy
Ecosystem Protection	Introduced Species	IS-3 Develop Baseline Information, Research & Monitoring Program
	SIMoN	SI-4 Integrate, Synthesize, and Analyze New and Existing Data
1	Marine Protected Areas	MPA-2 Define Conservation Goals and Objectives and Habitats and Resources to be Protected MPA-5 Develop Integrated Management System
Partnerships & Opportunities	Fishing Related Education and Research	FER-5 Fisheries Related Data Collection and Distribution
	Interpretive Facilities	IF-1 Construct and Operate Visitor Center
Water Quality	Cruise Ship Discharges	CS-2 Develop Enforcement and Monitoring Program
Wildlife Disturbance	Marine Mammal, Seabird and Turtle Disturbance	MMST-1 Mitigate Impacts From Marine Vessels MMST-4 Mitigate Impacts From Marine Debris

Habitat: Rocky Shores

	Action Plan	Management Strategy
Coastal Development	Coastal Armoring	CA-1 Conduct Issue Characterization and Needs Assessment CA-2 Develop and Implement Regional Approach to Coastal Armoring
	Desalination	DESAL-1 Develop and Implement Regional Desalination Program DESAL-2 Develop Facility Siting Guidelines DESAL-3 Identify Environmental Standards for Desalination Facilities DESAL-4 Develop Modeling and Monitoring Program
	Harbors and Dredge Disposal	HDD-2 Review Offshore Dredge Disposal Activities
	Submerged Cables	SC-1 Identify Routing and Zones for Submerged Cable Projects
Ecosystem Protection	Big Sur Coastal Ecosystem Protection	BSP-1 Provide Integrated Data and Information to the Public BSP-2 Interagency Coordination Program
	Introduced Species	IS-1 Address Known Pathways of Introduction IS-2 Develop Prevention Program for Known Pathways of Introduction IS-3 Develop Baseline Information, Research & Monitoring Program
	SIMoN	SI-4 Integrate, Synthesize, and Analyze New and Existing Data
	Marine Protected Areas	MPA-2 Define Conservation Goals and Objectives and Habitats and Resources to be Protected MPA-5 Develop Integrated Management System
Partnerships &	Interpretive Facilities	IF-3 Increase Sanctuary-Wide Interpretive Signage
Opportunities	Ocean Literacy	Strategy OLCB-5: Implement the MBNMS Multicultural Education for For Resource Issues Threatening Oceans (MERITO) Program
Water Quality	Water Quality Protection Program Implementation	WQPP-3 Collaborate with Regional Urban Runoff Management Efforts WQPP-8 Increase Regional Monitoring
Wildlife Disturbance	Marine Mammal, Seabird and Turtle Disturbance	MMST-4 Mitigate Impacts From Marine Debris MMST-5 Evaluate Impacts From Commercial Harvest MMST-8 Maintain and Enhance Enforcement
	Motorized Personal Watercraft	MPWC-1 Maintain Motorized Personal Watercraft Zones
	Tidepool Protection	TP-1 Assess the Problem TP-2 Conduct Education and Outreach TP-3 Strengthen Enforcement TP-4 Improve Tracking and Evaluation of Collection and Take TP-5 Consider Limitation on Use in Selected Locations TP-6 Identify Implementation Opportunities TP-7 Address Other Human Activities

Habitat: Sandy Floor

	Action Plan	Management Strategy
Coastal	Harbors and Dredge	HDD-2 Review Offshore Dredge Disposal Activities
Development	Disposal	HDD-3 Coordinate with Sediment Monitoring and Reduction Programs
		HDD-4 Disposal of Fine-Grained Material
<u>L</u>	Submerged Cables	SC-1 Identify Routing and Zones for Submerged Cable Projects
Ecosystem	Big Sur Coastal Ecosystem	BSP-2 Interagency Coordination Program
Protection	Protection	
	Bottom Trawling Effects	BH-1 Develop Partnerships with Fishermen
	on Benthic Habitats	BH-2 Assess Trawl Activity
		BH-3 Identify Habitats Vulnerable to Trawling
		BH-4 Develop a Management Tracking Program
		BH-5 Develop an Impact Identification and Research Program
		BH-6 Identify and Implement Potential Ecosystem Protection Measures
		BH-7 Develop Education and Outreach Program
-	Davidson Seamount	DS-1 Conduct Site Characterization
	SIMoN	SI-4 Integrate, Synthesize, and Analyze New and Existing Data
L	Marine Protected	MPA-2 Define Conservation Goals and Objectives and Habitats and
	Areas	Resources to be Protected
		MPA-5 Develop Integrated Management System
Partnerships &	Fishing Related Education	FER-1 Educate About Fisheries Management
Opportunities	and Research	FER-5 Fisheries Related Data Collection and Distribution
		FER-6 Collect and Distribute Socioeconomic, Cultural, and Historical
		Data

Habitat: Seamounts

	Action Plan	Management Strategy
Coastal	Submerged Cables	SC-1: Identify Routing and Zones for Submerged Cable Projects
Development		
Ecosystem	Bottom Trawling Effects	BH-2: Assess Trawl Activity
Protection	on Benthic Habitats	BH-6: Identify and Implement Potential Ecosystem Protection
		Measures
	Davidson Seamount	DS-1: Conduct Site Characterization
		DS-2: Conduct Ecological Processes Investigations
_		DS-3: Develop Resource Protection Program
		DS-4: Conduct Seamount Education and Outreach Initiatives
	SIMoN	SIMoN SI-4: Integrate, Synthesize, and Analyze New and Existing Data
L	Marine Protected	MPA-2: Define Conservation Goals and Objectives and Habitats
	Areas	and Resources to be Protected
		MPA-3: Develop General Design Criteria
		MPA-4: Determine Types of Use
		MPA-5: Develop Integrated Management System
Partnerships & Opportunities	Fishing Related Education and Research	FER-2: Enhance Stakeholder and Public Communication
L	Interpretive Facilities	IF-2: Develop Smaller Regional Interpretive Facilities
Wildlife Disturbance	Marine Mammal, Seabird and Turtle Disturbance	MMST-4: Mitigate Impacts From Marine Debris

Habitat: Submarine Canyons

	Action Plan	Management Strategy
Coastal	Harbors and Dredge	HDD-2: Review Offshore Dredge Disposal Activities
Development	Disposal	HDD-4: Disposal of Fine-Grained Material
<u>l</u>	Submerged Cables	SC-1: Identify Routing and Zones for Submerged Cable Projects
Ecosystem	Big Sur Coastal Ecosystem	BSP-2: Interagency Coordination Program
Protection	Protection	
	Bottom Trawling Effects on Benthic Habitats	BH-2: Assess Trawl Activity
	Davidson Seamount	DS-2: Conduct Ecological Processes Investigations
_	Introduced Species	IS-3: Develop Baseline Information, Research & Monitoring Program
•	SIMoN	SI-4: Integrate, Synthesize, and Analyze New and Existing Data
<u>L</u>	Marine Protected Areas	MPA-2: Define Conservation Goals and Objectives and Habitats and Resources to be Protected
		MPA-5: Develop Integrated Management System
Partnerships & Opportunities	Fishing Related Education and Research	FER-5: Fisheries Related Data Collection and Distribution
l	Interpretive Facilities	IF-1: Construct and Operate Visitor Center

## Appendix B – Education and Outreach Related Activities

Action Plan	Strategy	Activity	Implementation Timing
Coastal Developmen	nt Issues		
Coastal Armoring	CA-3: Permit Program Improvements	3.5: Share Information with Other Agencies	Years 1-2
Harbors and Dredge Disposal	HDD-5: Alternative Disposal Methods	5.1: Evaluate Potential Beneficial Usage of Dredged Materials	Years 3-4
Ecosystem Protection	on Issues		
Big Sur Coastal Ecosystem Coordination	BSP-1: Provide Integrated Data and Information to the Public	1.5: Develop and Implement Process to Keep Public Informed About Website	Years 3-4
	BSP-2: Develop an Interagency Coordination Program	2.2: Facilitate Priority Issue Coordination Task Forces	Years 3-5
Bottom Trawling Effects on Benthic Habitats	BH-1: Develop Partnerships with Fisherman	1.1: Engage Fishermen to Work with the Sanctuary to Address Impacts from Bottom Trawling	Years 1-2
	BH-6: Potential Ecosystem Protection Measures	6.1: Generate Socio-economic profile of Local Trawl Fishery	Years 4-5
	BH-7: Develop Education and Outreach Program	7.1: Define Educational Needs and Develop Outreach Program	Years 2-5
Davidson Seamount	DS-4: Conduct Seamount Education and Outreach Initiatives	4.1: Conduct an Educational Needs Assessment	Years 3-5
		4.2: Develop and Implement Davidson Seamount Education and Outreach Program	Years 3-5
Introduced Species	IS-2: Develop Prevention Program for Known Pathways of Introductions	2.1: Develop and Implement Introduced Species Outreach and Prevention Program	Years 3-5
Marine Protected Areas	MPA-8: Develop Education and Outreach Program	Activity 8.1: Identify Target Audiences and Develop Components of an Effective Education and Outreach Program	Years 3-5
		Activity 8.2: Conduct Regional Workshops to Share Information and Gather Input From Fishing Leaders and the Community After MPA Design Criteria are Determined by Multi-stakeholder Groups	Years 3-5
		Activity 8.3: Consider Ongoing Education potential of individual reserve locations	Years 3-5

Action Plan	Strategy	Activity	Implementation Timing
Operations and Adı			
Operations and Administration	OA-1: Assess Staffing Needs	1.3: Develop a Structured Intern Program	Years 1-2
	OA-2: Develop Volunteer Program	2.3: Provide Volunteer Orientation and Training	Years 2-3
	OA-3: Coordinate and Support Sanctuary Advisory Council	3.11: Assist Working Groups in Defining Each Group's Membership Protocols and Decision-making Protocols	Years 1-5
	OA-5: Conduct Administrative Initiatives	5.13: The MBNMS Education Coordinator Will Continue to Manage the Education Team and Participate in NMSP-wide Activities Relating to Education Including General Outreach Products and Events	Years 1-5
	OA-6: Coordinate and Conduct Boat Operations	6.1: Review and Adopt Boat Operations Guidelines	Years 1-5
	OA-7: Oversee and Conduct Dive Operations	7.3: Improve Outreach Efforts to the Local Dive Community in Order to Foster Collaborative Working Relationships	Years 1-5
	OA-8: Oversee and Conduct Aircraft Operations	8.1: Assess Aircraft Needs Based on the Management Plan Priorities	Years 2-5
	OA-9: Maintain and Enhance Permit Program	9.4: Conduct Outreach to Inform the Public About the Permit Process	Years 1-5
		9.5: Improve Website Information	Years 1-5
	OA-10: Interagency Program Review	10.1: Conduct Outreach to Agencies and Stakeholders	Years 1-5
Partnerships and Op	oportunities		
Fishing Related Education and Research	FER-1: Educate About Fisheries Management	1.1: Develop Information Identifying MBNMS's Role in Fisheries Issues	Years 2-4
	FER-2: Enhance Stakeholder and Public Communication	2.3: Develop a Communication Plan Between Parties Interested in Education and Research Issues Related to Fishing in the MBNMS	Years 2-4
		2.6: Facilitate Public Forums and Development of Educational Materials for the General Public and Interested Parties to Understand Local Fisheries, Fish Populations and Habitats and the Role of the MBNMS in Protecting the Ecosystem	Years 2-4
	FER-3: Facilitate Sustainable Fisheries Definition and Promotion	3.1: Promote Biological and Socioeconomic Research on Sustainability	Years 2-3
		3.2: Work with Partners to Identify, Promote, and Certify Healthy Fisheries in the MBNMS	Years 2-3
		3.3: Increase Outreach and Awareness of How Sustainability is Assessed	Years 2-3

Action Plan	Strategy	Activity	Implementation Timing
Fishing Related Education and Research cont.	FER-4: Involve Fishermen in Education and Outreach Programs	4.1: Evaluate Existing Outreach Efforts at a Sanctuary Education Panel (SEP) Meeting and Include Input from Fishermen and Other Interested Parties	Years 1-5
		4.2: Develop and Implement Interpretive Signage of Local Fishing Activities at Harbors	Years 1-5
		4.3: Create Fishing Related Exhibits at MBNMS Visitor Center	Years 1-5
		4.4: Develop and Implement Education Program for K-12, "Mariners in the Classroom"	Years 1-5
Interpretive Facilities Action Plan	IF-1: Construct and Operate Visitor Center	1.2: Develop Visitor Center Facilities and Operations Plan	Years 1-3
	IF-3: Sanctuary-Wide Interpretive Signage	3.3: Support Sanctuary-Related Interpretive Trail Projects	Years 1-3
	IF-4: Virtual Experiences	4.1: Expand Virtual Interpretive Opportunities on MBNMS Website	Years 2-3
		4.2: Expand Interpretive Opportunities Using Telepresence Technology	Years 2-3
		4.3: Expand Interpretive Opportunities Using Virtual Education Products	Years 2-3
Ocean Literacy and Constituent Building	OCLB-1: Develop and Implement Constituent Outreach Programs to increase Ocean Literacy	1.1: Offer general ocean awareness programs and sanctuary information	Years 1-5
		1.2: Partner with local and national partners to develop coordinated ocean literacy messages	Years 1-5
		1.3: Increase public awareness of the sanctuary and ocean literacy issues through media exposure and marketing	Years 1-5
	OLCB-2: Develop and Implement a Comprehensive Volunteer Program	2.1: Assessment of volunteer needs within the Sanctuary's programming	Years 1-5
		2.2: Identify funds and hire a Volunteer Coordinator	Years 1-5
		2.3: Evaluate volunteer recruitment, retention and effectiveness of roles	Years 1-5
	OLCB-3: Create Partnerships with Local Businesses	3.1: Implement partnership opportunities with the restaurant and lodging industries	Years 1-2
		3.2: Explore partnership opportunities with "on-the-water" businesses	Years 1-3
		3.3: Explore additional partnership opportunities with businesses participating in the Water Quality Protection Program or identified in MBNMS Action Plans	Years 1-5

Action Plan	Strategy	Activity	Implementation Timing
Ocean Literacy Action Plan cont.	OLCB-4: Develop and Implement K-12 Education Programs to increase Ocean Literacy	4.1: Develop educational programs and supporting materials for school groups including those visiting MBNMS visitor centers	
		4.2: Provide teacher professional development programs utilizing sanctuary educational materials and promoting ocean literacy  4.3: Develop and make available sanctuary	
		educational tools for use in schools  4.4: Develop ocean stewardship programming for K-12 students in conjunction with education partners	
	OLCB-5: Implement the MBNMS Multicultural Education for Resources Threatening Oceans (MERITO) Program	5.1: Community-Based Bilingual Outreach Program (After-school program, adult ed, field experiences)	
	rogram	5.2: Site-Based Bilingual Outreach Program (Demographic surveys, develop bilingual materials w/partners, support partner events)	
		5.3: Teacher Training and Internship Program 5.4: Comprehensive Communications	
		Plan  5.5: Integration of Multicultural Elements To Existing MBNMS Programs And Materials	
		5.6: Intra-Sanctuary Expansion of MERITO (CINMS expansion, regional website, expansion to other sanctuaries) 5.7: Evaluation of MERITO Programs	
Water Quality Issue	<u> </u>	3.7. Evaluation of WERTO Hograms	
Beach Closures and Contamination Action Plan	BC-3: Increase Monitoring Network	3.1: Increase Number and Frequency of Beach Sampling	Years 1-2
	BC-4: Enhance Notification Program	4.1: Develop Improved Notification System for User Groups	Years 1-3
	BC-6: Increase Technical Training for Industry Professionals	6.1: Coordinate with Local Jurisdictions to Educate Plumbers, Grease Trap, and Sewer Industry on Proper Cleaning Techniques and Promote Reporting Program	Years 1-3
		6.2: Working through Local Jurisdictions, Utilize Existing, or Adapt New Outreach/Training Modules for Targeted Public Servants	Years 1-3

Action Plan	Strategy	Activity	Implementation Timing
Beach Closures Action Plan cont.		6.3: Develop Spill Response Training Module (See Emergency Response Strategy)	Years 1-3
	BC-7: Enhance Public Outreach of Contamination Sources and Solutions	7.1: Enhance Public's Understanding of the Importance of Reducing Microbial Contamination, the Sources of Contamination	Years 2-3
		7.2: Develop Coordinated Regional Education Program Building and Expanding on Existing Materials and Efforts	Years 2-3
Cruise Ship Discharges	CS-1: Outreach and Coordination	1.1: Develop and Implement an Outreach Plan to Address Cruise Line Industry, Regulatory Agencies, and General Public	Years 1-2
		1.4: Partner to Cruise Line Industry to Develop MBNMS Outreach Materials and Supplies	Years 1-2
		1.5: Collaborate with Sightseeing Tour Operators, to Incorporate Sanctuary Information and Messages to Shore Based Tourists	Years 1-2
Water Quality Protection Program Implementation	WQPP-1: Public Education and Outreach	1.1: Update and Reprint Existing Educational Materials	Years 1-5
•		1.2: Broaden Distribution of Existing Outreach Materials and Programs	Years 1-5
		1.4: Expand Outreach to the Hispanic Population in Coordination with MERITO	Years 1-5
	WQPP-2: Technical Training	2.1: Update and Expand Training Materials	Years 1-5
		2.2: Continue Regional and On-site Urban Training Workshops	Years 1-5
		2.3: Develop and Conduct Training Workshops with Developers	Years 1-5
	WQPP-3: Regional Urban Runoff Management	3.2: Facilitate the Development of Regional Stormwater Programs	Years 1-5
	WQPP-6: Storm Drain Inspection	6.1: Continue and Expand First Flush and Urban Watch Monitoring Programs	Years 1-2
	WQPP-7: CEQA Additions	7.2: Provide Accompanying Training Materials and Workshops	Years 1-2
	WQPP-8: Regional Monitoring	8.4: Improve Public Awareness of Monitoring Efforts	Years 1-5
	WQPP-9: Data Access	9.3: Improve Packaging and Distribution of Data to Decision-makers and the Public	Years 1-2
	WQPP-10: Interagency Coordination	10.4: Summarize WQPP Implementation	Years 1-5
	WQPP-11: Public Education and Outreach	11.1: Sustain and Develop One-on-One Boater Outreach Programs	Years 1-5

Action Plan	Strategy	Activity	Implementation Timing
Water Quality cont'd.	WQPP-13: Bilge Waste Disposal and Waste Oil Recovery	13.1: Develop Incentives and Promotions to Encourage Facility Use	Years 1-2
	WQPP-14: Topside and Haul-out Vessel Maintenance	14.5: Review Policies Regarding Work in Slips/ Parking Lots	Years 2-3
	WQPP-15: Underwater Hull Maintenance	15.2: Initiate Guidelines and Trainings for Hull Cleaning	Years 1-5
	WQPP-16: Establish Agricultural Industry Networks to Address Water Quality	16.3: Implement Nonpoint Source Management Practices Using Industry-led Watershed Groups	Years 1-2
	WQPP-17: Strengthen Technical Information and Outreach to Agriculture	17.5: Strengthen Grower/Rancher Peer Advisory Networks to Share Conservation Information Among Peers, Including Outreach to Both Landowners And Tenants	Years 1-2
	WQPP-18: Improve Education and Public Relations on Watersheds and Agricultural Conservation Measures	18.1: Increase Public Knowledge of and Support for Agriculture and Agricultural Conservation Measures through Media and Outreach	Years 1-2
		18.2: Increase Grower and Public Awareness of Watershed-Based Management by Incorporating Watershed Message into Existing Programs and Conducting Media and Outreach	Years 1-2
	WQPP 19: Coordinate and Streamline Regulations for Conservation Projects	19.1: Develop User-Friendly Permit Guidebooks	Years 2-3
	-	19.3: Improve Collaborative Efforts Between Regulatory Enforcement Agencies and Landowners	Years 2-3
Wildlife Disturbanc			
Marine Mammal, Seabird and Turtle Disturbance	MMST-1: Mitigate Impacts From Marine Vessels	1.1: Find, Modify, and Develop Wildlife Viewing Guidelines	Years 3-5
		1.2: Continue and Strengthen MBNMS Team Ocean Kayak Program	Years 3-5
		1.3: Develop Informational Cards with Guidelines for Viewing Marine Species from Kayaks	Years 3-5
		1.4: Conduct Outreach and Promotion of Wildlife Viewing Guidelines to Private Boaters	Years 3-5
		1.5: Continue Outreach and Promotion of Wildlife Viewing Guidelines to Whale Watching Vessels	Years 3-5

Action Plan	Strategy	Activity	Implementation Timing
Marine Mammal Seabird and Turtle Disturbance cont'd.	MMST-2: Mitigate Impacts from Low Flying Aircraft	2.3: Continue Outreach to Pilots	Years 3-4
		2.4: Conduct Outreach with Film Commission	Years 3-4
	MMST-3: Mitigate Impacts From Shore Based Activities	3.2: Support Outreach Activities	Years 3-5
	MMST-4: Mitigate Impacts from Marine Debris	4.1: Coordinate with the Work Done by the California Coastal Commission, Conduct Education and Outreach Programs to Illustrate the Impact of Marine Debris	Years 4-5
		4.3: Increase Education Regarding Impacts of Lost Balloons	Years 4-5
	MMST-5: Consider Impacts Commercial Harvest	5.1: Evaluate Levels of Disturbance and Identify Solutions	Years 3-5
	MMST-6: Assess Impacts from Acoustics	6.1: Expand Research and Monitoring of Acoustics in Marine Environment	Years 3-5
	MMST-7: Reduce Sea Turtle Disturbance	7.2: Address Sea Turtle Disturbance in wildlife viewing guidelines	Years 3-4
	MMST-8: Maintain and Enhance Enforcement	8.2: Conduct Outreach to Increase Knowledge of MBNMS Regulations and Contact Information	Years 1-5
Motorized Personal Watercraft Action Plan	MPWC-3: Conduct Educational Outreach to MPWC Community	3.1: Update and Maintain Interpretive Materials (e.g. signs, brochures, videos)	Years 1-2
		3.2: Update Interpretive Methods (e.g. presentations, dock walkers, sign placement, information distribution)	Years 1-2
		3.3: Coordinate with GFNMS to Maintain the MBNMS NOAA Weather Kiosk at Pillar Point Harbor Launch Ramp for Use By MPWC Operators, Surfers, Boaters, Fishermen, etc.	Years 1-2
		3.4: Install A Link on the Front Page of the MBNMS and the GFNMS Website for Instant Access to Real-Time Weather and Oceanographic Data from the National Weather Service and National Data Buoy Center (Contingent on MPWC Permitting Program)	Years 1-2
Tidepool Protection Action Plan	TP-1: Assess the Problem	1.5: Ensure Researchers Understand Key Priorities and Information Needs of Managers	Years 4-5
		1.7: Conduct an Evaluation of Visitors at Representative Sites	Years 4-5
	TP-2: Conduct Education and Outreach	2.1: Develop Appropriate Education and Outreach	Years 4-5

Action Plan	Strategy	Activity	Implementation Timing
Tidepool Protection cont'd.		2.2: Consider Potential for Hands-on Exhibits or Live Display Tables	Years 4-5
		2.3: Develop Pre-Visit Education about Tidepool Etiquette	Years 4-5
Cross Cutting Issues	5		
Administration and Operations Plan	XAO-1: Improve Internal Communications Among the Three Sanctuaries	1.4: Program Coordinators will Meet Separately at Least Once Per year to Share Information and Plan Joint Activities Prior to the Development of the Annual Operating Plan	Years 1-5
	XAO-2: Improve the Efficiency and Cost- effectiveness of Program Operations	2.1: Develop a List of Existing Facilities, Signage, Exhibits, Equipment, Vessels, and Resources Based on the Revised Management plans that could be Shared Between Sites	Years 1-2
		2.2: Develop a List of Needed facilities, Signage, Exhibits, Equipment, Vessels and Resources Based on the Revised Management Plans that could be Shared Between Sites	Years 1-2
	XAO-3: Program Administration Improvements	3.3: Build Upon Existing Efforts to Share Information Technology (IT) Resources	Years 1-2
Community Outreach	XCO-1: Build Upon and Expand Ocean and Coastal Outreach	1.1: Develop or strengthen coordinated outreach programs and opportunities, such as Public Service Announcements, Issuespecific Workshops and Brochures (e.g. Tidepool Etiquette), Docent Programs, Signage, Learning Centers, or Exhibits and Displays at Community Events	Years 2-3
		1.2: Plan and Conduct Regional Sanctuary Outreach Events to Promote the Importance of Monitoring, Disseminate Monitoring Data, and Improve Understanding of Marine Conservation and Management	Years 2-3
		1.3: Develop and implement joint media communications plan (print, radio, TV, Internet, etc.)	Years 2-3
		1.4: Identify and Partner with External Programs to Incorporate Sanctuary-related Messages	Years 2-4
	XCO-2: Enhance and Coordinate Ocean and Coastal Education	2.1: Collaborate on Existing Site-specific Education Programs and Products as a Means to Enhance and Expand Educational Offerings	Years 2-4

Action Plan	Strategy	Activity	Implementation Timing
Community Outreach cont'd.		2.2: Following expansion of the MERITO program, increase Multicultural/ Multilingual Efforts Based on Needs Assessments to Determine other Multicultural, Socio-economic, or Multilingual Communities (Vietnamese, Chinese, Portuguese, Italian, etc.) and their Interests	Years 3-5
		2.3: Identify and Implement New Education Programs that can be Developed Jointly	Years 1-2
	XCO-3: Ocean/ Coastal Stewardship	3.1: Create, maintain and promote Sanctuary and partner volunteer programs to provide opportunities for stewardship as well as expanding resource protection, education, and outreach capabilities of the three Sanctuaries	Years 1-5
		3.2: Create Alternative Ways to Inspire Coastal and Ocean Stewardship	Years 1-5
		3.3: Identify partners to incorporate stewardship messages	Years 1-5
Maritime Heritage	XHMR-2: Inventory and Assess Submerged Sites	2.4: Assess and Nominate Appropriate Submerged Archaeological Sites for Inclusion to the National Register of Historic Places	Years 4-5
	XHMR-4: Protect and Manage Submerged Archaeological Resources	4.2: Provide Training to Sanctuary Staff and Facilitate Training for Partners	Years 4-5
	XMHR-5: Conduct Public Outreach with Traditional User and Ocean Dependent	5.1: Identify Traditional User and Ocean Dependent Groups	Years 3-4
	•	5.2: Develop Collaborative Programs and Initiatives	Years 4-5
		5.3: Create an Inventory of Historic and Present Maritime Heritage Communities	Years 4-5
	XMHR-6: Establish Maritime Heritage Focused Education and Outreach Programs	6.1: Improve Information Sharing and Dialogue	Years 3-5
		6.2: Create, expand and populate individual Sanctuary websites and/or the West Coast Shipwreck Database	
		6.3: Develop and Implement Education and Outreach Programs and Materials for	Years 1-5
		the Maritime Heritage Program  6.4: Collaborate on Maritime Heritage Resource Exhibits and Signage	Years 1-5

Monterey Bay Nationa Appendix B – Educatio	l Marine Sanctuary – on and Outreach Rela	- Final Managem uted Activities	ent Plan	

# Appendix C – Research and Monitoring Related

### Activities

Action Plan	Strategy	Activity	Implementation Timing
Coastal Developn	nent Issues		
Coastal Armoring	CA-1: Conduct Issue Characterization and Needs Assessment	1.1: Produce MBNMS-wide Maps and Database for use as Planning and Permit Review Tools	Years 1-5
		1.2: Compile and Analyze Ecological and Socioeconomic Data	Years 1-5
		1.4: Develop and Implement a Long-term Monitoring Program	Years 1-5
	CA-2: Develop and Implement Regional Approach to Coastal Armoring	2.8: Pursue Pilot Program for Alternatives to Coastal Armoring	Years 2-4
Desalination	DESAL-2: Facility Siting Guidelines	2.1: Identify Preferred Conditions and Habitats	Years 2-3
	DESAL-4: Modeling and Monitoring Program	4.2: Identify Minimum Information Required for Project Application	Years 3-4
		4.4: Determine Cumulative Impacts from Multiple Facilities	Years 3-4
Harbors and Dredge Disposal	HDD-2: Review Offshore Dredge Disposal Activities	2.3: Review Dredge Disposal Activities and Evaluate Redefinition of SF-12 (Moss Landing)	Years 1-2
		2.4: Coordinate with GFNMS in Evaluation of Dredge Disposal Site for Pillar Point Harbor	Years 1-2
	HDD-3: Sediment Monitoring and Reduction Program	3.1: Assess Changes in Aquatic Disposal Volumes	Years 3-5
		3.4: Monitor Coastal and Estuarine and Sediment Flow	Years 3-5
	HDD-5: Alternative Disposal Methods	5.1: Evaluate Potential Beneficial Usage of Dredged Materials	Years 3-4
Submerged Cables	SC-1: Routing and Zones for Submerged Cable Projects	1.1: Identify Environmentally Sensitive Areas	Years 1-2
	SC-2: Submerged Cable Project Permit Guidelines	2.1: Refine and Implement Permit Pathway and Applicant Guidelines	Years 1-2
		2.2: Identify Development Standards	Years 1-2
Ecosystem Protec	tion Issues		

Action Plan	Strategy	Activity	Implementation Timing
Big Sur Coastal Ecosystem Coordination	BSP-1: Provide Integrated Data and Information to the Public	1.1: Create Multi Agency Website for Big Sur Region	Years 3-4
		1.2: Provide Online Access for Planning Documents	Years 3-4
		1.3: Develop Integrated GIS Database for Big Sur Coastal and Marine Resource Management	Years 3-4
		1.4: Update Website as Agencies Update Plans and Programs	Years 3-4
		1.5: Develop and Implement Process to Keep Public Informed About Website	Years 3-4
		1. 6 Attend and Participate in the Big Sur Multi-Agency Advisory Council (MAAC)	Years 3-4
	BSP-2: Develop Interagency Coordination Program	2.2: Facilitate Priority Issue Coordination Task Forces	Years 3-5
Bottom Trawling Effects on Benthic Habitats	BH-2: Assess Trawl Activity	2.1: Compile Fishing Data	Years 1-3
		2.3: Improve Data Gathering	Years 1-3
	BH-3: Identify Habitats Vulnerable to Trawling	3.1: Consult Literature and Scientists to Develop Criteria for Selecting and Prioritizing Habitats Vulnerable to Effects of Bottom Trawling	Years 1-3
		3.2: Consult with Local Scientists, Fishermen, and Primary Literature to Determine What and Where Vulnerable Habitats are Located	Years 1-3
		3.3: Gather Existing Data on Habitat Distribution and Incorporate into GIS Format	Years 1-3
		3.4: Evaluate the Need for and Develop Strategy to Obtain Additional Habitat Distribution Data if Necessary	Years 1-3
	BH-4: Develop Management Tracking Program	4.1: Compile Database of Regulations and Restrictions	Years 1-3
	BH-5: Develop an Impact Identification and Research Program	5.1: Identify Impacts from Bottom Trawling in MBNMS	Years 2-3
		5.2: Identify and Conduct Necessary Research on Trawling Impacts	Years 2-3
Davidson Seamount	DS-1: Conduct Site Characterization	1.1: Complete Geologic and Biological Characterization of Seamount	Years 3-5
		1.3: Conduct Zoological Survey of Surface and Midwater Areas Above the Seamount	Years 3-5
		1.4: Initiate Oceanographic Surveys of Seamount Region	Years 3-5

Action Plan	Strategy	Activity	Implementation Timing
Davidson Seamount cont'd		1.5 Complete Thorough Socioeconomic (Commercial, Recreational, Research Uses) Analysis	Years 3-5
		1.6: Characterize Cultural History of Davidson Seamount	Years 3-5
		1.7: Incorporate Site Characterization Document in MBNMS Websites	Years 3-5
	DS-2: Conduct Ecological Processes Investigations	2.1: Conduct Regular Benthic Surveys of the Davidson Seamount	Years 3-5
		2.2: Conduct Deepwater Coral Ageing and Restoration Studies	Years 3-5
		2.3: Perform Research on Seamount to Expand Understanding Distribution and Abundance of Species	Years 3-5
		2.4: Understand Links with Coastal Sanctuary	Years 3-5
	DS-3: Develop Resource Protection Program	3.1 Continuously Characterize the Potential Threats to the Davidson Seamount	Years 2-5
Emerging Issues	EI-1: Identify and Track Emerging Issues	1.3: Consider Development of an "Early Warning" System to Assist MBNMS in Receiving Early Information on New and Unforeseen Issues, Including Efficient Pathways and Processes for Receiving this Information	Years 1-5
	EI – 2: Develop Process to Address Emerging Issues	2.1: Identify and Define Criteria for Assessing the Importance of Emerging Issues	Years 1-5
		2.2: Outline Alternative Categories and Processes to Address Emerging Issues	Year 1-5
Introduced Species Action Plan	IS-1: Address Known Pathways of Introduction	1.1: Develop and Implement Action Plans to Address Pathways, Threats, and Effective Prevention/Management	Years 3-5
	IS-2: Develop Prevention Program for Known Pathways of Introductions	2.1: Develop and Implement Introduced Species Outreach and Prevention Program	Years 3-5
	IS-3: Develop Baseline Information, Research & Monitoring Program	3.1: Increase Baseline Research	Years 3-4
		3.2: Develop Monitoring Plan for New Invasions	Years 3-4
		3.3: Synthesize Research Results and Make Results Publicly Available	Years 3-4
		3.4: Assess Ecological and Economic Impacts of Introduced Species in the MBNMS	Years 3-4

Action Plan	Strategy	Activity	Implementation Timing
Marine Protected Areas Action Plan	MPA-2: Define Conservation Goals and Objectives and Habitats and Resources to be Protected	2.2: Consider Range of Representative Habitat Type- e.g. Hard Bottom, Soft Bottom, Kelp Forest, Pelagic, Rocky Intertidal, Estuarine, etc.	Years 1-2
		2.3: Identify Key Ecological Interactions, Including Predator-Prey Relationships, Migratory Patterns, Life History Stages, and the Role of Biogenic Habitat (e.g. kelp)	Years 1-2
		2.4: Identify Emerging or Existing Threats to These Habitats, Resources or Interactions	Years 1-2
		2.5: Identify Resource or Habitat-specific Objectives for MPAs and/or Network/Collection of MPAs	Years 1-2
		2.6: Include Mix of Degrees of Habitat Health Ranging from Areas that are Minimally Disturbed and Set Aside for Protection, to Historically Productive, Currently Underused Habitats Set Aside to Allow Recovery	Years 1-2
	MPA-3: Develop General Design Criteria	3.1: Consider Biological and Physical Factors	Years 2-3
		3.2: Consider Human Use Patterns	Years 2-3
		3.3: Address Considerations of MPA Size and Scale	Years 2-3
		3.4: Consider Design Issues Specific to Federal Waters	Years 2-3
	MPA-5: Develop Integrated Management System	5.1: Identify and Evaluate Other Existing or Planned Ecosystem, Fishery, or Landbased Management Tools, as Feasible Within Staff Limitations	Years 2-3
	MPA-6: Conduct Socioeconomic Impact Analysis and Mitigation	6.1: Identify Types of Socioeconomic Analyses to Assist in the Design and Evaluation of Biologically Effective MPAs That Will Allow Continuation of Sustainable Fishing Practices and Sustainable Communities	Years 1-3
	MPA-9: Build Research and Monitoring Program	9.1: Design and Conduct Biological Effectiveness Evaluations Linked to Specific Goals of MPAs	Years 2-5
		9.3: Coordinate Monitoring and Data Distribution	Years 2-5
Operations and A			
Operations and Administration	OA-1: Assess Staffing Needs	1.3: Develop a Structured Intern Program	Years 1-2
	OA-2: Develop Volunteer Program	2.1: Coordinate and Incorporate MBNMS Volunteer Efforts on Specific Projects into a Single Team OCEAN Program	Years 2-3

Action Plan	Strategy	Activity	Implementation Timing
Ops and Admin		2.2: Continue Volunteer Recruitment and	Years 2-3
cont'd.		Placement	
		2.4: Recognize the Efforts and Services of	Years 2-3
		Volunteers	**
		2.5: Create a Mechanism to Retain	Years 2-3
	OA-5: Conduct	Volunteers 5.8: MBNMS Will Continue to Partner	Years 1-5
	Administrative	with the Monterey Bay Sanctuary	1 6418 1-3
	Initiatives	Foundation, a Nonprofit Organization	
	Intractives	Whose Mission is to Advance the	
		Understanding and Protection of MBNMS	
		and Other National Marine Sanctuaries in	
		California, and with Other	
		Nongovernmental Partners	
		5.12: The MBNMS Research Coordinator	Years 1-5
		Will Continue to Manage the Research	
		Team and Participate in NMSP-wide	
	04.6.0 1: 4 1	Activities Relating to Research	X7 1.7
	OA-6: Coordinate and	6.2: Develop Boat Operator and Crew	Years 1-5
	Conduct Boat Operations	Member Qualification Plan	
	Operations	6.4: Fund and Construct 65FT FULMAR	Years 1-5
		Vessel	1 cars 1 5
	OA-7: Oversee and	7.1: Identify Needs for Diving Operations	Years 1-5
	Conduct Dive	from Other Action Plans	
	Operations		
		7.2: Establish a Staff Qualification Plan	Years 1-5
		7.4: Develop Reciprocity Agreements	Years 1-5
		with Other Research Diving Programs to	
		Facilitate Collaborative Research	
	OA-8: Aircraft	8.2: Based on Needs Assessment, Develop	Years 2-5
	Operations	and Implement Aircraft Operations Plan	XX 1.5
	OA-9: Maintain and	9.3: Review Permit Process to Improve	Years 1-5
	Enhance Permit	Efficiency and Effectiveness	
	Program OA-10: Interagency	10.1: Conduct Outreach to Agencies and	Years 1-5
	Program Review	Stakeholders	1 0015 1-3
		10.3: Review and Comment on Local	Years 1-5
		Coastal Program Updates	
Partnerships and Opportunities		<u> </u>	
Fishing Related	FER-2: Enhance	2.1: Continue to Meet with Fishermen,	Years 2-4
Research and	Stakeholder	Incorporate them into Relevant	
Education	Communication	Committees and Obtain Fishermen's	
	Enhancement	Perspective for the Sanctuary Advisory	
		Council	XX 2 4
		2.3: Develop a Communication Plan	Years 2-4
		Between Parties Interested in Education	
		and Research Issues Related to Fishing in the MBNMS	
	1	mic midining	l

Action Plan	Strategy	Activity	Implementation Timing
Fishing Related Research and Education cont'd.		2.4: Investigate Partnership with the Pacific Marine Conservation Council's (PMCC) West Coast-Wide Collaborative Research Program	Years 2-4
		2.4: Develop a Series of Meetings Outlining Projects with Science Needs Using Fishermen's Skills and Assets	Years 2-4
	FER-3: Facilitate Sustainable Fisheries Definition and Promotion	3.1: Promote Biological and Socioeconomic Research on Sustainability	Years 2-3
		3.2: Work with Partners to Identify, Promote, and Certify Healthy Fisheries in the MBNMS	Years 2-3
		3.3: Increase Outreach and Awareness of How Sustainability is Assessed	Years 2-3
	FER-5: Collect and Distribute Fisheries and Habitat Related Data	5.1: Coordinate with Fishery Management Agencies in Developing a Recurring Workshop Series with Interested Parties to Determine Existing Data, Efforts, Gaps, Overlap, and Develop a Coordinated Plan for Collection and Distribution of Marine Ecosystem and Fisheries Relevant Data	Years 3-5
		5.2: Consider Input from Fishermen and Other Stakeholders in the Development, Synthesis, Collection, and Analyses of Data When Participating in Cooperative Fisheries Research	Years 3-5
		5.3: Include Fisheries Relevant Data in the Sanctuary Integrated Monitoring Network (SIMoN) Metadata Files And Website	Years 3-5
	FER-7: Conduct Public Outreach on Links Between Healthy Ecosystems and Fish Stocks	7.2: Facilitate an Assessment of What Is Known about the Links Between Ecosystems and Fisheries	Years 2-3
		7.4: Conduct Outreach to Target Audiences	Years 2-3
Interpretive Facilities	IF-1: Construct and Operate Visitor Center	1.2: Develop Visitor Center Facilities and Operations Plan	Years 1-3
	IF-4: Virtual Experiences	4.1: Expand Virtual Interpretive Opportunities on MBNMS Website	Years 2-3
Sanctuary Integrated Monitoring Network	SI-2: New Monitoring Efforts for Basic MBNMS Characterization and Understanding of Changes in Natural Resources	2.1: Initiate New and Continue Existing Monitoring Efforts to Address Needs Identified as Priorities in MBNMS Management Plan	Years 1-5
		2.3: Continue Rapid Response Programs	Years 1-5
		2.4: Continue Revue of Internal MBNMS Proposals	Years 1-5

Action Plan	Strategy	Activity	Implementation Timing
Sanctuary Integrated Monitoring Network cont.		2.5: Continue Review of Unsolicited Proposals	Years 1-5
	SI-3: Integrate Regional Monitoring Efforts	3.1: Coordinate and Synthesize Historic Data Sets with Information from the Various Regional Research Institutions Working within the MBNMS	Years 1-5
		3.2: Integrate Existing Data Sets into the SIMoN Database	Years 1-5
		3.3: Create and Disseminate Synthetic Products Based on Data from Various Monitoring and Research Efforts	Years 1-5
		3.4: Expand the Metadata Database to Include All Ongoing Monitoring Projects, Add New Projects, and Periodically Update and Review All Projects in the Database	Years 1-5
		3.5: Expand the SIMoN Database (i.e. PDERM) to Include Research (nonmonitoring) Projects that Complement Historic and Current Monitoring Efforts	Years 1-5
		3.6: Participate in the Development of Regional Ocean Observatory Programs	Years 1-5
	SI-5: Outreach and Information Dissemination	5.1: Continue Development and Maintenance of Monitoring Database and Mapping Tools on SIMoN Website	Years 1-5
		5.2: Produce State of the Sanctuary Report and Other Technical Reports	Years 1-5
		5.3: Conduct Annual Monitoring Symposia and Workshop	Years 1-5
		5.4: Provide Timely Information for Management Decisions	Years 1-5
		5.5: Continue to Create GIS Products to Support Monitoring Efforts	Years 1-5
	SI-6: Expand SIMoN as a Model for the National Marine Sanctuary System	6.1: Establish SIMoN Programs at All Sites	Years 1-2
		6.2: Involve Local Researchers Along with Agency Staff to Share Existing Monitoring and Identify and Collect New, Critical Monitoring Data	Years 1-2
		6.3: Identify "Sentinel" Locations for Long-Term Monitoring Locations at All Sanctuaries in the Development of Ocean Observatories	Years 1-2
		6.4: Develop Indicators, or Metrics, for each Site to Assess, to the Extent Possible, the Health of a MBNMS's Ecosystem	Years 1-2
Water Quality Issu	es		

Action Plan	Strategy	Activity	Implementation Timing
Beach Closures and Contamination	BC-1: Enhance Use of Geographic Information System (GIS)	1.2: Expand and Continue to Encourage Local Jurisdictions to Map Septic Sewer and Storm Drain Lines, and to Record Data on Reported Spills, Blockages, and Lateral Line Cleaning Work	Years 1-2
	BC-2: Expand Pathogen and Contamination Research	2.1: Investigate and Implement Rapid Indicator Assessment	Years 1-5
	BC-3: Increase Monitoring Network	2.2: Explore Other Potential Indicators 3.1: Increase Number and Frequency of Beach Sampling	Years 1-5 Years 1-2
	BC-4: Enhance Notification Program	4.1: Develop Improved Notification System for User Groups	Years 1-3
Water Quality Protection Program Implementation	WQPP-9: Data Access	9.1: Integrate Water Quality Data with SIMoN	Years 1-2
		9.2: Certify Data Quality for Volunteer Groups and Incorporate into Database	Years 1-2 Years 1-2
		9.3: Improve Packaging and Distribution of Data to Decision-makers and the Public	Years 1-2
	WQPP-17: Strengthen Technical Information and Outreach to Agriculture	17.7: Develop And Promote Self- Monitoring Tools for Conservation Management Practices to Assess Problems And Track Success	Years 1-2
Wildlife Disturband			
Marine Mammal, Seabird and Turtle Disturbance	MMST-2: Mitigate Impacts from Low Flying Aircraft	2.2: Identify Research and Monitoring Activities	Years 3-4
	MMST–4: Mitigate Impacts from Marine Debris	4.2: Develop a Database to Monitor Marine Debris	Years 4-5
	MMST-5: Consider Impacts from Commercial Harvest	5.1: Evaluate Levels of Disturbance and Identify Solutions	Years 3-5
	MMST-6: Assess Impacts From Acoustics	6.1: Expand Research and Monitoring of Acoustics in Marine Environment	Years 3-5
	MMST-7: Reduce Sea Turtle Disturbance	7.1: Assess Levels of Sea Turtle Disturbance in MBNMS	Years 3-4
Tidepool Protection	TP-1: Assess the Problem	1.1: Continue Regional Identification and Prioritization of Tidepool Locations	Years 4-5
		1.2: Identify Types and Extent of Impacts to Tidepools	Years 4-5
		1.3: Monitor to Understand Natural Versus Human-Caused Changes	Years 4-5
		1.4: Improve Data Collection and Database Coordination Among Tidepool Research and Monitoring Projects	Years 4-5

Action Plan	Strategy	Activity	Implementation Timing
Tidepool Protection cont'd.		1.5: Ensure Researchers Understand Key Priorities and Information Needs of Managers	Years 4-5
		1.6: Compile Historical Knowledge About Key Locations	Years 4-5
Cross Cutting Issue			
Administration and Operations	XAO-1: Improve Internal Communications Among the Three Sanctuaries	1.4: The Program Coordinators will Meet Separately at Least Once per year to Share Information and Pan Joint Activities Prior to the Development of the Annual Operating Plan	Years 1-5
	XAO-2: Improve the Efficiency and Cost- effectiveness of Program Operations	2.2: Develop a List of Needed Facilities, Signage, Exhibits, Equipment, Vessels, and Resources Based on the Revised Management Plans that could be Shared Between Sites	Years 1-2
		2.3: Contact and Inform the other Sites Early in the Planning Stages of Field Operations to Provide Opportunities to Plan Joint Missions and to Share Information and Data	Years 1-2
Ecosystem Monitoring	XEM-1: Coordinate Existing Targeted Monitoring Activities to Promote Greater Efficiency and Effectiveness	1.1: Coordinate individual sanctuary rocky intertidal monitoring programs and investigate opportunities to collaborate with other large-scale rocky intertidal monitoring efforts	Years 1-5
		1.2: Conduct a workshop to coordinate data collection protocols for Beach COMBERS and Beach Watch Programs that indirectly assess the health of the pelagic/offshore ecosystem	Years 2-3
		1.3: Develop an integrated sanctuary marine mammal and seabird survey monitoring plan for the 3 sanctuaries to coordinate and supplement the NOAA Fisheries 5-year surveys	Years 3-5
		1.4: Explore the potential for the expansion of existing fish surveys, such as the CalCOFI transect lines through Gulf of the Farallones and Cordell Bank, and continuation in Monterey Bay	Year 2
		1.5: Jointly developed research cruise plans and standards for sampling and reporting results for benthic habitat survey work	Years 1-5
		1.6: Augment the benthic habitat survey work with new technologies such as ROV surveys.	Years 1-5

Action Plan	Strategy	Activity	Implementation Timing
Ecosystem Monitoring cont'd.	XEM-2: Coordinate and Implement Existing Regional Ecosystem Monitoring Activities	2.1: Implement the West Coast Observation Project at CBNMS, GFNMS and MBNMS	Years 1-5
		2.2: Develop and implement an integrated NMSP's System-Wide Monitoring (SWiM) program for CBNMS, GFNMS and MBNMS	Years 2-3
	XEM-3: Identify Shared Monitoring Needs With Respect to Management Concerns and Responsibilities at Each of the Sanctuaries	3.1: Conduct a needs assessment and develop a site implementation plan for expanding SIMoN to the Gulf of the Farallones and Cordell Bank sanctuaries	Years 1-2
		3.2: Explore opportunities to integrate SIMoN with other regional monitoring efforts such as West Coast Observations and other IOOS projects	Years 1-2
		3.3: Evaluate and identify ongoing funding opportunities to support regional and larger scale ongoing monitoring activities	Years 1-2
	XEM-4: Establish a Joint Internal Monitoring Coordination Team	4.1: Establish a Monitoring Coordination Team	Years 2-3
		4.2: Review the monitoring recommendations set forth by the sanctuary specific issue-based working groups during the joint management plan review process	Year 1
		4.3: Develop a research and monitoring communication plan to improve coordination among the sanctuary's research staff and partners	Year 2
		4.4: Investigate the opportunity for joint reporting of monitoring activities through periodic "state of the sanctuaries" reports for cross-cutting monitoring activities among the three sanctuaries	Year 2

Action Plan	Strategy	Activity	Implementation Timing
Ecosystem Monitoring cont'd.	XEM-5: Consider Establishing Additional Site- Specific or a Joint Research Activities Panel to Enhance Research and Monitoring Collaborations	5.1: Evaluate the need and feasibility of establishing a CBNMS Research Activity Panel (RAP) or a GFNMS RAP as a permanent SAC working group and the need to create an ad-hoc or standing joint research activities panel (JRAP) to advise and identify opportunities for coordinated monitoring activities	Year 2
		5.4: Institute annual meetings for a subgroup of (~10) representatives from all three sanctuary RAPs (or research partners if a RAP does not exist)) to coordinate research and monitoring activities in the region	Year 4
Maritime Heritage	XMHR-1: Establish Maritime Heritage Resources Program	1.1: Develop the foundation and infrastructure of a MHR Program	Years 1-2
		1.2: Identify and assist partners doing maritime heritage related work to obtain funding and resources	Years 2-3
	XMHR-2: Inventory and Assess Submerged Sites	2.1: Establish external partnerships to inventory potential shipwreck sites with other federal, state, and local agencies as well as vocational archaeologists, commercial divers and fishermen, and recreational divers	Years 3-4
		2.2: Conduct systematic research and survey for archaeological sites, including the remains of prehistoric, as well as historic sites, that represent ship and aircraft losses	Years 3-4
		2.3: Establish a Shipwreck Reconnaissance and Site Monitoring Program	Years 3-5
		2.4: Assess and Nominate Appropriate Submerged Archaeological Sites for Inclusion to the National Register of Historic Places	Years 3-5
	XMHR-3: Assess Shipwrecks and Submerged Structures for Hazards	3.1: Establish an inventory of shipwrecks, inside and outside of Sanctuary boundaries, that may pose environmental threats to Sanctuary marine resources	Years 3-5
		3.2: Establish a monitoring program for shipwreck sites that may pose environmental threats	Years 3-5
		3.3: Coordinate with partners to reduce threats	Years 1-5
		3.4: For historic shipwrecks, ensure compliance under Section 106 of the National Historic Preservation Act (NHPA) and the National Marine Sanctuary Act (NMSA)	Years 3-5

Action Plan	Strategy	Activity	Implementation Timing
Maritime Heritage cont'd.	XMHR-4: Protect and Manage Submerged Archaeological Resources	4.1: Jointly develop uniform protocol to manage, monitor, and protect submerged sites within the three sanctuaries in partnership with appropriate local law enforcement agencies	Years 2-4
		4.2: Provide training to sanctuary staff and facilitate training for partners	Years 3-4
		4.3: Identify archaeological and historic resources currently outside sanctuary boundaries that may either be of significant historic interest or may pose a threat to sanctuary resources	Years 4-5

## Appendix D – Enforcement Related Activities

Action Plan	Strategy	Activity	Implementation Timing
Coastal Development Is	ssues		
Coastal Armoring	CA-2: Develop and Implement Regional Approach to Coastal Armoring	2.6: Broaden the Multi-Agency Enforcement Program	Years 2-4
	CA-3: Improve Permit Program	3.6: Permit Enforcement	Years 2-4
Desalination	DESAL-4: Develop Modeling and Monitoring Program	4.4: Enforcement and Permit Compliance	
Harbors and Dredge Disposal	HDD-1: Improve Agency Coordination	1.3: Enforcement and Permit Compliance	
Submerged Cables	SC-2: Develop Submerged Cable Project Permit Guidelines	2.5: Enforcement and Permit Compliance	
Ecosystem Protection Is	ssues		
Davidson Seamount	DS-3 Develop Resource Protection	3.3 Develop and Implement Enforcement Plan for DSMZ	Years 1-2
Introduced Species	IS-2: Prevention Program for Known Pathways of Introduction	2.3: Coordinate Use of Regulations/ Permits/ Enforcement and Inspect Discharge Logs	Years 3-5
Marine Protected Areas	MPA-7: Develop Enforcement and Compliance Program	7.1: Identify Components of an Effective Enforcement Program and Implementation Mechanisms to Provide Adequate Surveillance on the Water and in the Air	Years 4-5
		7.2: Develop Partnerships and Cooperative Interagency Enforcement Plans	Years 4-5
		7.3: Ensure Adequate Training of Enforcement Officers in MPA Management and Regulations 7.4: Utilize Technology such as GPS and Remote Sensing to facilitate Compliance	Years 4-5
		7.5: Enlist Community Participation in MPA Management and Enforcement to Maximize Costeffectiveness of Enforcement Program and Enhance Compliance	Years 4-5
	MPA-8: Develop Education and Outreach Program	8.5: Integrate Education with Enforcement and Research	Years 4-5
Operations and Admini			
Operations and Administration	OA-6: Coordinate and Conduct Boat Operations	6.5 Implement Boat Operations to Support Sanctuary Enforcement	Year 1-2
	OA-10: Permit Program	10.1: Conduct Outreach to Agencies and Stakeholders	

Action Plan	Strategy	Activity	Implementation Timing
Ops and Admin cont'd.		10.2: Review and Comment on Local Land Use Decisions	
		10.3: Review and Comment on Local Coastal Program Updates	
		10.4: Review and Comment on Fishery Management Plan Updates	
		10.5: Testify at Local Hearings on Issues Affecting the MBNMS	
Water Quality Issues		3	
Beach Closures and Contamination	BC-8: Increase and Coordinate Enforcement	8.1: Review Past Oversight and Sanctuary Notification of Spills, and Use this Information to Develop Effective Protocol for Collaboration Between Agencies	Years 1-2
		8.2: Coordinate and Strengthen Enforcement Actions with the RWQCBs	Years 1-2
	BC-9: Emergency Response	9.4: Provide Sanctuary Enforcement Presence Where Necessary in the Field to Follow Up on Reported Spills and Assess Potential Injury to the Sanctuary	Years 1-2
Cruise Ship Discharges	CS-2: Enforcement and Monitoring Program	2.4: Develop and Implement an Enforcement Program, in Collaboration with Partners	Years 1-2
Water Quality Protection Plan	WQPP-11: Public Education and Outreach	11.3:	
Wildlife Disturbance	Issues		
Marine Mammal, Seabird and Turtle Disturbance	MMST-8: Enforcement Activity Disturbance	8.1: Strengthen Enforcement	Years 1-3
Disturbance	Disturbance	8.2: Continue Outreach to Increase Knowledge of MBNMS Regulations and Contact Information	
		8.3: Increase Use of Summary Settlement Process	
		8.4: Increase Coordination Between Education and Enforcement Programs	
Motorized Personal Watercraft	MPWC-4: Enhance Enforcement Efforts	4.1: Expanded Deputization of Local Peace Officers to Increase Surveillance	Years 2-3
		4.2: Commit Sufficient Enforcement Funding to Support Deputization Agreements with Harbors	Years 2-3
		4.3: Permit Enforcement at Mavericks Using Permit Fee Funding	Years 2-3
Tidepool Protection	TP-3: Strengthen Enforcement	3.1: Improve Enforcement of Existing Regulations	Years 1-3
		3.2: Utilize Enforcement to Focus on Significant Violations	Years 1-3
		3.3: Improve Interagency Coordination	Years 2-4
		3.4: Define a System of Referrals from Docents to Enforcement Officers	Years 3-4
		3.5: Promote a Public Call-in Reporting System	Years 4-5
Cross Cutting Issues	VAO 4. D	A 1. Immon at 66 amon and 1 and 1	Voors 1.2
Administration and Operations	XAO-4: Resource Protection Program Coordination	4.1: Improve staff awareness and understanding of each site's regulations	Years 1-3

Action Plan	Strategy	Activity	Implementation Timing
		4.5: Develop a coordinated sanctuary emergency response plan	Years 2-3
		4.6: Coordinate with the NMSP Damage Assessment Team on populating and making SHIELDS functional and operative for the three sanctuaries and integrating it with the SIMoN database.	Years 1 -5
		4.7 / 4.8: Develop and implement a comprehensive enforcement plan for the trisanctuary area.	Years 3-5
Maritime Heritage	XMHR-4: Submerged Archaeological Resources Protection and Management	4.1: Jointly develop protocol to manage, monitor, and protect submerged site within the three sanctuaries in partnership with appropriate local law enforcement agencies.	Year 3-4
Northern Management Area	XNRP-2: GFNMS will be responsible for regulatory activities in the NMA while maintaining maximum consistency and protection to sanctuary resources	2.3: Resource Protection Teams Coordinate on Proposed Regulatory Changes	Years 1-2
	XNRP -4: GFNMS staff will coordinate enforcement activities in the NMA	4.1: GFNMS staff will oversee planning and implementation of all NMA enforcement activities in the NMA and will coordinate with MBNMS to ensure consistency across the sites.	Years 1-5

# Appendix E – List of Acronyms

ACCEO	Alliance for California Current Ecosystem Observation
ACP	Area Contingency Plan (USCG)
ACT	Alliance for Coastal Technologies
ADA	Americans with Disabilities Act
Alliance	Alliance of Communities for Sustainable Fisheries
AMBAG	Association of Monterey Bay Area Governments
AOP	Annual Operating Plan
APPS	U.S. Act to Prevent Pollution from Ships
ATOC	Acoustic Thermometry of Ocean Climate
AWA	American Watercraft Association
AWQA	Agricultural Water Quality Alliance
BAH	Booz Allen Hamilton
BASK	Bay Area Sea Kayakers
BBC	British Broadcasting Corporation
BC	British Colombia
Beach COMBERS	Beach Coastal Ocean/Marine Bird Education Research Surveys
BLM	Bureau of Land Management
BML	Bodega Marine Laboratory
BMP(s)	Best Management Practices
BTAP	MBNMS Business and Tourism Activity Panel
BWQW	Beach Water Quality Workgroup (SWRQCB)
Cal EPA	California Environmental Protection Agency
CalCOFI	California Cooperative Oceanic Fisheries Investigations
CalTrans	California Department of Transportation
	Campaign Against Marijuana Planting
CBNMS	Cordell Bank National Marine Sanctuary
CBSOA	California Boating Safety Officers Association
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCAMP	Central Coast Ambient Monitoring Program
CCC	California Coastal Commission
CCJDC	Central Coast Joint Data Committee
CCLEAN	Central Coast Long-term Environmental Assessment Network
CCR	California Code of Regulations
CCRWQBC	Central Coast Regional Water Quality Control Board
CDBW	California Department of Boating and Waterways
CDF	California Department of Forestry
CDFG	California Department of Fish and Game
CDPR	California Department of Parks and Recreation
CeNCOOS	Central California Ocean Observing System

CEOA	. California Environmental Quality Act
•	. California Endangered Species Act
	. Code of Federal Regulations
	. California Highway Patrol
	. Center for Integrated Marine Technology
	. Channel Islands National Marine Sanctuary
	. Coastal Maritime Archaeology Resources
	. Coastal Observation And Seabird Survey Team
	. Coastal Ocean Dynamics Applications Radar
	. U.S. Army Corps. Of Engineers
	. California State Lands Commission
	. California State University, Monterey Bay
CWA	
	. Coastal Watershed Council
	. Conservation Working Group
	. MBNMS Conservation Working Group
	. Coastal Zone Management Act
	. Dichlorodiphenyltrichloroethane
	. Dichlorodiphenyltrichloroethane
	. Draft Environmental Impact Statement
	. United States Department of Commerce
	. United States Department of the Interior
	. California Department of Parks and Recreation
	. U.S. Exclusive Economic Zone
EFH	
	. Environmental Impact Report
	. Environmental Impact Statement
	. U.S. Environmental Protection Agency
	. External Monitoring Review Panel
	. Endangered Species Act
	. Elkhorn Slough National Estuarine Research Reserve
	. Federal Aviation Administration
	Federal Communications Commission
	. Final Environmental Impact Statement and Management Plan
	Friends of the Elephant Seal
	. Florida Keys National Marine Sanctuary
	. Fishermen's Marketing Association
	. Farallones Marine Sanctuary Association
	. Friends of the Sea Otter
	. Federal Water Pollution Control Act
	. Gulf of the Farallones National Marine Sanctuary
	. Golden Gate National Recreation Area
	. SULTED SWAN TIMESON TO THE THE THE TANK THE TENT OF

GIS	Geographic Information Systems
	Global Learning and Observation to Benefit the Environment
	Global Positioning System
GS	
	General Services Administration
	Hazardous Materials (NOAA)
	Horizontal Directional Drilling
	Hawaiian Islands Humpback Whale National Marine Sanctuary
	Half Moon Bay Fisherman's Marketing Association
	Hispanic Serving Institution
	The International Council of Cruise Lines
	Incident Command System
	Individual Fishing Quota
-	Integrated Ocean Observing Systems
	Individual Transferable Quota
	JASON Foundation for Education
JMPR	Joint Management Plan Review
JRAP	Joint Research Advisory Panel
JRB	Joint Review Board
LABs	Long-chain Alkylbenzenes
LCP	Local Coastal Program
LiMPETS	Long-term Monitoring Program and Experiential Training for Students
LML	Long Marine Lab
LPNF	Los Padres National Forest
MAC	Maritime Archaeology Center (NOAA)
MAR	Multiple Antibiotic Resistance
MARINE	Multi-Agency Rocky Intertidal Network
MARPOL	The International Convention for the Prevention of Pollution from Ships
MATE	Marine Advanced Technology Education (Center)
MBA	Monterey Bay Aquarium
MBARI	Monterey Bay Aquarium Research Institute
MBNMS	Monterey Bay National Marine Sanctuary
MBSF	Monterey Bay Sanctuary Foundation
MBTA	Migratory Bird Treaty Act
MERITO	Multicultural Education for Resource Issues Threatening Oceans
MGD	Million Gallons per Day
MHR	Maritime Heritage Resources
MHW	Mean High Water
	Mean High Water Line
	Monterey Institute of International Studies
	Monterey Inter-Shelf Observatory
MLML	Moss Landing Marine Laboratories

MLPA Marine Life Protection Act MMPA Marine Mammal Protection Act MMS Minerals Management Service MMUG Marine Mapping User Group MOA Memorandum of Agreement MOU Memorandum of Understanding MPA Marine Protected Area MPN Most Probable Number MPWC Motorized Personal Watercraft MRWPCA Monterey Regional Water Pollution Control Agency MS4 Municipal Separate Storm Sewer Systems MSD Marine Sanitation Device MSFCMA Magnuson Stevens Fishery Conservation and Management Act MSI Environmental Entrepreneurship Program/Minority Serving Institution (NOAA) MURP Model Urban Runoff Program NANPCA Nonindigenous Aquatic Nuisance Prevention and Control Act NAS Nautical Archaeology Society NASA National Aeronautics and Space Administration NAUI National Association of Underwater Instructors NCCOS The National Centers for Coastal Ocean Science NCDDC National Data Buoy Center		i i i di i i i i i i i i i i i i i i i
MMS Minerals Management Service  MMUG Marine Mapping User Group  MOA Memorandum of Agreement  MOU Memorandum of Understanding  MPA Marine Protected Area  MPN Most Probable Number  MPWC Motorized Personal Watercraft  MRWPCA Monterey Regional Water Pollution Control Agency  MS4 Municipal Separate Storm Sewer Systems  MSD Marine Sanitation Device  MSFCMA Magnuson Stevens Fishery Conservation and Management Act  MSI Environmental Entrepreneurship Program/Minority Serving Institution (NOAA)  MURP Model Urban Runoff Program  NANPCA Nonindigenous Aquatic Nuisance Prevention and Control Act  NAS Nautical Archaeology Society  NASA National Aeronautics and Space Administration  NAUI National Association of Underwater Instructors  NCCOS The National Centers for Coastal Ocean Science  NCDDC National Coastal Data Development Center (NOAA)		Marine Mammal Protection Act
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NEPANational Environmental Policy Act		
NERRS		•
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NMSF		
NMSP		•
NOAA OLENOAA's Office of Law Enforcement		· · ·
NOAA		
NODC		
NOS		
NPDESNational Pollutant Discharge Elimination System		
NPS		- · · · · · · · · · · · · · · · · · · ·
NPSNaval Postgraduate School	NPS	Naval Postgraduate School

NPS	. Naval Postgraduate School
NPS	Non Point Source Pollution
NRCS	. National Resources Conservation Service
NTIA	. National Telecommunications and Information Administration
NURP	. National Undersea Research Program (NOAA)
NWHICRER	Northwest Hawaiian Islands Coral Reef Ecosystem Reserve
OCNMS	Olympic Coast National Marine Sanctuary
OCRM	Office of Coastal Resource Management (NOAA)
OES	. Office of Emergency Services
OSPR	. (Office of) Oil Spill Prevention and Response (CDFG)
OT	. Ocean Thunder
PADI	Professional Association of Diving Instructors
PCB	. Polychlorinated biphenyls
PCFFA	. Pacific Coast Federation of Fishermen's Associations
PCR	. Polymerase Chain Reactivity
PFEL	. Pacific Fisheries Environmental Laboratory
PFMC	Pacific Fishery Management Council
PISCO	. Partnership for Interdisciplinary Studies of Coastal Oceans
PMCC	. Pacific Marine Conservation Council
PPT	. Parts Per Thousand
PRBO	. Point Reyes Bird Observatory
PSA	. Public Service Announcement
PSMFC	. Pacific States Marine Fisheries Commission
PVC	. Polyvinyl Chloride
PWIA	Personal Watercraft Industry Association
QA	. Quality Assurance
QC	. Quality Control
RAP	. Research Activity Panel
RBOC	. Recreational Boaters of California
RCRA	. U.S. Resource Conservation and Recovery Act
RFP	. Request for Proposal
RO	. Reverse Osmosis
ROV	. Remotely Operated Vehicle
RUST	. Resources and Under Sea Threats (NMSP database system)
RWQCB	. Regional Water Quality Control Board
SAC	. Sanctuary Advisory Council
SAFE	. Stock Assessment and Fishery Evaluation
SBNMS	. Stellwagen Bank National Marine Sanctuary
SCCWRP	. Southern California Coastal Water Research Project
SCRP	. Submerged Cultures Resource Program (NMSP)
SCWMN	. Sanctuary Citizen Watershed Monitoring Network
Sea Grant	. University of California Sea Grant

SEA	Surfer's Environmental Alliance
SEALS	Sanctuary Education Awareness and Long-term Stewardship
SEP	MBNMS Sanctuary Education Panel
SF	Sanctuary Foundation
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SFSU	San Francisco State University
SHIELDS	Sanctuaries Hazardous Incident Emergency Logistics Database System
SHPO	California State Historic Preservation Office
SIMoN	Sanctuary Integrated Monitoring Network
SLUGS	Santa Lucia Gradient Studies
SMCNHA	San Mateo Coast Natural History Association
SNAPSHOT	Snapshot Water Quality Monitoring Event
SOS	Save Our Shores
SRP	Shipwreck Reconnaissance Program (CINMS)
SST	Sea Surface Temperature
SWiM	System Wide Monitoring Program (NMSP)
SWRCB	State Water Resources Control Board
TAMC	Transportation Agency for Monterey County
Team OCEAN	Team Ocean Conservation Education Action Network
TMDL	Total Maximum Daily Loads
UCCE	University of California Cooperative Extension
UCSB	University of California Santa Barbara
UCSC	University of California Santa Cruz
USACE	U.S. Army Corps of Engineers
USCG	United States Coast Guard
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WASC	Western Administrative Support Center (NOAA)
WDR	Waste Discharge Requirements
WERF	Water Environmental Research Foundation
WQC	Water Quality Council
WQPP	Water Quality Protection Program (MBNMS)
WRP	Western Regional Panel on Aquatic Nuisance Species
WWF	World Wildlife Fund