
TABLE OF CONTENTS

TABLE OF CONTENTS

1.0	INTRODUCTION	1-1
1.1	THE NATIONAL MARINE SANCTUARY PROGRAM	1-1
	1.1.1 Channel Islands National Marine Sanctuary.....	1-2
1.2	PROJECT LOCATION	1-2
1.3	PURPOSE AND NEED.....	1-7
1.4	SCOPE OF THIS EIS	1-9
1.5	ISSUES BEYOND THE SCOPE OF THIS EIS	1-11
	1.5.1 Boundary Expansion.....	1-12
	1.5.2 Marine Reserves and Conservation Areas	1-12
1.6	NEPA PUBLIC COMMENT PROCESS	1-13
	1.6.1 Council on Environmental Quality Regulations	1-13
	1.6.2 Scoping Process	1-13
	1.6.3 Public Review of the Draft EIS	1-14
	1.6.4 Public Comment Management Process	1-16
1.7	INTERAGENCY COORDINATION	1-16
1.8	EXAMPLES OF RELATED STUDIES AND PROCESSES	1-16
1.9	ORGANIZATION OF THE EIS	1-17
2.0	DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES.....	2-1
2.1	PROPOSED ACTION	2-2
	2.1.1 CINMS Boundary Description Clarification	2-2
	2.1.2 Prohibition 1 (Oil and Gas).....	2-3
	2.1.3 Prohibition 2 (Mineral Activities).....	2-4
	2.1.4 Prohibition 3 (Discharging or Depositing)	2-5
	2.1.5 Prohibition 4 (Altering the Seabed).....	2-7
	2.1.6 Prohibition 5 (Abandoning)	2-9
	2.1.7 Prohibition 6 (Nearshore Operation of Vessels)	2-10
	2.1.8 Prohibition 7 (Disturbing a Seabird or Marine Mammal by Aircraft Overflight)	2-11
	2.1.9 Prohibition 8 (Moving, Removing, Possessing or Injuring a Sanctuary Historical Resource)	2-11
	2.1.10 Prohibition 9 (Taking a Marine Mammal, Sea Turtle, or Seabird).....	2-12
	2.1.11 Prohibition 10 (Possessing a Marine Mammal, Sea Turtle, or Seabird).....	2-13
	2.1.12 Prohibition 11 (Tampering with Signs)	2-14
	2.1.13 Prohibition 12 (Releasing an Introduced Species).....	2-14
	2.1.14 Prohibition 13 (Operation of Motorized Personal Watercraft)	2-16
	2.1.15 Department of Defense Military Activities.....	2-17
	2.1.16 Regulation on Permit Procedures and Issuance Criteria.....	2-18
	2.1.17 CINMS Designation Document Changes	2-22
2.2	ALTERNATIVE 1.....	2-24
	2.2.1 Prohibition 3 (Discharging and Depositing)	2-24
	2.2.2 Prohibition 6 (Nearshore Operation of Vessels)	2-25
	2.2.3 Prohibition 15 (Lightering)	2-25
	2.2.4 Designation Document Changes.....	2-25
2.3	NO-ACTION ALTERNATIVE.....	2-25
	2.3.1 Prohibition 1 (Oil and Gas).....	2-26

2.3.2	Prohibition 2 (Mineral Activities).....	2-26
2.3.3	Prohibition 3 (Discharging or Depositing)	2-26
2.3.4	Prohibition 4 (Altering the Seabed)	2-27
2.3.5	Prohibition 5 (Abandoning)	2-28
2.3.6	Prohibition 6 (Nearshore Operation of Vessels)	2-28
2.3.7	Prohibition 7 (Disturbing a Seabird or Marine Mammal by Aircraft Overflight)	2-29
2.3.8	Prohibition 8 (Moving, Removing, Possessing, or Injuring a Sanctuary Historical Resource)	2-29
2.3.9	Prohibition 9 (Taking a Marine Mammal, Sea Turtle, or Seabird) and Prohibition 10 (Possessing a Marine Mammal, Sea Turtle, or Seabird).....	2-29
2.3.10	Prohibition 11 (Tampering with Signs)	2-30
2.3.11	Prohibition 12 (Releasing an Introduced Species).....	2-30
2.3.12	Prohibition 13 (Operation of Motorized Personal Watercraft)	2-30
2.3.13	Regulation on Department of Defense Activities	2-30
2.3.14	Regulation on Permit Procedures and Issuance Criteria.....	2-31
2.4	ALTERNATIVES CONSIDERED BUT DISMISSED	2-31
3.0	AFFECTED ENVIRONMENT	3-1
3.1	MARINE ECOSYSTEMS.....	3-2
3.1.1	Introduction.....	3-2
3.2	PHYSICAL ENVIRONMENT.....	3-2
3.2.1	Geology/Oceanography	3-3
3.2.2	Meteorology	3-9
3.2.3	Physical Oceanography.....	3-10
3.3	BIOLOGICAL ENVIRONMENT.....	3-23
3.3.1	Bioregions.....	3-23
3.3.2	Biotic Communities	3-24
3.3.3	Coastal Watersheds.....	3-29
3.3.4	Coastal Processes.....	3-30
3.3.5	Regulatory Setting	3-31
3.4	MARITIME HERITAGE RESOURCES	3-34
3.4.1	Cultural Resources	3-34
3.4.2	Historical Resources	3-35
3.4.3	Regulatory Setting	3-36
3.5	HUMAN USES.....	3-37
3.5.1	Oil and Gas	3-37
3.5.2	Fiber Optic Telecommunication Cables	3-58
3.5.3	Vessel Traffic and Harbors	3-58
3.5.4	Contaminant Sources	3-71
3.5.5	Introduction of Non-native and Genetically Modified Species	3-85
3.5.6	Fishing	3-90
3.5.7	Marine Bioprospecting	3-98
3.5.8	Nonconsumptive Recreation and Tourism.....	3-102
3.5.9	Department of Defense Activities.....	3-107
3.5.10	U.S. Coast Guard Activities.....	3-117
3.5.11	Research and Education.....	3-118
4.0	ENVIRONMENTAL CONSEQUENCES OF ALTERNATIVES	4-1
4.1	PROPOSED ACTION	4-6

4.1.1	Prohibition 1 (Oil and Gas).....	4-6
4.1.2	Prohibition 2 (Mineral Activities).....	4-6
4.1.3	Prohibition 3 (Discharging or Depositing)	4-7
4.1.4	Prohibition 4 (Altering the Seabed)	4-11
4.1.5	Prohibition 5 (Abandoning)	4-13
4.1.6	Prohibition 6 (Nearshore Operation of Vessels)	4-13
4.1.7	Prohibition 7 (Disturbing a Seabird or Marine Mammal by Aircraft Overflight)	4-15
4.1.8	Prohibition 8 (Moving, Removing, or Injuring a Sanctuary Historical Resource)	4-15
4.1.9	Prohibition 9 (Taking a Marine Mammal, Sea Turtle, or Seabird).....	4-16
4.1.10	Prohibition 10 (Possessing Marine Mammals, Sea Turtles, or Seabirds).....	4-17
4.1.11	Prohibition 11 (Tampering with Signs)	4-18
4.1.12	Prohibition 12 (Introducing or otherwise releasing an Introduced Species).....	4-18
4.1.13	Prohibition 13 (Operation of Motorized Personal Watercraft)	4-20
4.1.14	Sanctuary Boundary Description Clarification	4-21
4.1.15	Department of Defense Activities.....	4-22
4.1.16	Regulation on Permit Procedures and Issuance Criteria.....	4-23
4.2	ALTERNATIVE 1.....	4-24
4.2.1	Prohibition 3 (Discharging or Depositing)	4-24
4.2.2	Prohibition 6 (Nearshore Operation of Vessels)	4-24
4.2.3	Prohibition 15 (Lightering)	4-25
4.3	NO-ACTION ALTERNATIVE.....	4-26
4.3.1	Oil and Gas Exploration, Development, and Production.....	4-26
4.3.2	Exploring for, Developing, or Producing Minerals	4-26
4.3.3	Discharging or Depositing Material or Matter.....	4-27
4.3.4	Altering the Seabed.....	4-28
4.3.5	Abandoning any Structure, Material, or Other Matter on or in the Submerged Lands	4-28
4.3.6	Operation of Vessels within 1 NM of Islands.....	4-28
4.3.7	Disturbing a Seabird or Marine Mammal by Aircraft Overflight.....	4-29
4.3.8	Moving, Removing, Possessing, or Injuring a Sanctuary Historical Resource	4-29
4.3.9	Taking or Possessing a Marine Mammal, Sea Turtle, or Seabird.....	4-29
4.3.10	Tampering with Sanctuary Signs.....	4-30
4.3.11	Releasing an Introduced Species	4-30
4.3.12	Operation of Motorized Personal Watercraft.....	4-31
4.3.13	Department of Defense Activities.....	4-31
4.3.14	Permit Procedures and Issuance Criteria	4-31
4.4	OTHER REQUIRED EIS SECTIONS	4-31
4.4.1	Irreversible and Irretrievable Commitment of Resources.....	4-31
4.4.2	Relationship Between Short-Term Costs and Maintenance and Enhancement of Long-Term Productivity	4-32
4.4.3	Unavoidable Significant Adverse Impacts.....	4-32
4.4.4	Environmental Justice.....	4-32
4.4.5	Growth-Inducing Impacts	4-32
4.5	SOCIOECONOMIC IMPACTS SUMMARY (ALL ALTERNATIVES)	4-32
4.6	CUMULATIVE IMPACTS	4-33

5.0	FEDERAL AND STATE LAW.....	5-1
5.1	OFFSHORE ENERGY SOURCE AND MINERAL EXPLORATION AND DEVELOPMENT	5-1
5.2	DISCHARGING OR DEPOSITING OTHER MATTER INTO THE MARINE ENVIRONMENT	5-4
5.3	PROTECTION OF SUBMERGED LANDS.....	5-9
5.4	NAVIGATION OF VESSELS	5-10
5.5	PROTECTION OF MARINE MAMMALS, SEABIRDS AND SEA TURTLES	5-11
5.6	PROTECTION OF HISTORICAL/CULTURAL RESOURCES IN THE MARINE ENVIRONMENT	5-14
5.7	INTRODUCED SPECIES IN THE MARINE ENVIRONMENT	5-17
5.8	OPERATION OF MOTORIZED PERSONAL WATERCRAFT.....	5-18
5.9	OTHER FEDERAL AND STATE LAWS.....	5-18
5.9.1	Sustainability or Sustainable Development of Biological Resources	5-18
5.9.2	Marine Environmental Quality	5-20
5.9.3	Tourism and Recreation.....	5-24
5.9.4	United States Marine Transportation	5-24
5.9.5	Lightering	5-26
5.9.6	Cross-cutting Federal Law	5-27
6.0	REFERENCES.....	6-1
7.0	PERSONS AND AGENCIES CONTACTED	7-1
8.0	LIST OF PREPARERS.....	8-1
9.0	ACRONYMS AND ABBREVIATIONS.....	9-1
10.0	GLOSSARY OF TERMS.....	10-1
APPENDICES		
A	NOTICE OF INTENT AND PUBLIC SCOPING PROCESS	A-1
A.1	NOTICE OF INTENT (NOI).....	A1-1
A.2	DOCUMENTATION OF SCOPING PROCESS	A.2-1
B	NATIONAL MARINE SANCTUARIES ACT.....	B-1
C	BIOLOGICAL AND HISTORICAL/CULTURAL RESOURCES OF THE STUDY AREA	C-1
D	PROPOSED RULE.....	D-1
E	FINDINGS AND DETERMINATIONS.....	E-1
F	EIS MAILING LIST.....	F-1
G	PUBLIC COMMENTS AND RESPONSES (to be completed after the public comment period on the DMP/DEIS and added to the Final EIS).....	G-1

LIST OF FIGURES

1.2-1	Regional Location of the CINMS Study Area	1-3
1.2-2	CINMS EIS Study Area Location Map	1-5
1.6-1	Development and Review Process for the Revised CINMS Management Plan and Environmental Impact Statement.....	1-15
3.2-1	CINMS EIS Study Area Geologic Features and Bathymetry	3-5
3.2-2	CINMS EIS Study Area Currents	3-13
3.2-3	Monthly Mean Sea Surface Temperatures in the Southern California Bight	3-18
3.2-4	Scripps Pier Sea Surface Temperature Anomalies	3-19
3.3-1	Simplified Food Web	3-24
3.3-2	Activities, Mechanisms, Habitats, and Communities Affecting Coastal Birds	3-28
3.5-1	CINMS EIS Study Area Federal Oil and Gas Leases	3-41
3.5-2	CINMS EIS Study Area State Oil and Gas Leases	3-47
3.5-3	CINMS EIS Study Area Vessel Traffic Separation Scheme	3-61
3.5-4	CINMS Study Area Point Source Contaminant Inputs.....	3-73
3.5-5	Point Mugu Sea Range.....	3-112

LIST OF TABLES

2.1-1	Regulatory Alternatives Considered for the CINMS Management Plan Update.....	2-32
3.3-1	Major Watersheds of CINMS Study Area	3-30
3.5-1	Federal Offshore Oil and Gas Fields, Operators, Platforms, Installation Date, and Platform Depth.....	3-39
3.5-2	Oil and Gas Production and Projections on the OCS	3-49
3.5-3	Federal Leases Developable from Existing or New Platforms	3-50
3.5-4	Summary of OCS Annual Emissions Generated by Marine Offshore Vessels.....	3-66
3.5-5	Summary of Inputs from Discrete Sources of Contaminants to the Study Area.....	3-75
3.5-6	Municipal Wastewater Treatment Plants Discharging into the Study Area.....	3-80
3.5-7a	General Summary of Commercial Fishing Prohibitions in Southern California	3-99
3.5-7b	General Summary of Recreational Fishing Prohibitions in Southern California.....	3-101
3.5-8	Annual Visitors to Channel Islands National Park, 1995–2003	3-102
3.5-9	Aircraft-based Public Visitation for Channel Islands National Park, 1995–2002	3-103
3.5-10	Space Vehicle Launches from Vandenberg Air Force Base: Sonic Boom Measurements, Northern Channel Islands.....	3-111
4.0-1	Summary of Impacts Under the Proposed Action	4-3