February 5, 2004

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Reference: Contract No.: DTCG23-02-D-EXB001
e²M Project No.: 3055-004

SUBJECT: Transmittal of the Final Environmental Assessment for the Stand-up and Operations of the Maritime Safety and Security Team New York, NY

Dear Mr. Taylor:

This letter is to inform you of the delivery of the Final Environmental Assessment (EA) and Finding of no Significant Impact (FONSI) for the Stand-up and Operations of the Maritime Safety and Security Team New York, NY. engineering-environmental Management, Inc. (e²M) provided 10 hardcopies and a CD of the EA to LCDR Kirk Schilling for internal distribution.

These are file copies of the final documents only and no comments or response is requested.

We appreciate this opportunity to provide our continued support to the U.S. Coast Guard. Should you have any questions concerning this letter or the EA, please contact me at (610) 949-9699. Thank you.

Sincerely,
engineering-environmental Management, Inc.

Alan J. Finio
Project manager

cc: Kelley, Kebby (G-SEC-3)
Ms. Joan Lang, e²M
e²M Project File 3055-003

Environmental Assessment

Stand-Up and Operations of the

Maritime Safety and Security Team

New York, New York

Commandant

United States Coast Guard (G-OPD)

February 2004

ABBREVIATIONS AND ACRONYMS

%HA	Percent Highly Annoyed
˚C	degrees Celcius
˚F	degrees Fahrenheit
ALCOASTS	All coasts – message sent to all USCG installations and vessels
ANSI	American National Standards Institute
APLMRI	Atlantic Protected Living Marine Resources Initiative
AQCR	Air Quality Control Region
ASMFC	Atlantic States Marine Fisheries Commission
CAA	Clean Air Act
CCMP	Comprehensive Conservation and Management Plan
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMDTINST	Coast Guard Commandant Instruction
CPIP	Comprehensive Port Improvement Plan
CPIP-EIS	Comprehensive Port Improvement Plan and Environmental Impact Statement
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
dBC	C-weighted decibel
DEC	New York State Department of Environmental Conservation
DHS	Department of Homeland Security
DNL	Day-Night Average Sound Level
DoD	Department of Defense
DOT	Department of Transportation
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FY	Fiscal Year
HAPC	Habitat areas of particular concern
Harbor	New York-New Jersey Harbor
HEP	Harbor Estuary Program
Hp	horsepower
Hz	hertz
ISC	Integrated Support Command
Leq(24)	24-hour equivalent sound level
LURP	Land Use Regulation Program
m/s	meters per second
MAFMC	Mid-Atlantic Fisheries Management Council
mg/m^3	milligrams per cubic meter
MMPA	Marine Mammal Protection Act
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSST	Maritime Safety and Security Team

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Continued from front cover

MTSA	Maritime Transportation Security Act
NAAQS	National Ambient Air Quality Standards
NEFMC	New England Fisheries Management Council
NEPA	National Environmental Policy Act
NERR	National Estuarine Research Reserve
NJDEP	New Jersey Department of Environmental Protection
NJDOT	New Jersey Department of Transportation
NJ-NY-CT	New Jersey-New York-Connecticut
NMFS	National Marine Fisheries Service
NMSA	National Marine Sanctuaries Act
NO_2	Nitrogen Dioxide
NOAA	National Oceanic and Atmospheric Administration
NOAA Fisheries	National Oceanic and Atmospheric Administration's National Marine Fisheries Service
NOAA Fisheries HMS	NOAA Fisheries Highly Migratory Species Division
NO_x	nitrogen oxide
NRA	National Recreation Area
NRHP	National Register of Historic Places
NSR	New Source Review
O_3	ozone
P.L.	Public Law
PANYNJ	Port Authority of New York and New Jersey
Pb	lead
PIDN	Port Inland Distribution Network
PM_{10}	particulate Matter ≤ 10 microns in diameter
PNCT	Port Newark Container Terminal
Ppm	parts per million
PSD	Prevention of Significant Deterioration
RB-HS	Response Boats-Homeland Security
ROI	Region of Influence
SAE	Society of Automobile Engineers
SAFMC	South Atlantic Fisheries Management Council
SAV	Submerged Aquatic Vegetation
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	sulfur dioxide
TEU	Twenty-foot equivalent units
tpy	tons per year
U.S.	United States
U.S.C	United States Code
USACE	U.S. Army Corps of Engineers
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service
VOC	Volatile Organic Compound
$\mu g/m^3$	micrograms per cubic meter
µPa	microPascal
µPa-m	microPascal – meters

ENVIRONMENTAL ASSESSMENT OF THE STAND-UP AND OPERATIONS OF THE MARITIME SAFETY AND SECURITY TEAM NEW YORK, NY

Contract No.: DTCG23-02-D-EXB001

Prepared for:

Commandant
United States Coast Guard (G-OPD)
2100 Second Street, SW
Washington, DC 20593-0001

Prepared by:

e²M, Inc.
3949 Pender Drive, Suite 120
Fairfax, Virginia 22030

February 2004

USCG

ENVIRONMENTAL ASSESSMENT

FOR

COAST GUARD STAND-UP AND OPERATION OF MARITIME SAFETY AND SECURITY TEAM IN NEW YORK, NEW YORK

This USCG environmental assessment was prepared in accordance with Commandant's Manual Instruction M16475.1D and is in compliance with the National Environmental Policy Act of 1969 (P.L. 91-190) and the Council of Environmental Quality Regulations dated 28 November 1978 (40 CFR Parts 1500-1508).

This environmental assessment serves as a concise public document to briefly provide sufficient evidence and analysis for determining the need to prepare an environmental impact statement or a finding of no significant impact.

This environmental assessment concisely describes the proposed action, the need for the proposal, the alternatives, and the environmental impacts of the proposal and alternatives. This environmental assessment also contains a comparative analysis of the action and alternatives, a statement of the environmental significance of the preferred alternative, and a list of the agencies and persons consulted during the preparation of the environmental assessment.

1/29/04		LCDR/G-OPD
Date	Preparer/Environmental Project Manager (as applicable)	Title/Position
2-4-04		CHIEF, G-SEC-3
Date	**Environmental Reviewer	Title/Position

In reaching my decision/recommendation on the USCG's proposed action, I have considered the information contained in this environmental assessment on the potential for environmental impacts.

1/30/04		CAPT/G-OPD
Date	Responsible Official	Title/Position

USCG

FINDING OF NO SIGNIFICANT IMPACT

FOR

U.S. COAST GUARD STAND-UP AND OPERATIONS OF THE MARITIME SAFETY AND SECURITY TEAM IN NEW YORK, NEW YORK

The Proposed Action includes the stand up and operations of one Maritime Safety and Security Team (MSST) located at Station New York on Staten Island. The MSST will consist of 71 active duty personnel and 33 reserve personnel, and six Response Boats-Homeland Security (RB-HS). All six RB-HS can, but will not necessarily, be operating at once. The RB-HS will have two 225 horsepower outboard motors, will be 25 feet in length, will be highly maneuverable, will be capable of quickly reaching and sustaining high speeds (in excess of 40 knots), and will carry three crewmembers, plus a maximum of seven passengers. Other requirements will include, but not be limited to, communication equipment, protection for the crew, and defensive weaponry. When not in use, RB-HS may be placed on trailers.

The MSST will normally conduct operations in New York Harbor (Upper New York Bay, Lower New York Bay, the Narrows, Newark Bay, Jamaica Bay, Arthur Kill, Kill Van Kull, the Hudson River to West Point, and the East River to Long Island Sound). The Region of Influence (ROI) includes the New York counties of Putnam, Orange, Rockland, Westchester, Bronx, New York, Kings, Queens, and Richmond and the New Jersey counties of Bergen, Hudson, Essex, Union, Middlesex, and Monmouth. The MSST is intended for domestic operations, in support of the Group or Captain of the Port (COTP). Operations will closely parallel existing USCG traditional port security operations, but will provide complementary, non-redundant capabilities that will be able to close significant readiness gaps in our nation's strategic ports. The MSST will escort a variety of vessels and maintain specific security zones in New York Harbor. It will be capable of operating seven days a week, 24 hours a day, in all weather conditions. It will also operate with, and be supported by, both military and civilian government organizations and commercial and non-governmental entities. The MSST will be transportable via land transportation, USCG cutter, and USCG or other military aircraft.

This project has been thoroughly reviewed by the U.S. Coast Guard (USCG) and it has been determined, by the undersigned, that this project will have no significant effect on the human environment.

This finding of no significant impact (FONSI) is based on the attached contractor prepared environmental assessment (EA) which has been independently evaluated by the USCG and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project and provides sufficient evidence and analysis for determining that an environmental impact statement is not required. The USCG takes full responsibility for the accuracy, scope, and content of the attached environmental assessment.

2 FEB 04		CHIEF, G-SEC-3
Date	Environmental Reviewer	Title/Position

I have considered the information contained in the EA, which is the basis for this FONSI. Based on the information in the EA and this FONSI document, I agree that the proposed action as described above, and in the EA, will have no significant impact on the environment.

1/30/04		CAPT, USCG
Date	Responsible Official	Title/Position
		CHIEF, DEFENSE OPERATIONS

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1. Purpose of and Need for the Action

1.1 Introduction

The United States Coast Guard (USCG), one of the country's five armed services, is this nation's oldest maritime agency, and is one of the most unique agencies of the Federal government. The USCG began on August 4, 1790, when the first Congress authorized the construction of ten vessels to enforce tariff and trade laws, prevent smuggling, and protect the collection of the Federal revenue. Known previously as the Revenue Marine and the Revenue Cutter Service, the USCG expanded in size and responsibilities as the nation grew. These added responsibilities included humanitarian duties such as aiding mariners in distress, enforcing laws against slavery and piracy, protecting the marine environment, exploring and policing Alaska, and charting the growing nation's coastlines, all well before the turn of the 20th century.

The service received its present name in 1915 when the Revenue Cutter Service merged with the Life-Saving Service. The nation then had a single maritime service dedicated to saving lives at sea and enforcing the nation's maritime laws. The USCG has continued to protect the nation throughout its long history and served proudly in every one of the nation's conflicts. National defense responsibilities remain one of the USCG's most important functions.

Today, the USCG operates in all maritime regions:

- Approximately 95,000 miles of United States (U.S.) coastlines, including inland waterways and harbors
- More than 3.36 million square miles of Exclusive Economic Zone (EEZ) and U.S. territorial seas
- International waters and other maritime regions of importance to the U.S.

The events of September 11, 2001, significantly changed the nation's homeland security posture. Terrorism is a clear and present danger to the U.S. The USCG has dramatically shifted its mission activity to reflect its role as a leader in Maritime Homeland Security. On March 1, 2003, in response to growing national security demands, the newly formed Department of Homeland Security (DHS) assumed control of the USCG from the Department of Transportation (DOT) in the largest reorganization of the Federal government since the 1940s (Public Law [P.L.] 107-296). The USCG is the lead Federal agency for Maritime Homeland Security. The USCG's heightened maritime security posture will remain in place indefinitely.

1.2 Coast Guard Missions

The USCG is unique in that it is the only maritime service with regulatory and law enforcement authority, military capabilities, and humanitarian operations. USCG activities in warfare encompass critical elements of naval operations in littoral regions, including port security and safety, military environmental response, maritime interception, coastal control, and force protection. More than two centuries of littoral warfare operations at home and overseas have honed the USCG's skills most needed in support of the nation's military and naval strategies for the 21st century. The USCG's missions include maritime law enforcement, maritime safety, national defense, and marine environmental protection.

Under the newly formed DHS, one of the USCG's primary missions is to protect the U.S. Maritime Domain and the U.S. Marine Transportation System and deny their use and exploitation by terrorists as a means for attacks on U.S. territory, population, and critical infrastructure. The Maritime Transportation Security Act (MTSA) of 2002 contains several provisions relating to the USCG's role in maritime homeland security. It creates a U.S. maritime security system and requires Federal agencies, ports, and vessel owners to take numerous steps to upgrade security. The MTSA required the USCG to develop national and regional area maritime transportation security plans; it also required ports, waterfront terminals, and certain types of vessels to submit security and incident response plans to the USCG for approval.

The USCG has several additional roles in defense of homeland security:

- Protect ports, the flow of commerce, and the marine transportation system from terrorism.
- Maintain maritime border security against illegal drugs, illegal aliens, firearms, and weapons of mass destruction.
- Ensure that U.S. military assets can be rapidly deployed and re-supplied, by keeping USCG units at a high state of readiness, and by keeping marine transportation open for the transit of assets and personnel from other branches of the armed forces.
- Protect against illegal fishing and indiscriminate destruction of living marine resources.
- Prevent and respond to oil and hazardous material spills—both accidental and intentional.
- Coordinate efforts and intelligence with Federal, state, and local agencies.

In response to the increased homeland security threat level, the USCG is engaged in Operations Liberty Shield and Iraqi Freedom. Operation Liberty Shield is a multi-department, multi-agency, national team effort to protect American citizens and infrastructure while minimizing disruption

to our economy and way of life. The USCG is integrating its efforts within DHS and closely coordinating its efforts with those of the Department of Defense (DoD); DOT; the Federal Bureau of Investigation (FBI); and other Federal, state, and local security and law enforcement agencies to ensure the security of national ports, waterways, and facilities. Hundreds of USCG cutters, aircraft, and small boats manned by thousands of USCG active duty and reserve members are guarding coasts, ports, and waterways around the clock during this heightened state of alert.

Overseas, the USCG is playing a crucial role supporting the other military services in the implementation of Operation Iraqi Freedom. Several USCG cutters, aircraft, reserve, and active duty personnel are currently deployed in the Persian Gulf region and in the Mediterranean to perform waterside security, maritime force protection, and environmental response duties.

In addition, the USCG and DoD are currently partners in two major actions: Operation Enduring Freedom and Operation Noble Eagle. Operation Enduring Freedom generally refers to U.S. military operations associated with the war on terrorism outside the U.S.

Operation Noble Eagle generally refers to U.S. military operations associated with homeland defense and civil support to Federal, state, and local agencies in the U.S., and includes the increased security measures taken after the terrorist attacks on September 11, 2001. The operation involves joint agency coordination and cooperation to ensure our nation and its borders are protected from future attacks. The increased USCG maritime security presence prevents and deters those who would cause harm to innocent Americans.

1.3 Purpose and Need for the Action

1.3.1 Purpose of the Action

The USCG is at a heightened state of alert, protecting more than 361 ports and 95,000 miles of coastline, America's longest border. The USCG continues to play an integral role in maintaining the operations of our ports and waterways by providing a secure environment in which mariners and the American people can safely live and work (USCG 2002a).

The establishment of additional Maritime Safety and Security Teams (MSSTs) would better allow the USCG to perform all of its missions, especially the newly acquired homeland security missions. The MSSTs are needed to improve existing domestic port security capabilities. While the MSSTs would be used to augment existing USCG forces in the U.S., the MSSTs would not duplicate existing protective measures. They would provide complimentary, non-redundant

capabilities that would be able to close significant readiness gaps in the nation's strategic ports (USCG 2002b, c).

In order to determine which ports require additional protection, the USCG and other agencies developed a matrix to assess and "grade" each U.S. port to aid in the selection of the most critical ports to stand up. Elements that were assessed included (USCG 2002b):

- Cargo Value
- Cargo Volume
- Domestic Cargo
- Hazardous Cargo
- Military Presence
- Population

The first four MSSTs were established in Seattle, WA; Chesapeake, VA; San Pedro, CA; and Galveston, TX. The next two MSSTs would be established in New York, NY and St. Marys, GA. If additional MSSTs are established around the country, additional National Environmental Policy Act (NEPA) analysis would be prepared for future stand-ups, as necessary.

1.3.2 Need for the Action

The USCG has a broad range of environmental and geographic responsibilities throughout the EEZ. In the wake of the events of September 11, 2001, the USCG assumed homeland security duties in addition to their current missions. Unfortunately, manpower and vessels to perform all missions, including these additional operations, also remained the same. Currently, USCG resources are at maximum capacity and all missions (e.g., search and rescue, alien and drug interdiction, fisheries enforcement, and endangered species protection) suffer from the USCG's attempt to maintain the previous level of effectiveness and efficiency. If implemented, the Proposed Action would increase port security at the Port of New York/New Jersey and allow other USCG assets to focus on their intended missions more effectively and efficiently, since the MSST's primary responsibility would be dedicated to port security.

In 2002, under P.L. 107-87, an emergency response supplemental enacted by Congress, funds were appropriated to support USCG anti-terrorist activities, including the mandated establishment and operation of four MSSTs to be completed in Fiscal Year (FY) 2002. The establishment of MSSTs in Seattle, WA; San Pedro, CA; Galveston, TX; and Chesapeake, VA, helped relieve some of the strain on USCG units. However, a number of ports require further protection.

Therefore, Congress appropriated more funds and manpower positions in the FY 2003 budget for the establishment of additional MSSTs.

In the *Programmatic Environmental Assessment for the U.S. Coast Guard Acquisitions* (USCG 2003a), the USCG assessed the need to acquire standard Response Boats- Homeland Security (RB-HS) to add to or replace the aging and increasingly inefficient assets with standard, more reliable, and more environmentally sound assets. The RB-HS acquisition, intended to take place over the next several years, will also help alleviate homeland security needs in the long-term. However, the Response Boats-Homeland Security (RB-HS) are boats that can be acquired and modified in the very short-term, thus responding to current security concerns. The establishment of MSSTs in two new ports (New York, NY and St. Marys, GA) would further alleviate the strain of the existing units to perform all required missions equitably and provide additional protection for these ports.

1.4 Project Scope and Area

This Environmental Assessment (EA) addresses the MSST to be located at Integrated Support Command (ISC) on Staten Island (see Figure 1-1). The MSST is a tenant activity of ISC New York. MSST would normally conduct the majority of its operations in Upper New York Bay, Lower New York Bay, the Narrows, Newark Bay, Jamaica Bay, Arthur Kill, Kill Van Kull, the Hudson River to West Point, and the East River to Long Island Sound, hereafter referred to as New York Harbor. The RB-HSs would be dropped in the water in Fresh Kills, NY. The Region of Influence (ROI) for the NY MSST would include New York Harbor; the New York counties of Putnam, Orange, Rockland, Westchester, Bronx, New York, Kings, Queens, and Richmond; and the New Jersey counties of Bergen, Hudson, Essex, Union, Middlesex, and Monmouth (see Figure 1-2). The MSST would normally conduct operations in the harbor or port to which it is assigned. However, the MSST would also be transportable via land transportation, USCG cutter, and USCG or other military aircraft. In an emergency, the MSST could be relocated to another port. The location and duration of this relocation is impossible to predict and would depend on a number of currently unknown circumstances. Therefore, potential impacts from these types of operations would also be speculative in nature.

There are too many variables to adequately assess all potential ports. However, it is expected that the MSST would operate a majority of the time in its homeport. Therefore, this

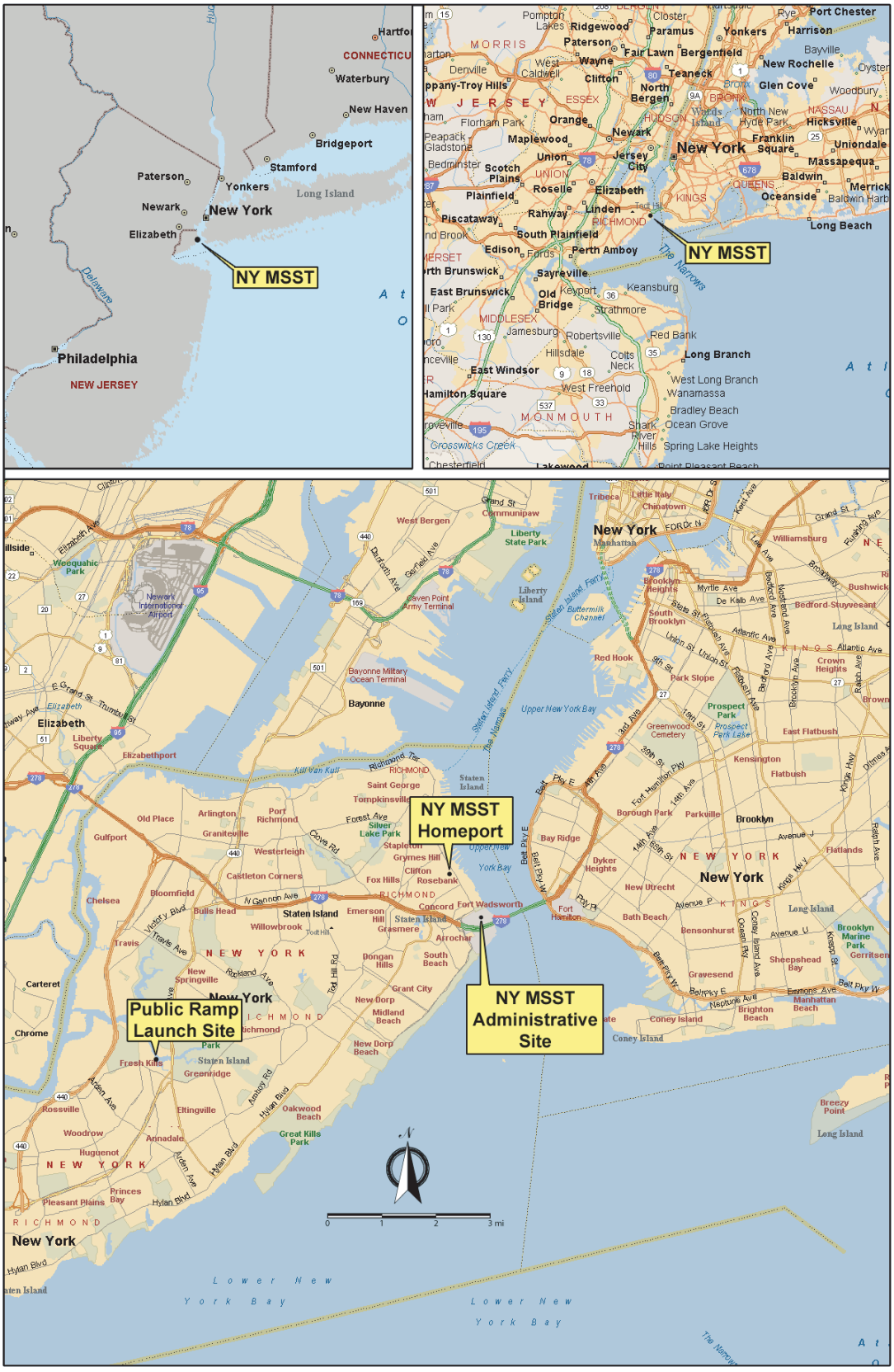

Figure 1-1. Location Map of New York MSST Homeport

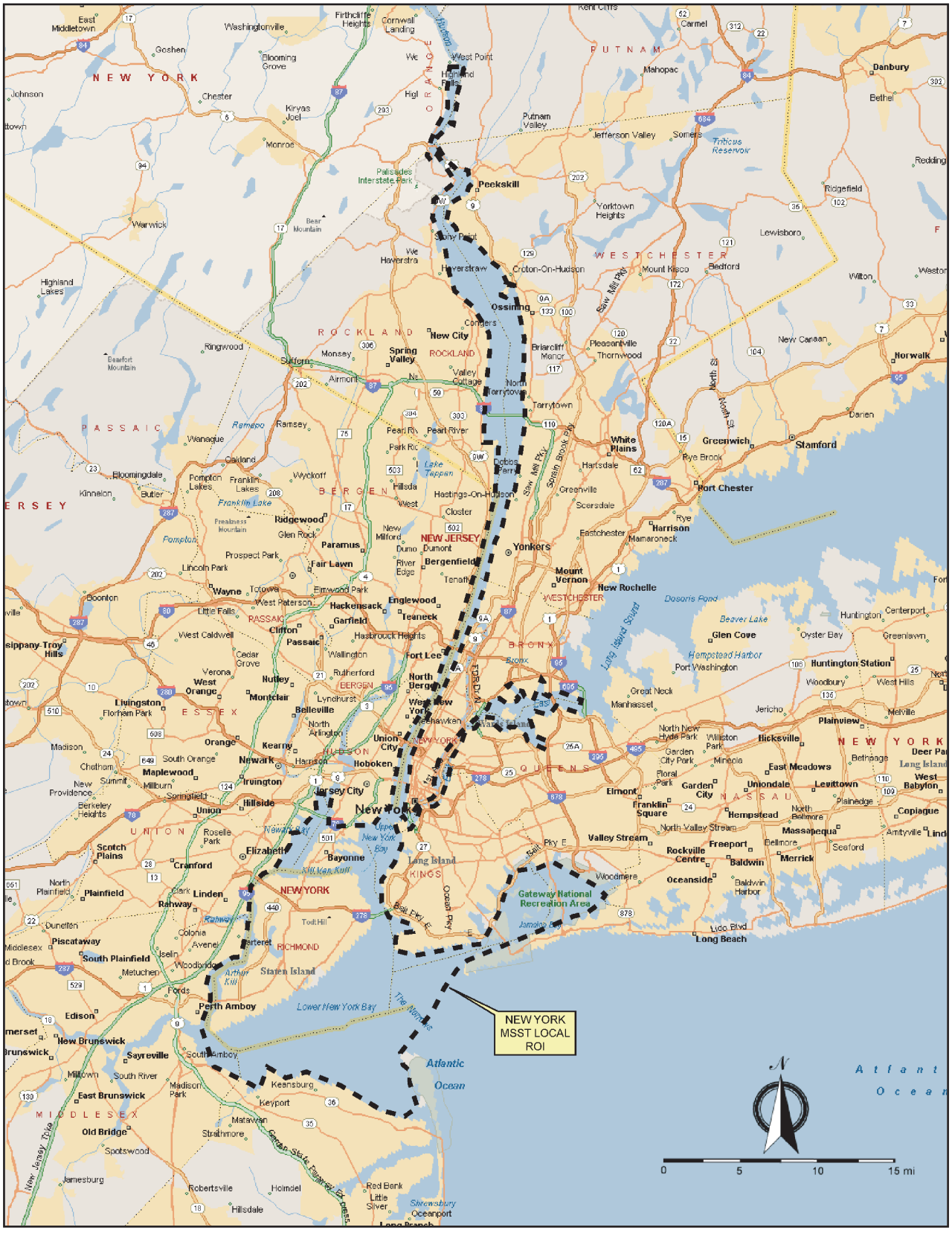

Figure 1-2. Location Map of New York MSST Region of Influence

EA focuses on the potential impacts at the Station New York on Staten Island, NY, and New York Harbor (defined as Upper New York Bay, the Narrows, Lower New York Bay, Newark Bay, Kill Van Kull, Arthur Kill, Jamaica Bay, the Hudson River to West Point, and the East River to Long Island Sound).

1.5 Public Involvement Process

An advertisement published in the Staten Island Advance on October 8, 2003, announced the USCG's intent to prepare an EA, giving information on the proposal and seeking comments. Letters to interested parties were also mailed to appropriate Federal, state, and local agencies (See Appendix A [Interested Party Letter]; Appendix B; [Mailing List]; Appendix C [Newspaper Announcement]; and Appendix D [Responses to the Interested Party Letter]). However, the USCG will accept comments on this Proposed Action throughout the environmental process. An announcement on the availability of the Final EA and Finding of No Significant Impact (FONSI) will also be placed in the Staten Island Advance.

1.6 Organization of the EA

Acronyms and abbreviations are used throughout the document to avoid unnecessary length. A list of acronyms and abbreviations used can be found on the inside cover of this EA.

Chapter 1: Purpose and Need for the Action. As a NEPA-required discussion, this chapter provides an overview of the action, describes the area in which the Proposed Action would occur, and explains the public involvement process.

Chapter 2: Proposed Action and Alternatives. This chapter describes the Proposed Action, alternatives considered, and the No Action Alternative.

Chapter 3: Affected Environment. This chapter describes the existing environmental conditions in the area in which the Proposed Action would occur.

Chapter 4: Environmental Consequences. Using the information in Chapter 3, this chapter identifies the potential for significant environmental impacts on each resource area under both the Proposed Action and No Action Alternative. Direct and indirect impacts as a result of the Proposed Action are identified on a broad scale as appropriate in an EA.

Chapter 5: Cumulative Impacts. This chapter discusses the potential cumulative impacts that may result from the impacts of the Proposed Action, combined with foreseeable future actions.

Chapters 6 and 7. These chapters provide references and a list of this document's preparers.

Appendices: This EA includes nine appendices that provide additional information. Appendix A is a copy of the Interested Party Letter and its attachment. Appendix B includes a copy of the mailing list that provides the names of those to whom the Interested Party Letter was sent. Appendix C is a copy of the newspaper announcement. Appendix D includes the written responses to the Interested Party Letter and agency correspondence regarding the Endangered Species Act (ESA) consultation, essential fish habitat (EFH) consultation, and coastal zone management consistency determination. Appendix E is a summary of the Atlantic Protected Living Marine Resources Initiative (APLMRI). Appendix F is a copy of the USCG's Ocean Steward Program. Appendix G is a copy of the letter from the New York State Historic Preservation Office (SHPO) to the USCG. Appendix H is a list of those regulations, laws, and executive orders that may reasonably be expected to apply to the Proposed Action. Appendix I is a list of management authority and EFH for species in the ROI. Appendix J provides further explanation of the terminology and methodology used in the noise resource section. Finally, Appendix K provides the calculations used for the air quality analysis

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2. Proposed Action and Alternatives

2.1 Proposed Action

The U.S. Coast Guard (USCG) proposes to stand-up and operate two more Maritime Safety and Security Teams (MSST), one of which would be located at USCG Station New York on Staten Island. The term "stand-up" is defined as establishing a new activity. The MSST would improve existing Station New York and New York Harbor security capabilities on an ongoing basis. The MSST would not duplicate existing protective measures, but would provide complimentary capabilities that would be able to close significant readiness gaps in our nation's strategic ports.

The MSST would include 71 active duty personnel augmented by 33 reservists, support buildings for personnel, and six Response Boats-Homeland Security (RB-HS). Personnel would consist of mostly reassigned personnel, although there may be some newly recruited personnel. It is anticipated that housing would be available at Activities New York or in New Jersey. MSST personnel would possess the specialized skills, capabilities, and expertise to perform a broad range of port security and harbor defense missions that may be required. Each team would be equipped with six armed RB-HS powered by outboard motors that can reach speeds of 40 knots in a short period of time. The RB-HS would be stored in a newly constructed building at Activities New York. The building would be a pre-engineered building located on the site of a recently demolished building. Depending on operational requirements, there may be between two to six boats operating at any one time. The MSST would be capable of operating 24 hours per day, seven days per week. The RB-HS and their personnel can be moved by aircraft or other means in order to respond to events in ports other than the Station, should an increased presence be required at another port. The MSST would be interoperable with, and supported by, military and civilian government organizations, and commercial and non-governmental entities.

USCG personnel would follow procedures already familiar to them, including establishing port security/port safety zones, moving security zones, and escorting vessels. The USCG performs these traditional port security operations on a daily basis. The MSST would have additional responsibilities:

- Enhance port security and security law enforcement capabilities at economic or military significant ports where they are based.
- Deploy for specific episodic events that require an increased security posture of a limited duration.

- Exercise security contingency plans in major ports.
- Augment the Captain of the Port capabilities.

The MSST would be prepared to conduct operations through all maritime security levels, and would be capable of operating under the threat of chemical, biological, or radiological attack. The MSST would have limited ability to detect chemical, biological, or radiological attack, and must be able to evacuate a contaminated environment. They would have the ability to conduct emergency gross decontamination of personnel and equipment. In the United States (U.S.), the local emergency response agency is responsible for mitigating incidents involving chemical, biological, and radiological hazardous materials. Overseas support is provided through a Memorandum of Understanding (MOU) with other service branches.

2.2 No Action Alternative

National Environmental Policy Act (NEPA) implementing regulations require that a No Action Alternative be analyzed to provide a baseline for comparison with the action alternatives. The No Action Alternative identifies and describes the potential environmental impacts if the proponent agency does not take the Proposed Action or one of the other action alternatives, if applicable.

The continuation of the existing conditions without implementation of the Proposed Action is referred to as the No Action Alternative. For the purposes of this project, the No Action Alternative is defined as not establishing an MSST in New York. The No Action Alternative serves as the benchmark against which Federal actions can be evaluated. Inclusion of the No Action Alternative is prescribed by the Council on Environmental Quality (CEQ) regulations and, therefore, will be carried forward for further analysis in this Environmental Assessment (EA).

Congress and the Executive Branch must respond to the recently critical demand for homeland defense. Port security measures, such as MSSTs, must be created immediately. In the case of the establishment of the MSSTs, Congress strongly indicated its desire that the USCG establish MSSTs on a priority basis. Public Law (P.L.) 107-117 provided money for the express purpose of having the USCG (in consultation with other agencies) establish four MSSTs before Fiscal Year (FY) 2003, which have been established. The Senate Appropriations Committee has recently approved a $76 million budget for the next seven MSSTs in the upcoming fiscal year (Senate Report 108-086).

If the No Action Alternative was selected, as described this EA, it would not fulfill the USCG's purpose and need to provide additional port security. Under current operations, vessels and manpower are being diverted from other missions in order to provide the additional security for the nation's ports. Under the No Action Alternative, this disruption of other missions would continue. The result would be further demand on manpower and current assets. This scenario of vessels and manpower at maximum capacity would facilitate an attack at one of the "critical" ports. The result might be a potential for significant adverse environmental impacts. Terrorists could strike at military or commercial facilities in these ports, creating health and safety hazards for the surrounding populace and impacting appropriate emergency responses, employment and trade, and marine life. The impacts could be immediate (loss of life) or long-lasting (disruption of commerce activities) that could impact the long-term economy. Recovery time would be dependent on the severity and extent of the loss.

Other consequences would result from the USCG being unable to perform enforcement missions fully. For example, the USCG is also responsible for drug and alien interdiction and protection of the nation's Exclusive Economic Zone (EEZ). Without adequate vessels and manpower, the USCG would not be able to maintain its high level of effectiveness in stopping illegal aliens and drugs from reaching the nation's shores. The environmental resources in the EEZ, such as fishing, may also suffer from the USCG's diminished ability to protect those fishing areas from illegal catches, as discussed in Ocean Guardian. In addition, adverse impacts to threatened and endangered species could occur if the USCG is unable to maintain its current level of effectiveness in enforcing the Endangered Species Act (ESA) and associated regulation in U.S. waters.

2.3 Comparison of Alternatives

The Proposed Action to stand-up and operate an MSST in New York, NY, has the potential for positive impacts from both a security and safety viewpoint, as well as easing environmental concerns. First, the additional response boats would provide added security from terrorist attacks for the safety of ships entering/leaving New York Harbor, numerous commercial interests, and the general population who work and live in and near the port. Second, the Proposed Action would add additional protection from potentially significant environmental damage. While the possibility of standing up six boats may appear to be a large increase, this is actually a small number when compared to the number and size of vessels that visit New York Harbor and the number of ferry trips that occur in New York Harbor. It is unlikely that all six boats would be in

use at any one time. The boats would usually cruise at 10 to 12 knots, resulting in a small wake that should not negatively impact the surrounding shores. Furthermore, the USCG has existing measures in place on the East Coast to guard against adverse vessel impacts to marine protected species. The USCG currently operates under the Atlantic Protected Living Marine Resources Initiative (APLMRI) (a summary of the APLMRI can be found in Appendix E) and Ocean Steward (Appendix F), as well as other long-standing initiatives and programs related to living marine resource protection. In 1996, the USCG published the APLMRI Environmental Impact Statement Record of Decision in the Federal Register. The APLMRI provides guidance for actions during USCG operations to support the recovery of protected living marine resources. It consists of two components: an internal program focusing on the USCG enforcement of the ESA and the Marine Mammal Protection Act (MMPA) and a conservation program focusing on other USCG activities, including interactions between USCG personnel and the public. The purpose of Ocean Steward is the USCG's national strategic goal to help the recovery and maintenance of marine protected species to achieve healthy, sustainable populations. APLMRI and Ocean Steward will help ensure that no significant impacts on marine protected species will occur from MSST vessel operations.

Under the No Action Alternative, the added safety and security provided by the MSST would not be available. While the USCG would continue with their current level of protection, this level has already been determined to be inadequate for New York Harbor. The potential environmental damage from a terrorist attack may be significant.

2.4 Alternatives Considered but Eliminated

Other agencies besides the USCG could have been considered for the Proposed Action. However, domestic port security has been a core mission of the USCG for over 200 years. The Memorandum of Agreement (MOA), signed in October 1995 by the Secretaries of Transportation and Defense, the Chief of Naval Operations, and the Commandant of the USCG, identified those unique national defense capabilities of the USCG as a force provider. In addition, the USCG is the only U.S. maritime agency with regulatory and law enforcement authority, also having U.S. military capabilities. The USCG has been using the same tactics for harbor defense and port security procedures as the MSSTs would be using at Station New York, New York Harbor, and other U.S. ports. This recognition of the USCG's unique capabilities coupled with the long-time advantage of providing security for U.S. ports makes the USCG the natural choice to fulfill this

mission. Therefore, this EA will assess the potential impacts of the USCG establishing and operating an MSST in New York.

2.5 Comparison of Environmental Effects of All Alternatives

Table 2-1 summarizes the impacts of the Proposed Action and No Action Alternative.

Table 2-1. Impact Summary Matrix

Resource Area	Proposed Action	No Action Alternative
Biological Resources	Implementation of the Proposed Action would have minor adverse impacts to biological resources in the New York Region of Influence (ROI). Current USCG environmental policies, regulations, and programs designed to protect living marine species (e.g., the APLMRI – Appendix E, Ocean Steward – Appendix F and speed guidance designed to avoid collisions with marine mammals) would continue to be followed. Additionally, these boats are designed to be highly maneuverable. Therefore, the addition of six RB-HS would not have major adverse impacts to biological protected marine resources or habitats.	Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Increased demand on vessels and manpower and disruption to other missions would continue. Under this scenario, it would be easier for a terrorist attack to occur or an attack that could spread to areas frequented by marine mammals. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack and the potential for significant adverse effects on marine mammals. Recovery time would depend on the extent of loss.

Table 2-1. Impact Summary Matrix (cont)

Resource Area	Proposed Action	No Action Alternative
Air Quality	Under the Proposed Action, minor adverse impacts to air quality would be realized. Calculations of air pollutant emissions from the proposed MSST operations were performed based on two boats operating 24 hours a day, 365 days a year. The number of additional personnel is comparatively small (71 active duty and 33 reservists) and would result in minor adverse impacts to air quality. Based on the emission calculations and analyses completed for the Proposed Action, it is clear that the net change in nitrogen oxide (NO_x), and volatile organic compound (VOC), emissions would be well below the *de minimis* threshold requirements and the regional significance requirements of the General Conformity Rule.	Under the No Action Alternative, existing conditions would remain as is and the MSST would not be stood up. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack and the potential for significant adverse effects on air quality. Recovery time would depend on the severity and extent of the impact.
Noise	Implementation of the Proposed Action would result in minor adverse impacts. However, due to low speed approach, docking at USCG facilities, and the fact that most operations would be conducted at 10 to 12 knots, the potential noise from the addition of six RB-HS would not have major adverse impacts on humans or marine wildlife. Because sound levels created by the RB-HS would be well below sound intensities associated with severe disturbance to whales or other marine mammals, and noise disturbance to sea turtles in the water would be temporary in nature, impacts to marine wildlife would not be greater than minor adverse.	Under the No Action Alternative, existing conditions would remain as is and the MSST would not be stood up. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack and the potential for significant adverse effects on the noise environment. Recovery time would depend on the severity and extent of the impact.

Table 2-1. Impact Summary Matrix (cont)

Resource Area	Proposed Action	No Action Alternative
Public Safety	Beneficial impacts may be reasonably expected from the Proposed Action. The Proposed Action would increase the USCG's ability to protect critical domestic ports and the U.S. Maritime Transportation System from warfare and terrorist attacks. While the MSST's operations would closely parallel USCG traditional port security operations, they would also provide complementary, non-redundant capabilities that would be able to close significant readiness gaps in our nation's strategic ports. The MSST would escort a variety of vessels and maintain specific security zones.	Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Increased demand on vessels and manpower and disruption to other missions would continue. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack and the potential for significant adverse effects on public safety. Terrorists could strike at military or commercial facilities in the ROI creating health and safety hazards for the surrounding populace. The impacts could be immediate or long lasting. Recovery time would depend on the severity and extent of the impact.

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3. Affected Environment

3.1 Introduction

3.1.1 Resources for Analysis

This chapter describes the environmental and socioeconomic conditions most likely to be affected by the Proposed Action and serves as a baseline from which to identify and evaluate potential impacts from implementation of the Proposed Action. In compliance with National Environmental Policy Act (NEPA) and Council on Environmental Quality (CEQ) guidelines, the description of the affected environment focuses on those conditions and resource areas that are potentially subject to impacts. These resources include water resources, soils and land use, socioeconomics, environmental justice, cultural resources, hazardous materials and waste management, biological resources, air quality and climate, noise, and public safety. Some environmental resources and conditions that are often analyzed in an EA have been omitted from this analysis. The following paragraphs identify the omitted resource areas and the basis for such exclusions:

- *Water Resources*. The Proposed Action does not involve any activities that would significantly increase the demand for water resources or affect surface water and groundwater. No physical disturbances, earth moving, or major construction activities would occur; therefore, the Proposed Action would not affect surface water flow quantity or quality. Accordingly, the U.S. Coast Guard (USCG) has omitted detailed analysis of water resources. A detailed discussion of wetlands and floodplains is included in Sections 3.2 and 4.2, Biological Resources. Though the Proposed Action could impact water quality in the Region of Influence (ROI) as a result of the emissions of outboard engines, the overall condition of northeastern estuaries is borderline poor, as defined in the U.S. Environmental Protection Agency's (EPA) *Condition of the Coast* (EPA 2001). Because of the high volume of boat traffic in New York Harbor, the Response Boats-Homeland Security (RB-HS) would not significantly impact water quality in New York Harbor.
- *Soils and Land Use*. The Proposed Action would not involve any physical disturbances, earth moving, or major construction activities. A pre-engineered Butler Building would be located on the site of a recently demolished building; however, there would be no ground-disturbing activities. Implementation of the Proposed Action would not alter the existing land use at these locations. Accordingly, USCG has omitted detailed examination of soils and land use.
- *Socioeconomics*. The Proposed Action does not involve any activities that would contribute to significant changes in socioeconomic resources. The 33 reservists are currently in the New York/New Jersey area. The majority of the 71 active duty personnel

would be reassigned personnel and, therefore, are already in the New York/New Jersey area. Housing would be available at either Activities New York or in New Jersey. It is unlikely that the addition of 71 personnel would have a significant adverse impact on the region, due to the relative size of the population affected and the low unemployment rate of the region. Accordingly, USCG has omitted detailed examination of socioeconomics.

- *Environmental Justice*. Implementation of the Proposed Action would not result in adverse impacts in any environmental resource area that would, in turn, be expected to affect disproportionately minority and low-income populations. Therefore, there are no significant impacts. Accordingly, USCG has omitted detailed examination of environmental justice.

- *Cultural Resources*. The Proposed Action does not involve any activities that would impact cultural resources. Maritime Safety and Security Team (MSST) personnel would be located in space leased from the National Park Service on Fort Wadsworth. A pre-engineered Butler Building would be constructed for the boat storage/maintenance. It would be located at the USCG Activities New York Rosebank Housing Site, which is co-located with USCG Station New York on Staten Island. There would be no ground-disturbing activities; therefore, there would be no impact to archaeological sites. In a letter dated April 18, 1995, from the New York State Office of Parks, Recreation and Historic Preservation to the USCG, "…the New York State Historic Preservation Office (SHPO) has determined that the Rosebank Housing Area, as a whole or in its components, does not meet the criteria for inclusion in the National Register of Historic Places" (see Appendix G). Cultural resources present in the ROI have the potential to be affected. The Elizabeth Alice Austen House, a property listed on the National Register of Historic Places (NRHP) and designated a National Historic Landmark in 1993, is located slightly north of the Rosebank Facility. However, based on the scale and nature of the operations, it is unlikely that the Proposed Action would adversely impact this property. The introduction of six RB-HS would not adversely affect setting, qualities of integrity, or jeopardize a property's eligibility on the NRHP. Accordingly, USCG has omitted detailed examination of cultural resources.

- *Hazardous Materials and Hazardous Wastes*. The Proposed Action would occur at Integrated Support Command (ISC) New York. The ISC would handle all hazardous waste for the MSST. This facility has existing hazardous materials and hazardous waste management programs. The ISC 90-day storage is adjacent to the boat/storage maintenance facility. A hazwaste officer has been identified. A dedicated ammunition storage shed for the MSST would be constructed between the boat storage and maintenance shed and one of the piers. The MSST would refuel at the ISC fueling dock. As a tenant activity, the MSST would comply with all rules and regulations established by the ISC for their facility. Only minor maintenance and repair work would be performed by MSST personnel. Major maintenance and repair work would occur at a Honda authorized facility. The Proposed Action would not require or add a significant amount of hazardous materials or wastes to those already generated by these facilities. The MSST would follow the USCG's procedures as described in the Hazardous Waste Management Manual (Coast Guard Commandant Instruction [COMDTINST] M16478.1B), internally known as the "Red Book." This manual is a compilation of

standard operating procedures for employees handling hazardous materials and waste, asbestos, polychlorinated biphenyls, fuel tanks, lead, and biohazardous waste (USCG 1992). Accordingly, USCG has omitted detailed examination of hazardous materials and hazardous wastes.

- *Coastal Zone Management Act.* The Federal *Coastal Zone Management Act of 1972* requires Federal agency activities to be consistent with the state's federally approved Coastal Management Program. In New York, Federal agencies must submit a Federal Consistency Assessment form 30 days prior to the initiation of the activity. If the Department of State determines that the proposed activity would be inconsistent with the state's Coastal Management Program, Federal agencies may not fund or approve the proposal. In the case of the Proposed Action, the construction of the storage/maintenance building would be on the site of a previously demolished building. The location of the proposed building would not create an erosion hazard, nor result in any impacts for commercial or recreational use of the area. Whether the number of vessel trips potentially generated by the MSST operations would also negatively impact the coastal zone is not as clearly identified. However, it is not anticipated that New York MSST would present any foreseeable effects in any of these areas. Since the Proposed Action is consistent with the state's Coastal Management Program, USCG has omitted further detailed examination.

3.1.2 Region of Influence

The MSST would be homeported at ISC New York, Staten Island (see Figure 1-1). The ISC is providing administrative space and infrastructure support. Personnel would be located in Building 120 on Fort Wadsworth. The six RB-HS would be stored in a boathouse at Rosebank. The RB-HS would be launched from a public boat ramp in Fresh Kills, NY. The ROI for the Proposed Action and the No Action Alternative is defined as New York Harbor (Upper New York Bay, Lower New York Bay, the Narrows, Newark Bay, Jamaica Bay, Arthur Kill, Kill Van Kull, the Hudson River to West Point, and the East River to Long Island Sound) (see Figure 1-2). The ROI includes the New York counties of Putnam, Orange, Rockland, Westchester, Bronx, New York, Kings, Queens, and Richmond and the New Jersey counties of Bergen, Hudson, Essex, Union, Middlesex, and Monmouth. This region encompasses the area where the MSST is expected to spend the majority of its operating time. The MSST can be deployed temporarily in emergencies to other ports as needed.

The Port of New York/New Jersey is the largest port complex on the East Coast of North America and is located at the hub of the most concentrated and affluent consumer market in the world, with immediate access to the most extensive interstate highway and rail networks in the region. Each year more than 21 million tons of ocean-borne general cargo moves through the

port, including 3.75 million TEUs (20-foot equivalent units) of containerized cargo. In 2002, the Port of New York/New Jersey handled 21.6 million tons of general cargo including more than 3.7 million TEUs of containerized cargo (PANYNJ 2003).

The Port Newark/Elizabeth-Port Authority Marine Terminal complex, the PA Auto Marine Terminal, Brooklyn Piers and Red Hook Container Terminal, and Howland Hook Marine Terminal handle most of the cargo and these facilities are managed by the Port Authority of New York & New Jersey (PANYNJ). PANYNJ is a bi-state agency formed in 1921 to promote trade and commerce in the entire port region and directly oversees the operation of seven cargo terminals in the New York-New Jersey region. In addition, there are private operators such as Global Marine Terminal, the City of New York's South Brooklyn Terminal, and a number of marine terminals operated by private oil companies along the southern New Jersey coastline to handle much of the liquid bulk crude oil imported. The NYC Passenger Ship Terminal is operated by P&O Ports North America for the City of New York. Thousands of trucking companies serve the Port of New York/New Jersey providing quality handling and responsive service from pickup to delivery. In addition, CSX and Norfolk Southern provide double-stack train service to and from the U.S. Midwest, New England, and eastern Canada with connections to Canadian Pacific Railway (PANYNJ 2003).

Station New York is located at the base of New York Harbor at Rosebank Staten Island. This is about one mile north of Fort Wadsworth. It is the largest small boat station in the USCG. Station New York is part of the largest operational command in the USCG, Activities New York. The Station's boat complement consists of five 41-foot Utility Boats and two Rigid Hull Inflatable Boats. Ashore, the Station comprises four buildings. Station New York has 60 active duty personnel and 25 drilling reservists.

3.1.3 Environmental Regulations, Laws, and Executive Orders

A table containing examples of regulations, laws, and executive orders (EO) that may reasonably be expected to apply to the Proposed Action is included in Appendix H. It is not intended to be a complete description of the entire legal framework under which the USCG conducts its missions.

3.2 Biological Resources

3.2.1 Definition of the Resource

Biological resources include native or naturalized plants and animals, and the habitats (such as wetlands, forests, and grasslands) in which they exist. Sensitive and protected biological resources include protected and sensitive habitats, and plant and animal species listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS), National Oceanic Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), a state regulatory agency, or otherwise protected under Federal or state laws. Determining which habitats or species occur in an area affected by a proposed action may be accomplished through literature reviews and coordination with appropriate Federal and state regulatory agency representatives, resource managers, and other knowledgeable experts.

The USCG has a number of long-standing initiatives and programs relating to Living Marine Resource Protection, a primary mission of the USCG:

- *National Marine Sanctuary Law Enforcement Program.* Among other activities, this provides routine surveillance of marine sanctuaries concurrently with other USCG operations and provides specific, targeted, or dedicated law enforcement as appropriate.
- *Ocean Guardian.* This long-range fisheries law enforcement strategy supports national goals for fisheries resource management and conservation.
- *Ocean Steward.* This is the USCG's national strategy to help the recovery and maintenance of healthy populations of marine protected species (See Appendix F).
- *Sea Partners.* This environmental and outreach program is designed to develop community awareness of maritime pollution issue and to improve compliance with marine environmental protection laws and regulations (USCG 2002d).
- *Commandant Instructions (COMDTINSTs) and ALCOASTS.* This is the USCG's implementation and guidance for policy and procedures.
- *Conservation Program.* This program promotes USCG involvement with outside Federal and state agencies, and public and non-government organizations to conserve and protect living marine resources (USCG 1996).
- *Atlantic Protected Living Marine Resources Initiative (APLMRI).* This initiative provides guidance for actions, during USCG operations, to support the recovery of protected living marine resources through internal compliance with and enforcement of Federal, state, and international laws designed to preserve marine protected species (See Appendix E).

Protected and Sensitive Habitats

Protected and sensitive habitats are usually defined as those regions that are identified as marine sanctuaries, critical habitats, fisheries management areas, national parks, wildlife refuges, and estuarine research reserve sites. These regions and areas can be under Federal, state, and in some cases, local jurisdictions.

Wetlands and Floodplains

Biological resources also include wetlands. Wetlands are an important natural system and habitat because of the diverse biologic and hydrologic functions they perform. These functions include water quality improvement, groundwater recharge and discharge, pollution mitigation, nutrient cycling, wildlife habitat provision, unique flora and fauna niche provision, storm water attenuation and storage, sediment detention, and erosion protection. Wetlands are protected as a subset of the "waters of the United States" under the Clean Water Act (CWA). The term "waters of the United States" has a broad meaning under the CWA and incorporates deep-water aquatic habitats and special aquatic habitats (including wetlands). The U.S. Army Corps of Engineers (USACE) defines wetlands as "those areas that are inundated or saturated with ground or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (33 Code of Federal Regulations [CFR] 328).

Section 404 of the CWA authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill materials into the waters of the U.S., including wetlands. In addition, Section 404 of the CWA also grants states with sufficient resources the right to assume these responsibilities. Section 401 of the CWA authorizes states to use their water quality standards to protect wetlands. The permit provided by the State under Section 401 is generally referred to as a 401 Water Quality Certification.

The New York State Department of Environmental Conservation (DEC) issues 401 Water Quality Certification for the State of New York. Additionally, under New York's Tidal Wetlands Act, the DEC administers a permit program regulating activities in tidal wetlands and their adjacent areas (DEC undated). In general, tidal wetlands consist of all the salt marshes, non-vegetated and vegetated flats, and shorelines subject to tides. The adjacent areas extend up to 300 feet inland from the wetland boundary (up to 150 feet inland within New York City). DEC requires a permit for almost any activity that will alter wetlands or the adjacent areas (EPA 2003).

Seagrass is often referred to as submerged aquatic vegetation (SAV). The DEC's Division of Marine Resources manages areas where SAV occurs under the Tidal Wetlands Land Use Regulations (6 NYCRR Part 661) (ASMFC 1997). There are no regulations specific to SAV, but New York regulations that protect the littoral zone extend out to six feet at mean low tide and include all lands under tidal waters which are not under any other category (6 NYCRR Part 661.4). SAV in New Jersey is regulated by the Land Use Regulation Program (LURP) (NJDEP 2003).

Floodplains are areas of low-level ground along a river or stream channel. These lands may be subject to periodic or infrequent inundation due to rain or melting snow. Risk of flooding is influenced by local topography, the frequency of precipitation events, and the size of the watershed above the floodplain. Flood potential is evaluated by the Federal Emergency Management Agency (FEMA), which evaluates the floodplain for 100- and 500-year flood events. Federal, state, and local regulations often limit floodplain development to passive uses such as recreational and preservation activities in order to reduce the risks to human health and safety, and minimize the cost to replace or repair repetitively damaged infrastructure.

Marine Mammals and Sea Turtles

Protection of marine protected species such as mammals, sea turtles, or other threatened or endangered marine species, is an important USCG mission. A number of factors may impact the distribution of marine mammals and sea turtles, including environmental, biotic, and human-generated impacts. Environmental factors may include chemical, climate, or physical (those related to the characteristics of a location). Biotic factors include the distribution and abundance of prey, competition for prey, reproduction, natural mortality, catastrophic events (e.g., die-offs), and predation. Human impacts include but are not limited to noise, hunting pressure, pollution, oil spills, habitat loss and degradation, shipping traffic, recreational and commercial fishing, oil and gas development and production, and seismic exploration. It is the interrelationships of environmental and biotic factors and human impacts that can affect the location and temporary distribution of prey species. This, in turn, influences diversity, abundance, and distribution of marine mammals and sea turtles.

The USCG has a long-standing role in protecting marine mammals and sea turtles. It enforces all U.S. laws in the Economic Exclusive Zone (EEZ), including laws protecting marine species. The USCG enforces the ESA, the MMPA, the National Marine Sanctuaries Act (NMSA), a number of maritime EOs, and Federal and international laws as applicable. COMDTINSTs include a

number of USCG policies, directions, and procedures that include specific rules to ensure avoidance with marine mammals and sea turtles and avoid impacts whenever possible. The USCG's Ocean Steward and Ocean Guardian initiatives, the APLMRI, and speed guidance also support these goals (USCG 2002a). Additionally, the Ocean Steward initiative protects marine mammals by regulating incidental and intentional "takes" (harassment of marine mammals from close or repeated approach by vessels).

The Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531-1534) establishes protection and conservation of threatened and endangered species and the ecosystems upon which they depend. The ESA is administered by USFWS and NOAA Fisheries. Under the ESA, an "endangered species" is defined as any species in danger of extinction throughout all or a significant portion of its range. A "threatened species" is defined as any species likely to become an endangered species in the foreseeable future. Section 7 of ESA requires that all Federal agencies consult with USFWS or NOAA Fisheries, as applicable, before initiating any action that could affect a listed species. Section 7 of the ESA states that any project authorized, funded, or conducted by any Federal agency should not "… jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined to be critical."

Under the Marine Mammal Protection Act (MMPA) of 1972 (16 United States Code [U.S.C.] 1361 et seq.), the Secretary of Commerce is responsible for the protection of all cetaceans (whales, porpoises, and dolphins) and pinnipeds (seals and sea lions) except walruses, and has delegated authority for implementing the MMPA to NOAA Fisheries. The Secretary of the Interior is responsible for walruses, polar bears, sea otters, manatees, and dugongs and has delegated the responsibility of conservation and protection of these marine mammals to USFWS. These responsibilities include providing overview and advice to regulatory agencies on all Federal actions that may affect these species.

The MMPA prohibits the "take" of marine mammals, with certain exceptions, in waters under U.S. jurisdiction and by U.S. citizens on the high seas. Under Section 3 of the MMPA, "take" of marine mammals is defined as "harass, hunt, capture, or kill or attempt to harass, hunt, capture, or kill any marine mammal" and "harassment" is defined as any act of pursuit, torment, or annoyance that has the potential to injure marine mammal stock in the wild; or has the potential to disturb a marine mammal or marine mammal stock in the wild by disrupting behavioral patterns, including migration, breathing, nursing, breeding, feeding, or sheltering. In cases where

U.S. citizens are engaged in activities, other than fishing, that result in "unavoidable," incidental take of marine mammals, the Secretary of Commerce can issue a "small take authorization." The authorization can be issued after notice and opportunity for public comment, if the Secretary of Commerce finds negligible impacts.

Fish

Under their Living Marine Resource Protection mission, the USCG undertakes activities such as enforcing domestic fisheries laws, and ensuring the development of practical enforcement plans to protect, conserve, and manage these resources. Examples of laws that the USCG enforces pertaining to fish and fisheries management include:

- Atlantic Coastal Fisheries Cooperative Management Act (16 U.S.C. 2431 et seq.)
- Atlantic Salmon Convention Act (16 U.S.C. 971 et seq.)
- Lacey Act Amendments of 1981 (16 U.S.C. 1531 et seq.)
- Magnuson-Stevens Fisheries Conservation Act (16 U.S.C. 1801, et seq.)
- Northwest Atlantic Fisheries Compliance Act of 1995 (16 U.S.C. 5001 et seq.)
- Tuna Conventions Act (16 U.S.C. 973 et seq.)

Additionally, the Ocean Guardian initiative includes the Fisheries Enforcement Strategic Plan to support national goals for fisheries resource management and conservation.

Coastal and Other Birds

In enforcing the ESA, the USCG also protects endangered and threatened bird species. The USCG must also comply with the Migratory Bird Treaty Act and EO 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*.

3.2.2 Affected Environment

The ROI for the Proposed Action and the No Action Alternative is defined as New York Harbor (Upper New York Bay, Lower New York Bay, the Narrows, Newark Bay, Jamaica Bay, Arthur Kill, Kill Van Kull, the Hudson River to West Point, and the East River to Long Island Sound).

Protected and Sensitive Habitats

Three protected and sensitive habitats that may occur within or near the ROI include the Hudson River National Estuarine Research Reserve (NERR), New York-New Jersey Harbor Estuary Program (HEP), and Gateway National Recreation Area (NRA) which includes Jamaica Bay Wildlife Refuge.

The Hudson River NERR is a network of four coastal wetlands located along 100 miles of the Hudson Estuary in the state of New York (NOAA 2003a). The reserve components are Piermont Marsh and Iona Island, in Rockland County; Tivoli Bays, in Dutchess County; and Stockport Flats, in Columbia County (NOAA 2003a).

The New York-New Jersey HEP is part of the EPA's National Estuary Program, which was established by Congress in 1987 to improve the quality of estuaries of national importance (EPA 2003). New York-New Jersey Harbor (Harbor) was designated an "Estuary of National Significance" in 1988 by the EPA. The HEP includes the waters of New York Harbor and the tidally influenced portions of all rivers and streams that empty into the Harbor. The primary planning document produced by the HEP is the Comprehensive Conservation and Management Plan (CCMP) (HEP 2003).

Gateway NRA is a 26,000-acre recreation area located in the heart of the New York metropolitan area (NPS 2003). The park is located in Brooklyn, Queens, and Staten Island, New York and Monmouth County, New Jersey. The park offers recreational opportunities and cultural and natural resources (NPS 2003). The Jamaica Bay Wildlife Refuge comprises diverse habitats, including beaches, dunes, salt marshes, upland fields and woods; fresh and brackish water ponds, and an open expanse of bay and islands. The refuge provides breeding and juvenile nursery habitat for fisheries; foraging, nesting, and roosting areas for birds; and butterfly concentration areas (Stevens et al. 2002). Jamaica Bay and Breezy Point have been designated as Significant Coastal Fish and Wildlife Habitats by the New York State Department of State, and the bay up to the high tide line was designated as a Critical Environmental Area by the DEC. Jamaica Bay was also designated as one of three special natural waterfront areas by New York City's Department of City Planning (Stevens et al. 2002).

Sea beach amaranth (*Amaranth pumilus*) is a plant species that is federally listed as threatened and state-listed as endangered. Sea bean amaranth occurs on barrier island beaches. Habitat for seabeach amaranth includes overwash flats at accreting ends of barrier islands and lower foredunes and upper strands of noneroding beaches (USFWS 1993).

Wetlands, Seagrass, and Floodplains

As a result of the previously cited Federal and state regulations, the USCG is responsible for identifying and locating jurisdictional waters of the U.S. (including wetlands) occurring on USCG installations where these resources have the potential to be impacted by mission activities. Such

impacts could include construction of roads, buildings, navigation aids, and other appurtenant structures or activities as simple as culvert crossings of small intermittent streams, rip-rap placement in stream channels to curb accelerated erosion, and incidental fill and grading of wet depressions.

In New York, tidal wetlands can be found across Long Island in north and south shore embayments and in the Peconic estuary at the eastern end of the island, as well as around New York City, in Westchester County on Long Island Sound, and in the Hudson River north to approximately the Tappan Zee Bridge (Niedowski 2000). The Hudson River is tidal north to the Federal Dam at Troy, New York, but is in general not greatly influenced by salinity north of Poughkeepsie, New York. The Hudson River and Raritan Bay contain 172,160 acres (269 square miles) of tidal wetlands (NOAA 1990). Approximately 12,000 of the original 16,000 acres of wetlands in Jamaica Bay have been filled in, primarily around the perimeter of the bay (Stevens et al. 2002).

SAV serves important functions as suspended sediment traps; winter forage habitat for migratory waterfowl; nursery areas for juvenile finfish, bay scallops, and blue crabs; and by nourishing fishery resources through primary biological productivity through detrital food webs (USFWS 1997). DEC regulations protect SAV from physical disturbance (ASMFC 1997). However, high-suspended solids and phytoplankton biomass have resulted in reduced light penetration and, thus, a reduction in SAV, especially eelgrass (*Zostera marina*) (USFWS 1997). An attempt to restore eelgrass beds in Raritan Bay failed due to a combination of wave action, turbidity, shading and smothering by sea lettuce, fouling of eelgrass blades by invertebrates and epiphytic algae, and nitrate enrichment (USFWS 1997).

Portions of Staten Island, New York, including portions of Fort Wadsworth, occur within areas that have been designated by FEMA as the 100- and 500-year floodplains (ESRI 2003).

Marine Mammals

Species of endangered marine mammals that have the potential to occur in the ROI are the North Atlantic right whales (*Eubalaena glacialis*), humpback whales (*Megaptera novaeangliae*), and fin whales (*Balaenoptera physalus*) (Koyama 2003).

The western North Atlantic right whale population ranges from wintering and calving grounds in coastal waters of the southeastern U.S. to summer feeding and nursery grounds in New England waters and northward to the Bay of Fundy and the Scotian Shelf (Waring et al. 2003). New

England waters are a primary feeding habitat for the right whale, but also serve as a mating and nursery ground for calves. Right whales are found in mid-Atlantic waters as a migratory population. North Atlantic right whales have been documented in the nearshore waters of New York from January through September (Koyama 2003). Northern right whales are now the rarest of all the great whales. The North Atlantic population has declined since the 1980s. Most recent estimates indicate that the North Atlantic population of right whales is 291 individuals (Waring et al. 2003).

Western North Atlantic populations of humpback whales feed during the spring, summer, and fall over a range that encompasses the eastern coast of the U.S. (Waring et al. 2003, Koyama 2003). As such, humpback whales have the potential to occur in the ROI. In the fall, humpback whales migrate southwards to breeding grounds. New evidence indicates that mid-Atlantic and southeastern waters may be supplemental feeding grounds or habitat for juveniles. Population estimates of humpback whales in the North Atlantic range from 10,400 to 11,570 individuals (Waring et al. 2003).

Fin whales usually occur in deeper offshore waters from Cape Hatteras northward (Waring et al. 2003). New England waters represent a major feeding ground for fin whales. Stranding data indicate that calving takes place during approximately four months from October to January in U.S. mid-Atlantic region. However, it is unknown where calving, mating, and wintering for most of the population occurs (Waring et al. 2003). While these whale species are not considered residents of New York Harbor, it is possible that transients may enter the area during seasonal migrations (Koyama 2003). Population estimates of fin whales in the North Atlantic range from 2,200 to 2,814 individuals (Waring et al. 2003).

Non-endangered or non-threatened species that may occur in the ROI include minke whales (*Balaenoptera acutorostrata*), gray seals (*Halichoerus grypus*), harbor seals (*Phoca vitulina*), harbor porpoises (*Phocoena phocoena*), and white-sided dolphins (*Lagenorhynchus acutus*) (Koyama 2003).

Sea Turtles

Four species of federally threatened and endangered sea turtles occur seasonally in nearshore New York waters and have the potential to occur in the ROI. These include loggerhead sea turtle (*Caretta caretta*) (threatened), Kemp's ridley sea turtle (*Lepidochelys kempii*) (endangered), green sea turtle (*Chelonia mydas*) (endangered), and leatherback sea turtle (*Dermochelys*

coriacea) (endangered) (Koyama 2003). The hawksbill sea turtle (*Eretmochyles imbricata*) is also listed as endangered throughout its range, including New Jersey and New York, but sightings in the Atlantic Ocean are rare north of Florida (USFWS 2003, NMFS 1993).

Generally, sea turtles migrate to New York waters in early summer (typically when water temperatures reach 11 degrees Celsius [°C]) and return south when the water temperature decreases around October to November (Koyama 2003). While sea turtles occur in nearby New York waters (e.g., Long Island Sound, the eastern and southern bays) throughout the warmer months each year, there is limited documented evidence of their presence within the New York Harbor. Habitat sampling has not recorded any sea turtles within New York Harbor waters. However, sampling has not targeted sea turtle distribution within New York Harbor. Given this information, it is difficult to confirm the presence or absence of sea turtles in any areas within the Harbor. Sea turtles occur in New York waters in the warmer months. They are known to inhabit shallow harbors and embayments. Therefore, it is reasonable to assume that sea turtles may inhabit the Harbor (Koyama 2003).

The most common species of sea turtles in New York waters are the loggerhead and Kemp's ridley sea turtles, which occur in New York waters during the summer months (Koyama 2003). Studies indicate that the New York Bight may be an important developmental habitat for Kemp's ridley sea turtles, as well as a feeding ground for loggerhead sea turtles (USFWS 1997).

The waters off Long Island are warm enough to support green sea turtles from June through October (Koyama 2003). Leatherback sea turtles are located in New York waters during the warmer months. Concentrations of leatherbacks were observed during the summer off the south shore of Long Island and off New Jersey. Leatherbacks in these waters are thought to be pursuing their preferred jellyfish prey. Both the green and leatherback sea turtles feed in New York waters (USFWS 1997).

Fish

The shortnose sturgeon (*Acipenser brevirostrum*) is the only endangered fish species (federally and state-listed as endangered) known to occur in the ROI (Koyama 2003). This species is a large, bony fish that typically lives in fresh tidal water and saline estuaries; it migrates upstream in coastal rivers to spawn. Measuring up to four feet in length, it is still the smallest of the three sturgeon species that inhabit eastern North American rivers from Florida to New Brunswick,

Canada. The shortnose sturgeon spends a greater portion of its life in slow-moving, brackish or fresh water than other sturgeon species (NMFS 2001).

There has never been a commercial fishing industry for shortnose sturgeon, but NOAA Fisheries suggests that it was often taken incidentally in commercial fishing for Atlantic sturgeon. Pollution of major U.S. river systems resulted in a decline in the population and subsequent listing by NOAA Fisheries of the species as endangered in March 1967. The shortnose sturgeon retained its endangered status with the passage of the ESA in 1973 and NOAA Fisheries was given jurisdiction over it a year later (NMFS 2001).

NOAA Fisheries prepared recovery plans for the shortnose sturgeon in 1982 and 1998. In the recovery plans, NOAA Fisheries identified the following as threats to the species' recovery: bridge construction and demolition; dam construction; dredging and in-river disposal of dredge soil; removal, licensing and operation of power plants; release of toxic chemicals from industrial activities; and domestic waste disposal (NMFS 2001).

Federally managed fisheries in the ROI are managed by the Mid-Atlantic Fisheries Management Council (MAFMC), New England Fisheries Management Council (NEFMC), South Atlantic Fisheries Management Council (SAFMC), and NOAA Fisheries Highly Migratory Species Division (NOAA Fisheries HMS). Table I-1 lists the management authority and essential fish habitat (EFH) for the species and the associated life history stages that have EFH within the ROI. Habitat areas of particular concern (HAPC) (i.e., a subset of EFH which serves an important ecological function, is sensitive to human-induced environmental degradation, and/or is rare) are also designated within the ROI (See Appendix I). HAPC within the ROI include SAV.

The top six species commercially harvested in New York in 2001 include longfin squid (18 percent of the landings), Atlantic surfclam (18 percent), silver hake (17 percent), American lobster (5 percent), and goldface tilefish and ocean quahogs (4 percent each) (NOAA 2003b). The top five recreationally harvested species in New York in 2001 include striped bass (27 percent of the landings), summer flounder (18 percent), bluefish (17 percent), scup (14 percent), and unidentified tunas and mackerels (14 percent) (NOAA 2003c).

Coastal and Other Birds

Two federally listed threatened and endangered birds occur in New York and New Jersey and may occur in the ROI. These include the piping plover (*Charadrius melodus*) federally listed as

threatened and state-listed as endangered, as well as the bald eagle (*Haliaeatus leucocephalus*) federally and state-listed as threatened (USFWS undated).

Varieties of bird species inhabit the woodland and shoreline habitats of the New York Harbor area, including waterfowl, shorebirds (including gulls and terns), wading birds, raptors, and songbirds. Over 325 species of birds have been identified at Jamaica Bay Wildlife refuge over the past 25 years (Stevens et al. 2002). The refuge provides year-round habitat for birds. The extensive salt marsh and upland islands in the bay provide nesting habitat for gulls, terns, waterfowl, and herons, and foraging and roosting habitat for shorebirds and waterbirds. The upland sites provide nesting and foraging for grassland birds (Stevens et al. 2002). Selected species of birds that either reside in or migrate through the New York Harbor region are listed in Table 3-1.

Table 3-1. Selected Bird Species that Occur in the New York Harbor Area.

Common Name	Scientific Name	Presence in NY Harbor Area[1]
WATERFOWL AND CORMORANTS		
Canada goose	*Branta Canadensis*	B/M/W
American wigeon	*Anas Americana*	M/W
Northern shoveler	*Anas clypeata*	B/M/W
Mallard	*Anas platyrhynchos*	B/M/W
American black duck	*Anas rubripes*	B/M/W
Gadwall	*Anas strepera*	B/M/W
Canvasback	*Aythya valisineria*	M/W
Greater scaup	*Aythya marila*	M/W
Common goldeneye	*Bucephala clangula*	M/W
Bufflehead	*Bucephala albeola*	M/W
Red-breasted merganser	*Mergus serrator*	M/W
Double-crested cormorant	*Phalacrocorax auritus*	B/M/W
Great cormorant	*Phalacrocorax carbo*	M/W
American coot	*Fulica Americana*	B/M/W
LONG LEGGED WADING BIRDS		
Cattle egret	*Bubulcus ibis*	B/M
Great egret	*Casmerodius albus*	B/M
Little blue heron	*Egretta caerulea*	B/M
Snowy egret	*Egretta thula*	B/M
Glossy ibis	*Plegadis falcinellus*	B/M
American bittern	*Botaurus lentiginosus*	B/M
Great blue heron	*Ardea herodias*	B/M/W

Table 3-1. Selected Bird Species that Occur in the New York Harbor Area (cont).

SHOREBIRDS, GULLS, AND TERNS		
Semipalmated sandpiper	*Calidris pusilla*	M
Lesser golden-plover	*Pluvialis dominica*	M
American oystercatcher	*Haematopus palliates*	B/M/W
Black-bellied plover	*Pluvialis squatarola*	M
Ruddy turnstone	*Arenaria interpres*	M
Piping plover	*Charadrius melodus*	B/M
Semipalmated plover	*Charadrius semipalmatus*	M
Sanderling	*Calidris alba*	M
Dunlin	*Calidris alpine*	M
Least sandpiper	*Calidris minutilla*	M
Willet	*Catoptrophorus semipalmatus*	B/M
Black skimmer	*Rynchops niger*	B/M
Least tern	*Sterna antillarum*	SM
Forster's tern	*Sterna forsteri*	M
Gull-billed tern	*Sterna nilotica*	B
Roseate tern	*Sterna dougallii*	B/M
RAPTORS		
Bald eagle	*Haliaeetus leucocephalus*	W
Common barn-owl	*Tyto alba*	B
Osprey	*Pandion haliaetus*	B/M/W
Peregrine falcon	*Falco peregrinus*	B/M/W
Short-eared owl	*Asio flammeus*	B/M/W

Source: USFWS 1997

Notes: B = Breed in the area

M = Migrates through the area and has identifiable migratory stopover or staging areas within the watershed

W = Overwinters in the area.

Waterfowl concentrate along the Staten Island shoreline of Raritan Bay and New York Bay for breeding, during migration, and as a wintering area (USFWS 1997). Species of waterfowl that breed in the New York Harbor area include the mallard (*Anas platyrhynchos*), gadwall (*Anas strepera*), American black duck (*Anas rubripes*), and Canada goose (*Branta canadensis*). Waterfowl use New York Harbor primarily during fall migration (peaking in November) and as wintering areas. In transit from the major breeding grounds in the Midwest, Canadian prairies, and Arctic to their wintering grounds along the Atlantic Coast, several species of waterfowl migrate down the Hudson and/or along the Atlantic coast, stopping to rest or feed or to overwinter in New York Harbor. These species include the Atlantic brant (*Branta bernicla*), greater scaup (*Aythya marila*), American black duck, canvasback (*Aytha valisneria*), and mallard, along with lesser numbers of bufflehead (*Bucephala albeola*), mergansers (primarily red-breasted

merganser [*Mergus serrator*]) common goldeneye (*Bucephala clangula*), and American wigeon (*Anas americana*) (USFWS 1997).

Only relatively few species of shorebirds, gulls, and terns, breed in the New York Harbor area including willet (*Catoptrophorus semipalmatus*), piping plover, and American oystercatcher (*Haematopus palliatus*) (USFWS 1997). However, nearly 30 species of shorebirds regularly use and migrate through New York Harbor and depend on the food resources of the marshes, flats, and shallow water areas. Shorebird migration extends over most of year, from March through June for the spring migration and from July through November for the fall migration. The most abundant shorebird species in the Harbor are semipalmated sandpiper (*Calidris pusilla*), semipalmated plover (*Charadrius semipalmatus*), sanderling (*Calidris alba*), ruddy turnstone (*Arenaria interpres*), black-bellied plover (*Pluvialis squatarola*), dunlin (*Calidris alpina*), greater and lesser yellowlegs (*Tringa melanoleuca* and *T. flavipes*), and least sandpiper (*Calidris minutilla*) (USFWS 1997).

Sandy Hook and Breezy Point are two sand spits that extend into the Harbor entrance and support some of the largest nesting populations of piping plover, least tern (*Sterna antillarum*), common tern (*Sterna hirundo*), and black skimmer (*Rhynchops niger*) in the region (USFWS 1997). Other terns that nest in small numbers in or near the Harbor include Forster's tern (*Sterna forsteri*), gull-billed tern (*Sterna nilotica*), and the roseate tern (USFWS 1997).

Colonies of herons, egrets, and ibises (long-legged wading birds) feed throughout the shallow waters, bays, and marshes of New York Harbor (USFWS 1997). The most abundant waders in the Harbor are black-crowned night heron (*Nycticorax nycticorax*), snowy egret (*Egretta thula*), glossy ibis (*Plegadis falcinellus*), cattle egret (Bubulcus ibis), and great egret (*Casmerodius albus*) (USFWS 1997).

Resident and migratory raptor populations breed and overwinter in the New York Harbor area (USFWS 1997). Breeding raptors include osprey (*Pandion haliaetus*), common barn owl (*Tyto alba*), and peregrine falcon (*Falco peregrinus*). The peregrine falcon is state-listed as endangered. Overwintering raptors include northern harrier, rough-legged hawk (*Buteo lagopus*), common barn owl, short-eared owl (*Asio flammeus*), long-eared owl (*Asio otus*), and peregrine falcon (USFWS 1997).

Both short and long distance migrant songbirds migrate through the New York Harbor area, while some species breed and/or overwinter in the area (USFWS 1997). Over 250 species of songbirds

have been identified during winter counts in the area, including 100 common species. Approximately 172 species of songbirds are probable or confirmed breeders in the New York Harbor area. This number includes 92 species from the order Passeriformes (perching birds) (USFWS 1997).

3.3 Air Quality and Climate

3.3.1 Definition of the Resource

The air quality in a given region is measured by the concentration of various pollutants in the atmosphere. The Clean Air Act (CAA) National Ambient Air Quality Standards (NAAQS) have been established by EPA for six criteria pollutants including: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than ten microns (PM_{10}), and lead (Pb). The measurements of these "criteria pollutants" are expressed in units of parts per million (ppm) or in units of micrograms per cubic meter ($\mu g/m^3$). The CAA directed EPA to develop, implement, and enforce strong environmental regulations that would ensure cleaner and healthier ambient air quality. In order to protect public health and welfare, EPA developed numerical concentration-based primary and secondary standards for these criteria pollutants. NAAQS represent maximum levels of background pollution that are considered safe, with an adequate margin of safety to protect public health and welfare. O_3 is not emitted directly from stationary, mobile, or area pollution sources. Rather, it is a product of photochemically reactive compounds such as nitrogen oxides (NO_x) and volatile organic compounds (VOCs). These compounds are inventoried and quantified as precursors of O_3. Air quality in a region is a result of not only the types and quantities of atmospheric pollutants and pollutant sources in an area, but also surface topography, the size of the air basin, and the prevailing meteorological conditions.

Federal regulations (40 CFR 81) have defined Air Quality Control Regions (AQCRs), or airsheds, for the entire U.S. AQCRs are based on population and topographic criteria for groups of counties within a state, or counties from multiple states that share a common geographical or pollutant concentration characteristic.

The CAA Section 176 I (1) prohibits Federal agencies from undertaking projects that do not conform to an EPA-approved State Implementation Plan (SIP) in non-attainment areas. In 1993, EPA developed the General Conformity Rule, which specifies how Federal agencies must determine CAA conformity for sources of non-attainment pollutants in designated non-attainment and maintenance areas. A maintenance area is one that has met Federal air quality standards, thus

removing it from non-attainment status. This rule and all subsequent amendments can be found in 40 CFR 51 Subpart W and 40 CFR 93 Subpart B. Through the Conformity Determination process specified in the final rule, any Federal agency must analyze increases in pollutant emissions directly or indirectly attributable to a proposed action. In addition, they may need to complete a formal evaluation that may include modeling for NAAQS impacts, obtaining a commitment from the state regulatory agency to modify the SIP to account for emissions from a proposed action, and/or provision for mitigation for any significant increases in non-attainment pollutants. SIPs are the regulations and other materials for meeting clean air standards and associated CAA requirements. The Proposed Action in New York Harbor occurs within a severe non-attainment area for O_3. Therefore, the General Conformity Rule applies and a conformity analysis is required.

3.3.2 Affected Environment

The ROI for the Proposed Action and the No Action Alternative is defined as New York Harbor (Upper New York Bay, Lower New York Bay, the Narrows, Newark Bay, Jamaica Bay, Arthur Kill, Kill Van Kull, the Hudson River to West Point, and the East River to Long Island Sound). The ROI includes the New York counties of Putnam, Orange, Rockland, Westchester, Bronx, New York, Kings, Queens, and Richmond and the New Jersey counties of Bergen, Hudson, Essex, Union, Middlesex, and Monmouth.

Air Quality

The DEC has primary jurisdiction over air quality in the State of New York. The Proposed Action is located in New Jersey-New York-Connecticut (NJ-NY-CT) Interstate AQCR. The air quality in this region is designated as a Severe-17 non-attainment area for O_3 and is in attainment for all other criteria pollutants. Table 3-2 presents the primary and secondary NAAQS. Table 3-3 presents the current air emissions inventory data for the NJ-NY-CT Interstate AQCR.

Climate

The NJ-NY-CT Interstate AQCR area is located in a humid climate and experiences moderately warm summers and long cold winters. Precipitation remains moderate and fairly evenly divided throughout the year, with the exception of the winter when there is less precipitation. The average yearly high temperature is 45.8 °F (degrees Fahrenheit) and the average low is 44.6 °F. Annual precipitation for New York is approximately 38.9 inches with the majority of the precipitation occurring from May to September. Table 3-4 presents the monthly temperature and precipitation data for the State of New York.

Table 3-2. National Ambient Air Quality Standards

Pollutant	Standard Value		Standard Type
Carbon Monoxide (CO)			
8-hour Average	9 ppm [a]	(10 mg/m^3) [b, c]	Primary & Secondary
1-hour Average	35 ppm	(40 mg/m^3) [c]	Primary
Nitrogen Dioxide (NO_2)			
Annual Arithmetic Mean	0.053 ppm	(100 $\mu g/m^3$) [b, d]	Primary & Secondary
Ozone (O_3)			
1-hour Average	0.12 ppm	(235 $\mu g/m^3$) [e]	Primary & Secondary
8-hour Average	0.08 ppm	(157 $\mu g/m^3$) [e]	Primary & Secondary
Lead (Pb)			
Quarterly Average		1.5 $\mu g/m^3$	Primary & Secondary
Particulate ≤ 10 microns (PM_{10})			
Annual Arithmetic Mean		50 $\mu g/m^3$	Primary & Secondary
24-hour Average		150 $\mu g/m^3$	Primary & Secondary
Sulfur Dioxide (SO_2)			
Annual Arithmetic Mean	0.03 ppm	(80 $\mu g/m^3$) [e]	Primary
24-hour Average	0.14 ppm	(365 $\mu g/m^3$) [e]	Primary
3-hour Average	0.50 ppm	(1300 $\mu g/m^3$) [e]	Secondary

Notes: a ppm – parts per million

b Parenthetical value is an approximately equivalent concentration.

c mg/m3– milligrams per cubic meter.

d µg/m3– micrograms per cubic meter.

e In July of 1997, the 8-hour ozone standard was promulgated and the 1-hour ozone standard was remanded for all areas, excepting areas that were designated non-attainment with the 1-hour standard when the ozone 8-hour standard was adopted. In July of 2000, the ozone 1-hour standard was reinstated as a result of the Federal lawsuits that were preventing the implementation of the new 8-hour ozone standard. As of December of 2001, EPA estimated that the revised 8-hour ozone standard rules would be promulgated in 2003-2004. In the interim, no areas can be deemed to be definitively non-attainment with the new 8-hour standard.

Table 3-3. Current AQCR Annual Emissions Inventory Data for NJ-NY-CT Interstate AQCR

	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO2 (tpy)	PM_{10} (tpy)
Area Sources	595,173	728,390	4,658,928	133,386	258,318
Point Sources	122,705	81,426	43,207	173,843	27,744
Total Emissions Inventory (tpy)	717,878	809,816	4,702,135	307,229	286,062

Source: EPA 1999

Note: tpy - tons per year

Table 3-4. Local Climate Summary for State of New York

Month	Mean Temperature (°F)	Median Precipitation (Inches)
January	21.0	2.8
February	21.5	2.5
March	31.1	3.0
April	43.3	3.2
May	54.9	3.4
June	64.1	3.6
July	68.8	3.7
August	66.8	3.6
September	59.6	3.6
October	48.6	3.3
November	37.3	3.3
December	25.6	3.0

Source: NOAA 2003d

Notes: Mean temperature and precipitation data obtained from average of 1895 to 2002.

°F – degrees Fahrenheit

3.4 Noise

3.4.1 Definition of the Resource

Webster's dictionary defines noise as "sound or a sound that is loud, disagreeable, or unwanted." However, the definition of noise is highly subjective. To some people, the roar of an engine is satisfying or thrilling; to others, it is an annoyance. Loud music may be enjoyable, depending on the listener and the circumstances. While no absolute standards define the threshold of "significant adverse impact," there are common precepts about what constitutes adverse noise in certain settings, based on empirical studies. Noise is "adverse" in the degree to which it interferes with activities (such as speech, sleep, and listening to the radio and television) and the degree to which human health may be impaired. Noise can also cause "adverse impacts" to marine mammals, depending on the type of noise and duration. Noise can result in stressful situations that disrupt sleep, reproduction, feeding habits, and communication in marine mammals.

This section defines noise standards and methodology, discusses the impacts of noise on humans and marine mammals, and describes the existing noise environment in the ROI (Upper New York Bay, Lower New York Bay, the Narrows, Newark Bay, Jamaica Bay, Arthur Kill, Kill Van Kull, the Hudson River to West Point, and the East River to Long Island Sound). In order to understand the impact of noise on humans, marine mammals, and sea turtles it is necessary to

understand the properties of noise in air and water and the existing ambient noise levels in the ROI.

Noise is customarily measured in decibels (dB) (a dB is defined as the ratio between a measured pressure and a reference pressure); it is a logarithmic unit that accounts for large variations in amplitude and is the accepted standard unit measurement of sound. The ambient sound level of a region is defined by the total noise generated, including sounds from both natural and artificial sources. The magnitude and frequency of environmental noise may vary considerably over the course of the day and throughout the week, due in part to changing weather conditions.

Above-water Noise

In order to evaluate the total community noise environment (above-water noise), two measurements are used by some Federal agencies to relate the time-varying quality of environmental noise to its known effect on people, the 24-hour equivalent sound level (Leq(24)) and the day-night sound level (DNL). The Leq(24) is the level of steady sound with the same total (equivalent) energy as the time-varying sound of interest, averaged over a 24-hour period. DNL is the average acoustical energy during a 24-hour period with a 10-dB penalty added to nighttime levels (i.e., hours between 10 p.m. and 7 a.m.) to account for people's greater sensitivity to sound during nighttime hours. When measuring sound to determine its effects on the human population, A-weighted sound levels (dBA) are typically used to account for the response of the human ear. A-weighted sound levels represent adjusted sound levels. The adjustments are made according to the frequency content of the sound. Another sound scale is the C-weighted scale (dBC). In contrast to the A-weighted scale, the C-weighted scale provides no adjustment to the noise signal over most of the audible frequency range. The C-weighted scale is generally used to measure impulsive noise such as airblasts from explosions, sonic booms, and gunfire.

Underwater Noise

Underwater sound measurements are different from above-water sounds. Because of these differences in reference standards, noise levels cited in air do not equal underwater levels. The reference pressure used for underwater noise measurements is 1 micro-Pascal (μPA) at 1 meter (re 1μPA-m), which is lower than that used for airborne sound measurements. In addition, underwater noise measurements typically do not have any frequency weighting applied (i.e., A-weighted or C-weighted), while airborne noise is often measured using one of several frequency weighting scales. In many cases, underwater noise levels are reported only for limited

frequency bands, while airborne noise is usually reported as an integrated value over a very wide range of frequencies. To compare noise levels in water to noise levels in air, one must subtract 26 dB from the noise level referenced in water in order to account for the difference in reference pressure (USCG 2003b). For example, a supertanker that emits 164 dB in air (20 re 1μPA-m) would sound more like 190 dB in water (1 re 1μPA-m) (USCG 2003b).

Furthermore, because the mechanical properties of water differ from those of air, sound moves at a faster speed in water (1,500 meters per second [m/s]) than in air (about 340 m/s) (USCG 2003b). Temperature also affects the speed of sound, traveling faster in warm water than in cold water, which is very significant in some parts of the ocean. A lower frequency sound has a longer wavelength, and the wavelength of a sound equals the speed of sound in either air or water divided by the frequency of the wave. Therefore, a 20-Hertz (Hz) sound wave is 75 meters long in the water, whereas a 20 Hz sound wave in air is only 17 meters long (USCG 2003b).

Regulatory Framework for Noise and Standard Operating Procedures

USCG NEPA Implementing Procedures (COMDTINST M16475.1-D) require a discussion of the existing conditions in the surrounding communities, including noise regulations. EPA, the Department of Defense (DoD), and other Federal agencies having non-occupational noise regulations, use the DNL as their principal noise descriptor for community assessments (Cowan 1994).

The USCG Safety and Environmental Health Manual (COMDTINST M5100.47) establishes requirements for noise, which include compliance with local noise ordinances and the identification and assessment of hazardous noise sources. USCG defines a hazardous noise as continuous sound levels exceeding 84 dBA or impact noises exceeding 140 dBA. Noise produced by USCG watercraft or by other USCG facility activities should comply with USCG, state, and local noise guidelines. Using Society of Automotive Engineers (SAE) J34 method, USCG recommends 86 dBA as the maximum noise-level that watercraft may generate at 50 feet at full speed (PWIA 2002).

Most states and territories have developed land use plans and regulations that incorporate noise thresholds and standards in accordance with the Federal Noise Control Act of 1972 (42 U.S.C. 4901, 4918). The State of New York, per section 44 of the consolidated law chapter 37, “No person shall operate a pleasure vessel on the waters of this state in such a manner as to exceed a

noise level of 75 dBA measured as specified in SAE J1970. Provided, that such measurement shall not preclude a stationary sound level test as prescribed by SAE J2005."

The USCG's *Reference Guide to State Boating Laws, 6th edition, 2000*, states that the State of New York a maximum operational noise level for watercraft, confirming the regulatory records review. The State of New York, like most states, incorporates the Society of Automotive Engineers tests: SAE J-2005 (stationary test) and SAE J-1970 (shoreline test). EPA has determined DNL 75 dB at 50 feet as an acceptable noise level to protect public health and welfare (PWIA 2002). For analysis purposes of this EA, the EPA standard will be used.

The USCG also cooperates with local governments or host agencies to ensure that the facilities comply with local noise standards and land use regulations. The New York City Noise Code, section 24-227, states "no person shall cause or permit discharge into the open air of the exhaust of any device, including but not limited to any steam engine, diesel engine, internal combustion engine or turbine engine, so as to create an unreasonable noise."

Human Response to Noise

Human response to noise varies according to the type and characteristics of the noise source, distance between source and receptor, receptor sensitivity, and time of day. Human hearing varies in sensitivity for different sound frequencies. The ear is most sensitive to sound frequencies between 800 and 8,000 Hz and is least sensitive to sound frequencies below 400 Hz or above 12,500 Hz. Several different frequency-weighting metrics have been developed using different dB adjustment values. The most commonly used decibel weighting schemes are the A-weighted and C-weighted scales, as described above.

Most people are exposed to sound levels of DNL 50 to 55 dB or higher on a daily basis. Studies specifically conducted to determine noise impacts on various human activities show that about 90 percent of the population is not significantly bothered by outdoor sound levels below DNL 65 dB (USDOT 1980). Studies of community annoyance in response to numerous types of environmental noise show that DNL correlates well with impact assessments and that there is a consistent relationship between DNL and the level of annoyance. The methodology employing DNL and percent highly annoyed (%HA) has been successfully used throughout the U.S. in a variety of settings, ranging from urban to rural (see Appendix J for further explanation on noise metrics).

Marine Mammal and Turtle Response to Noise

Increasing attention is being paid to the impacts of anthropogenic (human-generated) noise sources on marine mammals and sea turtles, especially those associated with the military, as these sources tend to be much louder and can be widespread (ONR 2000, Richardson et al. 1995). Both above-water (e.g., helicopters) and underwater (e.g., vessels) noise is recognized as a disturbance to marine mammals and sea turtles. Most marine animals can perceive underwater sounds over a broad range of frequencies from about 10 Hz to more than 10,000 Hz. Peak acoustic sensitivity of most invertebrates, fish, sea turtles, and baleen whales is below about 1,000 Hz. For most toothed cetaceans, pinnipeds, manatees, and sea birds, hearing is best at frequencies greater than 1,000 Hz (USCG 1996). Little is known about sea turtle hearing ability.

Marine mammals spotted in the New York Harbor include sei whale, sperm whale, humpback whale, Atlantic bottlenose dolphin, harbor porpoise, hooded seal, harp seal, and the harbor seal. Marine turtles found in the area include the loggerhead sea turtle, Kemp's (Atlantic) ridley, green sea turtle, and leatherback (to a lesser extent) sea turtle. They are protected under the MMPA.

3.4.2 Affected Environment

Currently, the USCG is located adjacent to compatible areas. The MSST is expected to operate in the waters defined as the New York Harbor. The ROI for the noise environment is the Upper New York Bay, Lower New York Bay, the Narrows, Newark Bay, Jamaica Bay, Arthur Kill, Kill Van Kull, the Hudson River to West Point, and the East River to Long Island Sound. Above-water ambient sound levels are not available for the ROI. Above-water ambient sound levels vary based upon the setting in which they are measured. For example, in a wilderness setting, ambient sound levels range from DNL 20 to 30 dB; in residential areas, they range between DNL 30 to 50 dB; and in urban residential areas, they range between DNL 60 to 70 dB (FICON 1992). When sound levels are DNL 55 dB or less in outdoor areas, where the absence of noise is important for functional land use, there is no reason to suspect that the general population would be at risk from any of the identified effects of noise (i.e., activity interference or annoyance) (EPA 1978).

Underwater Noise

Underwater ambient sound levels are not available for the ROI. Underwater noise in the ocean is a result of natural and human-generated sound sources. Natural sound sources include earthquakes, lightening strikes, sea ice activity, precipitation, and waves. Human-generated

sound comes from a variety of sources, including vessel traffic, geologic exploration, military projects, and aircraft. Sound radiated by the many large ships throughout the world's oceans is the single largest contributor to increased sound levels (ONR 2000). The effects of these vessels are both local, affecting specific limited areas, and global, contributing to an overall increase in ambient noise. Noise levels throughout the world's ocean at frequencies below 500 Hz have increased over the last three decades (Richardson et al. 1995).

Vessel size, hull construction, speed, maintenance, and other factors all affect the noise a vessel produces underwater. Vessel noises, caused by the turning of the screws, engine noise and noises of operating machinery on board, generally fall within the range of 5 to 2000 Hz (USCG 1996). Sound intensity, particularly at higher frequencies, tends to increase with the size of the vessel. Supertankers and large container ships may have a maximum broadband sound source level of 190 to 200 dB-referenced 1 µPa at 1 meter. Small outboard motor vessels produce broadband sounds of 150 dB-referenced 1 µPa at 1 meter; these sounds are attenuated to the range of 85 to 140 dB-referenced 1 µPa at a distance of 50 meters from the source (USCG 1996). Most USCG vessels are generally less than 100 feet in length and, therefore, generate sound pressure source levels of 160 dB-referenced 1 µPa at 1 meter or less (USCG 1996). Table 3-5 lists sound pressure source levels for various vessels (Richardson et al. 1995; USCG 1996).

Table 3-5. Underwater Sound Pressure Levels for Various Vessels

Vessel (length) and Description	Frequency	Source Level (dB referenced 1µPa-meter)
Outboard drive – 23 feet (2 engines, 80 horsepower each)	630, 1/3 octave	156
Twin Diesel – 112 feet	630, 1/3 octave	159
Small Supply Ships – 180 to 279 feet	1000,1/3 octave	125-135 (at 50 meters)
Freighter – 443 feet	41, 1/3 octave	172

Source: Richardson et al. 1995

Notes: These underwater sound pressure levels cannot be directly compared to airborne decibel levels.
dB – decibel
µPa-m – microPascal – meters

3.5 Public Safety

3.5.1 Definition of the Resource

A safe environment is one in which there is no, or an optimally reduced, potential for death, serious bodily injury or illness, or property damage. Safety and accident hazards can often be identified and reduced or eliminated. Necessary elements for an accident-prone situation or environment include the presence of the hazard itself together with the exposed (and possibly

susceptible) population. The degree of exposure depends primarily on the proximity of the hazard to the population. Activities that can be hazardous include transportation, maintenance and repair activities, and the creation of highly noisy environs. The proper operation, maintenance, and repair of vehicles and equipment carry important safety implications. Any facility or human-use area with potential explosive or other rapid oxidation process creates unsafe environments for nearby populations. Extremely noisy environments can also mask verbal or mechanical warning signals such as sirens, bells, or horns.

3.5.2 Affected Environment

Public safety is one of the USCG's primary missions, as the USCG is the prominent overseer of maritime safety in all U.S. waters, including the high seas. The U.S. maritime transportation system is diverse. Geography, environmental conditions, and the amount and types of vessel traffic are all aspects of the U.S. maritime system.

U.S. ports must provide safe and efficient rapid turnaround capabilities to accommodate expanding trade and the increasing size and speed of oceangoing ships, many of which are foreign. U.S. ports also handle a large volume of coastal and inland traffic. Major members of the U.S. maritime transportation system include Federal agencies, commercial groups, state and local groups, and public and community groups (USCG 2002a). Since the events of September 11, 2001, the safety of the country's ports and its maritime system has received increased scrutiny and concern. It is due to these concerns that the Proposed Action is being considered.

Each year more than 21 million tons of ocean-borne general cargo moves through the Port of New York/New Jersey. The Port of Newark/Elizabeth Port Authority Marine Terminal Complex, the PA Auto Marine Terminal, Brooklyn Piers, and Red Hook Marine Terminal handle most of the cargo and the Port Authority of New York and New Jersey (PANYNJ) manages these facilities. In addition, there are private operators such as Global Marine Terminal, the City of New York's South Brooklyn Terminal, and a number of marine terminals operated by private oil companies along the southern New Jersey coastline to handle much of the liquid bulk crude oil imported. P&O Ports North American operates the NYC Passenger Ship Terminal for the City of New York (PANYNJ 2003). Under the Proposed Action, the MSST would patrol these areas, plus the East River to Long Island Sound and Lower New York Bay.

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4. Environmental Consequences

4.1 Introduction

This chapter will present the potential environmental impacts of the Proposed Action and the No Action Alternatives. U.S. Coast Guard (USCG) personnel and cutters currently perform security duties in and around the New York Harbor.

The Proposed Action is the stand-up and operation of a Maritime Safety and Security Team (MSST) at Station New York. The MSST would consist of six Response Boats-Homeland Security (RB-HS) and approximately 71 active duty personnel and 33 reservists. The Region of Influence (ROI) for the Proposed Action and the No Action Alternative is defined as New York Harbor (Upper New York Bay, Lower New York Bay, the Narrows, Newark Bay, Jamaica Bay, Arthur Kill, Kill Van Kull, the Hudson River to West Point, and the East River to Long Island Sound). The ROI includes the New York counties of Putnam, Orange, Rockland, Westchester, Bronx, New York, Kings, Queens, and Richmond; and the New Jersey counties of Bergen, Hudson, Essex, Union, Middlesex, and Monmouth. This region encompasses the area where the MSST is expected to spend the majority of its operating time. The MSST can be deployed temporarily in emergencies to other ports as needed.

Currently, vessels and manpower are being diverted from other missions in order to provide the additional security for the nation's ports, including the Port of New York/New Jersey. The No Action Alternative fails to meet the purpose and need of the USCG mission. Under the No Action Alternative, disruption to other missions would continue to result in further strain on manpower and current assets. This scenario of vessels and manpower at maximum capacity would possibly make it easier for a terrorist attack to occur. The result might be a potential for adverse environmental impacts. Terrorists could strike at military or commercial facilities in these ports, creating health and safety hazards for the surrounding populace, impacting appropriate emergency responses, employment and trade, and marine life. The impacts could be immediate (loss of life) or long lasting (disruption of commerce activities that could impact the long-term economy). Recovery time would depend on the severity and extent of the loss.

Potential impacts are addressed in the context of the scope of the Proposed Action as described in Section 2.0, and in consideration of the potentially affected environment as characterized in Section 3.0.

4.2 Biological Resources

4.2.1 Significance Criteria

This section evaluates the potential impacts to the biological resources under the Proposed Action and the No Action Alternative. The significance of impact to biological resources is based on: (1) the importance (i.e., legal, commercial, recreational, ecological, or scientific) of the resource, (2) the proportion of the resource that would be affected relative to its occurrence in the region, (3) the sensitivity of the resource to proposed activities, and (4) the duration of ecological ramifications. The impacts to biological resources are significant if habitats or species of high concern are adversely affected over relatively large areas. Impacts are also considered significant if disturbances cause reductions in population size or distribution of a species of high concern.

Protected and Sensitive Habitats

Impacts to protected and sensitive habitats would be significant if MSST activities resulted in any of the following outcomes:

- Temporary or permanent loss of any sensitive, protected, or reporting area habitat
- Direct loss or damage of any sensitive resource within a protected or sensitive habitat
- Excessive noise or presence from normal USCG activities that lessens the habitat value

Wetlands, Seagrass, and Floodplains

The significance of impacts on wetland resources is proportional to the functions and values of the wetland complex. Wetlands function as habitat for plant and wildlife populations, including threatened and endangered species that depend on wetlands for their survival. Wetlands are valuable to the public for flood mitigation, stormwater runoff abatement, aquifer recharge, water quality improvement, and aesthetics. Quantification of wetlands functions and values, therefore, is based on the ecological quality of the site as compared with similar sites, and the comparison of the economic value of the habitat with the economic value of the proposed activity that would modify it. A significant adverse impact on wetlands would occur should either the major function or value of the wetland be significantly altered. Significance criteria for impacts on seagrass are based on the temporary or permanent loss of seagrass and the impact on species that seagrass in the ROI supports. Significance criteria for impacts on floodplains are based on the existence of floodplains and associated regulations. The impact of flood hazards on a proposed action is significant if such an action is proposed in an area with a high probability of flooding.

Marine Mammals and Sea Turtles

Impacts to marine mammals and sea turtles would be significant if MSST activities resulted in any of the following outcomes:

- Temporary or permanent loss of any habitat
- Direct loss (take) of a substantial number of a specific species that would affect the species' ability to survive
- Harassment, either Level A Marine Mammal Protection Act (MMPA), defined as pursuit, torment, or annoyance that has the potential to injure; or Level B, defined as causing disruption of behavioral patterns
- Permanent loss of breeding areas and habitat
- Substantial interference with movement of any resident species

Fish

Fisheries impacts could result primarily from impacts to fish habitat, direct contact between USCG vessels, and enforcement of applicable fishing laws. Additional impacts may result from accidental pollution emissions.

Impacts to fisheries would be significant if MSST activities resulted in any of the following outcomes:

- Overfishing resulting in the species' inability to survive
- Permanent loss of breeding areas, essential fish habitat (EFH) and/or habitat areas of particular concern (HAPC)
- Substantial interference with movement of any resident species or migration of anadramous species (i.e., species that migrate from saltwater to freshwater)

Coastal and Other Birds

Impacts to coastal and other birds would be significant if MSST activities resulted in any of the following outcomes:

- Harassment of nesting and foraging areas resulting in the species' inability to survive
- Permanent loss of breeding areas and habitat
- Substantial interference with migration

4.2.2 Potential Impacts

Based on the analysis completed for this EA, a combination of no adverse and minor adverse impacts would be expected for biological resources. Minor adverse impacts are possible for

marine mammals, sea turtles, and coastal and other birds. No adverse impacts are expected to protected and sensitive habitats; wetlands, floodplains, and barrier islands; and fish, fisheries, and essential fish habitats. A detailed explanation of the analyses is below.

Protected and Sensitive Habitats

Proposed Action. Although Hudson River National Estuarine Research Reserve (NERR), New York-New Jersey Harbor Estuary Program (HEP), and Gateway National Recreation Area (NRA) would occur within the ROI, the stationing and operations conducted by the MSST would not result in adverse effects on these protected and sensitive habitats. Proposed construction consists of modification of construction of a boathouse at Station New York, Rosebank. The proposed construction project would not impact these habitats.

While the purpose of the MSST would not be to protect these habitats, the USCG would continue to enforce laws that relate to habitat protection. These laws include the Marine Protection, Research, and Sanctuaries Act, the Magnuson-Stevens Conservation and Management Act, the Oil Pollution Act, and the Endangered Species Act (ESA).

Additionally, based on the purpose and projected operations of the MSST, normal patrol operations would not disturb these protected and sensitive areas, including barrier beaches which serve as habitat for seabeach amaranth. An exception to normal operations would be in the case of an unusual occurrence (e.g., pursuit). Under a normal operational scenario, there would be no loss of sensitive habitats. Therefore, no significant adverse impacts on sensitive or protected habitats or the threatened seabeach amaranth would occur as a result of the Proposed Action. Agency correspondence regarding threatened and endangered species and ESA Section (7)(a)(2) consultation is provided in Appendix D.

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood-up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Increased demand on vessels and manpower and disruption to other missions would continue. Under this scenario, it would possibly be easier for a terrorist attack on military and commercial assets to occur. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack and the potential for significant adverse effects to protected and sensitive habitats. Recovery would depend on the extent and type of damage.

Wetlands and Floodplains

Proposed Action. The stationing and operations conducted by the MSST would not result in adverse effects on wetlands and floodplains. The proposed construction would occur on the site of a recently demolished building at Station New York, Rosebank. The ROI does not occur within a 100- or 500-year floodplain.

Additionally, estuarine wetlands would not be utilized during MSST operations. Due to the shallow water depth in these areas, MSST boats would not be able to operate in the area. Operations of MSST boats are not expected to impact seagrass. Operations in proximity to estuarine wetland areas and shallow seagrass beds would be conducted at low speeds due to the shallow nature of the water and the high likelihood of submerged obstacles. Therefore, there would be no significant effects on wetlands or floodplains as a result of the Proposed Action. The Proposed Action is not likely to result in reasonably foreseeable negative affects to any coastal use or coastal resource; as such a Federal coastal zone consistency determination is not required (see Appendix D).

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Increased demand on vessels and manpower and disruption to other missions would continue. Under this scenario, it would possibly make it easier for a terrorist attack on the port to occur or an attack that might impact wetlands and floodplains. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack and the potential for significant adverse effects due to the potential for loss of wetlands and floodplains and their unique ecosystems. Recovery would depend on the extent and type of damage.

Marine Mammals

Proposed Action. Although several species of marine mammals are occasionally known to use New York Harbor, the stationing and operations conducted by the MSST would not result in more than minor adverse impacts to these species. An exception to normal operations would be in the case of an unusual occurrence (e.g., pursuit).

The USCG has protocols in place for protecting the right whale and other marine mammals and sea turtles. Strategies the USCG uses to reduce right whale ship strikes are discussed in the Atlantic Protected Living Marine Resources Initiative (APLMRI). These strategies allow for

right whale monitoring as well as for generally protecting and conserving marine animals and their habitats. APLMRI includes protocols and collaborations with various Federal and state agencies to implement major actions, including the Federal Right Whale Recovery Plan (USCG 2003a). The USCG's current Commandant Instructions (COMDTINSTs), regulations, and procedures to avoid marine mammals would continue under the Proposed Action. While the purpose of the MSST would not be to provide marine resource protection and law enforcement, the MSST would continue to comply with USCG living marine resources protection programs, initiatives, and guidance.

The addition of the USCG MSST vessels to New York Harbor would represent only a small increase when compared to the existing traffic already using the Harbor. These boats are designed to be highly maneuverable which would assist them in avoiding collisions with marine mammals. To guard against any adverse impacts of the MSST vessel operation on marine mammals, the USCG would continue to adhere to the protective measures in place in the APLMRI. Moreover, the USCG would continue to adhere to the policies and goals stated in the Ocean Steward (Appendix F). Because of the APLMRI and Ocean Steward, the small number and size of vessels, the boats' high level of maneuverability, and their low level of speed during normal operations, the addition of the MSST boats and their operations would not likely result in significant adverse effects on marine mammals. Agency correspondence regarding threatened and endangered species, the ESA Section (7)(a)(2) consultation, and other sensitive species that are protected under the MMPA is provided in Appendix D.

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Increased demand on vessels and manpower and disruption to other missions would continue. Under this scenario, it would possibly make it easier for a terrorist attack on the port to occur or an attack that could spread from the port to areas frequented by marine mammals. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack and the potential for significant adverse effects on marine mammals. Recovery would depend on the extent of loss.

Sea Turtles

Proposed Action. Although four species of sea turtles are occasionally known to use New York Harbor, the stationing and operations conducted by the MSST would not result in more than minor adverse impacts to these species. An exception to these normal operations would be in the

case of an unusual occurrence (e.g., pursuit). The USCG's current COMDTINSTs, regulations, and procedures to avoid protected species would continue under the Proposed Action. While the purpose of the MSST is not to provide marine resource protection and law enforcement, the MSST would continue to comply with these regulations.

The addition of the USCG MSST vessels to New York Harbor would represent only a small increase when compared to the existing traffic already using the port. These boats are designed to be highly maneuverable which would assist them in avoiding collisions with protected sea turtles. To guard against any adverse impacts of the MSST vessel operation on protected species, the USCG would continue to adhere to the protective measures in place in the APLMRI. Moreover, the USCG would continue to adhere to the policies and goals stated in the Ocean Steward (Appendix F). Because of the APLMRI and Ocean Steward, the small number and size of vessels, the boats' high level of maneuverability, and their low level of speed during normal operations, the addition of the MSST boats and their operations would not likely result in significant adverse effects on sea turtles. Agency correspondence regarding threatened and endangered species and the ESA Section (7)(a)(2) consultation is provided in Appendix D.

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Increased demand on vessels and manpower and disruption to other missions would continue. Under this scenario, it would possibly make it easier for a terrorist attack on the port to occur or an attack that could spread from the port to areas frequented by sea turtles. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack and the potential for significant adverse effects on sea turtles. Recovery would depend on the extent of loss.

Fish

Proposed Action. As part of the Proposed Action, the stationing and operations conducted by the MSST would not result in significant adverse impacts on fisheries or EFH. RB-HS are designed to be highly maneuverable, which would assist in avoiding impacts to EFH or HAPC. The addition of the USCG MSST vessels to New York Harbor would represent only a small increase when compared to the existing traffic already using the port. Agency correspondence regarding EFH is provided in Appendix D.

The USCG enforces a number of fishing and fisheries laws. In addition, USCG has developed its own initiatives to protect fisheries and their habitat. While the purpose of the MSST is not to provide marine resource protection and law enforcement, the MSST would continue to comply with USCG living marine resources protection programs, initiatives, and guidance.

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Increased demand on vessels and manpower and disruption to other missions would continue. Under this scenario, it would possibly make it easier for a terrorist attack on the port to occur. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack or an attack that might result in a loss or degradation of fishing areas. The potential for loss of EFH and fish species would also indirectly impact the nation's economy by impacting commercial fisheries. Recovery would depend on the amount and extent of loss.

Coastal and Other Birds

Proposed Action. While several species of threatened, endangered, coastal, and migratory birds are known to occur within the ROI, the stationing and operations conducted by the MSST would not result in more than minor adverse impacts to these species. Neither the stationing site nor the launch sites provide suitable habitat for these bird species. The MSST normal operations would not be within nesting and foraging habitat for threatened, endangered, coastal, or migratory birds. It is anticipated that only temporary, minor adverse impacts, if any, might occur. Agency correspondence regarding threatened and endangered species and the ESA Section (7)(a)(2) consultation is provided in Appendix D.

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Increased demand on vessels and manpower and disruption to other missions would continue. Under this scenario, it would possibly make it easier for a terrorist attack on the port to occur or an attack that might impact birds' habitats. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack, with the potential for significant adverse impacts to threatened, endangered, coastal, and migratory birds. Recovery would depend on the amount and extent of loss.

4.3 Air Quality and Climate

4.3.1 Significance Criteria

The potential impacts to local and regional air quality conditions near a proposed Federal action are determined based upon the increases in regulated pollutant emissions relative to existing conditions and ambient air quality. Impacts to air quality in National Ambient Air Quality Standards (NAAQS) "attainment" areas are considered significant if the net changes project-related emissions result in one of the following situations:

- Violation of any national or state ambient air quality standards.
- Exposure of sensitive receptors to substantially increased pollutant concentrations.
- An increase of 10 percent or more in an affected Air Quality Control Region (AQCR).

Emissions inventory impacts to air quality in NAAQS "non-attainment" areas are considered significant if the net changes in project-related emissions result in one of the following situations:

- Violating any national or state ambient air quality standards.
- Increasing the frequency or severity of a violation of any ambient air quality standard.
- Exceeding any significance criteria established in a state implementation plan (SIP).
- Delaying the attainment of any standard or other milestone contained in the SIP.

With respect to the General Conformity Rule, impacts to air quality would be considered significant if the Proposed Action would result in an increase of a non-attainment or maintenance area's emission inventory by ten percent or more for one or more non-attainment pollutants, or if such emissions exceed *de minimis* threshold levels established in 40 Code of Federal Regulations [CFR] 93.153(b) for individual non-attainment pollutants or for pollutants for which the area has been designated as a non-attainment or maintenance area. The General Conformity Rule applies, since the Proposed Action occurs in a severe non-attainment area for O_3.

Federal Prevention of Significant Deterioration (PSD) regulations also define air pollutant emissions to be "significant" if (1) a proposed project is within 10 kilometers of any Class I area; and (2) regulated pollutant emissions would cause an increase in the 24-hour average concentration of 1 $\mu g/m^3$ or more of any regulated pollutant in the Class I area (40 CFR 52.21(b)(23)(iii)). PSD regulations also define ambient air increments—limiting the allowable increases to any area's baseline air contaminant concentrations, based on the area's designation as Class I, II, or III (40 CFR 52.21(c)). Local and regional pollutant impacts of direct and indirect

emissions from stationary emission sources from the Proposed Action are addressed through Federal and state permitting program requirements under the New Source Review (NSR) and PSD regulations (40 CFR Parts 51 and 52).

4.3.2 Potential Impacts

The potential sources of increased criteria pollutant emissions under the Proposed Action would be from: (1) watercraft operations, (2) fuel storage and handling emissions, (3) maintenance and support activities, and (4) personnel travel.

Based on the analysis completed for this Environmental Assessment (EA), minor adverse impacts to air quality would be expected. However, the net change in nitrogen oxide (NO_x), and Volatile Organic Compound (VOC), emissions would be well below the *de minimis* threshold requirements and the regional significance requirements of the General Conformity Rule. A detailed explanation of the analyses are below.

Watercraft Operations

Proposed Action. The vessels and engines to be used for the RB-HS must meet specific requirements of the MSST, including the capability of sustaining speeds of 40+ knots in calm seas. The proposed engines would be the Honda 225 horsepower engines. These four-stroke engines would meet the speed requirements of the USCG and would fulfill Federal U.S. Environmental Protection Agency (EPA) 2006 emission requirements. The Proposed Action will be assessed based on impacts to the AQCR current emissions inventory.

Under the Proposed Action, a minor impact to air quality would be realized. Calculations of air pollutant emissions from the proposed MSST operations were performed based on two boats operating 24 hours a day, 365 days a year, at approximately 20 horsepower (see Appendix K).

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Under this alternative, disruption to other missions would continue. This scenario of vessels and manpower at maximum capacity would possibly be easier for a terrorist attack to occur. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack. Terrorists could strike at military or commercial facilities in these ports creating the potential for impacts to the

environment. The impacts could be immediate or long lasting. Recovery time would depend on the severity and extent of the impact.

Personnel Commuter Travel

Proposed Action. The number of additional personnel is comparatively small (71 active duty and 33 reservists) and would result in minor adverse impacts to air quality. Calculations of air pollutant emissions from the proposed personnel commuter travel operations, commuting an average of 20 miles each way to the New York MSST facility, 365 days a year (see Appendix K), were performed based on an average fleet model from 1995.

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Under this alternative, disruption to other missions would continue. This scenario of vessels and manpower at maximum capacity would possibly make it easier for a terrorist attack to occur. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack. Terrorists could strike at military or commercial facilities in these ports creating the potential for impacts to the environment. The impacts could be immediate or long lasting. Recovery time would depend on the severity and extent of the impact.

Maintenance and Support Activities

Proposed Action. Under the Proposed Action, most maintenance would be performed at the New York MSST facility. All other maintenance and repair would occur at other military or commercial facilities. Since the maintenance schedule is not known, it is anticipated that there would be minor adverse impacts on air quality in the region. No additional support facilities (beyond the addition of a pre-engineered Butler Building to Station New York) would be required to support the MSST.

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Under this alternative, disruption to other missions would continue. This scenario of vessels and manpower at maximum capacity would possibly make it easier for an attack to occur. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack. Terrorists could strike at military or commercial facilities in these ports creating the potential for impacts to the

environment. The impacts could be immediate or long lasting. Recovery time would depend on the severity and extent of the impact.

Fuel Storage and Handling Emissions

Proposed Action. No new fuel storage or dispensing facilities would be required under the Proposed Action. RB-HS would be refueled at Integrated Support Command (ISC) New York. The dispensing facility would have regulated vapor controls to reduce evaporative emissions. It is anticipated that there would be minor adverse impacts on air quality in the region.

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Under this alternative, disruption to other missions would continue. This scenario of vessels and manpower being stretched to their limit would possibly make it easier for a terrorist attack to occur. Impacts of selecting this alternative would be considered significantly adverse due to the potential of a terrorist attack. Terrorists could strike at military or commercial facilities in these ports creating the potential for impacts to the environment, as well as loss of petroleum storage tanks and delivery systems, thus impacting the economy. The impacts could be immediate or long lasting. Recovery time would depend on the severity and extent of the impact.

Conformity

Since an EPA-designated non-attainment area is affected by this Proposed Action, the USCG must comply with the Federal General Conformity Rule (40 Code of Federal Regulations [CFR] 93). To do so, an analysis has been completed to ensure that, given the changes in direct and indirect emissions of the ozone (O_3) precursors (NO_x and VOCs), particulate matter less than 10 microns (PM_{10}), and carbon monoxide (CO), the Proposed Action would be in conformity with applicable Clean Air Act (CAA) requirements. The Conformity Determination requirements specified in this rule can be avoided if the project-related non-attainment pollutant emission rate increases are below *de minimis* thresholds levels for each pollutant and are not considered regionally significant. For purposes of determining conformity in this non-attainment area, projected regulated pollutant emissions associated with the Proposed Action were estimated using available construction emissions and other non-permitted emission source information. The emission calculations and *de minimis* threshold comparisons are collectively presented in Appendix K.

With respect to the General Conformity Rule, impacts to air quality would be considered significant if the proposed Federal action would result in an increase of a non-attainment or maintenance area's emission inventory by 10 percent or more for one or more non-attainment pollutants, or if such emissions exceed *de minimis* threshold levels established in 40 CFR 93.153(b) for individual non-attainment pollutants or for pollutants for which the area has been designated as a non-attainment or maintenance area.

The *de minimis* threshold emission rates were established by EPA in the General Conformity Rule in order to focus analysis requirements on Federal actions with the potential to have "significant" air quality impacts. Table 4-1 presents these thresholds, by regulated pollutant. These *de minimis* thresholds are similar, in most cases, to the definitions for major stationary sources of criteria and precursors to criteria pollutants under the CAA's New Source Review (NSR) Program (CAA Title I). As shown in Table 4-1, *de minimis* thresholds vary depending upon the severity of the non-attainment area designation by EPA.

Table 4-1. General Conformity Rule *de minimis* Emission Thresholds

Pollutant	Status	Non-Attainment Classification	*de minimis* Threshold (tons/yr)
Ozone (measured as "precursors": NO_x or VOCs)	Non-attainment	Extreme	10
		Severe	25
		Serious	50
		Moderate/marginal (inside ozone transport region)	50 (VOCs)/100 (NO_x)
		All others	100
	Maintenance	Inside ozone transport region	50 (VOCs)/100 (NO_x)
		Outside ozone transport region	100
CO	Non-attainment/ Maintenance	All	100
(PM_{10})	Non-attainment	Serious	70
	Maintenance	Moderate	100
		Not Applicable	100
SO_2	Non-attainment/ maintenance	Not Applicable	100
NO_2	Non-attainment/ maintenance	Not Applicable	100

Source: 40 CFR 93.153(b)

Based on the emission calculations and analyses completed for the Proposed Action, it is clear that the net change in NO_x and VOC emissions would be well below the *de minimis* threshold requirements and the regional significance requirements of the General Conformity Rule. As

such, this Federal action is exempt from a Conformity Determination and all other requirements that are specified under the General Conformity Rule and applicable regulations (40 CFR 93).

Table 4-2 presents total air quality emissions from the Proposed Action.

Table 4-2. USCG MSST – New York MSST Emissions from Proposed Action

Vehicle Category	VOC Emissions (tpy)	NO_x Emissions (tpy)	CO Emissions (tpy)	SO_2 Emissions (tpy)	PM_{10} Emissions (tpy)
Watercraft Operations	6.33	2.77	27.68	0.25	0.26
Commuter and Tow Vehicles	1.30	1.13	15.84	0.08	1.09
Total Emissions:	7.63	3.90	43.52	0.33	1.35

Notes: tpy – tons per year

Table 4-3 compares the Proposed Action emissions to the total NJ-NY-CT Interstate AQCR emissions inventory.

Table 4-3. Net Emissions for NJ-NY-CT Interstate AQCR Under the Proposed Action

Net Emissions Changes for NJ-NY-CT Interstate AQCR under the Proposed Action					
NJ-NY-CT AQCR	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**
NJ-NY-CT Interstate AQCR Inventory (tpy)	809,816	717,878	4,702,135	307,229	286,062
Proposed Action Net Change (tpy)	7.63	3.90	43.52	0.33	1.35
Percent (%) of NJ-NY-CT Interstate AQCR Inventory	0.0009%	0.0005%	0.0009%	0.0001%	0.0005%

Source: EPA 1999

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined not to be sufficient. Under this alternative, disruption to other missions would continue. The result would be further strain on manpower and current assets. This scenario of vessels and manpower being stretched to their limit would possibly make it easier for an attack to occur. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack. Terrorists could strike at military or commercial facilities in these ports creating the potential for impacts to the

environment. The impacts could be immediate or long lasting. Recovery time would be dependent on the severity and extent of the impact.

4.4 Noise

4.4.1 Significance Criteria

Noise produced by water vessels and supporting facilities while homeported or in transit can combine with other noise sources to affect nearby communities and natural resources. This section addresses the noise impacts from the Proposed Action and the No Action Alternative. Examples of noise impacts from MSST operations include noise from vessels, construction equipment (temporary), and traffic. Noise impacts were only considered within the ROI. This section also discusses general noise impacts to marine mammals. The USCG establishes guidelines and develops cooperative agreements to mitigate impacts on neighboring communities. Federal and state laws and local ordinances establish standards and limitations for noise output from ports, airfields, heliports, helipads, power generating plants, and motor vehicles. USCG activities are operated in accordance with all Federal and state laws and local ordinances.

Noise impact criteria normally are based on a combination of land use compatibility guidelines and factors related to duration and magnitude of the noise level, including the time of day and the conduct of operations. The RB-HS is equipped with two 225 hp four-stroke engines which would be used for the Proposed Action. Four-stroke engines have four cycles: intake stroke, compression stroke, combustion stroke, and exhaust stroke. The first three cycles generate the majority of engine noise, with interaction of the piston and crankshaft.

Above-water Noise

The significance of above-water noise impact criteria normally is based on a combination of land use compatibility guidelines and factors related to duration and magnitude of the noise level, including the time of day and the conduct of operations. EPA has determined a Day-Night Average Sound Level (DNL) of 75 decibel (dB) at 50 feet as an acceptable noise level to protect public health and welfare (PWIA 2002).

Underwater Noise

Impacts to marine mammals and sea turtles would be significant if MSST activities resulted in any of the following outcomes:

- Harassment, either Level A Marine Mammal Protection Act (MMPA), defined as pursuit, torment, or annoyance that has the potential to injure, or Level B, defined as causing disruption of behavioral patterns
- Substantial interference with movement of any resident species

4.4.2 Potential Impacts

The Proposed Action would result in minor adverse noise impacts to human health and welfare under normal operating conditions. A detailed description of the analysis is presented below.

Above-water Noise

Proposed Action. The Proposed Action would result in minor adverse noise impacts to human health and welfare under normal operating conditions. It is anticipated that the MSST would operate 12 hours a day, seven days per week and that there would be two to three boats operating at any given period. All operations of the MSST would be in accordance with all Federal and state laws and local noise ordinances.

There are no identified noise sensitive areas in the ROI, therefore sound exposure levels were not calculated. The ROI is a large geographic area in New York Harbor. Airborne noise impacts from marine vessel operations is rarely an issue of concern because the majority of the population lives near waterways and have become familiar with the sound of passing boats and ships. Speeds in the waterways would be expected to continue to be generally low (10 to 12 knots) except during an unusual event (i.e., pursuit). It is anticipated that the proposed USCG operation within the ROI would be indistinguishable from existing vessel activity and the ambient noise environment. Noise impacts during unusual events would be minor adverse within the port dependent upon the specific location of the unusual event to a sensitive noise receptor.

Additionally, the RB-HS would be equipped with two quieter four-stroke engines (compared to the two stroke engine). This is likely because of the incorporation of muffling devices into design and the reduced number of combustion cycles (Evinrude 2002).

Minor noise impacts may result from the construction of the storage and maintenance facility at Station New York. These impacts would only persist during construction of the facility and thus would be short-term in nature.

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood-up. The USCG would maintain the current level of protection,

which has been determined to be insufficient. Under this alternative, disruption to other missions would continue. This scenario of vessels and manpower at maximum capacity would possibly make it easier for an attack to occur. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack. Terrorists could strike at military or commercial facilities in these ports creating the potential for impacts to the environment. The impacts could be immediate or long lasting. Recovery time would be dependent on the severity and extent of the impact.

Underwater Noise

Proposed Action. Cetacean (whale) reaction to boat traffic varies by species and, within species, according to their current behavior patterns and previous experience. Toothed whales and dolphins show tolerance of vessel traffic. Many dolphin species are attracted to vessels, and spend periods of time following them or swimming within these vessels' bow pressure waves, apparently to reduce energetic costs of swimming (USCG 2003c). Resting dolphins tend to avoid boats, foraging dolphins ignore boats, and socializing dolphins may approach the vessels (Richardson et al. 1995). It is known that bottlenose dolphins inhabit channels in many areas that are used by vessels including large tankers as well as small pleasure craft (USCG 2003c).

The most likely effects of noise on sea turtles would be short-term behavioral changes such as diving and evasive swimming, disruption of activities, or departure from the area of disturbance. Areas with heavy vessel traffic may be avoided by sea turtles, although generally most species appear to exhibit tolerance to noise.

Although the Proposed Action would produce an increase in the overall level of boat operations, the size of the vessels proposed are smaller than the existing commercial vessels operating in New York Harbor and the RB-HS would be equipped with two quieter four-stroke engines (compared to the two stroke engine). It is anticipated that the proposed USCG operation within the ROI would be indistinguishable from existing vessel activity and the ambient noise environment.

The USCG has protocols in place for protecting the right whale and other marine mammals and sea turtles. While the purpose of the MSST is not to provide marine resource protection and law enforcement, the MSST would continue to comply with USCG living marine resources protection programs, initiatives, and guidance.

Disturbance from USCG vessels would be transient and, should not significantly impact marine mammals and sea turtles (USCG 1996). The Proposed Action is not expected to result in more than minor adverse noise impacts on marine mammals and sea turtles that may occur in the ROI.

No Action Alternative. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood-up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Under this alternative, disruption to other missions would continue. This scenario of vessels and manpower at maximum capacity would possibly make it easier for a terrorist attack to occur. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack. Terrorists could strike at military or commercial facilities in these ports creating the potential for impacts to the environment. The impacts could be immediate or long lasting. Recovery time would be dependent on the severity and extent of the impact.

4.5 Public Safety

Based on the analysis completed for this EA, beneficial impacts would be expected to public safety. The establishment of the MSST would provide additional security to the military and commercial assets in the ROI. A detailed explanation of the analyses are below.

4.5.1 Significance Criteria

If implementation of the Proposed Action were to substantially increase risks associated with the safety of USCG personnel (including MSST personnel), workers and visitors, or the local community, or substantially hinder the ability to respond to an emergency, it would represent a significant impact. Furthermore, if implementation of the Proposed Action would result in incompatible land use with regard to safety criteria, impacts to safety would be significant. Public safety is one of the USCG's primary missions, as the USCG is the prominent overseer of maritime safety in all U.S. waters, including the high seas. The U.S. Maritime Transportation System is diverse. Geography, environmental conditions, and the amount and types of vessel traffic are all aspects of the U.S. maritime system. Since the events of September 11, 2001, the safety of the country's ports and its maritime system has received increased scrutiny and concern. It is due to these concerns that this Proposed Action is being considered.

It is extremely difficult to determine the level of significance and degree of impact from losing one (or more ships) and loss of life; therefore, no attempt to do so is made in this section.

4.5.2 Potential Impacts

Proposed Action. The Proposed Action would increase the USCG's ability to protect critical domestic ports and the U.S. Maritime Transportation System from warfare and terrorist attacks. While the MSST's operations would closely parallel USCG traditional port security operations, they would provide complementary, non-redundant capabilities that would be able to close significant readiness gaps in our nation's strategic ports. The MSST would escort a variety of vessels and maintain specific security zones in each port. It is capable of operating seven days a week, 24 hours a day, in all weather conditions. It would operate with and be supported by both military and civilian government organizations, and commercial, and non-governmental entities. Beneficial impacts may be reasonably expected from the Proposed Action.

No Action Alternative. Under the No Action Alternative, the USCG would continue to provide port security at the current level. Under the No Action Alternative, existing conditions would remain as is, and the MSST would not be stood up. The USCG would maintain the current level of protection, which has been determined to be insufficient. Additional boats and personnel would only be assigned to the port under unusual circumstances. Under this alternative, disruption to other missions would continue. This scenario of vessels and manpower being stretched to their limit would possibly make it easier for an attack to occur. Significant adverse impacts would be expected should this alternative be selected due to the increased risk of a terrorist attack. Terrorists could strike at military or commercial facilities in these ports creating health and safety hazards for the surrounding populace, impacting appropriate emergency responses, and the potential for impacts to the environment. The impacts could be immediate or long lasting. Recovery time would be dependent on the severity and extent of the impact.

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5. Cumulative Impacts

5.1 Cumulative Impacts Methods

Cumulative impacts are defined as the impacts that result from the incremental impact of the action, when added to other past, present, and foreseeable future action (40 Code of Federal Regulations [CFR] 1508.7). Cumulative impacts can result from individually minor but collectively significant impacts occurring over time.

This cumulative impact analysis considers reasonably foreseeable programs, projects, or policies that may impact Maritime Safety and Security Team (MSST) operations, add to the MSST operations, or create a significant impact in the Region of Influence (ROI). For the purposes of this Environmental Assessment (EA), only those projects identified in Section 3 that may be impacted by the Proposed Action will be carried over into the Cumulative Impacts discussion. Information about ongoing and future projects and programs has been identified from web searches, other National Environmental Policy Act (NEPA) documents, and local newspaper articles.

Projects that are currently in the planning stages, or have been delayed until further studies have been completed and have no target dates, have been dismissed from further consideration. These projects, if completed, will be concluded at some future unknown date, long after the MSST has become operational. Based on professional judgment, potential impacts are identified as minor, moderate, or high and beneficial and adverse whenever possible.

5.2 Cumulative Impacts Analysis

5.2.1 Projects Deleted from Further Consideration

- *Port Authority Bi-state Rail Freight Initiative.* In July 2001, the Port Authority authorized a contribution of $50 million for rail projects to increase freight capacity in New York and New Jersey. Improvements slated for New Jersey will support adding more rail sidings and track connections, as well as upgrading signal systems. These improvements will increase rail capacity and the operating efficiency of both large railroads and local short line operators. Improvements slated for New York will increase rail clearances and rehabilitate tracks and yards in strategic locations to accommodate additional rail cargo east of the Hudson (PNYNJ 2003a). No environmental data is available.

- *Port Inland Distribution Network (PIDN).* Working with both public agencies and private freight terminal operators, the agency is planning to develop a network of inland distribution hubs and feeder ports at customer cluster points in the northeast. Ultimately, PIDN is expected to provide a cost-effective, financially self-sustaining alternative to trucking containers to the 10-state area that comprises the cargo market for the port's East Coast customers. Start-up service to inland sites could be activated within the next two years to handle port freight bound for inland markets (PNYNJ 2003a). No environmental data is available.
- *New Jersey Department of Transportation's (NJDOT) Portway International Intermodal Corridor (Portway).* Portway is a billion dollar, decade-long program that includes the phased development of a number of projects designed to improve truck access and road safety. It aims to relieve highway construction near and around marine terminals and other intermodal service centers within a 17-mile corridor from Union and Essex counties in the south to Hudson and Bergen counties in the north. Construction has started on bridge and roadway improvements at the northern edge of the port. Several Portway projects are in final design and development with construction scheduled to begin between 2004 and 2006 (PNYNJ 2003a). No environmental data is available.
- *Off-site and Regional Transportation Improvements.* Because the port's competitiveness and its ability to efficiently handle growing cargo volumes are dependent on the overall state of transportation in the region, many projects are currently being evaluated to alleviate container congestion at the terminals (PNYNJ 2003a). No environmental data is available.
- *Comprehensive Port Improvement Plan (CPIP).* The Port Authority of New York and New Jersey (PANYNJ), the states of New York and New Jersey, and New York City formed a Consortium to prepare a Comprehensive Port Improvement Plan (CPIP) and accompanying Environmental Impact Statement (CPIP-EIS) by 2005, at an estimated total cost of $15 million to be shared by the Consortium (PNYNJ 2003a). A Draft EIS has not been released.

5.2.2 Pertinent Projects

It should be noted that several different channels were used to attempt to obtain environmental analyses for the following projects; however, as of the date of the publication of this EA, no objective data was obtained. In most cases, while a specific project has been identified, funded, and has a target date for completion, the environmental data has yet to be produced. In other cases, internal studies have concluded that potential impacts are short-lived and outweigh the long-term benefits of the project. Therefore, based on previous experience with these types of projects, reasonable potential impacts have been identified, and when possible, identified as minor, moderate, or adverse. In all cases, and in comparison to these large projects, the potential

impacts from the stand-up and operations of the MSST must be considered minor. Table 5-1 lists the programs and projects evaluated for potential cumulative impacts.

Table 5-1. Programs and Projects Evaluated for Potential Cumulative Impacts

Proposed (or Existing) Action	Potential Cumulative Impacts
Channel and Berth Deepening Projects Kill Van Kull/Port Jersey and Arthur Kill Channels Ambrose/Bay Ridge/Anchorage/Port Jersey/Kill Van Kull/Newark Bay/Arthur Kill Channels	Short-term adverse impacts to water quality, air quality, and noise during construction. Long-term adverse impacts to air quality and noise, due to increased number of ships using Ports.
Terminal Expansion Projects ExpressRail Terminal APM Terminal Maher Terminal Port Newark Container Terminal Howland Hook Marine Terminal	Short-term adverse impacts to water quality, air quality, and noise during construction. Long-term noise impacts due to increased usage of Ports. Potentially improved air quality due to engines that are more efficient and improved transportation corridors.
Inland Access (to Ports) Projects ExpressRail II Port Newark Interim Rail Terminal Howland Hook Intermodal Terminal Project	Short-term adverse impacts to air quality and noise during construction. Long-term adverse air quality and noise impacts as a result of increase usage of Ports.
Port Authority Bi-state Rail Freight Initiative	Short-term adverse impacts to air quality and noise during construction. Long-term adverse air quality and noise impacts as a result of increase usage of Ports.

Channel and Berth Deepening Projects

PANYNJ and the Army Corps of Engineers (USACE) are currently working on three critical channel deepening projects in the New York/New Jersey harbor.

- *The Kill Van Kull/Port Jersey and Arthur Kill Channels*. These channels offer primary access to Port Newark/Elizabeth marine terminal complex, are being deepened to 45 feet. Deepening Kill Van Kull is almost complete and work on Newark Bay is commencing. Congress approved these same channels for eventual deepening to 50 feet under the Water Resources Development Act of 2000 (PNYNJ 2003b). Environmental data is not available.
- *Ambrose/Bay Ridge/Anchorage/Port Jersey/Kill Van Kull/Newark Bay/Arthur Kill Channels*. The Water Resources Development Act of 2000 authorizes the deepening of seven key shipping channels throughout New York/New Jersey harbor to a depth of 50 feet. This project, according to the Army Corps of Engineers' current schedule has a completion date of 2016 and will provide larger containerships with access to the marine terminals throughout the port (PNYNJ 2003b). Environmental data is not available.

Terminal Expansion Projects

An important part of The Port Authority of New York and New Jersey's redevelopment program includes the expansion and improvements to the maritime terminals that will increase the Port of New York and New Jersey's total capacity to handle containers and improve productivity at each of the marine terminals. This will be vital if cargo volumes grow at their expected rates and double in the next decade.

- *ExpressRail Terminal.* The Port's on-dock intermodal rail terminal located at the Elizabeth-Port Authority Marine Terminal. The current facility will be replaced that will more than double in size and have the capacity to handle one million containers annually. The new terminal is targeted for completion by May 2004 (PNYNJ 2003c). Environmental data has not been available.
- *APM Terminal (former Maersk Sealand Terminal).* The redevelopment project will make the terminal a total of 350 acres. The expansion is targeted for completion by December 2006 (PNYNJ 2003c). Environmental data has not been made available.
- *Maher Terminal.* This is the Port's largest container terminal operator. Also located at Elizabeth-Port Authority Marine Terminal, improvement projects include the consolidation of two separate container terminals into a single 445-acre terminal, plus new cranes. The terminal's berths will also be deepened to 50 feet. Work is scheduled for completion by March 2007 (PNYNJ 2003c). Environmental data has not been made available.
- *Port Newark Container Terminal (PNCT).* PNCT started construction on new administration and operational buildings and total wharf length to 4,400 feet. Dredging 2,300 feet of berth to 50 feet is included in the redevelopment. The expansion program will be completed by February 2003 (PNYNJ 2003c). Environmental data is not available.
- *Howland Hook Marine Terminal.* The wharves will be extended at both ends to allow deepening the Staten Island terminal's berth to 50 feet. When completed in 2004, these improvements will increase the terminal's throughput capacity (PNYNJ 2003c). Environmental data has not been made available.

Inland Access (to Ports) Programs

- *ExpressRail II.* Construction will start later this year on this state-of-the-art, on dock-rail terminal that is scheduled to be completed in 2004. The terminal, to be located on a 70-acre site adjacent to the Maher and APM terminals, will be twice as large and have the capacity to handle one million containers annually. A rail overpass and lead track to the new site are already under construction. The new entrance will allow uninterrupted rail access to the terminal and remove conflicts with truck traffic. This will improve drayage efficiency and ease traffic congestion throughout the Port Newark/Elizabeth Marine Terminals complex (PNYNJ 2003a). Environmental data is not available.

- *Port Newark Interim Rail Terminal.* The Port Authority will expand intermodal rail capability later this year by opening an interim rail terminal to serve Port Newark. The interim facility will handle international container traffic generated by its newest terminal operator, Port Newark Container Terminal. Planning is currently under way for the design of a permanent, dedicated rail terminal. Construction for this facility is scheduled to begin in 2004 and be completed in 2005 (PNYNJ 2003a). Environmental data is not available.
- *Howland Hook Intermodal Terminal Project.* The Port Authority is also developing a new, full-service, on-dock rail terminal to serve the Howland Hook Marine Terminal on Staten Island. Construction is scheduled for completion in 2004. The availability of intermodal rail service on-dock at Howland Hook will expand the terminal's market reach to the Midwest, Canada and the rest of North America for the terminal's customers. Rail service will be connected from the Staten Island Railroad to the Chemical Coast Line in New Jersey (PNYNJ 2003a). Environmental data is not available.

As of this time, no current projects that would be simultaneous with the stand-up of the MSST were identified. The Proposed Action would not be adding to the severity of any existing projects or projects that would commence during the stand-up of the MSST. While the possibility of operating six boats may appear to be a large increase, when compared to the size and number of vessels operating in New York Harbor, this is actually a small number. Furthermore, it is unlikely that all six boats would be used at one time. It is unlikely that addition of the MSST in New York would result in any significant impacts. Supporting documentation for the above-listed projects should include MSST operations.

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USCG 1996	U.S. Coast Guard (USCG). 1996. NEPA Final Environmental Impact Statement (Volume I) for the U. S. Coast Guard Living Marine Resources (APLMR) Initiative. Prepared by Battelle Ocean Sciences. October 31, 1996.
USCG 2002a	U.S. Coast Guard (USCG). 2002. U.S. Coast Guard/G-IPA Web page Homeland Security. Available online: *<http://www.uscg.mil/news/homeland_security/homeland_security.htm>*. Accessed May 18, 2002.
USCG 2002b	U.S. Coast Guard (USCG). 2002. Coast Guard Missions. Available online: *<http://www.uscg.mil>*. Accessed May 1, 2002.
USCG 2002c	U.S. Coast Guard (USCG). 2002. Final Environmental Assessment for Replacement of Pier 36 Berth Alpha. Facilities Design and Construction Center (Pacific). March 2001.
USCG 2002d	U.S. Coast Guard (USCG). 2002. *U.S.* Coast Guard Final Programmatic Environmental Impact Statement for the Integrated Deepwater System Project. March 22, 2002.
USCG 2003a	U.S. Coast Guard (USCG). 2003. Programmatic Environmental Assessment of the U.S. Coast Guard Response Boat Acquisitions.
USCG 2003b	U.S. Coast Guard (USCG). 2003. Final Environmental Impact Statement for the Port Pelican LLC Deepwater Port License Application. August 2003.
USCG 2003c	U.S. Coast Guard (USCG). 2003. Draft Environmental Assessment of the El Paso Energy Bridge Gulf of Mexico L.L.C. Deepwater Port License Application. September 2003.
USDOT 1980	U.S. Department of Transportation (USDOT). 1980. Guidelines for Considering Noise in Land Use Planning and Control, Federal Interagency Committee on Urban Noise. June 1980.
USFWS 1993	U.S. Fish and Wildlife Service (USFWS). 1993. Seabeach Amaranth (*Amaranthus pumilus*). Source: Endangered and Threatened Species of Southeastern United States (The Red Bood) FWS Region 4 – As of 8/93. Available online: *<http://endangered.fws.gov/i/q/saq9z.html>*. Accessed January 20, 2004.
USFWS 1997	U.S. Fish and Wildlife Service (USFWS). 1997. Significant Habitats and Habitat Complexes of the New York Bight Watershed. Charlestown Rhode Island.
USFWS 2003	U.S. Fish and Wildlife Service (USFWS). 2003. Species Profile: sea turtle, hawksbill. Available online: *<https://ecos.fws.gov/species_profile/SpeciesProfile?spcode=C00E>*. Accessed September 2003.
USFWS undated	U.S. Fish and Wildlife Service (USFWS), Athens Field Office. Undated. Threatened and Endangered Species. Available online: *<http://athens.fws.gov/endangered.html>*. Accessed August 2003.
Waring et al. 2003	Waring, G.T., J.M. Quintal, and C.P. Fairfields (eds.). 2003. Draft U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessment-2002. Nation Oceanic and Atmospheric Administration Technical Memorandum NMFS-NE-XXX.

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APPENDIX A

INTERESTED PARTY LETTER

U.S. Department of Homeland Security

United States Coast Guard

Commandant
U. S. Coast Guard

2100 2nd Street, SW
Washington, DC 20593-0001
Staff Symbol: G-OPD
Phone: 202-267-2039
FAX: 202-267-4278

16475
SEP 30 2003

Dear Interested Party:

The U.S. Coast Guard (USCG) is announcing its intent to prepare Environmental Assessments (EA) of the establishment of Maritime Safety and Security Teams (MSSTs) (one each) in Staten Island, NY and St. Mary's, GA. Preparation of the EAs is being conducted in accordance with the National Environmental Policy Act (NEPA) of 1969 (Section 102[2][c]) and its implementing regulations at 40 Code of Federal Regulations, Part 1500. These two MSSTs are being established to increase the USCG's ability to protect critical domestic ports and the U.S. Maritime Transportation System from illegal activity, sabotage, and other subversive acts including terrorism. While the MSSTs' operations will closely parallel USCG traditional port security operations, they also will provide complementary, non-redundant capabilities that will be able to close significant readiness gaps in our nation's strategic ports. Should the USCG stand up MSSTs in other critical ports around the country, additional NEPA analysis would be prepared for any future ports, as necessary.

The EAs will address the overall environmental impacts of establishing and operating each of the two MSSTs including the implementation of minor shore side infrastructure support to accommodate MSST personnel and equipment and the operation of six new Response Boats-Homeland Security (RB-HS) in each of the above-mentioned ports. Public input is important in the preparation of these EAs. Your concerns and comments regarding the implementation of these MSSTs and their possible environmental impacts are important to the USCG. You are invited to submit comments by October 20, 2003 using only one of the following means:

(1) By mail to:
Headquarters, U.S. Coast Guard
Captain Kevin Quigley
Chief, Office of Defense Operations (G-OPD)
Room 3121
2100 Second Street, SW
Washington, DC 20593

(2) Or, by fax to LCDR Kirk Schilling at (202) 267-4278
(3) Or by E-mail to *KSchilling@comdt.uscg.mil*

In choosing among the above means for submitting your comments, please give due regard to the difficulties and delays associated with delivery of mail through the U.S. Postal Service to Federal facilities. Written comments should include your name, address, and the specific port(s) to which the comment relates. The USCG will consider all comments received by October 20, 2003 in the development and completion of each EA.

Sincerely,

K. G. QUIGLEY
Captain, U.S. Coast Guard
Chief, Office of Defense Operations

ENVIRONMENTAL ASSESSMENT (EA) OF THE
ESTABLISHMENT OF MARITIME SAFETY AND SECURITY TEAMS (MSSTS)

New York, NY and St. Mary's, GA

Background

On November 25, 2002, the President signed into law the Homeland Security Act of 2002, P.L. 107-296, which creates the new Department of Homeland Security (DHS). Under this legislation, the USCG was transferred from the Department of Transportation to the DHS. In the wake of the events of September 11, 2001, emerging threats to the U.S. homeland has prompted an increased USCG focus on protecting domestic ports and the U.S. Maritime Transportation System from warfare and terrorist threats.

Maritime Safety and Security Teams

The USCG's answer is Maritime Safety and Security Teams (MSSTs). MSSTs are specifically organized, trained, and equipped to counter current and emerging threats to our nation's seaports. While other solutions are underway or being considered, the stand-up (establishment and operations) of the MSSTs at New York, NY and St. Mary's, GA are the actions that will be considered in these Environmental Assessments.

Each MSST will consist of 71 active duty personnel and 33 reserve personnel (these will consist of mostly reassigned personnel although there may be some new personnel as well), support buildings for personnel, and six Response Boats-Homeland Security (RB-HS) for each MSST. All six RB-HSs can, but will not necessarily, be operating at once. RB-HSs are 25-foot boats with outboard engines. They are highly maneuverable, capable of quickly reaching and sustaining high speeds (in excess of 40 knots), and can carry three crewmembers, plus an additional seven passengers. The RB-HSs are equipped with radar, depth sounder, differential Global Positioning System (DGPS), and defensive weaponry. When not in use, RB-HSs are capable of being placed on trailers.

MSSTs will normally conduct operations in protected waters such as a harbor or port. Our seaports are a vital hub and central to our nation's defense and economic security. Considerable critical infrastructure, and thousands of commercial and military ships located in our seaports move over 90 percent of America's foreign trade and military cargo to overseas locations. MSSTs will provide a dedicated force focused on mastering the advanced tactics, techniques and procedures associated with port security and defense missions in ports that are also engaged in legitimate commercial and recreational activities. These advanced skills and specialized capabilities required the development of a new capability, the MSST, which is specifically organized, trained, and equipped to counter current and emerging threats to our nation's seaports. They will operate with, and be supported by, both military and civilian government organizations, commercial, and non-government entities. MSSTs will be transportable via land transportation, USCG cutter, and USCG or other military aircraft worldwide. MSST personnel will be employed for operations consistent with training and readiness. In summary, the MSST will:

- Augment a USCG Group or the Captain of the Port (COTP) as a force multiplier; enhancing port safety and security, and law enforcement capabilities at economic or military significant ports.
- Deploy for specific episodic events that require an increased security posture for a limited duration. Transport all equipment and material via aircraft or ground or cutter transportation. Exercise security contingency plans in major ports. Detachments may also augment COTPs as Sea Marshals and deploy for port familiarization and training.

Location

Each MSST will be located at or near an existing USCG Group in the vicinity of a regionally significant economic or military port. The criteria used to select these ports and the priority in which the MSSTs are stood up is based on a number of factors, including, but not limited to, the level of current protection, the amount and type of cargo and the concentration of critical Department of Defense facilities. Additional ports are currently being evaluated.

Co-locating MSSTs with or near existing USCG Groups will maximize the use of existing infrastructure (i.e., electric, water and communications) and already assigned personnel, although in some cases, additional personnel may be necessary. The use of existing facilities will be maximized as much as possible to house MSST personnel during working hours (e.g., leasing existing facilities, renovating existing buildings, etc.). We anticipate that the housing for MSST personnel will be leased and based in the nearby area.

Staten Island, NY

The NY MSST would be homeported at Station New York and personnel would be located in a National Park Service building at Fort Wadsworth. The MSST would include the implementation of minor shore side infrastructure support to accommodate MSST personnel and equipment. The RB-HS would operate in New York Bay, Newark Bay, Jamaica Bay, Arthur Kill, Kill Van Kull, the Hudson River to West Point, and the East River to Long Island Sound.

St. Mary's GA

The St. Mary's MSST would be homeported in St. Mary's GA. The MSST would include the implementation of minor shore side infrastructure support to accommodate MSST personnel and equipment. The RB-HSs and personnel would located at the St. Mary's Police Station at 563 Point Peter Road. The RB-HS would operate in the mouth of the St. Mary's River and Kings Bay.

APPENDIX B

INTERESTED PARTY MAILING LIST

MSST 91108 – STATEN ISLAND, NY
INTERESTED PARTY MAILING LIST

Dr. Willie Taylor
U.S. Department of the Interior
Office of Environmental Policy and Compliance
Main Interior Building, MS 2340
1849 C Street, NW
Washington, DC 20240

Mr. A. Forester Einarsen
NEPA Coordinator
U.S. Army Corps of Engineers
Office of Environmental Policy (CECW-AR-E)
20 Massachusetts Avenue
Washington, DC 203141000

Ms. Anne Norton Miller
Director
U.S. Environmental Protection Agency
Office of Federal Activities
Federal Liason Division, 2251-A
401 M Street, SW
Washington, DC 20460

Ms. Nancy Gloman
Director
U.S. Fish and Wildlife Service
Division of Endangered Species
4401 N. Fairfax Drive, Room 420
Arlington, VA 22203

Ms. Susan Essig
Chief, Division of Habitat Conservation
U.S. Fish and Wildlife Service Region 5
300 Westgate Center Drive
Hadley, MA 010359589

Ms. Patricia A. Kurkul
Regional Administrator
NOAA Fisheries
Northeast Regional Office
1 Blackburn Drive
Gloucester, MA 019302298

Mr. Robert Hargrove
Environmental Review Coordinator
U.S. Environmental Protection Agency
Region 2
290 Broadway
New York, NY 100071866

Mr. Joseph F. Picciano
Acting Regional Director
Federal Emergency Management Agency
Region 2
26 Federal Plaza
New York, NY 10278

Honorable Charles Schumer
Senator
State of New York
313 Hart Senate Office Building
Washington, DC 20510

Honorable Hillary Clinton
Senator
State of New York
476 Russell Senate Office Building
Washington, DC 20510

Honorable Vito Fossella
Congressman
State of New York, 13th District
1239 Longworth House Office Building
Washington, DC 205150005

Honorable George E. Pataki
Governor of New York
State Capitol
Albany, NY 12224

Ms. Bernadette Castro
State Historic Preservation Officer
New York Parks, Recreation & Historic Preservation
Agency Building #1, Empire State Plaza
Albany, NY 12238

Mr. George Stafford
Director of Coastal Resources
New York Division of Coastal Resources
41 State Street
Albany, NY 12231-0001

Honorable Michael R. Bloomberg
Mayor
New York City
City Hall
New York, NY 10007

Mr. Raymond R. Kelly
Police Commissioner
New York Police Department
One Police Plaza
New York, NY 10038

Mr. Joseph J. Esposito
Chief of Department
New York Police Department
One Police Plaza
New York, NY 10038

Captain Kevin McGinn
Commanding Officer
New York Police Department
123rd Precinct
116 Main Street
Staten Island, NY 10307

Deputy Inspector Patrick Conry
Commanding Officer
New York Police Department
122nd Precinct
2320 Hylan Boulevard
Staten Island, NY 10306

Mr. Nicholas Scoppetta
Commissioner
Fire Department of New York
1 Chase Manhattan Plaza
New York, NY 10113

Deputy Inspector Gerald Deickman
Commanding Officer
New York Police Department
120th Precinct
78 Richmond Terrace
Staten Island, NY 10301

Ms. Iris Weinshall
Commissioner
New York City Department of Transportation
40 Worth Street
New York, NY 10113

Mr. Christopher O. Ward
Commissioner
New York City Department of Environmental Protection
59-14 Junction Blvd., 10th Floor
Flushing, NY 11373

Mr. Marc V. Shaw
Deputy Mayor for Operations
Mayor's Office for Intergovernmental Affairs
100 Gold Street, 2nd Floor
New York, NY 10038

Mr. Adrian Benepe
Commissioner
New York City Parks and Recreation
The Arsenal, Central Park,
830 5th Avenue
New York, NY 10021

Eastern Area Office
Poospatuck Reservation
P.O. Box 86
Mastic, NY 11950

VADM James D. Hull
Commander, Atlantic Area
U.S. Coast Guard
4000 Coast Guard Blvd
Portsmouth, VA 23703

RADM Vivien S. Crea
Commander, First District
U.S. Coast Guard
455 Commercial Street
Boston, MA 02109

Ms. Rachel Marino
U.S. Coast Guard
CEU Providence
300 Metro Center Blvd
Warwick, RI 02886

LCDR Robert Wilbur
U.S. Coast Guard
CEU Providence
300 Metro Center Blvd
Warwick, RI 02886

LCDR Dimitri Delgado
U.S. Coast Guard
Maritime Safety and Security Team 91106
120 New York Avenue
Staten Island, NY 10305

APPENDIX C

NEWSPAPER ANNOUNCEMENT

PUBLIC NOTICE

Environmental Assessment for Maritime Safety Security Teams (MSST) US Coast Guard

The United States Coast Guard (USCG) is announcing its intent to prepare an Environmental Assessment (EA) for the establishment of Maritime Safety and Security Team in New York, NY. Preparation of the EA's is being conducted in accordance with the National Environmental Policy Act (NEPA) of 1969 (Section 102 (2)(c) and its implementing regulations at 40 Code of Federal Regulations, Part 1500. The MSST is being established to increase the USCG's ability to protect critical domestic ports and the U.S. Maritime Transportation System from illegal activity, sabotage, and other subversive acts including terrorism. In additon to the NY MSST mentioned above, the USCG is planning to stand up additional MSSTs in other critical ports around the country. Additional NEPA analysis will be prepared for future ports as necessary.

The EAs will address the overall environmental impacts of establishing and operating the NY MSST including the implementation of minor shore side infastructure support to accommodate MSST personnel and equipment and the operation of approximately 6 new Response Boats Homeland Security (RB-HS). The RB-HSs would be homeported at Station New York and personnel would be located in a National Park Service building at Fort Wadsworth. The RB-HS would operate in New York Bay, Newark Bay, Jamaica Bay, Arthur Kill Van Kull, the Hudson River to West Point, and the East River to Long Island Sound. Public input is important in the prepatation of these EAs. Your concerns and comments regarding the implementation of the MSST and their possible envioronmental impacts are important to the USCG. You are invited to submit comments by October 31, 2003 using only one of the following means:

(1) By mail to: Headquarters, U.S. Coast Guard
Captain K.G. Quigley
Chief, Office of Defense Operations (G-OPD)
Room 3121
2100 Second Street, SW
Washington, DC 20593

(2) Or, by fax to LCDR Kirk Schilling at (202) 267-4278
(3) Or, by E-mail to KSchilling@comdt.uscg.mil

In choosing among the above means for submitting your comments, please give due regard to the recent difficulties and delays associated with delivery of mail through the U.S. Postal Service to Federal facilities.

Written comments should include you name, address, and the specific port(s) to which the comment relates. The USCG will consider all comments received by October 31, 2003 in the development and completion of each EA.

The following Notice of Availability was published in the *Staten Island Advance* on December 11, 2003.

Notice of Availability

Environmental Assessment and Draft Finding of No Significant Impact
Stand-up and Operations of the Maritime Safety and Security Team
New York, NY

Summary: The U.S. Coast Guard (USCG) announces the availability of the Environmental Assessment (EA) of, and Draft Finding of No Significant Impact (FONSI) for the Stand-up and Operations of the Maritime Safety and Security Team (MSST) New York, New York. The MSST will consist of six Response Boats-Small and 71 active duty and 33 reserve personnel. A pre-engineered Butler Building will be erected at Station New York. MSST personnel will be located in Building 120 on Fort Wadsworth. The MSST will normally conduct operations in New York and New Jersey Harbors. The MSST will escort vessels and maintain specific security zones. The EA evaluates the environmental and socioeconomic impacts of the Proposed Action. The Draft FONSI records the USCG's determination that the Proposed Action would have no significant impact on the environment. For further information contact: Headquarters, U.S. Coast Guard Captain Kevin Quigley, Chief, Office of Defense Operations (G-OPD), Room 3121, 2100 Second Street, SW, Washington, D.C., or LCDR Kirk Schilling by fax at (202) 267-4278 or by email at KSchilling@comdt.uscg.mil. To view and download the EA and Draft FONSI, please go to <http://www.uscg.mil/systems/gse/gsec-3H.htm> and scroll down the left side to: NEPA Document for MSST New York.

APPENDIX D

RESPONSES TO INTERESTED PARTY LETTER AND AGENCY CORRESPONDENCE

NOAA Fisheries

From: Schilling, Kirk LCDR [KSchilling@comdt.uscg.mil]
Sent: Tuesday, October 21, 2003 9:58 PM
To: 'Kristen Koyama'
Cc: Kelley, Kebby; Lang, Joan; Melissa Ellinghaus (E-mail)
Subject: RE: MSST EA comments

Thank you for the update.

v/r Kirk

-----Original Message-----
From: Kristen Koyama [mailto:Kristen.Koyama@Noaa.Gov]
Sent: Friday, October 17, 2003 3:21 PM
To: Schilling, Kirk LCDR
Subject: MSST EA comments

LCDR Schilling,

The National Marine Fisheries Service (NOAA Fisheries) Northeast Regional Office is preparing comments on the notice of intent to prepare EAs on the establishment of the MSST in Staten Island, NY. However, we are attempting to coordinate with our Southeast Regional Office, as the other MSST will be within their region. I anticipate that we should be able to get the comments together relatively quickly; however, we will most likely not have them in by the requested deadline of Monday, October 20. We appreciate your understanding. Thank you for the opportunity to comment on this notice.

Regards,
Kristen Koyama

--
Kristen Koyama
NMFS Northeast Regional Office
Protected Resources
(978) 281-9328 x6531
(978) 281-9394

Headquarters, U .S. Coast Guard
Captain Kevin Quigley
Chief, Office of Defense Operations (G-OPD)
Room 3121
2100 Second Street, SW
Washington, DC 20593

October 16, 2003

In reply to: New York MSST Deployment

Dear Captain Quigley:

In regards to your letter requesting comments on the Environmental Assessment of establishment of Maritime Safety & Security teams in New York Harbor. The New York City Police Department Counter Terrorism Bureau has reviewed all the information on the establishment & deployment of this unit to New York and have no negative comments on the deployment of MSST teams in New York Harbor.

If I can be or any further assistance, please feel free to contact my office.

Sincerely,

Michael A. Sheehan
Deputy Commissioner
Counter Terrorism
New York City Police Department

City of New York
Parks & Recreation

Alexander R. Brash, Chief
Natural Resource Group
1234 Fifth Avenue
New York, N.Y. 10029
Ph.: 212-360-2781
Fax: 212-360-1426
Alex.Brash@Parks.nyc.gov

October 20th, 2003

Captain Kevin Quigley
Headquarters, U.S. Coast Guard
Chief, Office of Defense Operations
Room 3121
2100 Second Street
Washington D.C. 20593

Dear Captain Quigley,

I am sure that all us here in New York City look forward to any additional help in addressing our security concerns, and indeed I am sure an increased Coast Guard presence will also prove to be helpful in other respects.

Foremost, we do not see the addition of six RB-Hss as having any significant impact on New York Harbor's environmental health. The only minor concerns we might have are:

- Ensuring the MSSTs familiarity and mutual cooperation with respect to this Agency's patrol boats when out in the harbor.
- Ensuring the MSSTs familiarity and mutual cooperation with respect to this Agency's research scientists when they are visiting the islands, bays, and salt marshes in the harbor on a regular basis to monitor the flora and fauna.
- In particular, this Agency, the National Park Service, the National Audubon Society and others are all quite invested in the Harbor Heron Program. This program aims at restoring and maintaining the colonial wading birds to roughly 12 islands in the harbor. Landing on these islands, or otherwise operating too near them between April and August may impact the birds' breeding success. Conversely an increased and sensitized USCG force in the harbor which helps deter other humans from disturbing the colonies would be of great benefit.
- Ensuring the sensitivity of USCG personnel to the impact of wakes on certain salt marshes, particularly those in the Arthur Kill, Jamaica Bay, and near Pelham Bay Park.

Aside from these concerns, which as I have noted we believe to be minor, we certainly look forward to an augmented USCG presence in the harbor. This Agency will always welcome any additional resources that will help USCG continue to work with, and serve, this Agency in a number of ways. Given that the City alone maintains and operates 14 miles of beaches, including Rockaway, Coney Island, Orchard, and the beaches along Staten Island, there are inevitably

numerous search and rescue incidents, and conflicts between bathers, jet skis, and boaters which the USCG has always helped with, and as mentioned, any additional enforcement surrounding the harbor's colonial wading bird colonies would also be quite welcome.

If you have any further questions, please do not hesitate to call.

Sincerely yours,

United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

November 24, 2003

Headquarters, U.S. Coast Guard
Captain Kevin Quigley
Chief, Office of Defense Operations (G-OPD)
Room 3121
2100 Second Street, SW
Washington, DC 20593-0001

Attention: Ms. Kebby Kelley and Lieutenant Commander Kirk Schilling

Dear Captain Quigley:

This responds to your letter of October 30, 2003, requesting information on the presence of endangered or threatened species in the vicinity of the proposed Maritime Safety and Security Team - New York Harbor/Hudson River/East River and Jamaica Bay area in Bronx, Kings, Nassau, New York, Richmond, Rockland, and Westchester Counties, New York. We understand that our New Jersey Field Office also has been contacted for an independent response.

The bald eagle (*Haliaeetus leucocephalus*), seabeach amaranth (*Amaranthus pumilus*), and piping plover (*Charadrius melodus*), Federally listed threatened species, are known to occur within the proposed project area. The U.S. Fish and Wildlife Service (Service) recommends that the project's environmental documents should, therefore, include an evaluation of the potential direct, indirect, and cumulative effects of specific project-related activities on the bald eagle, seabeach amaranth, and piping plover and/or their habitats, and include appropriate measures, if necessary, to protect these species and their habitats. When specific plans are identified, the plans and the results of the evaluation should be provided to this office to determine the need for further coordination or consultation pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended: 16 U.S.C. 1531 et seq.).

Except for the bald eagle, seabeach amaranth, piping plover, and occasional transient individuals, no other Federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area. In addition, no habitat in the project impact area is currently designated or proposed "critical habitat" in accordance with provisions of the Endangered Species Act. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of Federally listed and proposed endangered and threatened species in New York* is available for your information.

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the Endangered Species Act. This response does not preclude additional Service comments under the Fish and Wildlife Coordination Act or other legislation.

Federally listed endangered and threatened marine species, inclusive of the Federally listed endangered shortnose sturgeon (*Acipenser brevirostrum*), may be found near the project area. These species are under the jurisdiction of the National Marine Fisheries Service. You should contact Mr. Stanley Gorski, Habitat and Protected Resources Division, Area Coordinator, National Marine Fisheries Service, James J. Howard Marine Sciences Laboratory, 74 Magruder Road, Highlands, NJ 07732, for additional information (telephone: [732] 872-3037).

The New York State Department of Environmental Conservation (State) requests that you be advised that the peregrine falcon (*Falco peregrinus*), listed as endangered by the State of New York, is known to occur in the vicinity of the proposed project. The bald eagle is listed as threatened by the State of New York. The New York State Department of Environmental Conservation (State) contact for the bald eagle and peregrine falcon is Mr. Peter Nye, Endangered Species Unit, 625 Broadway, Albany, NY 12233 (telephone: [518] 402-8859). The seabeach amaranth is listed as endangered by the State of New York. The piping plover is listed as endangered by the State of New York. Mr. Dan Rosenblatt is the State contact for the piping plover; his address is the New York State Department of Environmental Conservation, Building 40, SUNY, Stony Brook, NY 11794 (telephone: [631] 444-0305). The New York State Department of Environmental Conservation contact for the seabeach amaranth is Ms. Jean Pietrusiak, New York Natural Heritage Program - Information Services, 625 Broadway, Albany, NY 12233-4757 telephone: [518] 402-8935).

For additional information on fish and wildlife resources or State-listed species, we suggest you contact the appropriate New York State Department of Environmental Conservation regional office(s).* and:

New York State Department of Environmental Conservation
New York Natural Heritage Program Information Services
625 Broadway
Albany, NY 12233-4757
(518) 402-8935

Since wetlands may be present, you are advised that National Wetlands Inventory (NWI) maps may or may not be available for the project area. However, while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes. Copies of specific NWI maps can be obtained from:

Cornell Institute for Resource Information Systems
302 Rice Hall
Cornell University
Ithaca, NY 14853
(607) 255-4864

Work in certain waters of the United States, including wetlands, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act, the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).*

If you require additional information or assistance please contact Michael Stoll at (607) 753-9334.

Sincerely,

Mark W. Clough

Acting For

David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at: http://nyfo.fws.gov/es/esdesc.htm.

cc: NYSDEC, Long Island City, New Paltz, and Stony Brook, NY (Environmental Permits)
NYSDEC, Stony Brook, NY (Attn: D. Rosenblatt)
NYSDEC, Albany, NY (Natural Heritage Program, Attn: J. Pietrusiak)
NYSDEC, Albany, NY (Endangered Species Unit, Attn: P. Nye)
NYSDEC, New Paltz, NY (Hudson River Fisheries Unit, Attn: K. Hatalla)
EPA, Div. of Environmental Planning & Protection, New York, NY
NMFS, Highlands, NJ (Attn: S. Gorski)
NMFS, Milford, CT (Attn: M. Ludwig)
COE, New York, NY

U.S. Fish and Wildlife Service
New York Field Office
3817 Luker Road
Cortland, NY 13045

To provide a timely response to future requests for endangered species comments in New York, please include the following in future inquiries:

1. A concise brief description of the project/action.

2. Name of the hamlet/village/city/town/county where the project/action occurs.

3. The latitude and longitude of the project/action, i.e : 42° 13' 28" / 76° 56' 30". If the project/action is linear, you may provide coordinates for both ends or just one near center.

4. A map showing the project/action location. Preferrably the map should be a U.S. Geological Survey quadrangle map (USGS Quad). You need only provide a copy of that portion where the project/action occurs. Please provide the name(s) of the USGS quadrangle.

   If providing only a portion, indicate where the portion would be located on the full quadrangle, i.e.

Providing the information above will assist us in responding to your needs.

If you require additional information please contact Michael Stoll at (607) 753-9334.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

DEC 1 2003

Headquarters, US Coast Guard
Captain Kevin Quigley
Chief, Office of Defense Operations (G-OPD)
Room 3121
2100 Second Street, SW
Washington, DC 20593

Re: Establishment of a Maritime Safety and Security Team (MSST) in Staten Island, NY

Dear Capt. Quigley:

This is in response to your letter dated October 30, 2003 in which the US Coast Guard (USCG) requested informal consultation in accordance with section 7 of the Endangered Species Act of 1973 (ESA), as amended, regarding the establishment of a Maritime Safety and Security Team (MSST) in Staten Island, NY. The letter indicated that the proposed activities will include shore-side infrastructure support at Fort Wadsworth, NY and operation of six Response Boats-Homeland Security (RB-HS) in various rivers and bays in the New York and New Jersey areas. The following species are protected under the ESA and are known to occur in the vicinity of the proposed activities:

Species	Status
Sea turtles	
Loggerhead (*Caretta caretta*)	Threatened
Kemp's ridley (*Lepidochelys kempii*)	Endangered
Leatherback (*Dermochelys coriacea*)	Endangered
Green (*Chelonia mydas*)	Endangered
Whales	
North Atlantic right (*Eubalaena glacialis*)	Endangered
Humpback (*Megaptera novaeangliae*)	Endangered
Fin (*Balaenoptera physalus*)	Endangered
Fish	
Shortnose sturgeon (*Acipenser brevirostrum*)	Endangered

The federally threatened loggerhead and endangered Kemp's ridley sea turtles are the most common sea turtle species in nearshore New York and New Jersey waters. The general trend is for sea turtles to migrate to the area in early summer (typically when water temperatures reach 11°C) and return south when the water temperature decreases around October-November. While habitat sampling has not recorded any sea turtles within the Upper New York Bay or the Lower

New York Bay, there has been little attention and few resources focused directly on determining the frequency and extent of sea turtle distribution within the Harbor Complex. Given this information, it is difficult to confirm the presence or absence of sea turtles in any areas within the Harbor Complex. Sea turtles are in New York waters in the warmer months and are known to inhabit shallow harbors and embayments. Therefore, it is reasonable to assume that sea turtles may inhabit the Upper and Lower New York Bays.

The waters off Long Island have also been found to be warm enough to support endangered green sea turtles from June through October. Endangered leatherback sea turtles are located in New York and New Jersey waters during the warmer months as well, although they tend to be more pelagic and do not frequent shallow harbors and bays. Concentrations of leatherbacks have been observed during the summer off the south shore of Long Island and off New Jersey. Leatherbacks in these waters are thought to be pursuing their preferred jellyfish prey.

Endangered North Atlantic right whales, humpback whales, and fin whales may also be found seasonally in New York and New Jersey waters. North Atlantic right whales have been documented in these waters from January through September. Humpback whales feed during the spring, summer, and fall over a range that encompasses the eastern coast of the United States. Fin whales are common in northeast waters, but usually occur in deeper offshore waters.

The endangered shortnose sturgeon is present in the Hudson River. In a mark-recapture study in the river, Bain et al. (2000) estimated that the adult shortnose sturgeon population size is approximately 61,057. The Hudson River appears to support the largest population and most individuals of this species. Shortnose sturgeon in the river are primarily healthy adults, which is indicative of an unexploited, long-lived fish population. The spawning site for this species in the Hudson is located slightly downstream of the Troy Dam in Albany. An overwintering site is believed to exist near Kingston for adults and further south near the Tappan Zee Bridge for juveniles. The summer habitat of this species extends in the river from Catskill, New York to northern New Jersey. As such, the area of the Hudson affected by the proposed MSST activities (up to West Point) includes both the juvenile winter habitat and the summer habitat of the species.

Because federally listed species may be present in the New York and New Jersey rivers and bays included in this action, these species and potential impacts to them must be addressed in the Environmental Assessment (EA). Some activities that should be considered include:

- Vessel transits, including high-speed operations
- Any increase in vessel traffic that may increase the potential for harassment of or collision with protected species. This includes not only the RB-HS boats, but any other USCG or non-USCG vessel traffic that may increase as a direct result of MSST requirements.
- Any dredging, pile driving, or construction activities that may take place in the water as part of the infrastructure support portion of the project
- Training activities or weapons tests that take place in the water

However, based on the information provided thus far, we cannot identify all potential effects on listed species. NOAA Fisheries can proceed with informal consultation once we receive the EA,

which should include more specific information about the activities that will take place as a result of establishing the MSST.

In addition, several marine mammal species including minke whales (*Balaenoptera acutorostrata*), gray seals (*Halichoerus grypus*), harbor seals (*Phoca vitulina*), harbor porpoises (*Phocoena phocoena*), and white-sided dolphins (*Lagenorhynchus acutus*) are common residents of New York and New Jersey waters. While these species are not protected under the ESA, all marine mammals receive protection under the Marine Mammal Protection Act of 1972.

We look forward to reviewing the EA for this project. If you have any questions about the above comments, or the section 7 consultation process in general, please contact Kristen Koyama at (978) 281-9328 ext. 6531.

Sincerely,

Mary A. Colligan
Assistant Regional Administrator for
Protected Resources

File Code: Section 7, USCG-New York

STATE OF NEW YORK
DEPARTMENT OF STATE
41 STATE STREET
ALBANY, NY 12231-0001

GEORGE E. PATAKI
GOVERNOR

RANDY A. DANIELS
SECRETARY OF STATE

December 24, 2003

LCDR K. Schilling
U.S. Coast Guard
2100 Second S5treet
SW Washington, DC 20593

F-2003-1011
U.S. Coast Guard, Establish and operate two Maritime Safety and Security Teams (MSST). Metropolitan NYC Region

Dear LCDR Schilling:

The Department of State has reviewed the information received on November 25, 2003 describing the above-referenced proposal.

The information provided indicates the proposed action is not one listed in the NYS Coastal Management Program as one likely to result in reasonably foreseeable negative effects to any coastal use or resource.

Therefore, it is not necessary for the Department of State to review this proposal pursuant to the consistency provisions of the federal Coastal Zone Management Act and the New York State Coastal Management Program.

If you have any questions or need any additional information regarding this matter, please contact Gary Haight at (518) 486-3047.

Sincerely,

William Feldhusen

William Feldhusen
Coastal Resources Specialist II
Consistency Review and Analysis Unit

NEW YORK STATE DEPARTMENT OF STATE
COASTAL MANAGEMENT PROGRAM
Federal Consistency Assessment Form

An applicant, seeking a permit, license, waiver, certification or similar type of approval from a federal agency which is subject to the New York State Coastal Management Program (CMP), shall complete this assessment form for any proposed activity that will occur within and/or directly affect the State's Coastal Area. This form is intended to assist an applicant in certifying that the proposed activity is consistent with New York State's CMP as required by U.S. Department of Commerce regulations (15 CFR 930.57). It should be completed at the time when the federal application is prepared. The Department of State will use the completed form and accompanying information in its review of the applicant's certification of consistency.

A. APPLICANT (please print)

1. Name: U.S. Coast Guard
2. Address: 2100 Second Street, SW Washington, DC 20593
3. Telephone: Area Code (202) 267 6034 (Ms. Kobby Kelley) Sr.Environmental Specialist
   (202)267 1054 (LCDR Kirk Schilling) Project Operations

B. PROPOSED ACTIVITY

1. Brief description of activity:

   4-6 small, high speed boats that will patrol Upper/Lower New York Harbor, East River to Long Island Sound, New Jersey harbor and "Kills" area on a 24/7 hour schedule.

2. Purpose of activity:

   To improve existing homeland port security in these areas.

3. Location of activity:

   See (1) above
   County | City, Town, orVillage | Street or Site Description

4. Type of federal permit/license required: none
5. Federal application number, if known: N/A
6. If a state permit/license was issued or is required for the proposed activity, identify the state agency and provide the application or permit number, if known: N/A

C. COASTAL ASSESSMENT Check either "YES" or "NO" for each of these questions. The numbers following each question refer to the policies described in the CMP document (see footnote on page 3) which may be affected by the proposed activity.

	YES	NO
1. Will the proposed activity result in any of the following:		
a. Large physical change to a site within the coastal area which will require the preparation of an environmental impact statement? (11, 22, 25, 32, 37, 38, 41, 43)	—	X
b. Physical alteration of more than two acres of land along the shoreline, land under water or coastal waters? (2, 11, 12, 20, 28, 35, 44)	—	X
c. Revitalization/redevelopment of a deteriorated or underutilized waterfront site? (1)	—	X
d. Reduction of existing or potential public access to or along coastal waters? (19, 20)	—	X
e. Adverse effect upon the commercial or recreational use of coastal fish resources? (9,10)	—	X
f. Siting of a facility essential to the exploration, development and production of energy resources in coastal waters or on the Outer Continental Shelf? (29)	—	X
g. Siting of a facility essential to the generation or transmission of energy? (27)	—	X
h. Mining, excavation, or dredging activities, or the placement of dredged or fill material in coastal waters? (15, 35)	—	X
i. Discharge of toxics, hazardous substances or other pollutants into coastal waters? (8, 15, 35)	—	X
j. Draining of stormwater runoff or sewer overflows into coastal waters? (33)	—	X
k. Transport, storage, treatment, or disposal of solid wastes or hazardous materials? (36, 39)	—	X
l. Adverse effect upon land or water uses within the State's small harbors? (4)	—	X
2. Will the proposed activity affect or be located in, on, or adjacent to any of the following:	YES	NO
a. State designated freshwater or tidal wetland? (44)	—	X
b. Federally designated flood and/or state designated erosion hazard area? (11, 12, 17,)	—	X
c. State designated significant fish and/or wildlife habitat? (7)	—	X
d. State designated significant scenic resource or area? (24)	—	X
e. State designated important agricultural lands? (26)	—	X
f. Beach, dune or barrier island? (12)	—	X
g. Major ports of Albany, Buffalo, Ogdensburg, Oswego or New York? (3)	—	X
h. State, county, or local park? (19, 20)	—	X
i. Historic resource listed on the National or State Register of Historic Places? (23)	—	X
3. Will the proposed activity require any of the following:	YES	NO
a. Waterfront site? (2, 21, 22)	—	X
b. Provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (5)	—	X
c. Construction or reconstruction of a flood or erosion control structure? (13, 14, 16)	—	X
d. State water quality permit or certification? (30, 38, 40)	—	X
e. State air quality permit or certification? (41, 43)	—	X
4. Will the proposed activity occur within and/or affect an area covered by a State approved local waterfront revitalization program? (see policies in local program document)	—	X

D. ADDITIONAL STEPS

1. If all of the questions in Section C are answered "NO", then the applicant or agency shall complete Section E and submit the documentation required by Section F.

2. If any of the questions in Section C are answered "YES", then the applicant or agent is advised to consult the CMP, or where appropriate, the local waterfront revitalization program document*. The proposed activity must be analyzed in more detail with respect to the applicable state or local coastal policies. On a separate page(s), the applicant or agent shall: (a) identify, by their policy numbers, which coastal policies are affected by the activity, (b) briefly assess the effects of the activity upon the policy, and, (c) state how the activity is consistent with each policy. Following the completion of this written assessment, the applicant or agency shall complete Section E and submit the documentation required by Section F.

E. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with the State's CMP or the approved local waterfront revitalization program, as appropriate. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program, or with the applicable approved local waterfront revitalization program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: LCDR K. Schilling

Address: U.S. Coast Guard 2100 Second Street, SW Washington, DC 20593

Telephone: Area Code (202) 267-1504

Applicant/Agent's Signature: [signature] Date: 10/22/03

F. SUBMISSION REQUIREMENTS

1. The applicant or agent shall submit the following documents to the New York State Department of State, Division of Coastal Resources, 41 State Street - 8th Floor, Albany, New York 12231.

   a. Copy of original signed form.
   b. Copy of the completed federal agency application.
   c. Other available information which would support the certification of consistency.

2. The applicant or agent shall also submit a copy of this completed form along with his/her application to the federal agency.

3. If there are any questions regarding the submission of this form, contact the Department of State at (518) 474-6000.

*These state and local documents are available for inspection at the offices of many federal agencies, Department of environmental Conservation and Department of State regional offices, and the appropriate regional and county planning agencies. Local program documents are also available for inspection at the offices of the appropriate local government.

APPENDIX E

ATLANTIC PROTECTED LIVING MARINE RESOURCES INITIATIVE (EXCERPT FROM FINAL ENVIRONMENTAL IMPACT STATEMENT)

The USCG's participation with NMFS and other agencies in enforcement of provisions of the following Federal statutes would continue.

- The Marine Mammal Protection Act (16 USC 1361, *et seq.*)
- The Endangered Species Act (16 USC 1536, *et seq.*)
- The Whaling Convention Act (16 USC, 916, *et seq.*)
- The Magnuson Fishery Conservation and Management Act of 1986, as amended (16 USC 1801, *et seq.*)

The USCG actively participates in enforcement of other Federal and international regulations that deal with protection of threatened or endangered species of marine animals and their critical habitats. Continued enforcement of these regulations results in numerous benefits for living marine resources.

In addition to the protective measures described above, the USCG would use current guidance for safe speed as described in the Inland and International Rules. Under these rules, "safe speed" is defined as "every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances". In determining "safe speed," mariners use the following factors: (1) the state of visibility; (2) the traffic density; (3) the maneuverability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions; (4) the presence of background light at night, such as from shore lights or from backscatter; (5) the state of the wind, sea, and currents, and the proximity of hazards; and (6) the draft in relation to the available depth of water. This guidance directs mariners to adjust speeds to accommodate hazards that they may encounter during the course of operation. The guidance emphasizes that whales, just like other hazards, require course and speed adjustments.

As described above, the USCG, under the No Action Alternative, would continue with current efforts to protect the marine environment. However, the No Action Alternative does not include a coordinated effort between all organizational components and across all Area and District areas of responsibility (AOR) to oversee and direct activities to protect the marine environment. In addition, the No Action Alternative does not have the organizational structure to evaluate and implement new limits on vessel and aircraft movements nor would a formal Conservation Program be adopted. Observations of protected species would be reported and individual animals would be avoided, but without any regimen or protocol to maximize effectiveness. Given the requirement for the USCG to effectively comply with all environmental laws, determine how it will respond to the July 1996 Biological Opinion (BO), and enhance its compliance with MOUs designed to encourage USCG protection of endangered species and marine mammals, the No Action alternative is not practical or reasonable. Nevertheless, the No Action alternative is analyzed in this DEIS to serve as a baseline that will allow decision makers and the public to compare the environmental effects of the No Action Alternative with the other alternatives.

3.2 Preferred Alternative: Adoption and Implementation of the USCG Atlantic Protected Living Marine Resources Initiative

The Preferred Alternative is the adoption of a formal USCG Atlantic Protected Living Marine Resources Initiative (the Initiative) which has two main components: the Internal Program and the Conservation Program. The Initiative is a mitigation plan that is composed of individual elements to protect and conserve living marine resources more effectively. The Preferred Alternative is an "umbrella" program that encompasses all organizational components of the USCG. The proposed undertakings are developed from recommendations in the Biological Opinions (BO) issued by NMFS in September 1995 and July 1996, the September 1995 USCG EA, and the comments received in response to the EA and DEIS. The implementation of the Initiative would enable the USCG to more effectively comply with environmental

laws and to fulfill the commitments made in MOUs while effectively fulfilling USCG missions. Beginning on 1 January 1997, the USCG would provide an annual progress report to jurisdictional agencies (*e.g.*, NMFS) on implementing the Initiative.

3.2.1 Internal Program

The USCG Internal Program is the first part of the proposed Initiative. This program consists of two distinct elements: operational directives and operating procedures.

Operational Directives

The Internal Program would use USCG directives to establish USCG policy and procedures that support the Conservation Program and protect living marine resources.

A USCG directive is a written communication that initiates or governs action, conduct or procedure. Directives promote consistency, continuity, planning, understanding, and teamwork, and ensure that delegation of authority is followed. Often, Districts will issue regionally appropriate directives to implement USCG policy or general procedure contained in a directive issued from USCG Headquarters. Within the USCG, directives are issued to do the following:

- Establish policy,
- Prescribe a method or procedure,
- Establish standards of conduct,
- Establish or change organizational structure,
- Delegate authority,
- Assign responsibility,
- Establish a form or report, or
- Revise, supplement or cancel a directive.

USCG directives can come in several different forms such as circulars, notices, instructions, regulations, orders, and handbooks. Each type of directive is designed for a particular situation. For example, an "Instruction" is a directive prescribing authority and/or containing information with continuing reference value or that requires continuing action. An instruction remains in effect until it is replaced or canceled by the originator or higher authority. A "Notice", while it has the same force as an Instruction, is a directive of a one time or brief nature which has a self canceling provision.

Under the Preferred Alternative, USCG Atlantic Area (LANTAREA) and District commands would use the Commandant Instruction on Protected Living Marine Resources Program as the basis for developing operating procedures for their respective areas and units (Appendix I). The Commandant's Instruction on the Protected Living Marine Resources Program (PLMRP) would be formally issued because it will provide all USCG commands with a written communication that initiates or governs action, conduct, or procedures, and it prescribes authority, contains information with continuing reference value, and requires continuing action. As an instruction, it would remain in effect until it is replaced or canceled by the Commandant. The USCG Atlantic Area (LANTAREA) and District Commanders would use this Instruction as the basis for the development of more specific operational directives for their respective areas and units discussed in the following paragraphs.

The interim protection programs currently in effect in the USCG Atlantic Coast Districts in the form of District Law Enforcement Bulletins (LEBs) and Instructions (see Appendices J and K) would be revised and adopted into formal Marine Mammal and Endangered Species Act Protection Programs for the Atlantic Coast area Districts (First, Fifth, and Seventh) and the LANTAREA. Guidelines developed for these programs would include requirements to provide (1) a description of areas of special interest, including designated critical habitat and marine sanctuaries (note: Environmental Sensitivity Index Maps have been developed by NOAA, USCG and/or cognizant state agencies for Area Contingency Plans, and are available at all USCG Marine Safety Offices), (2) enforcement procedures, (3) marine animal stranding response protocols, (4) operational control (OPCON) and monitoring responsibilities, and (5) procedures for the disposition of dead or injured protected species. Standardized forms for reporting boat collisions with marine animals, or entangled turtles or whales would be included, as well as the names and telephone numbers for stranding network personnel. Additionally, where USCG units assist in the salvage, rescue, or disposal of a marine mammal, they would be required to submit a letter report to the USFWS and/or NMFS with a copy to the appropriate District. LANTAREA and the Districts would conduct annual verification and updating of USCG procedures related to stranding and phone contacts at NMFS regional offices and stranding networks.

The USCG would complete and implement a Commandant Notice addressing "Endangered Species Act and Marine Mammal Protection Act Consultation on Response Activities". This Notice will require consultation with USFWS or NMFS when pollution response activities could affect species protected by ESA and/or MMPA, and will require changes to Area Contingency Plans to include special spill-response protocols to be used when operating in critical habitats or in proximity to where the spill has the potential to impact a potential resource. This Notice will apply to all USCG units including those in LANTAREA.

Enforcement

As reflected in the LEBs and Instructions, the USCG would refocus its enforcement of the ESA and the MMPA by formally adopting the enforcement guidance described in the First District Instruction, dated 1 July 1996, Prohibitions and Enforcement, section 2 (pages 7 through 10), the Fifth District LEB 20-96, section C, part 2 (pages 8 through 10), and the Seventh District Instruction 16214.5, dated 14 April 1995, section 6 (pages 6 through 8). This enforcement guidance would apply to the Atlantic Coast area Districts (First, Fifth, and Seventh) and the LANTAREA. In addition, these USCG Districts and LANTAREA would intensify their efforts to protect threatened and endangered species by engaging in "pulse operations" that focus enforcement activities on times when waterways are most heavily used (*e.g.*, holiday weekends when recreational boating increases). Pulse operations would be conducted based upon the availability of USCG resources. The availability would be determined by the Area and District Commanders and their staffs (*e.g.*, pulse operations focusing on ESA and MMPA enforcement might not be feasible while USCG resources are responding to emergencies such as the recent TWA flight 800 crash, a major spill such as the recent oil spill off Rhode Island, or during periods of increased illegal migration such as the Muriel boatlift from Cuba).

The USCG would formally implement the interim protective measure developed in the LEBs and Instructions and continue enhanced enforcement of the ESA and MMPA. USCG units would be directed to target significant violators or those vessel operators that act in a manner that may result in injury or harassment of protected species (Appendices J and K). Educating the public about proper boat handling techniques around whales, sea turtles, and manatees would be a fundamental part of the USCG-enhanced compliance efforts. Education would be conducted during outreach programs, such as boat safety training courses.

Lookouts

Standard operating procedures aboard USCG vessels include posting a lookout and identifying and avoiding objects in the water. This measure ensures the safety of the crew, minimizes potential vessel damage, and protects wildlife in the area. Operational directives to USCG vessels would be revised to specify that lookouts who have successfully completed marine mammal training would be posted during all emergency and non-emergency USCG transits made within 20 nm of shore. For example, trained lookouts would be posted during transits in all seasonal high-use areas; areas of known whale concentrations; and critical habitats in Cape Cod Bay, the Great South Channel, and in the calving grounds off the Florida coast and other special areas off Florida and Georgia that are delineated in the conservation recommendations of the 15 September 1995 BO. Exceptions would be made during periods of low visibility (*e.g.*, dense fog or night travel) when posting a lookout would be ineffective. Operational directives to USCG operational commanders would be revised to clearly state that marine mammal training is applicable to bridge watch personnel and boat crews.

Training

To obtain NMFS curriculum certification, the USCG would provide NMFS with the current classroom marine mammal identification training course (Appendix L). After obtaining certification, the Districts would use the course to train lookouts and the USCG would work with NMFS to provide copies to interested organizations, agencies, and individuals. It is expected that training of all lookouts would be completed within one year of curriculum certification.

The USCG would work with NMFS, USFWS, and the established Recovery Plan Implementation Team for each species to develop and implement a field training program that would augment the classroom marine mammal training course. Spotting whales, manatees, and turtles, and maneuvering around them is an acquired skill that is developed through education and experience. Periods of normal onboard duty would be used to conduct field training for sighting techniques, identification, and common behavioral patterns of endangered whales and other species as they are encountered during operations. Cross-agency training programs would also help to increase awareness of the marine environment and its inhabitants. In turn, wildlife observation skills would be enhanced and potential for collisions with wildlife would be minimized.

The USCG would train VTS and Group personnel regarding endangered species in their AOR so that USCG personnel can issue, in a timely manner, NAVTEX and Notices to Mariners when sightings of endangered species are reported in addition to the standard notices described in the No Action Alternative. This training would require a detailed NMFS-developed protocol and information on which species pose a risk of collision or require exclusion zones.

Speed

Operational directives to USCG vessel commanding officers and coxswains have been revised — as interim protective measures — to clearly state that, for non-emergency transits, a speed standard would be followed. Implementation of the Initiative would formally adopt this protective measure. During non-emergency operations, vessels transiting critical habitats, high-use areas, and migratory routes would use a speed that allows the lookout to see and report whales and other endangered or threatened species in a timely manner to allow the vessel to vary course and speed to reduce the potential for a strike. If a whale is spotted, USCG vessels would avoid approaching the whale, and would utilize a speed and course

necessary to permit the vessel to open the distance from the whale or to allow the whale to successfully evade the vessel. Observations by researchers have indicated that right whales can travel at speeds of 5 kt; thus, vessel speeds of 5 kt or less could allow a right whale to successfully evade a vessel. Unless and until another whale species is positively identified, the USCG would treat any large whale sighted as a right whale.

The operational guidance for vessels should use language that mariners are familiar with, understand, and accept by convention. In Inland and International Rules, "safe speed" is defined as "every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances." In determining "safe speed," mariners use the following factors: (1) the state of visibility; (2) the traffic density; (3) the maneuverability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions; (4) the presence of background light at night, such as from shore lights or from backscatter; (5) the state of the wind, sea, current, and the proximity of hazards; and (6) the draft in relation to the available depth of water. The guidance should also reflect that mariners recognize that speeds must be adjusted to accommodate hazards that they may encounter during the course of operation. The guidance emphasizes that whales, just like other hazards, require course and speed adjustments that may include reducing speed. Terms such as "slow safe speed" and "slowest safe speed," which are used in the BO, have been interpreted for USCG vessel operators (Appendix T) as an interim protective measure who, like other U.S. and foreign-flag mariners, must operate their vessels following the International Rules or Inland Rules. Practical impediments to using specific speed limits include the fact that the "clutch-in speed" of vessels varies. For example, most 110-ft USCG patrol boats "clutch in" at 9 knots. For this reason, a safe speed standard, rather than a strict nautical-mile-per-hour standard, is appropriate.

In response to the 22 July 1996 BO, the USCG worked with NMFS to develop appropriate speed guidance to comply with that portion of the reasonable and prudent alternative that addresses speed and issued that guidance on 15 August 1996. The USCG interim vessel speed guidance which was issued on 15 August 1996 is as follows: To avoid a collision with a whale during the course of normal operations, USCG vessels transiting critical habitat, migratory routes and high-use areas shall use extreme caution, be alert, and reduce speeds, as appropriate. Appropriate reduced speeds should be based on the factors identified in Rule 6 (Safe Speed) of the International/Inland Navigation Rules (COMDTINST M16672.2C). Additional reductions in speed should be considered when a whale is sighted or known to be in the immediate vicinity or within 5 nm of the vessel. In these situations, vessels shall use those courses and speeds as appropriate, yet navigationally prudent, to avoid a collision with a whale, clear the area and, if necessary, reduce speed to the minimum at which the vessel can be kept on course or come to all stop (Appendix T).

Approach Distance

Until such time as NMFS can establish a detailed protocol regarding approaches to whales, operational directives developed as an interim protective measure in response to the 22 July 1996 BO specify that USCG vessels would maintain a safe minimum distance of 500 yd from right whales. In addition, unless another whale species is positively identified, any large whale would be considered and treated as a right whale. The USCG will also maintain a minimum distance of 100 yards from all whale species as another protective measure to avoid accidental interactions with whales. Adjustments to these distances would be made if the USCG is assisting in the rescue of a protected species, including right whales, or performing its duties to enforce the ESA and MMPA. In response to the Reasonable and Prudent Alternative (RPA) discussed in the 22 July 1996 BO, the USCG, after obtaining NMFS approval, issued the interim approach guideline to all USCG vessels (Appendix M)

Notices

The USCG would notify mariners by publishing and broadcasting seasonal notices to all mariners advising caution in endangered or threatened species critical habitat. If a threatened or endangered whale is spotted and reported, USCG would notify other vessels in the vicinity of the whales via VHF radio and advise those vessels to proceed through the area with caution. One disadvantage of such notices is that some people may use those notices to locate whales for closer viewing. The USCG would participate in NAVTEX posting of right whale locations and other whale and turtle concentrations in the southeast and the northeast and investigate expanding NAVTEX to cover all areas of the Atlantic coast.

Charts

The USCG would plot critical habitat and marine sanctuary boundaries on locally held unit navigational, aeronautical, and law enforcement working charts. This procedure would alert the crews of USCG vessels and aircraft to sensitive areas and locations where encounters with wildlife are likely, thereby assisting crews in avoiding harmful interactions with protected species and habitats.

Operating Procedures

The Internal Program's operating procedures for USCG vessels and aircraft in the Atlantic area is designed to prevent, to the maximum extent possible, harmful interactions with protected living marine resources. The operating procedures would allow USCG personnel to conduct mission-fulfilling activities such as marine environmental protection, search and rescue, law enforcement, vessel traffic services, and marine safety while helping to avoid harmful interactions of USCG vessels and aircraft with protected living marine resources.

The USCG would provide guidance and directions to USCG vessels and aircraft during non-emergency operations, when transiting or overflying marine sanctuaries, critical habitats, and areas of intermittent protected species concentrations (*e.g.*, nesting areas, seasonal high-use areas, migratory routes). Guidance would be issued as USCG directives (*e.g.*, by message or Commandant Notice or Commandant Instruction). The areas of intermittent protected species concentrations, such as bald eagle nests and cetacean feeding areas, would be identified during informal consultation with regional USFWS and NMFS offices. (Note: emergency operations are operations for which rapid response is required such as SAR to avoid the loss of life and property, urgent law enforcement incidents, and urgent matters of national security as defined by operational commanders on a case by case basis.)

In addition to the operating procedures mentioned above, both USCG vessels and aircraft would avoid, whenever possible, sensitive pinniped (seal) rookeries two hours before and after low tide. When passing a haul-out site, vessels and aircraft would use appropriate speeds and increase distance altitude if animals appear to be startled. None of the five species of pinnipeds found in Atlantic waters along the United States is endangered or threatened. This measure would be implemented once NMFS has exercised its authority to protect sites that are very sensitive to vessel or aircraft traffic.

Vessels — The USCG would continue to post a lookout. Posting a lookout and identifying and avoiding objects in the water are standard operating procedures aboard USCG vessels of all sizes. This measure ensures the safety of the crew, minimizes vessel damage, and protects wildlife in the area. The Initiative additionally proposes that the USCG would post lookouts who have successfully completed marine mammal training. These lookouts would be posted during all transits, both emergency and non-

emergency, that occur within 20 nm of shore. This would be in addition to posting lookouts during transits in all high-use areas, areas of whale concentrations and critical habitats in Cape Cod Bay, the Great South Channel, and in the calving grounds off the Florida coast and other special areas off Georgia and Florida that are delineated in the conservation recommendations of the 15 September 1995 BO. Exceptions would be made for periods of low visibility such as dense fog or night travel when this practice would be ineffective. During non-emergency operations, vessels transiting critical habitats, high-use areas, areas of known whale concentrations, and migratory routes would be directed to use extreme caution and be alert for marine animals. If a whale is sighted, vessels would (1) give whales a wide berth, (2) use the speed and approach distance protocols developed in consultation with NMFS, per the 22 July 1996 BO, to reduce the possibility of a whale strike, and (3) notify all vessels (USCG and non-USCG vessels) in the vicinity about the locations of whales via VHF radio, and direct them to proceed through the area with caution (operational security measures may require not disclosing the location of the vessel or aircraft, therefore the vessel or aircraft would relay information to a USCG shore facility that would then issue the notification). USCG vessels in the vicinity of sea turtle nesting beaches primarily located in the Seventh USCG District AOR would use extreme caution during April through October, the months when females are abundant just offshore.

As stated previously, USCG vessels would maintain a safe minimum distance of 500 yd from right whales. In addition, unless another whale species is positively identified, any large whale would be considered and treated as a right whale. The USCG also would maintain a distance of 100 yards from all whale species as another protective measure to avoid accidental interactions with whales. Adjustments to these distances would be made if the USCG is assisting in the rescue of an endangered whale, including right whales, or performing its duties to enforce the ESA and MMPA. The USCG approach distance guidance is an interim protective measure which would be adjusted to take into account any NMFS promulgated approach distance regulation (Appendix X).

Aircraft — Pursuant to the guidance in the Air Operations Manual, Commandant Instruction 3710.1., aircraft must maintain an altitude of at least 3000 ft when flying over wildlife habitat. The USCG will modify the Air Operations Manual to bring it in line with current Federal Aviation Regulations (FAR) and the USCG will comply with whatever altitude restrictions are in place (note: NMFS has proposed a 1500 ft protective altitude for northern right whales at 61 Federal Register 41116, published 7 August 1996). As specified in the FAR, USCG aircraft are prohibited from flying over sensitive areas at less than 2000 ft, unless engaged in emergency operations such as an emergency SAR, law enforcement, or spill response operation. At the current FAR altitude of 2000 feet, like the 3000 ft current altitude guidance, the momentary disturbance of marine mammals, turtles, and birds is expected to be negligible. However, during some USCG operations, particularly SAR missions and missions which require surveillance and identification of vessels, it may be necessary to fly below 2000 ft, and often below 500 ft. Such operations have the potential to disturb cetaceans, birds, and mammals. Because low-altitude flying is dangerous for the aircraft and crew, this altitude is maintained for the minimum time necessary to complete the objective of the mission and aircraft time at low altitudes would be limited. The operational impact of directing aircraft to maintain an altitude of 2000 ft in offshore critical habitats and high-use areas except in emergency missions is that more vessels will be required to patrol those areas because the aircraft's capability to identify vessels is diminished. Therefore, aircraft guidance would be written to indicate that a 2000 ft altitude would be maintained in the critical habitat (except during those portions of non-emergency missions requiring surveillance and identification of vessels) wherever possible.

USCG aviation will continue to enhance and update flight charts with regard to wildlife habitat. Most, if not all, USCG aviation charts are approved by the Federal Aviation Administration. These charts include information regarding sensitive areas, such as wildlife reserves. The usefulness of these charts varies, but

most are effective for between 3-6 months. This rapid update ensures accurate charts which promote flight safety. During this regular update, wildlife areas also are updated.

Each air station operations center also maintains a chart depicting the local flying area. This chart is updated on a continuous basis, as changes occur. Operations center personnel would incorporate any pertinent information received from local agencies regarding wildlife areas. Such information would also be distributed directly or through the chain of command, including support organizations such as the USCG Civil Engineering Unit.

Mission Impacts of Operational Directives

Formal restrictions on USCG vessel speeds, whale approach distances, and USCG aircraft altitude may result in major impacts on the USCG's ability to perform its missions. For example, limiting vessel speeds and approaches to large marine mammals will likely detract from the USCG's ability to conduct fisheries enforcement, particularly in areas such as the northwest Atlantic where the closed fisheries areas overlap with the designated critical habitat. This decrease in fisheries enforcement may lead to a rise in violations that would place fisheries resources at risk. Similarly, requiring USCG vessels to travel more slowly will increase the time needed to perform all missions or decrease the time available to perform those missions. Overall, implementing the Initiative may lead to the need to extend the time existing personnel and equipment are employed. Increasing the average work week of USCG personnel could result in a decrease in the effectiveness of overtaxed personnel and equipment. As an indication of potential adverse consequences, the USCG recently decreased the average work week for USCG stations from an average of 90 hours to an average of 68 hours by internally reorganizing and reassigning 500 personnel. It will prove difficult if not impossible to maintain a reasonable average work week if additional hours are needed to implement the Initiative.

Presently, the USCG has made a qualitative determination (based on quantitative estimates - see Appendix W) that implementing the Initiative will have an overall negative impact on USCG operations. Actual quantification of the Initiative's impacts will require establishing and implementing a program to monitor the internal and external impacts. The monitoring program will require at least two years to conduct - the development and implementation phase taking up to six months, the monitoring phase taking at least one year, and the analysis phase taking approximately six months. The monitoring program would measure the impact on the use of USCG resources (*e.g.*, measurements would include the resource hours currently measured in the abstract of operations reporting system that will indicate the amount of time various USCG assets perform their missions) as well as the impact on environmental resources (*e.g.*, the USCG would continue to provide NMFS with data and obtain NMFS assessment of the impacts on marine resources based on their stock assessments and takings data). The analysis phase will provide the USCG the opportunity to reassess the effectiveness and necessity of the various protective measures and determine if adjustments are necessary, whether those adjustments require reinitiation of consultation, and whether the monitoring period should be extended.

3.2.2 Conservation Program

The Conservation Program, which would help promote the conservation of protected living marine resources, consists of procedures involving other USCG activities, including interaction between USCG personnel, other Federal and state entities, and the public, which would help promote the conservation of protected living marine resources.

Sea Partners

Sea Partners Program is a program that was instituted to educate communities at large in developing awareness of marine pollution issues and improving compliance with marine environmental protection laws and regulations. Since 1994 the Sea Partners program has conducted over 4,800 activities involving 20,500 contact hours with the public. This has been done by USCG reservists who have been assigned to each of the 47 USCG Marine Safety Offices located in port communities throughout the nation. The Sea Partners Program provides educational messages on 1) the effects of oil, hazardous chemicals, waste and debris on the marine environment, 2) how marine environmental protection laws and regulations apply to various marine users, and 3) various ways groups and individuals can take action to protect the environment. The Sea Partners Program has targeted a wide range of audiences, including state, local and Federal officials, merchant mariners, offshore industry personnel, ferry operators, recreational boaters, sport and commercial fisherman, seafood processors, local business owners, marina operators, students, scouts, and teachers. Through the Sea Partners program, the USCG has been able to launch a public education and outreach program with the potential to make substantial contribution to protecting the marine environment, and at the same time, has broadened USCG Reserve training opportunities to enhance military readiness and ability to respond to contingencies. The program has been funded by the Department of Defense (DOD) Civil-Military Program during fiscal years 1994-1996 due to its reserve training value, however, for Fiscal Year 1997 the funding for this program was dropped by DOD. The USCG will attempt to regain funding for this program because the service recognizes the merits of the program in educating the public on marine environmental issues. The USCG has included sea turtle conservation information in the Program outreach material and did anticipate incorporating whale and other protected species conservation information in the program as well.

Training/Education of Non-USCG Personnel

The USCG would work with NMFS, recovery implementation teams, and other agencies to develop public information manuals on critical habitats, sanctuaries, and endangered species migration patterns for use by mariners.

- The USCG would include protected species awareness information in basic boat safety training provided to the public.

- The USCG would incorporate whale and turtle conservation information in the USCG Sea Partners marine pollution prevention education efforts (see text box).

- There are two established publications commonly used by mariners for voyage planning purposes. These publications are *Sailing Directions* and the *Coast Pilot*. Depending upon vessel size and areas of operation, most U.S. vessels would have one, if not both, of these publications on board. *Sailing Directions* are maintained and published by the Defense Mapping Agency (DMA) and the *Coast Pilot* is maintained and published by the National Oceanic and Atmospheric Administration (NOAA). The USCG would work with NMFS to develop an educational fact sheet describing critical habitats, whale concentrations and high-use areas, photos of whales, applicable regulations, and reporting procedures. The USCG would then work with DMA (DMA will become the National Imagery and Mapping Agency, NIMA, after 29 October 1996) and NOAA to include this information in *Sailing Directions* and the *Coast Pilot*. Another advantage to using these two publications is that foreign-flagged vessels transiting U.S. waters or operating in and out of U.S. ports carry these publications for voyage planning purposes. The USCG would provide input to the publications and inform NMFS of the status of conservation measures in an annual progress report. The annual progress report for 1996 would be submitted to NMFS by 1 January 1997.

- The USCG would work with NMFS to include protected species awareness information in Commercial Fishing Vessel examination and outreach programs.

- The USCG would work with NMFS to provide copies of USCG training curricula, that has been certified by NMFS, to other agencies (such as the U.S. Navy) organizations, and individuals.

It has been suggested that the USCG consider and adopt an alternative requiring whale species identification and critical habitat information, as well as all regulations applicable to the protection of right whales, be a part of the testing criteria for the public applying for USCG licenses to operate vessels (licensing alternative). Currently all U.S. deck officers are tested using the *Coast Pilot* and, in addition, holders of licenses authorizing extended international voyages may be tested on *Sailing Directions*. Examinations for deck officer licenses are maintained by the USCG National Maritime Center. When protected species information is included in the *Coast Pilot* and in *Sailing Directions*, the USCG would then test license applicants on that material. It should be noted, however, that once an individual is tested for a particular license, there is no requirement for retesting on renewals for that particular license. Therefore, in an effort to provide measures that contribute to the protection of endangered and threatened species, the USCG considers the placement of updated species and habitat information in voyage planning documents (*e.g.*, the *Coast Pilot* and *Sailing Directions*), which are used extensively by mariners throughout their careers, to be more significant and environmentally beneficial than only modifying testing for licenses.

It also has been suggested that as part of this licensing alternative, the USCG make compliance with regulations designed to protect threatened and endangered species a specific condition in the issuance of licenses for operation of vessels. The USCG does not excuse holders of licenses from compliance with any laws or regulations. If any vessel is found to be in non-compliance with the threatened and endangered species regulations, enforcement action would be taken.

Cooperation with Other Agencies and Recovery Teams

- The USCG would continue to actively participate in and support Regional Multi-Agency Recovery Implementation Teams, groups, and task forces .

- The USCG would maintain active membership in the Southeastern Implementation Team for the Recovery of the northern right whale and would continue to contribute to Southeastern United States (SEUS) early warning right whale system (Appendix N). A program of regular reconnaissance flights is one measure that is the subject of a Memorandum of Agreement (MOA) between the First USCG District and the NMFS (Appendix O). USCG aircraft from AIRSTATION Cape Cod currently perform overflights with NMFS personnel aboard. The USCG would continue to participate in the Southeast U.S. Recovery Implementation Team Early Warning System aerial survey program, which it has been part of since 1993. The USCG would work with the New England Implementation Team to address the feasibility of a similar multi-agency effort in the north Atlantic.

- The USCG Districts would develop MOUs with NMFS, the National Marine Sanctuaries Program, and the New England and Southeastern Regional Implementation Teams regarding proposals to develop and implement protective measures described in the Right and Humpback Whale Recovery Plans.

- The USCG would work with NMFS, the New England Right Whale Recovery Plan Implementation Team and the Southeastern Right Whale Recovery Plan Implementation Team regarding the development of a Mid-Atlantic Implementation Team and also consider expanding the areas covered by these teams to include the Mid-Atlantic. Specifically, the USCG would help develop a survey program, organize reports of whale sightings in the area, and develop a system to provide these sightings reports for broadcast.

- The USCG would participate with NMFS, USFWS, and Recovery Plan Implementation Teams to develop and implement a notification program to provide commercial vessels entering major U.S. Atlantic coast ports with timely information on current whale locations and critical habitats. The USCG would also cooperate in development of a plan to alert commercial traffic through port pilots, Captains of the Port, Vessel Traffic Services (where available), and others who are aware of ships' locations and port arrival times. The USCG would develop such a plan with NMFS by 1 January 1997.

- The USCG would continue to work with NMFS, USFWS, the Recovery Plan Implementation Teams, and other Federal agencies to determine the feasibility and applicability of new technology or research and development efforts in recovery strategies for endangered and protected species. The implementation teams and multi-agency efforts provide synergy of effort and resources and, most importantly, the teams can evaluate the potential impacts of any initiative on the marine environment.

- The USCG would continue to participate in the ESA Inter-Agency Working Group (Washington, DC.) currently headed by USFWS.

- The USCG would work with NMFS and USFWS to investigate facility lighting at all beachside USCG stations where turtle nesting occurs. The USCG would ensure, in consultation with NMFS and USFWS, that USCG facility lighting would not have a significant adverse impact on turtle nesting sites. Currently, in Florida, where most known USCG controlled turtle nesting sites occur on the Atlantic Coast, the USCG adheres to local Florida lighting ordinances for marine turtle protection. These ordinances are designed to protect turtles from the effects of artificial light. Additionally, in Florida, lighting is currently evaluated at USCG sites during USCG Environmental Compliance Evaluations (ECEs) (conducted on a three year rotational basis). Under the Preferred Alternative, the use of ECE analyses to examine lighting at beachside stations would be expanded where appropriate.

- On 25 January 1996 an MOA among the USCG, NMFS, the U.S. Navy, and the U.S. Army Corps of Engineers was finalized (Appendix U). The purpose of the MOA is to facilitate right whale conservation efforts along the Georgia and Florida coasts.

Controlling Non-USCG Vessels

A comment on the DEIS proposed that the USCG place environmental conditions or other constraints on the permitting process for regatta or marine events or deny permits for such events in or near whale habitat. Under the Act of April 28, 1908 (codified as 33 U.S.C. 1233), the USCG is authorized to issue regulations to promote the safety of life on navigable waters during regattas and marine parades. Although the USCG currently implements section 1233 through a permitting process, the law neither mentions nor mandates issuing permits as the necessary or appropriate procedure to use. Additionally, the authority for the current marine event permitting process relies on possible hazard to the safety of life on navigable

waters of the United States as the basis for exercising authority to regulate marine events. Currently, USCG policy allows issuing authorities to add conditions or deny permits for marine events based on consideration of environmental concerns (see Appendix V, copy of COMDTINST 16751.3A, Regattas and Marine Parades).

Under NEPA and the ESA, the USCG currently must evaluate each marine event requiring a permit on a case-by-case basis to determine whether the event will be held in or near environmentally sensitive areas (including areas where the presence of endangered/threatened species is likely). If the event is planned in an environmentally sensitive area possibly involving endangered species, the USCG must enter into consultation under Section 7 of the ESA and may have to prepare an EA or EIS depending on the possible impacts to the species. Under the current system, the permit applicant is notified of the results of the consultation and any NEPA documentation that must be completed. For those events requiring a marine event permit under the current procedures, the USCG uses the results of the Section 7 consultation to notify a marine event sponsor of protections for endangered/threatened whales or other protected species. The USCG cannot and will not issue a permit for an event that violates the ESA.

At present, the USCG is responding to the need to reduce the regulatory burden on the public and is considering changing the definition of marine events requiring a USCG permit which would result in fewer events to be permitted by the USCG. However, those events that would still require a USCG permit would continue to be reviewed on a case-by-case basis as described above. Further, the USCG would still require sponsors of certain types of events to notify the USCG of the event and thereby enable the USCG to provide a copy of the notice to other Federal, State, and local agencies regarding navigational and environmental concerns. The information provided would allow the USCG to determine whether or not a permit with appropriate conditions, navigation safety regulations, notice to mariners, or some combination, should be required for the event. These pending changes to the marine event permitting procedures are embodied in an Interim Rule and an announcement of availability of the associated EA published in the Federal Register on 26 June 1996 (61 FR 33027). In consideration of all comments received, the USCG is delaying a decision on the marine event permit procedural changes by postponing the effective date and by reopening and extending the comment period. The USCG will announce the dates by publishing a notice in the Federal Register. The USCG will examine the comments, including expert comments on possible interactions with endangered species, and decide whether to proceed with the pending rule, modify it, or withdraw it. The USCG will also consider the resulting increases in the information collection and reporting burden on additional event sponsors related to broadening the definition of when notice of an event or a permit application must be submitted to the USCG. The USCG will continue the ongoing IR consultation and NEPA processes and address these issues (see also Appendix Q, comment number 6).

The USCG has been asked to consider an alternative to promulgate minimum approach and/or distance regulations — pursuant to the ESA — to keep vessels and aircraft separated from protected species (see Appendix Q, comment number 10b). Specifically, the USCG has been requested to promulgate a 500-yard protection zone around every northern right whale, and a similar 100-yard rule for all other whales (Appendix P). The NMFS, which has the biologists and the resources needed to consider and develop these rules, has already undertaken this proposal and the USCG would continue to support the NMFS efforts to develop a workable protective distance rule. The USCG has specific responsibility for enforcing the ESA and, in the case of whales, NMFS has responsibility for giving marine species their protected status — by listing them as endangered or threatened — and by issuing protective regulations.

Unfortunately, there will be impediments to strict enforcement such as: (1) northern right whales cannot always be identified at 500 yards or, under some conditions of limited visibility, at 100 yards; and (2) distance estimates will be subjective (best estimate based on enforcement officer's training) with no electronic means to validate or support the infraction. Under the existing international regime,

enforcement would be limited to U.S. flag vessels — a small minority of vessels — beyond 3 nautical miles. The International Maritime Organization (IMO), the entity that addresses international vessel traffic and establishes voluntary guidelines has, because of its diverse membership that includes nations opposing any limitations on freedom of navigation or on whaling, been reluctant to address protective zones for whales. The Department of State is the lead U.S. agency for IMO initiatives, and the USCG would endeavor to use that forum (the IMO) to sensitize members of the international community to protect species and habitat.

As an example of this international effort, the USCG would work with other U.S. agencies (*e.g.*, Department of State, U.S. Navy) to develop proposals to designate critical habitat and high-use areas as Particularly Sensitive Sea Areas (PSSAs) and/or Areas To Be Avoided (ATBA) that protect species habitats beyond 3 nautical miles through the IMO.

PSSAs are defined as areas which need special protection through action by IMO because of their significance for recognized ecological or socioeconomic or scientific reasons and which may be vulnerable to damage by marine activity. It should be understood, however, that being designated as a PSSA does not mandate protective action, it is simply an identification of an area in which some IMO measure may have a positive effect.

An ATBA is defined as a routing measure comprising an area within defined limits in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties and which should be avoided by all ships or certain classes of ships. The USCG has created five ATBAs in U.S. coastal waters; each was designed to provide some measure of environmental protection. The common theme of the ATBAs, whether primarily for casualty prevention or environmental protection, is that they define a specific geographic area. There are no ATBAs that are intended to protect migrating marine life and it is difficult to envision how one might be instituted for that purpose without creating dangerous confusion in the marine community. The USCG would investigate whether seasonal ATBAs would meet the IMO criteria, and will initiate a Port Access Route Study (PARS) if it appears to be feasible.

There are also a number of other IMO adopted routing measures, for the most part traffic separation schemes (TSSs) associated with precautionary areas, which guide mariners in the approaches to many of our ports. They are intended to separate opposing streams of traffic and require vessels to operate with particular caution where they must converge. There is presently a TSS in the approach to Boston. Although there appears to be no way to completely avoid the whale habitat while entering the Port of Boston, the USCG would investigate whether any modification to the TSS would be beneficial. The USCG would conduct similar investigations in other areas of the coast considered to be high use areas or critical habitat and, if warranted, initiate a PARS to determine whether an IMO adopted routing measure would aid in the protection of endangered marine life.

To create or change a routing measure, the USCG is required by the Ports and Waterways Safety Act to consult with appropriate Federal agencies and states to ensure other uses of the area under consideration are taken into account. This is done by initiating a PARS, which also gathers information from any other interested party. PARS generally take about 18 months to complete. Once the information is gathered, a proposal is developed for submission to IMO. If the proposal is for a TSS, rulemaking is also required, but can be done in parallel with the IMO process. A proposal is submitted to the IMO Subcommittee on Safety of Navigation (NAV), which normally meets annually. If approved at NAV, it is then submitted to the subsequent session of the Maritime Safety Committee (MSC), which meets three times each biennium. The routing measure may enter into force six months after adoption by the MSC.

APPENDIX F

OCEAN STEWARD

U.S. Department of Transportation
United States Coast Guard

Commandant
United States Coast Guard

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16214
SEP 28 2000

LETTER OF PROMULGATION

From: Commandant
To: Distribution

1. Protecting our nation's natural resources is one of the Coast Guard's five strategic goals. Along with Maritime Safety, Maritime Security, Maritime Mobility, and National Defense, Protection of Natural Resources is one of the basic reasons the taxpayers fund the Coast Guard each year. Hence, it is one of the outcomes to which our entire organizational effort – programs, policies, and assets – should be dedicated. In our Strategic Plan 1999, I defined the Protection of Natural Resources Strategic Goals as "the elimination of environmental damage and natural resource degradation associated with all maritime activities." A vital aspect of achieving this goal is helping the nation recover and maintain healthy populations of marine protected species. OCEAN STEWARD is our strategic plan for making that happen.

2. OCEAN STEWARD provides the emphasis operational commanders, training commands, and administrative staffs need to prioritize and execute this increasingly important mission. The core idea behind OCEAN STEWARD is the premise that all of us, as members of the Coast Guard, have a responsibility to be good stewards of the ocean. If we adhere to this premise as individuals, then the Coast Guard, as an organization, will make great progress toward achieving OCEAN STEWARD's objectives.

3. As we enter the 21st century, our nation is becoming increasingly concerned about the ocean and the state of its living marine resources. Coast Guard leadership in protecting marine species, however, is nothing new; it dates back as far as the Fur Seal Act of 1897. The Coast Guard remains committed to continuing that tradition of leadership, and OCEAN STEWARD is your guide in this important endeavor.

JAMES M. LOY

Encl: (1) OCEAN STEWARD, Protected Living Marine Resources Strategic Plan

Dist: CG LANTAREA (A, Am, Ao), CG PACAREA (P, Pm, Po), CG DISTRICTS (d, m, o), CG ACADEMY, CG INSTITUTE, CG TRACEN Yorktown, CG TRACEN Cape May, CG TRACEN Petaluma, CG PACAREA TRATEAM, CG RFTC Cape Cod MA, CG RFTC Charleston SC, CG RFTC New Orleans LA, CG RFTC Kodiak AK, CG R&DC

COMMANDANT'S PREAMBLE

The Coast Guard's Strategic Plan 1999 states the nation's waterways and their ecosystems are vital to our economy and health. This is why we made the protection of natural resources, specifically the elimination of environmental damage and natural resource degradation associated with maritime activities, one of our five strategic goals, and made enforcing the federal regulations that result in all living marine resources achieving healthy, sustainable populations one of our performance goals. We already have formal plans in place to help us achieve some of these goals, particularly in the areas of pollution response and fisheries law enforcement. However, if we are to fully achieve our protection of natural resources strategic goal, we must become more involved in the efforts to recover and maintain our nation's marine protected species and the habitats on which they depend.

In recent years, there has been a dramatic increase in public and governmental concern about the state of our oceans and their living resources. Evidence of this includes:

- Increasing fishery management measures designed to reduce bycatch of non-targeted species, such as turtle excluder devices (TEDs), fixed-net pingers, and bycatch reduction devices (BRDs).
- Rising conflicts between advocates for species protection and resource users, such as those existing between Steller sea lion protection advocates and Bering Sea/Gulf of Alaska pollock fishers, and between northern right whale protection advocates and New England fixed gear fishers.
- The recent formation of federal and state government task forces to protect coral reefs, northern right whales, Pacific salmon, and other endangered species.
- National Marine Fisheries Service Report to Congress (1999) concluding, of the 230 stocks for which the status can be determined, 98 are overfished and five are approaching overfished - an increase from 86 overfished stocks in 1997 and 90 in 1998.
- Fisheries closures and restrictions in the Gulf of Maine and the West Coast that have had a devastating economic impact on groundfish fleets.
- Increasing litigation against government agencies (including the Coast Guard) by organizations trying to influence marine resource management policy.
- Funding for the Lands Legacy Initiative, which included $27 million to protect ocean and coastal resources in FY 2000 and a request for $266 million for FY 2001.
- The recent signing, by President Clinton, of Executive Order 13158, strengthening and expanding the nation's system of marine protected areas (MPAs).

The Coast Guard already has effective, coordinated strategies for enforcing our nation's fisheries management regulations, protecting the marine environment from oil pollution, and responding to maritime disasters. However, our approach to marine protected species (MPS), specifically those species and geographic areas that are protected under the Endangered Species Act, the Marine Mammal Protection Act, the National Marine Sanctuaries Act, or similar regulations or executive orders, is less clearly defined. Problems resulting from this include:

- Initial delay in establishing a coordinated plan for accomplishing assigned Atlantic Protected Living Marine Resources Initiative (APLMRI) tasks.

- Difficulty in addressing potential conflicts between high-speed craft and marine protected species in New England.
- Low funding priority for funding assessments to address the impact Coast Guard operations have on marine protected species throughout the Pacific Area.
- Inconsistency in handling cross-directorate MPS issues such as working with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) on marine mammal protection initiatives and responding to the Coral Reef Initiative (Executive Order 13089).
- Working level frustration with lack of guidance for dealing with endangered species lawsuits, creation of Memorandums of Understanding (MOU) with NMFS, potential regulation of high-speed craft and whale watch industry vessels, and other MPS issues.

A robust ocean environment is essential to our nation's prosperity, and healthy populations of marine protected species are essential to maintaining a robust ocean environment. Just as protecting our water and air became top national priorities during the last decades of the 20th century, protecting our oceans is becoming a top priority of the 21st century. In the coming years, the nation will look for leaders to exercise responsible stewardship of our ocean resources. The Coast Guard is stepping forward and embracing this role, it is one of the most important roles we will ever undertake.

Ocean Steward Purpose

The purpose of Ocean Steward is to help the Coast Guard achieve its strategic goal Protection of Natural Resources and its performance goal of enforcing federal regulations that result in all living marine resources achieving healthy, sustainable populations. Ocean Steward provides a clearly defined strategy for our role in helping the nation recover and maintain healthy populations of marine protected species; it captures the things we are already doing and provides a comprehensive list of objectives we can achieve if we are provided the necessary resources. Ocean Steward complements our fisheries enforcement strategic plan, Ocean Guardian. Together, Ocean Steward and Ocean Guardian provide a roadmap for the Coast Guard's efforts in ensuring our nation's waterways and their ecosystems remain productive by protecting all our nation's living marine resources from degradation.

Coast Guard Strategic Goal: Protection of Natural Resources

Eliminate environmental damage and natural resource degradation associated with all maritime activities

The nation's waterways and their ecosystems are vital to our economy and health. If the United States is to enjoy a rich, diverse and sustainable ocean environment, then we must halt the degradation of our ocean's natural resources associated with maritime activities. This includes ensuring our country's marine protected species are provided the protection necessary to help their populations recover to healthy, sustainable levels. Providing adequate protection will require the United States to enact and enforce a wide range of regulations to govern marine resource management and use. Ocean Steward will enable the Coast Guard, as the nation's primary at sea law enforcement agency, to develop and enforce those regulations necessary to help recover and maintain our country's marine protected species. Moreover, Ocean Steward will ensure the Coast Guard is viewed as a leader in regional, national and international efforts to protect the nation's marine ecosystems.

Ocean Steward Vision Statement

The Coast Guard will be a leader in the effort to recover and maintain our nation's marine protected species

OCEAN STEWARD MISSION STATEMENT

We will enforce and comply with marine protected species regulations, work with other agencies and organizations to develop appropriate regulations for marine protected species recovery, and publicize our efforts to gain the support and resources necessary to fully implement Ocean Steward

The Coast Guard will implement a formal MPS strategy, Ocean Steward, with a clear, focused vision. We will educate and train our members to make certain every individual understands that stewardship of the ocean environment is a fundamental part of their duty. We will use existing enforcement authorities, and seek new authorities as necessary, to help reduce the risks of extinction and recover marine protected species populations. We will conduct our own operations so as to minimize our impact on marine protected species. We will assess the impact on marine protected species when developing both internal and external regulations and policies. We will work closely with other federal, state and local governments, as well as environmental and research organizations, to carry out the nation's MPS policies. We will inform the public of both the importance of the mission and the ways in which they can help lessen the impact of human activities on marine protected species. We will widely publicize our strategy and results to inform policymakers and the public of the value of our MPS efforts.

GUIDING PRINCIPLE

We are Stewards of the Ocean

The guiding principle behind Ocean Steward is instilling in every member of the Coast Guard the belief that each individual is a steward of the ocean. This concept must be promoted throughout the entire organization. Our training commands – Training Center Cape May, the Coast Guard Academy, Training Center Yorktown, Training Center Petaluma, and the Regional Fisheries Training Centers – should produce graduates who understand and believe preservation of marine protected species is a fundamental Coast Guard responsibility. Our boarding officers and marine inspectors should know, and want to know, what marine protected species exist in their AORs, the regulations that exist to protect them, and how his or her actions can promote species recovery. Our operations and marine safety units should know, and want to know, the concerns of federal, state and local officials, and should work cooperatively with them. Our stations, cutters and marine safety offices should distribute appropriate educational literature. At every opportunity Coast Guard personnel should let the public know we are on watch protecting their oceans and waterways, and inform them of what they can do to help eliminate the degradation of natural resources associated with maritime activities. Our deck watch officers, aircrews and coxswains should be able to recognize the marine protected species they are likely to

encounter and report sightings to interested organizations. Our staff officers and port operations personnel should ensure, and want to ensure, recovery of marine protected species is taken into account when making policy decisions, and they should prioritize the workloads of their personnel to reflect this emphasis. In short, every member of the Coast Guard must think of himself or herself as a steward of the ocean. Committing to that, both organizationally and individually, we will enable us to reach our overarching Protection of Natural Resources strategic goal.

OCEAN STEWARD STRATEGIES

Raise the Profile of the MPS Mission: We will raise the profile of the MPS mission to the status of missions such as maritime drug interdiction, marine pollution prevention and fisheries enforcement.

Obtain Necessary Resources and Authorities: We will prioritize existing resources, use existing authorities, and seek additional resources and authorities as necessary to implement Ocean Steward.

Partner with Other Agencies: We will work closely with other agencies and organizations involved in the preservation and recovery of marine protected species to eliminate redundancy, and provide a clear link between enforcement and management.

Publicize Our Efforts: We will stress the importance of the Coast Guard's role as part of a comprehensive management scheme and highlight our successful efforts to the public.

Each of these strategies contains sets of near, mid, and long-term objectives. Near-term objectives are those that can be achieved without a major reallocation of resources. Mid-term objectives require addition resources or a significant reallocation of resources. Long-term objectives are those objectives that will require institutional changes such as seeking additional authorities or creation of program offices.

STRATEGY: RAISE THE PROFILE OF THE MPS MISSION

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1. DISCUSSION

If the Coast Guard is to be truly committed to protecting the ocean and its resources, then, in the eyes of our own people, recovery of marine protected species must be just as important as traditional missions such as maritime drug interdiction, marine pollution prevention, and fisheries enforcement. We must go beyond development of single initiatives in response to pressure or crisis. We should approach MPS issues with the same proactive, integrated, long-term strategy we use for addressing counterdrug operations, fisheries law enforcement, and commercial vessel safety. Every member of the Coast Guard must know it is part of our job to help recover and maintain our marine

protected species, just as they know it is our job to rescue those in distress. If we understand this concept individually, we will certainly convey that image organizationally.

2. Key Objectives

a. Near Term

1) Incorporate MPS issues into CG performance planning.	G-CCS
2) Develop Area and District MPS operating and enforcement guidance.	G-O/Areas/ Districts
3) Emphasize area specific MPS issues in the curriculum of all 5 Regional Fisheries Training Centers (RFTC).	G-O/G-W/ Areas/RFTCs
4) Identify ways to increase CG Auxiliary participation in MPS mission.	G-O
5) Identify ways to increase focus on MPS issues in Sea Partners program.	G-M
6) Measure the effectiveness of current MPS initiatives such as compliance with the Mandatory Ship Reporting System (MSR) and manatee speed zone regulations.	G-O
7) Designate MPS points of contact (POC) at HQ/Areas/Districts, and create a CG network for information flow on MPS issues.	G-O/Areas/ Districts

b. Mid Term

1) Increase Endangered Species Act/Marine Mammal Protection Act enforcement pulse ops during critical seasons.	G-O/Areas/ Districts
2) Ensure current and potential MPS missions (patrol of remote coral reefs, removal of derelict fishing gear, assisting in disentanglement of whales, etc.) are included in Deepwater decision making process.	G-O
3) Increase CG participation in environmental cleanup events such as the Center for Marine Conservation's annual International Coastal Clean Up.	G-M/G-O
4) Incorporate MPS mission into curriculum of all entry-level and accession training programs (e.g., Officer Candidate School, the Academy, Cape May, and Civilian Indoctrination).	G-W
5) Incorporate MPS issues into International Maritime Officers Course and Mobile Training Teams.	G-CI
6) Designate MPS POC at appropriate CG units.	Districts
7) Include MPS guidance in Maritime Law Enforcement Manual updates.	G-O
8) Include MPS guidance in Marine Safety Manual updates.	G-M

c. Long Term

1) Create HQ cross-directorate MPS office.	G-M/G-O
2) Incorporate MPS questions into Servicewide Examinations.	G-W
3) Add MPS material to appropriate A School curricula (e.g., BM, QM, and MST).	G-W
4) Add MPS material to appropriate C School curricula (e.g., Boarding Officer Course, Boarding Team Member Course, and Marine Safety Petty Officer Course).	G-W

STRATEGY: OBTAIN NECESSARY RESOURCES AND AUTHORITIES

1. DISCUSSION

As national sentiment builds for increasing the protection of our oceans, the Coast Guard should be at the top of the list of agencies that the public demands to be adequately funded. We should reinforce this by documenting our need for, and requesting, the additional resources required to meet the increasing enforcement and regulatory demands in the oceans environment. The public must view the Coast Guard as a leader in preserving our oceans and their protected species. When it is the right thing to do, we should seek to expand our enforcement and regulatory roles, and not shy away for fear of acquiring additional mandates or becoming the target of legal action. If we can be leaders in maritime search and rescue, drug interdiction and pollution prevention, then we can also become leaders in the recovery of marine protected species.

2. KEY OBJECTIVES

a. Near Term

1) Request funding for implementation of Ocean Steward through annual budgeting and resource allocation processes.	G-I/G-M/ G-O/G-
2) Include resource hour requests for implementation of Ocean Steward in input to the annual Operational Guidance letter.	G-O/Areas
3) Assess the need for more enforcement authority to protect resources of various marine protected areas and sanctuaries.	G-I /G-M/ G-O
4) Monitor and evaluate effectiveness of the Mandatory Ship Reporting System (MSR).	G-M/G-O
5) Monitor R&D efforts to develop new technologies for marine mammal detection and avoidance in order to plan for possible acquisition of feasible technologies.	G-O/G-S

b. Mid Term

1) Develop better measures of effectiveness for MPS enforcement efforts.	G-O
2) Support Resource Proposals that address requirements for MPS activities.	G-CCS
3) Allocate resources required to implement Ocean Steward in the annual Operational Guidance letter.	G-O
4) Propose statutory changes and new regulations to improve CG ability to support the nation's MPS objectives.	G-L/G-M/ G-O

c. Long term

1) Consider seeking expanded authority for regulation of vessels in order to protect marine protected species.	G-L/G-M/ G-O

STRATEGY: PARTNER WITH OTHER AGENCIES AND ORGANIZATIONS

1. DISCUSSION

Our leadership should seek opportunities to help recover and maintain the nation's marine protected species (MPS) by working more closely with the National Oceanic and Atmospheric Administration (NOAA), the National Marine Fisheries Service, the National Marine Sanctuaries (NMS), the U.S. Fish and Wildlife Service, the Department of State, the Department of Defense, state and local governments, non-governmental organizations, industry, research institutions, and international organizations. We should partner with concerned agencies and organizations to ensure MPS issues are considered whenever agencies propose new regulations. We should work closely with NOAA, NMFS, the NMS, state and local governments, and international organizations to ensure we are doing all we can to provide enforcement for various marine protected areas, and to assist them with their education and outreach initiatives. We should reach out to other management agencies and research institutions to assist in providing the data needed to answer important questions about marine protected species.

2. KEY OBJECTIVES

a. Near Term

1) Maximize assistance to NMFS in investigation and prosecution of protected MPS incidents.	G-O
2) Work closely with NMFS on MPS issues such as fishing gear conflicts, vessel traffic management, and bycatch reduction.	G-M/G-O
3) Work closely with the Navy to monitor research and development efforts to use acoustics for tracking and avoiding endangered whales.	G-O/G-C
4) Use MOUs, as appropriate, to define relations with the National Marine Sanctuaries and other marine protected areas.	G-L/G-M/ G-O
5) Engage other agencies in a discussion of remote marine protected areas.	G-M/G-O
6) Increase our role in federal and international recovery teams and task forces (e.g., the Coral Reef Task Force, the Manatee Recovery Team, and Right Whale Recovery Plan Implementation Teams).	G-M/G-O
7) Emphasize ship-riding opportunities for NMFS and NMS personnel on CG fisheries/MPS patrols.	G-O

b. Mid Term

1) Establish a senior officer liaison billet to NOAA to increase CG input and interaction in developing MPS issues and regulations.	G-M/G-O
2) Establish a senior officer liaison billet to Council on Environmental Quality (CEQ).	G-M/G-O
3) Create opportunities for undergraduate/graduate level marine affairs students to experience CG fisheries and MPS operations.	G-O

c. Long term

1) Consider engaging other agencies in joint rulemaking for MPS regulations.	G-L/G-M

STRATEGY: PUBLICIZE OUR EFFORTS

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1. DISCUSSION

The Coast Guard already has many marine protected species success stories to tell. We are partnering with the USFWS to educate the boating public and reduce manatee deaths by enforcing speed zone regulations in Florida. We are working closely with NMFS and environmental agencies to help protect the highly endangered northern right whale. In Hawaii, we remove tons of derelict fishing nets from coral reefs that are critical habitat of the endangered Hawaiian monk seal. Conducting this work, however, is only half of the job.

If the public is to perceive us as stewards of the ocean, then we must highlight our efforts and successes to the press and the public at every opportunity. Local units need to let communities know what we are doing to protect their waters. Districts should emphasize the importance of our MPS mission in maintaining healthy, sustainable ecosystems. Area and Headquarters staffs must cultivate relationships with the press, civic leaders, stakeholders and legislators to ensure they are aware of the valuable work the Coast Guard is doing. The public must recognize we are the nation's most valuable maritime asset in the effort to protect and sustain our oceans and their resources. The more we are seen taking positive, decisive action and producing good results, the more the public will demand we be properly resourced to perform this vital mission.

2. KEY OBJECTIVES

a. Near Term

1) Maximize publicity of cooperative MPS efforts with federal and state agencies and non-governmental organizations.	G-I/G-L/ G-M/G-O
2) Maximize publicity of Sea Partners MPS initiatives.	G-I/G-M
3) Use inspections and examinations as opportunities to provide MPS information packages to vessels.	G-M/G-O

b. Mid Term

1) Use publicity to generate interest in, and develop ideas for, future marine environment cleanups and other initiatives.	G-I
2) Optimize publicity of CG role in MPS task forces.	G-I
3) Maximize publicity of CG Auxiliary public education efforts in MPS identification, sensitivity, and avoidance measures.	G-I/G-O

c. Long term

1) Develop an interactive forum for public comment and ideas regarding MPS protection.	G-I
2) Raise the profile of the MPS mission to attract recruits with interest in environmental issues.	G-W

APPENDIX G

LETTER FROM NY SHPO TO USCG

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643

Bernadette Castro
Commissioner

April 18, 1995

Jerald Johnson
Chief, Design Division
U.S. Coast Guard
Facilities Design & Construction Center Pacific
Federal Building
915 Second Avenue
Seattle, Washington 98174-1011

Re: USCG
Rosebank Housing Complex
Staten Island, Richmond County
94PR2633

Dear Mr. Johnson:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO) with regard to the relocation of watercraft and personnel to the Rosebank Housing Area, Staten Island, New York. We have begun to review the project in accordance with Section 106 of the National Historic Preservation Act of 1966 and the relevant implementing regulations.

The Preliminary Environmental Assessment has correctly noted that the New York SHPO has determined that the Rosebank Housing Area, as a whole or in its components, does not meet the criteria for inclusion in the National Register of Historic Places. Our records indicate that the Elizabeth Alice Austen House, a property listed on the National Register of Historic Places and designated a National Historic Landmark in 1993, is located slightly north of the Rosebank Facility. This waterfront property may be impacted by construction and increased activity at Rosebank, depending on the scale and nature of the proposed work. A copy of the Austen House National Register nomination is enclosed for your information.

Please also note that at this time, we consider the closure of Governors Island and the reassignment of personnel to Rosebank as a single undertaking and will issue a single determination of effect under Section 106 for these activities.

ENCLOSURE 31

If you have any questions or comments on this matter, please contact me at 518/237-8643, ext. 280.

Sincerely,

James Warren

James Warren
Program Analyst
Field Services Bureau

JPW:cm

encl: Austen House NR nomination

cc: Drucilla Null, ACHP w/o encl.

APPENDIX H

SUMMARY TABLE OF REGULATIONS, LAWS, AND EXECUTIVE ORDERS

Table H-1. Applicable Regulations, Laws, and Executive Orders

Executive Orders	
Executive Order (EO) 11593, Protection and Enhancement of the Cultural Environment	All Federal agencies are required to locate, identify, and record all cultural and natural resources. Cultural resources include sites of archaeological, historical, or architectural significance. Natural resources include the presence of endangered species, critical habitat, and areas of special biological significance.
EO 11990, Protection of Wetlands	Requires Federal agencies to avoid undertaking or providing assistance for new construction located in wetlands unless there is no practicable alternative, and all practicable measures to minimize harm to wetlands has been implemented.
EO 11988, Floodplain Management	Provides direction regarding actions of Federal agencies in floodplains, and requires permits from state and Federal review agencies for any construction within a 100-year floodplain.
EO 12372, Intergovernmental Review of Federal Programs (as amended by EO 12416)	Requires Federal agencies to consult with state and local governments when proposed Federal financial assistance or direct Federal development has an impact on interstate metropolitan urban centers or other interstate areas.
EO 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements	Requires Federal agencies to plan for chemical emergencies. Facilities that store, use, or release certain chemicals are subject to various reporting requirements. Reported information is made available to the public.
EO 12898, Environmental Justice	Requires certain Federal agencies, including the Department of Defense (DoD), to the greatest extent practicable permitted by law, to make environmental justice part of their missions by identifying and addressing disproportionately high and adverse health or environmental effects on minority and low-income populations.
EO 13007, Indian Sacred Sites	Requires Federal agencies to accommodate access to, and ceremonial use of, sacred sites by practitioners and avoid adversely affecting the physical integrity of such sites.

Table H-1. Applicable Regulations, Laws, and Executive Orders (continued)

Executive Orders	
EO 13045, Protection of Children from Environmental Health and Safety Risks	Makes it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children. It also directs agencies to ensure that policies, programs, activities, and standards address such risks if identified.
EO 13158, Marine Protected Areas	Requires Federal agencies whose actions affect the natural and cultural resources protected by a marine protected area (MPA) to identify such actions, and, to the extent practicable and permitted by law, to avoid harming the natural and cultural resources that are protected by an MPA.
EO 13175, Consultation and Coordination with Indian Tribal Governments	Requires Federal agencies to have an accountable process to ensure meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.
EO 13186, Responsibilities of Federal Agencies to Protect Migratory Birds	Requires Federal agencies to take steps to protect migratory birds, including restoring and enhancing habitat, preventing or abating pollution affecting birds, and incorporating migratory bird conservation into agency planning processes whenever possible.
American Indian Religious Freedom Act, 42 United States Code (U.S.C.) 1996, Public Law (P.L). 95-341	Protects and preserves the rights of American Indians, Eskimos, Aleuts, and Native Hawaiians to exercise the traditional religions. These rights include, but are not limited to, access to sites, use and possession of sacred objects, and the freedom to worship through ceremony and tradition rites.
Antiquities Act of 1906, 16 U.S.C. 431-433, P.L. 59-209	Provides for the protection of historic and prehistoric ruins and objects of antiquity on lands owned or controlled by the Federal government. Authorizes scientific investigation of antiquities on Federal lands. Authorizes the establishment of national landmarks.
Archaeological and Historical Preservation Act, 16 U.S.C. 469	Protects and preserves historical and archaeological data. Requires Federal agencies to identify and recover data from archaeological sites threatened by their actions.

Table H-1. Applicable Regulations, Laws, and Executive Orders (continued)

Executive Orders	
Archaeological Resources Protection Act of 1979, 16 U.S.C. 470 et seq., P.L. 96-95	Enacted to preserve and protect resources and sites on Federal and Indian lands. Fosters cooperation between governmental authorities, professionals, and the public. Prohibits the removal, sale, receipt, and interstate transportation of archaeological resources obtained illegally from public or Indian lands.
Clean Air Act, 42 U.S.C. 7401-7671q, July 14, 1955, as amended	This Act, as amended, is known as the Clean Air Act (CAA) of 1970. The amendments made in 1970 established the core of the clean air program. The primary objective is to establish Federal standards for air pollutants. It is designed to improve air quality in areas of the country, which do not meet Federal standards and to prevent significant deterioration in areas where air quality exceeds those standards.
Coastal Zone Management Act of 1972, 16 U.S.C. 1451-1464, P.L. 92-583	Establishes a policy to preserve, protect, develop, and, where possible, restore and enhance the resources of the Nation's coastal zone. Encourages and assists states through the development and implementation of coastal zone management programs.
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601-9675, P.L. 96-510, amended by Superfund Amendments and Reauthorization Act of 1986 (SARA), P.L. 99-499	Also known as "Superfund," provides for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and cleanup of inactive hazardous substances disposal sites. Also established a fund financed by hazardous waste generators to support cleanup and response actions.
Department of Transportation Act, Section 4(f)	Requires the Department of Transportation (DOT) to avoid or mitigate impacts to public parks and wildlife areas when approving transportation programs or projects.
Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq., P.L. 93-205	Protects threatened, endangered, and candidate species of fish, wildlife, and plants and their designated critical habitats. Under this law, no Federal action is allowed to jeopardize the continued existence of an endangered or threatened species. The Endangered Species Act also requires consultation with USFWS and the National Marine Fisheries Service (NMFS) and the preparation of a biological assessment when such species are present in an area that is affected by government activities.

Table H-1. Applicable Regulations, Laws, and Executive Orders (continued)

Executive Orders	
Federal Property and Administrative Services Act of 1949	Guides the process for transferring government property.
Federal Records Act	Requires Federal agencies to preserve Federal records of potential historic value.
Federal Water Pollution Control Act (Clean Water Act), 33 U.S.C. 1251-1387	The Clean Water Act is a comprehensive statute aimed at restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. Primary authority for the implementation and enforcement rests with the U.S. Environmental Protection Agency (EPA).
Fish and Wildlife Conservation Act Coordination Act, 16 U.S.C. 661 et seq., P.L. Chapter 55	The purpose of this Act is to ensure that wildlife conservation receives equal consideration and be coordinated with other features of water-resources development programs.
Historic Sites Act of 1935, 16 U.S.C. 461-467, P.L. Chapter 593	Establishes a national policy to preserve for public use, historic sites, buildings, and objects of national significance.
Historical and Archaeological Data-Preservation, 16 U.S.C. 469 et seq., P.L. 93-291	Protects and preserves historical and archaeological data caused as a result of Federal construction projects. Directs Federal agencies to notify the Secretary of the Interior when the construction project may cause irreparable loss or destruction of significant resources or data. Provides a mechanism through which resources can be salvaged from a construction site.
Lacy Act of 1900, 16 U.S.C. 701, 702; 31 Stat. 187, 32 Stat. 285	Under this law, it is unlawful to import, export, sell, acquire, or purchase fish, wildlife, or plants taken, possessed, transported, or sold: 1) in violation of U.S. or Indian law, or 2) in interstate or foreign commerce involving any fish, wildlife, or plants taken, possessed, or sold in violation of state or foreign law.
Magnuson-Stevens Fishery Conservation and Management Act, as amended through October 11, 1996, 16 U.S.C. 1801 et seq., P.L. 94-265	Establishes regional fisheries councils that set fishing quotas and restrictions in U.S. waters. Federal agencies must consult with NMFS on all actions, authorized, funded, or undertaken by the agency that may adversely affect essential fish habitat (EFH)

Table H-1. Applicable Regulations, Laws, and Executive Orders (continued)

Executive Orders	
Marine Mammal Protection Act of 1972, 16 U.S.C. 1361 et seq., 1401-1407, 1538, 4107	Establishes a moratorium on the taking and importation of marine mammals including harassment, hunting, capturing, collecting, or killing or attempting the above actions. Requires permits for taking marine mammals. Requires consultations with USFWS and NMFS if impacts to marine mammals are possible.
Marine Protection, Research, and Sanctuaries Act of 1972, 33 U.S.C. 1401-1445, P.L.92-532	Regulates the dumping of materials into ocean waters. Provides for a permitting process to control the ocean dumping of dredged materials. Establishes the marine sanctuaries program.
Migratory Bird Treaty Act 16 U.S.C. 703-712	The Migratory Bird Treaty Act implements various treaties and is for the protection of migratory birds. Under the Act, taking, killing, or possessing migratory birds is unlawful.
National Environmental Policy Act of 1969 (NEPA), as amended; P.L. 91-190, 42 U.S.C. 4321 et seq.	Requires Federal agencies to utilize a systematic approach when assessing environmental impacts of government activities. NEPA proposes an interdisciplinary approach in a decision-making process designed to identify unacceptable or unnecessary impacts to the environment.
National Historic Preservation Act, 16 U.S.C. 470 et seq.	Requires Federal agencies to take account of the effect of any federally assisted undertaking or licensing on any district, site, building, structure, or object eligible or listed for inclusion in the NRHP. Provides for the nomination, identification (through listing on the National Register), and protection of historical and cultural properties of significance.
National Invasive Species Act of 1996, 16 U.S.C. 4701 et seq., P.L. 104-332	Reauthorizes and amends the Nonindigenous Aquatic Nuisance Prevention Control Act of 1990. Establishes ballast water information and requires guidelines to be issued for the Great Lakes.
Noise Control Act of 1972, 42 U.S.C. 4901-4918, P.L. 92-574	Establishes a national policy to promote an environment free from noise that jeopardizes their health and welfare. Authorizes the establishment of Federal noise emissions standards and provides information to the public.
Nonindigenous Aquatic Nuisance Prevention Control Act of 1990, 16 U.S.C. 4701 et seq., P.L. 101-646	Establishes aquatic nuisance species.

Table H-1. Applicable Regulations, Laws, and Executive Orders (continued)

Executive Orders	
Northwest Atlantic Fisheries Convention Act	Implements provisions of international conventions and establishes regulatory framework.
Occupational Safety and Health Act	Establishes standards to protect workers, including standards on industrial safety, noise, and health standards.
Port and Waterways Safety Act	Sets vessel operating and towing safety requirements and sets out enforcement provisions.
Resource Conservation and Recovery Act, 42 U.S.C. 6901, P.L. 94-580	Establishes requirements for safely managing and disposing of solid and hazardous waste and underground storage tanks. Federal agencies must comply with waste management requirements.

APPENDIX I

MANAGEMENT AUTHORITY AND EFH FOR SPECIES IN THE REGION OF INFLUENCE

Table I-1. Management Authority and EFH for the Species and Associated Life History Stages within the ROI

Species	Management Authority	Eggs	Larvae/ Neonate (sharks only)	Juveniles	Adults	Spawning Adults
Red hake (*Urophycis chuss*)	NEFMC	surface waters; <66.2 °F; <25 ppt; M, S[1]	surface waters; <66.2 °F; >0.5 ppt, <656 ft; May-Dec with peaks Sept-Oct; M, S[1]	bottom habitats-shell fragments and scallops; <61 °F; <328 ft; 31-33 ppt; M, S[1]	bottom habitats in depressions with sand and mud substrates; <54 °F; 33-427 ft; 33-34 ppt; M, S[1]	No EFH in ROI.
Winter flounder (*Pleuronectes americanus*)	NEFMC	bottom habitats with sand, muddy sand, and gravel substrates; <50 °F; 10-30 ppt; <16 ft; M, S[1]	pelagic and bottom waters; <59 °F, 4-30 ppt, <20 ft; Mar-Jul with peaks Apr-May; M, S[1]	*YOY*[2] - bottom habitats with mud, sand, and gravel substrates; <82 °F; 5-333 ppt; .3-32 ft *Juveniles* – bottom habitats with mud and fine grained sand; <77 °F; 3-164 ft; 10-33 ppt; M, S[1]	bottom habitats with mud, sand, and gravel; <77 °F; 3-328 ft; 15-33 ppt; M, S[1]	bottom habitats with mud, sand, muddy sand, and gravel; <59 °F; <20 ft; 5.5-36 ppt; Feb-Jun; M, S[1]
Windowpane flounder (*Scopthalmus aquosus*)	NEFMC	surface waters; <68 °F; <230 ft; Feb-Oct with peaks Jul-Aug; M, S[1]	pelagic waters; <68 °F; <230 ft, Feb-Oct with peaks Jul-Aug; M, S[1]	bottom habitats with mud or fine grained sand substrates; <77 °F; 3-328 ft; 5.5-36 ppt; M, S[1]	bottom habitats with mud or fine grained sand substrates; <80 °F; 3-246 ft; 5.5-36 ppt; M, S[1]	bottom habitats with mud or fine grained sand substrates; <70 °F; 3-246 ft; 5.5-36 ppt; Feb-Dec with peak in May; M, S[1]
Atlantic sea herring (*Clupea harengus*)	NEFMC	No EFH in ROI.	pelagic waters; <61 °F; 164-290 m; 32 ppt, Aug-Apr with peaks Sep-Nov; M, S[1]	pelagic waters; <50 °F; 49-443 ft; 26-32 ppt; M, S[1]	pelagic waters; <50 °F; 66-427 ft; 28 ppt; M, S[1]	No EFH in ROI.

Table I-1. Management Authority and EFH for the Species and Associated Life History Stages within the ROI (cont)

Species	Management Authority	Eggs	Larvae/ Neonate (sharks only)	Juveniles	Adults	Spawning Adults
Bluefish (*Pomatomus saltatrix*)	MAFMC	No EFH in ROI.	No EFH in ROI.	pelagic waters; May-Oct; M, S[1]	pelagic waters; Apr-Oct; M, S[1]	No EFH in ROI.
Atlantic butterfish (*Peprilus tricanthus*)	MAFMC	No EFH in ROI.	pelagic waters; 48-66 °F; shore-6000 ft; M, S[1]t	pelagic waters; 37-82 °F; 33-1200 ft; M, S[1]	pelagic waters; 37-82 °F; 33-1200 ft; M, S[1]	No EFH in ROI.
Atlantic mackerel (*Scomber scombrus*)	MAFMC	No EFH in ROI.	No EFH in ROI.	pelagic waters; shore to 1050 ft; 39-72°F; M, S[1]	pelagic waters; shore to 1050 ft; 39-61 °F; M, S[1]	No EFH in ROI.
Summer flounder (*Paralichthys dentatus*)	MAFMC	No EFH in ROI.	pelagic waters; 30 - 230 ft; Sep-Feb; F, M, S[1]	demersal waters in salt marsh creeks, seagrass beds, mudflats, and open bay areas; >37 °F; 10-30 ppt; M,S; SAV is HAPC[6] ; M, S[1]	shallow demersal waters during warmer months; SAV is HAPC[6]; M, S[1]	No EFH in ROI.
Scup (*Stenotomus chrysops*)	MAFMC	55-73 °F; >15 ppt; May-Aug; M, S[1]	55-73 °F; >15 ppt; May-Sep; M, S[1]	sands, mud, mussel and eelgrass substrates; >45 °F; >15 ppt; summer and spring; M, S[1]	M, S[1]	No EFH in ROI.

Table I-1. Management Authority and EFH for the Species and Associated Life History Stages within the ROI (cont)

Species	Management Authority	Eggs	Larvae/ Neonate (sharks only)	Juveniles	Adults	Spawning Adults
Black sea bass (*Centropristis striata*)	MAFMC	No EFH in ROI.	No EFH in ROI.	rough bottom, shellfish beds, eelgrass beds, man-made structures, sandy-shelly areas; >43 °F; >18 ppt; summer and spring; M, S[1]	structure, sand, and shell; >43 °F; 18 ppt; May-Oct; M, S[1]	No EFH in ROI.
King mackerel (*Scomberomorus cavalla*)	SAFMC	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern	No EFH in ROI.
Spanish mackerel (*Scomberomorus maculates*)	SAFMC	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern	No EFH in ROI.

Table I-1. Management Authority and EFH for the Species and Associated Life History Stages within the ROI (cont)

Species	Management Authority	Eggs	Larvae/ Neonate (sharks only)	Juveniles	Adults	Spawning Adults
Cobia (*Rachycentron candum*)	SAFMC	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern, high salinity bays and seagrass habitat	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern, high salinity bays and seagrass habitat	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern, high salinity bays and seagrass habitat	sandy shoals of capes, high profile rocky bottoms, inlets, state-designated nursery habitats of particular concern, high salinity bays and seagrass habitat	No EFH in ROI.
Sandbar shark	HMS	NA[3]	>70 °F; 22 ppt; ≤82 ft	NO EFH in ROI.	EFH type or characteristics not specified.	No EFH in ROI.
Dusky shark	HMS	NA[3]	inlets and estuaries	inlets and estuaries	inlets and estuaries	inlets and estuaries
Sandtiger Shark	HMS	NA[3]	EFH type or characteristics not specified	No EFH in ROI.	EFH type or characteristics not specified	No EFH in ROI.

Source: NOAA undated
1 F=freshwater, M=mixing zone, S=seawater
2 YOY (Young-of-Year) are juveniles that were spawned that year
3 Not applicable, i.e., sharks are live-bearers

APPENDIX J

NOISE TERMINOLOGY AND ANALYSIS METHODOLOGY

APPENDIX J

This Appendix presents a detailed discussion of noise and its effects on people and the environment. An assessment of noise requires a general understanding of how sound is measured and how it affects people in the natural environment. The purpose of this appendix is to address public concerns regarding noise impacts.

Section J.1 is a general discussion on the properties of noise. Section J.2 summarizes the noise metrics discussed throughout this Environmental Assessment (EA). Section J.3 summarizes Land-Use Compatibility.

J.1 General

Noise, often defined as unwanted sound, is one of the most common environmental issues associated with aircraft operations. Of course, aircraft are not the only source of noise in an urban or suburban surrounding. Interstate and local roadway traffic, rail, industrial, and neighborhood sources also intrude on the everyday quality of life. Nevertheless, aircraft are readily identifiable to those affected by their noise, and typically are singled out for special attention and criticism. Consequently, aircraft noise problems often dominate analyses of environmental impacts.

Sound is a physical phenomenon, and consists of minute vibrations that travel through a medium, such as air, and are sensed by the human ear. The interpretation of that sound as pleasant or unpleasant depends largely on the listener's current activity, past experience, and attitude toward the source of that sound. It is often true that one person's music is another person's noise.

The measurement and human perception of sound involves two basic physical characteristics, intensity and frequency. The intensity is a measure of the strength or amplitude of the sound vibrations and is expressed in terms of sound pressure. The higher the sound pressure, the more energy is carried by the sound and the perception of that sound is louder. The second important physical characteristic is sound frequency that is the number of times per second the air vibrates or oscillates. Low-frequency sounds are characterized as rumbles or roars, while sirens or screeches typify high-frequency sounds

The loudest sounds that can be detected comfortably by the human ear have intensities that are 1,000,000,000,000 times larger than those of sounds that can just be detected. Because of this vast range, any attempt to represent the intensity of sound using a linear scale becomes very

unwieldy. As a result, a logarithmic unit known as the decibel (dB) is used to represent the intensity of a sound. Such a representation is called a sound level.

Because of the logarithmic nature of the decibel unit, sound levels cannot be added or subtracted directly and are somewhat cumbersome to handle mathematically. However, some simple rules of thumb are useful in dealing with sound levels. First, if a sound's intensity is doubled, the sound level increases by 3 dB, regardless of the initial sound level. For example:

$$60 \text{ dB} + 60 \text{ dB} = 63 \text{ dB}, \text{ and}$$

$$80 \text{ dB} + 80 \text{ dB} = 83 \text{ dB}$$

The total sound level produced by two sounds of different levels is usually only slightly more than the higher of the two. For example:

$$60.0 \text{ dB} + 70.0 \text{ dB} = 70.4 \text{ dB}$$

Because the addition of sound levels behaves differently than that of ordinary numbers, such addition is often referred to as “decibel addition” or “energy addition.” The latter term arises from the fact that what we are really doing when we add decibel values is first converting each decibel value to its corresponding acoustic energy, then adding the energies using the normal rules of addition, and finally converting the total energy back to its decibel equivalent.

An important facet of decibel addition arises later when the concept of time-average sound levels is introduced to explain Day-Night Average Sound Level (DNL). Because of the logarithmic units, the louder levels that occur during the averaging period dominate the time-average sound level. As a simple example, consider a sound level which is 100 dB and lasts for 30 seconds, followed by a sound level of 50 dB which also lasts for 30 seconds. The time-average sound level over the total 60-second period is 97 dB, not 75 dB.

A sound level of 0 dB is approximately the threshold of human hearing and is barely audible under extremely quiet listening conditions. Normal speech has a sound level of approximately 60

dB. Sound levels above about 120 dB begin to be felt inside the human ear as discomfort and eventually pain at still higher levels.

The minimum change in the time-average sound level of individual events that an average human ear can detect is about 3 dB. A change in sound level of about 10 dB is usually perceived by the average person as a doubling (or halving) of the sound's loudness, and this relation holds true for loud sounds and for quieter sounds.

Sound frequency is pitch measured in terms of hertz (Hz). The normal human ear can detect sounds that range in frequency from about 20 Hz to about 15,000 Hz. All sounds in this wide range of frequencies, however, are not heard equally well by the human ear, which is most sensitive to frequencies in the 1,000 to 4,000 Hz range. To account for the varied frequency sensitivity of people, we use the A-weighted scale that approximates the average, healthy human ear. The A-weighting de-emphasizes the low and high frequency portion of the noise signal and emphasizes the mid-frequency portion. Sound levels measured using A-weighting are most properly called A-weighted sound levels, while sound levels measured without any frequency weighting are most properly called sound levels. However, since most environmental impact analysis documents deal only with A-weighted sound levels, the adjective “A-weighted” is often omitted, and A-weighted sound levels are referred to simply as sound levels. In some instances, the author will indicate that the levels have been A-weighted by using the abbreviation dBA or dB(A), rather than the abbreviation dB, for decibel. As long as the use of A-weighting is understood to be used, there is no difference implied by the terms “sound level” and “A-weighted sound level” or by the units dB, dBA, and dB(A). The A-weighting function de-emphasizes higher and, especially, lower frequencies to which humans are less sensitive. Because the A-weighting is closely related to human hearing characteristics, it is appropriate to use A-weighted sound levels when assessing potential noise effects on humans and many terrestrial wildlife species. In this document, all sound levels are A-weighted and are reported in dB.

Sound levels do not represent instantaneous measurements but rather averages over short periods of time. Two-measurement time-periods are most common – 1 second and 1/8 of a second. A measured sound level averaged over 1 second is called a slow response sound level; one averaged over 1/8 of a second is called a fast response sound level. Most environmental noise studies use slow response measurements, and the adjective “slow response” is usually omitted. It is easy to understand why the proper descriptor “slow response A-weighted sound level” is usually shortened to “sound level” in environmental impact analysis documents.

J.2 Noise Metrics

A "metric" is defined as something "of, involving, or used in measurement." As used in environmental noise analyses, a metric refers to the unit or quantity that measures or represents the effect of noise on people. Noise measurements typically have involved a confusing proliferation of noise metrics as individual researchers have attempted to understand and represent the effects of noise. As a result, past literature describing environmental noise or environmental noise abatement has included many different metrics. Recently, however, various Federal agencies involved in environmental noise mitigation have agreed on common metrics for environmental impact analyses documents, and both the Department of Defense (DoD) and the Federal Aviation Administration (FAA) have specified those which should be used for Federal aviation noise assessments. These metrics are as follows.

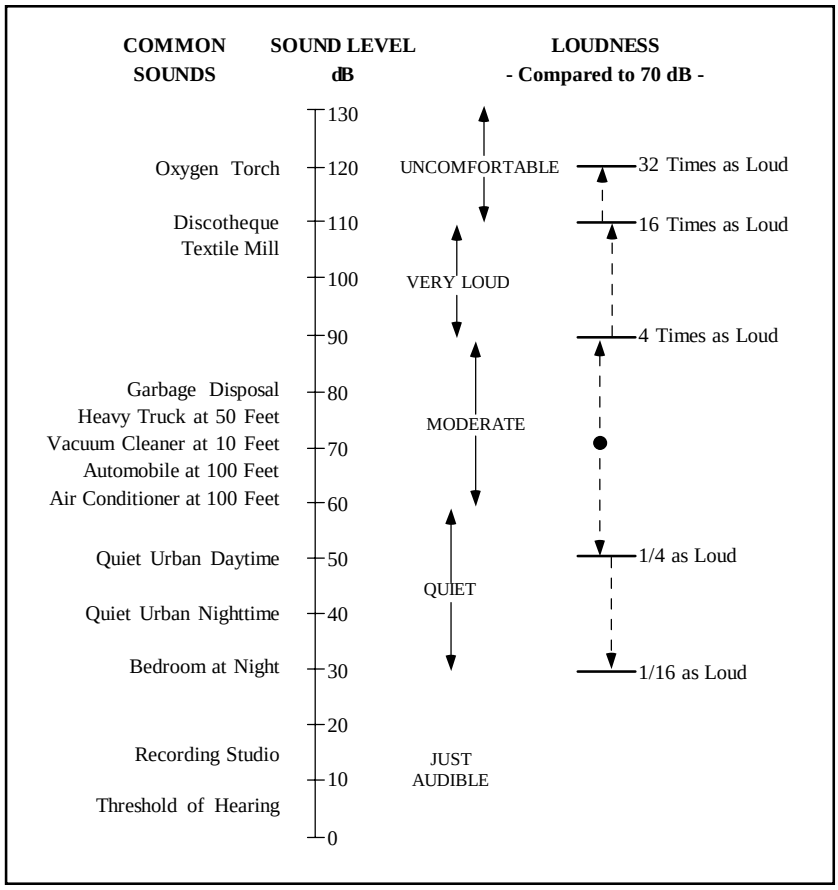
J.2.1 Maximum Sound Level

The highest A-weighted sound level measured during a single event in which the sound level changes value as time goes on (e.g., an aircraft overflight) is called the maximum A-weighted sound level or maximum sound level, for short. It is usually abbreviated by ALM, L_{max}, or LA_{max}. The typical A-weighted levels of common sounds are shown in Figure J-1. The maximum sound level is important in judging the interference caused by a noise event with conversation, TV or radio listening, sleep, or other common activities.

J.2.2 Sound Exposure Level

Individual time-varying noise events have two main characteristics: 1) a sound level which changes throughout the event, and 2) a period of time during which the event is heard. Although the maximum sound level, described above, provides some measure of the intrusiveness of the event, it alone does not completely describe the total event. The period of time during which the sound is heard is also significant. The sound exposure level (abbreviated SEL or LAE) combines both of these characteristics into a single metric.

Sound exposure level is a logarithmic measure of the total acoustic energy transmitted to the listener during the event. Mathematically, it represents the sound level of the constant sound that in one second would generate the same acoustic energy, as did the actual time-varying noise event. For example, since aircraft overflights usually last longer than one second, the SEL of an overflight is usually greater than the maximum sound level of the overflight.



Source: Harris 1979

Figure J-1. Typical A-Weighted Sound Levels of Common Sounds

Sound exposure level is a composite metric that represents both the intensity of a sound and its duration. It does not directly represent the sound level heard at any given time, but rather provides a measure of the net impact of the entire acoustic event. It has been well established in the scientific community that SEL measures this impact much more reliably than just the maximum sound level. Because the SEL and the maximum sound level are both A-weighted sound levels expressed in dBs, there is sometimes confusion between the two, so the specific metric used should be clearly stated.

J.2.3 Day-Night Average Sound Level

Time-average sound levels are the measurements of sound levels that are averaged over a specified length of time. These levels provide a measure of the average sound energy during the measurement period.

For the evaluation of community noise effects, and particularly aircraft noise effects, the day-night average sound level (abbreviated DNL or Ldn) is used. Day-night average sound level averages aircraft sound levels at a location over a complete 24-hour period, with a 10-dB adjustment added to those noise events that take place between 10:00 p.m. and 7:00 a.m. (local time) the following morning. This 10-dB "penalty" represents the added intrusiveness of sounds that occur during normal sleeping hours, both because of the increased sensitivity to noise during those hours and because ambient sound levels during nighttime are typically about 10 dB lower than during daytime hours.

Ignoring the 10-dB nighttime adjustment for the moment, DNL may be thought of as the continuous A-weighted sound level that would be present if all of the variations in sound level that occur over a 24-hour period were smoothed out so as to contain the same total sound energy.

Day-night average sound level provides a single measure of overall noise impact, but does not provide specific information on the number of noise events or the individual sound levels that occur during the day. For example, a DNL of 65 dB could result from a very few noisy events, or a large number of quieter events.

As noted earlier for SEL, DNL does not represent the sound level heard at any particular time, but rather represents the total sound exposure. Scientific studies and social surveys that have been conducted to appraise community annoyance to all types of environmental noise have found the DNL to be the best measure of that annoyance. Its use is endorsed by the scientific community (American National Standards Institute [ANSI] 1980, 1988; U.S. Environmental Protection Agency [EPA] 1974; Federal Interagency Committee on Urban Noise [FICUN] 1980; Federal Interagency Committee on Noise [FICON] 1992).

The results of attitudinal surveys, conducted in different countries, show a remarkable consistency in the percentages of groups of people who express various degrees of annoyance when exposed to different levels of DNL. This is illustrated in Figure J-2, which summarizes the results of a large number of social surveys relating community responses to various types of noises, measured in DNL.

Figure J-2, taken from Schultz (1978), shows the original curve fit. A more recent study has reaffirmed this relationship (Fidell et al. 1991). Figure J-3 shows an updated form of the curve fit (Finegold et al. 1992) in comparison with the original. The updated fit, which does not differ substantially from the original, is the current preferred form. In general, correlation coefficients

of 0.85 to 0.95 are found between the percentages of groups of people highly annoyed and the level of average noise exposure. The correlation coefficients for the annoyance of individuals are relatively low, however, on the order of 0.5 or less. This is not surprising, considering the varying personal factors that influence the manner in which individuals react to noise. Nevertheless, findings substantiate that community annoyance to aircraft noise is represented quite reliably using DNL.

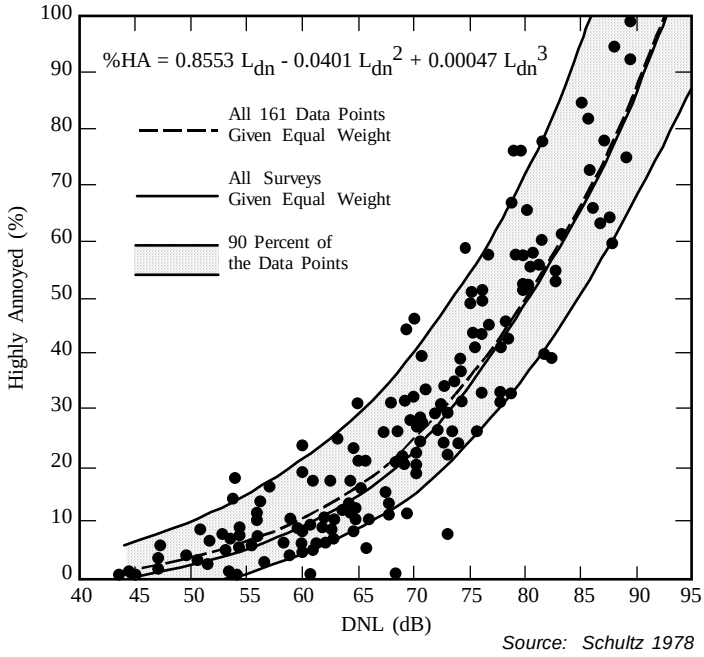


Figure J-2. Community Surveys of Noise Annoyance

J.3 Land-Use Compatibility

As noted above, the inherent variability between individuals makes it impossible to predict accurately how any individual will react to a given noise event. Nevertheless, when a community is considered as a whole, its overall reaction to noise can be represented with a high degree of confidence. As described above, the best noise exposure metric for this correlation is the DNL. In June 1980, an ad hoc Federal Interagency Committee on Urban Noise (FICUN) published guidelines for considering noise in land use planning (FICUN 1980). These guidelines related DNL to compatible land uses in urban areas. The committee was composed of representatives from the DoD, Department of Transportation, Department of Housing and Urban Development; the EPA; and the Veterans Administration. Since the issuance of these guidelines, Federal

agencies have generally adopted these guidelines to make recommendations to the local communities on land use compatibilities.

The FAA included the committee's guidelines in the Federal Aviation Regulations (Harris 1984). These guidelines are reprinted in Table J-1, along with the explanatory notes included in the regulation. Although these guidelines are not mandatory (see Notes in Table J-1), they provide the best means for evaluating noise impact in airport communities. In general, residential land uses normally are not compatible with outdoor DNL (Ldn values) above 65 dB. The extent of land areas and populations exposed to DNL of 65 dB and higher provides the best means for assessing the noise impacts of alternative aircraft actions.

In 1990, the FICON was formed to review the manner in which aviation noise effects are assessed and presented. This group released its report in 1992 and reaffirmed the use of DNL as the best metric for this purpose (FICON 1992).

Table J-1. Land Use Compatibility Guidelines with Yearly Day-Night Average Sound Level

LAND USE	YEARLY DAY-NIGHT AVERAGE SOUND LEVELS IN DECIBELS					
	BELOW 65	65-70	70-75	75-80	80-85	OVER 85
Residential						
Residential, other than mobile homes and transient lodgings	*Y*	*N(1)*	*N(1)*	*N*	*N*	*N*
Mobile home parks	*Y*	*N*	*N*	*N*	*N*	*N*
Transient lodgings	*Y*	*N(1)*	*N(1)*	*N(1)*	*N*	*N*
Public Use						
Schools	*Y*	*N(1)*	*N(1)*	*N*	*N*	*N*
Hospitals & nursing homes	*Y*	*25*	*30*	*N*	*N*	*N*
Churches, auditoria, & concert halls	*Y*	*25*	*30*	*N*	*N*	*N*
Government services	*Y*	*Y*	*25*	*30*	*N*	*N*
Transportation	*Y*	*Y*	*Y(2)*	*Y(3)*	*Y(4)*	*Y(4)*
Parking	*Y*	*Y*	*Y(2)*	*Y(3)*	*Y(4)*	*N*
Commercial Use						
Offices, business, & professional	*Y*	*Y*	*25*	*30*	*N*	*N*
Wholesale & retail-building materials, hardware, and farm equipment	*Y*	*Y*	*Y(2)*	*Y(3)*	*Y(4)*	*N*
Retail trade-general	*Y*	*Y*	*25*	*30*	*N*	*N*
Utilities	*Y*	*Y*	*Y(2)*	*Y(3)*	*Y(4)*	*N*
Communication	*Y*	*Y*	*25*	*30*	*N*	*N*
Manufacturing and Production						
Manufacturing, general	*Y*	*Y*	*Y(2)*	*Y(3)*	*Y(4)*	*N*
Photographic & optical	*Y*	*Y*	*25*	*30*	*N*	*N*
Agriculture (except livestock) & forestry	*Y*	*Y(6)*	*Y(7)*	*Y(8)*	*Y(8)*	*Y(8)*
Livestock farming & breeding	*Y*	*Y(6)*	*Y(7)*	*N*	*N*	*N*
Mining & fishing, resource production & extraction	*Y*	*Y*	*Y*	*Y*	*Y*	*Y*
Recreational						
Outdoor sports arenas & spectator sports	*Y*	*Y(5)*	*Y(5)*	*N*	*N*	*N*
Outdoor music shells, amphitheaters	*Y*	*N*	*N*	*N*	*N*	*N*
Nature exhibits & zoos	*Y*	*Y*	*N*	*N*	*N*	*N*
Amusements, parks, resorts, & camps	*Y*	*Y*	*Y*	*N*	*N*	*N*
Golf courses, riding stables, & water recreation	*Y*	*Y*	*25*	*30*	*N*	*N*

Key:
Y (Yes) = Land use and related structures compatible without restrictions.
N (No) = Land use and related structures are not compatible and should be prohibited.
NLR = Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
25 or 30 = Land use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structures.
Notes:
(1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor-to-indoor NLR of at least 25 and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide an NLR of 20 dB; thus, the reduction requirements often are stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year-round. However, the use of NLR criteria will not eliminate outdoor noise problems.
(2) Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
(3) Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
(4) Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal level is low.
(5) Land-use compatible, provided special sound reinforcement systems are installed.
(6) Residential buildings require an NLR of 25 dB.
(7) Residential buildings require an NLR of 30 dB.
(8) Residential buildings not permitted.

Source: USDOT 1984 and FAA 1985

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APPENDIX K

CLEAN AIR ACT

GENERAL CONFORMITY ANALYSIS

AIR QUALITY CALCULATIONS

New York MSST

Scenario

2 boats in harbor, 6 hrs/day 7 days/wk
3 boats on trailers for remote assignments; assume maximum of two in water 6 hrs/day, all outside NJ-NY-CT AQCR.
1 spare boat
3 F-350 Ford gasoline pickups tow the trailers. Used about 15 days per month.

During military load-outs, the Harbor boats will patrol 12 hr/day for 1-2 days. The frequency of such events is dependent on world events, but will be at least 1-2 per month for the near future.

The trailered boats could be deployed to any location on the east coast of the United States, but their duties will be primarily located in New York Harbor.

The 12 knot speed mentioned in the Description of Proposed Action is an average speed rather than an actual speed. The boats would rarely actualy travel at 10-12 knots because that is a transition speed between displacement and planing for a boat of this size. As a result, that speed generates a significant wake, and results in unnecessary fuel consumption and emissions.

Boats will patrol at 7-8 knots in the harbor, with occasional periods of travel of approximately 35 knots to relocate, or to go out or return from escort assignments. Staff estimate 80% of the time is spent at low speed, and 20% of the time is spent a cruising speed. There are also occasional momentary bursts of up to 50 knots to intercept other watercraft.
Boats patroling west to Cincinnati, south to Phildaelphia, or east to Boston will spend most of their time at cruising speed (approximately 35 knots) with a smaller fraction of time at low speed.

One new pre-engineered Butler Building erected for boat storage emissions from transporting and erecting the modular building and erecting the modular building will be minimal and temporary, and have been neglected.

There will be a total of 71 active duty and 33 reservists associated with the Proposed Action. These will all be new staff (104) to the New York Staten Island Coast Guard facility. The reservists will come to Staten Island only one weekend per month for exercises.

Assumptions:

Assume that the two harbor patrols will be in NJ-NY-CT AQCR 100% of the time, running 6 hr/day, 329 days/yr.
Assume that the two harbor patrols will be on 12 hour Military Load-out patrols the other 36 days/yr

Assume that the boats that patrol the coastline will operate only in New York Harbor and Richmond County.

Assume that all commuter vehicles are in NJ-NY-CT AQCR 100% of the time.
Assume that pickups with boat trailers will commute out of NJ-NY-CT AQCR 15 days per month.

No historical data on fuel use for comperable Coast Guard watercraft were available for New York Staten Island. Assume MSST patrols use about 45 gal in a 12-hour day

Based on mileage data from comperable engines, see "Power Requirements" worksheet, these outboard motors have a thermal efficiency of approximately 22.6%.

$$\frac{(3.75\ \text{gal/hr})\ (130{,}000\ \text{Btu/gal})\ (22.6\%\ \text{thermal efficiency})}{3413\ \text{Btu/kW-hr}} = 32\ \text{kW}$$

Based on tests of outboard boat efficiency, see "Power Requirements" worksheet, a 24 foot boat uses approximately 10.3 gal/hr at a cruising speed of 32 MPH. If we assume 80:20 ratio of cruising to idle speed for the deployed boats, as opposed to 20:80 for the Harbor Patrol boats, then the deployed boats would be expected to consume approximately 8.75 gallons per hour.

$$\frac{(8.75\ \text{gal/hr})\ (130{,}000\ \text{Btu/gal})\ (22.6\%\ \text{thermal efficiency})}{3413\ \text{Btu/kW-hr}} = 75\ \text{kW}$$

Assume that the average total power demand for patrol boats over their 12-hour shifts will be:

50 HP avg. engine load to patrol harbor =	37 kW
100 HP avg. engine load to cruise along coast =	75 kW

Boat Activity in NJ-NY-CT Interstate AQCR:

	Two harbor patrol boats, 6 hr/day, 329 days/yr	
	Two harbor patrol boats, 12 hr/day, 36 days/yr	
Totals	4,812 boat-hrs in NYSDEC Region 2, Metropolitan AQCR or:	**179,367 kW-hrs**

On-Road Motor Vehicles
This analysis will compute emissions associated with 71 active duty staff vehicles commuting an average of 40 miles per day (20 miles each way), one person per car, 240 days per year.
Reservists will be assumed to originate outside of NJ-NY-CT AQCR, so their mileage will be based on 12 round trips per year from the edge of the air basin (approximately 200 miles in the NJ-NY-CT AQCR each round trip)
The three Ford F-350 pickups will be assumed to travel to the edge of NJ-NY-CT AQCR 15 times per month (approximately 200 miles in the NJ-NY-CT AQCR each round trip).
Fleet makup and age assumptions are listed and emission factors are computed on the "Commute" sheet in this workbook.

Motor Vehicle Activity in NJ-NY-CT Interstate AQCR:

71 active duty staff, 40 mi/day, 240 days/yr.	681,600 vehicle miles traveled
3 Ford F-350s, 200 miles/trip, 180 trips/yr	108,000 vehicle miles traveled
33 reservists, 200 miles/trip, 12 trips/yr	79,200 vehicle miles traveled

Motor vehicle activity in air basins outside of NJ-NY-CT AQCR will be negligible and has not been evaluated.

Emissions From Watercraft

The specification for the Proposed Action motor procurement requires that current and future MSST engines meet federal 2006 model year emission standards for outboard motors (= California 2001-2003 MY standards).

Emission Factors **Not** Used in This Analysis - Presented for Comparison Purposes Only

Emission Factors from U.S. EPA NonRoad Model Version 2.2.0
For 4-Stroke Inboard Engines, Technology M3

Exhaust Emissions				Refuel	Diurnal
NOx g/kW-hr	HC g/kW-hr	CO g/kW-hr	PM10 g/kW-hr	HC g/day	HC g/day
10.36	5.41	173.75	0.08	1.8	3.0

The NonRoad Model does not include emission factors for 4-stroke outboard motors. Furthermore, the NonRoad Model emission factors do not anticipate the federal MY2006 outboard engine emission standards (which the Proposed Action motors must meet). These factors are moderatly lower than the factors used in this analysis for NOx and HC, and moderately higher than the factor used in this analyis for CO. This PM10 factor is significantly lower than the factor used in this analysis, and may be more representative of a 4-stroke outboard than the factor used in this analysis. However, if the currently-selected engines were to be replaced by 2-stroke engines at some time during the life of the Proposed Action, the NonRoad Model PM10 factor listed above would likely underestimate 2-stroke outboard engine emissions.

Emission Certification Data Submitted by Honda Motor Corp. to EPA and CARB for the BF200A/BF225A Series engines.

NOx g/kW-hr	HC g/kW-hr	CO g/kW-hr
6.39	3.54	139.05

These factors are representative of the engines selected this year for the MSST watercraft. However, they may not be representative of any future engines that may replace these engines.

The emission factors to be used for this analysis are generic factors which are higher than the engine certification factors for the particular engines selected for the Proposed Action. The generic factors are computed to correspond to the federal 2006 emission standards, as discussed on the following page.

Federal 2006 Outboard Engine Emission Standard (Ref: 40 CFR 91.104

$$NO_x \& HC\ (g/kW\text{-}hr) = [0.25 \times (151 + 557/Ptx^{0.9})] + 6$$

where Ptx = engine rated output in kW

The emission standard is a NOx+HC standard that is expressed by an exponential formula based on the engine horsepower rating. For a 200 HP engine, the formula works out to 46 g/kW-hr NOx+HC. The ratio of NOx to HC used to allocate this 46 g/kW-hr to individual pollutant emission factors is based on the measured emissions from seven MY2002 engine families in the 140 kW+ (200 HP+) size range that meet California 2001-2003 (same as federal 2006) emission standards. The CO factor is based on the highest three CO measurements out of the seven engine families that meet the standard.

Emission Factors Used for Outboard Motors

NOx g/kW-hr	HC g/kW-hr	CO g/kW-hr	PM10 g/kW-hr	SOx g/kW-hr
14	32	140	1.3	1.2

A comparison of these default 'compliant' emission factors to the actual certification data for the engines selected for these boats indicates that this estimate will conservatively over-estimate NOx, HC and CO for these new engines, and should be conservatively high for any future engines that may replace these engines during the life of the Proposed Action.
Available references documenting emission factors for outboard motors generally provide data for NOx, HC, and CO only. For this analysis, PM10 and SOx factors for gasoline engines were taken from U.S. EPA AP-42 Table 3.3-1 dated 10/96.

Estimated Emissions From Watercraft

	NOx ton/yr	HC ton/yr	CO ton/yr	PM10 ton/yr	SOx ton/yr	
Annual NJ-NY-CT AQCR	2.77	6.33	27.68	0.26	0.25	Note (1)

(1) 179,367 kW-hrs per year in NJ-NY-CT AQCR, see Assumptions section of this worksheet.

Diurnal and refueling emissions for these watercraft are estimated to be only 17 lbs per year.

Emissions From Commuter and Tow Vehicles

Emission Factors Used for the Commuter Fleet

	NOx g/mi	HC g/mi	CO g/mi	PM10 g/mi	SOx g/mi	
Commuter Vehicles	1.2	1.4	16.4	0.93	0.1	Note (1)
Tow Vehicles	1.4	1.4	17.4	2.58	0.1	Note (2)

(1) These are national average emission factors using a fleet mix that is typical of commuter traffic.
These factors have not been refined to reflect local smog check programs, etc.
The fleet mix and emission factor calculation is done on the "Commute" sheet in this workbook.

(2) These are emission factors for Light-duty gasoline trucks (LDGV2, GVW 6000-8500 lbs)
The emission factor calculation is done on the "Commute" sheet in this workbook.

Estimated Emissions From Commuters in NJ-NY-CT Interstate AQCR

	NOx ton/yr	HC ton/yr	CO ton/yr	PM10 ton/yr	SOx ton/yr	
Commuter Vehicles	0.97	1.14	13.77	0.78	0.07	(active duty and reservists)
Tow Vehicles	0.16	0.16	2.07	0.31	0.01	
Totals	1.13	1.30	15.84	1.09	0.08	

See Assumptions section of this worksheet for discussion of vehicle miles traveled.

Total Estimated Annual Emissions From Proposed Action

	NOx ton/yr	HC ton/yr	CO ton/yr	PM10 ton/yr	SOx ton/yr
Annual NJ-NY-CT AQCR	3.90	7.63	43.52	1.35	0.33

General Conformity De Minimis Thresholds

	NOx ton/yr	HC ton/yr	CO ton/yr	PM10 ton/yr	SOx ton/yr	
Annual NJ-NY-CT AQCR	25.00	25.00	--	--	--	Severe 17 O_3 Nonattainment

Cells with "--" in them indicate federal attainment for this pollutant in this area. No conformity determination is necessary for this pollutant in this air basin.

General Conformity Regional Significance Thresholds (10% of regional budget)

Since future year budgets were not readily available, actual 1999 air emissions inventories for the counties were used as an approximation of the regional inventory. Because the Proposed Action is several orders of magnitude below significance, the conclusion would be the same, regardless of whether future year budget data set were used.

NJ-NY-CT Interstate AQCR Target Year Emissions Budgets

	Point and Area Sources Combined				
Year	**NOx (tpy)**	**VOC (tpy)**	**CO (tpy)**	**PM10 (tpy)**	**SO2 (tpy)**
1999	717,878	809,816	4,702,135	286,062	307,229

Source: USEPA-AirData NET Tier Report (http://www.epa.gov/air/data/nettier.html). Site visited on 9/5/03

Determination Significance (Significance Threshold = 10%)

Minimum -1999	717,878	809,816	4,702,135	286,062	307,229
Proposed Action %	**0.0005%**	**0.0009%**	**0.0009%**	**0.0005%**	**0.0001%**

ASSUMPTIONS

Staff: 71 Active duty staff supporting the MSST will all be new staff.
33 Reservists will come in only one weekend per month for exercises.

Commute: Active duty staff live anywhere from 5 to 40 miles from the station.
An estimate of 20 miles cummute each way should be conservative.

Boats: Six Safeboats International 25' Response Boat Homeland Security (RB-HS)

Motors: twin 225 HP Honda outboard motors

Fuel Use: Not enough experience to estimate daily fuel consumption, but they know that these boats consume 15 gal/hr when cruising at 35 knots. They expect to cruise at 35 knots up to 20% of the time as they go out to pick up escorts or return from escort missions, and as they relocate within the harbor area.
The boat holds 125 gallons of fuel.

Duty: Two boats on harbor duty. 6 hr/day each would be a realistic estimate of how much time they will be running, rather than 12 hr/day.
Patrols may increase to 8-12 hours per day during military loadouts, but he would not anticipate a patrol of 48 consecutive hours (as previously assumed)
Two or three boats will be subject to deployment anywhere from Cinncinnati, Philadelphia, and Boston.
These boats will generally NOT cruise to their assignments but will be trailered to their assignments behind Ford F-350 gasoline pickups. I should assume that the trucks with boat trailers will travel out and back 15 days per month.

Power Reqirements for MSST Boats

http://www.boatmotors.com/outboard/outboard_motor_article.html
Lambrecht, Ralph. 2002. "Two-stroke conventional wisdom." Boat & Motor Dealer. April. 34-37

Mr Lambrecht gave results from comparitive testing of 2002 model year 2-stroke outboards vs 4-stroke outboards. He did not cite who did the tests or what motors were tested. His point was that there is little difference in mileage and speed, and the 2-strokes meet emission standards.

	Calculations						
	gal/hr	gal/hr	Thermal Efficiency		Average	HP	HP
20.7' boat							
225 HP outboards							
4.5 to 4.7 mpg at 28 mph	6.0	6.2				70	73
2.7 to 3.2 mpg at 52 mph top speed	16.3	19.3	(a)	22.9%	22.9%		
24' boat							
225 HP outboards							
3.1 mpg at 32 mph	10.3	10.3				121	121
2.4 to 2.6 mpg at 46 to 48 mph top speed	18.5	19.2	23.9%	23.0%	23.4%		
20" boat							
135 HP outboards							
4 to 4.2 mpg at 21 mph	5.0	5.3				55	58
3 to 3.5 mpg at 37 to 43 mph top speed	12.3	12.3	21.5%	21.4%	21.5%		
4.45 mpg at 28 mph (best economy)	6.3	6.3					

If we assume that the engines were putting out rated horsepower at top speed, then we can compute the thermal efficiency of these outboards based on the gallon per hour throughput and the rated output. Gasoline has 130,000 Btu/gal and there are 2546.5 Btus in a horsepower-hour.

Overall Average Thermal Efficiency
22.6%

a) The 3.2 mpg at 52 mph cannot be used in efficiency calculations because this was not the maximum speed for this engine/boat combination, so the engine was putting out less than 225 HP, and there is no way to know how many HP it

was producing, so the thermal efficiency cannot be computed.

For the 200 HP engines used in this analysis, a 23% thermal efficiency will be assumed.

The power demand is hard to predict, because gas mileage likely starts fairly high at really low speeds, then dips somewhere in the 10-20 mph range, then maxes out at around 30 mph as the boat rises out of the water, then drops again as the boat approaches maximum speed.

From what I am seeing so far, my initial 50 HP guess for patrol load may have been accurate. Howerver, to accommodate averaging in occasional relocations at above planing speed, I will assume an average load of 75 HP over the 12 hour day.

Average power output based on fuel consumption while on patrol:

Chief Petty Officer Mark Wilkins (Galveston) said on 11/26/02 that they use about 45 gal in a 12-hour day.

$$\frac{(3.75 \text{ gal/hr})\ (130{,}000 \text{ Btu/gal})\ (22.6\% \text{ thermal efficiency})}{3413 \text{ Btu/kW-hr}} = 32.28 \text{ kW}$$

$$= 43.30 \text{ HP}$$

Safeboat 25' (Defender Class) RB-HS w/twin 225 HP outboards photo by Neil Rabinowitz

Safeboat 25' (Defender Class) RB-HS on trailer photo by Neil Rabinowitz