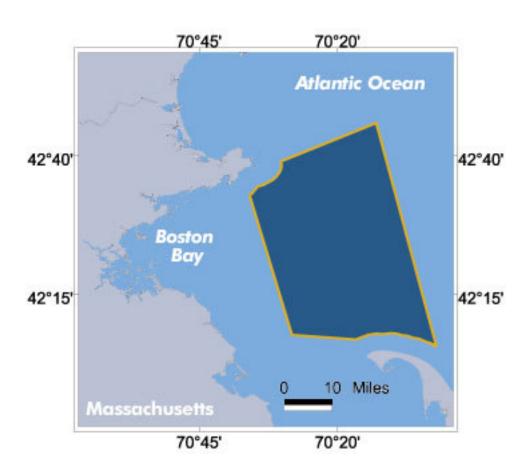
# STELLWAGEN BANK NATIONAL MARINE SANCTUARY ANNEX

# Plymouth to Salisbury, MA Area Contingency Plan



#### INTRODUCTION

The National Marine Sanctuaries Act (also known as Title III of the Marine Protection, Research, and Sanctuaries Act of 1972; or NMSA) authorizes the Secretary of Commerce to designate and manage areas of the marine environment with special national significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational or esthetic qualities as National Marine Sanctuaries (NMS). The primary objective of the NMSA is to protect marine resources, such as coral reefs, sunken historical vessels or unique habitats. Sanctuaries are managed according to site-specific plans prepared by the National Oceanic and Atmospheric Administration's (NOAA) National Marine Sanctuary Program (NMSP), within NOAA's Ocean Service.

The Gerry E. Studds Stellwagen Bank National Marine Sanctuary (SBNMS) was designated in 1992. SBNMS is located between Cape Ann and Cape Cod, in the southwest corner of the Gulf of Maine, is Massachusetts Bay. Stellwagen Bank is the centerpiece SBNMS, which encompasses a total of 638 square nm. SBNMS also includes all of Tillies Bank (situated to the northeast of Stellwagen Bank) and southern portions of Jeffreys Ledge (situated to the north). The western boundary line of SBNMS is approximately 25 miles east of Boston; the southern boundary is three miles from Provincetown, MA while the northwestern boundary is three miles from Gloucester, MA.

The SBNMS boundary occurs entirely within Federal waters (beyond the three-mile limit of Commonwealth jurisdiction). The southern border follows a line tangential to the seaward limit of Commonwealth jurisdiction adjacent to the Commonwealth-designated Cape Cod Bay Ocean Sanctuary; and is also tangential to waters designated by the Commonwealth as the Cape Cod Ocean Sanctuary. The northwest border of the sanctuary coincides with the Commonwealth-designated North Shore Ocean Sanctuary

#### Boundary coordinates for SBNMS (15 FR 922, Appendix A to Subpart N)

Point	Latitude	Longitude
NE	42 deg 45' 59.83" N	70 deg 13' 01.77" W
SE	42 deg 05' 35.51" N	70 deg 02' 08.14" W
SW	42 deg 07' 44.89" N	70 deg 28' 15.44" W
WNW	42 deg 32' 53.52" N	70 deg 35' 52.38" W
NNW	42 deg 39' 04.08" N	70 deg 30' 11.29" W

#### **Command**

As described in the NCP, on-scene coordinators (OSCs) are responsible for organizing a response that utilizes the Incident Command System (ICS). It is incumbent upon NMS staff and their partners to understand, be trained and familiar with ICS, as well as understand how they will best fit into the system during various types of events.

NOAA typically works within the ICS / UC system through the Office of Response and Restoration, Hazardous Materials Response Division's (HAZMAT) Scientific Support Coordinators (SSCs) that

are co-located in each of the USCG Districts around the country. The SSC leads the scientific team on the FOSC's staff and is responsible for providing mission-critical scientific information to the response. As such, in many instances the SSC will present NMS concerns and positions to the Unified Command and for the response, in general. However, this does not preclude the NMS staff being actively involved within the Environmental Section and, should it be deemed appropriate by the Federal On-Scene Coordinator (FOSC), direct involvement with the UC.

The NOAA SSC is responsible for all response-related NOAA personnel on scene. This does not include NOAA Trustees or NOAA Damage Assessment Center personnel. SBNMS are required to coordinate with the SSC or the SSC stafff when coming on scene in order that proper safety information can be conveyed, mission assignments made and field operations coordinated.

In addition, the Department of Commerce (DOC) and NOAA representative to the Regional Response Teams (RRTs) are the designated representatives for NOAA trustee resources during oil and hazardous materials incidents. It is these individuals who are responsible for coordinating and articulating NOAA policy position during a response, particularly with respect to the use of advanced response technologies such as dispersants, in-situ burning and bioremediation. This does not preclude SBNMS from speaking on issues of internal sanctuary policy.

#### **Role of SBNMS Staff in ICS**

Depending on the type of response event, it is generally expected that SBNMS will provide staff and resources in the following areas (Figure 1):

- *Planning Section/Environmental Unit:* 
  - NMS staff will be relied upon to provide the best available information about sanctuary resources that are at risk, provide baseline characterizations, assess and suggest response options, and provide trained wildlife observers. Additionally, NMS staff will participate in such issues as consultation and permitting issues (e.g., NMSA, NHPA, ESA, MMPA).
- *Operations Section:* 
  - NMS staff may be requested to provide access to and coordinate deployment of planes, boats, equipment, divers, vehicles, facilities, field-trained staff and wildlife observers.
- *Finance Section*:
  - NMS staff will be responsible to ensure that the FOSC or its designee has approved all expenditures, and that appropriate documentation of NMS costs occurs. Staff will coordinate closely with NMS Headquarters and HAZMAT Finance staff in these activities. ORR/ HAZMAT Finance staff will estimate, track and report SBNMS hours through the SSC, or if appropriate, directly to the USCG officer in charge of response cost tracking.
- Information Officer / Joint Information Center:
  - NMS staff will be asked to provide outreach materials and resources as needed, particularly information about NMS resources and the NMS System. All information about an incident must be coordinated and released through the JIC.

#### • *Command:*

• The NCP states that FOSCs have discretion to include resource managers in the Incident Command, should they deem it appropriate. Inclusion is not a given.

#### **Contacts**

The following contacts may be involved in some aspects of a response.

SBNMS Contact	Title	Phone	Home
SBNMS Office (bus. hrs)		(781) 545-8026	
Craig MacDonald, Ph.D.	Superintendent	(781) 545-8026	(781) 582-0316
Craig MacDonald, 1 n.D.	Superintendent	x202	
Benjamin Cowie-Haskell	Operations / Facilities	(781) 545-8026	(781) 837-0982
Benjamin Cowie-Hasken	Coordinator	x207	
Anne I. Smrcina	Education / Outreach Coordinator	(781) 545-8026	
Aime I. Simema	Education / Outreach Coordinator	x204	
David Wiley, Ph.D.	Science Coordinator	(781) 545-8026	
David Wiley, Fil.D.	Science Coordinator	x211	

Primary emergency contact personnel indicated in **BOLD** 

#### Resources at Risk

The Sanctuary encompasses within its boundaries each of the five major seafloor habitat types – rocky outcrop, piled boulder, gravel, sand and mud - found in the Gulf of Maine. These habitats are spread across the series of banks and deep basins that make the Sanctuary the diverse topographic area that it is. This unique seafloor topography combines with tidal currents, seasonal mixing and annual circulation patterns to support a diverse array of species, from microscopic phytoplankton to large marine mammals.

Some of these species are vulnerable to oil and other hazardous materials. The species below spend all or part of their time on the surface making them particularly vulnerable to fouling by hazardous materials.

# **Sea Birds**

Stellwagen Bank Sea Birds		OCCUR.	ANCES		
Species	Vulnerability	Winter	Spring	Summer	Fall
Cory's Shearwater	Н			R	О
Greater Shearwater	Н		O	U	U
Sooty Shearwater	Н		C	C	U
Manx Shearwater	Н		O	U	U
Leach's Storm Petrel	Н		O	R	O
Wilson's Storm Petrel	Н		U	C	O
Northern Gannet	Н	C	C	O	C
Common Eider	Н	C	U		U
Black Scoter	Н				U
Surf Scoter	Н				C
White-winged Scoter	Н	O			C
Dovekie	Н	O			R
Common Murre	Н		U	C	C
Thick-billed Murre	Н	O			
Razorbill	Н	C	R		U
Black Guillemot	Н	R			
Atlantic Puffin	Н	O			R
Common Loon	M	O	U		U
Northern Fulmar	M	U	O		U
Great Cormorant	M	U	O		O
Double-crested Cormorant	M		C	C	C
Oldsquaw	M	U	O		O
Red-necked Phalarope	M		O	O	U
Parasitic Jeager	M		O	O	U
Iceland Gull	M	U			O
Lesser Black-backed Gull	M	R	R		R
Glaucous Gull	M	O	R		R
Great Black-backed Gull	M	A	A	A	A
Black-legged Kittiwake	M	A	O		U
Sabine's Gull	M			R	R
Roseate Tern*	M			O	O
Pomarine Jeager	L		R	O	U
Long-tailed Jeager	L				R
Laughing Gull	L		O	U	U
Bonaparte's Gull	L				O
Ring-billed Gull	L	R	R	R	R
Herring Gull	L	A	A	A	A
Common Tern	L		U	С	С

#### \* State & Federal Endangered Species

A = abundant
C = common
U = uncommon
Species should be expected on 100 percent of visits
Species should be expected on 50-99 percent of visits
Species should be expected on 25-49 percent of visits
Species should be expected on 1-24 percent of visits
R = rare
Species should not be expected on most visits

WINTER: December-March SPRING: April-May

SUMMER: June-August FALL: September-November

#### References:

1. Petersen, Wayne; Ward, Nathalie, Center for Coastal Studies <u>Stellwagen Bank, A Guide to the Whales, Sea Birds, and Marine Life of the Stellwagen Bank National Marine Sanctuary</u>, 1995

2. RPI, Inc. & NOAA, et. al., Natural Resources Response Guide: Marine Birds, 1988

#### Response Considerations: Sea Birds

- 1. The responsibility for management and protection of sea birds in the SBNMS is that of the US Fish and Wildlife Service.
- 2. SBNMS will provide, as appropriate, data and trained observers to assist the USFWS in assessing, hazing and otherwise protecting vulnerable sea birds within the Sanctuary.

### **Marine Mammals**

# Whales, Dolphins, and Porpoises (cetaceans)

Right*	frequents the SBNMS and skim feeds along surface on	
	copepods.	
Humpback*	very abundant from May – Nov.	
Finback*	frequently sighted from Apr- Oct.	
Minke	common	
Sei*	occasional visitor	
Blue*	occasional visitor	
Pilot	present May – Oct.	
Harbor porpoise	present during late spring, early summer.	
Orca ("killer whale")	infrequent visitor	
White-sided dolphin	present all year	

<sup>\*</sup> Federally Endangered Species

#### Response Considerations: Whales, Dolphins, and Porpoises

- 1. Any encounter or disturbance of a federally endangered species (right, humpback, finback, sei or blue whales) as a result of federal actions is subject to the consultation requirements of section 7 of the Endangered Species Act and the subsequent MOU between DOI, NOAA and USCG. Response measures that, in any way might fall under these provisions should be reviewed by the applicable federal natural resource trustee or agency subject-matter experts.
- 2. All non-conventional response techniques (chemical dispersants, in-situ burning, etc.) require separate approval during certain times of the years (see below).
- 3. Activities in and around the Stellwagen Bank National Marine Sanctuary during times of large cetacean activity should include input (preferable on-scene) of a NOAA cetacean biologist. This action is for the protection of the animals as well as the safety of response personnel in small boats.
- 4. Cetaceans observed or suspected to be oiled or found dead within the Sanctuary should be reported to the Unified Command and the Environmental Unit. Direct action regarding these animals (even dead animals) may be coordinated with Sanctuary staff, but all actions MUST be following consultation with the NOAA National Marine Fisheries Services, Office of Protected Resources or an authorized representative (see Marine Mammal Protection Act, 1972). Contact information below.

### Seals (pinnipeds)

Harbor (*Phoca vitulina*) Gray (*Halichoerus grypus*)

Occurrence	Both species are more common in the winter to spring months (October through May)
Pupping	The harbor seal pup (gives birth to young) mid-April to mid-June off the Maine and New Brunswick coasts. Gray seals pup from mid-December to early February in eastern Canada. There is no pupping in the Sactuary.
Haul Outs:	Seals "haul out" on to exposed sandy or rocky areas in order to rest and to pup. As no such exposed areas exist within the Sanctuary, even at low tide, no hauling out occurs.

#### Reference:

- L. Katona, Steven, et.al. A Field Guide to Whales, Porpoises, and Seals, 1993
- 2. Ward, Nathalie, Center for Coastal Studies <u>Stellwagen Bank, A Guide to the Whales, Sea Birds, and Marine Life of the Stellwagen Bank National Marine Sanctuary</u>, 1995

#### Response Considerations: Seals

- 1. Pinnipeds are vulnerable to oil through dermal (skin) exposure, inhalation and ingestion. It is not uncommon to witness impacts from behavioral changes to mortality in pinnipeds during certain types of spills, most regularly with lighter, more volatile and more toxic refined oils such as gasoline, diesel and home heating oil.
- 2. Pinnipeds observed or suspected to be oiled within the Sanctuary should be reported to the Unified Command and the Environmental Unit. Direct action

regarding these animals may be coordinated with Sanctuary staff, but all actions MUST be following consultation with the NOAA National Marine Fisheries Services, Office of Protected Resources or an authorized representative (see Marine Mammal Protection Act, 1972).

#### Marine Mammal Contact Information

#### Governmental Units

<b>Protected Resources Division</b>	Protected Species Branch
NMFS Northeast Region	NMFS Northeast Fisheries Science Center
One Blackburn Drive	166 Water Street
Gloucester, MA 01930-2298	Woods Hole, MA 02543-1026
(508) 281-9328	(508) 495-2000

#### Authorized Non-governmental Units

New England Aquarium	Cape Cod Stranding Network
Central Wharf	PO Box 287
Boston, MA 02110	Buzzards Bay, MA 02532
Hotline: (617) 973-5247	Hotline: 508-301-7859

### **Fin Fish**

These fish frequently school or feed at the surface.

Herring	primary prey for finback whales and important prey for many fish
Sand Lance	primary prey of humpback whales and important prey for many fish
Tuna	feed at surface on schools of herring, sand lance, and bluefish
Bluefish	present during warmer months
Striped Bass	present during warmer months
Basking Sharks	skim feed on zooplankton from May – Oct.
Ocean Sunfish	feed on jellies from May – Oct.

#### Response Considerations: Fin Fish

- 1. Fisheries management decisions (closing, opening, etc.) in the SBNMS will be the responsibility of the NOAA National Marine Fisheries Service, under the Magnuson-Stevens Fisheries Conservation & Management Act of 1976, 2000, with a level of Sanctuary consultation they feel is appropriate.
- 2. Fish landing management, generally reserved for taint and contamination issues during a spill, will be the responsibility of the state of Massachusetts.

## **Sea Turtles**

These turtles spend a significant amount of time at the surface.

Leatherback	regular summer visitor, feeds on jellies
Atlantic ridley	regular summer visitor, feeds on jellies

#### Response Considerations: Sea Turtles

- 1. In general, the greatest vulnerability to sea turtles from oil is during nesting. As sea turtles do not nest anywhere in New England, there is reduced threat to these animals.
- 2. Sea turtles sometimes experience "cold shock" during the early winter months if individuals migrate late. This can cause the animal to become disoriented and come ashore. In this rare event, NOAA National Marine Fisheries Service or the Department of the Interior (both share trust responsibilities for sea turtles), or the marine mammal stranding network should be contacted (see above).

#### **Invertebrates**

These zooplankton school in surface waters during certain times of the day. Zooplankton production begins along coastal waters of Massachusetts north of Cape Ann during March. Production continues to expand throughout the southern Gulf of Maine and the Sanctuary throughout April, peaking by the end of May.

Copepods	Year Round, heaviest production during the spring
Euphausids	Year Round, heaviest production during the spring

#### Response Considerations: Invertebrates

1. As the invertebrates in the SBNMS are planktonic (free floating), mitigation of impact to these organisms is virtually impossible.

# **Human Uses**

#### Whale Watching

Historically important as a fishing ground, Stellwagen Bank is now one of the premiere whalewatching destinations in the world. Whalewatch vessel entry to the Sanctuary comes primarily from eight ports along the coast of Massachusetts Bay, but occasionally also from New Hampshire and southern Maine. Since the mid-1970s, whalewatching has become an economically and educationally significant activity in the Sanctuary. In fact, over 90% of all New England regional whalewatching effort occurs within the Sanctuary boundaries.

In 1997, the most recent data year, direct gross sales revenues in the New England region for whalewatching were estimated at around \$21 million. At least 10 million people went whalewatching in the Sanctuary between 1975 and 1993. An estimated 864,000 individuals went whalewatching there during the 1996 season alone. On an annual basis, these numbers are generally believed to have since increased.

#### **Commercial Fishing**

Historically, the yield from groundfish, invertebrate, and pelagic fisheries was a singularly important commercial resource for the New England region beginning in the Colonial Period. Today, commercial fishing remains among the more important sources of revenue for the New England coastal states. Precise estimates of the fishing effort, and associated landings, applied to the Sanctuary on a seasonal and annual basis are currently not available, but continue to be a matter of significant interest.

#### **Recreational Fishing and Boating**

The Sanctuary is a popular destination for recreational fishing boats, sailboats and powerboats. Recreational fishing, from party boats, charters and private boats, is regularly directed at fish from cod to bluefin tuna inside the Sanctuary. There are 65 small boat harbors and over 80 boating and yacht clubs sited along the Massachusetts coast giving access to the Sanctuary. Recreational boaters typically transit the Sanctuary going to and from Boston, coming from the Cape Cod Canal or Cape Cod Bay, and from Provincetown or Cape Anne. Recreational boaters are most numerous and often aggregate within the Sanctuary during the whalewatching season from May to September. On a calm summer day, recreational boats can number in the hundreds over Stellwagen Bank.

#### **Commercial Shipping, Ferries and Cruise Ships**

The Sanctuary area can be described as the "gateway" to maritime commerce of Massachusetts. As one of the busiest ports in the country, Boston sustains great amounts of commercial shipping traffic. Shipping lanes designated for entry and exit to and from the Port cross the Sanctuary, with vessels plying natural gas, cars from Europe and the Far East, and regional freight, for example. Ferries cross the Sanctuary in route to Provincetown from Boston and Plymouth, and ferry service between Portsmouth (NH) and Provincetown, that would cross the Sanctuary, is proposed. Some of these ferries operate at high speeds in excess of 30 knots. Cruise ship activity has been increasing and is heavily promoted for the Port of Boston.

# **Response Considerations**

#### Chemical Dispersants Use Policy in Stellwagen Bank National Marine Sanctuary

Massachusetts/ Rhode Island Dispersant Pre-Authorization Policy, RRT-1, 1997

Agreement Area and Date Approved	OSC Decision Zone	Expedited Decision Zone	Trial Application Zone	Special Consideration Areas
MA / RI	> 2nm from	N/A	N/A	

1997	coast & > 40 feet		Applicable: April 01-November 15
	deep		(Consultation with National Marine Fisheries Service and the SBNMS Superintendent or designee required)  Craig MacDonald (primary) Ben Cowie-Haskell (secondary)

### In-Situ Burning Policy in Stellwagen Bank National Marine Sanctuary

#### **RRT-1 MOU 1997**

Agreement Area and Date Approved	OSC Decision Zone	Expedited Decision Zone	Case by Case Zone	Special Consideration Areas
Region I 1997	> 6 mi	IOSC and State	Remainder of agreement area (inside 1 mile) decision is that of OSC and State OSC in consultation with DOI/NOAA trustees, and involving other parties as defined by state (i.e. fire chiefs, air quality boards, etc.)	Applicable: Year Round  (Consultation with National Marine Fisheries Service and the SBNMS Superintendent or designee required)  Craig MacDonald (primary) Ben Cowie-Haskell (secondary)

#### **Salvage**

As practical, salvage operations (surface and subsurface) within the boundary of the Stellwagen Bank National Marine Sanctuary or such operations that could reasonably be expected to have negative consequences on the Sanctuary, but are outside the Sanctuary will be coordinated with SBNMS staff by the US Coast Guard.

#### **Archeological Resources**

The SBNMS has within its boundary several historic ship wrecks. Marine archeological sites are considered to be national trust resources and, as such, are under the protection of the NOAA Trustee. Any activity that potentially impacts such a resource should be done with the consultation of the NOAA Trustee and SBNMS staff.

#### **Notification**

The SBNMS will be notified by the USCG Marine Safety Office, or their representative, of pollution events or potential pollution events within their boundary or potentially affecting the Sanctuary. While there is no specified threshold size that triggers notification, the Sanctuary may not be notified of very small releases or releases of very short duration (e.g.: 100 gallons of diesel fuel in high winds). However, the USCG will attempt to err on the conservative side.

The SBNMS will identify two primary points of contact (see Response Contacts above), either of whom will be empowered to act for the SBNMS in the event of an emergency. These contacts will be updated by the Sanctuary as necessary and will include an after-hours telephone or pager number.

#### Data

The SBNMS will make available all relevant data, maps, charts, soundings, photographs, etc. to the USCG FOSC in the event of a spill or marine casualty. These data will be used by the Environmental Unit or other unit of the Unified Command to better mitigate, cleanup or respond to the emergency. (See SBNMS's list of available data below).

#### Sinking or Non-Buoyant Oils and Oil Products

It is very rare that an oil or oil product will sink in open water such as the SBNMS. However, if such an event occurs and the SBNMS boundary represents greater than fifty percent of the impact area, the FOSC will consider making the superintendent of the SBNMS a part of the Unified Command.

#### **Lightering within the SBNMS**

Lightering in the SBNMS is prohibited. A permit will be necessary to conduct this activity.

#### **SBNMS Resources**

• Vessels:

R/V Gannet 28 foot, out board

• Data:

A wide array of environmental data, mostly specially referenced on a geographic information system (GIS), including bathymetric imagery and mapping, resource distribution mapping and sea floor sedimentation mapping.