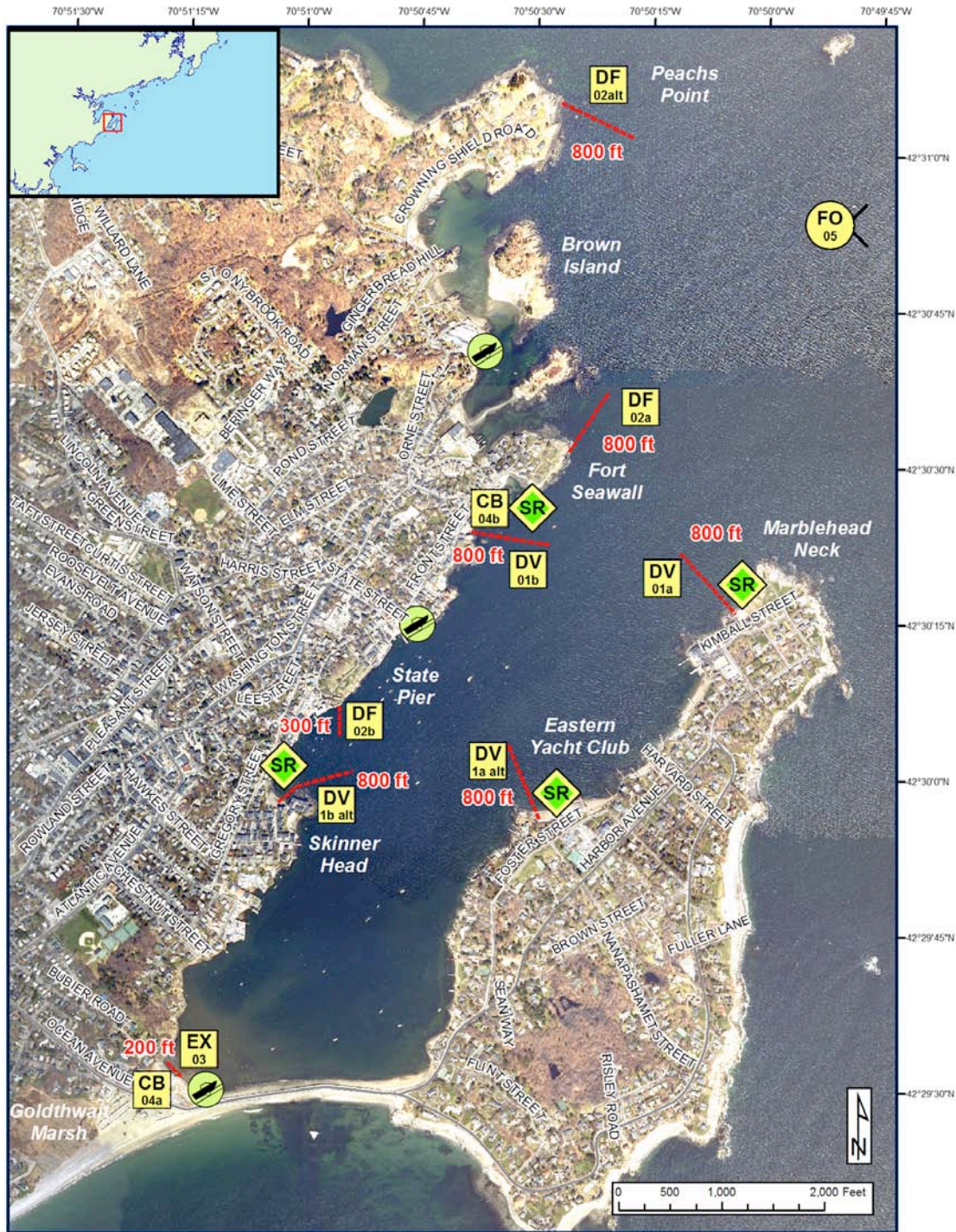




North Shore Geographic Response Plan

Marblehead Harbor NS-27



Map Legend			
BB Beach Berm	DF Deflection Booming	MD Mosquito Ditch	Protected-water Boom (Flood Tide)
CB Culvert Block	EX Exclusion Booming	U.S. Coast Guard Station	Protected-water Boom (Ebb Tide)
DV Diversion Booming	SR Shoreside Recovery	Boat Ramp	Snare or Sorbent Boom
PR Passive Recovery	FO Free-oil Recovery	Snare or Sorbent Boom	Beach Berm Material






A total of 3 State Response Trailers are required to implement all of the tactics in this GRP. Responders should always consider on-scene conditions before deploying GRP tactics. Tactics may not be safe or effective under certain conditions. Responder safety should always be the first priority.





North Shore Geographic Response Plan

Marblehead Harbor NS-27






ID	Location and Description	Response Strategy	Implementation
NS-27-01 	Marblehead Harbor (a)Marblehead Neck Lat. 42°30'18"N Lon. 70°50'7"W (b)Front St Lat. 42°30'23"N Lon. 70°50'35"W (a-alt)Eastern Yacht Club Lat. 42°30'N Lon. 70°50'32"W (b-alt)Skinner Head Lat. 42°30'N Lon. 70°50'58"W	Divert and Collect - Shoreside Place and anchor sections of protected water boom at the proper angle to the incoming oil to divert it to the identified shoreside collection locations.	Deploy anchors and boom with skiffs. For (a) and (b) place 800 ft of 18" boom angled as shown in the diagram to divert incoming oil to the collection sites at Marblehead Neck and Front St. Set anchors every 200 ft. Set up shoreside recovery and add passive recovery at the shoreline to minimize leakage and damage. If conditions do not allow for the execution of (a) and (b) or if additional response is called for, set (a-alt) and (b-alt) to divert incoming oil to the collection sites at Eastern Y.C. and Skinner Head. Set NS-27-02b with (b-alt) to divert oil to collection site. Tend throughout the tide.
NS-27-02 	Marblehead Harbor (a)Fort Seawall Lat. 42°30'46"N Lon. 70°50'28"W (alt)Peachs Point Lat. 42°30'46"N Lon. 70°50'28"W (b)State Pier Lat. 42°30'6"N Lon. 70°50'56"W	Deflection Set (a) or (alt) to deflect oil away from sensitive environmental area behind Brown and Gerry Islands. Set (b) to deflect oil to shoreside recovery at Skinner Head and minimize impact to shoreline.	Deploy anchors and boom with skiffs. For (a) on an inbound tide or for oil approaching from the east to northeast, place a 800 ft line of boom at Fort Seawall to deflect oil away from the shoreline as shown in the diagram. Switch deflection boom to Peachs Point (alt) for an outgoing tide or for oil approaching from the west. Set anchors every 200 ft. For (b) place 300 ft of boom in a southerly direction to deflect oil to the Skinner Head collection site. Set anchors every 200 ft and adjust boom based on currents and tides. Tend throughout the tide.
NS-27-03 	Marblehead Harbor Goldthwait Marsh Lat. 42°29'31"N Lon. 70°51'18"W	Exclusion Deploy boom to block off the entrance to Goldthwait Marsh.	Place 200 ft of 18" boom at the entrance to Goldthwait Marsh to prevent oil from entering. Tend throughout the tide.
NS-27-04 	Marblehead Harbor (a) Riverhead Beach Lat. 42°29'31"N Lon. 70°51'18"W (b) Shoreside recovery area by DV-01b Lat. 42°30'23"N Lon. 70°50'35"W	Culvert Block Place culvert blocks and/or set exclusion boom to prevent oil from entering the two large culverts next to the boat ramp at Ocean Ave. They are located near Riverhead Beach. CB-04b is located in the shoreside recovery area near by DV-01b.	Install culvert blocks or set up exclusion boom at low tide. If inflatable plugs are not available, place plywood or similar sheeting material across the entrance of the culverts. Use plastic sheeting to ensure the seal. Stack adequate sandbags against the plywood sheeting to counter the out flow pressure. Monitor the blocks to ensure blocking integrity. Culvert blocks should be tested and stored at appropriate locations.
NS-27-05 	Salem Sound	Free-Oil Recovery Maximize free-oil recovery in the offshore & nearshore environment of Salem Sound depending on spill location and trajectory.	Deploy free-oil recovery strike teams upwind and up current of the port area. Use aerial surveillance to locate incoming slicks. Ensure that responders have experience with on-water free-oil recovery.





North Shore Geographic Response Plan

Marblehead Harbor NS-27

ID	Response Resources	Staging Area Site Access	Resources Protected	Special Considerations
NS-27-01 	Deployment Equipment (Primary sites) 1600 ft 18" boom 8 anchor systems 2 anchor stakes 2 shoreside recovery systems Vessels 2 skiffs Personnel/Shift 8 total (1 vessel operator + 1 responder per vessel, 4 shoreside responders) Tending Vessels 1 skiff Personnel/Shift 4 total (1 vessel operator + 1 responder per vessel, 2 shoreside responders)	Staging Area: From Rt 114/Pleasant St, left on Washington St., right on State St., left on Front St. Boat Ramp at 81 Front Street. Site Access: (a) From Rt 129/Atlantic Ave to Ocean Ave to Manley St. to Kimball St. (b) Rt 129/Atlantic Ave to Hawkee St to Gregory St to Union St to Front St to corner at Selman St (a-alt) From Rt 129/Atlantic Ave to Ocean Ave to Harbor Ave to Foster St. (b-alt) Rt 129/Atlantic Ave to Hawkee St to Gregory St to Catherine Ln. Chart 13275-1	Birds – Nesting sites, Seabirds, Shorebirds Invertebrates – Shellfish, Urchins Habitat – Beach, Rocky Shore, Tidal Flats Human Use – Marina, Boat Ramp, Port/Harbor	Tide range 7 – 11 ft. Vessel master should have local knowledge. Large number of recreational vessels. Developed shoreline with riprap, pier pilings, docks and floats. Moored vessels may need to be moved. Entire site surveyed: 06/02/09. Tested: 06/30/10
NS-27-02 	Deployment Equipment (Primary sites) 1100 ft 18" boom 6 anchor systems 2 anchor stakes Vessels Same as DV-01 Personnel/Shift Same as DV-01 Tending Vessels Same as DV-01 Personnel/Shift Same as DV-01	Site Access: (a) From Rt 114/Pleasant St to Washington St to Orne St to Beacon St. (b) From Rt 129/Atlantic Ave to Hawkee St to Gregory St to Union St to Water St.	Same as NS-27-01.	(continued from NS-27-01) Consider loading the boom on to the vessel rather than towing through a mooring field. Consider using permanent anchors/shoreline attachment points.
NS-27-03 	Deployment Equipment 200 ft 18" boom 2 anchor stakes Vessels Same as DV-01 Personnel/Shift Same as DV-01 Tending Vessels Same as DV-01 Personnel/Shift Same as DV-01	From Rt 129/Atlantic Ave to Ocean Ave	Same as NS-27-01.	Same as NS-27-01.
NS-27-04 	Deployment (per site) Transport 1 Truck Equipment 2 inflatable culvert blocks or 2 sheets of plywood 100-200 sandbags 2 polyethylene sheeting Personnel/Shift 4 shoreside responders	Same as NS-27-03.	Same as NS-27-01.	Coordinate with DPW. For the 2 culverts at Riverhead Beach; one culvert drains from the town and the other drains from Goldthwait Marsh.
NS-27-05 	Deploy multiple free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas.	Site Access: Vessel Platform Via marine waters. Chart 13275-1	Same as NS-27-01.	Vessel master should have local knowledge.





Site Photographs and Contact Information



Shoreline behind Brown Island at low tide on 02 June 2009. View looks south.



Peachs Point. MassDEP, 14 April 2009.



Front St collection site at low tide on 02 June 2009. View looks southwest.



Western shoreline of Marblehead. MassDEP, 14 April 2009.



Marblehead Neck collection site at low tide on 02 June 2009. View looks northeast.

Contact Information:

Marblehead Fire Department: 978-631-0142
Marblehead Harbormaster: 978-631-2386
Marblehead DPW: 781-631-1750
Salem Sound Coastwatch: 978-741-7900
U.S.C.G. Station Gloucester: 978-283-0705
Mass Division of Marine Fisheries: 617-626-1520
Environmental Police: 800-632-8075

