



# Massachusetts Department of Environmental Protection Three-Year Geographic Response Plan Testing Program

---

## After-Action Report on Marblehead Harbor (NS-27) GRP Test

Testing Date: June 30, 2010

Developed by Nuka Research and Planning Group, LLC  
July 2010

### Project Background

MassDEP has initiated a three-year program to test GRPs at a variety of locations statewide. This long-term testing program will benefit ongoing and future GRP development throughout the state by documenting lessons learned for various oil spill response tactics under a range of conditions. The testing will also provide practical training opportunities for local responders and spill response organizations, and will improve the level of preparedness to respond to coastal oil spills statewide. The overall purpose of the testing program is to evaluate the *tactics and strategies* and not to test or challenge the spill responders (local or professional). However, the testing process often yields important information about areas where additional training or standardization is needed to improve overall response capabilities. For additional information on the MassDEP 3-Year GRP testing program, visit the project website at <http://grp.nukaresearch.com/testing.htm>.

### Testing Overview

The sixth GRP site tested as part of the 3-Year MassDEP program was NS-27, Marblehead Harbor. A full day of testing was conducted on June 30, 2010 to evaluate the draft tactics and strategies in GRP-NS-27. Due to a request for more in-depth training from responders in Swampscott and Nahant, the first half of the day was classroom training led by instructors from Moran Environmental and Nuka Research. During the afternoon, the group relocated to Marblehead Harbor and deployed boom to test the tactic DV-01b.

A planning team consisting of representatives of MassDEP, the towns of Swampscott, Marblehead, Nahant and Nuka Research (contractor) met periodically in the months prior to the deployment test to establish objectives, select the sites and develop a schedule.

The testing day began at 9:00 a.m., when participants gathered at the Veterans Middle School for the classroom training portion of the event. Lunch was provided at the training site and then the group moved to the parking lot at the

Harbormaster's building at 12:30 p.m. Testing concluded at approximately 2:25 p.m.

Training materials from the classroom portion are available to download at the GRP testing website.

### **GRP Site**

Marblehead Harbor (GRP site NS-27) is located on the eastern coast of northern Massachusetts.

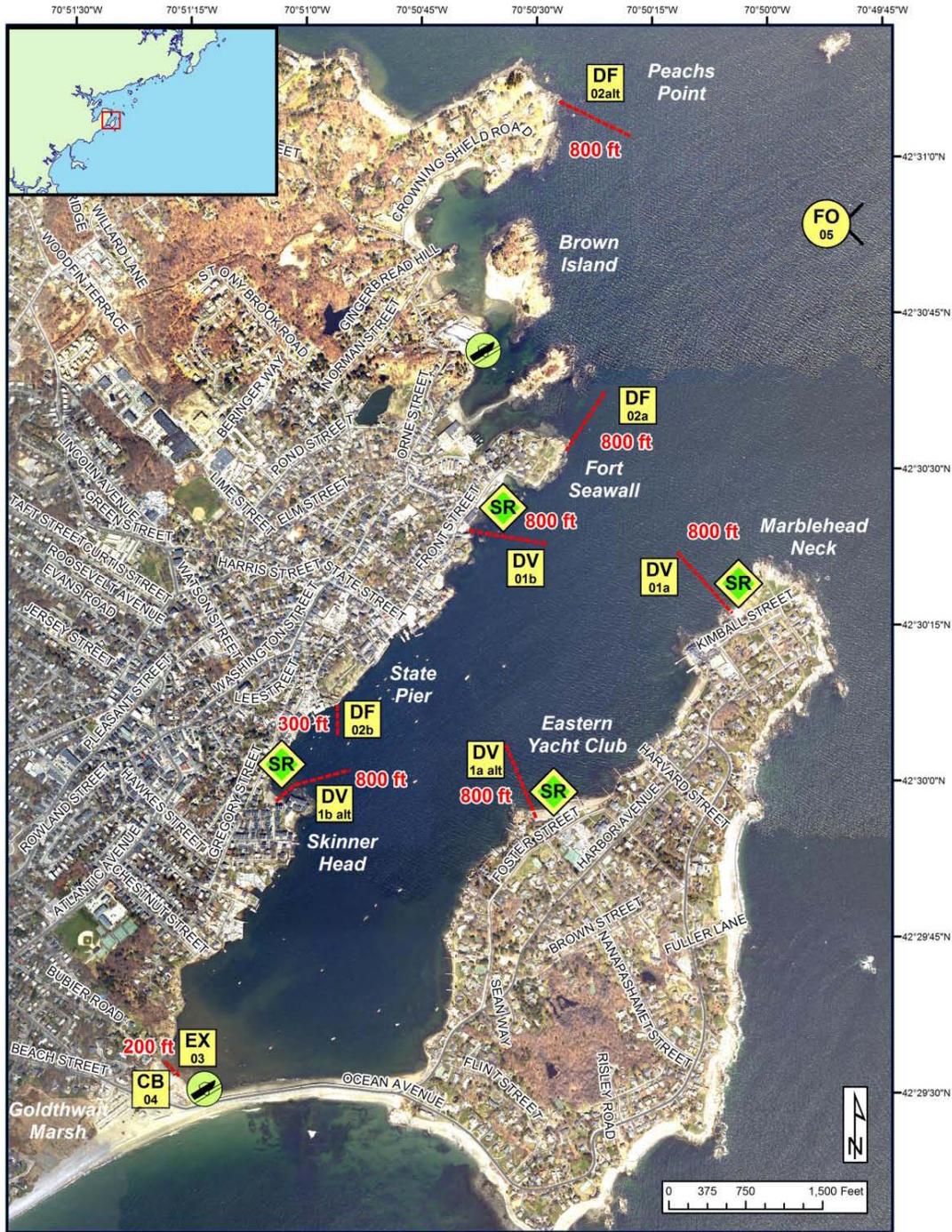
The focus of the GRP for Marblehead Harbor is preventing a spill in the outer harbor or offshore from entering the harbor by deploying boom to divert and recover as much oil as possible from the adjacent shoreline. Figure 1 shows a map of GRP-NS-27. The tactic tested is identified on the GRP map as DV-01b. Appendix A contains a copy of the full GRP for this site.

### **Goals and Objectives**

The goal of this exercise was to provide training on basic boom deployment and conduct a field deployment in Marblehead Harbor to reinforce classroom instruction. The following testing objectives were established:

- Familiarization with MassDEP response trailers
- Learn basics of protective booming tactics
- Practice handling equipment
- Deploy GRP - simulated incident
- Coordinate among multiple towns/agencies
- Demobilize boom
- Hot wash/identify additional preparedness needs

Figure 1. Map of NS-27 (GRP for Marblehead Harbor).



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

## Participation in GRP Deployment

Staff members from the Marblehead Fire Department, the Swampscott Fire Department, the Nahant Fire Department, the Marblehead Harbormaster Department, the Nahant Harbormaster Department, and the Swampscott Harbormaster Department were the primary responders for this deployment test (see Figures 2 and 3). They transported, deployed, demobilized, and stored the boom and anchors used in the test. A professional spill responder from Moran Environmental provided assistance and direction to the town responders. It was emphasized throughout the testing that these tests were designed to test the strategies and provide experience to the responders.

*Figure 2. Gathering at staging area for deployment briefing*



Photo by Ian Hurley, Marblehead Reporter

Figure 3. Deploying/towing boom from the staging area



Photo by Ian Hurley, Marblehead Reporter

Personnel from Nuka Research acted as the facilitator, providing direction, answering questions, and keeping the process moving. Moran Environmental provided hands-on training and instruction to responders.

There was a group of observer/evaluators who observed part or all of the day's deployment and were asked to fill out evaluation forms online, or participate in the debrief. The observers included representatives from the Swampscott Fire Department, Marblehead Fire Department, Nahant Fire Department, Nahant Harbormaster Department, Swampscott Harbormaster Department, Marblehead Harbormaster Department, and the MassDEP.

A list of participants from the June 30, 2010 Marblehead Harbor GRP Test is included in the data forms in Appendix B. Due to the large number of participants and the fact that the deployment site could not be viewed from the staging area, the column for observer/responder was left blank if their role was unknown to the data recorder.

### **Equipment**

The equipment (boom, anchor system, lines, floats) deployed during this test came from the MassDEP oil spill response trailer from the Town of Swampscott. Vessels

were provided by the Marblehead Fire Department and the Marblehead Harbormaster Department.

### **Summary of Testing Day**

The testing portion was run based on the principals of the Incident Command System (ICS), although the ICS portion of the exercise was not the prime objective. Lt. Cerrutti from Marblehead Fire Dept served as Incident Commander. After meeting at the Marblehead Harbormaster parking lot on Ferry Street for a review of the day's objectives by Elise DeCola, a safety briefing by Safety Officer Breen, and assignments for the incident by Incident Commander Cerrutti, the group unloaded boom from the Swampscott oil spill response trailer. They deployed three sections of boom, towed by two vessels, for one version of DV-01b, a diversion boom array (see Figure 4). There were many moorings in the harbor which made it difficult to maneuver while towing the boom. The smaller vessel (zodiac) was used solely to set anchors (see Figure 5). There was access from the street to set the shoreline anchor. An iron bolt in the rocks was ultimately used as a permanent anchor after some difficulty using the rebar.

*Figure 4. Attaching the boom to tow to the deployment site*



Photo by Ian Hurley, Marblehead Reporter

Figure 5. Vessels working with boom in Marblehead Harbor



Photo by Ian Hurley, Marblehead Reporter

The wind did pick up towards the end of the deployment, but it did not prove to be a major challenge. After the group returned, rinsed, and stowed the boom a culvert plug was brought out of the trailer and semi-inflated for informational purposes, since there had been a culvert at the shoreside recovery area. It was noted that a culvert plug should be added to the GRP tactics for this site, to ensure that, if the beach were used for recovery, oil would not enter the large culvert/outfall. The entire deployment was completed in about two hours.

### **Documentation**

Since on-site conditions have an impact on deployment, data was compiled on tide cycles, wind speed and direction, sea state, precipitation, and any other environmental conditions or on-scene factors. The completed site data collection form is included in Appendix B.

Standard evaluation forms were posted online for the day's testing, with standard evaluation criteria. To date four written evaluations have been submitted (see Table 1); some participants provided verbal comments during the debrief.

Photographs were also used as documentation. Appendix C contains a copy of Evaluation Forms.

Table 1: Participants' Evaluation Responses

Participant	General Comments/Suggestions	Logistics/Staging Area	Anchor	Boom	Boats	Personnel
Charles Cerrutti	<p>Hand-outs were helpful in the classroom.</p> <p>Shorten classroom time; need more time devoted to practical exercises. Would like to see more practical exercises incorporated into the training.</p> <p>Would like to see clearer roles between the DEP and the rest of the instructors (exercise design and facilitation).</p> <p>Equipment was sufficient. We used Swampscott's trailer. MFD set up the trailer the week prior of the drill so as not to waste time during the exercise as we did two years ago.</p> <p>GRP needs to have launching ramp locations and culvert locations.</p>	Worked fluidly.	Sufficient.	Problems with mooring field in harbor.	There were enough vessels with adequate power to deploy the boom. I would have liked the other towns that participated in the drill to bring their own boats. This would allow more personnel out on the water to observe.	Responders effectively deployed DV-01b.
Mike Kairevich	Objectives were helpful during the classroom training portion.	Staging area: fair to good.	Sufficient.	Challenges/setbacks encountered in towing boom: Allowing for tide set.	Sufficient.	Responders effectively deployed DV-01b.
Andrew Puleo	The classroom portion provided a good understanding with regards to the boom system with regards to oil spills. One change would be possibly to gear it to the shores of the North Shore.	The staging went well considering the location, where an incident could happen.	Sufficient.	To setting and retrieving the boom where buoys were in the area.	Sufficient.	Responders effectively deployed DV-01b.
F. Webb Russell	<p>The classroom portion was helpful in explanation of all the trailer equipment and the new GRP plan.</p> <p>A boat ramp icon should be added to SR by the Eastern Yacht Club. Otherwise I feel we have a great GRP.</p>	Staging area worked sufficient for training. In a real incident I believe we would deploy at specific GRP locations.	Sufficient.	Going through the mooring field was challenging.	Sufficient.	Responders effectively deployed DV-01b.

## Communications

For the testing day, marine Channel 72 was assigned for those responders on the water. Although it was a training exercise, an Incident Commander was assigned (Lt. Cerrutti, Marblehead Fire Department) and a Safety Officer (Deputy Chief Kevin Breen, Swampscott Fire Department). Both were at the staging site on Ferry Street.

## Safety

Throughout the deployment test, facilitators emphasized that safety was the highest priority. An initial safety briefing was given, and participants were also

encouraged to abide by the safety policies of their agency or organization. All participants who were on vessels were required to wear a personal flotation device at all times. Participants were instructed to dress in work clothes appropriate for the weather conditions.

The testing cycle was successfully completed with no safety incidents or injuries.

### **Observations**

The GRP test yielded specific information about the tactic tested, the staging area, and the equipment at the site. The major observations and lessons learned are summarized here by theme/issue, and recommendations for how to address these issues are included where appropriate.

- The Harbormaster building parking lot was too confined for a staging area and there was no line of vision from there to the deployment site. The boom had to be walked down a gangplank to the dock and then towing it to the site through the mooring field proved challenging.
- The shoreline anchor (rebar) was difficult to set due to the rocky shoreline. After reviewing the area many permanent anchor points were found, of varied effectiveness.
- The smaller vessel (zodiac) was very helpful in setting the anchors and being able to maneuver effectively.
- The responders demonstrated that they could successfully deploy a diversion boom array.

### **Recommendations**

Several recommendations came out of this testing day, related both to the GRP itself and to the testing process:

- Change the staging area to a site more conducive to off-loading the boom.
- Add culvert plug to DV-01b.
- Consider loading boom onto vessels if approaching through the mooring fields.
- Make a note of permanent anchors along the shoreline.
- Revise GRP to add boat ramp and culvert.
- Continue to look for opportunities to use field exercises to test and work with neighboring towns.

## **Appendices**

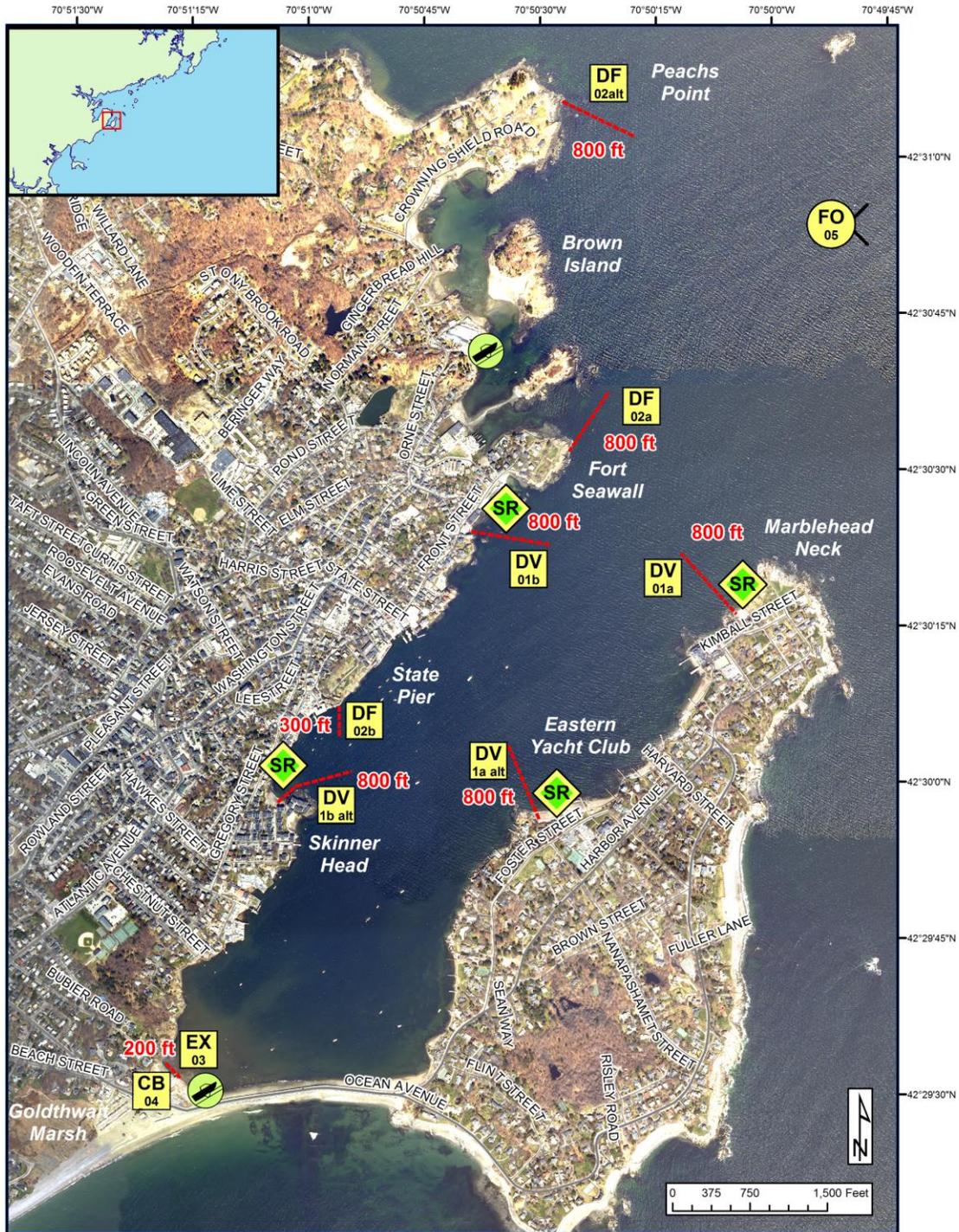
- Appendix A: GRP (as written)
- Appendix B: Site Data Collection Form (completed)
- Appendix C: Evaluation Form (blank)

## **Appendix A**



# North Shore Geographic Response Plan

## Marblehead Harbor NS-27



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

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 	<b>Marblehead Harbor</b> (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	<b>Divert and Collect - Shoreside</b> 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 	<b>Marblehead Harbor</b> (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	<b>Deflection</b> 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 	<b>Marblehead Harbor</b> Goldthwait Marsh Lat. 42°29'31"N Lon. 70°51'18"W	<b>Exclusion</b> 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 	<b>Marblehead Harbor</b> Riverhead Beach Lat. 42°29'31"N Lon. 70°51'18"W	<b>Culvert Block</b> 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. One culvert drains from the town and the other drains from Goldthwait Marsh.	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.
NS-27-05 	<b>Salem Sound</b>	<b>Free-Oil Recovery</b> 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 	<b>Deployment</b> <b>Equipment (Primary sites)</b> 1600 ft 18" boom 8 anchor systems 2 anchor stakes 2 shoreside recovery systems <b>Vessels</b> 2 skiffs <b>Personnel/Shift</b> 8 total (1 vessel operator + 1 responder per vessel, 4 shoreside responders) <b>Tending</b> <b>Vessels</b> 1 skiff <b>Personnel/Shift</b> 4 total (1 vessel operator + 1 responder per vessel, 2 shoreside responders)	<b>Staging Area:</b> Marblehead Fire Department, 1 Ocean Ave; From Rt 128 (exit 25) to Rt 114 S to Ocean Ave.  <b>Site Access:</b> (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	<b>Birds</b> – Nesting sites, Seabirds, Shorebirds  <b>Invertebrates</b> – Shellfish, Urchins  <b>Habitat</b> – Beach, Rocky Shore, Tidal Flats  <b>Human Use</b> – 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: not yet.
NS-27-02 	<b>Deployment</b> <b>Equipment (Primary sites)</b> 1100 ft 18" boom 6 anchor systems 2 anchor stakes <b>Vessels</b> Same as DV-01 <b>Personnel/Shift</b> Same as DV-01 <b>Tending</b> <b>Vessels</b> Same as DV-01 <b>Personnel/Shift</b> Same as DV-01	<b>Site Access:</b> (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.	Same as NS-27-01.
NS-27-03 	<b>Deployment</b> <b>Equipment</b> 200 ft 18" boom 2 anchor stakes <b>Vessels</b> Same as DV-01 <b>Personnel/Shift</b> Same as DV-01 <b>Tending</b> <b>Vessels</b> Same as DV-01 <b>Personnel/Shift</b> 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 	<b>Deployment</b> <b>Transport</b> 1 Truck <b>Equipment</b> 2 inflatable culvert blocks or 2 sheets of plywood 100-200 sandbags 2 polyethylene sheeting <b>Personnel/Shift</b> 4 shoreside responders	Same as NS-27-03.	Same as NS-27-01.	Coordinate with DPW.  Culvert blocks should be tested and stored at appropriate locations.  Tested: not yet.
NS-27-05 	Deploy multiple free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas.	<b>Site Access:</b> 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



## **Appendix B**

**Massachusetts Geographic Response Plan Deployment Tests**

<b>Test Conditions Data Sheet</b>	
ALL FORMS IN THIS PACKET SHOULD BE COMPLETED IN FULL BY FACILITATOR. Use a separate set of forms for each individual tactic tested.	
Data Recorder Name: Sanne Schneider	Data Recorder Organization: Nuka Research
Date: June 30, 2010	GRP Site Name: Marblehead Harbor
GRP # NS-27	Tactic # DV-01b
Test Start Time (begins at completion of safety & operation briefings):  1238	Test End Time (ends when all equipment removed and demobilized either back to trailer or to new testing site):  1350
Tide stage at <b>start</b> time:  Mid, flooding	Tide stage at <b>end</b> time:  High
Tide height at <b>start</b> time:  n/a	Tide height at <b>end</b> time:  n/a
Approximate wave height (ft) during test:  n/a	Approximate wave period during test (describe):  n/a
Average wind speed (kts) during test: 5 knots	Wind direction during tests:  west
Max wind speed during test:  12 knots, with gusts up to 20	Estimated visibility (mi) during tests: 10 miles
Estimated current speed at <b>start</b> time:	Estimated current speed at <b>end</b> time:
Current direction at <b>start</b> time: SE	Current direction at <b>end</b> time: n/a
Notes:	

**Massachusetts Geographic Response Plan Deployment Tests**

---

<b>Deployment Details Data Sheet</b>	
Data Recorder Name: Sanne Schneider	Data Recorder Organization: Nuka Research
Date: June 30, 2010	GRP Site Name: Marblehead Harbor
GRP # NS-27	Tactic # DV-01b
Total elapsed time required to deploy tactic: One hour, 10 minutes	Number of vessels used to deploy (do not count observers): Three
<b>1. Vessel information (fill out for each vessel involved)</b>	
Vessel name & ownership: Marblehead Fire	Type: Pump out
Length: 21'	Engine type & HP: Evinrude E-Tec 90
Vessel name & ownership: Marblehead Harbormaster	Type:
Length: 25'	Engine type & HP: Twin Evinrude E-Tec 125s
Vessel name & ownership: Marblehead Fire	Type: Inflatable
Length: 13'	Engine type & HP: Johnson 15
Vessel name & ownership: Personal boat	Type:
Length:	Engine type & HP:

---

**Massachusetts Geographic Response Plan Deployment Tests**

---

<b>Deployment Details Data Sheet</b>	
<b>2. Response Personnel information</b>	
Number & type of response personnel required per GRP: Eight; two vessel operators and two responders, plus four shoreside responders	
Total number of personnel involved in deployment: unknown	Number of vessel operators: Three
Number of vessel-based responders: 13	Number of shore-based responders: unknown
List all response personnel by name and organization (do not include observers or facilitators):	
Responder name	Organization
Incident Commander Cerrutti	Marblehead Fire
Safety Officer Breen	Swampscott Fire
Eric Ridge	Marblehead Fire
Adam Hatfield	Marblehead Fire
Mike Kairevich	Nahant Harbormaster
Steven Bivens	Marblehead Fire
Personnel	Marblehead Fire
Personnel	Swampscott Fire
Personnel	Nahant Fire

---

<b>Deployment Details Data Sheet</b>	
<b>3. Response Equipment information</b>	
Amount and type of boom, anchor sets, and other equipment required per written GRP: 800' of 18" boom, one shoreline anchor, four anchor sets	
Type (size) of boom and other equipment used in deployment:  200' 12" boom, 300' 18", rebar, anchors	Total amount of boom used in deployment:  500'
Number of anchor sets used in deployment:  Three	Other equipment used during deployment:  None
Boom configuration in GRP as written:  800 ft. diversion array	Actual boom configuration during deployment tests:  500 ft. diversion array
Describe major differences/changes to deployment compared to GRP as written.  Deployed 500 ft of boom.	
Based on deployment, are changes recommended to GRP? (consider input from responders, observers, and facilitators)  A boat ramp and a culvert will be added to the GRP.	
Describe how on-scene conditions impacted deployment overall, and list any observations regarding the potential for local conditions to impact future deployments of this GRP.  Towing boom through the mooring field was challenging. Depending on the location of a spill, the staging site might be moved or boom could be loaded on vessels instead of being towed.	

---

**Massachusetts Geographic Response Plan Deployment Tests**

---

<b>Deployment Details Data Sheet</b>		
<b>4. Participant information</b>		
Total number of participants (responders, facilitators, observers, other): 50		
List all participants by name and organization:		
Participant	Organization	Role (Observer, Facilitator or Responder)
Ken Sanderson	MassDEP	Observer
Zach Peters	MassDEP	Observer
Chris Bresnahan	MassDEP	Observer
Kingsley Ndi	MassDEP	Observer
Charlie Dalferro	Marblehead HM	Observer
John Duponte	Moran Environmental	Facilitator
Elise DeCola	Nuka Research	Facilitator
Mounzer Aylouche	Swampscott HM	
Lawrence Bithell	Swampscott HM	Observer
Kevin Breen	Swampscott Fire	Safety Officer
Charles Cerrutti	Marblehead Fire	Incident Comm.
Geoffrey Boland	Swampscott HM	
Roger Bruley	Swampscott HM	
Andrew Puleo	Nahant HM	Observer
Mike Kairevich	Nahant HM	Responder
Dean Palumbo	Nahant Fire	
Austin Antrim	Nahant Fire	
Rick Leger	Nahant Fire	
Rich Cotting	Marblehead Fire	
Dennis Ball	Nahant Fire	
Bruce Marshall	Nahant Fire	
Robert Surette	Swampscott Fire	
Chris DiPietro	Swampscott Fire	
James Potts	Swampscott Fire	
Daniel Waters	Swampscott Fire	
Todd Seligman	Swampscott Fire	
Karl Lemieux	Marblehead Fire	
Steven Bivens	Marblehead Fire	Responder
Robert Tibbo	Nahant Fire	
Edward Steriti	Nahant Fire	
Matthew Serratore	Marblehead Fire	

---

---

**Massachusetts Geographic Response Plan Deployment Tests**

---

Eric Thibodeau	Marblehead Fire	
Josh Mahoney	Nahant Fire	
Eric Ridge	Marblehead Fire	Responser
Adam Hatfield	Marblehead Fire	Responser
Gregg McLaughlin	Marblehead Fire	
Martin Hines	Marblehead Fire	
Patrick Attridge	Marblehead Fire	
Scott Martin	Marblehead Fire	
John Vignerun	Marblehead HM	
Daniel Roads	Marblehead HM	
F. Webb Russell	Marblehead HM	Observer
John Payne	Marblehead HM	Observer
Julia Perry	MassDEP	Observer
Dan Rice	Marblehead Fire	
Doug Knowles	Marblehead Fire	
Mark Borowski	Marblehead Fire	
Jack Boardway	Marblehead Fire	
Rick DiGiammarino	Marblehead Fire	
Sanne Schneider	Nuka Research	Observer

## **Appendix C**

<b>GRP/Oil Spill Response Trailer Training Evaluation Form</b>		
<b>GRP # NS - 27 Marblehead Harbor</b>	<b>Test date: 06/30/10</b>	
Instructions to Evaluators: Complete this form based on your observations of the Oil Spill Response Trailer Training/GRP testing. Please email to <a href="mailto:sanne@nukaresearch.com">sanne@nukaresearch.com</a> or fax to 240-368-7467 or mail to Nuka Research, PO Box 1672 Plymouth, MA 02362.		
<b>Classroom Training Portion</b>		
Evaluator Name:	Evaluator Organization:	
What did you find helpful about the classroom training portion?		
What, if anything, could be done differently to improve the classroom training?		
Please check a box to respond to the following.	YES	NO
1. I feel the trainers were well prepared and knowledgeable about oil spill response/GRPs.		
2. I have a better understanding of spill response tactics than I did prior to this training.		
3. I found the handouts to be helpful.		
4. The objectives were clearly explained and the classroom training met the objectives.		
5. The room and facility were adequate.		
Other comments or suggestions about training facilitation, written materials, and/or the facility?		

<b>GRP/Oil Spill Response Trailer Training Evaluation Form</b>		
<b>GRP # NS - 27 Marblehead Harbor</b>	<b>Test date: 06/30/10</b>	
What was your role in the exercise? (responder, observer, facilitator, etc.)		
What was your level of spill response experience prior to this exercise?		
Please check a box to respond to the following.	YES	NO
1. I feel more prepared to deploy GRPs now than I did prior to this exercise.		
2. I have a better understanding of spill response tactics than I did prior to this exercise.		
3. I would participate in future GRP deployments at other sites.		
4. The objectives were clearly explained and the deployment test met the objectives.		
5. The exercise was conducted safely.		
Other comments or suggestions about exercise design & facilitation?		

**GRP/Oil Spill Response Trailer Training Evaluation Form**

GRP # NS – 27 Marblehead Harbor

Test date: 06/30/10

**Evaluation of Tactics – Diversion Boom Array**

Were responders able to effectively deploy DV-01b?

Describe any challenges or setbacks you encountered or observed in towing and setting the boom.

Based on your experience today, would you feel comfortable setting a similar boom array during an actual incident?

Please evaluate how well the staging area at the Marblehead Harbormaster's building worked for deploying and demobilizing boom from the trailer for this deployment.

<b>GRP/Oil Spill Response Trailer Training Evaluation Form</b>	
<b>GRP # NS – 27 Marblehead Harbor</b>	<b>Test date: 06/30/10</b>
<b>Evaluation of Deployment Overall</b>	
Was the equipment available (boom, anchors, line, etc.) sufficient to accomplish the deployment? If not, describe.	
Were there enough vessels to deploy the boom? Did vessels have adequate power and maneuverability?	
Did responders appear to have sufficient equipment, training and knowledge to deploy the boom? If no, explain any deficits.	
Did the GRP document (map diagram and table) provide clear direction as to how and where to deploy the boom? If not, please identify problems & suggest improvements.	