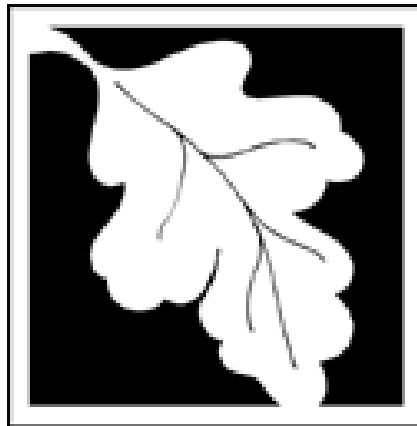


**Old Harbor (CI-01) Geographic Response Plan Deployment  
Exercise**

**October 17, 2012**

**AFTER ACTION  
REPORT/IMPROVEMENT PLAN**

**November 2012**



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## HANDLING INSTRUCTIONS

1. The title of this document is the Massachusetts Department of Environmental Protection Old Harbor Oil Spill Boom Deployment Exercise
2. The information gathered in this AAR/IP is unclassified
3. Points of Contact:

State POC:

Rich Packard  
Program Manager  
MassDEP Oil Spill Prevention and Response Program  
20 Riverside Drive  
Lakeville, MA 02347  
508.946.2856 (office)  
[Richard.Packard@state.ma.us](mailto:Richard.Packard@state.ma.us)

[Federal POC:]

LT Brock Nelson  
USCG Sector Southeastern New England  
20 Risho Ave.  
East Providence, RI 02914  
401.435.2348 (office)  
[Brock.E.Nelson@uscg.mil](mailto:Brock.E.Nelson@uscg.mil)

Exercise Facilitators:

Mike Popovich, Project Manager  
Jooyi Ryan, Project Manager  
Nuka Research and Planning Group  
10 Samoset Street  
Plymouth, MA 02360  
508.746.1047 (office)  
[popovich@nukaresearch.com](mailto:popovich@nukaresearch.com)  
[jooyi@nukaresearch.com](mailto:jooyi@nukaresearch.com)

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## CONTENTS

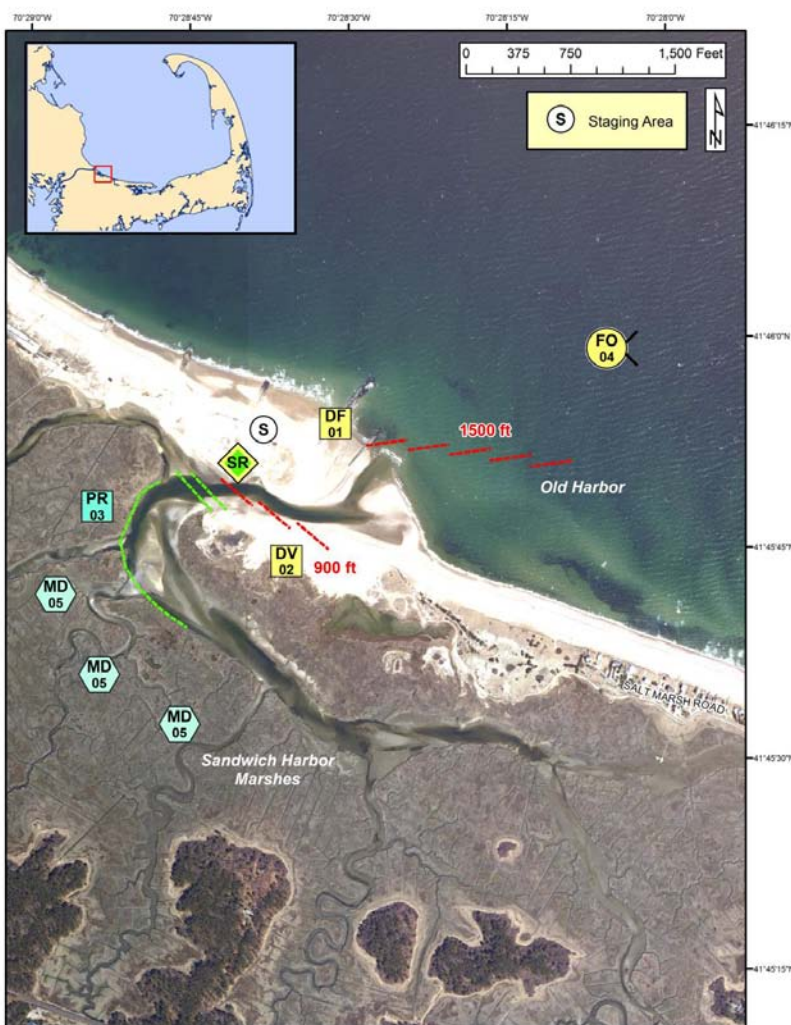
<b>Handling Instructions .....</b>	<b>1</b>
<b>Contents .....</b>	<b>3</b>
<b>Executive Summary .....</b>	<b>5</b>
Major Strengths.....	9
Primary Areas for Improvement .....	9
<b>Section 1: Exercise Overview .....</b>	<b>11</b>
Exercise Details .....	11
Exercise Planning Team .....	12
<b>Section 2: Exercise Design Summary .....</b>	<b>14</b>
Exercise Purpose and Design.....	14
Exercise Objectives, Capabilities, and Activities .....	14
<b>Section 3: Analysis of Capabilities.....</b>	<b>18</b>
Capability 1: Planning.....	18
Capability 2: Communications .....	19
Capability 3: Community Preparedness and Participation .....	21
<b>Section 4: Conclusion.....</b>	<b>244</b>
<b>Appendix A: Improvement Plan .....</b>	<b>255</b>
Improvement Plan Matrix .....	255
<b>Appendix B: Lessons Learned.....</b>	<b>288</b>
Exercise Lessons Learned.....	288
<b>Appendix C: Exercise Evaluation Form .....</b>	<b>300</b>
<b>Appendix D: Exercise Events Summary Table.....</b>	<b>312</b>
Schedule of Events.....	322
<b>Appendix E: Acronyms.....</b>	<b>333</b>
Acronym Table .....	333

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## EXECUTIVE SUMMARY

The Massachusetts Department of Environmental Protection Old Harbor Geographic Response Plan (GRP) Deployment Exercise occurred on October 17, 2012. The goal was to deploy a diversion booming array, utilizing as many responders as possible from two towns on the Cape and Islands (Sandwich, Bourne) to exercise the existing Cape and Islands Geographic Response Plan CI-01 developed for Old Harbor (See Figure 1) and provide hands-on experience for oil spill first responders.

Figure 1. Old Harbor Creek GRP (CI-01)



The Massachusetts Department of Environmental Protection (MassDEP) GRP Program exercise at Old Harbor was developed to exercise local area first responder's Inter-Agency Planning and Coordination, Resource Coordination, and Local Oil Spill Preparedness capabilities. The exercise planning team was composed of several agencies, including the Sandwich Fire

Department, the Sandwich Harbormaster Department, the Sandwich Department of Natural Resources, the Bourne Fire Department, the Bourne Department of Natural Resources, Barnstable County Department of Health and Environment, Massachusetts Department of Environmental Protection, and Nuka Research and Planning Group (See Figure 2).

In preparation for this exercise, Initial, Mid-Term, and Final Planning Conferences were held.

The Initial Planning Conference (IPC) was held on April 17, 2012 at the Sagamore Fire Station in Sagamore, MA. A Mid-Term Planning Conference (MPC) was held on August 16, 2012 at the Sagamore Fire Station in Sagamore, MA and the Final Planning Conference (FPC) was held on October 11, 2012 via teleconference.

During the course of the IPC the exercise planning team discussed and determined:

- Exercise scope
- Exercise objectives
- Design requirements and conditions including:
  - Timing of the exercise in relation to tidal schedule
  - Potential use of an oil surrogate to simulate spilled oil and determine efficacy of the booming strategy

During the MPC, the exercise planning team further refined the exercise tasks and objectives and determined:

- Exercise scenario and schedule
- Manpower and vessel needs
- Logistical issues including identification of staging and field locations.
- Administrative and documentation requirements and assignments.

During the FPC, a comprehensive review of all exercise objectives was conducted as well as detailed, final discussions to review logistics and resolve all open issues.

Based on the exercise planning team's deliberations, the following objectives were developed for the Old Harbor site:

- Objective 1: Foster Inter-Agency Planning and Coordination by providing the opportunity for local responders to work with Federal (USCG) and State (MADEP) responders to plan for and deploy a GRP protective booming tactic during a simulated incident (Figure 2).
- Objective 2: Promote Resource Coordination among local responders by coordinating use of assets from both towns and the Barnstable County Department of Health and Environment. (See Table 1 and Figures 3 and 4).
- Objective 3: Improve local Oil Spill Preparedness by deploying equipment from the trailer, providing participants hands-on experience mobilizing and demobilizing boom in the field, and providing an opportunity to evaluate the effectiveness of the booming tactic and identify any modifications necessary (See Figures 5 - 8).



Sandwich	Bourne	Barnstable County	MADEP
Spill Response Trailer	FD Vessel (14')	Mobile Command Vehicle	Spill Response Trailers
FD Vessel (13')	DNR Vessel (17')	Portable Radios	Exercise facilitators
DNR Vessel (20')			Spill response contractor/trainer
Engine Truck (rinse boom)			

Table 1: Assets Supplied for Exercise by Town/Agency

The exercise objectives focused on inter-agency coordination and resource coordination for the purpose of improving initial response capacity to oil spills in the towns of Sandwich and Bourne.

Figure 2. Participants Gathered During Training and Initial Operations Briefing



Photo Courtesy of Nuka Research and Planning Group

Figure 3. Sandwich Oil Spill Response Trailer



Photo Courtesy of Nuka Research and Planning Group

Figure 4. Barnstable County Mobile Command Vehicle



Photo Courtesy of Nuka Research and Planning Group

Figure 5. Staging Area/Boat Ramp



Photo Courtesy of Nuka Research and Planning Group

The purpose of this report is to analyze exercise results, identify strengths to be maintained and built upon, identify potential areas for further improvement, and support development of corrective actions.

## Major Strengths

The major strengths identified during this exercise are as follows:

- Local agencies worked together to achieve objectives.
- Local responders demonstrated ability to adapt and modify IAP as necessary to safely meet objectives.
- Assets from both communities and from Barnstable County were integrated effectively to support the exercise objectives.
- Clear, concise, and effective communications.

## Primary Areas for Improvement

The primary areas for improvement identified during this exercise, including recommendations, are as follows:

- First responders would benefit from additional opportunities to practice boom deployment in a variety of environmental conditions.

- Responders should practice towing boom, especially when maneuvering in channels and congested areas.
- Incident Command should communicate booming tactics and basic operational tasking to first responders prior to boom deployment.
- Neighboring communities would benefit from having a shared Marine VHF operating channel.

Overall, the exercise was successful in providing an opportunity for first responders to deploy boom and strengthen inter-agency participation. Future exercises will be beneficial in strengthening local first responders' skill in deploying oil spill containment boom and will provide additional opportunities for inter-town and state coordination.

## SECTION 1: EXERCISE OVERVIEW

### Exercise Details

#### Exercise Name

Massachusetts Department of Environmental Protection Old Harbor (CI-01) GRP Deployment Exercise

#### Type of Exercise

Functional Exercise

#### Exercise Start Date

October 17, 2012

#### Exercise End Date

October 17, 2012

#### Duration

5 hours

#### Location

The exercise in-briefing took place at the Boardwalk Road parking lot, with the exercise following at the same location and the Old Harbor Creek, in the town of Sandwich, MA.

#### Sponsor

The Massachusetts DEP was the sponsor of the exercise, with input from the participating towns, SRPEDD, and the U.S. Coast Guard and facilitation by Nuka Research and Planning Group, LLC (contractor to MassDEP).

#### Program

Massachusetts GRP Exercise Program

#### Mission

This exercise was designed to provide an opportunity for participants to practice protective booming of a sensitive area in response to a simulated oil spill.

#### Capabilities

Planning, Communications, Community Preparedness and Participation

#### Scenario Type

The scenario is a simulated oil spill in Old Harbor and the Old Harbor Creek.

## Exercise Planning Team

- Rich Packard, facilitator  
MADEP  
508-946-2856  
[Richard.Packard@state.ma.us](mailto:Richard.Packard@state.ma.us)
- Mike Popovich, facilitator  
Nuka Research and Planning Group  
508-746-1047  
[popovich@nukaresearch.com](mailto:popovich@nukaresearch.com)
- Chief George Russell  
Sandwich Fire Department  
508-888-0525  
[grussell@townofsandwich.net](mailto:grussell@townofsandwich.net)
- Dave Whearty  
Sandwich Harbormaster  
508-833-0808  
[dwhearty@townofsandwich.net](mailto:dwhearty@townofsandwich.net)
- Mark Galkowski  
Sandwich Department of Natural Resources  
508-833-8054  
[mgalkowski@townofsandwich.net](mailto:mgalkowski@townofsandwich.net)
- Chief Martin Greene  
Bourne Fire Department  
508-759-4412  
[mgreene@townofbourne.com](mailto:mgreene@townofbourne.com)
- Tim Mullen  
Bourne Department of Natural Resources  
508-759-0621  
[tmullen@townofbourne.com](mailto:tmullen@townofbourne.com)

## Participating Organizations

Participating organizations included:

- Sandwich Harbormaster Department
- Sandwich Fire Department
- Sandwich Department of Natural Resources
- Bourne Fire Department
- Bourne Department of Natural Resources
- Barnstable County Department of Health and Environment
- Massachusetts Department of Environmental Protection
- Moran Environmental Recovery
- Southeastern Regional Planning & Economic Development District
- Nuka Research and Planning Group, LLC
- United States Coast Guard Sector Southeastern New England
- United States Coast Guard First District
- The Association to Preserve Cape Cod
- Massachusetts Audubon Society

## Number of Participants

- Players: 29
- Controllers: 1
- Facilitators: 3
- Observer/Evaluators: 6

## SECTION 2: EXERCISE DESIGN SUMMARY

### Exercise Purpose and Design

Geographic Response Plans (GRP) are tactical oil spill response plans tailored to protect a specific sensitive area from impacts following a spill. GRPs are developed by collaborative work groups that include local, state, and federal agencies, natural resource organizations, spill response organizations, and the oil industry. GRPs are incorporated into the state/federal Area Contingency Plans for oil spill and hazardous materials response. The Area Contingency Plan implements the National Contingency Plan and aligns with the National Response Framework. Once the GRPs have been published in the Area Plan, the next step in the planning and preparedness process involves exercising the GRPs to (1) field verify the resources and tactics identified in the GRP and (2) provide an opportunity for local responders to practice deploying spill response equipment utilizing an ICS framework.

The MassDEP GRP Exercise Program is currently in the fourth year of field exercises involving local fire, harbor, police, shellfish, and emergency management personnel along with state and federal agencies (Mass Division of Marine Fisheries, U.S. Coast Guard, Mass Environmental Police, National Oceanic and Atmospheric Administration). The exercise design, facilitation, planning, and reporting are funded by MassDEP. Participating towns may receive grant funding to cover overtime and backfill costs. These exercises are designed to examine the strategies and provide experience to the responders.

### Exercise Objectives, Capabilities, and Activities

Capabilities-based planning allows for exercise planning teams to develop exercise objectives and observe exercise outcomes through a framework of specific action items that were derived from the Target Capabilities List (TCL). The capabilities listed below form the foundation for the organization of all objectives and observations in this exercise. Additionally, each capability is linked to several corresponding activities and tasks to provide additional detail.

Based upon the identified exercise objectives below, the exercise planning team decided to demonstrate the following capabilities during this exercise:

- **Objective 1:**
  - **Planning:**
    - Successfully demonstrate the ability to plan and coordinate a multi-town/multi-jurisdictional exercise
      - Initial, Mid-Term, and Final Planning Conferences as outlined above under Executive Summary.



- **Objective 2:**
  - **Communications:**
    - Assign common operating frequency (800 Mhz) for Command and Operations;
    - Supply radios as needed to support interoperable communications; and
    - Communicate effectively during drill between shoreside/on-water responders, Operation Section Chief and IC.
  
- **Objective 3:**
  - **Community Preparedness and Participation:**
    - Simulate incident; assign responders;
    - Develop IAP;
    - Use WebEOC to post incident updates;
    - Integrate Barnstable County Mobile Command vehicle;
    - Deploy boom; and
    - Demobilize boom.

## Scenario Summary

The scenario was a simulated oil spill in Old Harbor that migrates inland toward Old Harbor Creek. Local responders from the Sandwich Fire Department, the Bourne Fire Department, the Sandwich Department of Natural Resources, Bourne Department of Natural Resources, Barnstable County Department of Health and Environment and the Sandwich Harbormaster Department were directed by the IC (Sandwich FD Captain) to deploy tactic DV-02 from GRP CI-01 (Figure 1). The Exercise Design Team developed an Incident Action Plan (IAP), which was utilized during the exercise. A safety officer from the Sandwich Fire Department was assigned and after initial safety and operations briefings, the field responders transported, deployed, evaluated, demobilized, and stored the boom and anchors used in the exercise (See Figures 5-7). Use of a surrogate was discussed during the planning meetings, but due to the high (flood) tide, strong currents and the ineffectiveness of the tactic in these conditions, the IC, Operations Section Chief and exercise facilitators decided not to deploy the surrogate. Professional spill responders from Moran Environmental provided assistance and direction to the town responders. Personnel from Nuka Research and MassDEP acted as facilitators, providing direction, answering questions, and managing the exercise timetable.

Figure 6. Deploying & Towing Initial Boom Segments from MassDEP Trailer



Photo courtesy of Nuka Research and Planning Group

Figure 7. Resetting Shoreside Anchor for West Leg of DV-02



Photo Courtesy of Nuka Research and Planning Group

Figure 8. Multiple Town Agencies Work Together to Deploy Oil Spill Containment Boom



Photo courtesy of Nuka Research and Planning Group

After the boom was loaded back in the trailer, there was a post-exercise ‘hot wash,’ during which participants were asked to share any insights learned during the exercise and/or any suggestions on modifications needed to successfully deploy the tactic. There was a group of observer/evaluators who observed part or all of the exercise and were asked to fill out evaluation forms online, or participate in the debriefing. The observers included representatives from the Coast Guard, Massachusetts Environmental Police, MassDEP, Massachusetts Audubon Society, the Association to Preserve Cape Cod, Barnstable County Department of Health and Environment and members of the Sandwich and Bourne Fire Departments without specific assignments.

## SECTION 3: ANALYSIS OF CAPABILITIES

This section of the report reviews the performance of the exercised capabilities, activities, and tasks. In this section, observations are organized by capability and associated activities. The capabilities linked to the exercise objectives of the Old Harbor GRP (CI-01) Deployment Exercise are listed below, followed by corresponding activities. Each activity is followed by related observations, which include references, analysis, and recommendations.

### Capability 1: Planning

**Capability Summary:** The Planning capability was implemented during pre-exercise planning conferences and during the functional exercise. The capability required Fire Chiefs and local officials from Sandwich and Bourne to identify objectives, select an exercise location, select a GRP tactic to be tested, and assign manpower, vessels, and other resources to support the exercise. Effective pre-planning led to a successful exercise.

**Activity 1.1:** Initial and Mid-Planning Conferences to discuss site selection, exercise objectives and other issues outlined above in the Executive Summary.

**Observation 1.1:** Strength: Representatives from all communities worked well together, offering suggestions and weighing the merit of each before accepting or rejecting them and providing alternatives.

**References:** Homeland Security Exercise and Evaluation Program, Volume II, February 2007

**Analysis:** Town-level objectives were well aligned and exercise design proceeded smoothly. All fire or harbor departments committed manpower and vessels to the exercise. There was agreement that the exercise should provide an opportunity for broad participation by as many local responders as possible.

**Recommendations:** Consider future joint oil spill response exercises, possibly involving other towns or agencies.

**Activity 1.2:** Mid-Term and Final Planning Conferences to assign manpower and equipment, work through exercise logistics, and additional activities outlined above in the Executive Summary.

**Observation 1.2:** Strength: All communities coordinated the integration of town equipment, vessels, and manpower with the addition of county assets. Task Forces were comprised of first responders from different towns and departments allowing for coordination among towns and agencies, and created a training environment that fostered mentoring between responders with varying levels of experience.

**References:** Homeland Security Exercise and Evaluation Program, Volume II, February 2007

**Analysis:** Logistical pre-planning led to a smooth exercise. Each community supplied vessels, equipment and responders, providing an opportunity to work together in a task force setting with mixed crews from all towns.

**Recommendations:** Continue to periodically test GRPs and conduct exercises using spill response equipment and multi-jurisdictional approach.

## Capability 2: Communications

**Capability Summary:** On-water spill response operations require a common tactical communications capability so that responders from multiple agencies can work together safely and effectively on the water and shoreline, and so that the Incident Command can maintain situational awareness of tactical operations.

**Activity 2.1:** Assign Communications Channels:

- Command and Operations were assigned the same frequency (800 Mhz)

### Observation 2.1:

**Strength:** In this exercise, command and operations shared the same frequency due to the personnel assigned, the operational environment and the lack of a common operating channel between the two towns. The exercise geographic proximity and the nature of the ICS structure made sharing the same frequency efficient and ensured timely communications between the IC, Operations Section Chief and vessels. Due to the lack of a common operating channel between the towns, handheld radios were issued from the Barnstable County Mobile Command Vehicle.

**References:** Homeland Security Exercise and Evaluation Program, Volume II, February 2007, National Incident Management System

**Analysis:** All participants maintained good radio discipline minimizing radio “chatter” and confining radio communications to essential information. This practice was evident throughout the exercise, during which Incident Command as well as exercise facilitators monitored radio communications and observed that while the responders communicated key information needed to deploy the boom, they did so quickly, succinctly, and without undue extraneous chatter.

**Recommendations:** Continue to observe good radio practices. While not feasible in this exercise, recommend that IC and Tactical Ops typically utilize separate channels. Towns frequently lack a common operating channel making distribution of handheld and portable radios necessary to ensure smooth communications in an exercise and necessary in an actual event. Early identification of these resources through town or county assets is

essential.

**Activity 2.2:** Future exercises to reinforce good practices.

**Observation 2.2:**

Strength: The Barnstable County Department of Health and Environment participated in the exercise with a suite of communications capabilities including portable radios, wireless internet and WebEOC. Due to the lack of common operating channels between the towns, Barnstable County provided portable radios for the responders and Incident Command to use.

**References:** Homeland Security Exercise and Evaluation Program, Volume II, February 2007, National Incident Management System

**Analysis:** The assignment and tracking of radios for interoperable communications provided a workable solution to address the fact that both towns share tactical frequencies among their UHF radios. There were sufficient handheld radios available to ensure that all crews (vessel and shore) could communicate with the IC, Operations Chief, Safety Officer, and exercise facilitators.

**Recommendations:** Towns should continue to work together to develop shared communications channels for multi-town/multi-agency on-water incidents.

**Activity 2.3:** Communicate Effectively During Drill Between On-Water/Shoreside Responders and IC.

**Observation 2.3:**

Strength: Incident Command shared information concisely and clearly between responders on vessels and shoreside.

**References:** Homeland Security Exercise and Evaluation Program, Volume II, February 2007, National Incident Management System

**Analysis:** Common operational practices between the two fire departments and previous coordination helped to ensure that radio communications were streamlined and effective. Incident Command and Safety Officer maintained good situational awareness throughout the exercise.

**Recommendations:** N/A

## Capability 3: Community Preparedness and Participation

**Capability Summary:** MassDEP has developed a community-based oil spill response capacity throughout coastal regions of the state by providing oil spill response equipment trailers to local fire departments, developing GRPs (tactical plans to protect sensitive areas from oil spill impacts), and providing initial training to local first responders. This functional exercise provided a key link by allowing first responders from the communities of Sandwich and Bourne to work together in a task force setting to exercise their ability to deploy boom from a state spill response trailer during a mock oil spill. The community-based spill response program requires that towns be able to work together, since a major oil spill may require significant mutual aid and assistance. This field exercise provided a realistic scenario for the communities to work together to improve their spill response capacity.

**Activity 3.1:** Simulate Incident; Assign Responders

### Observation 3.1:

Strength: Participants from both towns were assigned by the Incident Commander (IC) to on-water task forces. Task forces were intentionally configured to include participants from different towns and departments to promote inter-jurisdictional cooperation.

**References:** Homeland Security Exercise and Evaluation Program, Volume II, February 2007, National Incident Management System, GRP NS-17

**Analysis:** The process of assigning responders to various task forces provided an opportunity for the departmental leadership to consider the strengths and abilities of their responders for various spill response functions. The GRP provided a tactical plan that was ready for field implementation. Each team was comprised of responders from each participating community to promote interagency coordination. A Sandwich Fire Capt. acted as IC, the Bourne Fire Lt. acted as Operations Section Chief and the other Sandwich Fire Capt. acted as Safety Officer. This organization was very effective and worked well.

**Recommendations:** In this exercise, the assignment of a single Incident Commander and an Operations Sections Chief worked very effectively. Due to previous coordination and common operational practices, the coordination was seamless.

**Activity 3.2:** Use WebEOC during exercise

**Observation 3.2:**

Strength: Computer and wireless hotspot was set up at staging site and local responder used these assets to access WebEOC and internet. The Barnstable County Mobile Command Vehicle was available as a shelter and gathering location.

**References:** Homeland Security Exercise and Evaluation Program, Volume II, February 2007, National Incident Management System, NERAC Equipment Cache

**Analysis:** The simulated oil spill gave the IC an opportunity to use WebEOC as a source of information and to post exercise updates. The Barnstable County Mobile Command Vehicle provided enough flexibility to provide communications ability and served as an additional location for shelter from the weather. The exercise afforded an opportunity for state, federal and local responders to appreciate the county assets. Although the wireless connectivity wasn't operating, members of Barnstable County were accessible to operate and post onto WebEOC.

**Recommendations:** The Fire Captains and Lieutenant would benefit from a tutorial in the basics of WebEOC, so that they may utilize and become familiar with it during training or in case of an actual event. Recommend utilizing county assets to the maximum extent practicable during all future MassDEP GRP exercises and training evolutions.

**Activity 3.3:** Deploy Boom

**Observation 3.3:**

Strength: Vessel and shore-based Task Forces worked well together to implement the booming tactic under challenging site conditions.

**References:** Homeland Security Exercise and Evaluation Program, Volume II, February 2007, National Incident Management System, GRP NS-17

**Analysis:** The primary objective of GRPs is to deploy boom ahead of an oil spill to prevent or reduce negative impacts to environmentally sensitive areas. Successful deployment of GRP booming tactics requires that the boom be effectively anchored and positioned so that it would divert, deflect, or exclude oil from the sensitive area. Four vessel crews and two shoreside teams were assembled to deploy the diversion boom configuration in Old Harbor. Vessel-based responders coordinated their activities towing, anchoring, and positioning boom and worked well together throughout. The IC, Ops Section Chief and facilitators decided to deploy only two legs of boom due to the shifting geography of the sand as compared to aerial images and the impending high tide. Due to the excessively high tide and strong current, the modified configuration was only partially deployed as it became evident that the tactic would not be effective in these



conditions in Old Harbor. Participants discussed the option of deploying alternate tactics to completely divert the oil from Old Harbor and keep it in Cape Cod Bay. While the tactic was not fully deployed due to the remarkably high tide and current, this exercise nevertheless provided the opportunity to not only test the tactic and evaluate its effectiveness in this area but also gave local first responders a first-hand glimpse of the challenging aspects of employing booming tactics and strategies under adverse conditions.

**Recommendations:** Conduct future GRP deployment exercises to keep boom deployment skills current and to test GRP strategies at other locations. Improve boom deployment and tending skills by deploying existing GRPs that call for and incorporate boom arrays in different configurations and tending throughout the tide. Deployment of longer boom arrays and those that are relatively more complex (cascade arrays) should not be confused with towing longer sections of boom; a practice that is discouraged. For towing purposes, both due to the relatively small size of vessel used by local first responders, harbormasters and others, and due to relative lack of boom towing experience amongst first responders, it is recommended that towed boom segments be limited to 200 ft. Utilization of surrogate(s) to assess boom effectiveness should be incorporated as much as practicable in future exercises.

MassDEP will revisit and evaluate the booming strategy for Old Harbor and make recommendations for changing the GRP.

#### **Activity 3.4:** Demobilize Boom

##### **Observation 3.4:**

Strength: On water responders towed the boom to the boat ramp where participants who had previously been observing took on the role of rinsing and stowing the boom

##### **References:** GRP CI-01

**Analysis:** Demobilization of boom can be time-consuming and tedious. Responders worked well throughout this process, showing strong teamwork. Sandwich Fire provided an engine to support boom rinsing.

**Recommendations:** The same practice of towing shorter segments of boom should be followed for demobilization as it is for deployment. While demobilization during these types of exercises tends to take place at the end of sometimes very long training days, it is important to ensure that boom towing is done in a deliberate manner with good situational awareness, to avoid potential navigation safety issues. For exercises that approach 5 or more hours, providing lunch for participants may help to alleviate fatigue.

## SECTION 4: CONCLUSION

This was a useful and successful exercise despite the fact that the GRP diversion tactic was not completely deployed as planned due to the extreme high tide and higher than normal current speed. Both communities worked together seamlessly. The boom deployment was accomplished quickly and safely although the high flood tide presented challenging site conditions. The staging area provided adequate space and the responders were able to effectively use available resources to support the deployment.

The group demonstrated the capability to assign participants to various roles, including Incident Commander, Operations Section Chief, Safety Officer, vessel-based and shore responders, task forces, and observers. Equipment from the Sandwich Oil Spill Response trailer was deployed from vessels provided by both communities, and participants became more familiar with deploying, setting, and demobilizing boom, anchors, and floats. The Incident Command communicated effectively and clearly with both vessel-based and shore-based responders, while the Barnstable County computer and wireless access to WebEOC supported other exercise documentation. Interagency communications were successful, using Barnstable County's handheld UHF radios and available tactical/ops channels.

Lessons learned from this exercise included but were not limited to:

- Responders were able to work well in task force setting that mixed responders from both towns.
- The Barnstable County assets supported real-time flow of information both in posting updates and receiving weather alerts but could have been better utilized.
- Shorter boom segments are easier to tow for inexperienced personnel and in area marked with tight turns and shallow water.
- This tactic (DV-02) is ineffective at very high tide levels (11ft) in Old Harbor. At low tide, vessels will be unable to deploy the boom due to insufficient water to launch vessels and equipment. The GRP should be re-evaluated in light of these conditions.
- Due to the changing geography from the shifting sands in Old Harbor, it is necessary to survey the area, either by air or on water, prior to deploying resources, to effectively deploy this tactic in the future.
- The Boardwalk parking lot is a good staging area/boat ramp.

## APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for Massachusetts, Barnstable County, as a result of the Massachusetts Department of Environmental Protection Old Harbor Geographic Response Plan Exercise conducted on October 17, 2012. These recommendations draw on both the After Action Report and the After Action Conference.

### Improvement Plan Matrix

Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Capability 2: Communications	1. Towns would benefit from further cooperative exercises using portable UHF radios	2.1 Continue to observe good radio practices and utilize separate channels for IC and Tactical Ops.	2.1.1 Arrange another cooperative exercise at a different site	Communications	Sandwich and Bourne Fire Depts.	Fire Chiefs	October 2012	October 2013
Capability 3: Community Preparedness and Participation	1. Communities would benefit from further training in WebEOC	3.2 Seek out opportunities to participate in other exercises and utilize WebEOC to continue to gain experience	3.1.1 Participate in another exercise and volunteer to use WebEOC	Community Preparedness and Participation	Sandwich and Bourne Fire Depts.	Fire Chiefs	October 2012	October 2013

Homeland Security Exercise and Evaluation Program (HSEEP)  
 After Action Report/Improvement Plan Massachusetts Department of Environmental Protection  
 (AAR/IP) Old Harbor GRP (CI-01) Deployment Exercise

Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Capability 3: Community Preparedness and Participation	1. Vessel and shore-based task forces work well together	3.3 MassDEP further evaluate the tactic for change to GRP	3.3.1 Participate in additional testing of tactic and/or conduct site surveys at location	Community Preparedness and Participation	MassDEP	DEP representative	October 2012	October 2013

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## APPENDIX B: LESSONS LEARNED

While the After Action Report/Improvement Plan includes recommendations which support development of specific post-exercise corrective actions, exercises may also reveal lessons learned which can be shared with the broader homeland security audience. The Department of Homeland Security (DHS) maintains the *Lessons Learned Information Sharing* (LLIS.gov) system as a means of sharing post-exercise lessons learned with the emergency response community. This appendix provides jurisdictions and organizations with an opportunity to nominate lessons learned from exercises for sharing on *LLIS.gov*.

For reference, the following are the categories and definitions used in LLIS.gov:

- **Lesson Learned:** Knowledge and experience, positive or negative, derived from actual incidents, such as the 9/11 attacks and Hurricane Katrina, as well as those derived from observations and historical study of operations, training, and exercises.
- **Best Practices:** Exemplary, peer-validated techniques, procedures, good ideas, or solutions that work and are solidly grounded in actual operations, training, and exercise experience.
- **Good Stories:** Exemplary, but non-peer-validated, initiatives (implemented by various jurisdictions) that have shown success in their specific environments and that may provide useful information to other communities and organizations.
- **Practice Note:** A brief description of innovative practices, procedures, methods, programs, or tactics that an organization uses to adapt to changing conditions or to overcome an obstacle or challenge.

### Exercise Lessons Learned

The entire MA DEP GRP development and testing program should be considered a best practice as it provides a model for other states to follow. This program is unlike any other in the country in that it provides a comprehensive method to:

- Develop and test Geographic Response Plans for oil spills
- Train first responders on boom deployment basics as well as specific GRP tactics

Additionally, MADEP:

- Provides equipment in the form of pre-positioned and fully stocked pollution response trailers that are assigned to select Massachusetts coastal communities
- Provides long-term maintenance and support of the equipment via a maintenance and equipment replacement program

This program has proven highly successful and garnered praise from the international community. In 2011, MADEP and Nuka Research and Planning Group, (the contractor

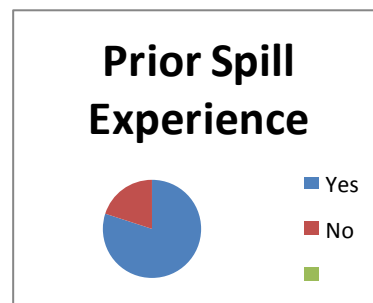
overseeing the project) submitted a white paper (later approved and entered as a poster) at the International Oil Spill Conference in Portland, OR in 2011. The poster was entitled “Approaches to Development and Testing of Geographic Response Plans in Massachusetts and Rhode Island” and won first place in the Preparedness category.

## APPENDIX C: EXERCISE EVALUATION FORM

GRP/Oil Spill Response Trailer Training Evaluation Form		
<b>Old Harbor, Sandwich</b>	<b>Test date: 10/17/12</b>	
Instructions to Evaluators: Complete this form based on your observations of the GRP exercise.		
<b>Field Training Portion</b>		
Evaluator Name:	Evaluator Organization:	
What was your role in exercise? (responder, observer, facilitator, etc.)		
What was your level of spill response experience prior to this exercise?		
NONE      TRAINING ONLY      SOME SPILL RESPONSE      A LOT		
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 deploying spill response tactics than I did prior to this exercise.		
3. I would participate in future GRP deployments at other sites.		
4. The field objectives were clearly explained and the deployment exercise met the objectives.		
5. The exercise was conducted safely.		
Based on your experience today, would you feel comfortable setting a similar boom array during an actual incident?		
NOT AT ALL      A LITTLE      MODERATELY      VERY		
Please evaluate how well the parking lot at Boardwalk Rd. worked for deploying and demobilizing boom from the trailer for this deployment: ___ <u>Ideal</u> staging area for boom for this tactic. ___ <u>Sufficient</u> as a staging area for boom for this tactic. ___ <u>Not sufficient</u> as a staging area for boom for this tactic.		
Did the GRP document (map diagram) provide clear direction as to how and where to deploy the boom? If not, please identify problems & suggest improvements.		

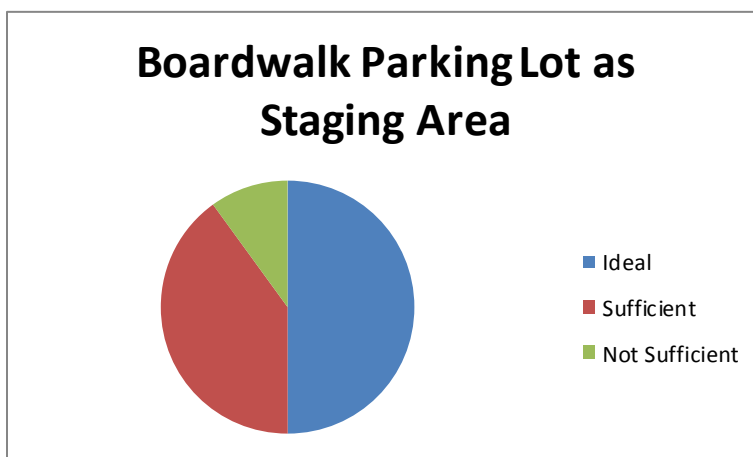
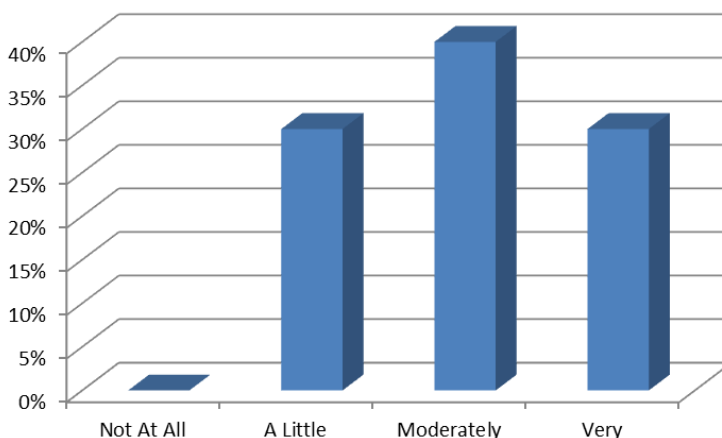


	Yes	No
Prior Oil Spill Experience	80%	20%
More Prepared after Exercise	100%	0%
Better Understanding of Deploying Spill Response Tactics	100%	0%
Participate in Future GRP Deployments	100%	0%
Field Objectives Clearly Explained and/or Met	80%	20%



10 Respondents

Based on experience today, comfort level with setting a similar boom array in actual incident



## APPENDIX D: EXERCISE EVENTS SUMMARY TABLE

### Schedule of Events

Time	Event	Location/Details
9:00	Meet for briefing and review	Boardwalk parking lot. Will present scenario, assign personnel, review protective booming and equipment, and develop an Operational Plan and Comms Plan. Brief on endangered species in the area.
10:00	Group trailer review	Boardwalk parking lot. Review of equipment in Sandwich trailer.
10:30	Safety briefing and assignment review.	Safety Officer will give a safety briefing and ICs review responder assignments.
11:00	Deploy DV-02. Leave boom in place to evaluate anchor holding	Load boom to vessels from trailer at boat ramp. Responders will deploy boom as drawn in plan. Other task forces and observers/evaluators will watch from shore.
11:45	Re-locate anchor for west leg.	Responders re-located the anchor for the west leg to adjust for strong currents.
12:30	Evaluate portion of DV-02 that responders were able to deploy.	Responders and facilitators will evaluate and adapt tactic as necessary. Responders were unable to fully deploy DV-02 due to the strong currents and under-powered vessels for the conditions.
12:35	Demobilize DV-02.	Release anchor and tow back to shore.
1:30	Debrief	Reconvene at the Boardwalk parking lot for debrief.
2:00	Adjourn	

#### Tides (Cape Cod Bay) October 17

High 1		Low 1		High 2		Low 2	
12:41	10.0 ft	6:43	-.59 ft	12:56	11.0 ft	19:18	-1.2 ft

## APPENDIX E: ACRONYMS

### Acronym Table

Acronym	Meaning
DV	Diversion booming
FPC	Final Planning Conference
GRP	Geographic Response Plan
IAP	Incident Action Plan
IPC	Initial Planning Conference
IC	Incident Command(er)
LL	Lessons Learned
MADEP(MassDEP)	Massachusetts Department of Environmental Protection
MPC	Mid-Term Planning Conference
SRPEDD	Southeastern Regional Planning and Economic Development District
TCL	Target Capabilities List
UHF	Ultra High Frequency
USCG	United States Coast Guard
VHF	Very High Frequency
WebEOC	Web Emergency Operations Centers software