



Massachusetts Department of
Environmental Protection

MassDEP Geographic Response Plan - 2013 South Shore Exercise

Exercise Plan

September 24, 2013

The Exercise Plan (ExPlan) gives elected and appointed officials, observers, media personnel, and players from participating organizations information they need to observe or participate in the exercise. Some exercise material is intended for the exclusive use of exercise planners, controllers, and evaluators, but players may view other materials that are necessary to their performance. All exercise participants may view the ExPlan.

EXERCISE OVERVIEW

Exercise Name	2013 South Shore GRP Exercise
Exercise Dates	September 24, 2013
Scope	This exercise is a Full-Scale Exercise, planned for approximately six hours at Roht Marine in Marshfield, MA, A to Z Boatworks/North River Marine in Scituate, MA, and upon the waters of the North River. Exercise play is limited to the western North River, Roht Marine, and A to Z Boatworks in the vicinity of the Route 3A/Main Street Bridge.
Mission Area(s)	Response
Core Capabilities	Planning, Communications, On-Site Incident Management, WMD and Hazardous Materials Response and Decontamination.
Objectives	<p>Objective 1: Foster Inter-Agency Planning and Coordination by providing the opportunity for local responders to work with Federal (USCG) and State (MassDEP) responders to plan for and deploy a GRP protective booming tactic during a simulated incident.</p> <p>Objective 2: Promote Resource Coordination among local responders by coordinating use of assets from different towns and agencies.</p> <p>Objective 3: Improve local Oil Spill Preparedness by deploying equipment from one or more MassDEP provided Oil Spill Response trailers, providing participants hands-on experience mobilizing and demobilizing boom in the field.</p>
Threat or Hazard	Discharge of oil onto a navigable waterway
Scenario	<p>The North River Geographic Response Plan (SS-06) will serve as the foundation for this exercise but none of the specific strategies depicted on the GRP will be tested. Instead, and because of the strong current that is common throughout the North River system, this exercise will be conducted to test the overall efficacy of booming in the North River. The results of this exercise will inform MassDEP and will likely lead to overall changes to the SS-06 GRP tactics and strategies. Further information on the boom deployment plan can be found in Appendix E.</p> <p>A tank truck rollover with associated fuel oil spill on Route 3A near the</p>

	<p>bridge at the North River which threatens to enter the North River will serve as a background scenario with boom being deployed on both sides of the river near the bridge to minimize environmental impact.</p>
Sponsor	<p>Massachusetts Department of Environmental Protection. Southeast Regional Planning and Economic Development District (SRPEDD) program funds are being utilized for first responder backfill and overtime costs.</p>
Participating Organizations	<p>Participating organizations will include the Marshfield, Scituate and Duxbury, MA Fire Departments, Marshfield Harbormaster, Scituate Harbormaster, personnel from Roht Marine in Marshfield , MA and A to Z Boatworks in Scituate, MA, as well as MassDEP, U.S. Coast Guard Sector Boston, Moran Environmental Recovery LLC, and Nuka Research and Planning Group, LLC (Nuka Research). Additional details contained in Appendix B below.</p>
Point of Contact	<p>Rich Packard, Oil Spill Program Coordinator Massachusetts Department of Environmental Protection Oil Spill Prevention and Response Program 20 Riverside Drive Lakeville, MA 02347 (508) 946-2856 Richard.Packard@state.ma.us</p>

GENERAL INFORMATION

Exercise Objectives and Core Capabilities

The following exercise objectives in Table 1 describe the expected outcomes for the exercise. The objectives are linked to core capabilities, which are distinct critical elements necessary to achieve the specific mission area(s). The objectives and aligned core capabilities are guided by elected and appointed officials and selected by the Exercise Planning Team.

Exercise Objective	Core Capability
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	Planning
Promote Resource Coordination among local responders by coordinating use of assets from different towns and agencies	Communications
Improve local Oil Spill Preparedness by deploying equipment from one or more MassDEP provided Oil Spill Response trailers, providing participants hands-on experience mobilizing and demobilizing boom in the field	WMD and Hazardous Materials Response and Decontamination

Table 1. Exercise Objectives and Associated Core Capabilities

Participant Roles and Responsibilities

The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise, and their respective roles and responsibilities, are as follows:

- **Players.** Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency.
- **Controllers.** Controllers plan and manage exercise play, set up and operate the exercise site, and act in the roles of organizations or individuals that are not playing in the exercise. Controllers direct the pace of the exercise, provide key data to players, and may prompt or initiate certain player actions to ensure exercise continuity. In addition, they issue exercise material to players as required, monitor the exercise timeline, and supervise the safety of all exercise participants.
- **Simulators.** Simulators are control staff personnel who role play nonparticipating organizations or individuals. They most often operate out of the Simulation Cell (SimCell), but they may occasionally have face-to-face contact with players. Simulators function semi-independently under the supervision of SimCell controllers, enacting roles (e.g., media reporters or next of kin) in accordance with instructions provided in the

Master Scenario Events List (MSEL). All simulators are ultimately accountable to the Exercise Director and Senior Controller.

- **Evaluators.** Evaluators evaluate and provide feedback on a designated functional area of the exercise. Evaluators observe and document performance against established capability targets and critical tasks, in accordance with the Exercise Evaluation Guides (EEGs).
- **Observers.** Observers visit or view selected segments of the exercise. Observers do not play in the exercise, nor do they perform any control or evaluation functions. Observers view the exercise from a designated observation area and must remain within the observation area during the exercise. Very Important Persons (VIPs) are also observers, but they frequently are grouped separately.
- **Media Personnel.** Some media personnel may be present as observers, pending approval by the sponsor organization and the Exercise Planning Team.
- **Support Staff.** The exercise support staff includes individuals who perform administrative and logistical support tasks during the exercise (e.g., registration, catering).

Exercise Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise, and should not allow these considerations to negatively impact their participation.

Assumptions

Assumptions constitute the implied factual foundation for the exercise and, as such, are assumed to be present before the exercise starts. The following assumptions apply to the exercise:

- The exercise is conducted in a no-fault learning environment wherein capabilities, plans, systems, and processes will be evaluated.
- The exercise scenario is plausible, and events occur as they are presented.
- Exercise simulation contains sufficient detail to allow players to react to information and situations as they are presented as if the simulated incident were real.
- Participating agencies may need to balance exercise play with real-world emergencies. Real-world emergencies take priority.

Artificialities

During this exercise, the following artificialities apply:

- Exercise communication and coordination is limited to participating exercise organizations and venues. Participants may also incorporate exercise notifications to the Massachusetts Emergency Management Agency (MEMA) via WebEOC.

EXERCISE LOGISTICS

Safety

Exercise participant safety takes priority over exercise events. The following general requirements apply to the exercise:

- A Safety Controller is responsible for participant safety; any safety concerns must be immediately reported to the Safety Controller. The Safety Controller and Exercise Director will determine if a real-world emergency warrants a pause in exercise play and when exercise play can be resumed.
- For an emergency that requires assistance, use the phrase “**emergency.**” The following procedures should be used in case of a real emergency during the exercise:
 - Anyone who observes a participant who is seriously ill or injured will immediately notify emergency services and the closest controller, and, within reason and training, render aid.
 - The controller aware of a real emergency will initiate the “emergency” broadcast and provide the Safety Controller, Senior Controller, and Exercise Director with the location of the emergency and resources needed, if any. The Senior Controller will notify the Exercise Director as soon as possible if a real emergency occurs.

Fire Safety

Standard fire and safety regulations relevant to the **Marshfield, Scituate, and Duxbury Fire Departments** will be followed during the exercise.

Emergency Medical Services

The sponsor organization will coordinate with local emergency medical services in the event of a real-world emergency.

Site Access

Security

If entry control is required for the exercise venue(s), the sponsor organization is responsible for arranging appropriate security measures. To prevent interruption of the exercise, access to exercise sites is limited to exercise participants. Players should advise their venue’s controller or evaluator of any unauthorized persons.

Media/Observer Coordination

Organizations with media personnel and/or observers attending the event should coordinate with the sponsor organization for access to the exercise site. Media/Observers are escorted to designated areas and accompanied by an exercise controller at all times. Sponsor organization

representatives and/or the observer controller may be present to explain exercise conduct and answer questions. Exercise participants should be advised of media and/or observer presence.

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POST-EXERCISE AND EVALUATION ACTIVITIES

Debriefings

Post-exercise debriefings aim to collect sufficient relevant data to support effective evaluation and improvement planning.

Hot Wash

At the conclusion of exercise play, controllers facilitate a Hot Wash to allow players to discuss strengths and areas for improvement, and evaluators to seek clarification regarding player actions and decision-making processes. All participants may attend; however, observers are not encouraged to attend the meeting. The Hot Wash should not exceed 30 minutes.

Controller and Evaluator Debriefing

Controllers and evaluators attend a facilitated C/E Debriefing immediately following the exercise. During this debriefing, controllers and evaluators provide an overview of their observed functional areas and discuss strengths and areas for improvement.

Participant Feedback Forms

Participant Feedback Forms provide players with the opportunity to comment candidly on exercise activities and exercise design. Participant Feedback Forms should be collected at the conclusion of the Hot Wash.

Evaluation

Exercise Evaluation Guides

EEGs assist evaluators in collecting relevant exercise observations. EEGs document exercise objectives and aligned core capabilities, capability targets, and critical tasks. Each EEG provides evaluators with information on what they should expect to see demonstrated in their functional area. The EEGs, coupled with Participant Feedback Forms and Hot Wash notes, are used to evaluate the exercise and compile the After-Action Report (AAR).

After-Action Report

The AAR summarizes key information related to evaluation. The AAR primarily focuses on the analysis of core capabilities, including capability performance, strengths, and areas for improvement. AARs also include basic exercise information, including the exercise name, type of exercise, dates, location, participating organizations, mission area(s), specific threat or hazard, a brief scenario description, and the name of the exercise sponsor and POC.

Improvement Planning

Improvement planning is the process by which the observations recorded in the AAR are resolved through development of concrete corrective actions, which are prioritized and tracked as a part of a continuous corrective action program.

After-Action Meeting

The After-Action Meeting (AAM) is a meeting held among decision- and policy-makers from the exercising organizations, as well as the Lead Evaluator and members of the Exercise Planning Team, to debrief the exercise and to review and refine the draft AAR and Improvement Plan (IP). The AAM should be an interactive session, providing attendees the opportunity to discuss and validate the observations and corrective actions in the draft AAR/IP.

Improvement Plan

The IP identifies specific corrective actions, assigns them to responsible parties, and establishes target dates for their completion. It is created by elected and appointed officials from the organizations participating in the exercise, and discussed and validated during the AAM.

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PARTICIPANT INFORMATION AND GUIDANCE

Exercise Rules

The following general rules govern exercise play:

- Real-world emergency actions take priority over exercise actions.
- Exercise players will comply with real-world emergency procedures, unless otherwise directed by the control staff.
- All communications (including written, radio, telephone, and e-mail) during the exercise will begin and end with the statement [“**This is an exercise.**”]
- Exercise players who place telephone calls or initiate radio communication with the SimCell must identify the organization or individual with whom they wish to speak.

Players Instructions

Players should follow certain guidelines before, during, and after the exercise to ensure a safe and effective exercise.

Before the Exercise

- Review appropriate organizational plans, procedures, and exercise support documents.
- Be at the appropriate site at least 30 minutes before the exercise starts. Wear the appropriate uniform and/or identification item(s).
- Sign in when you arrive.
- If you gain knowledge of the scenario before the exercise, notify a controller so that appropriate actions can be taken to ensure a valid evaluation.

During the Exercise

- Respond to exercise events and information as if the emergency were real, unless otherwise directed by an exercise controller.
- Controllers will give you only information they are specifically directed to disseminate. You are expected to obtain other necessary information through existing emergency information channels.
- Do not engage in personal conversations with controllers, evaluators, observers, or media personnel. If you are asked an exercise-related question, give a short, concise answer. If you are busy and cannot immediately respond, indicate that, but report back with an answer as soon as possible.
- If you do not understand the scope of the exercise, or if you are uncertain about an organization’s participation in an exercise, ask a controller.
- Parts of the scenario may seem implausible. Recognize that the exercise has objectives to satisfy and may require incorporation of unrealistic aspects. Every effort has been made

by the exercise's trusted agents to balance realism with safety and to create an effective learning and evaluation environment.

- All exercise communications will begin and end with the statement [“**This is an exercise.**”] This precaution is taken so that anyone who overhears the conversation will not mistake exercise play for a real-world emergency.
- When you communicate with the SimCell, identify the organization or individual with whom you wish to speak.
- Speak when you take an action. This procedure will ensure that evaluators are aware of critical actions as they occur.
- Maintain a log of your activities. Many times, this log may include documentation of activities that were missed by a controller or evaluator.

After the Exercise

- Participate in the Hot Wash at your venue with controllers and evaluators.
- Complete the Participant Feedback Form. This form allows you to comment candidly on emergency response activities and exercise effectiveness. Provide the completed form to a controller or evaluator.
- Provide any notes or materials generated from the exercise to your controller or evaluator for review and inclusion in the AAR.

Simulation Guidelines

Because the exercise is of limited duration and scope, certain details will be simulated. The physical description of what would fully occur at the incident sites and surrounding areas will be relayed to players by simulators or controllers. A SimCell will simulate the roles and interactions of nonparticipating organizations or individuals.

APPENDIX A: EXERCISE SCHEDULE

Time	Personnel	Activity	Location
September 24, 2013			
0800	All	Mobilize and Stage Equipment	Roht Marine and A to Z Boatworks
0900	All	Conduct equipment familiarization, Safety and Operational Briefing	Roht Marine
1030	All	Deploy and evaluate Phase 1 ¹ Diversion (DV) boom segments from boat ramp at A to Z Boatworks	A to Z Boatworks (Phase 2 teams and observers at Roht Marine)
1115	All	Deploy and evaluate Phase 2 ¹ Diversion (DV) boom segments from boat ramp at Roht Marine	Roht Marine (Phase 1 teams and observers at A to Z Boatworks)
1200	All	Deploy surrogate (peat moss/oranges) and observe movement downstream to determine likely impact locations	Eastern North River or directly from Route 3A bridge
1230	All	Demobilize all boom segments, rinse and repack equipment	Roht Marine and A to Z Boatworks
1300	All	Hot Wash/Complete and turn in all Participant Feedback Forms	Roht Marine
1330	All	Demobilize/Adjourn	Roht Marine
Upon completion of the DRAFT AAR			
Not time specific	Controllers, evaluators, and elected and appointed officials	Controller and Evaluator After Action Review	Via E-mail

Tides (North River, MA-24SEP13)

HIGH				LOW			
AM	ft	PM	ft	AM	ft	PM	ft
3:27	8.6	3:41	9.0	9:43	0.7	10:17	0.4

¹ See Appendix E, Figure E.2 for details on deployment plan

APPENDIX B: EXERCISE PARTICIPANTS

Participating Organizations	
Federal	Participant Count
United States Coast Guard Sector Southeastern New England (USCG)	1
State	
Massachusetts Department of Environmental Protection (MassDEP)	3
Nuka Research and Planning group, LLC (contractor for MassDEP)	2
Moran Environmental Recovery (contractor for MassDEP)	1
Town of Marshfield, MA	
Marshfield Fire Department (MFD)	8
Marshfield Harbormaster	6
Roht Marine	1
Town of Scituate, MA	
Scituate Fire Department (SFD)	10
Scituate Harbormaster (Scituate HM)	4
A to Z Boatworks/North River Marine	1
Town of Duxbury, MA	
Duxbury Fire Department (DFD)	6
TOTAL	43

APPENDIX C: EXERCISE EQUIPMENT

Agency	Equipment Type	Description (length, horsepower, spec capability)
Local		
Marshfield FD	Vessel	15' Whaler/10HP outboard – Trailered and on stand-by
Marshfield FD	Apparatus	TBD
Marshfield FD	Trailer	MassDEP pre-positioned pollution response trailer – Roht Marine
Marshfield HM	Vessel	31' Safe Boat/350HP (twin)
Marshfield HM	Vessel	19' Carolina Skiff/115HP
Scituate HM	Vessel	21' Boston Whaler/225HP
Scituate FD	Apparatus	TBD
Scituate FD	Trailer	MassDEP pre-positioned pollution response trailer – A to Z Boatyard
Duxbury FD	Vessel	18' Parker/40HP outboard
Duxbury FD	Apparatus	

APPENDIX D: COMMUNICATIONS PLAN

All participants will utilize VHF and UHF radios. The Plymouth County Communications System will be used and a common operational frequency will be identified and utilized for the exercise.

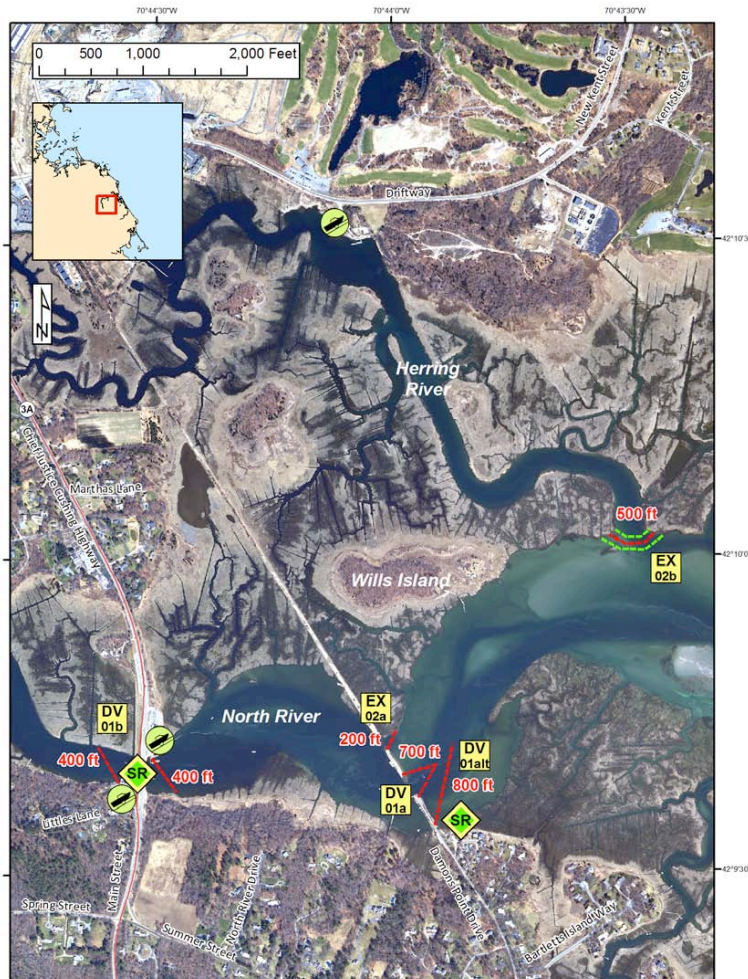
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APPENDIX E: EXERCISE SITE MAPS

Figure E.1: SS GRP: North River (SS-06)



South Shore Geographic Response Plan
North River SS-06



Map Legend			
BB Beach Berm	DF Deflection Booming	TG Tide Gate	
CB Culvert Block	EX Exclusion Booming	Boat Ramp	
DV Diversion Booming	SR Shoreside Recovery	Beach Berm Material	Protected-water Boom (Flood Tide)
PR Passive Recovery	FO Free-oil Recovery	GRP Trailer Locations	Snare or Sorbent Boom

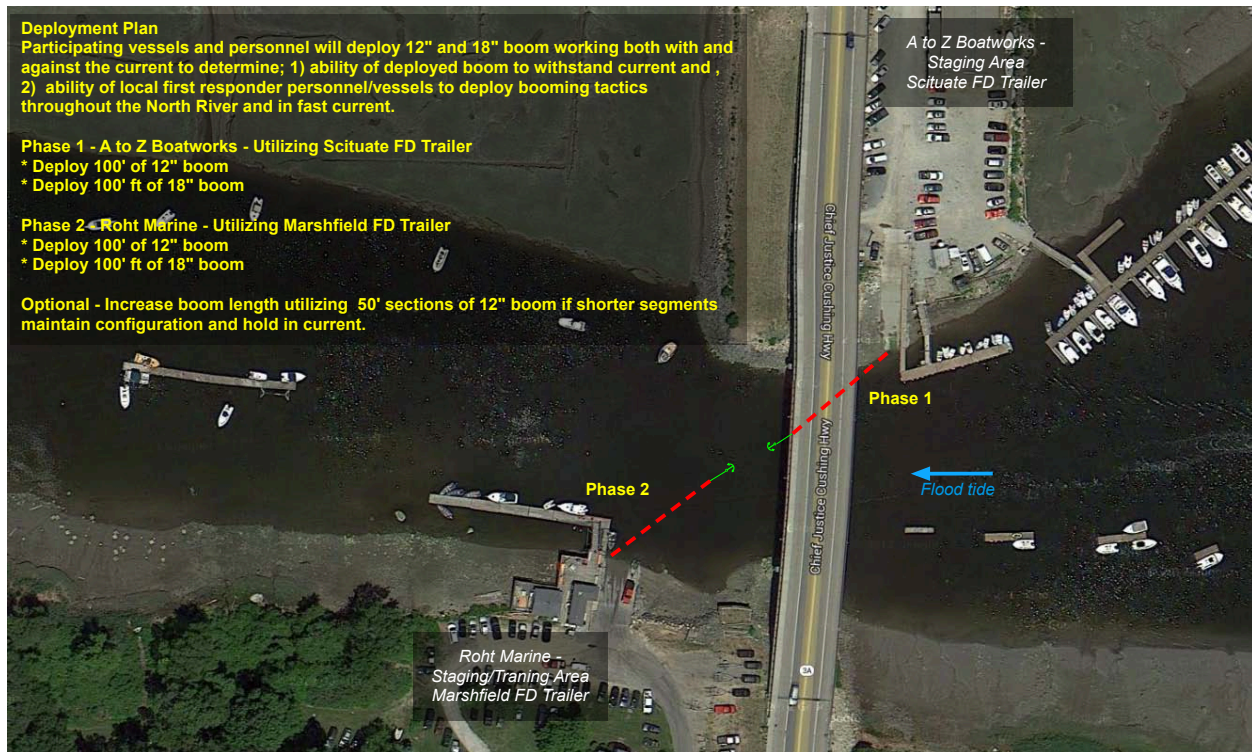
A total of 3 State Response Trailers are required to implement all of the tactics in this GRP. Responders should always consider on-scene conditions before deploying GRP tactics. Tactics may not be safe or effective under certain conditions. Responder safety should always be the first priority. The strategies contained within this plan have been designed to mitigate a potential off-shore or off-site release that could impact the subject plan area. When responding to other types of spills these tactics will likely require significant modification.

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Nuka Research and Planning Group, LLC



Figure E.2: Modified Deployment Plan



Deployment Plan

Following the Equipment Familiarization and Training session that will take place at Roht Marine utilizing the Marshfield Pre-Positioned Pollution Response Trailer, an operational brief will be conducted at which time all participating vessels and personnel will be assigned to carry out all elements of the Phase 1 and 2 deployment plan as follows:

- Shoreside teams will be assigned at A to Z Marine and Roht Marine
- Vessel assignments will be made to carry out each Phase 1 and 2 deployment element as described in the graphical deployment plan above

Following this operational and safety briefing, personnel will report to their assigned location and Phase 1 activities will commence at A to Z Boatworks. Following Phase 1 operations which may include multiple deployments with varying lengths of boom, Phase 2 deployments will commence at Roht Marine in much the same fashion as Phase 1.

Following Phase 1 and 2 operations, deployment of an oil surrogate (peat moss and/or oranges) may take place if time permits. AN oil surrogate will be deployed either upstream or to the east of the Route 3A bridge or directly from the bridge. Once the surrogate is deployed, participants will observe the oil surrogate movement and this movement will be recorded to inform future GRP revisions.

