



Massachusetts Department of
Environmental Protection

MassDEP Geographic Response Plan – 2014 Inner Cohasset Harbor (SS-02) Exercise

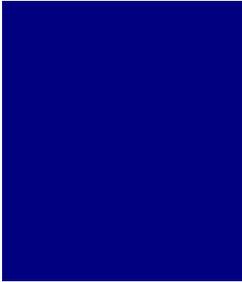
Exercise Plan

September 8, 2014

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	2014 Inner Cohasset Harbor (SS-02) GRP Exercise
Exercise Dates	September 8, 2014
Scope	This exercise is a Full Scale Exercise, planned for approximately six hours in Cohasset, MA and upon the waters of Inner Cohasset Harbor. Exercise play is limited to Inner Cohasset Harbor and adjacent shoreline.
Mission Area(s)	Response
Core Capabilities	Environmental Response/Health and Safety, Operational Coordination, Operational Communications.
Objectives	<p>Objective 1: Demonstrate the ability to deploy oil spill equipment from one or more MassDEP pre-positioned oil spill response trailers utilizing common Geographic Response Plan (GRP) tactics.</p> <p>Objective 2: Demonstrate the ability to assemble a spill response organization utilizing Incident Command System (ICS) principles through development and execution of an Assignment List (ICS 204) and implementation of on-site incident management and tactical operations.</p> <p>Objective 3: Demonstrate the ability to effectively communicate between multiple local, state, and federal agencies including fire departments, police departments, harbormasters, and other state and federal first responders using both UHF and VHF communications.</p>
Threat or Hazard	Discharge of oil into a navigable waterway
Scenario	An oil spill has occurred in Cohasset Harbor and is migrating toward the Cohasset Cove and Inner Cohasset Harbor. The Cohasset and Hingham Fire Departments will utilize GRP SS-02 to deploy protective booming to protect sensitive resources in and near Inner Cohasset Harbor.
Sponsor	Massachusetts Department of Environmental Protection. Program funds may become available and if so, will be utilized for first responder backfill and overtime costs.
Participating Organizations	<p>Participating organizations will include:</p> <ul style="list-style-type: none"> • Cohasset Fire Department (CFD) • Cohasset Harbormaster (CHM)



- Hingham Fire Department (HFD)
- Hingham Police Department - Harbormaster (HPD)
- MassDEP
- U.S. Coast Guard Sector Boston (USCG)
- Moran Environmental Recovery (MER)
- Nuka Research and Planning Group, LLC (Nuka Research)



Point of Contact

Steve Mahoney, Environmental Analyst
Massachusetts Department of Environmental Protection
Oil Spill Prevention and Response Program
1 Winter St.
Boston, MA 02108
(617) 292-5516
Stephen.Mahoney@state.ma.us

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
Demonstrate the ability to deploy oil spill equipment from one or more MassDEP pre-positioned oil spill response trailers utilizing common Geographic Response Plan (GRP) tactics.	Environmental Response/Health & Safety
Objective 2: Demonstrate the ability to assemble a spill response organization utilizing Incident Command System (ICS) principles through development and execution of an Assignment List (ICS 204) and implementation of on-site incident management and tactical operations.	Operational Coordination
Demonstrate the ability to effectively communicate between multiple local, state, and federal agencies including fire departments, police departments, harbormasters, and other state and federal first responders using both UHF and VHF communications	Operational Communication

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.

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 **Cohasset and Hingham Fire Departments, and Cohasset and Hingham Harbormasters** will be followed during the exercise.

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.

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.

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 8, 2014			
0800	CFD, HFD, HPD	Pre-Stage Equipment	Government Island Pier, Lightkeepers Hall, Boat Ramp
0900	All	Conduct First Responder Training, GRP Overview, Oil Spill 101 (classroom)	Cohasset Lightkeepers Hall
1000	All	Conduct MassDEP trailer equipment familiarization and hands-on training	Cohasset Lightkeepers Hall
1030	All	Safety, Operational, and Communications Briefing. Deploy alternate EX strategy west of Town Dock. Deploy surrogate and evaluate configuration.	Government Island Pier
1130	All	LUNCH	Cohasset Lightkeepers Hall
1200	All	Deploy alternate EX strategy east of Town Dock across entrance to The Creek. Deploy surrogate and evaluate configuration.	Government Island Pier
1230	All	Demobilize all boom configurations, rinse and repack equipment	Government Island Pier, Boat Ramp
1330	All	Hot Wash/Complete and turn in all Participant Feedback Forms	Cohasset Town Dock
1400	All	Demobilize/Adjourn	Cohasset Town Dock

Tides (Inner Cohasset Harbor, MA-September 8, 2014)

HIGH				LOW			
AM	ft	PM	ft	AM	ft	PM	ft
11:02	10.2	11:24	10.9	4:43	-1.2	5:04	-1.1

APPENDIX B: EXERCISE PARTICIPANTS

Participating Organizations	
Federal	Participant Count
United States Coast Guard Sector Boston (USCG)	2
State	
Massachusetts Department of Environmental Protection (MassDEP)	3
Nuka Research and Planning Group, LLC (contractor for MassDEP)	3
Moran Environmental Recovery (contractor for MassDEP)	2
Town of Cohasset, MA	
Cohasset Fire Department (CFD)	4 (+4-6 obsvr)
Cohasset Harbormaster (CHM)	3
Town of Hingham, MA	
Hingham Fire Department (HFD)	5
Hingham Police Department – Harbormaster (HPD)	4
TOTAL	26 (+4-6 obsvr)

APPENDIX C: EXERCISE EQUIPMENT

Agency	Equipment Type	Description (length, horsepower, spec capability)
Federal		
USCG		
State		
MassDEP	Trailer	<i>See below under local equipment</i>
Local		
CFD	Trailer	MassDEP Pre-Positioned Pollution Response Trailer (Demo)
	Pump Truck	
CHM	Vessel	17 ft Carolina Skiff/40HP/Cohasset HM
HFD	Trailer	MassDEP Pre-Positioned Pollution Response Trailer (Deploy)
	Vessel	14 ft RHIB/8HP/HFD Marine 1
HPD	Vessel	27 ft XX/450 HP/HPD Marine 2

APPENDIX D: COMMUNICATIONS PLAN

INCIDENT RADIO COMMUNICATIONS PLAN			1. Incident Name COHASSET/HINGHAM (SS-02) GRP EXERCISE	2. Date/Time Prepared	3. Operational Period Date/Time 5/14/2013 1000-1500
4. Basic Radio Channel Utilization					
System/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks
VHF	17 12 (Back-up)	Command and Tactical Operations		Incident Commander	
				Safety Officer	
				HFD Marine 1	
				HPD Marine 2	
				Harbormaster	
				Shore Team 1	
5. Prepared by (Communications Unit)					

APPENDIX E: SAFETY MESSAGE/PLAN

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SAFETY MESSAGE/PLAN (ICS 208)

1. Incident Name: 2014 Cohasset/Hingham GRP Exercise		2. Operational Period:	Date From: 9/8/2014 Time From: 0800	Date To: 9/8/2014 Time To: 1500
3. Safety Message/Expanded Safety Message, Safety Plan, Site Safety Plan:				
KNOWN SAFETY HAZARDS:				
<ul style="list-style-type: none"> • Lines under tension (boom towing and shoreside anchoring) • Pinch points (connecting boom, boom towing, vessel operations) • Heavy lifting (boom and anchors) - Observe safe lifting practices. • Entanglement – Personnel, lines/rigging, and boom. Personnel, lines, propellers. Maintain situational awareness when working around lines, anchors and boom during shoreside and on-water deployment operations to ensure that entanglement does not occur. Do not stand in the bight of lines or where boom is faked out for deployment. • Loose clothing and jewelry – Refrain from wearing loose clothing that may snag or become entangled on equipment. Jewelry including necklaces and rings should be removed while engaged in equipment deployment operations. • Slips, trips, and falls - Exercise caution in wet, muddy, and rocky areas and when working on piers or bulkheads near water to avoid falling. During boom deployment and retrieval when working in, on, or near the equipment trailers and ramps, special precaution must be taken to avoid injury when working on trailer ramp and around trailer ramp cables. Caution tape provided in trailer should be attached to trailer ramp cables to mark their location. • Crushing injuries – Use caution when working with anchors, driving shoreside stakes with sledgehammer, and when working alongside other vessels to avoid crushing injuries. • Vessel Operations – Working in close proximity to other vessels; Boom deployment and towing, and rigging near outboard motors and vessel screws/propellers. • Flotsam and debris – Conduct shoreside walkdown (Exercise Safety Officer) to identify and remove dangerous objects including glass, sharp objects, or debris washed up on shore that may endanger participants and/or impede exercise activities. Medical waste should only be retrieved by on-scene medical personnel. Flotsam should only be removed if it can be done safely and only if it impedes exercise activities. • Hypothermia – Dependent on water temperature. If participant is immersed in water, extricate safely and quickly and treat as appropriate. • Heat Stress/Stroke – Dependent upon air temperature and humidity. Exposure to extreme heat may put participants at risk for heat stress. Heat stress can result in heat stroke, heat exhaustion, heat cramps, or heat rashes. Participants exhibiting heat stress related symptoms must be treated immediately IAW participating agency protocols. 				
SPECIFIC PRECAUTIONS:				
<ul style="list-style-type: none"> • An Exercise Safety Officer will be identified and be responsible for participant safety. • FIRST AID equipment is available [<i>location</i>]. EMT/Paramedics are available on-scene [<i>confirm</i>]. • Personal Flotation Devices (PFDs) are required for all vessel personnel and all shoreside personnel working along shoreline, bulkheads or piers. • Steel-toe boots and safety glasses should be worn. • Hearing protection should be worn when working around generator and air compressor. • All vessel operators will conduct a safety brief with passengers to review vessel-specific safety precautions. • During vessel operations, a spotter should be assigned to provide guidance to vessel operator. Utilize fenders when mooring alongside pier/dock and when rafting with other vessels. • Man overboard – Assigned vessel spotter must maintain constant visual contact with man overboard and provide position and direction to vessel operator. “Emergency” phrase must be communicated to all exercise participants. Incident Commander or Exercise Coordinator will halt all exercise activity. • Vessel load balancing - Each vessel operator must ensure that personnel and equipment are stationed and distributed appropriately on deck. • Hydration – Participants must ensure they remain properly hydrated based on their level of exertion and on-scene weather conditions (heat, humidity). Water is provided. • Sunscreen – Participants should ensure proper sunscreen application based on weather conditions. Sunscreen is provided. 				
4. Site Safety Plan Required? Yes <input type="checkbox"/> No <input type="checkbox"/>				
Approved Site Safety Plan(s) Located At:				
5. Prepared by: Name: M. Popovich		Position/Title: Exercise Coord.		Signature: _____
ICS 208	IAP Page	Date/Time: 7/16/2014 12:00 AM		

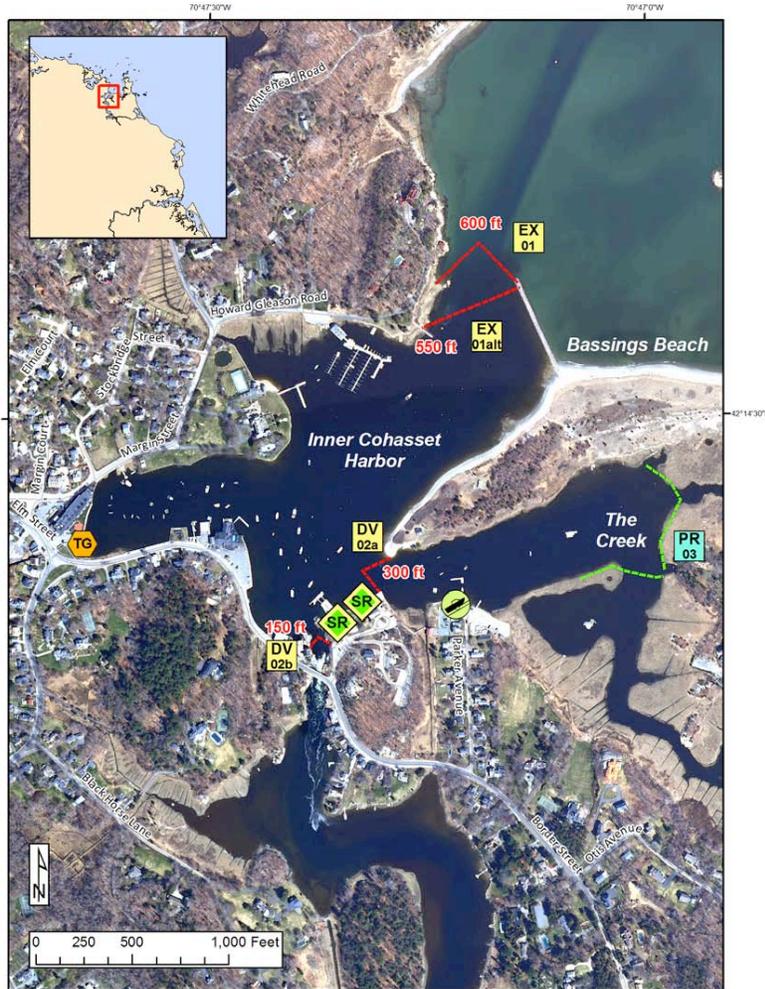
APPENDIX F: EXERCISE SITE MAPS

Figure F.1: Inner Cohasset Harbor (SS-02) GRP Map

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South Shore Geographic Response Plan
Inner Cohasset Harbor SS-02

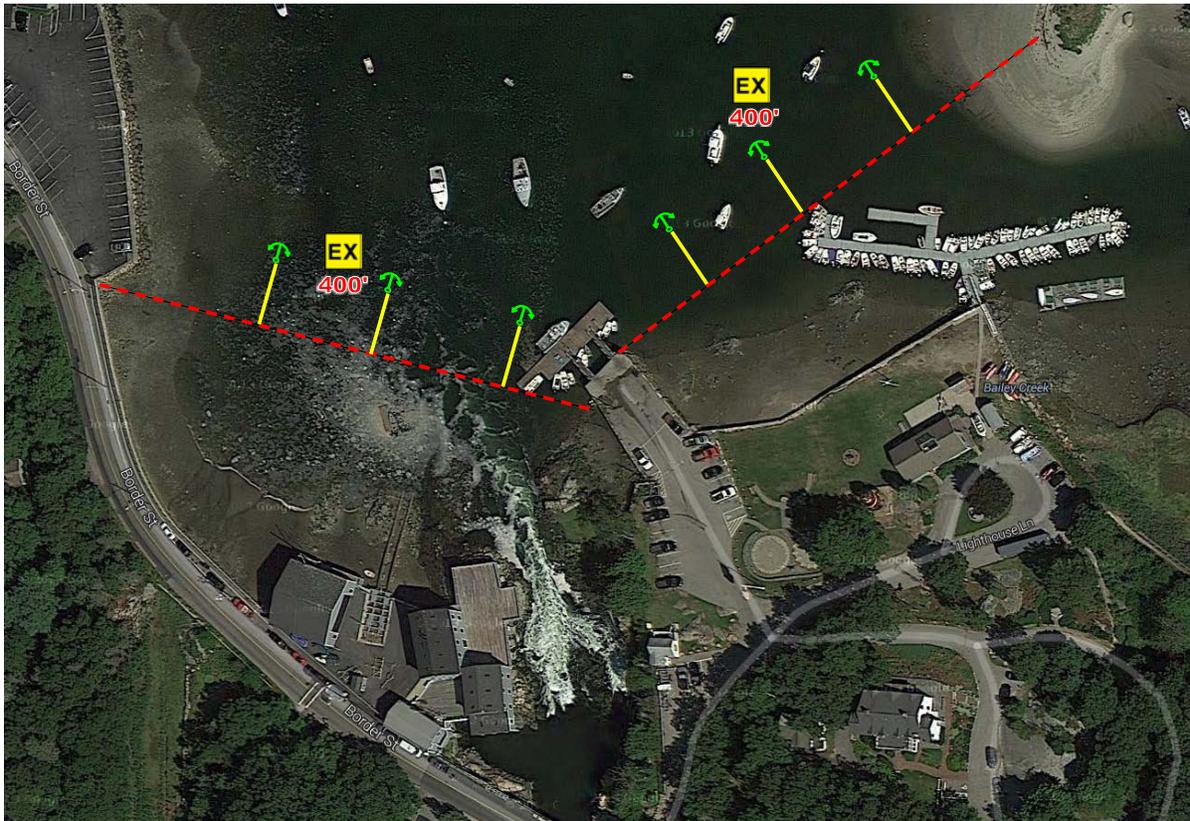


Map Legend			
BB Beach Berm	DF Deflection Booming	TG Tide Gate	Protected-water Boom (Flood Tide)
CB Culvert Block	EX Exclusion Booming	Boat Ramp	
DV Diversion Booming	SR Shoreside Recovery	Beach Berm Material	Snare or Sorbent Boom
PR Passive Recovery	FO Free-oil Recovery	GRP Trailer Locations	

A total of 2 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.



Figure F.2: Inner Cohasset Harbor Modified Deployment Plan



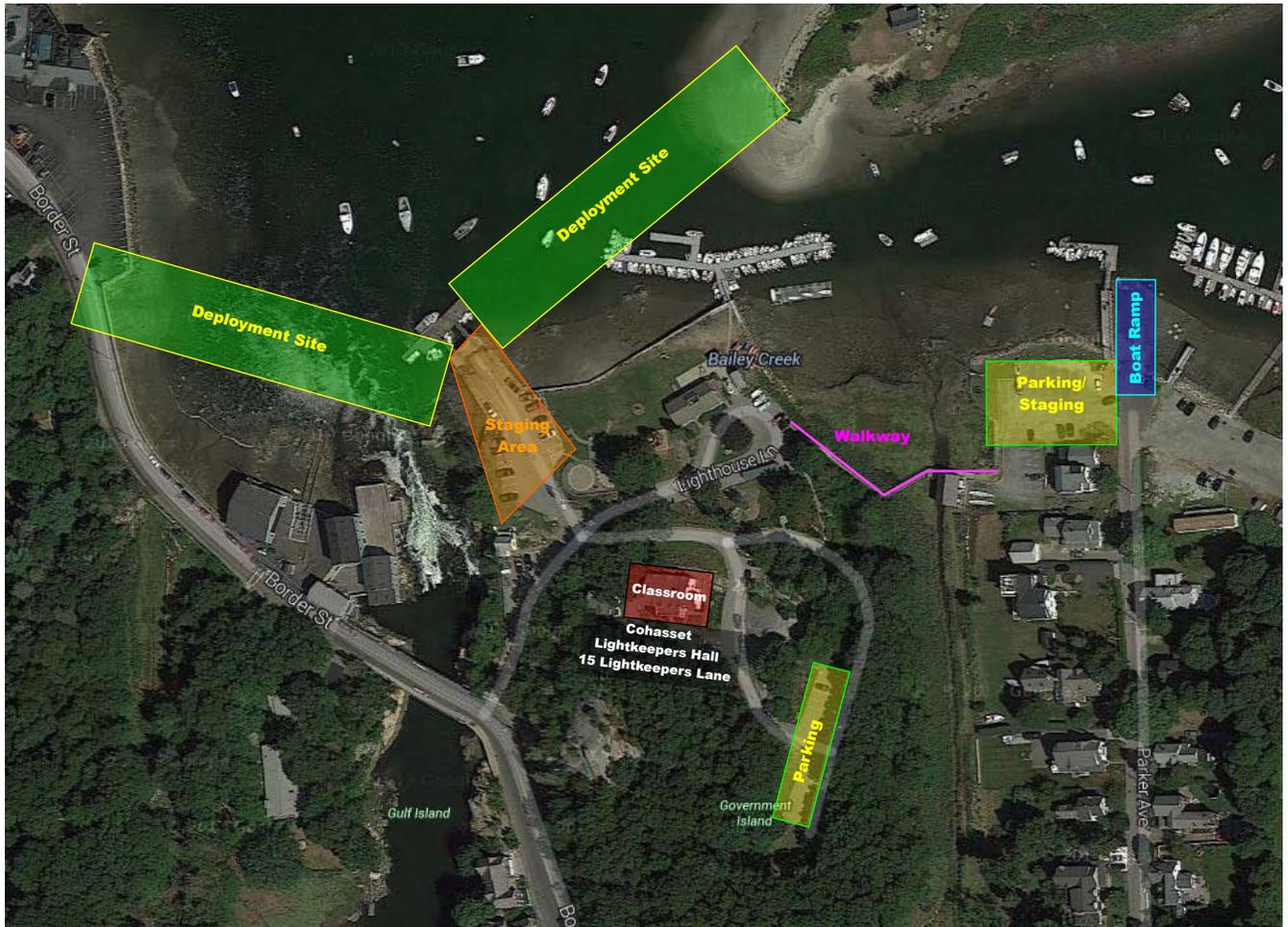
Background:

Following a site survey in Cohasset Harbor conducted at the conclusion of the Mid-Planning Meeting on July 24, 2014 by the Exercise Planning Team (EPT), the decision was made to develop alternative deployment tactics at the entrances to The Creek (current location of DV02a) and The Gulf River (current location of DV02b).

Due to tidal current conditions near the entrance to the Gulf River, the existence of floating structures in the vicinity of the Cohasset Sailing Club and the entrance to The Creek, the DV02a and DV02b strategies as currently depicted on GRP SS-02 would likely be difficult to deploy and ineffective. The EPT agreed that an alternate deployment plan should be developed for this exercise. Figure F.2 above depicts the alternate deployment plan developed for this exercise.

Based on the results of the exercise, the SS-02 GRP will be modified to reflect the strategies most suitable for protecting The Creek and The Gulf River.

Figure F.3: Supplementary Exercise Site Map



APPENDIX G: ACRONYMS

Acronym	Term
DHS	U.S. Department of Homeland Security
ExPlan	Exercise Plan
CFD	Cohasset Fire Department
CHM	Cohasset Harbormaster
HFD	Hingham Fire Department
HPD	Hingham Police Department - Harbormaster
HSEEP	Homeland Security Exercise and Evaluation Program
MassDEP	Massachusetts Department of Environmental Protection
MEMA	Massachusetts Emergency Management Agency
MER	Moran Environmental Recovery
SME	Subject Matter Expert
SRPEDD	Southeast Regional Planning and Economic Development District
USCG	United States Coast Guard