South Shore Geographic Response Plan (GRP) Project

September 29, 2011 1:00 p.m.
Plymouth Town Hall
Plymouth, Massachusetts

Attendees

Jason Burtner – Coastal Zone Management
Dan Crafton – MassDEP
Elise DeCola– Nuka Research
Mike Dimeo – Marshfield Harbormaster
Stanley Eldridge – Plymouth Fire Dept.
William Hocking – Marshfield Fire Dept.
Chad Hunter – Plymouth Harbormaster
Ross Kessler – Mass Division of Marine Fisheries
Doug Mansell – USCG, Sector Boston
Kim Michaelis – Plymouth Emergency Management
Gregg Morris – Oyster Farmer
Rich Packard – MassDEP
Mike Popovich – USCG District 1, Boston
Caleb Queen – Nuka Research
Mike Salviati – USCG, Sector Boston
Sanne Schneider – Nuka Research

Welcome & Introduction

Rich Packard of the MA DEP introduced himself and welcomed the group. The South Shore GRP project is the fifth in a series of six GRP regions that the MA DEP has contracted Nuka Research and Planning Group to develop. Geographic Response Plans have been developed and incorporated into the Area Contingency Plans for the Cape & Islands, Buzzards Bay, Boston Harbor and the North Shore. He introduced Elise DeCola of Nuka Research.

Activities Since Last Meeting

DeCola reviewed the activities of the group since the last meeting. Site surveys have been conducted, with local participants, USCG representatives, MADEP, Division of Marine Fisheries, and Nuka Research. Most recently, Tactics sub-group meeting was held to review the first draft GRPs. Participants in the Tactics sub-group included work group members with spill response experience.

DeCola emphasized that today's focus is reviewing the 14 South Shore GRP drafts and asked for input and discussion from the group to contribute to final edits. Drafts GRPs of all the sites and an updated site selection matrix (SSM) are available for review on the project website. Although comments will be accepted today, there will be more time in the next few weeks for individuals to review the GRPs at greater length and to provide input. October 31, 2011 was established as the closing date for comments on the draft GRPs.

Project Objectives

DeCola began discussing the project objectives by explaining that the MA DEP has been developing GRPs as a tool for first responders to use for protecting sensitive areas in case of an oil spill. She noted that at the beginning of the project the focus is on the identification of environmental sensitivities and protection priorities, and that tactics are developed to protect those areas where feasible. She described the GRPs as flexible and modifiable based on the conditions at the time of a spill. She thanked everyone who participated in the site surveys, especially those who provided vessels to complete them.

DeCola introduced Mike Popovich of the United States Coast Guard to speak about the booming tactics that are used in the GRPs.

Review of Oil Spill Response Tactics

Mike Popovich, Spill Response Equipment Specialist from USCG District 1 was introduced to speak on Tactics (Booming 101). He explained that the Massachusetts GRPs are based pm a set of pre-defined Tactics that contain standard terminology and a defined resource set, aiding in continuity. The icons are also consistent throughout the maps, which helps you to understand what you're looking at on the GRPs. Popovich explained that all the tactics are meant to be flexible, because each situation responders will face will be different (e.g. weather, tides, seasons, oil type, etc.). He emphasized that the Tactics Guide is just that, a guide, and the steps are not set in stone. (Link to Tactics Guide: http://grp.nukaresearch.com/CIGRP.htm)

Popovich used some slides from the Tactics Guide to show the three types of booming strategies that are typically used on the GRPs (exclusion, diversion, deflection). He explained that exclusion booming protects a resource by keeping oil away from it. This can be used in low energy environment, on calm water. Diversion booming is used when you want to send oil somewhere, usually to a collection point, and on the GRPs the DV icon will always be seen with a SR icon (Shoreside Recovery). Shoreside recovery denotes a collection point where oil can be recovered with skimmers, passive recovery, or vacuum trucks. Deflection booming is used when directing spilled oil away from somewhere or to change the course of a slick. Usually deflection boom is anchored to the shoreline upstream, to move the oil away from shoreline.

Popovich discussed recovery tactics, noting that shoreside recovery is the primary tactic used for GRP purposes. He explained that marine and on-water free-oil recovery are more active recovery tactics that require more experience and equipment, and are seldom used by first responders.

Gregg Morris, a Duxbury oyster farmer, asked what boom is available from the MADEP oil spill response trailers for first responders. Rich Packard explained that each trailer has 1000 ft.; 200 ft. of 12" boom, and 800 ft. of 18" boom. Packard noted that there are 76 trailers in 69 communities in coastal Massachusetts. Ross Kessler, from Marine Fisheries, talked about the idea of mutual aid, since each town has its own trailer. Packard explained that the DEP provides the trailers and tells the towns to use them when necessary, advising the DEP so they can restock or provide assistance, in the case of a larger spill. He agreed that neighboring towns can be notified in a mutual aid situation, but if an event is larger than that, Unified Command (MADEP, USCG, RP) should be making decisions about trailer allocation. As a rule of thumb, neighboring towns can borrow a trailer through mutual aid, but if a town would like multiple trailers from other regions in the state, they should contact MassDEP. The boom in the state response trailers is meant for initial response. Long-term booming is usually provided by OSROs (oil spill response organizations). The DEP has purchased some larger boom (36"), Packard stated, which is pre-staged at Buzzards Bay. Packard noted that the purpose of the trailer and GRP programs are to build local first response capacity for the initial hours of a spill.

DeCola introduced Caleb Queen to talk about GIS mapping, how it works, and how it is used in conjunction with the GRPs.

Overview of GIS Mapping

Caleb Queen began by explaining that the software he uses to map the GRPs is called ArcGIS (developed by ESRI), which stands for geographic information system. ArcGIS is mapping software which uses spatial analysis to build spatial databases. He has used GIS mapping to create GRPs for 14 sites in South Shore and for all other Massachusetts GRPs. All the features on the maps are drawn to scale and have latitude/longitude assigned to them. Queen also noted that the GRP data can be overlaid with other GIS layers (like watersheds and boat ramps).

Queen used Stage Harbor/Herring River as an example and showed how the GIS data can be used to calculate how much boom (how many trailers) are needed to deploy certain tactics. He stated that GIS will be used at all major spills, if it is not already. DeCola noted that although technology is moving forward rapidly, the GRPs are paper-based documents and that for the time being, responders still seem to value this. The Massachusetts GRPs can be used either on paper or in GIS, depending upon the user.

Review and Comments on Draft GRPs

DeCola began by saying that the GRPs were drafted, and should be reviewed, in terms of tactics, logistical info, protection priorities, contact information, and how they overlap with other plans. The comment period ends on Monday, Oct. 31, 2011.

DeCola began discussing the GRP review process. She suggested workgroup members review at least the sites that are in their town and listed some things to consider: are the tactics feasible; is the logistical information correct (i.e. driving directions, place names, boat ramps); and do the tactics reflect the protection priorities for that site?

DeCola briefly went through the layout of the GRPs with the group. The first page is the tactics map. The next two pages are tactics information, including booming strategy, location/description, response strategy, implementation, response resources needed to deploy, staging areas site access, resources to be protected, and special considerations. DeCola stressed the importance of local expertise to identify any practical information (e.g. navigational hazards, seasonal sensitivities). The final page is a combination of photos from ground level and satellite images, and contact numbers which is not meant to be an exhaustive list but should include local first response agencies and other stakeholders.

Discussion of Draft GRPs

The draft GRPs were discussed and information provided during the meeting is noted here. DeCola notified the group that October 31st is the comment deadline, so that the GRPs can be edited for final presentation to the Area Committee at their next meeting (date pending, likely November/December 2011). After discussion, the group agreed to the following changes/revisions to the GRPs.

> SS-01 Outer Cohasset Harbor – No changes. It was noted that Little Harbor was an area with the highest concentration of filters from the NH water treatment plant, and is therefore a likely area for oil spill impacts if a spill occurs offshore.
>
> SS-02 Inner Cohasset Harbor – Note to tend passive recovery boom throughout the tide.

SS-03 Musquashcut Pond –Packard suggested changing the color of the culvert/tide gate icon to something besides white, in all the GRPs that use this icon. Burtner noted a large 12 or 14 foot culvert that needs to be added. Also noted is that the one on the left is a culvert, not a tide gate. These changes will be made.

SS-04 Scituate Harbor – The group noted that debris washes up on the lighthouse area, so that was identified that as a recovery area.

SS-05 New Inlet – This was surveyed from the land and the water. It is the mouth of the North/South River, and has a very strong current. There was discussion regarding the booming tactics near the mouth of the South River and Truant's Island, and the group agreed that the tactics as drawn probably would not be effective. DV-01 will be revised. The 1100 ft. section of boom by Truant's Island will be split into cascaded sections and will become an EX tactic. The 1400 ft. section of boom on the Humarock side will remain in place and be the single leg of boom for the DV tactic. Year round moorings will be noted. This site was flagged for future testing.

SS-06 North River – During astronomically high tides, the marsh may be completely underwater, precluding any shoreside anchor points.

SS-07 South River – During astronomically high tides, the marsh may be completely underwater, precluding any shoreside anchor points.

SS-08 Green Harbor – Dimeo noted that Tide Gates can be closed off in a few hours.

SS-09 Duxbury – There was discussion about the 2500 ft f boom adjacent to the bridge and the group decided to change the tactic to two shorter segments, one at each shoreline. Morris suggested a longer length of boom to enclose the upwellers at an additional dock south of the two shown.

SS-10 Saquish – The DF boom on Saquish Point will be removed. Instead, an EX tactic will be used at the marsh by Saquish Creek. The group also noted an area of opportunistic recovery with collection points.

SS-11 Kingston – Morris suggested closing off Fish Creek (top of map) that goes to Mill Pond, using exclusion boom. There is marsh on both sides and the creek is about 10-20 feet across. Packard suggested the possibility of using sorbent boom.

SS-12 Plymouth Harbor – Chad Hunter, the Plymouth Harbormaster, stated that the directions to the boat ramp on the third page need to be updated.

SS-13 Manomet Heights – There was discussion about the Pilgrim Power Plant and the group noted that since they do not store enough oil to require a Facility Response Plan, they do not have their own booming strategies. An alternate booming strategy was suggested for this site for when the jetty provides a lee.

SS-14 Ellisville Harbor – change exclusion to DV with SR on Salt Marsh Lane.

Testing program

Packard briefly discussed the 3 year testing program and noted that the MADEP has renewed their contract with Moran Environmental, the company that will be inspecting the

trailers and their contents. They will restock any missing equipment and repair damages. Packard noted that there should be a notebook in each trailer, listing the inventory, MSDS sheets regarding types of oil, and sections of GRPs for each town. Packard said that the MADEP is instituting an email address: MassDEPtrailers@state.ma.us at which you can reach Moran Environmental to discuss the trailers.

DeCola spoke about the testing program and how it is used to ground truth information in the GRPs and review and familiarize first responders with the equipment in trailers. The goal is to accomplish these in the shoulder seasons, so as not to add on to the towns' busiest times of year. She mentioned that they would like to test one or more of the South Shore sites next year. Packard and DeCola agreed that often times they target sites for testing when there are questions about the tactics. Packard also suggested that towns may request to be tested as well, and that it is beneficial as a source of refresher training.

Eldridge suggested choosing an easy spot for testing because the take-away would be better with a successful exercise. Packard and DeCola stated that they meet with the towns and work through those details to satisfy the town's training objectives.

Area Committee Meeting
Packard noted that the next step, after GRPs are finalized, is that they would be presented at the Plymouth to Salisbury Area Committee and Southeastern Massachusetts Area Committee Meetings in late November, or early December. Typically they get accepted and they become an annex to the Area Plan.

The MADEP has been printing the GRPs out and supplying them to the trailers for adjacent sites. Morris asked when the GRPs are reviewed and updated. DeCola said that after they are accepted by the Area Committee, they don't typically get reviewed until they're tested or when they are put into play in the event of a spill. There was a discussion of chemical dispersants and Popovich noted that they are not approved for use in nearshore waters in Massachusetts.

Link to the Area Contingency Plan website through Homeport (USCG):
https://homeport.uscg.mil/mycg/portal/ep/home.do?BV_SessionID=@@@@1981757652.1317867255@@@@&BV_EngineID=ccceadfekgefjfgcfjgcfgfdffhdghl.0&tabId=1&formCotp=44&cotpId=44

Action Items

- Comments by October 31, 2011
- Nuka will incorporate changes to GRPs
- Final GRPs will be presented at the Area Committee meetings

DeCola closed out the meeting by thanking everyone for their participation and attendance and asked that any further input and comments be made by October 31, 2011.