Mount Hope Bay Geographic Response Plan (GRP) Project

June 6, 2012, 9:00 – 11:30 a.m.
Heritage State Park, Fall River, Massachusetts

Attendees

Sean Baker – USCG, Sector SENE
Neil Churchill – Mass. Division of Marine Fisheries
Elise DeCola– Nuka Research
John Duponte – Moran Environmental
Arnie Geller – USCG Auxiliary
Mike LePage – Fall River Fire
Shawn Kerrigan – Somerset Fire
Sheila Medeiros – Brayton Point Station
David Messier – Somerset Fire/Harbor
Rich Packard – MassDEP
Mike Popovich – Nuka Research
Roland Proulx – Fall River Harbormaster
Sanne Schneider – Nuka Research
Mike Whiteside – DEP, Emergency Response

Welcome & Introduction

Rich Packard of the Massachusetts Department of Environmental Protection (MassDEP) introduced himself and welcomed the group. The Mount Hope Bay geographic response plan (GRP) project is the sixth and final GRP region that the MassDEP 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, the North Shore, Boston Harbor, and the South Shore regions of Massachusetts. He thanked the group for taking time to attend and participate in this project and indicated that the remainder of this project will be facilitated by Nuka Research and Planning Group, led by Project Manager Mike Popovich. Mike Popovich introduced himself, and asked others to do the same.

Project Overview

Elise DeCola, from Nuka Research, described the Mount Hope Bay region as the final area to be completed within the larger Massachusetts GRP project, but certainly not the least important. The project began in 2007. For the purpose of GRP development, the state was into regions set that generally align with the Massachusetts Coastal Zone Management (CZM) regions. GRPs have already been developed for the Cape & Islands, Buzzards Bay, the North Shore, Boston Harbor, and the South Shore. The one difference between the GRP regions and CZM regions is that CZM considers Buzzards Bay and Mt. Hope Bay/Lower Taunton River collectively as the South Coast Region. Since GRPs were initially developed for just Buzzards Bay, following the 2003 B-130 oil spill, the South Coast Region was split for GRP purposes into Buzzards Bay and Mt. Hope Bay.

DeCola noted that being the final region for GRP development, Mt. Hope Bay benefits from the fact that the process is well established. She emphasized that

because GRPs are consensus-based documents, it is critical to get local stakeholders input throughout this process.

Mike Popovich then provided a general overview of what comprises a GRP. He described a GRP as a map-based, consensus-driven response strategy to protect sensitive areas from oil spills. They are not a mandate, a law, or a performance standard. Sites selected for GRP development are not the only sites that should be protected, and the tactics on a GRP are not a substitute for best professional judgment. Most importantly, a GRP should be field verified to test the tactics.

GRPs are developed to standardize tactics and terminology. They provide a field tool for first responders, and are also valuable for training and preparedness. By involving community members, the process fosters local buy-in and helps to create realistic expectations for protecting sensitive areas in the event of an oil spill. Project objectives include developing flexible strategies that reflect the protection priorities of agencies, stakeholders, and local personnel. The process, which has been applied to other GRP regions and refined over the course of several years, is to form a work group of agencies, stakeholders, and local citizens, use their input to prioritize sites, survey those sites from land or water, develop GRPs (apply tactics to each site), publish the GRPs in the Area Contingency Plan, and finally test and modify the GRPs to the maximum extent practicable. Popovich passed around a copy of the newly revised Mass GRP Tactics Guide, which is available to download from the project website. http://grp.nukaresearch.com/CIGRP.htm Popovich then introduced Chief Sean Baker of the United States Coast Guard (USCG) Sector Southeastern New England to speak about the role of the GRPs in the Area Contingency Plan.

Role of GRPs within Area Contingency Plan (ACP)

Chief Baker explained that the Mount Hope Bay region is part of the Rhode Island/Southeastern Massachusetts (RISEMA) ACP. The current version of the ACP was updated in December of 2010, a collaborative effort between state and federal agencies who participate in the RISEMA Area Committee. Baker noted that the ACP is geographically specific to the region from Manomet Point in Plymouth south to the northern boundary of Long Island Sound. The ACP follows the National Incident Management System (NIMS) Incident Command System (ICS). It also includes tribal information and state/local response systems. Baker added while the GRPs are included in the ACP as an appendix, each individual GRP will not be included in the ACP document, but will reside as a separate set of documents (maintained on the web by MassDEP and Nuka Research) and referenced in the ACP.

Chief Baker provided a brief case study to highlight the importance of having GRPs as part of a comprehensive ACP. On October 31, 2011 a paint/sandblasting barge sank in 108 ft. of water directly under the Newport Bridge (barge had been anchored and conducting bridge work) during an overnight storm. The barge had a combined total of approximately 3000 gallons of diesel and hydraulic oils on board. Most of the oil was contained in fuel tanks, compressors, and the like. A Unified Command (UC) was established and included the USCG, RI Department of Environmental Management (RIDEM), the responsible party (RP), the RI Turnpike

Authority, Clean Harbors, and Save the Bay. Their goal was to raise the barge while protecting Rose Island, which is a Harbor Seal haulout. Because no GRPs currently exist for Lower Narragansett Bay, there were no pre-established booming strategies for that site. Responders attempted to deploy deflection boom, but all attempts failed due to strong currents.

Chief Baker noted that it would have been beneficial to have a GRP to refer to in this incident. It would have been a helpful tool to determine how much boom would have been needed, where to set it, where to collect the oil, how many responders and vessels are necessary, and what sensitive areas needed to be protected. GRPs reduce Unified Command's (UC) decision-making time by already having strategies/tactics in place. He praised MassDEP's efforts to continually test and verify GRPs to reduce trial and error during an actual response. Typically, these field tests involve at least three communities to emphasize the importance of mutual aid and equipment/personnel resource management during a response.

The ACP as well as other information about local waterways can be accessed at the USCG Homeport website (homeport.uscg.mil). Baker recommended getting involved in AC Meetings, which are held twice a year. Popovich supported the idea, empahsizing the importance of local involvement in the process of planning, preparation, and spill response.

Establishing Oil Spill Protection Priorities

Steve Lehmann, who is the National Oceanographic and Atmospheric Administration (NOAA) Scientific Support Coordinator (SSC) for the Northeast region was on the agenda to lead a discussion about environmental sensitivity to oil spills and establishing protection priorities. However, due to a travel conflict, he was unable to attend, so Elise DeCola presented materials provided by Lehmann. DeCola reviewed the methodology that NOAA has developed to characterize shoreline types based on their sensitivity to oil spills. This system aids in selecting strategies and setting protection priorities. She referenced Environmental Sensitivity Index (ESI) maps for the region and noted that while they contain a lot of good information, it was developed over 10 years ago. Through the MHBGRP process, the work group would have an opportunity to augment this information. Information compiled from the ESI maps and from work group meetings will be collated into a Site Selection Matrix (SSM), which will be available on the project website.

DeCola reviewed the ranking system that NOAA has established for shoreline sensitivity. The numeric ranking system identifies shoreline types from least (1) to most (10) sensitive. Packard commented that based on this system, sandy beaches are one of the less sensitive shorelines, so the sandy bathing beaches that may be aesthetically important to stakeholders are actually less sensitive to spill impacts when compared to other shoreline types (e.g. sheltered rocky beaches or marsh areas). Sensitivity is a major consideration when setting priorities for spill response. The assignment of priorities is subjective, and priorities may vary based on local or stakeholder concerns. During the GRP development process, prioritization of sites for oil spill protection will be made through consensus

discussions involving local, state, and federal agencies as well as stakeholder groups.

As an example of the often subjective nature of setting oil spill protection priorities, Packard described an oil spill that occurred in Kuwait, where despite the presence of several biologically important resource, the local protection priority was a water intake for a desalinization plant, because it provided drinking water.

Popovich reviewed three important questions that must be asked and answered during the prioritization process when developing GRPs: 1) What areas are important? 2) Is each area vulnerable to an oil spill (could a spill threaten the area)? And 3) it is the area protectable using available resources? The Mt. Hope Bay GRP will provide local interest an opportunity to participate in the prioritization process.

A copy of Mr. Lehmann's presentation is available on the project website: http://grp.nukaresearch.com/MHBgroup.htm

Other sources for information are the MassDEP marine oil spill program website: http://www.mass.gov/dep/cleanup/oilsprep.htm

Packard asked the group to please spread the word of the project to others that may be interested and have valuable input.

GRP Development Process

Popovich explained that we have started a list of candidate sites and during the next phase of the Mount Hope Bay GRP project, the site list will become established, surveyed, and revised based on field surveys.

Mike LePage (Fall River Fire) asked whether the GRPs differentiated between spills in fresh or salt water. Packard stated that the MassDEP marine oil spill program funds response to marine and coastal spills. Factors such as risk and tidal influence will determine inland boundaries. Dave Messier (Somerset Fire) stated that Dighton has desalination plant and that Swansea will soon have one as well. John Duponte (Moran Environmental) and Popovich noted that the Massachusetts Department of Conservation and Recreation (DCR) has an oil spill program for fresh water (at least for all inland reservoirs), where they both are currently participating in ongoing training exercises.

Popovich showed the group the list of candidate sites that he has started, based on the three ESI maps for Mount Hope Bay. They included but are not limited to these sites:

1. Cedar Cove
2. Shady Isle
3. Cole River
4. Lee River/I-195
5. Fox Hill Cove
6. Brayton Pt./Lee River
7. Fall River waterfront
8. Brightman St. Bridge*
9. Breeds/Weaver's Cove
10. Somerset Marina

11. Mallard Point
12. Winslow Point
13. Assonet River
14. Broad Cove
15. Muddy Cove lane
16. Dighton/Berkeley Bridge
17. Dighton Rock/Grassy Island
18. Shoves Neck
19. Assonet Bay/Rt. 24
20. Shepherds Cove

**A group member made note that the Brightman St. Bridge is now out of service and the Veterans Memorial Bridge is now in active service*

Popovich reviewed the site survey process, which typically involves 4-6 people, including local, state and federal representation, as well as spill response experts. Surveys are conducted from shore and/or vessels. Information collected includes water circulation, tides, currents, resources at risk, recreational and commercial use, and seasonal changes.

During site surveys, draft tactics are developed – boom configurations, anchor points, shoreside collection areas, local response resources - for each sites. A smaller sub-group then reviews the draft tactics and forwards full draft GRP documents to the work group for final review and discussion. The over-arching considerations for each GRP site are: 1) Environmental sensitivity; 2) Risks and vulnerability; and 3) The ability to protect the site.

Popovich provided overview of GRP Tactics, which include booming and oil recovery:

- When applying a tactic to a site the operating environment is considered (open water, protected, calm, fast), and then boom properties are evaluated.
- Tactics used in the Massachusetts GRPs:
    - Exclusion (EX)- used to keep oil out of an area
    - Diversion (DV) - to divert oil <u>to</u> a certain point, most often a shoreside collection/recovery point
    - Deflection (DF) - to change the course of a spill <u>away</u> from an area, but not necessarily toward a collection point
- Popovich described three tactics for recovery – Shoreside Recovery (SR), On Water Free Oil (FO), and Marine. For the purposes of the GRPs, usually an Oil Spill Removal Organization will be responsible for recovery. It is important to remember that these plans, tactics, and strategies are meant to be deployed protectively, **ahead** of the oil.

Popovich then illustrated the GRP layout:

- Typically four pages, with the first page indicating a map of the site.
- Second and third pages show the tactics table, which includes all the different tactics shown on the map: location/description of site with lat/long, a detailed response and implementation strategy, resources, staging area and site access, the resources to protect and any special considerations.
- Last page comprised of aerial photos of the site and local contact information.

Overview of ArcGIS Mapping

DeCola gave a quick overview of the Geographic Information System (GIS) component of the GRPs. Nuka Research uses ArcGIS mapping software to make the maps for the GRPs. She explained that the GIS data can also be used during an actual spill response for spatial analysis to find how much boom is needed to deploy all the tactics within a given site or region. DeCola interjected that once the GRP is completed, the GIS data is managed by MassGIS and is available through MassGIS.

Comments and Suggestions

None.

Timeline

Initial meeting – 6/6/2012
Site Selection/Sensitivity Planning Meeting – late June, early July
Site surveys – July
Draft GRP tactics – July/August
Review/finalization of GRPS by Work Group – September/October
Publish GRPs in Area Plan - November/December

Review Action Items

Popovich will contact the group via email to set a date/location for the next meeting.
Nuka Research and MassDEP will reach out to environmental groups in the Mount Hope Bay region, to encourage their involvement in the project.

***Invite others – Please note that we want to increase participation for the next meeting, so please seek out and invite those people whose input would be valuable for the site selection process*

Adjourn

Popovich and Packard thanked the group for coming and reiterated how important local input is in making the GRP project a successful one.