North Shore Geographic Response Plan (GRP) Project

April 29, 2009, 1:00 p.m.
NOAA Fisheries Service, Northeast Regional Office
Gloucester, Massachusetts

Attendees

Steve Aiello – Gloucester Deputy Fire Chief
James Broderick – Rowley Fire Chief
Ben Bryant – Nuka Research
Jim Caulkett – Gloucester Harbormaster
Elise DeCola– Nuka Research
Gene Doherty – Revere Fire Chief
Jim Doucette – Manchester Fire Department
Tom Falasca – Saugus Harbormaster
Claudia Gelzer – USCG Sector Boston
Kathryn Glenn – Coastal Zone Management
Art Howe – Ipswich Fire Chief
Franz Ingelfinger – Trustees of the Reservation
Jeff Kennedy – MA Division of Marine Fisheries
Kingsley Ndi – MA DEP Northeast Region
Rich Packard – MA DEP
Andrew Paskalis – Manchester Fire Chief
Peter Phippen – Merrimack Valley Planning Commission
Caleb Queen – Nuka Research
Dave Roach – MA Division of Marine Fisheries
Dave Sargent – Gloucester Shellfish Constable
Sanne Schneider – Nuka Research
Ron Skinner – Danvers Deputy Harbormaster
Chris Sparkman – USCG Station Gloucester
Jack Tirrell – NOAA
Barbara Warren – Salem Sound Coastwatch
Mike Wortman – USCG Sector Boston

Welcome & Introduction

Jack Tirrell welcomed the group to the new NOAA building and indicated fire exits in case of a fire alarm. Introductions were made of all work group attendees and then Rich Packard spoke about the project background. He referenced the Bouchard oil spill in Buzzards Bay and resulting legislation passed in 2004. He explained that part of the statute established an oil spill trust fund and the MA Department of Environmental Protection (DEP) was tasked with implementing a marine oil spill program that includes planning, preparedness, and response activities. Program activities include the distribution of oil spill response equipment trailers to coastal communities, training on how to deploy the response equipment, and development of GRPs (Geographic Response Plans), which denote where equipment should be deployed and how. GRPs are already in place for the Cape and Islands and Buzzards Bay. Completing GRPs for the North Shore will better prepare coastal Massachusetts in case of an oil spill. Rich Packard stressed the importance of local knowledge in developing these GRPs.

Project Overview

Ben Bryant reviewed the agenda and then went on to define GRPs as plans developed to protect sensitive areas of the coastline in case of an oil spill. As an example, he showed a GRP from Nauset Beach on Cape Cod, illustrating that a GRP is a map-based, tactical, consensus plan developed in a non-emergency setting. The plans are made to be tested and revised as shoreline/habitats change. He also noted that GRPs are not a performance standard or a mandate, but when using them it is important to apply professional judgment and personal experience.

Peter Phippen asked who holds the completed plans and who makes the decision to use them, in the event of a spill. Bryant stated that the plans are pulled together through the collaborative work group process that is being initiated with this meeting, and then the final GRPs are forwarded to the Area Committee for approval and incorporation into the Area Contingency Plan. The State, USCG, and EPA co-chair the Area Committee. If there is a

large spill, the Unified Command (federal, state, and responsible party representatives) could call for the implementation of GRPs, but these plans can also be implemented at the town level using equipment from the local trailers. Rich Packard added that although Unified Command manages the overall spill response, the local communities also have a role to play in GRP implementation, especially during the early phases of a spill response when the Unified Command may be more focused on source control and containment.

Tom Falasca talked about the recent oil spill in Revere and said that using the equipment in the trailer was like putting a Band-aid on an open wound; there was not enough to be effective and neighboring towns did not offer their equipment, for whatever reason. Rich Packard noted that although the DEP has ownership of the trailers, towns may share them as they see fit. The Coast Guard representatives agreed that in this case, the RP's (responsible party) insurance company responded quickly with contracted resources. Packard agreed but noted that towns can use the trailers in addition to equipment used by private contractors. Claudia Gelzer spoke as a firsthand participant in the Revere spill clean-up, and said that the early arrival of equipment made a huge difference in the outcome. She noted that the clean-up that could have taken three weeks took three days. She stressed that Coast Guard, State agencies and local law enforcement are key players and that in other scenarios, the local equipment trailers may play a key role in the initial hours of a spill, especially in locations where contractor equipment may take hours to arrive. Packard reiterated that equipment can be brought in from other communities as needed. There was a brief discussion of the high risk of spills on the Saugus River and the need for coordination of local efforts for spill response.

Bryant then talked about why GRPs are important. They standardize tactics and terminology, are used as a field tool for local responders, and have value for training and preparedness. Over time, the State would like to periodically test these strategies, which would help train people, validate the plans, and also foster local buy-in. He then listed the objectives of this project: 1) to have responder-oriented strategies and tactics, 2) to reflect protection priorities of agencies, stakeholders and locals, 3) to have strategies which are flexible and modifiable to fit the prevailing conditions and, 4) to have a tool that is easy to use and update. The MA DEP, Coastal Zone Management (CZM), National Oceanographic and Atmospheric Administration (NOAA), USCG, Marine Fisheries, Environmental Police, environmental groups, local community members, and Nuka Research are some of the participants in this project. Together the project work group will select sites, survey them, develop GRPs, publish GRPs, and test them over time. The final GRPs will be submitted to the Area Committee.

Establishing Oil Spill Protection Priorities

Elise DeCola introduced herself and gave some background on her work in the field of GRP development. She stated that GRPs are art and science combined. She spoke for Steve Lehmann (NOAA) who was unable to attend, regarding Shoreline Sensitivity to Oil spills, a consideration when choosing sites for GRPs. Barbara Warren asked if the project focused on land spills moving to water, or oil spills on the water. DeCola replied that GRPs typically focus on spills from marine sources, but that no spills are ruled out. DeCola introduced the Site Sensitivity Matrix, put together using data from ESI maps (NOAA). Peter Phippen asked if the maps were available to the public and Elise replied that they were on the Mass GIS website (http://www.mass.gov/mgis/). Dave Roach said they have not been updated since they were put up on the website; about 5 years. DeCola noted that information from local organizations was needed to supplement the ESI data, which is often not complete.

DeCola introduced a Shoreline Habitat Ranking scale, which is used to compare relative sensitivities to oil impacts, and noted that the ESI maps show biological resources and human use resources. A brief list of shoreline sensitivity rankings from least to most sensitive follows: 1) exposed rocky shore, exposed manmade structures, 2) wave cut platform, 3) fine-medium grain sand beaches, scarps and steep slopes in sand, 4) coarse grain sand beach, 5) mixed sand, 6) gravel and riprap, 7) exposed tidal flats, 8) sheltered rocky shores, sheltered man-made structures, sheltered riprap, 9) sheltered tidal flats, and 10) salt/brackish/freshwater marshes. DeCola noted that sensitivity is only one consideration when setting priorities. The ESI maps are significant, but subjective information is also necessary. Other considerations are what is protectable, vital, and what takes longer to recover. If a resource is able to be restored with money, then it is less crucial than a resource that may take a long time to restore or cannot be restored at all. She emphasized the need for input on shoreline sensitivities and protection priorities from work group participants and their constituencies.

Implementing GRPs During a Spill Response

Claudia Gelzer introduced herself as Chief of Prevention for the USCG Sector Boston representing the Sector Commander, Captain Gail Coulish. Gelzer talked about the next Area Committee meeting, which is May 7 at the USCG Sector office in Boston. Any who wish to attend are welcome. Gelzer explained that the Area Committees were set up after the Exxon Valdez spill, under the Oil Spill Act of 1990. The Area Committees are standing groups comprised of state and federal agencies, industry and stakeholders. They meet regularly to consider oil spill preparedness and response issues.

Gelzer then identified key Sector Boston personnel who would be involved in this work group. Currently in Sector Boston, the head of Spill Response is Pamela Garcia and Mike Wortman and Jessica Watts are the Lead Pollution Investigators. She noted that the Coast Guard strongly supports the GRP development process and is grateful for the support from contractors and the funding provided by the state. Gelzer referenced the Revere spill and stressed the importance of local communities having a plan to put into action, even though the RP (Responsible Party) got a private clean-up crew out there quickly. She emphasized that GRPs for the North Shore should be a priority, because of the traffic coming through on its way to the Port of Boston. With GRPs in place, she stated that the North Shore would be better equipped to mitigate the effects of a spill.

Site Selection Process & Review of Draft Matrix

Bryant indicated that Nuka Research has identified 27 candidate sites by looking at ESI maps, the layout of shoreline, and other factors, and is now looking for input from agencies, stakeholders, public, and response experts. Bryant noted the importance of correctly using local nomenclature and asked for input on local site names. He then reviewed the candidate sites. Barbara Warren commented that the scale of each site was very different. DeCola spoke to the fact that one size doesn't fit all and noted that each GRP is tailored to the size and scope of the site. The GRPs are very fluid and everyone's input is valued. Bryant listed the criteria for site selection: sensitivity to oil spills, probability of oil spill impacts, and feasibility of deployment (he referenced the high currents of the Annisquam River as an example of where a deployment would need to be modified). The Site Selection Matrix was then introduced as a tool that captures the site attributes in a table format using abbreviations for the various attributes. A site selection matrix key is attached to the table to assist with interpreting the information. The site selection matrix will continue to be built as information is gathered and will be a valuable reference tool in addition to the GRPs.

GRP Site Surveys

Bryant reviewed the survey process and the makeup of the survey teams. The teams consist of 4-6 people, aboard vessel or on foot, with a local representative (harbor/fire/shellfish), state/federal representative, stakeholder representative (environmental organization), and contractors (OSRO, consultants). Peter Phippen asked if tides were a concern and Bryant responded in the affirmative, and noted that tides would be considered in scheduling survey trips. Ben stated that he would be speaking to harbormasters regarding the use of boats to carry survey teams. DeCola reiterated that local knowledge is of ultimate importance, especially information about tides and seasonal changes, since the surveys only consider the site at a single time and tide stage. She explained that GRP tactics require constant tending and adjustment based on tidal flow and other changes.

Bryant stressed that one of the primary concerns while developing GRPs is SAFETY FIRST. Next, site information is gathered, e.g. water circulation, tides and currents, resources at risk, recreational and commercial use, seasonal changes, etc. Some tools which are used are: GPS, range finder, charts & aerial photos, and data forms. Potential tactics are then identified, e.g. boom anchor points. Bryant showed the Nauset Beach GRP again along with the key, reviewing points on each page. Peter Phippen asked if there was a verbal description of each site as well as lat/long and DeCola replied that narrative information on the GRP itself is limited, but indicated the fourth page contains land/shore photos. Bryant included that there are driving directions to the access sites on each GRP. DeCola mentioned that many people primarily use the first page and therefore they try to communicate as much information as possible on that first map page.

Chris Sparkman asked if the GRP was designed for local responders or contractors and if its use was mandated once it was approved by the Area Committee. Gelzer stated that the Unified Command has some role in determining which GRPs may be deployed. Bryant noted that the GRPs are designed so that local responders have information available to assess and respond in the first critical hours, as well as for Unified Command to direct the response and recovery operation. Rich Packard stated that in addition to trailers and boom, a plan of action is necessary – the GRPs provide this action plan. Bryant suggested that a town often picks one person to be the lead oil spill response person and that there could be mutual aid from other towns to supplement one town's responders.

Local Involvement and Input

Kathryn Glenn, of the MASS CZM stressed the importance of local input (from harbormasters, shellfish constables, fire chiefs or other local coordinators) to indicate how/where to use the plans. The North Shore has a lot of ESI 10 (high sensitivity) areas and it is critical to have people from each town involved. She asked the participants to help notify key people regarding the importance of their involvement in this process, particularly other fire chiefs, harbor masters and shellfish wardens.

GRP Tactics Development and Implementation

DeCola then spoke about Tactics development. During the first GRP project that Nuka was involved with (Cape & Islands), a Tactics Guide was developed to provide a standard description of response tactics that would be applied through the GRPs. She explained that common terminology was important and that the tactics guide provided a good training tool as well. The Tactics Guide is available for review and down-load from the GRP website. It is a good reference tool and there is a standard "menu" of tactics, with consistent icons used in the GRP maps. The tactics are flexible and modifiable, non-prescriptive, and easy to understand and use.

Barbara Warren asked if the tactics were covered in trailer training. Packard said because it is only a one day training just the basics are reviewed. Bryant stated that on a site survey one would become familiar with tactics. Jim Doucette spoke about the importance of a guide, in addition to all the information that is disseminated, and asked about the availability of further training. He completed the trailer training, but felt that additional training would be beneficial. Rich referenced the MassDEP oil spill training website, http://www.mass.gov/dep/cleanup/os/index.html, and stated that the State would like to begin testing 2-3 GRPs per year. Testing would begin with the Cape & Islands and Buzzards Bay because their GRPs are already developed. Packard said that after the North Shore GRPs are in place, testing will occur. The DEP plans to do six site tests next year; three in the spring and three in the fall. Mike Wortman stated that the USCG is doing training in Gloucester soon but was unsure if it was available to everyone. He said that he would find out and also noted that there are schools for further training.

DeCola returned to the subject of tactics, and explained that the guide uses standard definitions of operating environments and resource types. She explained that oil spill response equipment is classified based on operating environment. For example in the DEP trailers, the largest boom is 18 inches, which limits its functionality to calm or protected-water environments (less than 3 feet wave height). DeCola reviewed the tactic for diversion booming as an example of how the Tactics Guide is organized. She differentiated diversion booming, which is moving oil towards a point where you can recover it, from deflection booming, which involves moving oil away from sensitive areas towards less sensitive areas. She stated that the GRPs try to use diversion whenever possible to ensure that oil is removed from the environment. She noted that oil spill equipment deployment is a specialized skill that requires practice. Going out on a survey would be helpful in becoming more familiar with how tactics are applied.

Comments and Suggestions

Ben Bryant wrapped up the meeting asking for any comments. Peter Phippen stated that there are 25,000 acres of marshland (ESI 10) in upper northern Massachusetts and that it is necessary to focus on how to maximize protection of that area. He said that a lot of environmental groups will be helpful to that end. Jim Doucette noted that it is also a huge economic area.

Tom Falasca asked how soon the DEP would have trailers in place in the North Shore communities that do not already have them. Rich Packard stated that the bid is out right now and he hoped by September the trailers would be in place. He also noted that a few communities in the inner Boston area will get some by the spring. Packard clarified that the 20-ft trailers are stocked with common equipment, so there is no difference among communities, except that some smaller communities have chosen 12-ft. trailers, with half the equipment. Packard stated that MassDEP is considering designing different trailers for Boston, since there is already a great deal of contractor equipment available in that area. A special meeting would occur to make the decision with input from local towns and contractors. The DEP is now looking at whether there needs to be an additional stockpile of equipment somewhere including different boom, skimmers, and other collecting equipment. Packard indicated that a map showing trailer locations and inventories is included on the MassDEP oil spill program website (http://www.mass.gov/dep/cleanup/os/index.html), as well as the point of contact for each town. Ron Skinner noted that some key people were not in attendance today and Packard emphasized that participation is voluntary, but the more people who are involved the better. Packard encouraged all attendees to reach out to their local contacts to solicit participation.

Timeline and Next Meeting

April – Kick-off meeting
May/June – Final site selection and field surveys
July – First Draft of GRPs
August – Project team members review
September – Review meeting
October – NSGRPs published (final draft)
November – Present GRPs to Area Committee

Action Items

- Spread the word
- Input on site selection matrix
- Indicated your interest in surveys/vessels
- May 7 Area Committee meeting in Boston

Bryant closed out the meeting by thanking everyone for their participation and attendance and indicated that he looked forward to working with them on the project. His contact information and the project website link, listed below, were provided to the group.

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