

North Shore Geographic Response Plan (GRP) Project

May 14, 2009, 1:00 p.m.
NOAA Fisheries Service, Northeast Regional Office
Gloucester, Massachusetts

Attendees

Richard Adams – USCG, Sector Boston
Brent Baeslack – Conservation Commission
Lou Bochynski – Beverly Facilities Manager
Ben Bryant – Nuka Research
Glenn Casey – MA Division of Marine Fisheries
Jim Caulkett – Gloucester Harbormaster
David Cody – Salem Fire Chief
Frank Drauszewski – Parker River National
Wildlife Refuge
Lt. Gary Duncan – Massachusetts
Environmental Police
Dana Francica – USCG, Sector Boston
Kathryn Glenn – MA Coastal Zone Management
Jeff Kennedy – MA Division of Marine Fisheries
Steve Lehmann – NOAA SSC
Susan Maguire - SWIM

Rich Packard – MA DEP
Amy Maxner – Beverly Conservation
Committee
Peter Phippen – Merrimack Valley Planning
Commission
Caleb Queen – Nuka Research
David Roach – MA Division of Marine Fisheries
Dave Sargent – Gloucester Shellfish Constable
Adam Smart – USCG, Station Gloucester
David Stanley – Ipswich Conservation
Committee
Jack Terrill - NOAA
Heather Warchalowski – Department of
Conservation and Recreation
Barbara Warren – Salem Sound Coastwatch
Devon Winkler –MA Division of Marine Fisheries

Welcome & Introduction

Jack Terrill welcomed the group to the new NOAA building and pointed out the fire exits. Ben Bryant began by introducing Rich Packard who stated that the meeting was one of several designed to enhance the state's response to potential oil spills. He explained that the purpose of the meeting was to determine which sensitive areas are to be evaluated and to begin developing Geographic Response Plans (GRPs). Nuka Research, working with the MA DEP, has already completed plans for Buzzards Bay, Cape Cod, and Martha's Vineyard. The MA DEP chose the North Shore region as the next area for GRP design. Packard emphasized that GRPs are only part of the spill response plan. They are to be combined with oil spill trailers/equipment and trained response personnel. Local, State and Federal input is being sought to determine the sensitive areas for GRP design.

Ben Bryant then introduced Steve Lehmann (NOAA), who is the Scientific Support Coordinator for the Northeast. For the last 20 years he has supported the state on oil spill response issues. Lehmann spoke about GRPs first being developed as a concept on the West coast. GRPs are intended to be a shock absorber during a spill; reducing the amount of time between planning the response and executing the response. He stated that GRPs are designed to be given directly to a contractor to put into use, protecting a specific area. In developing a GRP, Spill Response professionals benefit a great deal from the input given by stakeholders.

Review

Ben Bryant introduced the GRP process, noting that Nuka Research has been developing GRPs for about 18 years. In Massachusetts, GRPs were first developed for the Cape & Islands and Buzzards Bay. The next area selected by the MA DEP for GRP design is the North Shore. The kickoff meeting for the North Shore region was held on April 29, 2008. The objective of the site selection meeting was to get the public's opinion and input on which areas are the most sensitive and/or important to protect. Nuka Research has pre-selected 27 different sites on the North Shore. Bryant stated that during the meeting the group would evaluate each potential site and mark-up Base Maps of the site using pens and stickers to denote habitats, man-made structures, nesting areas, currents, and other points of interest.

Introductions were made.

Bryant reviewed the concept of GRPs with the group: they are used as a plan of action when the oil from a spill begins to migrate. A GRP is a map based strategy for responders. They are typically four pages long, with a map on the first page that contains symbols to communicate strategies. The following three pages contain more detailed information to help execute the response. It is important to note that a GRP is not a performance standard and that a variety of factors come into play, which are then taken into account in the field. Bryant also emphasized that a GRP is not a mandate for site protection or response. Responders will prioritize the response according to the actual spill characteristics, available resources and weather conditions. Just because a site has a GRP, does not mean it is the only site that will or should be protected. There is no substitute for professional judgment.

Brent Baeslack asked if the plan dealt only with oil, or if they were developed for other hazardous materials. Bryant replied that the GRPs deal with the specific characteristics of oil. Mass DEP has discussed the idea of developing GRPs for ethanol but due to ethanol's quick evaporation and dilution rate responding to it with GRP type tactics would be much less effective. The same issue has arisen when considering developing GRPs for gasoline spills.

David Stanley asked if GRPs were limited to coastal and offshore spills. Bryant replied that a GRP would be effective for either coastal spills or oil introduced from highways into waterways. He stated that GRPs are developed to standardize tactics and terminology. They are also used as a field tool for local responders to aid in training and preparedness exercises.

Presentation

Bryant briefly went over the GRP development process, which involves a kickoff meeting, site selection, site surveys, developing the GRP (applying the tactics to the site), then approval/publishing of the GRP in the Area Plan. He stressed that GRPs should be tested and modified over time. The North Shore GRP project will be completed in November.



Criteria for Site Selection

Bryant spoke about a GRP site being a geographic area where you would send a response team, who would then apply a number of different tactics. He gave as example, Salem Harbor, which was split into two sites for two response teams. A site is a geographic area where responders apply tactics, not a specific beach, or marsh. Some factors that were considered in selecting the 27 candidate sites were:

- Sensitivity to oil spills
- Probability of an oil spill
- Feasibility of tactic deployment

Nuka Research's initial list of candidate sites was based upon Environmental Sensitivity Index Maps (ESI maps). The creation of ESI maps was a NOAA led project that identified sensitive habitats, shorelines, eel grass beds, nesting areas, etc. Nuka Research has listed each site's ESI attributes in a table format, called the Site Selection Matrix. During the meeting, attendees were given the first draft of the Site Selection Matrix as well as Base Maps of each of the 27 potential sites. The group was encouraged to add/remove/edit information on the Base Maps (for example, Piping Plover nesting areas may have moved and the group would indicate the new nesting area).

The ESI maps also provide information on shoreline habitats. The ranking system identifies shoreline from least-to-most sensitive, depending on wave action and energy). For example, rocky shoreline will recover faster than swamps; and gravel beaches suffer more than coarse grain sand. Oil can penetrate the layers of gravel, making clean up more difficult.

The potential sites were numbered from North to South. On the Merrimack River there are two sites, one at the mouth of the river and one further inland. The sites in Plum Island Sound all consist of the same shoreline habitat, however, due to the size of the area to be covered; three sites were established in this area. Further south, candidate sites include Essex Bay, Cape Ann, and the Rockport area. Islands are individual sites because they are bird nesting areas. Sites were chosen at the North and South ends of the Annisquam River, and two sites were established in Gloucester harbor, at the mouth and back of the harbor. Manchester Bay and harbor have been selected as a single site. Eagle Island Channel contains many islands which can hopefully be captured in a single GRP. Sites were also established on the Beverly River, Danvers River, Salem Harbor, Marblehead Harbor, Nahant Bay, Lynn Harbor and the Saugus/Pines Rivers.

Peter Phippen posed the issue of political pressure, asking does political input count? He gave the example of the Manchester coast, which contains the homes of some political figures. Would this fact make the area a priority? Bryant replied that political issues are not a factor because this is a science based technique, taking into account the length of recovery. Bryant emphasized that at this point the goal is simply to create the GRPs.



Barbara Warren asked why Thatcher Island was selected since it has a rocky shore. Bryant noted the main reason for selection was that gulls are nesting there. He reiterated that at this stage sites were selected by their sensitivity ranking, according to the information in the ESI maps. Warren then wondered if a GRP could be developed for Kettle Island and Bryant recommended that the group come up with an 'island strategy'. He suggested they pick the island that is most important, determine which tactics to use, and then apply similar tactics to the other islands in the North Shore region. He noted that on straight shoreline, sometimes the most you can do is apply cleanup tactics.

Peter Phippen suggested that a new site be made for the Egypt River, due to Rtes. 1A, 133, and 127 (key roads) crossing over the area. Bryant responded that the Rowley River site could be expanded to cover this area.

Brent Baeslack asked if economic impacts were taken into account when selecting GRP sites. Rich Packard noted that the income of The Trustees of Reservations would diminish if an area was closed and that straight economic loss is dealt with through third party claims process which includes out of pocket expenses. Fishermen also go through the third party claim process.

Dave Stanley wondered if the attendees were potentially dooming some places that were not the most sensitive. He asked about areas containing oil transport lanes, or heating oil shipments carried by truck. He stressed the need to understand where the threats are and where the environmentally sensitive areas are.

Rich Packard spoke to Stanley's comments, stating that those facilities where oil goes in and out are required to have their own response plan and equipment, or access to equipment. He noted that British Petroleum (BP) has a project to look at the coast line of Massachusetts to find which areas have the greatest probability of a spill. Funding for this coastal project came from legislature to plan and respond to marine oil spills. Mass DEP has a different project that is looking at oil spill threats. Some areas are just impossible to protect, due to factors like current or type of shoreline. Sites selected for GRP development fit into the area of sensitivity and protect-ability.

Steve Lehmann explained that this is only the first order of protection. GRPs are great in the first 24 hours following a spill. When you get the experts together, you alter them as necessary in the field. The longer and more complex part of the spill is the clean up piece. GRPs deal with the emergency response part and the protection part.

Lehmann continued, stating that GRPs are transferable to other areas, but it is a matter of scope and scale. They are designed to deal with the larger sized spills. Part of what is examined is volume. Small scale should not be ignored, however. Small mobile oil carrying units are usually the most likely to have an accident. The probability of a large tanker spill is low (low probability, high consequence event).



Ben Bryant handed out Base Maps, along with blank stickers and pens for the group to collaborate, marking the sensitive areas, resources, habitats, etc. of each of the 27 sites.

Steve Lehmann mentioned that there is good background information on spill response techniques - including software, documents and ESI maps - on the NOAA website at: www.response.restoration.noaa.gov.

Comments and Suggestions

General comments from Group:

- Milk Island & Kettle Island both provide nesting sites for Snowy Egrets and Glossy Ibis also nest on Kettle Island. It's worth thinking of a permanent structure to block oil.
- LNG (liquefied Natural Gas) has 2 offshore facilities.
- In site #2 – Salisbury; Black Rock Creek is all marsh.
- There is a seal haul out on the outside of the Merrimack River.
- A separate site should be considered for the north side of the entrance to the Merrimack River.
- Just north of the entrance is a nesting site for Common Terns.
- Change the scope of the Rowley River to include the Egypt River for access/entry point on Egypt River.
- Essex bay has shifting tidal flats. The entire bay can be covered as one site.
- Crane Beach has a sand bar off shore that reduces wave energy.
- Review area between sites 16 & 17. Other side of site 17 is Chubb Creek Estuary. House Island off of Manchester may be an additional site.
- Between 23 & 24 another site may be necessary.
- Heather Warchalowski is providing tidal info for Nahant. It could be a pooling area for oil.
- Site 18, and the other island sites, may fall under a single island strategy.

Timeline and Next Meeting

April – Kick-off meeting held

May/June – Final site selection meeting and field surveys

July – First draft of GRPs to be completed

August – Project team members review draft GRPs and make edits (meeting to be scheduled)

September – Final review meeting (meeting to be scheduled)

October – NSGRPs to be published (final draft)

November – Present GRPs to Area Committee for approval



Action Items

- Revise Base Maps of selected sites based on group input
- Finalize site review schedule and participants
- Conduct site surveys
- Schedule August meeting

Bryant thanked the attendees for coming and helping out with the selection process and closed by saying that there will be two more meetings, in August 2009 and September 2009. Frank Drauszewski of the Parker River National Wildlife Refuge suggested that Parker River Refuge is a good place to meet and is available for the August meeting. The site selection meeting adjourned at 1500 hrs.