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# MASSACHUSETTS OIL SPILL Prevention & Response Act

M.G.L. Chapter 21M

*Program Activities & Accomplishments*

# 2013

*Main Cover Photo: Nuka Research and Planning Group, LLC*



## Massachusetts Oil Spill Prevention & Response Act (MOSPRA) M.G.L. Chapter 21M

### 2013 PROGRAM ACTIVITIES & ACCOMPLISHMENTS

This report describes and documents the MassDEP Marine Oil Spill Prevention and Response Program activities and accomplishments during 2013.

### STATUTORY & LITIGATION BACKGROUND

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April 27, 2013 marked the 10th anniversary of the grounding of the barge B-120 at the entrance to Buzzards Bay. In response to that grounding and subsequent oil spill, the Massachusetts Legislature enacted Chapter 251, Acts of 2004, *An Act Relative to Oil Spill Prevention and Response in Buzzards Bay and Other Harbors and Bays of the Commonwealth* (also known as the Massachusetts Oil Spill Prevention and Response Act or MOSPRA or simply the Oil Spill Act), on August 4, 2004.

The purpose of the Oil Spill Act was to strengthen several statutes that govern Massachusetts's ability to prevent and respond to oil spills in the coastal waters of the Commonwealth. It created M.G.L. Chapter 21M, which contains most of the provisions related to implementation of MOSPRA, including

provisions for establishing the MOSPRA Trust Fund (the Trust Fund), financed by a 5-cent/barrel fee on petroleum products delivered to marine terminals in the state.



**Figure 1- Cleanup Activities after B-120 Spill**

Table 1 shows the trust fund balance as of December 2013.

**Table 1. MOSPRA Trust Fund Balances**

	Beginning Balance	Revenue Collected	Expenditures	Available Balance
<b>FY05</b>	\$0	\$1,492,186	(\$81,817)	\$1,410,369
<b>FY06</b>	\$1,410,369	\$1,817,058	(\$389,389)	\$2,838,038
<b>FY07</b>	\$2,838,038	\$1,789,321	(\$499,822)	\$4,127,537
<b>FY08</b>	\$4,127,537	\$1,632,832	(\$940,464)	\$4,819,905
<b>FY09</b>	\$4,819,905	\$1,639,681	(\$1,192,050)	\$5,267,536
<b>FY10*</b>	\$5,267,536	\$1,820,054	(\$2,761,615)	\$4,325,975
<b>FY11</b>	\$4,325,975	\$3,775,809	(\$4,397,820)	\$3,703,964
<b>FY12</b>	\$3,703,964	\$3,842,442	(\$653,588)	\$6,892,819
<b>FY13</b>	\$6,892,819	\$3,644,620	(\$719,077)	\$9,818,362
<b>YTD FY14<sup>#</sup></b>	\$9,818,362	\$1,579,250	(\$310,101)	\$11,087,511
*Fee increased to \$.05/bbl on 4/1/2010				
<sup>#</sup> As of December 31, 2013 (First and Second Quarters of FY14)				

As directed by MOSPRA, the MassDEP Marine Oil Spill Prevention and Response Program has used proceeds from the Trust Fund to ensure that the Massachusetts coastline is protected from oil spills through spill prevention and response efforts and programs that have included: (a) development of site-specific spill response plans (Geographic Response Plans) for sensitive areas throughout Massachusetts; b) procurement and maintenance of spill response equipment for local, regional, and/or state responders; (c) development and implementation of spill response drills and exercises; and (d) development of spill prevention/response studies and risk analysis efforts.

Litigation challenging certain MOSPRA requirements (escort tugboat and pilots) has been ongoing since 2005 between Massachusetts, the United States Coast Guard (USCG), and the American Waterways Operators (a trade association for the tug and barge industry). The Coast Guard was initially successful in preempting the state law, and in 2007 Massachusetts was temporarily enjoined from carrying out the mandatory tugboat escort provisions of MOSPRA<sup>1</sup> while appeals proceeded.

In 2008 and 2009, MOSPRA was amended to provide that the owner or operator of a vessel that carries 6,000 or more barrels of oil as cargo within Buzzards Bay may voluntarily notify the department and request the services of a state pilot to be placed on the towing vessel and to be paid for by the MOSPRA Trust Fund. The amendments also required that the MassDEP provide the services of an escort tug, at no cost, to eligible tank vessels while navigating in Buzzards Bay or the Cape Cod Canal.

Upon appeal, the United States Court of Appeals for the First Circuit issued a July 11, 2011 ruling, which lifted the previous injunction. Immediately following the Appeals Court ruling, the requirement was reinstated for owners or operators of single and double-hulled tank barges carrying 6,000 or more barrels of oil through Buzzards Bay and the Cape Cod Canal to hire a tugboat escort. The July 2011

<sup>1</sup> The injunction prevented MassDEP from implementing and enforcing MOSPRA's manning and tugboat escort requirements under Mass. Gen. Laws Chapter 21M, §§ 4, 6, and 314 CMR 19.00.

Appeals Court ruling relieved MassDEP of its obligation to provide state-funded tugboat escorts and pilots and re-established a central provision of MOSPRA by requiring industry to pay for tugboat escorts and marine pilots for single and double-hulled oil tank barges carrying over 6,000 barrels of oil through Buzzards Bay and the Cape Cod Canal.

Following the July 2011 Appeals Court ruling, the MassDEP Marine Oil Spill Prevention and Response Program began monitoring industry compliance with the reinstated M.G.L. Chapter 21M and 314 CMR 19.00 requirements. MassDEP also began documenting instances in which the tugboat escort provided assistance to the vessel being escorted, to gather information about the oil spill prevention value of escort tugs in Buzzards Bay.

## **PLANNING & ADMINISTRATION**

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### ***MOSPRA Advisory Committee Meeting***

On October 23, 2013 a MOSPRA Advisory Committee Meeting was held in New Bedford at the offices of the Buzzard's Bay Coalition. The meeting was the ninth that the program has held since 2007 and informed committee members and the public on MOSPRA program's prevention and preparedness efforts as well as the status of ongoing litigation.<sup>2</sup>

Agenda topics included:

- Highlight of achievements and acknowledgement of thanks to retiring Program Manager, Rich Packard, and update on staff transition
- Discussion of peer review and pending final report for the Buzzard's Bay Risk Assessment (BBRA), completed by MITRE Corp. under the Homeland Security Systems Engineering and Development Institute
- Explanation of the federal rule making process and the USCG's Advance Notice of Proposed Rulemaking for Buzzard's Bay published in July 2013
- Proposal by New Bedford Harbor Development Commission for New Bedford Harbor Bilge Water Collection Facility and Oil Spill Prevention Program
- Update on Ongoing MOSPRA Program Implementation Activities
- Update on MOSPRA Program Plan and Trust Fund Status

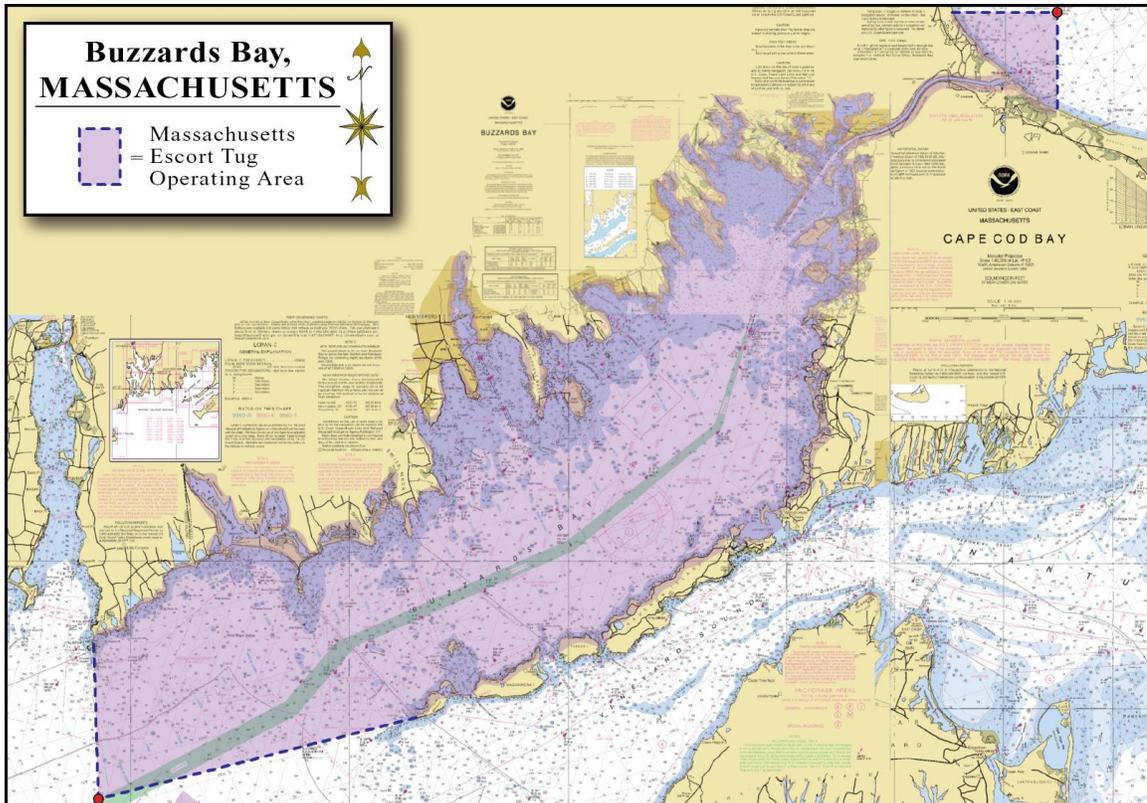
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<sup>2</sup> Minutes from the meeting can be found online at:  
<http://www.mass.gov/eea/docs/dep/cleanup/laws/osam1013.pdf>

### Buzzards Bay Risk Assessment

The MOSPRA program jointly funded, with the USCG, a technical risk study to evaluate the level of risk of a future oil spill in Buzzards Bay and the Cape Cod Canal and to determine whether the use of pilots and escort tugs for double-hulled tank barges would reduce the risk of future spills.

Under the provisions of the federal Oil Pollution Act of 1990, all tank vessels carrying oil as bulk cargo in U.S. waters will have to be double hulled as of January 1, 2015. The current federal escort requirement in Buzzards Bay applies only to single-hulled vessels and will sunset as the fleet transitions to double hulls.



The Buzzards Bay Risk Assessment report, completed in January 2013,<sup>3</sup> concluded that both pilots and escort tugs for double-hulled tank barges would provide risk reduction benefits.

However, there were aspects of the BBRA's conclusions and recommendations that MassDEP did not find to be supported by the analysis. Concerns included:

- The addition and evaluation of escort tugs “in adverse weather or when determined necessary,” which fell outside of the original scope of work for the BBRA
- Inconsistencies in relating causal factors to accident events and then to mitigating policies

<sup>3</sup> The BBRA may be found at: <http://www.mass.gov/eea/docs/dep/cleanup/os/pubs/bbrisk.pdf>

- Absence of consequence analysis
- Inclusion of voluntary measures not specified in the original study scope
- Inclusion of double hulls as a prevention measure as opposed to the incremental benefits and costs of escort vessels and independent pilots for double hull barges
- Disproportionate weighting of the value of pilots and escort tugs in reducing risk, not supported by analysis

MassDEP initiated a peer review to better understand the study’s potential applicability and limitations for Buzzards Bay marine transportation safety.

The screenshot shows the TRB website interface. At the top, there is a navigation menu with links for Home, Contact Us, Directory, E-Newsletter, Follow Us, and RSS. A search bar is located on the right. Below the navigation menu, there is a banner for the TRB logo and the text "TRANSPORTATION RESEARCH BOARD OF THE NATIONAL ACADEMIES". A secondary navigation menu includes links for About TRB, Annual Meeting, Calendar, Committees & Panels, Programs, Projects, Publications, and Resources & Databases. The main content area displays the title "Letter Report on a Technical Peer Review of the Buzzards Bay Risk Assessment" and a brief summary of the report. A "VIEW THIS PDF" button is visible at the bottom left of the content area. The footer of the page contains the address "Transportation Research Board, 500 Fifth St. NW, Washington, D.C. 20001" and the National Academy of Sciences logo.

### Buzzards Bay Risk Assessment Peer Review

Upon completion of the Buzzards Bay Risk Assessment (BBRA), MassDEP contracted with the Transportation Research Board (TRB) of the National Academy of Sciences (NAS) to conduct a peer review study of the final Risk Assessment report. Members of the peer review panel were:

- Paul S. Fischbeck, Carnegie Mellon University, *Chair*
- William L. Hurley, Jr., Glosten Associates
- Thomas M. Leschine, University of Washington
- Milton Levenson, NAE, Consultant
- R. Keith Michel, Webb Institute
- Ali Mosleh, NAE, University of Maryland
- Malcolm L. Spaulding, University of Rhode Island

The peer review panel was charged with evaluating the methodologies and conclusions of the BBRA, focusing on three key questions:

1. Is the scope of the analysis (type and extent of data gathered) sufficient to support the decisions that are being made based on its results?
2. Are the methodologies used (“what if” and “change analysis”) appropriately applied to estimate the risk reduction benefits of each alternative?
3. Does the data analyzed support the authors’ judgment and ranking of risk mitigation options considered?

The panel members were provided with the final BBRA report and supporting information to review, and convened a two-day meeting in Woods Hole during August 2013 to discuss and deliberate. The peer review process followed the NAS procedures, and culminated in a Letter Report<sup>4</sup> that represented a consensus decision of the panel members.

The peer review letter report found “there are significant limitations with regard to the BBRA that bring into question its scope, methods, and data.” Because of these concerns, the peer review panel recommended that the ranking of risk reduction options was not supported by the analysis, and should not be used as a foundation for policy decisions. The committee noted that relatively small changes, corrections, or improvements in some of the input values and assumptions could have significantly changed the ranking of risk reduction options.

## **PREVENTION ACTIVITIES**

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### ***Industry-Provided Tugboat Escort***

During calendar year 2013, owners/operators of single and double hulled tank vessels carrying more than 6,000 barrels of oil were required to hire a tugboat escort while operating in Buzzards Bay and the Cape Cod Canal under MOSPRA’s reinstated provisions. There were 643 escorts of tank vessels conducted while transiting Buzzards Bay and the Cape Cod Canal from January 1 to December 31, 2013. These escorts were performed by McAllister Towing of New England (DBA Providence Steamboat) and Reinauer Towing and Transportation (DBA Boston Towing and Transportation).

Of the 643 escorts of oil carrying tank barges conducted during 2013, there were 53 occasions (approximately 8% of transits) during which the escort tugboat provided assistance while the vessel was being escorted through Buzzards Bay and the Cape Cod Canal. Table 2 summarizes the 53 occurrences where the escort tug assisted the tug/barge it was accompanying.

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<sup>4</sup> [http://onlinepubs.trb.org/onlinepubs/reports/BBRA\\_October\\_2013.pdf](http://onlinepubs.trb.org/onlinepubs/reports/BBRA_October_2013.pdf)

*Table 2. Buzzards Bay escort tugboat assists in 2013*

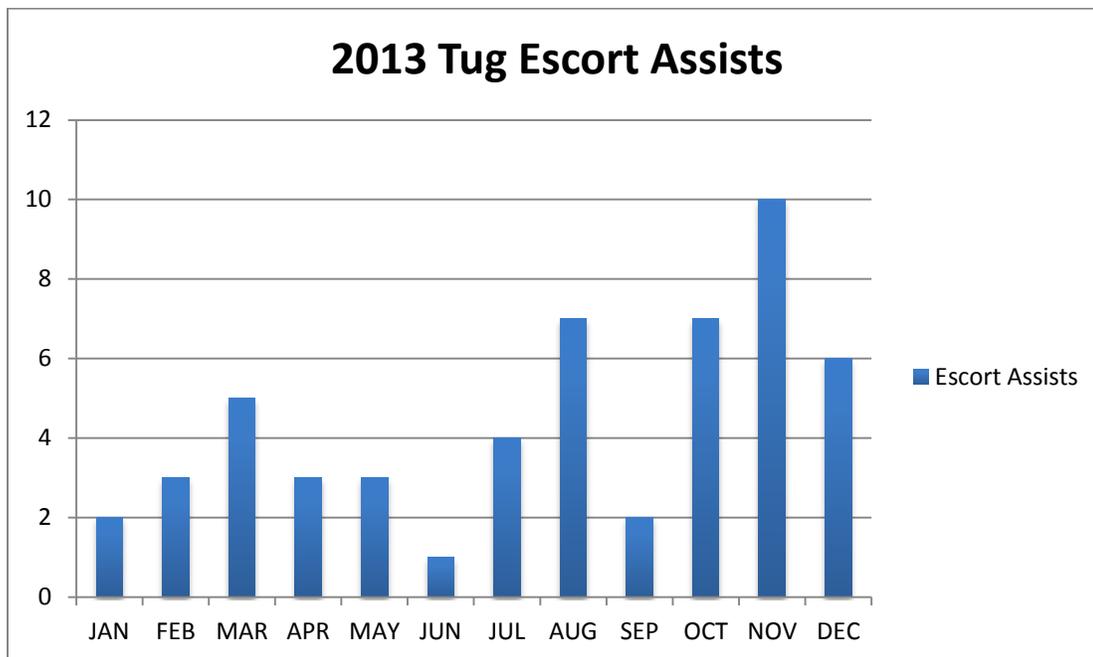
DATE	TUG/BARGE	DESCRIPTION	ACTIVITY TYPE
1/27/13	Sassafras DS-56	Sabine made up to the DS-56 in push gear 1620-1820 to assist through CCC.	Assist
1/30/13	Siberian Sea Columbia	Justice made up alongside to assist through ebb tide. Siberian Sea broke down at the East End and McAllister brought the Rowan McAllister down from Portland to take the barge Columbia from CC Buoy to Global in Chelsea. The Siberian Sea went to Boston for repairs.	Mechanical
2/4/13	Calusa Coast Penn 410	Put a line up on the bow of Penn 410 to help steer through the canal.	Assist
2/6/13	Siberian Sea Columbia	Siberian Sea had mechanical issues with their tow winch, they stayed in push gear and the Sabine escorted them to Gloucester to try and get out of the impending blizzard on the 8th. The Sabine stayed with them until Sunday the 10th, on the 10th, the Rowan McAllister came and took the barge Columbia.	Assist
2/20/13	Siberian Sea Columbia	Made up alongside barge to assist in bucking tide in the canal.	Assist
3/6/13	McKinley Sea DBL-103	Assisted into the west stakes for weather.	Weather
3/9/13	McKinley Sea DBL-103	Assisted out of the west stakes. Unit sat for 3 days for weather.	Weather
3/10/13	Patuxent DS-59	Made up to barge in push gear, Cleve Ledge to East End, 1400-1615	Assist
3/12/13	Susquehanna DS-50	New Bedford hurricane barrier closed for weather as the unit was going into Sprague-NB. Stood by the barge from 2030-2300 until the barrier was reopened. New Bedford hurricane barrier closed for weather as the unit was going into Sprague-NB.	Weather
3/21/13	Barbara McAllister B-220	Short notice call to go escort this unit, the Justice had an incident going to the job and could not make it.	Assist
4/2/13	Ruth Reinauer RTC-104	At 0945-2 around the #3-#4 Buoy, the Ellen Bouchard pushing the light barge B-280 was left of center of the channel, forcing the Ruth Reinauer, pushing the loaded barge RTC-104, to the outer edge of the channel. The Ruth then hailed the Ellen informing him of his variation out of the recommended route. The Ellen saw nothing wrong with being left of center while meeting the Ruth. The Ruth Reinauer then informed Canal Control of the incident.	Incident
4/15/13	Patuxent DS-59	Sabine made up in push gear from 1130-1330, Cleve Ledge to East End, to boost barge through CCC	Assist
4/24/13	Siberian Sea Columbia	Made up A/S @ west stakes 1500-0250 to steady while waiting out high sea conditions.	Weather
5/3/13	Chesapeake Coast DS-59	Made up in the notch and helped push through canal.	Assist
5/8/13	Chesapeake Coast DS-59	Made up in push gear from #10 buoy to Anch-C,0115-0215, then standby in Anch-C for visibility 0300-0845	Weather
5/27/13	Siberian Sea Columbia	Made up alongside, standby @ Anch-C for CCC current	Assist
6/30/13	Huron Service Energy-6506	Made up in notch of 6506 to help steer through the CCC	Assist
7/3/13	Marjorie McAllister B-264	Assisted into Anch-C for zero vis fog, 0510 to 0700	Weather
7/4/13	Huron Service E-6506	Made up in notch 2300 to 0310	Assist
7/25/13	Chesapeake Coast DS-59	Got in push gear @1600 to help steer through CCC	Assist
7/26/13	Patuxent DS-54	1135-26 to 0600-27 @Anch-C waiting on weather, 0600-27 made up alongside to help steer through CCC	Weather
8/9/13	Mediterranean Sea DBL-84	Assisted into Anch-C after the Mediterranean Sea had an engine failure. Stood by until problem resolved	Mechanical
8/11/13	Frederick Bouchard B-210	Had to quickly make up to B-210 after the Frederick had overheating issues in CCC.	Mechanical

*Massachusetts Oil Spill Prevention & Response Act – M.G.L. Chapter 21M*

DATE	TUG/BARGE	DESCRIPTION	ACTIVITY TYPE
8/13/13	Doris Moran Alexandra	The Sabine was finishing a transit at the east end when they received a call from Canal Control to get to the aid of the Doris Moran. The Doris was towing on a short wire in the canal when they lost steering. The barge overtook, and collided with the Doris. With the Sabine on site, the Doris regained her steering from the upper wheelhouse and got the barge Alexandra back under control. The Sabine then escorted her to Anch-M. The Sabine brought pumps out to the barge at the anchorage and when the USCG gave approval for them to get underway, escorted her to Senesco Marine in North Kingston, RI for inspection.	Collision Assist
8/15/13	Linda Moran Houston	Put a line up on the Houston for heavy boat traffic in Cleve Ledge, boost through the CCC.	Vessel traffic
8/18/13	Marjorie McAllister B-264	Made up on the quarter of B-264 to boost through CCC.	Assist
8/27/13	Kimberly Turecamo Connecticut	Made up a/s Connecticut to make slack water at Canal Electric docking.	Assist
8/29/13	Wicomico DS-58	Made up a/s @1945 for boost to make slack water at Canal Electric for docking.	Assist
9/16/13	Huron Service E-6506	Made up in push gear-Tail boat for canal transit	Assist
9/23/13	Weddell Sea DBL-83	Put a line up in the notch so they can tow through the CCC due to bad weather on the east end, after the	Weather
10/7/13	Endeavor GCS-238	Made up a/s barge to help steer through CCC	Assist
10/9/13	Pocomoke DS-52	Made up a/s barge to buck tide through CCC	Assist
10/10/13	Frederick Bouchard B-210	Made up in notch of barge to assist through CCC	Assist
10/14/13	Pocomoke DS-52	1045 Made up a/s for CCC transit	Assist
10/18/13	Pocomoke DS-52	Make up to the DS-52 to help boost through CCC against current	Power Assist
10/18/13	Marion Moran Maria T	Made up alongside cement barge to assist from Cleve Ledge through CCC for weather	Weather
10/28/13	Mary Gellatly Pacific	In push gear due to tow pendant problems on target tug, assist into west stakes	Mechanical
11/7/13	Huron Service E-6506	Made up in push gear for CCC transit	Assist
11/12/13	Pocomoke DS-52	3 line make up to DS-52 from Cleve Ledge to east end channel	Assist
11/12/13	Weddell Sea DBL-83	Made up in notch for CCC transit	Assist
11/22/13	Patuxent DS-54	Assisted out of west stakes to finish transit through CCC	Assist
11/22/13	North Sea Penn 90	Assist into Sandwich Power Plant	Assist
11/25/13	Tuckahoe DS-53	Made up a/s 0150 @Cleve Ledge to give boost and tail boat for CCC transit	Assist
11/28/13	Frederick Bouchard B-210	Push on B-210 to hold it into the wind while Frederick gets in push gear	Weather
11/29/13	Marion Moran Maria T	Made up alongside cement barge to assist from Cleve Ledge through CCC for weather	Weather
11/29/13	Pocomoke DS-52	Made up in notch of DS-52 to help steer through CCC	Assist
11/30/13	Patuxent DS-54	Made up to DS-54 in push gear to help steer and buck current through CCC	Power Assist
12/4/13	Patrice McAllister B-264	Made up in notch of B-264 @ BB Tower to help push up Buzzards Bay to make the CCC tide	Power Assist
12/5/13	Patuxent DS-54	Made up in notch for CCC transit 0545-0940	Assist
12/10/13	Huron Service E-6506	From Anch-C in notch 2 lines 1520 to 2245	Assist
12/14/13	Liberty Service E-11105	Put a line up on bow of E-11105 to hold while tug makes up in push gear, gale warnings in effect	Weather
12/16/13	Huron Service	Put a line up in notch to hold steady while working on his level winder, we then	Mechanical

DATE	TUG/BARGE	DESCRIPTION	ACTIVITY TYPE
	E-6506	kept line up for transit	
12/19/13	Potomac DS-52	Made up in notch for transit through CCC	Assist

Figure 1 shows the number of assists by month. The highest number of assists occurred during August and October through December. The lowest number occurred in June.



*Figure 1. Number of escort assists by month.*

Figure 2 shows the distribution of various types of assists during 2012. The assistance provided by the escort tug generally fell into the following categories: 1) it allowed the tug/barge to continue its transit during bad weather conditions; 2) it provided additional horsepower to the towing vessel traveling against the tide; 3) it provided assistance due to a mechanical or steering malfunction; (4) it provided assistance during an interruption to the primary tow or the transition from towing to pushing the tank barge; or (5) it provided assistance in managing vessel traffic.

Most escort tug assists involved incidents where the primary tow was disrupted or where there was heavy weather. Many of the tow disruptions occurred during the transition from towing to pushing; a common practice for a tugboat towing a barge through Buzzards Bay is to shorten up the towing wire when entering the Bay. While not required, many tug boat captains prefer to move from towing the tank barge to pushing it through the canal. The process requires the towing vessel to release the free-floating barge while the tug moves into “the notch” in the rear of the barge. Using an escort tug to hold the barge in place during this transition from

towing to pushing allows for more control of the barge in areas with limited maneuverability.

MassDEP believes that the availability of escort tugs to perform these assists reduces the likelihood of a navigational incident or oil spill and provides an additional level of safety for vessels operating in Buzzards Bay.

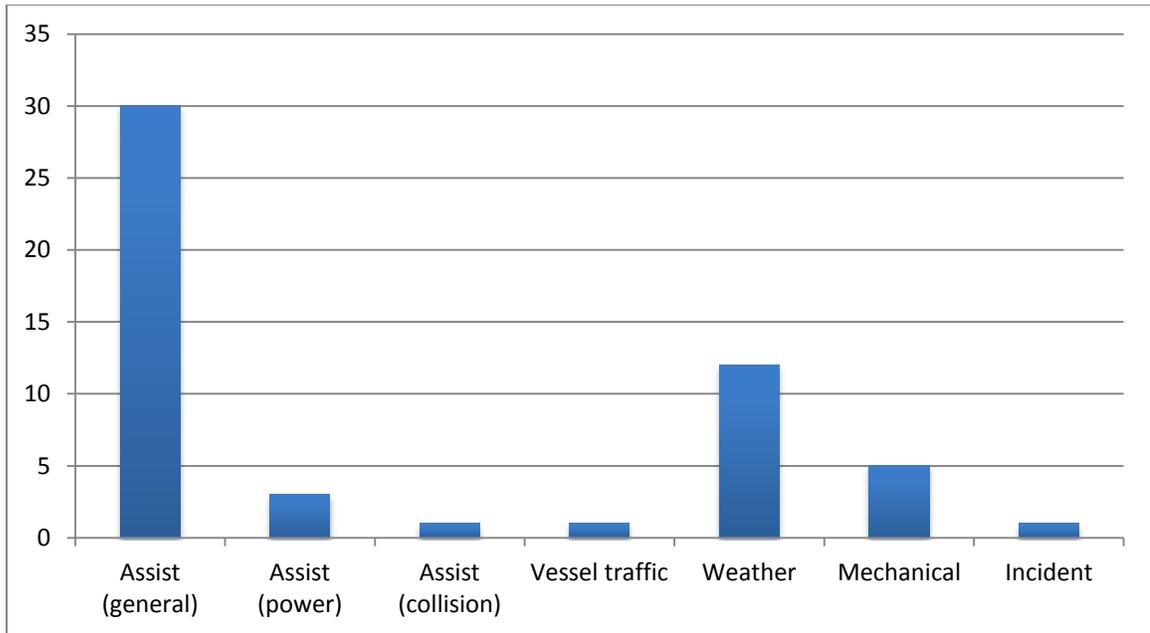


Figure 2. Distribution of various types of escort assists during 2012.

### Annual Report to the Massachusetts Legislature on Tugboat Escort Waivers for “Exigent Circumstances”

MassDEP reports to the state legislature every year on waivers of the tugboat escort requirements granted for “exigent circumstances.”<sup>5</sup> As discussed above, the pilot and escort program currently in effect is not the state-provided program, and, consequently, no waivers for exigent circumstances have been granted under M.G.L. c. 21M, § 9. However, waivers have been granted under MassDEP’s Oil Spill Prevention and Response Regulations at 314 CMR 19.03(1), promulgated pursuant to M.G.L. c. 21M, § 6(c).

Of the 643 escorts of oil tank barges in 2013, there were 96 requests by the companies providing tugboat escort services to use a tugboat that did not fully meet the specifications found in Chapter 21M and 314 CMR 19.00. The Department approved use of a tugboat that did not meet all of the specifications in all 96 instances after determining that exigent circumstances existed and that the tugboat to

<sup>5</sup> The report to the Massachusetts legislature for tugboat escort waivers approved in 2013 can be found on the MOSPRA web page at: <http://www.mass.gov/cea/agencies/massdep/cleanup/marine/#8>

be used would still be protective. In each of these instances, compelling circumstances were anticipated such as approaching bad weather, vessel traffic that exceeded the number of compliant escort tugboats available or because maintenance/mechanical problems had taken the fully compliant tugboats out of service. The “waiver tugboats” used in these circumstances, while not meeting the full ABS Fi-Fi 1 firefighting specification, met a firefighting standard that was deemed acceptable for the state-provided tugboat escorts and also met industry standards for towing or providing assistance to tank barges of the size that transit Massachusetts coastal waters.

## **PREPAREDNESS ACTIVITIES**

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### ***Geographic Response Plans***

Since 2007, MassDEP’s Marine Oil Spill Prevention and Response Program has been developing Geographic Response Plans (GRPs) to enhance oil spill response preparedness. GRPs are map based plans that identify sensitive coastal resources and provide first responders with suggested tactics to be used to protect these areas from oil spill impacts. MassDEP has now completed development of GRPs for the Massachusetts coastline, and will continue to update and modify existing GRPs as they are field-tested.<sup>6</sup>

In September 2013, the US Environmental Protection Agency initiated a program to develop GRPs for inland rivers in Massachusetts, including the Merrimack and Charles River. This project builds on MassDEP’s successful approach, and may result in additional inland spill response planning in the future.

Figure 3 shows the 160 GRPs that have been developed in Massachusetts.

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<sup>6</sup> GRPs can be found at: <http://www.mass.gov/eea/agencies/massdep/cleanup/marine/massachusetts-geographic-response-plan.html>

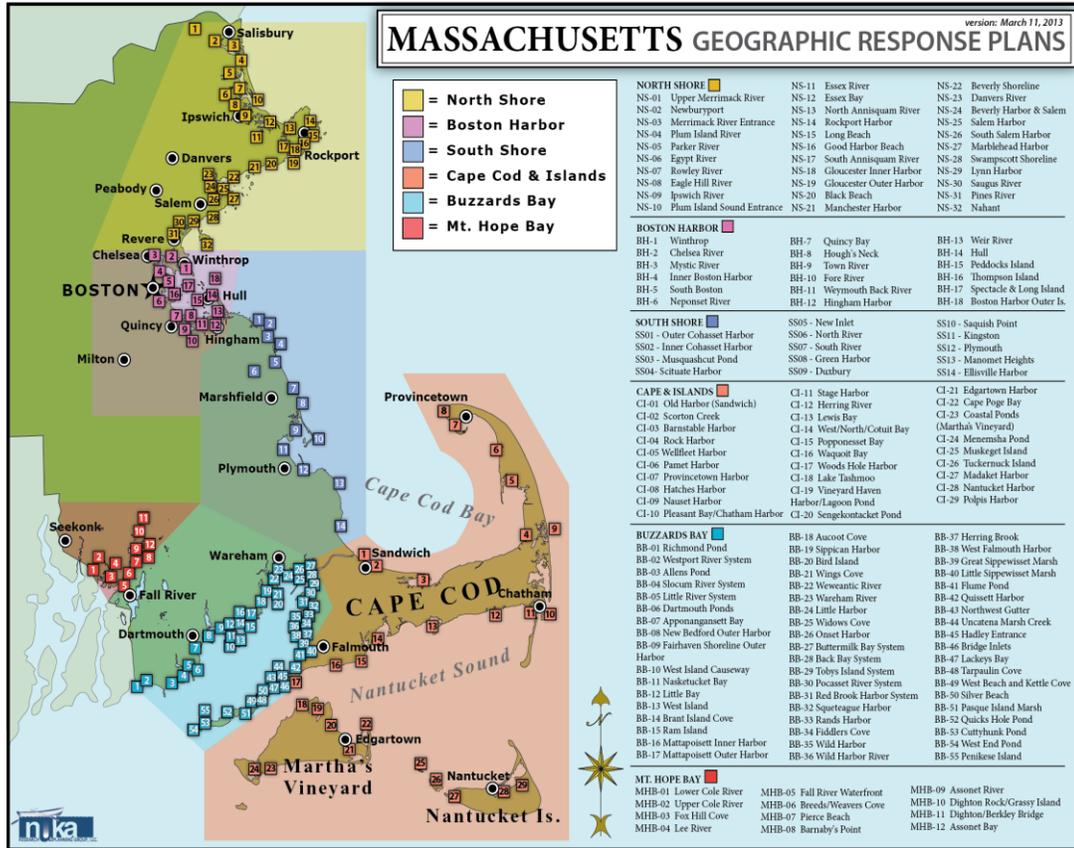


Figure 3. Map of Completed GRP sites

### First Responder Training and GRP Testing Exercises

MassDEP’s Marine Oil Spill Prevention and Response Program’s preparedness efforts also include efforts to develop a resident spill response capacity by providing local and state first responders with hands on experience deploying oil spill equipment provided by MassDEP. This program began in 2008 and has evolved into a field exercise program that provides an opportunity for first responders to practice deploying protective booming tactics while testing and verifying the Geographic Response Plan strategies.

The program uses contracted resources from Nuka Research & Planning Group and Moran Environmental Recovery and includes:

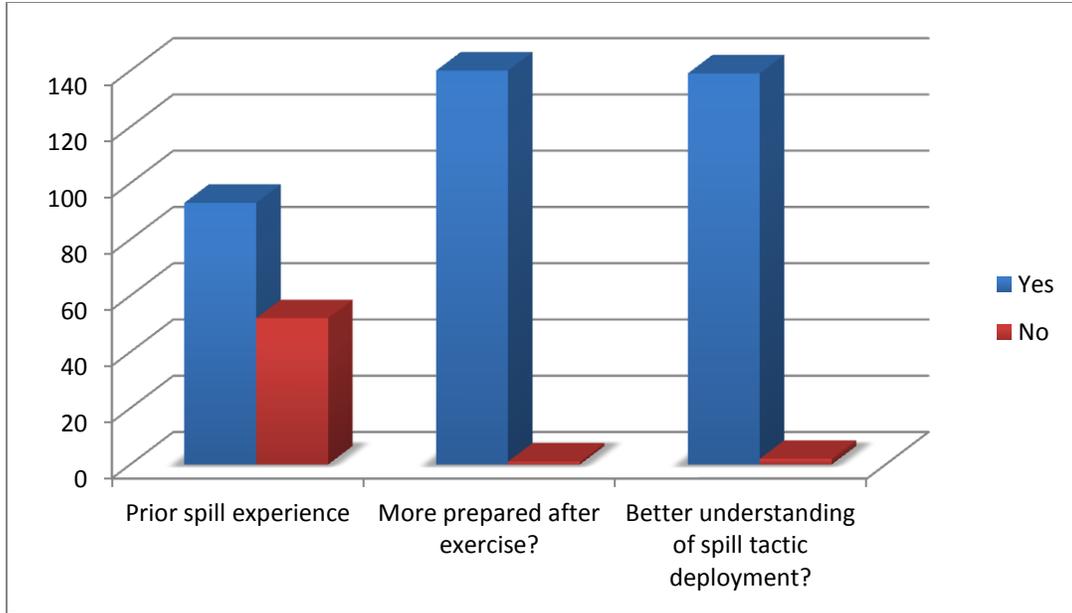
- Classroom training and equipment familiarization;
- Hands-on deployment of MassDEP-provided oil spill equipment;
- Familiarizing responders with plans such as Area Contingency Plans, GRPs, and MassDEP/MEMA procedures for oil spill equipment allocation; and
- Field testing of protection strategies found in the GRPs.



All field exercises follow the U.S. Department of Homeland Security Exercise Evaluation Program (HSEEP) guidelines and objectives and utilize the ICS structure and principals. During 2013, the Marine Oil Spill Program sponsored and conducted first responder (FR) field exercises and GRP tests for coastal communities at five GRP sites, plus three first responder training exercises held at the Boston Fire Department Moon Island Training Center. A total of 358 participants were involved in the 2013 exercises, which were held at the following sites:

- May 14, 2013: Lynn/Revere/Saugus (NS-01)
- June 24 & 25, 2013: Boston (FR)
- August 12, 2013: Berkley/Dighton/Freetown (MHB-12)
- September 19, 2013: Boston (FR)
- September 24, 2013: Marshfield/Scituate (SS-06)
- October 10, 2013: Dartmouth/Westport (BB-02)
- October 17, 2013: Nantucket (CI-28)

At the completion of each exercise, participants are requested to complete evaluation forms to help assess the effectiveness of the training. An aggregation of the forms received from 2013 participants reflected significant positive feedback regarding their level of comfort deploying spill response tactics and equipment after the exercises as compared to before. Figure 4 shows the aggregated results from evaluation forms from all completed 2013 exercise evaluation forms.



*Figure 4. Summary of feedback from completed evaluation forms from 2013 exercises*

As the GRP Exercise and First Responder Training Program has evolved, the Marine Oil Spill Program has reached a significant portion of coastal communities. From 2009 – 2013, the program has included 51 of 70 coastal Massachusetts communities (73%), and 21 of 160 GRP sites (13%) have been tested. Figure 5 shows the GRP sites that have been tested from 2009 through 2013.

The Marine Oil Spill Program continues to receive requests from coastal communities to provide these training/field exercises. They are frequently covered by local and regional press and receive positive media attention.



Figure 5. Sites included in Geographic Response Plan Exercises 2009-2013

### ***Homeland Security Exercise Evaluation Program Grants (HSEEP)***

In recent years, municipal budgetary constraints have resulted in requests from Fire Departments for funding support for overtime (OT) and backfill costs associated with sending first responders to MassDEP's Marine Oil Spill Program sponsored exercises. To address these requests, MassDEP has applied for State Homeland Security Program (SHSP) and Urban Area Security Initiative (UASI) grant funding through the Northeast Homeland Security Regional Advisory Council (NERAC), Southeast Homeland Security Regional Advisory Council (SERAC) and the Metro Boston Homeland Security Region (through the City of Boston Mayor's Office of Emergency Management) for reimbursement of municipal OT/backfill costs to attend exercises. HSEEP funding for OT/backfill costs has been approved for all field exercises since the spring of 2011.



The alignment of MassDEP's Marine Oil Spill Program with the HSEEP exercise program has provided the benefit of increased coordination at the municipal, county and state level as well as increasing awareness of and competence in the use of NERAC and SERAC equipment assets.

### ***Oil Spill Equipment Procurement, Maintenance and Restocking***

MassDEP has completed the distribution of spill response trailers, with 81 trailers dispersed throughout 70 coastal communities and 2 trailers at MassDEP's northeast and southeast regional offices. These trailers are valuable to the implementation of the program's goal of enhancing local and state capability to respond to a coastal oil spill. The trailers contain a mix of 12- and 18-inch hard boom, sorbent boom, anchors, line, floats, inflatable culvert plugs, and other equipment for first responders in local communities and the state to use to contain oil spills and protect the shoreline. Figure 6 shows a map of Marine Oil Spill Program trailer locations across the Commonwealth. (At the end of 2013, MassDEP was still trying to find locations for two Boston oil spill response trailers.)

MassDEP has continued its commitment to perform maintenance and restocking of this equipment to ensure a state of readiness. Through a competitive bid process, Moran Environmental Recovery (Moran) was selected to conduct maintenance and restocking of the oil spill response trailers. Trailers are inspected annually and restocked upon deployment and notification to MassDEP. During annual inspections, Moran has been installing solar panels on trailers to prolong the life of the batteries on each trailer.

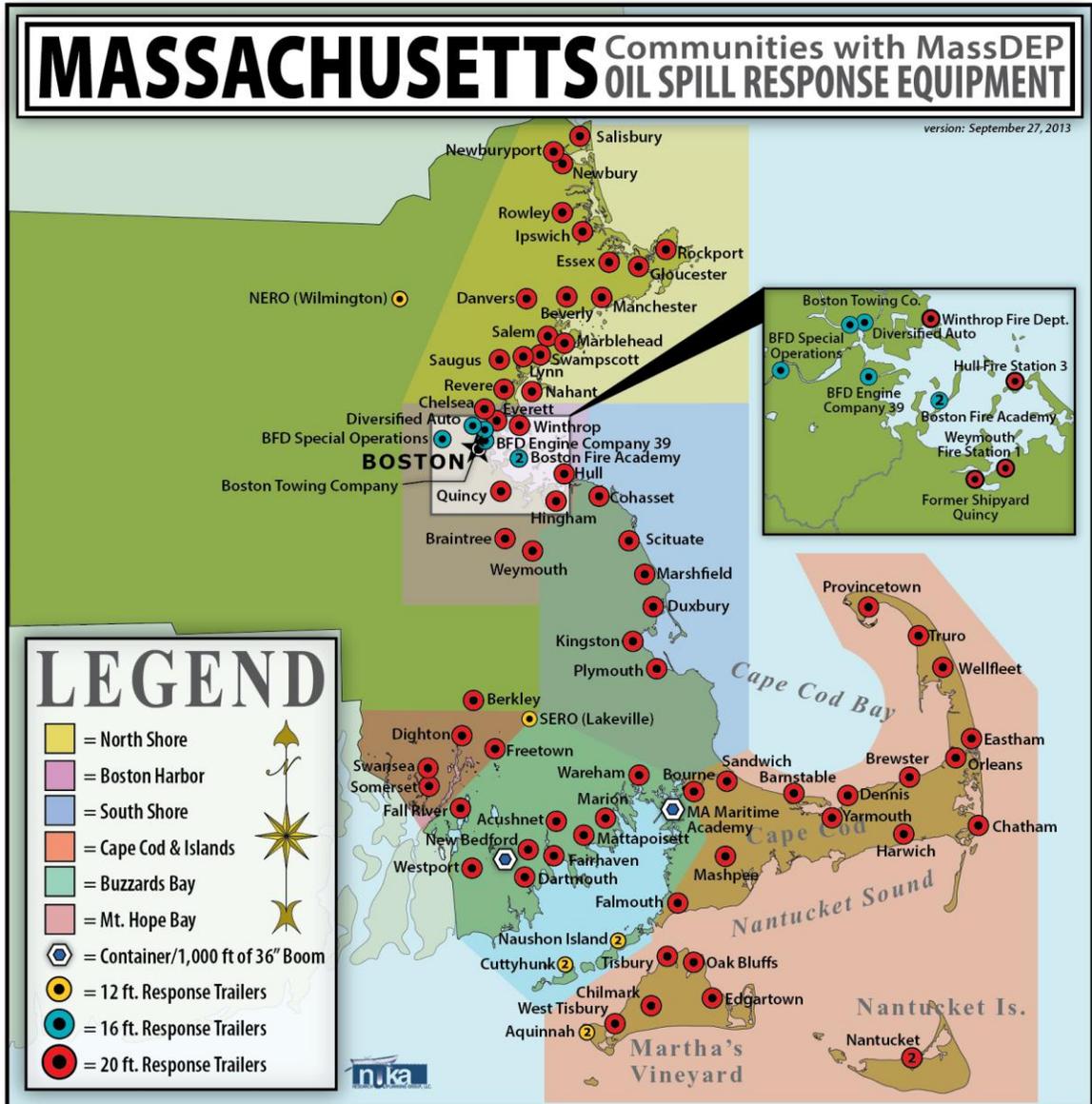


Figure 6. Massachusetts communities with MassDEP oil spill response equipment.