

# VIRGINIA SALTWATER RECREATIONAL FISHING DEVELOPMENT FUND SUMMARY PROJECT APPLICATION\*



<b>NAME AND ADDRESS OF APPLICANT:</b>  Virginia Aquarium & Marine Science Center Research and Conservation Division 717 General Booth Boulevard Virginia Beach, VA 23451	<b>PROJECT LEADER (name, phone, e-mail):</b>  W. Mark Swingle Director of Research & Conservation Virginia Aquarium Foundation 757-385-0326    mswingle@virginiaaquarium.com								
<b>PRIORITY AREA OF CONCERN:</b>  Education	<b>PROJECT LOCATION:</b>  Southside Virginia, specifically between Lynnhaven and Rudee Inlets.								
<b>DESCRIPTIVE TITLE OF PROJECT:</b>  Fish Away from Whales: A cooperative educational outreach project aimed to inform recreational saltwater fishermen in Virginia on safe and responsible boating while in the vicinity of whales.									
<b>PROJECT SUMMARY:</b>  Our overall objective is to educate recreational fishers targeting fish species in Virginia at times and places where they may encounter whales on how to operate vessels safely in the vicinity of protected and/or endangered whale species. We will begin this two year project by monitoring recreational vessel-based fishers' actions around whales in a variety of ways while working to disseminate a positive message about whale conservation and compliance with whale approach guidelines to this audience. We will monitor our message's effectiveness and fishers' compliance in the second year of the project.									
<b>EXPECTED BENEFITS:</b>  <ol style="list-style-type: none"> <li>1. Increased awareness among recreational fishers of federal rules, regulations, and guidelines regarding large whales</li> <li>2. Decreased incidents of collision, entanglement and 'near' collisions</li> <li>3. Decreased incidents of documented whale harassment on recreational fishing related social media web sites and blogs</li> <li>4. Increased safety for recreational fishermen while boating in the vicinity of whales</li> <li>5. Peaceful co-existence between recreational fishers and whales in Virginia and an appreciation and understanding of whale biology and conservation by the recreational fishing public.</li> </ol>									
<b>COSTS:</b>  This two year project will cost \$76,151 in Year 1 and \$68,244 in Year 2 with a match of \$10,372 in Year 1 and \$10,281 in Year 2. <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td></td> <td style="border: 1px solid black; padding: 2px 10px;"><b>Year 1</b></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 10px;"><b>VMRC Funding:</b></td> <td style="border: 1px solid black; padding: 2px 10px;"><del>\$144,396</del>    <b>\$ 76,151</b></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 10px;"><b>Recipient Funding:</b></td> <td style="border: 1px solid black; padding: 2px 10px;"><del>\$20,653</del>    <b>\$ 10,372</b></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 10px;"><b>Total Costs:</b></td> <td style="border: 1px solid black; padding: 2px 10px;"><del>\$165,049</del>    <b>\$ 86,523</b></td> </tr> </table>			<b>Year 1</b>	<b>VMRC Funding:</b>	<del>\$144,396</del> <b>\$ 76,151</b>	<b>Recipient Funding:</b>	<del>\$20,653</del> <b>\$ 10,372</b>	<b>Total Costs:</b>	<del>\$165,049</del> <b>\$ 86,523</b>
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<b>Detailed budget must be included with proposal.</b>									

Updated 11/12/08

\*This form alone does not constitute a complete application, see application instructions or contact Sonya Davis at 757-247-8155 or [sonya.davis@mrc.virginia.gov](mailto:sonya.davis@mrc.virginia.gov)

Table 1: Breakdown of Budget for Years 1 and 2.

<b>Year 1</b>	<b>Fishing Fund</b>	<b>Match</b>	<b>Comments</b>
<b>Personnel</b>			
Bort	\$14,480		4 months
Lockhart	\$8,988		2 months
Trapani	\$4,003		1 month
Swingle		\$4,506	0.5 month
Outreach Team		\$1,200	100 hours
<b>Contractual</b>			
WDCS	\$5,000	\$1,020	1.5 months
<b>Travel</b>			
	\$4,000		
<b>Supplies, equipment, etc.</b>			
	\$11,100		
<b>Other</b>			
Boat surveys	\$12,750		
Workshop	\$600	\$600	\$200/hr match
<b>Indirect 25%</b>	<b>\$15,230</b>	<b>\$3,046</b>	<b>5% match</b>
<b>Total</b>	<b>\$76,151</b>	<b>\$10,372</b>	

<b>Year 2</b>	<b>Fishing Fund</b>	<b>Match</b>	<b>Comments</b>
<b>Personnel</b>			
Bort	\$19,005		5 months
Lockhart	\$9,437		2 months
Trapani	\$4,203		1 month
Swingle		\$4,731	0.5 months
Outreach Team		\$1,200	100 hours
<b>Contractual</b>			
WDCS	\$5,200	\$1,020	1.5 months
<b>Printing, supplies &amp; equipment</b>			
	\$1,400		
<b>Travel</b>			
	\$2,000		
<b>Other</b>			
boat surveys	\$12,750		
workshop	\$600	\$600	\$200/hr match
<b>Indirect 25%</b>	<b>\$13,649</b>	<b>\$2,730</b>	<b>5% match</b>
<b>Total</b>	<b>\$68,244</b>	<b>\$10,281</b>	

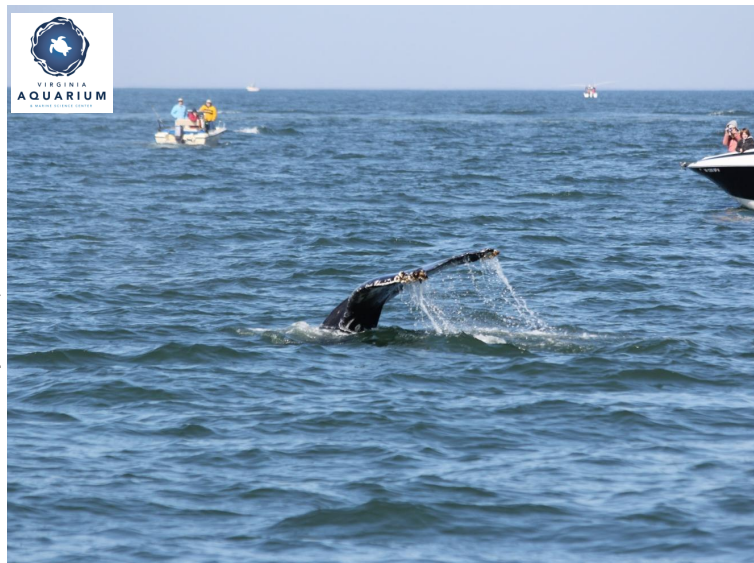
**Virginia Aquarium & Marine Science Center, Whale & Dolphin Conservation Society, &  
NOAA Fisheries Service Northeast Regional Office Project Proposal:  
FISH AWAY FROM WHALES**

**I.) Need:**

Over the past few years, there has been an increase in reports of potentially harmful interactions between salt water anglers (particularly those targeting striped bass and tuna) and endangered whales. These reports have occurred in the northeast off the coast of Massachusetts in summer, and off the coasts of Virginia and North Carolina during winter months. These interactions are of concern because of the safety risk posed to fishermen, boat passengers, and the whales themselves. In the northeast region, fishers have received non-punitive warnings to follow the letter of the law regarding approaching and subsequently harassing whales. In the mid-Atlantic, we believe that most recreational fishers are unaware of federal whale approach guidelines and feel that a positively-worded educational program should be used to promote the voluntary adoption of guidelines. We propose an outreach program that will educate anglers in Virginia to reduce potential for negative impacts on whales, vessel operators, and passengers, while allowing anglers and whales to safely share Virginia waters.

Between December and March, a commercially valuable recreational fishery is active off the coast of Virginia, a time when large endangered whales are also found feeding near shore on the shared prey sources, primarily menhaden, of target fish species, such as striped bass. This has been particularly true during mild winters (such as the winters of 2006-2007 and 2011-2012) when the warm temperatures not only attracted more baitfish (and therefore more large predators), but more boaters and fishers taking advantage of nice days on the water.

All whale species are protected by the U.S. Marine Mammal Protection Act (MMPA) and most large whales are additionally protected by the Endangered Species Act (ESA). These animals are highly susceptible to vessel strikes from all vessel size classes and fishing gear entanglements from a number of fisheries. Small vessels, in particular, have been implicated in harassment, serious injury, and/or death of whales in the U.S. Of particular concern regarding small vessel collisions with whales is that they pose serious threats, not only to the whales, but to the vessel's operators and their passengers. Additionally, whales are known to become entangled in recreational hook and line gear which is



**Figure 1.**

An example of responsible viewing of whales by recreational fishermen and boaters, February 2012. What has at least 100 feet to avoid boaters.

costly to the fishers and causes injury to these animals, which is a violation of federal law.

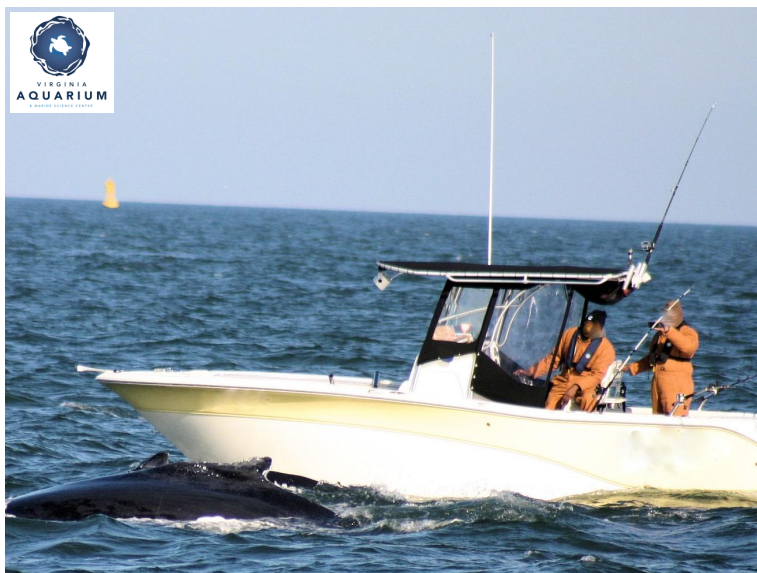
Our area is also a migratory route for the critically endangered North Atlantic right whale, which no boat under any circumstance may approach within 500 yards. Right whales are particularly vulnerable to boat strike and fishing gear entanglement due to their slower swimming speeds (relative to other whales found in the area), and the increased time this species spends near the surface to feed. The U.S. Coast Guard reported two sightings of right whales during the winter of 2012 and right whales have been anecdotally sighted in other years.

In the winter months of 2011-2012, the Virginia Aquarium was able to identify a minimum of 50 individual endangered humpback whales and five endangered fin whales feeding within coastal waters less than 10nm off Virginia Beach using photographic identification techniques. Most of these sightings took place within state waters. During this time, there were two documented incidents of entanglement with recreational striped bass fishing gear, and many more anecdotal reports of entanglements.

Virginia Aquarium researchers on targeted whale surveys—as well as naturalists and passengers on winter wildlife boat tours—witnessed countless interactions between recreational fishermen and whales where the boaters were operating outside of set safe operational procedures regarding approaches to whales. NOAA Office of Law Enforcement as well as the U.S. Coast Guard became involved as more complaints of close approaches and potential injuries to whales were received. A violation of the MMPA, under which all marine mammal species in U.S. waters are covered, or the ESA may result in fines or civil penalties of up to \$10,000 or criminal penalties of up to \$20,000 and up to a year in jail.

We believe that many of these interactions were due to the lack of awareness on the part of the fishermen, as well as lack of educational outreach in the area. It is necessary to promote the voluntary adoption of responsible practices within the local angler community prior to resorting to forced adoption. A widespread outreach campaign could increase problem recognition in recreational anglers, and reduce negative interactions between whales and anglers. Providing the necessary outreach and education to fishers in Virginia will benefit, not only the whales, but reduce the risk of injury to humans and increase an appreciation of the ecology of coastal Virginia.

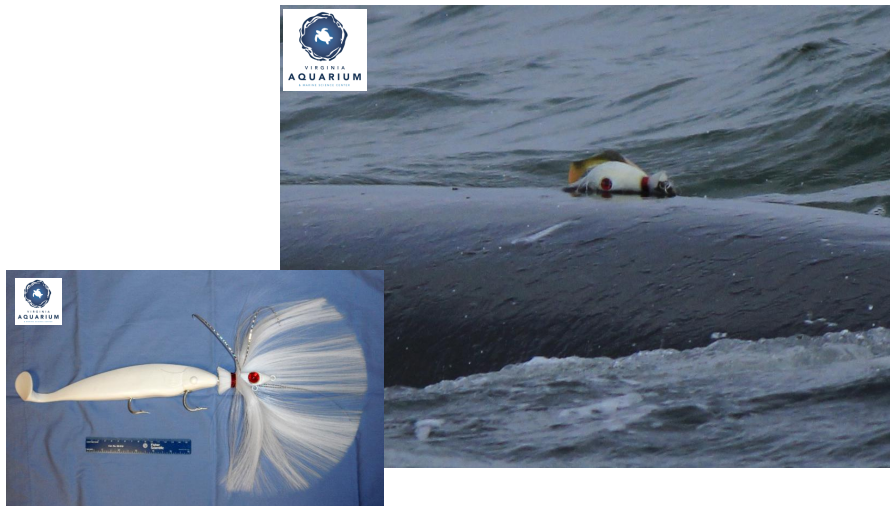
II.) Objective: Provide a concise statement of what is anticipated and the target date(s).



**Figure 2.**

Fishing boat approaching whales within 100 feet, in violation of the MMPA, February 2012. Faces and identifying information of the fishermen involved have been removed from the photograph.

Our overall objective is to educate recreational fishers who are using vessels to target fish species in Virginia at times and places where they may encounter whales on how to operate vessels safely in the vicinity of protected and/or endangered whale species. We will begin this two year project in the fall of 2012 and monitor recreational vessel-based fishers' actions around whales



**Figure 3.**

The type of gear we believe is imbedded into Humpback Whale #7621. A striped bass lure known as a "mojo lure" with a white head, red eye and orange and black tail .

in a variety of ways while working to disseminate a positive message about whale conservation and compliance with whale approach guidelines to this audience. We will reach out to and educate the fishing public throughout 2013 and will continue to monitor our message effectiveness and fishers' compliance in the winter of 2014, completing the project in the fall of 2014.

III.) Expected Results or Benefits: Describe to the extent possible the benefits, which will accrue to Virginia's recreational fishermen and the resource.

We believe that whales and fishing activities can peacefully and safely co-exist. However, without appropriate education for Virginia fishers, this co-existence may be difficult to achieve. Our expectations of the benefits of this project are three-fold and will provide significant benefit to Virginian fishermen, the public, and the whales. We believe that this project will result in:

1. Increased awareness among recreational fishers of federal rules, regulations, and guidelines regarding large whales
2. Decreased incidents of collision, entanglement and 'near' collisions
3. Decreased incidents of documented whale harassment on recreational fishing related social media web sites and blogs
4. Increased safety for recreational fishermen while boating in the vicinity of whales
5. Peaceful co-existence between recreational fishers and whales in Virginia and an appreciation and understanding of whale biology and conservation by the recreational fishing public.

IV.) Approach: Describe how the work will be conducted including steps to be taken and target dates, personnel required.

For this project, we will take advantage of previous work done with recreational boaters and fishers in the northeast US in the vicinity of spring and summer whale feeding areas. The US office of the Whale and Dolphin Conservation Society (WDCS) and the northeast regional Office



of Protected Species of the National Oceanographic and Atmospheric Administration Fisheries Service (NOAA Fisheries) have targeted outreach efforts toward recreational boaters (often fishers) who are operating small vessels around whales, but not specifically watching whales, by developing a campaign called '*See a Spout, Watch Out!*' The campaign started in 2001 and was originally funded by as a collaborative effort between WDCS and NOAA. The program condenses the Northeast Regional whale watch guidelines into five easy to remember boating tips. This information was distributed through boater safety courses, rack cards at boating supply stores, and placards posted at marinas, yacht clubs and fuel docks throughout New England.

NOAA Fisheries has also recently pursued several additional outreach efforts to the recreational fishing industry including participating in annual New England saltwater angler trade shows, sponsoring safe operational advertisements in saltwater fishing magazines, and by contacting individual recreational tuna permit holders to inform them of the increasing reports received of harassment and recreational entanglements, the regulatory implications, and suggestions for safely boating and fishing in areas where whales are present

For this project, the Virginia Aquarium will partner with both WDCS and NOAA Fisheries to modify and expand the *See a Spout!* program to include the Mid-Atlantic region and address issues specific to Mid-Atlantic waters. This will include the development of Virginia based programming and printing and distribution educational materials.

#### *Approach 1- Expanding & modifying existing outreach programs and materials*

The *See a Spout, Watch Out!* Program includes not only brochures but also lectures to target audiences on large whale presence, whale and vessel behavior and laws regarding close approaches to these protected species. We feel that the *See a Spout, Watch Out!* Program is a good fit for the recreational fishing audience in Virginia as it focuses a positive message to recreational boaters who may operate in the vicinity of whales but not be aware of their presence or of the best way to behave around them. By also partnering with NOAA Fisheries, we give both boaters and NOAA enforcement the message that we want to be pro-active in avoiding any problems between recreational fishers and whales and instead want them to be good stewards of the environment and to fish and operate private vessels in a responsible manner.

Upon receiving grant funds, we will, with our WDCS and NOAA partners, update and modify existing *See a Spout, Watch Out!* literature on avoiding whale harassment and collision approved by NOAA which targets recreational boater behavior around large whales.

#### *Approach 2-Distribute message*

Following updates of the *See a Spout, Watch Out!* literature, we will distribute them to recreational fishers by mailing brochures and letters to saltwater license holders and/or registered boaters in the southside Virginia region. Because we realize that many winter fishers are not from the region, we will also distribute materials at local boat ramps, tackle shops and fishing shows using the volunteer outreach team of the Virginia Aquarium's Research & Conservation Division. We will also hold two workshops at the Virginia Aquarium, one with WDCS partners, to educate boaters about the presence of whales in the region and the messages in the *See a Spout, Watch Out!* program to avoid negative vessel and fishing interactions. We will invite NOAA Office of

Law Enforcement and U.S. Coast Guard to participate and answer questions from the audience to impress upon attendees on the significance and seriousness of whale conservation in a positive manner.

In addition to hard copies of materials and workshops, we will create a page on the Virginia Aquarium website with educational materials and information, including downloadable brochures. We will also work with local fishing websites and blogs as well as partner organizations to make the information available on their websites and social media pages.

#### *Approach 3 – Measure message effectiveness*

While the ‘See a Spout, Watch Out!’ Program has proven its effectiveness in the northeast where directed outreach to fishing organizations, marinas, USCG Auxiliary, Power Squadron and yacht clubs as well as signage at fuel docks and marinas has resulted in more than 100,000 boaters reached in the northeast, whale presence is less well known in the Virginia area.

Because the audience in the mid-Atlantic has less awareness of large whale issues than the original target audience for the program, there is a need to measure the effectiveness of the message in our region. We plan to do so through the use of a survey that we will encourage fishers to anonymously participate in using an internet portal, by monitoring the outreach materials distributed, the number of people reached through direct presentations, and any increases in requests for outreach materials. The advantage of using an internet service is that the data are readily downloadable and can be analyzed without having to mail and manually enter survey data.

#### *Approach 4 – Measure compliance*

Along with measuring the effectiveness of the message we present to fishers (Approach 3), we also want to measure compliance with the message we deliver. We have a three-fold approach to measurement.

First, we will monitor internet sites for discussion and images of whale activity and illegal approaches to whales. We will use the winter of 2012 as a control, use 2013 as a monitoring season where we post positive comments on appropriate vessel and fishing behavior around whales, then we will measure winter 2014 activity following outreach efforts, as a comparison to 2012 and 2013.

Second, we will systematically record reports to the Virginia Aquarium of concerns regarding close approaches, as well as vessel and fishing related injury to whales in the area. The Virginia Aquarium & Marine Science Center, as the sponsor of local whale watches and the primary conservation organization in southside Virginia, is a natural organization that is contacted when citizens are concerned about marine animals



**Figure 4.**

A near collision with two whales witnessed by Aquarium researchers. Identifying information on the boat has been removed.

and events on the water. In the winter of 2012, we were called and emailed numerous times by concerned observers, boaters and fishers about the behavior of some vessels around whales. We have not, in the past systematically recorded these events and believe that if we have a similar winter season to 2012, it can serve as a subjective measure of compliance.

Finally, we believe that the most quantitative measure of compliance with whale approach guidelines is direct observation. We propose to use a variety of platforms (whale watch vessels and two research vessels) to observe the behavior of vessels in the vicinity of whales. We propose to measure close approaches per hour by all vessels and by those actively fishing in the winters of 2013 and 2014. We will count, photograph and videotape appropriate and inappropriate approaches and compare the total number, rate and ratio of close approaches in the different seasons.

If no change in actual compliance is found, but partners receive increase in requests for outreach materials, program partners will work to identify gaps in outreach efforts or messaging in order to more directly target the appropriate audiences.

V.) Location: Identify where the project will be carried out.

The effort will focus on southside Virginia, primarily targeting boaters using Lynnhaven and Rudee Inlets, fishing for striped bass and nearshore bluefin tuna in the mouth of the Chesapeake Bay and state ocean waters during winter months.

VI.) Estimated Cost: Provide the estimated cost by line item, including matching funds used.

This two year project will cost \$76,151 in Year 1 and \$68,244 in Year 2 with a match of \$10,372 in Year 1 and \$10,281 in Year 2 (Table 1).

The funds required to complete this project are as follows:

**Personnel** - Year 1 \$27,471, Year 2 \$32,646; Year 1 match \$5706, Year 1 match \$5931

#### *Project Funds*

Most of the work in this project requires staff time and we propose to include three Virginia Aquarium Research and Conservation Division employees on the project. Research Technician Jacquelin Bort will spend a total of 4 months of time in Year 1 (\$14,480 salary & fringe) and 5 months in Year 2 (\$19,005 salary and fringe) completing the bulk of the project work including working with WDACS and NOAA to update *See a Spout!* materials, coordinating talks and other outreach, organizing survey effort and on-water data collection and report writing. Research Specialist Gwen Lockhart will oversee management and data analysis for the project which we estimate will require two months of her time each year (\$8,988 Year 1; \$9,437 Year 2). Information Specialist Christina Trapani will spend one month of her time each year on Aquarium website design, facebook posts and responses and brochure and signage design (\$4,003 Year 1; \$4,203 Year 2).



### *Match Funds*

Research & Conservation Director, Mark Swingle, will match one half month of his time in each year to handle financial reporting and contractual agreements (\$4,506 Year 1; \$4,731 Year 2). Outreach Team volunteers will spend at least one hundred hours each year disseminating re-designed See a Spout materials and working at boating/fishing show booths. In most of our grants, we match volunteer hours at \$12 per hour (\$1,200 both years).

**Contractual** - \$5,000 Year 1 and \$5,200 Year 2; \$1,020 both Years match

### *Project Funds*

We will contract with the Whale and Dolphin Conservation Society (WDCS) to provide time and expertise to update and modify the See a Spout! materials for a broader audience including the mid-Atlantic recreational fishing community. WDCS personnel will spend 1.5 months per year researching, writing and training Virginia Aquarium staff in the See a Spout! program.

### *Match Funds*

WDCS will match fringe benefits for each year at \$1,020 per year.

**Travel** - \$4,000 Year 1, \$2,000 Year 2; no match

### *Project Funds*

In Year 1, we will require travel fund to work with WDCS and NOAA in Massachusetts and to travel to fishing and boating shows and clubs to present outreach materials. We expect that at least two Aquarium staff members will travel to MA and two WDCS staff to travel to VA which will include airfare, hotel, food and car rental. We will also require funding for travel to fishing shows and talks to fishing groups to present materials. In Year 2, Aquarium and WDCS staff will meet once in either MA or VA to confer on the final report and we will again require funds to travel for outreach programs.

**Supplies, equipment, etc.** - \$11,100 Year 1, \$1,400 Year 2; no match

### *Project Funds*

For Year 1 of the project we will print brochures and signage (\$2,900), mail letter to recreational fishers, advertise workshops (\$1,200) and purchase a refurbished laptop and video projector (\$900) for outreach activities, a camera capable of taking video, long lens, media card, card reader and case (\$3,800), handheld GPS for boat surveys, website and video editing software and survey services (\$2,300). In year two, we will bulk mail letters (\$400) advertise workshops (\$300) and replace printed materials (\$700).

### **Other Budget Items**

**Workshop** - \$600 Year 1, \$600 Year 2; \$600 Year 1 match, \$600 Year 2 match

### *Project Funds*

The room for the workshop will be donated but we must use the contracted caterer to supply snacks and drinks at \$8 per person and we estimate 75 people for each of two workshops for a cost of \$600 per workshop.

*Match funds*

We will use the Aquarium's 85 seat interactive theater for one *See a Spout!* workshop in Year 1 and Year 2. The room rents for \$200 per hour, and we expect the workshop to be 2 hours with an hour for set up and break down making each workshop match \$600 per year.

**Vessel-based surveys** - \$12,750 Year 1, \$12,750 Year 2, no match

*Project Funds*

We will use Aquarium vessels (45' Ocean Explorer and 23' center console Aquarium Connection) for vessel-based on-water surveys to measure interaction rates between recreational fishers and whales. We estimate 10 days on the water each year, 5 each on the larger and smaller vessel. Costs with crew and fuel for each are \$1,800 for the Ocean Explorer and \$750 per 8 hour day for the vessels.

**Indirect** - \$15,230 Year 1, \$13,649 Year 2; \$2,611 Year 1 match, \$2,730 Year 2 match

*Project Funds*

We have a federal calculated indirect rate of 30% and will charge 25% to the project. This includes office space, long distance, fax, internet, cell phones, accounting and other support services.

*Match funds*

We will offer the remaining 5% of our indirect rate as match toward the project.



Photo: WCNE and SBMMS

**Boat propellers can kill or maim whales. Your vigilance can prevent this serious injury or mortality.**

**Helpful Hotline Numbers**

Boaters can be instrumental in helping gather crucial data, such as sightings of the critically endangered North Atlantic right whale, and saving injured or entangled animals by reporting them to the appropriate authorities. Please call the hotline number if you see a right whale, find a whale that is injured or stranded, or see a whale entangled in fishing gear. You can make a difference!



Photo: PCGS

**Reporting Saves Lives!**

To report a stranded, injured, entangled or dead marine mammal or sea turtle, call: **866-755-NOAA (2266)** or contact the U.S. Coast Guard via **VH16**.

If possible, please stand by an entangled whale until a response vessel arrives. If you must depart, please document your sighting with photos or video and report the time, location, and whale's direction of travel when you left the scene.

To report presumed marine law violations, call NOAA's Office of Law Enforcement: **800-853-1964**



Photo: NMFS

*Rapid and carefully planned responses often lead to successful disentanglements.*

Photo obtained under NOAA Fisheries Permit #932-1489



Photo: WDPS

Safe boaters keep their distance and avoid head-on approaches.



Photo: WDPS

Too many boats may disturb whales.

Responsible vessel operators adhere to NOAA's Northeast whale watching guidelines by never approaching closer than 100 feet to a whale. If a whale approaches within 100 feet of a vessel, the responsible operator places the engine in neutral and does not re-engage propulsion until the whale is observed a safe distance away from the vessel.



Stellwagen Bank National Marine Sanctuary

NOAA's Fisheries Service Northeast Region



Whale Sense

A companion program for commercial whale watch vessel operators in the northeast region may be of interest. Visit [www.whalesense.org](http://www.whalesense.org) for more information about safe whale watching.



NOAA's Fisheries Service Northeast Regional Office Protected Resources Division 978-281-9328 <http://www.nmno.noaa.gov>



Whale and Dolphin Conservation Society 508-746-2522 <http://www.whales.org>



NOAA's Gerry E. Studds Stellwagen Bank National Marine Sanctuary 781-545-8026 <http://stellwagen.noaa.gov>



**Responsible Whale Watching...**

**It's Up To You!**

**See a Spout, Watch Out!**

Important tips for boaters to help protect the whales of Stellwagen Bank National Marine Sanctuary and the Northeast Region





Photo: SBNMS

Six Tips for Boating Around Whales

# See a Spout, Watch Out!

**1. See a Spout, Watch Out!**

If you see a spout, a tail or a breaching whale, please slow down and post a lookout. Some whales dive 20 minutes or more searching for food. If you've seen one whale, many more could be close - maybe too close to your boat and its spinning propellers. Proceed cautiously!

**2. Head On is Wrong!**

Don't alter a whale's path by cutting it off or risk striking a whale by approaching too closely. Please comply with regional regulations and guidelines when watching whales. This information can be found on the web sites of the *See A Spout* sponsoring organizations.

**3. Lots of Boats, Then Talk to Folks!**

If there are other boats watching or traveling near whales, hail them on your VHF radio (channels 9 or 16) and coordinate your viewing efforts.

Photo: NMFS

**4. Avoid Troubles, Steer Clear of Bubbles!**

Humpback whales create "bubble clouds" and "bubble nets" to corral schools of small fish. Never approach or drive through a bubble cloud or bubble net. A feeding whale is likely to be just below the surface.

**5. Don't Chase, Give the Whales Space!**

Closely approaching a whale may cause the animal to move away from its food source. Respect the whale's behavior and keep your distance. If a whale moves away, don't chase it. A cautious boater may get to see whales feeding, breaching or tail and flipper slapping. Enjoy the whales; don't endanger them or yourselves.

**6. Drop Your Sails When Watching Whales!**

A boat under sail may not be able to reduce speed or stop at a safe distance from a surfacing whale. When in the vicinity of whales, it is best to use your auxiliary motor and proceed cautiously.

## Commonly Watched Marine Mammals

**Finback Whale** (*Balaenoptera physalus*)  
Length: 59-72 feet, Weight 40-80 tons  
W. North Atlantic Population: approx. 2,000  
Status: Endangered

**North Atlantic Right Whale** (*Eubalaena glacialis*)  
Length: 45-55 feet  
Weight: up to 70 tons  
Species Population: approx. 400  
Status: Critically Endangered

Federal regulations prohibit approaching the North Atlantic right whale closer than 500 yards.

**Humpback Whale** (*Megaptera novaeangliae*)  
Length: 45-56 feet  
Weight: 25-45 tons  
Gulf of Maine Population: approx. 800  
Status: Endangered

**Minke Whale** (*Balaenoptera acutorostrata*)  
Length: 23-33 feet  
Weight: 5-10 tons  
Canadian East Coast Population: approx. 3,000  
Status: Protected

**Atlantic White-Sided Dolphins** (*Lagenorhynchus acutus*)  
Length: 8-9 feet  
Weight: 400-500 lbs.  
W. North Atlantic Population: more than 63,000  
Status: Protected

Illustrations: F. McCue

## Keep Our Waters Clean and Pristine!

We rely on the ocean for food, fun, and our well being. Keeping the marine ecosystem clean and healthy is in our best interest. Here are a few easy things that you can do to help ensure a healthy ocean:

**Don't Dump, Pump!**

Contact with disease-causing bacteria found in sewage can lead to human ailments, habitat degradation and shellfish poisoning. Call ahead to the local harbormaster to find a local pumpout station to remove sewage from your vessel. Dumping untreated sewage within three miles of shore is illegal.

**Put a Sock in It!**

Use oil absorbent "socks" and pads in your bilge to prevent oil from leaking out and contaminating the water. Check pads regularly, change when needed and dispose of properly to ensure a more efficient and cleaner running engine.

**Stash Your Trash!**

Federal laws prohibit dumping any trash overboard within three miles of shore. Plastic waste may not be dumped anywhere in the ocean. Marine mammals, seabirds and sea turtles are known to ingest or become entangled in marine debris, which can lead to fatalities. Please do not leave trash on the deck where it can blow overboard. Bring your trash to shore for proper disposal.

Boats under sail may not have sufficient control to avoid collisions.

Photo: Dolphin Fleet