

# VIRGINIA RECREATIONAL FISHING DEVELOPMENT FUND SUMMARY PROJECT APPLICATION\*

<p><b>NAME AND ADDRESS OF APPLICANT:</b></p> <p>Virginia Aquarium Stranding Response Program 717 General Booth Boulevard Virginia Beach, VA 23451 757-437-6159</p>	<p><b>PROJECT LEADER:</b></p> <p>Christina Trapani</p>										
<p><b>PRIORITY AREA OF CONCERN:</b></p> <p>Virginia is experiencing very high numbers of sea turtle mortalities during the months of May through November. The reason for most of these mortalities is unknown. It is also estimated that over half of the floating dead turtles never make it to the beach to be recorded</p>	<p><b>PROJECT LOCATION:</b></p> <p>Virginia's ocean and bay waters, including the Southside (Virginia Beach and Norfolk), Eastern Shore (Northampton and Accomack Counties) and the Peninsula (Hampton to the Maryland line)</p>										
<p><b>DESCRIPTIVE TITLE OF PROJECT:</b></p> <p>Using Virginia's Recreational Fishers in a Sea Turtle Tagging Study</p>											
<p><b>PROJECT SUMMARY:</b></p> <p>The Virginia Aquarium Stranding Response Program (VAQS) would like to provide recreational fisherman with training and supplies to tag dead floating sea turtles in Virginia's coastal bay and ocean waters. VAQS staff would attend various fishing organizational meetings during the early spring months to ask recreational fishers for their help with this project. VAQS staff will also participate in two local boat shows. A simple training will be given at that time and supplies including gloves, tags and data cards will be distributed to those willing to participate. The fishers, upon finding a dead floating sea turtle, will call the Stranding Center to give lat/long, species description and acquire permission to tag the animal. The tag can be used to track these animals for information such as drift patterns, drift time, changes in decomposition over time (if photos are taken), and the ratio of turtles tagged to turtles that strand. During a pilot study in 2005, four floating turtles were tagged and two stranded. One of the tagged turtles stranded near the tagging location, the other stranded on the opposite shore of Chesapeake Bay from its tag location.</p>											
<p><b>EXPECTED BENEFITS:</b></p> <p>For this project both fishers and researchers will benefit by gaining knowledge about sea turtle mortality in Virginia. Through the involvement of recreational fishermen, researchers will better understand the relationship between sea turtle strandings and sea turtle mortalities including where dead animals drift over time and the percentage of floating carcasses that actually strand. Recreational fishers will be taught: sea turtle species identification, how to tag dead floating sea turtles, to assess and report entangled, sick or injured animals and general information about sea turtle life history. Not only will recreational fishers be contributing to a scientific study, but their participation will promote environmental stewardship within the fishing community.</p>											
<p><b>COSTS:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Tagging Kits (Match)</td> <td style="text-align: right;">520</td> </tr> <tr> <td style="padding-left: 20px;">Supplies and printing</td> <td style="text-align: right;">860</td> </tr> <tr> <td style="padding-left: 20px;">Staff time</td> <td style="text-align: right;">2445</td> </tr> <tr> <td style="padding-left: 20px;">Travel</td> <td style="text-align: right;">835</td> </tr> <tr> <td style="padding-left: 20px;">Indirect funds (accounting, office support, etc.)</td> <td style="text-align: right;">460</td> </tr> </table> <p><b>VMRC Funding: \$4600</b>  <b>Recipient Funding: \$520</b>  <b>Total Costs: \$5120</b></p>		Tagging Kits (Match)	520	Supplies and printing	860	Staff time	2445	Travel	835	Indirect funds (accounting, office support, etc.)	460
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<p><b>Detailed budget must be included with proposal.</b></p>											

## Virginia Aquarium Sea Turtle Tagging Project – C. Trapani

### Justification

The Virginia Aquarium Stranding Response Program (VAQS) has been responding to sea turtle strandings in Virginia since 1990. In recent years, sea turtle strandings have increased dramatically with a peak of over 500 turtles in the state of Virginia in 2003, especially around the mouth of the Chesapeake Bay. Often, recreational as well as commercial and government (city, state or USCG) vessels will call the VAQS with reports of floating dead turtles. Currently, VAQS does not have the resources to retrieve floating turtles and must wait until they wash ashore or strand to recover them. As a result, almost nothing is known about the relationship between the time and location of death and of stranding.

In the spring of 2005, VAQS staff conducted a pilot tagging study where four dead, floating sea turtles were tagged. One turtle stranded in Kiptopeke, VA near its tagging location, two others were not reported as stranded and may have decomposed and sunk. The fourth turtle was tagged near Kiptopeke, VA and stranded five days later in the Oceanview section of Norfolk, VA. The pilot study validated the methodology described below. By recruiting many participants who will be on the water, we hope to increase the number of turtles tagged and retrieved.

### Objective

The objective of this project is to train (boat-based) recreational fishers to tag dead, floating sea turtles in order to assist VAQS researchers studying turtle mortalities in Virginia. This project is designed to study sea turtle mortalities through examination of drift patterns and the rate of recovery of tagged animals

### Methods

1. Recreational fishers will be recruited and trained to place specially designed tags on the flippers of dead floating turtles. Participants will be identified using angler meetings, fishing shows and direct contact at boat ramps.
2. The tags used are bright red cattle ear tags with sequential numbers as well as the VAQS contact number.
3. Because sea turtles are protected species, volunteer participants in this project will be instructed to call VAQS before touching the turtle. VAQS will authorize tagging and will record the GPS location and tag number of the animal.
4. VAQS will request that pictures be taken at the time of tagging (if a camera is available) to assist with species ID and a decomposition study.
5. If a tagged turtle is reported multiple times, the GPS locations will be requested for tracking.
6. Results of the study will be distributed to all participants.



### Expected Results and Benefits

We expect the results of this project will give us a better understanding of the number, distribution and ultimate fate of sea turtle carcasses floating in the Chesapeake Bay and coastal ocean waters of Virginia. The boat-based recreational fishing community is an ideal group to help collect the data needed to answer these questions. The more turtles tagged by recreational fishers, the more accurate this picture will be. This project will benefit scientists,



fishers and sea turtles. Scientists will gain valuable information about sea turtle mortalities including drift patterns, numbers and decomposition. Fishers participating in this project will gain insight into the biology of sea turtles in the region as well as threats and conservation efforts. The overall health and well being of the ocean and bay waters can be reflected in the creatures that live in it, including sea turtles.

### Detailed Budget

Tagging kits for fishers (match)	\$520
Prepare materials and training (staff time=17 hrs \$15/hr)	\$255
Attend 8 Fishing Meetings (staff time=30 hrs)	\$450
Attend 2 Fishing Shows (staff time=56hrs)	\$840
Distribute materials @ boat ramps (staff time=20 hrs)	\$300
Communicate with fishers, prepare reports (staff time=40 hrs)	\$600
Travel costs (mileage, tolls)	\$835
Supplies and printing	\$860
Indirect funds (accounting, office support, etc.)=10%	\$460
<b>Total Request</b>	<b>\$5,120</b>