

Project Period 11/01/2013 - 1/29/2016

Project Location The project will take place on the exhibit floor of The Maritime Aquarium at Norwalk.

Description

(from Proposal)

Project

Install two interactive staffed exhibits targeted at 125,000 visitors to encourage adoption of three behaviors to improve water quality in the Long Island Sound.

Summary (from

Proposal)

Summary of

Accomplishments

The Aquarium's Keeping the Sound Healthy Project was completed on January 31, 2016. During the project, the Aquarium developed two floor programs on the topics of Marine Debris and Water Quality, naming the program: Keeping Long Island Sound Healthy. Over the life of the program 32,876 people visited the two stations and 6,556 pledges to Keep the Sound Healthy were received. The final evaluation noted that 58% of visitors who participated in one of the floor programs were likely to change a suggested behavior as a result (19,068) however, the data also suggests that there was a high percentage of both Control and Program group participants who already practice the recommended behaviors. While those visitors who participated in the programs were better able to articulate a take away message that was specific to behaviors for keeping the sound healthy, it is unclear whether or not they actually carried through with the behaviors.

Lessons Learned

Myriad lessons have been learned from the Aquarium's Keeping the Sound Healthy project, both positive and negative.

On a positive note, the accompanying project evaluation indicates that much of the messaging relayed through the project was already understood by many, and was new knowledge for only some of the participants. That is a positive lesson. Many of our visitors know and use reusable backs and resist using plastic. Also, many know about the importance of going to a car wash, as opposed to washing your car at home. This speaks to an intensive social marketing campaign ongoing in society, in general, and far beyond what the Aquarium could have affected.

Regarding the actual establishment of the Water Quality and Marine Debris stations, we learned the challenges of presenting an exhibit that is focused on children, but requiring parental buy-in for concrete action. This is not an uncommon situation, but one that requires some sophistication in the interactive manner in which messaging is conducted.

In terms of determining the number of people impacted, we have become keenly aware of the difference between people casually passing by or attending an exhibit, but displaying slight interest, and those who actively participate. In the future, we'll be more attentive to how numbers of people impacted are determined, so that the number represents people who actually invested some time in participating and internalizing messaging.

In addition, we have learned about the publics' increasing resistance to sharing contact information. In rare cases will relying upon people sharing their personal contact information be a reliable method to obtain follow up behavioral change confirmation.

Activities and Outcomes

Funding Strategy

Activity / Outcome

Required
Description

Capacity, Outreach, Incentives

LISFF - Outreach/ Education/ Technical Assistance - # people reached

Recommended

Enter the number of people reached by outreach, training, or technical assistance activities

# people reached - Current	32876.00
# people reached - Grant Completion	32876.00

Notes

Funding Strategy

Activity / Outcome

Required
Description

Capacity, Outreach, Incentives

LISFF - Outreach/ Education/ Technical Assistance - # people with changed behavior

Recommended

Enter the number of individuals demonstrating a minimum threshold of behavior change

# people with changed behavior - Current	19068.00
# people with changed behavior - Grant Completion	19068.00

Notes

In contrast to the 32,876 people reached and with knowledge, the Aquarium has calculated the number of people with changed behavior using the percentages presented in the final evaluation. On pages 4 and 5 of the evaluation it states that 68% of program group participants said that the program made a noticeable/very strong impact on their likelihood to bring reusable bags/containers shopping with them; 56% indicated that the program made a noticeable/very strong impact on their likelihood to take their car/truck to a car wash; 42% said the program made a noticeable/very strong impact on their likelihood to monitor lawn fertilizer. Averaging these percentages and using them as an order of magnitude, 58% of visitors to the two stations report that they will likely perform one of the recommended activities. The number, 19,068, is 58% of the 32,876 total of people reached and with knowledge.

Visitors were given several different avenues through which to make pledges to 'Keep the Sound Healthy'. Young children were provided the means to color a pledge, adolescents could do a 'Selfie for the Sound' and families, all together, could write their pledge on our graffiti board. All of these pledges totaled to 6,556. Visitors were provided the materials and the medium through which to pledge, but they created the language of the pledge, in reference to the three activities promoted by the program: reduction/elimination of the use of fertilizers, using car washes and using recyclable plastic bags. As these were family oriented exhibits, these numbers were totaled by the number of pledges, not the number of people.

Funding Strategy

Activity / Outcome

Required
Description

Capacity, Outreach, Incentives

LISFF - Outreach/ Education/ Technical Assistance - # people with knowledge

Recommended

Enter the number of people demonstrating a minimum level of

knowledge, attitudes, or skills

# people with knowledge - Current	32876.00
# people with knowledge - Grant Completion	32876.00

Notes

Funding Strategy

Activity / Outcome

Required

Description

Capacity, Outreach, Incentives

LISFF - Volunteer participation - # volunteers participating

Recommended

Enter the number of volunteers participating in projects

# volunteers participating - Current	0.00
# volunteers participating - Grant Completion	0.00

Notes

Due to scheduling and training needs of the program, the Aquarium was not able to use volunteers as proposed. Instead, part time educators were used in the program with matching funds. There was a significant amount of training required for the volunteers, this coupled with the fact that program staff worked only weekends, vacation and holidays required the use of paid staff.

Funding Strategy

Activity / Outcome

Required

Description

Habitat Management

LISFF - BMP implementation for nutrient or sediment reduction - Lbs nutrients avoided (annually)

Recommended

Enter the amount of nutrients prevented from entering system annually

Lbs nutrients avoided (annual) - Current	0.00
Lbs nutrients avoided (annual) - Grant Completion	0.00

Notes

As so few visitors were willing to share their contact information, it became impossible to follow up with people to verify changed behaviors and measure nutrients avoided.

Funding Strategy

Activity / Outcome

Required

Description

Habitat Management

LISFF - BMP implementation for stormwater runoff - Lbs of floatables reduced

Recommended

Enter the weight in lbs of floatable debris prevented from entering waterways

Lbs of floatables reduced - Current	0.00
Lbs of floatables reduced - Grant Completion	0.00

Notes

As so few visitors were willing to share contact information, it was impossible to follow up with participants to measure the amount of floatables reduced.

Show Map Below

The following pages contain the uploaded documents, in the order shown below, as provided by the grantee:

Upload Type	File Name	Uploaded By	Uploaded Date
Final Report Narrative - Standard	Final Report Narrative 3_30_16.pdf	Becchi, Mary	03/30/2016
Photos - Jpeg	TMA kids pledge to keep LIS healthy.jpg	Becchi, Mary	03/30/2016
Photos - Jpeg	TMA marine debris display.jpg	Becchi, Mary	03/30/2016
Photos - Jpeg	TMA Water Quality Station.jpg	Becchi, Mary	03/30/2016
Other Documents	KISH evaluation report FINAL.pdf	Becchi, Mary	03/30/2016

The following uploads do not have the same headers and footers as the previous sections of this document in order to preserve the integrity of the actual files uploaded.



NFWF

Final Programmatic Report Narrative

Instructions: Save this document on your computer and complete the narrative in the format provided. The final narrative should not exceed ten (10) pages; do not delete the text provided below. Once complete, upload this document into the on-line final programmatic report task as instructed.

1. Summary of Accomplishments

In four to five sentences, provide a brief summary of the project's key accomplishments and outcomes that were observed or measured.

The Maritime Aquarium at Norwalk developed two floor programs on the topics of Marine Debris and Water Quality, naming the program: Keeping Long Island Sound Healthy. Over the life of the program 32,876 people visited the two stations and 6,556 signed a pledge to Keep the Sound Healthy. The final evaluation noted that those visitors who participated in one of the floor programs were more likely to change a suggested behavior as a result; however, the data also suggests that there was a high percentage of both Control and Program group participants who already practice the recommended behaviors. While those visitors who participated in the programs were better able to articulate a take away message that was specific to behaviors for keeping the sound healthy, it is unclear whether or not they actually carried through with the behaviors.

2. Project Activities & Outcomes

Activities

- Describe and quantify (using the approved metrics referenced in your grant agreement) the primary activities conducted during this grant.

Keeping the Sound Healthy was the follow-on initiative to two previous NFWF/LISFF awards. The first, in 2009, was entitled, *Creature Encounters: Stormwater Social Marketing*. With a goal of inspiring people to become better stewards of LIS, *Creature Encounters* started as a station hosted by trained educators and designed to present TMA visitors with informal educational experiences that were consistently enjoyable, inspiring, engaging, informative, accurate and personalized.

The NFWF/LISFF second award in 2011 provided TMA with the resources to conduct in-depth research with an outside firm to identify and develop the social marketing messages that would provide the best opportunity for behavior change resulting in the greatest impact on water quality.

Results of this research led to the recommendations for implementation that were the objectives of this award. *Keeping the Sound Healthy* was a community-based social marketing campaign utilizing two staffed interactive exhibits on the Aquarium floor to encourage adoption of behaviors that protect water quality. The behaviors targeted at the Water Quality and Marine Debris stations were:

- For those who have lawns and use lawn fertilizers, encourage soil testing and the use of organic, slow release varieties in the minimum amounts needed
- Use automatic car washes rather than washing cars in the street or driveway
- Increase use of reusable shopping bags, beverage bottles and mugs.

To ensure efficient use of resources with the greatest impact, Keeping the Sound Healthy was open 11:00-3:00 on weekends, holidays and vacations, periods of highest visitorship.

Exhibit One – Water Quality Station

Working at the Water Quality Station, TMA educators targeted two approaches to reduce nutrients in storm water runoff. The first was associated with selection and application of lawn fertilizer, and the second with making the switch from washing cars at home to using commercial car wash facilities. A 3-D map (enviroscape) and terrapin turtle engaged littler children, while educators engaged families, with information about hypoxia and how typical household soap plays into the problem of water quality, as well as how water is treated at commercial car washes to mitigate nutrients and other contaminants.

Primary Activities at the exhibit included: TMA’s Salt Marsh Avenger Story; Enviroscape Board and Selfie for the Sound.

TMA’s Salt Marsh Avenger Story: Was geared for children up to around 7-8 years old and was narrated by a TMA educator while a second educator uses puppets and props to animate it. The story required 3 volunteers from the audience. It was meant to be a 5-7 minute animation following ‘Malcolm’ the Terrapin and his friends, “Chester “and “Nellie” as their neighborhood becomes polluted and they are force to relocate. At the end of the story our Terrapin Ambassador was taken out for touch time.

Enviroscape Board: The main interactive feature of the Water Quality Station was a custom 3-D map of South Norwalk featuring the Norwalk River, The Maritime Aquarium, parks, residential areas, a car wash and even the sewage treatment plant. There was also a holding tank for live terrapin turtles, one inside the cart and one for display. The enviroscape was intended for grades 3-adult. It used soap to depict blue water and corn meal as fertilizer to engage audiences in a discussion of where these pollutants/nutrients came from and what happens when they get into the water. There was no script for his section, but talks are engaging and focused on the audience’s general age group, with participation encouraged. A watering can was used to wash down the board to show what we put on land will make its way into a water source.

Selfie for the Sound: Allowed visitors to write about how they will help keep our oceans free from marine debris. Visitors took photos of themselves holding their pledge (or someone in their group can take a photo). They were asked to post their photo to social media (any site) using #selfiefor the sound, if they so choose. The Aquarium displays their pictures on our monitor at the marine debris station; or, if they felt more comfortable e-mailing their pledge they can send it to social@maritimeaquarium.org and we can post it on their behalf.

Exhibit Two – Marine Debris Station

The Marine Debris Station targets the reuse of shopping bags, beverage bottles and mugs.

Exhibit: The principle activity at this station was to use a turtle skull, plastic bag, entangled fish, jellyfish, stuffed animal and turtle puppet to engage visitors in a discussion on how marine debris is harmful to ocean animals. Educators exhibit how reusable bags and beverage containers should be used rather than single-use cups and bags. Children colored our jellyfish pledge cards and adults signed their family name to our black pledge board.

Selfie for the Sound : The same ‘Selfie’ activity that took place at the Water Quality Station took place at the Marine Debris Station. Visitors were also asked to write how they would help keep our oceans free from marine debris. At this station there was also opportunity for visitors to participate in a pollution quiz. Patrons matched up items with the length of time they believe it takes for various types of debris to bio-degrade.

- Briefly explain discrepancies between the activities conducted during the grant and the activities agreed upon in your grant agreement.

In 2013 when the application was submitted, TMA proposed that by project completion 125,000 people would be reached by outreach, training or technical assistance activities, that 75,000 would demonstrate a minimum threshold of behavior change and that 175,000 would demonstrate a minimum level of knowledge, attitudes or skills. At project completion, 32,876 people had visited the stations, of whom 6,556 signed pledges to keep the sound clean.

Outcomes

- Describe and quantify progress towards achieving the project outcomes described in your grant agreement. (Quantify using the approved metrics referenced in your grant agreement or by using more relevant metrics not included in the application.)
- Briefly explain discrepancies between what actually happened compared to what was anticipated to happen.
- Provide any further information (such as unexpected outcomes) important for understanding project activities and outcome results.

Since beginning implementation of Keeping the Sound Healthy in December 2013, TMA has made several observations about visitor numbers and behaviors, which would impact the project's final metrics. In 2013 when the application was submitted, TMA proposed that by project completion 125,000 people would be reached by outreach, training or technical assistance activities, that 75,000 would demonstrate a minimum threshold of behavior change and that 175,000 would demonstrate a minimum level of knowledge, attitudes or skills.

After 24 months of observation, we have not been able to reach those metrics, even with the no cost extension, which moved the project completion date to January 31, 2016. This is the case for several different reasons.

Staff vacancies described in the 2014 report accounted for limited project management relatively early in the project. Although our new Director of Education joined the Aquarium in April 2014 and our floor exhibit manager returned to work from maternity leave shortly thereafter, neither the Aquarium nor the exhibit itself was able to generate the number of visitors originally projected.

An additional reason why TMA is unlikely to meet the exhibit visitation projections has to do with how the proposal envisioned that we would reach this number. Original projections were made under the assumption that 100% visitors to the Aquarium on weekends, holidays and vacations would pass by the Keeping the Sound Healthy exhibits, and would be reached by the stations' outreach. In the proposal, those reached by outreach actually mirrored projected attendance numbers, but didn't focus on those visitors who actually spent time at the exhibits, engaged and participating. Upon reflection, the Aquarium has resisted the temptation to track numbers by counting Aquarium attendance number. Instead, we are tracking those visitors who actually came to the exhibits, engaged in some level of interaction and focused on the exhibits' messaging.

Currently, with actual visitor data in hand, The Maritime Aquarium can document that roughly 9% of Aquarium visitors visited the exhibits and interacted with educators. Since the beginning of the project, this translates to 32,876 interactions, by parents, school aged children or young children. In light of this reduction, TMA wishes to emphasize that we are counting the number of people who actually stop and listen to the messaging at the stations and participate or encourage their children to participate. This level of engagement is vastly different from counting those numbers of people who casually pass by the exhibits without focusing any serious degree of attention on the messaging. Of the 32,876 visitors, 6,556 (20%) signed a pledge to keep the Sound healthy

Additionally, TMA's strategy to measure impact of the project on behavior change was based upon our ability to follow up with visitors through e-mail within a reasonable time after their visit to the Aquarium. The degree to which we are able to do this is a direct function of the number of people visiting the stations. In addition to a reduced number of participants at the two stations, TMA is witnessing the visiting public's increasingly serious reservations about providing e-mail addresses or other contact information. TMA devised several incentives and props which urged people to provide their e-mail addresses; however, none of these had any measurable impact upon the number of e-mail addresses obtained. These included: giving away pencils; asking for e-mail addresses with each pledge to keep the Sound healthy; using ipads to take photos of guests interacting with the stations and e-mailing it to them; having a passive survey monkey e-mail address screen up on the ipads at all times; giving away LIS posters for an e-mail address.

3. Lessons Learned

Describe the key lessons learned from this project, such as the least and most effective conservation practices or notable aspects of the project's methods, monitoring, or results. How could other conservation organizations adapt their projects to build upon some of these key lessons about what worked best and what did not?

Myriad lessons have been learned from the Aquarium's Keeping the Sound Healthy project, both positive and negative.

On a positive note, the accompanying project evaluation indicates that much of the messaging relayed through the project was already understood and was new knowledge for only some of the participants. That is a positive lesson. Many of our visitors know and use reusable backs and resist using plastic. Also, many know about the importance of going to a car wash, as opposed to washing your car at home. This speaks to an intensive social marketing campaign ongoing in society and far beyond what the Aquarium could have affected.

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In addition, we have learned about the publics' increasing resistance to sharing contact information. In rare cases will this be a reliable method to obtain follow up behavioral change confirmation.

4. Dissemination

Briefly identify any dissemination of lessons learned or other project results to external audiences, such as the public or other conservation organizations.

To complement Keeping the Sound Healthy's messaging on marine debris, the Aquarium has established a permanent marine debris exhibit. The sustained messaging possible through this exhibit provides a remarkable visual impact on visitors which will leave a permanent impression. Permanent presence of the exhibit will also establish the Aquarium as an actor in educating citizens on what not to do to help conserve LIS.

5. Project Documents

Include in your final programmatic report, via the Uploads section of this task, the following:

- 2-10 representative photos from the project. Photos need to have a minimum resolution of 300 dpi and must be accompanied with a legend or caption describing the file name and content of the photos;
- report publications, GIS data, brochures, videos, outreach tools, press releases, media coverage;
- any project deliverables per the terms of your grant agreement.

POSTING OF FINAL REPORT: *This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as "PROTECTED" and provide an explanation and complete citation to the statutory or regulatory source for such protection.*