



REQUEST FOR PROPOSAL (RFP)
FOR
SOUNDHEALTHEXPLORER.ORG

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SAVE THE SOUND 545 Tompkins Ave, 3rd Floor, Mamaroneck, NY 10543

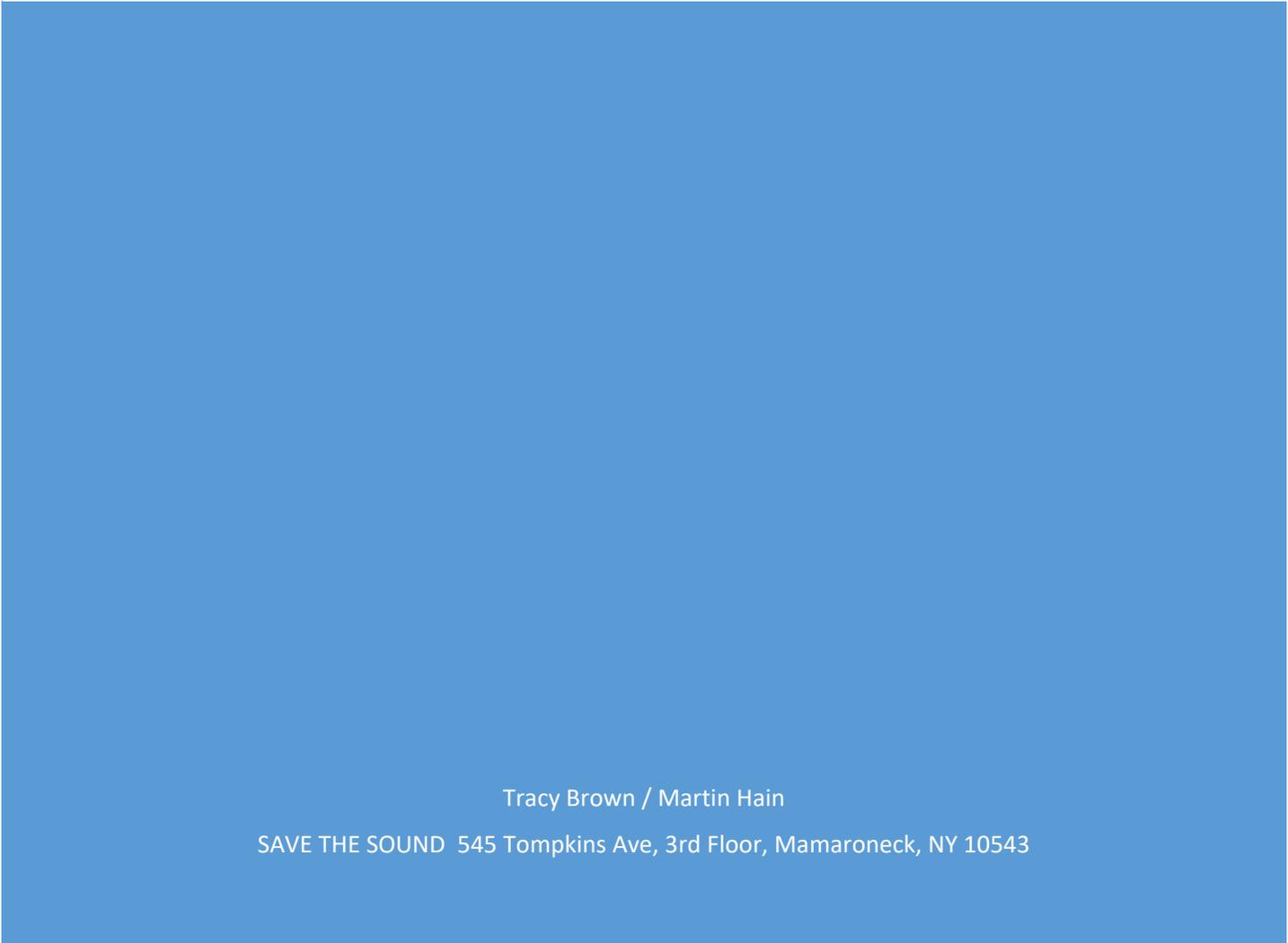


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1 Introduction

1.1 Overview

Save the Sound has issued this Request for Proposal (RFP) in order to select and contract with a company (“vendor”) to redesign and expand Sound Health Explorer (SHE) <http://www.soundhealthexplorer.org>.

Save the Sound is seeking proposals from website development companies to design, develop and implement this public-facing website. The chosen strategic partner must be a firm that has expertise with best practices regarding:

- successful website redesign
- data visualization
- user experience and usability testing
- information architecture
- website development and deployment
- content strategy

This RFP does not obligate Save the Sound to award a contract or complete the project and Save the Sound reserves the right to cancel the solicitation if it is considered to be in its best interest.

1.2 About Save the Sound

Save the Sound is a bi-state program of Connecticut Fund for the Environment. CFE/Save the Sound (STS) is a 501(c)3 nonprofit organization dedicated to protecting and improving the land, air, and water of Connecticut and Long Island Sound. Programming includes legislative advocacy, litigation, and on-the-ground environmental restoration and related volunteer opportunities.

1.3 Project Timeline

RFP Release Date	March 2, 2020
Vendor Proposal Submission Deadline	March 23, 2020
Final Vendor Selection	March 31, 2020
Anticipated Website Re-Launch	June/July, 2020

1.4 Save the Sound Contact Information

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1.5 Terms of Service

Save the Sound wishes to engage a vendor for the duration of this project and for any needed on-going hosting and maintenance services. Specific deliverables related to the scope of work for this project will be included in the final agreement.

2 Background and Goals

2.1 Our Current Environment

2.1.1 **Existing Website** – CFE/Save the Sound’s website, www.SoundHealthExplorer.org (SHE), was launched in the summer of 2015 as an interactive map that paints a picture of water quality trends at Long Island Sound beaches. It uses publicly available monitoring data from health departments in Connecticut and Westchester, and on Long Island, combined with precipitation data from Wunderground /IBM, and other datasets relevant to understanding beach conditions. The initial project was inspired by the very successful online Beach Report Card published and maintained by Heal the Bay in CA - <http://brc.healthebay.org>.

The SHE tool has been well received and has spurred some local action to track down and eliminate pollution impacting beaches in both CT and NY. SHE has also become a very useful tool for STS staff in our investigations of water pollution, review of wastewater treatment plant locations and CSO outfalls, reference of coastal watersheds, and more.

The SHE tool currently relies on historical data only and does not provide up-to-the-minute forecasting. This is a limit in the monitoring protocols which could only be addressed by changing the federal monitoring standards or creating a massive model to predict beach water quality based on historic data. Both of these activities are out of scope for this project. Instead, our focus is on annual conditions from the prior monitoring season and trends over time (the data set goes back to 2004).

2.1.2 **Form creation, input data collection and management** – All forms linked to from SHE are created using [EveryAction \(EA\)](#) and are embedded into pages that live on the [STS website](#). All data collected from the forms is stored and managed in EA.

2.1.3 **Content Management** – The website consists of web pages managed by approximately 4 people. The current custom-built CMS allows us to add/edit informational text pages only. It does not allow us to edit navigation, layout, functionality, datasets or data visualization parameters.

2.1.4 **Document Management** – All documents accessible through the site are currently stored and hosted directly on SHE or [our company website](#).

- 2.1.5 **Data Management** – All data is currently imported, maintained and managed by [NiJel](#). STS does not have any administrative capabilities in regards to the data being represented on the site.
- 2.1.6 **Website Platform, Hosting & Maintenance** – The current site has been developed, hosted and maintained by [NiJel](#).

2.2 General Objectives and Goals

- 2.2.1 **Interactive and Engaging Website** – We are seeking to redesign SHE to include multiple data channels in an intuitive, easy-to-use interface that allows users to access the data provided quickly and easily regardless of the device they are using. We want to expand the site from one that provides primarily beach data, to a data portal with multiple data channels on Long Island Sound. After the redesign, the current beach related content will be one channel alongside other data channels including: water quality for marine life, sea level rise projections and stream survey data. The solution should allow for the addition of more channels over time and be easy to maintain for our administrators and content creators.
- 2.2.2 **Strategic Partnership** – We want a vendor partner who understands the data visualization challenges and will help guide us to where we want to be today, as well as provide ongoing services to support our growth into the future.
- 2.2.3 **Research Based Design** – We want a site that meets the unique needs of our community, and are not looking for a cookie-cutter or templated solution. Our vendor should employ a strategic research-based and data-driven process to gather input, define expectations and design a consistent, user-friendly navigation framework for the website that meets the needs of all users.
- 2.2.4 **Responsive Site** – Visitors to our site will utilize a wide variety of devices to access our website, including computers, tablets and mobile smart phones. Our new website should automatically detect the screen resolution of any device and respond with a view of the site that is optimized specifically for that screen.
- 2.2.5 **Accessible Site** – Our new website should comply with World Wide Web Consortium’s (W3C) Web Content Accessibility Guidelines (WCAG) 2.0 (Level AA compliance) and Section 508 of the Rehabilitation Act of 1973. In addition, the vendor should follow best practices, voluntary standards and guidelines developed by the World Wide Web Consortium’s (W3C) Web Accessibility Initiative (WAI).
- 2.2.6 **Flexible Solution** – The new website should build upon proven and accepted website development standards while maintaining flexibility to easily grow and add new functionality over time and with minimal cost.
- 2.2.7 **Evolutionary SaaS Solution** – The vendor’s hosted Software as a

Service (SaaS) content management solution (CMS) should be in a state of constant evolution and improvement.

2.2.8 **Open Availability of Data** – Save the Sound would like to continue to provide SHE as an open source tool where users can download all the data. No logins for public users required.

2.2.9 **Ease of Sharing** – Save the Sound would like to provide easier and more obvious ways for users to share what they find relevant on SHE through social media and other available channels.

3 Scope of Work

3.1 Vendor Experience and Development Criteria

Preference will be given to vendors with experience developing data visualization solutions for websites, with special attention given to vendors' breadth of experience, references, number of years of experience and expertise of staff.

3.1.1 **Skilled Team** – Vendor will supply a team of user experience, design and development professionals to supplement the development process led by the project manager. This team should include staff members skilled in data visualization website user experience, navigation and information architecture, website design, accessibility, and support and training of the content management system.

3.1.2 **Proven Development Process** – Vendor should have a proven development process and flexible timeline structure that favors the availability and time commitment of Save the Sound.

3.2 System Functionality

The vendor's proposed content management system (CMS) should be a web-based application that provides the core of the entire development process, being both the platform for development and the tool by which system administrators and contributors can update the new website. The CMS may feature plug-in applications or modules that enhance the functionality of the website, though core features should center around ease-of-use, flexibility and, for ongoing stability, an established information architecture and hosting environment.

The CMS must allow non-technical content contributors the following abilities:

3.2.1 **Administrative Dashboard** – The administrative portion of the CMS shall be accessible for all content contributors and feature a customizable interface that displays critical shortcuts, on-site items that require attention, recent activity logs and an internal messaging system that displays administrative messages and updated information.

3.2.2 **Automatic Sitemap** – The CMS should automatically create and update a sitemap and on-page breadcrumbs when content is added, edited or removed from the site.

3.2.3 **Content Management** – A way to add, edit and move content

directly on an assigned webpage without the need to utilize or be trained on a back-end administrative system (i.e. HTML).

- 3.2.4 **Content Preview** – Content publishers must have the ability to preview changes prior to publishing on the site.
- 3.2.5 **Dynamic Menu Structure** – A dynamic menu structure, with the ability to easily add, edit, move and delete menu items in multiple structural areas of the site.
- 3.2.6 **Menu Levels** – A menu level system that allows the addition of menu levels.
- 3.2.7 **Page Structure** – A page structure system that allows the addition of pages.
- 3.2.8 **Website Analytics** – Analytics will be tracked and maintained through Google Analytics.

3.3 Technology / Platform Requirements

- 3.3.1 **Browser Support** – The new website should support mobile and desktop versions of Apple Safari, Google Chrome, Microsoft Internet Explorer and Edge, and Mozilla Firefox. The site should support all versions of the browsers that have been released within the last 5 years.
- 3.3.2 **Page Load Time** – The solution should ensure that pages load on an average of 1.5 seconds or less.
- 3.3.3 **Third Party Plugins** – Potential use of third-party plugins where appropriate is acceptable.

3.4 Design and Usability Guidelines

The design of the website should be easy to navigate and capture the spirit of our organization. The comprehensive redesign should incorporate elements that effectively represent Save the Sound's brand and image through a data-driven and consultative development process that includes the following techniques and best practices of usability and user experience:

- 3.4.1 **Site Analytics** – The vendor will utilize historical site analytics to understand patterns and information useful to the development of the new site.
- 3.4.2 **Consistent Website Design** – Website design must remain consistent throughout all pages to maximize usability, except where differentiating between channels of the website as requested by the Save the Sound.
- 3.4.3 **Easy Updating** – Design elements should include background images, photographs, logos and buttons that are easily updated or swapped out by our staff at any time and without incurring any additional implementation or update charges.
- 3.4.4 **Easy Sharing** – Design elements should include easy ways for users to share what they find on the site through social or email.

3.5 Responsive Design

We recognize that there are two ways to build a responsive website – using responsive design and adaptive design. Responsive design provides one layout that fluidly changes depending on the size of the screen. Adaptive design has several distinct layouts for multiple screen sizes that are built for the distinct needs of that device. We are seeking a vendor partner who has experience in both approaches and who will recommend the best solution for our needs. The solution should automatically detect the screen resolution of any device and respond with a view of the site that is optimized specifically for that screen.

3.6 Data Channels and Tools

Save the Sound would like to expand beyond the beach data currently available on SHE to create a data portal, where additional datasets and tools are added and users can choose from different areas of concern to view the status in their community. We have created partnerships with several other water quality organizations and anticipate embedding their tools into SHE. The ability for SHE to easily expand over time to accommodate more datasets and tools is crucial to the overall success of this project.

For a complete list of the datasets currently in use on SHE, please visit [this page](#).

To start, we want to include the following channels:

- 3.6.1 **Swimmable/Beaches** – This channel will contain ALL of the data currently on SHE.
 - This channel will pertain to fecal bacteria pollution at the beaches around Long Island Sound and its relationship to precipitation.
 - The bacteria data are pulled from the [EPA Water Quality Data portal \(WQX\) database](#). The precipitation data are pulled from IBM's Weather Underground site. The current site queries the WQX database for updates to these beach locations and when a new data point is uploaded it retrieves the associated precipitation data from the [Weather Underground API](#).
- 3.6.2 **Fishable/Marine Life** – This channel will contain the LIS water quality data that the state of Connecticut, NYC and an interstate agency collect in the open waters of the Sound and as well as water quality data we collect through the [Unified Water Study \(UWS\)](#) in 40 Sound bays and harbors. We score these data and publish the grades in a biennial LIS Report Card.
 - This data is currently displayed by a third-party on [ecoreportcard.org](#)
 - This channel will pertain mostly to nitrogen pollution.
 - This channel will highlight the [22 partner groups participating in the UWS](#)
 - This section will pertain to open water conditions as well as bay and harbor water quality conditions, and other complimentary datasets such as watershed boundaries.
 - These data are collected by STS staff in Excel spreadsheets which need to be manually uploaded into the website.

- 3.6.3 **Sea Level Rise** – This channel will contain the map and data from the free sea level rise tool, [SurgingSeas, provided by ClimateCentral](#)
 - Save the Sound has been in contact with ClimateCentral and have gained permission to incorporate this tool.
- 3.6.4 **Stream and Coastal Surveys** – This channel will contain the Stream Survey Tool being developed by [Chesapeake Commons](#).
 - Save the Sound is currently working in coordination with Chesapeake Commons to develop a tool to allow users to walk a stream and perform a site survey using their smartphone. Data collected will then be automatically populated to a generated map using their [Water Reporter](#) platform.
 - This channel will allow for other locally-generated datasets to be uploaded and displayed. The first such dataset to be included will be [STS's Bacteria Monitoring program data](#).
 - This channel will also need to credit local partners where appropriate.

3.7 Taking Action

Save the Sound would like to add more opportunities for users to respond and get involved with water pollution issues that directly relate to the data being presented.

These can include, but are not limited to:

- 3.7.1 **Donate** – Our organization is totally funded through grants and donations, we want to make it easy for people to do so.
 - Forms and mechanism for this would NOT have to be built by the vendor. We handle all of this through our [EveryAction](#) account. The forms created in EveryAction can be embedded in the page or linked to directly.
- 3.7.2 **Volunteer** – Encouraging people to participate in clean-ups or water sampling.
 - Vendor would need to create a section on the site to display the different volunteering opportunities available.
 - A map with indicators that could be rolled over to reveal the information about the opportunity is one approach idea.
 - Easy administration for addition and deletion of opportunities would be needed.
- 3.7.3 **Advocate** – Encouraging people to speak out and/or sign petitions for issues that affect the water quality in their area.
 - Vendor would need to create a section on the site to display the different advocate opportunities available.
 - A map with icons that could be rolled over to reveal the information about the opportunity is one approach idea.
 - Easy administration for addition and deletion of opportunities would be needed.
- 3.7.4 **Action Alerts** – This would be a sign-up for people to be added to our list for alerts about things that need action.

- Forms and mechanism for this would NOT have to be built by the vendor. We handle all of this through our [EveryAction](#) account. The forms created in EveryAction can be embedded in the page or linked to directly.
- Delivery of the alerts would also be handled within EveryAction.

3.8 Library

Save the Sound would like provide useful information and reference materials to the users of SHE.

These can include, but are not limited to:

- 3.8.1 **Best Practices** – For example, tips for homeowners and businesses to reduce nitrogen entering the Sound from their lawns or septic systems.
- 3.8.2 **Guidelines** – For example, how to track down a fecal bacteria (sewage) pollution source
- 3.8.3 **Directions** – For example, how to sign-up or organize a coastal cleanup.
- 3.8.4 **General Information** – For example, information on political and legislative tools available to reduce marine debris.
- 3.8.5 **Toolkits** – For example, a course or presentation prepared with supportive data for teachers or legislators.

3.9 Target Audiences

The design of the website should take into account the many different types of users that may be accessing the site. Each will use the site very differently and find different information more relevant than others.

The target audiences include, but are not limited to:

- Local Residents and Property Owners
- Schools, Colleges and Universities
 - Students
 - Teachers and/or Professors
- Wastewater Treatment Plant Operators
- Regional and Local Media
- Boaters and Anglers
- Beach Goers
- Farmers
- Federal, State and Local Elected Officials
- Town and County Public Health Officials
- Funders of Save the Sound
- Water Quality Experts

3.10 Known Challenges

Save the Sound has identified the following as known development challenges:

- 3.10.1 **Not Overwhelming Users** – Designing so that users are not overwhelmed by too much data. Breaking the information architecture into different channels.
- 3.10.2 **Keeping Maintenance to a Minimum** – Designing in a way that keeps the maintenance of the site to a minimum, with automated data retrievable and upgrades wherever possible.
- 3.10.3 **Recognition for UWS Partners** – Providing brand recognition and credit to our 22 Unified Water Study partner groups.
- 3.10.4 **Historic Data NOT Real-Time Data** – Reinforcing the understanding that the beach data is historic trends, not current swim conditions.
- 3.10.5 **Outside Applications** – Interfacing with ClimateCentral and Chesapeake Commons to incorporate their tools.

4 Design Deliverables

4.1 Initial Wireframes and Explorative Design Mock-Ups

The redesign is expected to occur in several phases, starting with initial wireframes and explorative mock-ups:

- 4.1.1 **Wireframes** – The vendor will create a wireframes that will be used to understand how the pieces of the site work together.
- 4.1.2 **Explorative Mockups** – The vendor will create 3 distinctly different explorative design approaches to the homepage and inner pages of the site providing Save the Sound with a clear representation of what the user journey would be through the site in each version.

4.2 Final Design Mock-Ups

The result of the design review and feedback from Save the Sound should be a final round of design mock-ups including, but not limited to:

- 4.1.3 **Home Page**
- 4.1.4 **About SHE**
- 4.1.5 **Swimmable/Beach Channel**
- 4.1.6 **Fishable/Marine Life Channel**
- 4.1.7 **Sea Level Rise Channel**
- 4.1.8 **Stream and Coastal Survey Channel**
- 4.1.9 **Take Action – Advocate**
- 4.1.10 **Take Action – Donate**
- 4.1.11 **Take Action – Volunteer**
- 4.1.12 **Take Action – Action Alerts**
- 4.1.13 **Library**
- 4.1.14 **Contact Us**

5 Additional Options

5.1 Beyond the RFP

Although Save the Sound has specified many of the requirements, we are also interested in your ideas for the approach to redesigning the SHE website. We encourage respondents to consider and propose alternative solutions and recommendations. We are particularly interested in specific web functionality that your company may have already developed and deployed for other customers.

Additionally, this new website will need a hosting environment in which to live. Save the Sound will discuss options for hosting either on our own third-party servers or on the vendors once the selection process is completed.