



SASJBEP STC Meeting Notes 8/20/2026

1-2:00pm CT

Attendance: SASJBEP Staff (Ryann Rossi, Jessica Graham, Liz Farmer, Aleighsa Wright), Carrie Jones, Claire Rosental, Darryl Boudreau, Jessica Black, Joy Brown, Eric Weather, Megan Christopher, Phil Maxwell, Katie Konchar, Bill Fisher, Jessica Black, Campbell Payne, Donnie Hicks, Cathleen Coates

Meeting Summary: The Science and Technical Committee (STC) received updates on three major initiatives: the Living Shoreline Suitability Analysis, the Harmful Algal Bloom (HAB) Volunteer Monitoring Network, and the Bay Guardians citizen science water quality monitoring project. Progress is being made on the long-awaited Living Shoreline Suitability Model despite challenges converting the VIMS ArcMap-based tool for ArcGIS Pro and troubleshooting fetch modeling requirements. The HAB network was developed in response to severe red tide impacts in 2025 and is now engaging citizen scientists to collect early-detection samples throughout St. Andrew and St. Joseph Bays. The Bay Guardians project will expand volunteer water quality monitoring, evaluate whether existing stations accurately represent conditions in local bayous, establish new monitoring sites in St. Joseph Bay, and develop public-facing data dashboards. Committee members provided feedback on proposed monitoring station locations, discussed monitoring priorities and data gaps, and shared resources related to HAB response funding and water quality databases. The meeting concluded with announcements regarding upcoming outreach events, volunteer opportunities, cleanup activities, and future STC meetings.

Access the meeting recordings [here](#) and meeting materials [here](#).

Living Shoreline Suitability Analysis

The committee received an update on the Living Shoreline Suitability Model, a project that SASJBEP has pursued since approximately 2022. Funding was finally secured, and we were able to start working on the project in January 2026. The model, developed by VIMS and already applied in areas such as Tampa Bay, Pensacola, and Choctawhatchee Bay, evaluates shoreline restoration opportunities using thirteen physical and environmental metrics. These include bank height, beach width, fetch, bathymetry, shoreline structures, land use, submerged aquatic vegetation, marsh presence, roads, boat ramps, and tributary designations.

A significant challenge has been that the model was originally developed for ArcMap, which is no longer supported. Because a public ArcGIS Pro version is not yet available, SASJBEP staff have been adapting and troubleshooting the workflow themselves with support from VIMS developers. Despite these technical hurdles, the project remains on schedule.





Discussion focused heavily on the fetch analysis component, which evaluates wind travel distance over open water and is one of the most computationally intensive portions of the model. Staff identified an issue with the buffer size used in St. Joseph Bay that inadvertently truncated portions of the bay and may require reprocessing. Committee members also discussed the relationship between fetch, wind, and bathymetry. While bathymetry is incorporated into the overall suitability assessment, participants noted that the model serves primarily as a screening tool rather than a site-specific engineering design tool. Questions were raised about bathymetry age and seasonal wind variability, but it was noted that detailed engineering analyses would occur later for actual restoration projects.

HAB Network

The HAB Monitoring Network was developed in response to severe red tide events experienced during the previous year, particularly in St. Joseph Bay. Impacts included prolonged red tide conditions, terrapin mortality, human health concerns, fish and dolphin deaths, business disruptions, and widespread media attention. Discussions with Mote Marine Laboratory highlighted the need for faster local information to support mitigation technology testing and response efforts.

The network uses citizen scientists to provide early detection monitoring. Volunteers receive sampling kits containing bottles and sample vials and submit observations through a Survey123 form that records date, time, and GPS coordinates. Kits are available in both Gulf and Bay Counties. Samples are preserved with Lugol's solution and later analyzed under microscopes housed at FSU Panama City.

The program currently operates without dedicated funding, relying on donated equipment, existing resources, and volunteer support. Participation has been strongest in St. Joseph Bay, and collected sample locations are displayed through a public dashboard.

Discussion included adding FWC fish kill reporting information to volunteer kits and surveys and to look into NOAA's HAB Event Response funding opportunity to help support the HAB Network. The group also discussed sample handling procedures and lessons learned related to Lugol's preservation solution, evaporation, and container compatibility. Additional volunteers are being sought both for field sampling and microscope-based analysis.

Bay Guardians

The Bay Guardians initiative is a citizen science effort focused on expanding water quality monitoring throughout St. Andrew and St. Joseph Bays. The project has three primary objectives: supporting community-based monitoring programs, evaluating whether existing monitoring stations accurately characterize waterbody conditions, and creating public-facing dashboards that make monitoring results more accessible.





St. Joseph Bay Monitoring Expansion

For St. Joseph Bay, the project will establish approximately five new volunteer-led monitoring stations. The original proposal envisioned ten stations, but increasing laboratory analytical costs required scaling back the number of sites. Proposed stations were selected to fill monitoring gaps not currently covered by CPAP, FDACS, or other entities.

Committee members discussed several proposed locations, including areas near the Gulf County Canal, wastewater infrastructure, and mid-bay regions with limited existing coverage. CPAP already collects nutrient samples at DEAR stations not shown on the project map and followed up to share the coordinates to ensure newly selected stations don't overlap and help increase coverage. Members emphasized balancing limited resources between tracking potential nutrient sources and achieving broad baywide coverage.

The discussion also highlighted the challenge of obtaining comprehensive information about who is monitoring what parameters across agencies. Existing databases such as WIN/STORET contain much of the information but were described as difficult to navigate and not user-friendly.

St. Andrew Bay Monitoring Evaluation

For St. Andrew Bay, the primary focus is evaluating whether current monitoring stations accurately represent conditions within individual bayous. This effort stemmed from public feedback regarding report cards that classify some bayous as having "good" water quality despite local concerns about recurring wastewater spills and degraded conditions.

Potential monitoring targets include Watson Bayou, Massalina Bayou, Callaway Bayou, Wetappo Creek, Lynn Haven Bayou, Robinson Bayou, Pretty Bayou, and Poston Bayou. Due to funding constraints, only four or five locations can be monitored at a time. The current strategy is to rotate monitored bayous between project years to maximize geographic coverage.

The committee discussed using these temporary stations to determine whether monitoring locations should be permanently relocated further upstream into tributaries and bayous. The project aims to ensure that condition assessments are consistent with actual environmental conditions and public observations.

Spatially Balanced Monitoring Design and Data Dashboard

Another major component of Bay Guardians involves developing a statistically defensible monitoring design for St. Andrew Bay. With assistance from retired EPA scientist Mike McManus, the team will evaluate various spatially balanced survey approaches to identify the most efficient number and arrangement of stations needed to characterize bay conditions. Potential approaches include treating the bay as a single system, distributing stations by





existing bay segments, or ensuring representation from bay segments as well as tributary bayous. Results and recommendations will be discussed further during the October STC meeting.

The project will also create a new public dashboard displaying monitoring data, making volunteer-collected information more accessible than current report card products and state databases. The goal is to improve transparency, public engagement, and understanding of water quality trends throughout the estuary system.

SASJBEP Announcements

Upcoming Events

- **Race for the Bay (5K & 10K):** September 26, 2026
 - Registration open
 - Volunteers and sponsors needed
- **History Class "Pouring Love" Fundraiser**
 - SASJBEP beneficiary for September
- **Bingo & Auction Fundraiser**
 - September 13, 2026, at 1:00 PM
 - Hosted at History Class
- **Tides & Talks**
 - Tentative dates:
 - September 10
 - October 8
 - November 12
- **International Coastal Cleanup**
 - Multiple cleanup events scheduled throughout Bay and Gulf Counties





- **Bay Ambassadors (formerly Teen Outreach Committee)**

- First meeting scheduled for the upcoming Saturday
- Open to high school students

Volunteer Opportunities

- HAB Monitoring Network
- HAB sample microscopy and analysis
- Bay Guardians water quality monitoring
- Race for the Bay event support

2026 STC Meeting Schedule

February 19	Subbasin Prioritization and Project ideas
April 16	CSTARS
August 20	Living shoreline suitability analysis for St. Andrew Bay
October 15	Water Quality
December 17	Year in Review

