

Environment & Wildlife Committee Special Called Meeting

October 25, 2024, 10:00 am

[Watch Live on YouTube](#)

Seabrook Island Town Hall, Council Chambers
2001 Seabrook Island Road
Seabrook Island, SC 29455



AGENDA

CALL TO ORDER, ROLL CALL & FOIA STATEMENT

APPROVAL OF MINUTES

- 1.) Environment and Wildlife Committee Meeting: June 20, 2024
- 2.) Environment and Wildlife Committee Meeting: September 12, 2024

ITEMS FOR INFORMATION AND DISCUSSION

- 1.) Review of Environment and Wildlife Conservation Grant Requests
 - a. The Avian Conservation Center - \$2,500.00 (*Action Item*)
- 2.) Marshfront Management Plan Update – Dr. Nicole Elko
- 3.) Beachfront Management Plan Update – Patrick Barrineau

COMMITTEE COMMENTS

ADJOURNMENT

Environment and Wildlife Special Called Meeting

June 20, 2024, 1:00 pm

[View Meeting on YouTube](#)

Seabrook Island Town Hall, Council Chambers
2001 Seabrook Island Road
Seabrook Island, SC 29455



MINUTES

CALL TO ORDER

Chairman Weis called the meeting to order at 1:00 pm.

ROLL CALL

MEMBERS PRESENT: Gordon Weis, Chairman; James Geiger, Mark Andrews, Dean Moor

STAFF PRESENT: Joe Cronin (Town Administrator)

FOIA STATEMENT

Mr. Cronin confirmed that the committee was in compliance with the Freedom of Information Act. Notice of meetings and agendas were posted and furnished to news media and all persons requesting notification.

APPROVAL OF MINUTES

May 9, 2024

Mr. Moor made a motion to approve the meeting minutes of May 9, seconded by Mr. Geiger. The motion passed unanimously.

The May 9 meeting minutes were approved UNANIMOUSLY.

ITEMS FOR INFORMATION AND DISCUSSION

Marshfront Management Plan

Dr. Nicole Elko of Elko Coastal Consulting informed the committee that her consulting group will be working on the Town of Seabrook Island's Marshfront Management Plan.

There was a brief discussion related to what areas of the marsh would be covered under the plan. Dr. Elko explained that jurisdictional lines were the main determinant of what areas of the marsh would be included in the plan.

Dr. Elko asked representatives from various community groups to discuss any strategies and/or goals they would like to see included and addressed as part of the marshfront plan.

There was a discussion related to protecting marsh areas from building encroachments, specifically seawalls. Mr. Cronin stated that Seabrook Island has an ordinance where building cannot occur inside of twenty-five feet of the OCRM Critical Line. Dr. Elko stated that these issues will be addressed in the plan.

There was a brief discussion concerning new residents of Seabrook Island. Representatives from community groups wanted the plan to include a strategy for engaging new residents and educating them on the importance of a healthy marsh.

Dr. Elko reported that her goal is for the plan to be presented to the Town of Seabrook Island in February 2025.

ADJOURNMENT

There being no further business before the committee, Chairman Weis declared the meeting adjourned at 2:09 pm.

Peter D. Wiggins II
Town Clerk

Environment & Wildlife Committee Regular Meeting

September 12, 2024, 10:00 am

[View Meeting on YouTube](#)

Seabrook Island Town Hall, Council Chambers
2001 Seabrook Island Road
Seabrook Island, SC 29455



MINUTES

CALL TO ORDER

Chairman Weis called the meeting to order at 10:02 am.

ROLL CALL

COMMITTEE MEMBERS PRESENT: Gordon Weis, Chairman; Fred Demler, James Geiger, Mark Andrews

STAFF PRESENT: Joe Cronin (Town Administrator), Tyler Newman (Zoning Administrator)

FOIA STATEMENT

Mr. Cronin reported that the committee was in compliance with South Carolina FOIA statutes. Agendas were posted and provided to news media and all persons requesting notification.

APPROVAL OF MINUTES

None

ITEMS FOR INFORMATION AND DISCUSSION

Greenspace Conservancy Grant Request

Discussions were had related to what reports the Greenspace Conservancy would provide to the Town. Mr. Cronin stated the grantee will be required to submit receipts to show that funds were spent in accordance with the grant terms.

Mr. Andrews motioned to approve the grant request, seconded by Mr. Geiger and the motion was passed.

The recommendation was approved UNANIMOUSLY.

Camp St. Christopher Grant Request

Mr. Geiger asked if Camp St. Christopher would be required to provide data to the Town that is collected as a result of grant funding. Mr. Weis stated that if the Town asked for the results Camp St. Christopher would provide it, but that there was no such requirement in the grant conditions.

Mr. Andrews motioned to approve the grant request, seconded by Mr. Geiger and the recommendation was passed.

The recommendation was approved UNANIMOUSLY.

Seabrook Island Birders Grant Request

After a brief discussion related to what supplies would be purchased with grant funds, Mr. Geiger motioned to approve the request seconded by Mr. Weis. The motion passed unanimously.

The recommendation was approved UNANIMOUSLY.

Beach Management
Plan

Patrick Barrineau of Coastal Science and Engineering provided an update to the Beach Management Plan. He asked staff to review the highlighted parts of the plan and update accordingly.

A discussion was had between committee members and Mr. Barrineau related to how models predict movement of Captain Sam's Inlet. The committee discussed with Mr. Barrineau the increasing rates of movement of the inlet and how that is addressed in the management plan.

Mr. Andrews recommended that the plan should highlight beach and habitat creation since 1976 including data on all threatened or endangered species found on Seabrook Island. There was further discussion on how the Town of Seabrook Island and the Seabrook Island Property Owners Association (SIPOA) could collaborate on plan initiatives.

Discussions were had related to the movement of Captain Sam's Inlet and how movement will affect both Kiawah and Seabrook Island.

Marshfront
Management Plan

Dr. Nicole Elko provided a brief update on the Marshfront Management Plan.

Discussions were had related to creating a "Living Shoreline" and what permits may be required for performing work below the OCRM critical line.

Mr. Geiger asked about land on Seabrook Island that is owned by various conservation groups, and how these parcels of land could be included in successfully reaching marshfront management goals.

Committee Comments

Mr. Andrews commented on Deveaux Bank being identified as a site of international importance by the Western Hemisphere Shorebirds Reserve Network.

Mr. Andrews also commented on the signs along Boardwalks 1, 7, and 9. He stated several groups had a goal of replacing the dolphin, turtle, and shorebirds sign.

ADJOURNMENT

There being no further business before the committee, Chairman Weis declared the meeting adjourned at 11:28 am.

Peter D. Wiggins II
Town Clerk



**Town of
Seabrook
Island** 2001

**Environment & Wildlife
Grant**

2024

Seabrook Island Road

Seabrook Island, SC 29455 townofseabrookisland.org kwatkins@townofseabrookisland.org

Contact Us: (843) 768-9121

The Town of Seabrook Island invites applications from eligible organizations for funding from the Environment and Wildlife Conservation Grants program. Environment and Wildlife Conservation Grants will be awarded to provide support for programs and activities that are designed to benefit the Town of Seabrook Island by preserving and protecting wildlife and wildlife habitat, enhancing environmental and wildlife conservation efforts, or improving citizen participation, satisfaction and sense of place. Applications will be accepted beginning on April 1, 2024, and will continue to be accepted until the earlier of October 1, 2024, or until all available funds have been committed.

1 APPLICANT INFORMATION			
Organization Name	Avian Conservation Center		
Contact Person	Christine Vessell, Advancement Associate		
Mailing Address	PO Box 1247, Charleston, SC, 29402		
Phone Number	PO Box 1247, Charleston, SC, 29402	Email Address	christine.vessell@avianconservationcenter.org
Brief description of the organization and its membership	<p>Rapid and dramatic changes to the environment caused by human activity have long-term effects on wild bird populations and their crucial habitats. Due to their wide distribution, environmental sensitivity, and dependence on a variety of habitat types, birds of prey offer valuable insights into ecological issues. Their status reflects the overall health of the ecosystem and the effectiveness of natural resource management overall.</p> <p>The Avian Conservation Center is located on a 156-acre campus near Charleston, SC, adjacent to the Cape Romain Wildlife Refuge and Francis Marion National Forest. It is recognized as the leading avian center in South Carolina and the only one in the nation that integrates science, education, research, medical care, captive breeding, and oiled bird treatment. Since its establishment in 1991, the Center has directly served all 46 South Carolina counties and has significantly contributed to the global community of specialists dedicated to preserving the natural world.</p> <p>The Avian Conservation Center encompasses three specific divisions: The Center for Birds of Prey, the Avian Medical Clinic, and the South Carolina Oiled Bird Treatment Facility.</p> <p>The Avian Medical Clinic provides professional medical treatment for nearly 1,000 injured or compromised birds of prey and shore birds each year, releasing the majority back to their natural habitats while utilizing strict criteria to provide sound assurance of their survivability in the wild. The Clinic has also led and participated in groundbreaking scientific research such as studies on avian population, genetics, and environmental toxicity.</p> <p>The Center's primary operating division, The Center for Birds of Prey, is open to members of the</p>		

	public through general admission without discrimination. In its fully outdoor campus, visitors learn about various raptor species on display, experience flight demonstrations, and participate in educational presentations for students of all ages. The Avian Conservation Center's comprehensive facilities and dedicated, experienced staff represent a unique and valuable resource in science and conservation within South Carolina and beyond.
What is the organization's annual budget?	\$1,284,500
Is this organization registered as a non-profit organization under state and/or federal law?	Yes If Yes, Tax ID #57-09-66813
If this organization is <u>NOT</u> registered as a non profit organization, please explain how and why the organization operates as a not-for-profit under the grant's eligibility criteria	

2	GRANT AMOUNT
Amount Requested (Min: \$250.00; Max: \$2,500.00)	\$2,500

3	PROJECT BUDGET	
In the space below, please provide a detailed budget showing how the requested funds will be spent if awarded:		
Item(s) or Service(s) to be Purchased	Vendor (If Known)	Amount Budgeted
Anticoagulant Rodenticide (LC/MS) code 1004	Texas A&M Veterinary Diagnostic Laboratory	\$2,250
Collection/testing supplies	Antech diagnostics	\$250
		\$
		\$
		\$
TOTAL		\$2,500

4	PURPOSE
In the space below, please describe how these funds will be used to benefit the Town of Seabrook Island	

One category of commonly used rodent poisons, anticoagulant rodenticides, (ARs) causes serious health issues and even death to wild birds of prey such as owls, hawks, and eagles when they consume poisoned rodents. The most dangerous of these rodenticides are second-generation anticoagulants, which cause internal bleeding, eventually causing shock, organ failure, and a long-suffering death.

In the past three years, the Avian Medical Clinic has admitted several Great-horned owls exhibiting symptoms of rodenticide poisoning, including lying prone with dilated eyes, labored breathing, pale mucosa, and unexplained hemorrhaging or bruising. Unfortunately, most of the owls presenting with these symptoms have died shortly after being admitted.

Due to the increasing awareness of birds admitted with these symptoms, the Avian Medical Clinic has identified anticoagulant rodenticide poisoning as a broader issue in the region. Specific testing for ARs is costly and can be performed only by an experienced diagnostic laboratory. With limited resources, the Clinic has only been able to test five cases of suspected rodenticide exposure and, in all cases, poisoning from multiple second-generation anticoagulant rodenticides was confirmed.

The Avian Medical Clinic is currently planning a more extensive study to test for and quantify the prevalence of ARs in its bird of prey patients, determine possible sources of exposure, and find the means to address and decrease the level of exposure to these lethal compounds.

The Clinical objectives for this study are to:

- Quantify the impacts of ARs on a broad sample of bird subjects, qualify the physical effects of exposure, and identify which second-generation ARs are most harmful.
- Develop treatment protocols for living patients that serve to increase the survivability of rodenticide exposure.
- Inform the public about the lethal impacts of ARs on birds and other wildlife and alternatives to their use. This messaging will be provided through the Avian Conservation Center’s educational programs reaching more than 40,000 individuals each year, as well as the Center’s website and extensive social media channels. **The Center’s education staff will develop specific strategies to reach those in the in the Seabrook and John's Island region** about the dangers of anticoagulant rodenticides and alternative pest control options that pose a lower risk of toxicity to beneficial predators.

The Center anticipates testing 50 affected birds per year over this three-year study, based on an average of 30 Great horned owls admitted annually, plus an estimated 20 additional birds representing different species of owls, hawks, and eagles.

Preserving and protecting these birds is of the utmost importance for native species conservation and the Lowcountry’s ecosystem. **Generous funding from the Town of Seabrook Island will be applied directly toward expenses related to the study, including laboratory testing for rodenticide compounds in suspected cases.**

5	REIMBURSEMENT
Upon presentation of all required documentation and/or receipts, to whom should the grant check be sent?	Avian Conservation Center PO Box 1247, Charleston, SC, 29402

Note: All documentation must be submitted to the Town Clerk no later than December 15th of the grant year.

6

CERTIFICATION

I hereby certify that all information contained herein is true and accurate to the best of my knowledge. I certify that I have the authority to submit this application on behalf of the above-named organization. I acknowledge that the Town reserves the right to require additional information and that the submittal of this application is not a guarantee of grant funding. On behalf of the organization, I acknowledge that any awarded funds shall be spent in accordance with all applicable laws and shall conform to the guidelines of the grant program. Furthermore, I acknowledge that the town is not party to nor liable for any dispute associated with the expenditure of awarded funds.

Applicant Signature



Applicant Printed Name

Christine Vessell

Submittal Date

9/30/2024

**Town of Seabrook Island Marshfront Management Plan
Progress Meeting Agenda: Friday, October 25 at 10:00 AM**

<https://us02web.zoom.us/j/82877257421?pwd=BPBJzO5Kjln2OKgTo2wryKR5tCb9IT.1>

Meeting ID: 828 7725 7421

Passcode: 125596

AGENDA

1. September (9/12) Meeting Recap:

- Preliminary Goals & Objectives
- Stakeholder Engagement Analysis
- Other engagement and collaboration: Kiawah Conservancy Green-Infrastructure Practices & Nature-Based Solutions Manual
- Marshfront Site Visits

2. Draft Recommendations

- Slides
- Handout

3. Guest Presenters:

- Nick Plaisted
Wildlife Biologist, SCDNR
Marine Resources Division
- Katie Finegan, PE (virtual)
Coastal Processes Specialist
S.C. Sea Grant Consortium
- Lee Bundrick
Sr. Ecological Health & Conservation Coordinator
Kiawah Conservancy

4. November 19 Work Session at 12:30PM

- 2 hour “open house” prior to council meeting
- Purpose: Gain stakeholder input to prioritize recommendations

Goals, Objectives, and Recommendations

This list of goals and objectives was shaped by input from Town staff, the Environmental Committee, key stakeholders (marshfront property owners, representatives of each governing entity, local business owners, subject-matter experts, local organizations, and state agencies). Each goal includes prioritized objectives with specific recommendations to achieve them. The order of recommendations is based on stakeholder feedback from surveys, and will be refined following the November work session. It does not necessarily reflect the ease of, or timing for, implementation.

Engage

Engagement with the Seabrook Island community is essential for the success of the Marsh Management Plan (MMP). [Insert specific example here]. The following actions are recommended:

Seek Stakeholder and Community Input and Encourage Participation

- Solicit input on marsh management plan (MMP) development and updates to ensure co-development and stakeholder engagement.
- Provide regular updates on MMP progress to keep the community informed and involved.

Develop a Communication Plan

- Include the motivation for efforts to increase Seabrook's coastal resilience in response to future climate change and rising sea levels.
- Outline how information will be shared among stakeholders, ensuring seamless coordination among all relevant entities.
- Utilize various communication channels (in order of stakeholder preference):
 - Emails
 - Community meetings
 - Newsletters
 - Social media
- Coordinate with Abby Grooms, the Town's communications manager, to utilize "Tidelines" and email blasts for effective community outreach.

Offer Public Education and Guidance Strategies by leveraging information from partner organizations like SC Sea Grant Consortium and Kiawah Conservancy

- **Develop educational campaigns for the public, property owners, and decision-makers**
 - Foster a community that understands Seabrook's marsh values and functions

- Include information about marsh dynamics, health, and the impacts of management actions such as bulkheads.
- Create and distribute educational resources in both physical (e.g., kiosks, signage) and virtual formats.
- Create demonstration sites on public marshfront property to show best practices for marsh management.
- **Create volunteer opportunities**
 - Assist with monitor goal by developing citizen science programs for data collection
 - Complement the restore goal with community marsh-clean up events or vegetation plantings

Monitor

In collaboration with the Kiawah Conservancy, the Town should monitor the health and condition of Seabrook Island's marsh areas for informed management and effective decision-making. By quantifying marsh acreage, assessing ecological indicators, and inventorying infrastructure, the Town can identify potential threats and changes over time. Establishing comprehensive monitoring protocols will enable timely responses to evolving conditions and ensure the long-term resilience of the marsh ecosystem. The following actions are recommended to enhance monitoring efforts:

Identify and Define the Extent and Characteristics of Marsh Areas

- Map baseline sea level conditions and future marsh migration pathways
- Map key indicators for marsh health, such as the Unvegetated-Vegetated Ratio (UVVR), to monitor vegetative cover and marsh die-off.
- Establish protocols for monitoring marsh health, including water quality, economic value, and wildlife populations.
- Develop an Arc Map Online tool to compare various layers of marsh maps and marshfront inventories created during the planning process.

Inventory and Map Infrastructure

- Map the critical line surrounding Seabrook Island to establish a baseline for monitoring erosion rates.
- Monitor marsh shoreline positions where infrastructure crosses the critical line, including docks, boat ramps, bulkheads, and creek bends, which have a higher potential for erosion.
- Inventory public property, vacant/undeveloped lots, and conserved lands along the marshfront for potential demonstration sites.
- Refine mapping of the coverage of permeable surfaces in the community with on-the-ground quality checking.
- Identify areas at risk of marsh-related coastal flooding.

Protect

Protecting Seabrook Island's marshfront is vital to safeguarding property and ensuring the ecological integrity of these sensitive areas. This goal emphasizes the importance of enhancing regulations, promoting sustainable practices, and investing in innovative solutions to preserve the marsh's health for future generations. The following actions are recommended:

Reduce Threats to Property and Address Erosion

- Evaluate options for marshfront property owners to balance property protection with marsh preservation, such as green infrastructure.

Adjust Local Regulatory Framework to Protect Marshlands

- Transition Agricultural to Conservation Zoning along the marshfront to reduce development pressure and protect sensitive ecosystems.
- Clarify zoning regulations to prevent encroachments on adjacent marshlands and other environmentally sensitive areas.
- Reduce impermeable surfaces in the community to minimize runoff into the marsh.

Evaluate Green and Grey Infrastructure Solutions

- Expand the critical line setback to include a vegetative buffer.
- Incentivize private on-site stormwater management to reduce runoff from marshfront properties.
- Pilot green infrastructure projects on public lands, such as vegetative buffers and rain gardens.

Restore

By encouraging and implementing innovative restoration techniques, such as living shorelines and thin layer placement, the Town can foster ecological resilience in the face of climate change. To facilitate following restoration recommendations, the Town should collaborate with local organizations and explore funding opportunities.

Implement Living Shorelines

- Pilot living shoreline projects on public lands to protect marshfronts while enhancing habitat.
- Create incentives for adjacent marshfront property owners to collaborate on restoring privately held marshfront sections.

Plan for Long-term Marsh Restoration

- Explore the potential for Thin Layer Placement to rebuild marsh elevation and resilience.

Incorporate Best Practices

- Utilize the Kiawah Conservancy's Nature-Based Solutions manual and Audubon International's certification of Seabrook's golf courses to integrate sustainability into marsh restoration.
- Collaborate with local experts and organizations, such as Clemson Extension, SC DNR's SCORE program, and South Carolina Sea Grant, to leverage expertise and resources for marsh restoration.

Explore Creative Funding Opportunities

- Establish a marsh mitigation bank fund for future large-scale public marsh restoration projects.
- Offer mini-grants to marshfront property owners to support the installation of green infrastructure and living shorelines.

Conserve Marshfront Property

- Partner with the Seabrook Island Green Space Conservancy to identify, acquire, or conserve vulnerable marshfront lands.

Adapt

Implementing adaptive management practices will ensure that marshfront areas remain resilient in the face of ongoing climate impacts. The following actions are recommended:

Adapt to Changing Climate Conditions and Rising Sea Levels

- Understand and plan for adaptation strategies to address the impacts of sea level rise on marshlands.

Scope and Align Adaptation Efforts

- Understand the extent of marsh areas and develop adaptation strategies in response to rising sea levels and climate change.
- Align marsh adaptation plans with other local strategies, including the Town's Comprehensive Plan and other environmental resilience initiatives.

Identify and Implement Adaptive Management

- Implement adaptive management practices in areas with significant marshfronts, such as Bohicket Marina Village.
- Develop long-term adaptation strategies to address the evolving environmental conditions of the marshfront ecosystem.