# Funding recommendations for 2025-2026 Trust Fund Monies

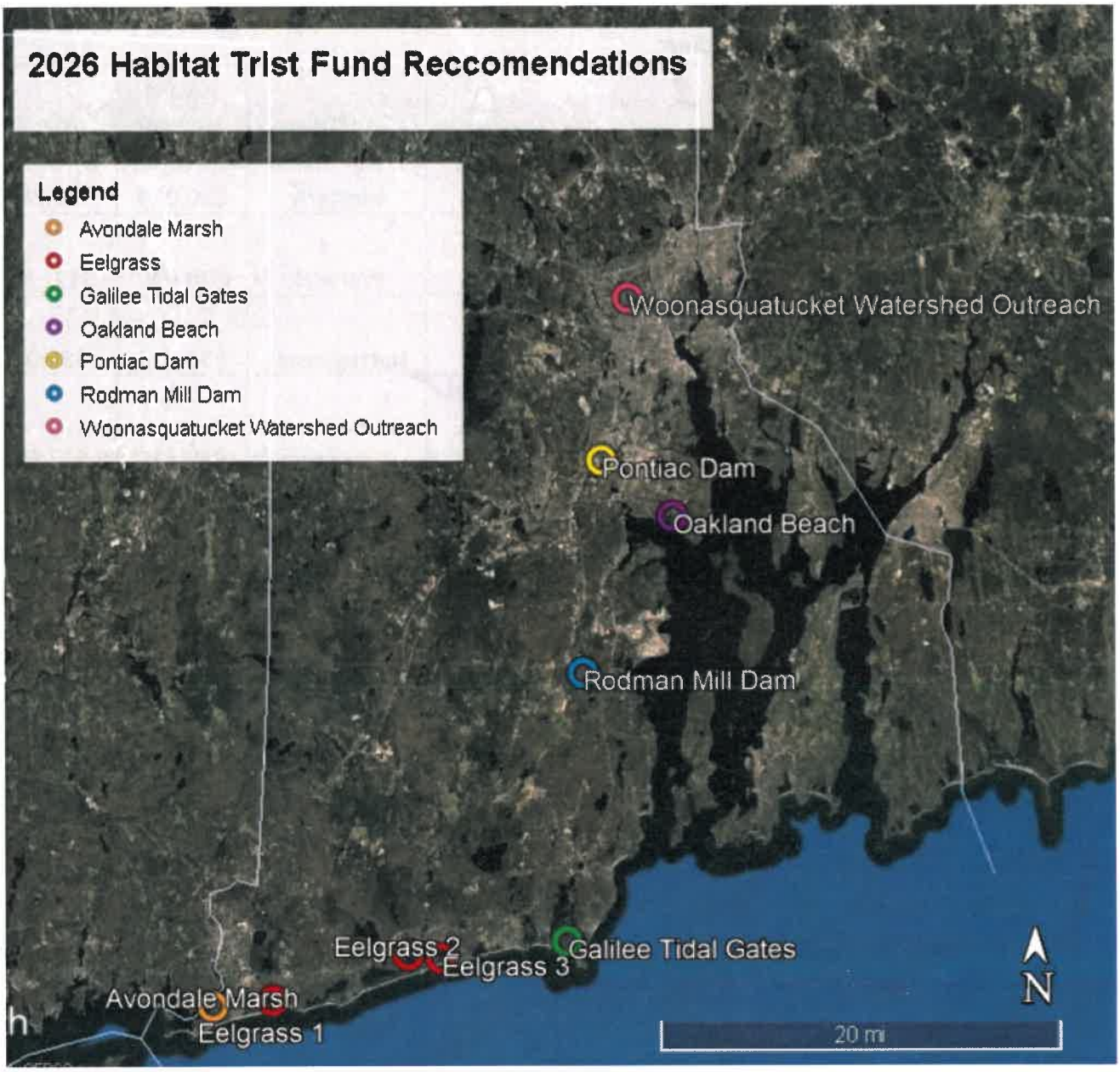
**Projects recommended for funding:**

| Project Name | City/Town | Award Amount | Match |
|---|---|---|---|
| Avondale Salt Marsh Restoration and Marsh Migration Facilitation Project | Westerly | $20,000 | $8,280 |
| Pontiac Dam Site Survey to Support Dam Removal Design and Permitting | Warwick | $20,000 | $125,500 |
| Galilee Salt Marsh Tide Gate Repair and Recalibration | Narragansett | $50,000 | $85,000 |
| Removal of the Rodman Mill Dam, and Associated Site Improvements to Enhance Climate Resiliency on the Annaquatucket River in North Kingstown, Rhode Island | North Kingstown | $49,426 | $11,634 |
| Oakland Beach Coastal Invasive Species Mitigation and Habitat Restoration Preparation | Warwick | $12,000 | $13,666 |
| Enhancing Eelgrass Resilience and Thermal Tolerance through Seed-Based Restoration and Enhancement Approaches | Westerly, Charlestown, South Kingstown | $50,000 | $380,752 |
| Engaging Woonasquatucket Watershed Communities in Coastal Resilience and Habitat Restoration | Providence County | $23,574 | $358,025 |
| ***Total*** | | ***$225,000*** | ***$982,857*** |

**Habitat Restoration Team Technical Advisory Committee:**

| Member | Affiliation |
|---|---|
| Tom Ardito | Restore America's Estuaries |
| Caitlin Chaffee (Chair) | Narragansett Bay National Estuarine Research Reserve |
| *Philip Edwards | RI DEM Division of Fish and Wildlife |
| Natalie Schafer | US Environmental Protection Agency |
| Emily Hall | RI Coastal Resources Management Council |
| Suzanne Paton | US Fish and Wildlife Service |
| Danielle Perry | National Oceanic and Atmospheric Administration |
| Margherita Pryor | US Environmental Protection Agency |
| Jenifer Rodgers | Narragansett Bay Estuary Program |
| Darcy Young | Narragansett Bay Estuary Program |

**Member recused from reviewing some full proposals*


2026 Habitat Trist Fund Reccomendations
Legend
Avondale Marsh
Eelgrass
Galilee Tidal Gates
Oakland Beach
Pontiac Dam
Rodman Mill Dam
Woonasquatucket Watershed Outreach
Woonasquatucket Watershed Outreach
Pontiac Dam
Oakland Beach
Rodman Mill Dam
Eelgrass 2
Eelgrass 3
Galilee Tidal Gates
Avondale Marsh
Eelgrass 1
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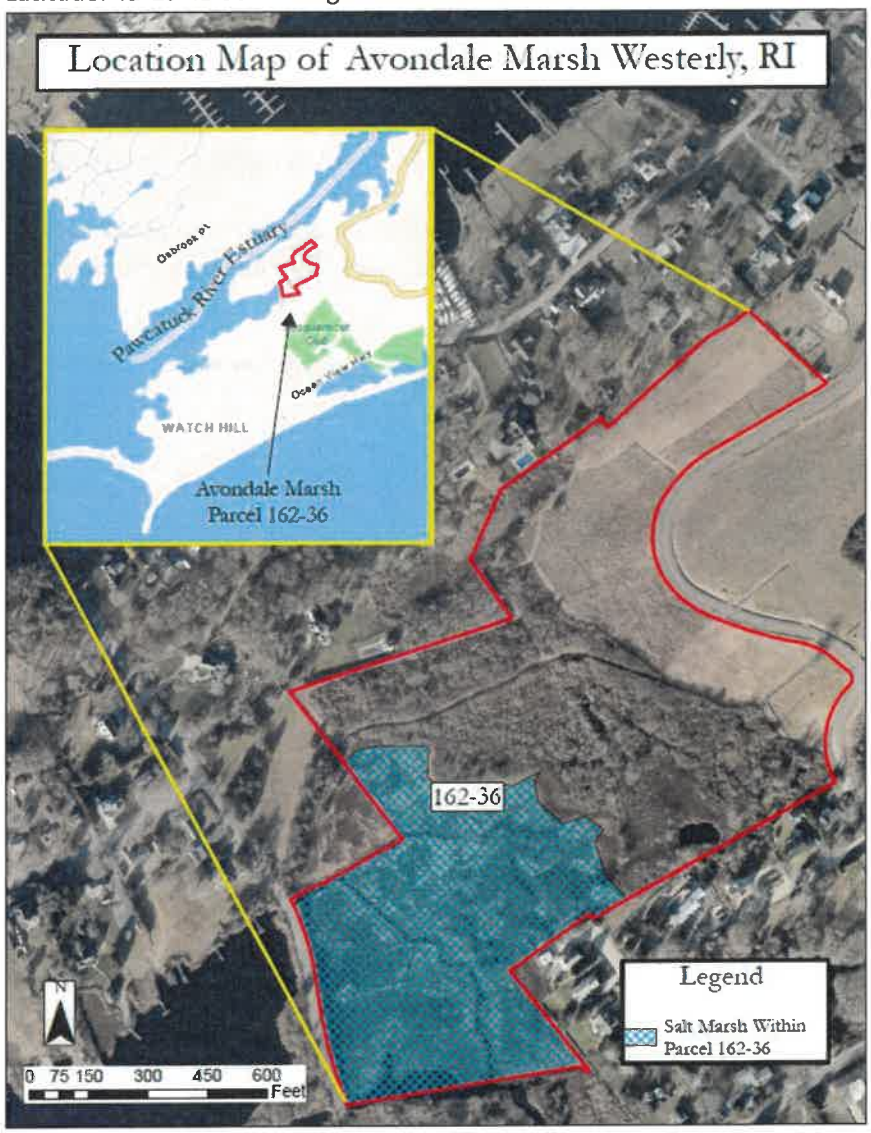
**Rhode Island Coastal and Estuary Habitat Restoration Fund**
**Full Proposal Form 2025/2026**

## I. PROJECT SUMMARY

1. **Project Title:** Avondale Salt Marsh Restoration and Marsh Migration Facilitation Project

2. **Project Location and coordinates**: Avondale Salt Marsh, Avondale Farm Preserve, Westerly, RI, Latitude: 41°19'42.30"N Longitude: 71°50'21.23"W




3. **Project type** *(Design, Construction or Other)*: Design, permitting, and implementation

4. **If other, please specify:**

5. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: Salt marsh

6. **If other, please specify**:

7. **Restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: Tidal hydrology restoration

8. **Total acreage or miles(river systems) of habitat to be restored, or project area planning unit size:**
   11-acre salt marsh and 12.5-acre marsh migration corridor

9. **Project benefits:** Restoration of the hydrology of the marsh to reduce the height and density of *Phragmites*, restore native salt marsh habitat, reduce marsh platform subsidence, decrease mosquito breeding habitat, and facilitate future marsh migration

10. **Project partners** *(organizations providing financial or other support to the project)*: Save The Bay

11. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** Yes **If yes, year(s) funding was awarded: 2012**

## II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Jennifer Fusco

2. **Organization**: Westerly Land Trust

3. **Address**: P.O. Box 601

4. **City**: Westerly **State:** RI **6. Zip**: 02891

7. **Phone**: (401) 315-2610 **8. Email**: jfusco@westerlylandtrust.org

9. **Property Owner(s)**: Westerly Land Trust

   See attached *Proof of Ownership.*

## III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

| | | |
|---|---|---|
| | **Amount Requested from Trust Fund** | **$20,000** |
| **Matching Funds** | **Project Partner(s)** | **Amount of Match** |
| **Stewardship Volunteers** | Westerly Land Trust | $7,306 |
| **Interns** | Save The Bay | $974 |
| | **TOTAL PROJECT COST** | $28,280 |

## IV. PROPOSAL NARRATIVE (five pages maximum)

### 1. Justification and Purpose

The Westerly Land Trust owns 11 acres of the Avondale salt marsh, a salt and brackish marsh on the east side of the Pawcatuck River that is part of the 31-acre Avondale Preserve. The salt marsh has experienced marsh degradation, including impounded water on the marsh platform, vegetation die-off, degradation of marsh substrate, and significant expansion of *Phragmites australis* due to impounded brackish water (Figures 1 and 2). Legacy human impacts from past agricultural (Adamowicz, 2020), mosquito control activities, and watershed development have impacted the hydrology of the marsh platform, including at least two agricultural embankments that impound fresh and brackish water in the migration corridor (Figure 3), ditch spoils parallel to the ditches that impound saltwater on the marsh platform, and stormwater runoff from surrounding development. Accelerated sea level rise is further impacting the health of this marsh.

Rhode Island Department of Environmental Management's (RIDEM) Mosquito Abatement Program and the Westerly Land Trust conducted hydrology restoration in the northeast corner of the marsh in the fall of 2014 to reduce the amount of impounded brackish water on the marsh that created mosquito breeding habitat and conditions to allow *Phragmites* to expand in the upper marsh. The Mosquito Abatement Coordinator used RIDEM's low ground pressure excavator to maintain a ditch and to create a new drainage feature to drain impounded brackish water in the *Phragmites*-dominated marsh. This project reduced the density and the coverage of *Phragmites,* and allowed native salt marsh vegetation to reestablish in former Phragmites dominated areas.

The Westerly Land Trust hired an environmental consultant to conduct pre- and post-restoration monitoring. The monitoring results highlighted a reduction in *Phragmites* density and an increase in native salt marsh vegetation cover. Since the restoration activities have occurred, the downstream section of the drainage feature installed by RIDEM has become clogged with *Phragmites* rhizomes, impounding brackish water on the marsh platform (Figure 4). In the last few growing seasons, the *Phragmites* has begun to recolonize areas where its density had been reduced and to encroach on areas where native salt marsh vegetation had become established.

The proposed restoration project will expand the restoration area to include hydrology restoration of the marsh migration corridor by re-establishing a drainage feature through the agricultural embankment located along the edge of the brackish section of the marsh and by conducting hydrology restoration in the southern and western sections of the marsh through installation of shallow hand-dug runnels where native vegetation die-off has occurred due to impounded water. Additionally, the drainage features installed by RIDEM's Mosquito Abatement Coordinator will be maintained. The excavated peat from the runnels will be placed on the marsh platform in small peat islands that are slightly higher in elevation and revegetated with either low or high marsh vegetation. This practice has been conducted by Save The Bay and RIDEM Mosquito Abatement since 2010 and the practice is included in the interagency Atlantic Coast Joint Venture's Saltmarsh Sparrow Conservation Plan (Hartley, M.J. and A.J. Weldon, eds. 2020) as a technique to increase saltmarsh sparrow breeding productivity and nest success by creating "microhabitats", small areas or "islands" of higher elevation marsh that experience less flooding from extreme tides and larger rain events. Based on the results of beneficial use of peat from other restoration projects, revegetation of the peat occurs after one to two growing seasons, stabilizing the peat. In areas where *Phragmites* is excavated, the *Phragmites* rhizomes and peat are placed in *Phragmites* dominated areas to prevent the spread of *Phragmites*.

Vegetation monitoring data from Save The Bay's salt marsh restoration projects have shown greater vegetation coverage and less standing water on the marsh surface, including 8 years of pre- and post-monitoring data from a tidal hydrology restoration project at a grid-ditched marsh on Winnapaug Pond conducted by Save The Bay in 2013 (Besterman, 2022) and a 5-year study of tidal hydrology restoration at a marsh impacted by legacy agricultural features on the Narrow River (Watson, 2022).

The goal of this salt marsh restoration project is to restore the marsh's health and function by improving the hydrology of the marsh platform and the marsh migration corridor. The Westerly Land Trust owns approximately 12.5 acres of the surrounding freshwater wetland and uplands adjacent to the marsh, where the salt marsh is projected to migrate under 5' sea level rise scenarios (Figure 5). In the short term, tidal hydrology restoration will prevent further marsh platform subsidence and enable revegetation in the southern marsh and will reduce the height and vigor of *Phragmites* in the upper marsh. In the long term, the salt marsh vegetation's belowground biomass will increase, stabilizing the sediment and enabling marsh building processes. Draining the impounded water will also reduce mosquito breeding habitat. The beneficial use of peat to create small, higher-elevation areas on the marsh platform will revegetate with either low- or high-marsh vegetation and will enhance nesting habitat for salt-marsh-dependent species such as the saltmarsh sparrow and willet.

**2. Project Activities, Schedule and Work Plan**

The Westerly Land Trust, working in coordination with Save The Bay's Director of Restoration and Salt Marsh Restoration Ecologist, will finalize the draft restoration plan created by Save The Bay (Figure 6) and share the plan with RIDEM's Mosquito Abatement Program for their input on mosquito breeding habitat reduction. Save The Bay will develop and submit state and federal permit applications on behalf of Westerly Land Trust and request a 10-year permit to allow the partners to continue maintaining the drainage features once the restoration project is finalized. Save The Bay will establish the monitoring transects, and Save The Bay and the Westerly Land Trust will conduct vegetation monitoring 1 year pre- and 2 years post-restoration. Once the state and federal permits are secured, Save The Bay will oversee the restoration activities, including operating RIDEM's low-ground-pressure excavator to conduct the restoration work in the *Phragmites*-dominated section of the marsh. The drainage features will also be installed via hand digging by staff, interns, and the Westerly Land Trust's stewardship volunteers. The project will be installed in phases to assess the effects of the drainage features and to allow unconsolidated sediment in the impounded water areas to stabilize and revegetate. After the 2 years of phased implementation, the Westerly Land Trust and Save The Bay will develop a maintenance schedule. The Land Trust's Land Stewardship Manager and volunteers will assess and maintain the drainage features in the spring and fall to remove wrack, vegetation, and *Phragmites* rhizomes.

**Timeline:**

May – August 2026: Finalize restoration plan. Meet with the Town of Westerly to address stormwater management in the eastern sub-watershed and assist the Town with conceptual design development and securing funding for design and implementation.

September – November 2026: Prepare and submit the state and federal permit applications and conduct the pre-restoration monitoring.

March - May 2027: Conduct the first phase of the restoration project and *Phragmites* mulching. Submit annual report.

June - September 2027: Conduct post-restoration monitoring and repetitive cutting of *Phragmites* during the growing season.

October - April 2028: Conduct the second phase of the restoration project. Submit annual report.

August - September 2028: Conduct post-restoration monitoring.

October – March 2029: Maintain drainage features. Submit final CEHRTF report.

**3. Minimization of Adverse Impacts**

Hydrology restoration activities in the marsh will occur outside the salt marsh bird nesting season from September to May to minimize disturbance to bird species such as the saltmarsh sparrow and the willet that nest on the marsh platform. Save The Bay will operate RIDEM's low-ground-pressure excavator to minimize impact on the marsh platform. In areas of the marsh not accessible to the excavator along the southern section of the marsh, the drainage features will be dug by hand by the Westerly Land Trust and Save The Bay staff and volunteers. Repetitive cutting of *Phragmites australis* will be done by hand during the first two growing seasons after the hydrology is restored to reduce its vigor.

**4. Public Support**

The Westerly Land Trust has communicated with watershed residents about the restoration project and has received support from the Avondale Homeowners Association. Additionally, the Town of Westerly supports the habitat restoration project as it aligns with the town's Comprehensive Community Plan by enhancing coastal resources and community resilience.

During the restoration phase of the project, the Westerly Land Trust will host a walking tour of the marsh for Westerly Land Trust members and abutters to highlight the marsh's stressors and the restoration approach.

**5. Economic and Educational Benefits**

The economic benefits of restoring salt marsh hydrology include improved habitat for nekton that live in salt marshes and are forage fish for recreationally and commercially valuable species such as striped bass and bluefish. Other economic benefits include improved recreational opportunities for the public, such as fishing and birdwatching. Healthy marshes can also provide some level of protection for infrastructure during coastal storms. Restoration of tidal hydrology will reduce mosquito breeding habitat and future mosquito breeding abatement costs.

There are many educational opportunities associated with this restoration project. The Westerly Land Trust will highlight the restoration project through their monthly stewardship e-newsletter *From the Ground Up*, their print newsletter *Sense of Place*, social media, and signage at the Avondale Preserve. Save The Bay will also highlight this restoration project through their monthly Currents e-news, Tides Magazine, and social media. Westerly Land Trust's volunteer stewards, including high school students, will learn about salt marsh ecology and hydrology restoration.

**6. Coastal Resiliency**

Restoring the ecological health of salt marshes by providing shallow drainage of impounded water areas will allow plants to recolonize the marsh, stabilize peat and unconsolidated sediments, and increase the marsh's ability to keep pace with accelerated sea-level rise. The freshwater wetlands and undeveloped protected uplands bordering the Avondale salt marsh provide space for marsh migration under future sea level rise scenarios. Removing the impediments to marsh migration by re-establishing drainage features through the legacy agricultural features such as stone walls and earthen embankments will create conditions more suitable for the salt marsh migration. The proposed restoration activities will enable the marsh to keep pace with accelerated sea-level rise, facilitate marsh migration, and restore the functions and values that marshes provide for fish and wildlife habitat, carbon sequestration, nutrient cycling, and storm buffering.

**7. Planning Consistency and Restoration Priority**

Rhode Island's Coastal Wetland Restoration Strategy (2018) describes the need for salt marsh restoration due to past stressors and accelerated sea level rise. It highlights restoration techniques, including drainage enhancement through runnels and tidal hydrology restoration. The State's Wildlife Action Plan (2015) includes that salt marshes are highly vulnerable to climate change and the saltmarsh sparrow is listed as a Species of Greatest Conservation Need.

The Atlantic Coast Joint Venture's (ACJV) Salt Marsh Bird Conservation Plan, in which they identify the saltmarsh sparrow among the highest priority species for conservation. The plan identifies as a priority the implementation of promising management actions, including 1) the creation of runnels to improve drainage of ponded areas, 2) improving drainage by remediating ditches, trunks, and dikes to restore more natural hydrology, and 3) the creation of micro-topography/peat islands to provide nesting areas less prone to flooding. The ACJV Conservation Plan identifies evaluating these restoration techniques as a priority science needed to advance conservation for this species.

**8. Species of Concern**

The restoration of high marsh habitat that provides habitat for nesting birds during tidal flooding events will directly benefit tidal marsh specialists such as the saltmarsh sparrow, *Ammodramus caudacutus*, and other bird species that nest on the marsh, such as the willet, *Tringa semipalmata*, that rely on the high marsh for nesting areas (i.e., *Spartina patens, Juncus gerardii*). Increased inundation of the marsh platform and loss of high marsh species negatively affect salt marsh-dependent breeding birds through nest loss due to tidal flooding (Reinert 2006). With increased inundation of the marsh platform and loss of suitable nesting habitat, the saltmarsh sparrow population has significantly declined over an 18-year period, according to the SHARP (Salt Marsh Habitat and Avian Research Program). The saltmarsh sparrow is listed as globally vulnerable by the International Union for Conservation of Nature and is being considered for listing as federally endangered by the USFWS. Without immediate intervention to restore coastal habitat, it could become extinct within the next 50 years. Additionally, the Atlantic Coast Joint Venture lists the saltmarsh sparrow as a flagship species for conservation efforts and coastal marsh restoration.

**9. Permitting**

Save The Bay will prepare the following permit applications on behalf of the Westerly Land Trust.

- Coastal Resources Management Council Assent
- Rhode Island Department of Environmental Management Water Quality Certificate

- General Permit from the Army Corps of Engineers (ACOE). During the permitting process through the ACOE, federal agencies, including EPA, USFWS, and NOAA are consulted to ensure that the tidal hydrology restoration does not affect endangered species or essential fish habitat.

**10. Capacity of Lead Organization** (attach additional materials if necessary)

The Westerly Land Trust, nationally accredited by the Land Trust Alliance, has stewarded the Avondale Farm Preserve since 1998 and, therefore, has an intimate knowledge of this acreage. The Westerly Land Trust's Executive Director Jennifer Fusco and Land Stewardship Manager Marc Doherty will work in tandem with Save the Bay to execute this restoration project. Ms. Fusco has led the Westerly Land Trust as the Executive Director since 2018 and served on the Board of Directors prior to joining the staff. Mr. Doherty joined Westerly Land Trust in 2021 from the Bureau of Land Management in Kremmling, Colorado. He holds a degree in environmental studies from the University of Colorado. Both Ms. Fusco and Mr. Doherty are experienced in planning and executing long-term stewardship projects. The Westerly Land Trust and Save the Bay have a strong working relationship, as evidenced by their ongoing partnership on a similar tidal hydrology restoration project at Winnapaug Pond since 2019. They have continued to steward the site together since the initial restoration.

Save The Bay staff, Wenley Ferguson, Director of Habitat Restoration, and Ben Gaspar, Salt Marsh Restoration Ecologist, will conduct the restoration activities in coordination with the Westerly Land Trust. Wenley has coordinated tidal hydrology restoration projects since 1999 and, since 2013, has implemented and monitored more than 20 tidal hydrology restoration projects using runnels and selective ditch maintenance. She has experience designing projects, developing permit applications, overseeing implementation, and conducting pre- and post-restoration monitoring. Ben has worked at Save The Bay for over four years and was a Field Technician for USFWS for nine years. Ben has extensive experience in natural resource management, including invasive plant management, salt marsh assessment, and the implementation and monitoring of salt marsh restoration. Ben is a licensed equipment operator and operates the state's low-ground-pressure excavator.

## V. SUSTAINABILITY (one page maximum)

**1. Maintenance**

Tidal hydrology restoration of the marsh platform through the installation of runnels and the maintenance of a select number of ditches requires ongoing maintenance of these drainage features. Save The Bay will request a 10-year permit from the permitting agencies since the drainage features need to be maintained and cleared of vegetation and wrack, especially in a marsh with *Phragmites australis*. To conduct the ongoing maintenance, Save The Bay will work with the Westerly Land Trust's Stewardship Manager to train the Westerly Land Trust volunteers to assess how the drainage features are functioning and to maintain them if they are clogged by *Phragmites* rhizomes, wrack, or vegetation. The Land Trust and Save The Bay will develop an annual maintenance schedule for the drainage features once they are established to ensure that they remain functioning after the initial implementation phase.

The Westerly Land Trust has an active corps of nearly 40 volunteers that have participated in maintaining drainage features at another collaborative project with Save The Bay at Winnapaug Pond.

## 2. External Factors and Hazard Mitigation

The Avondale salt marsh is bordered by residential development along the eastern and western side of the marsh. Road runoff from Shephard's Run Road discharges into the upper marsh contributing to the *Phragmites* that has expanded in the marsh over the past 30 years. The Westerly Land Trust and Save The Bay have identified a potential stormwater retrofit at the end of Shepherd's Run Road and have shared a conceptual plan with the Town of Westerly's engineer. The plan has also received support from the Town Manager and Department of Public Works. We plan to conduct a site visit with the Town to further discuss the installation of a shallow infiltration area in the Town-owned land at the end of Shephard's Run.

The Westerly Land Trust will also share information with the marsh abutters about environmentally sound landscaping including limiting fertilizer use, irrigation and stormwater management through rain garden or rain barrel installation to reduce freshwater and nutrient inputs to the marsh. Save The Bay's Bay Friendly Living booklet and rain garden flyer will be distributed to residents.

# VI. EVALUATING PROJECT SUCCESS (one page maximum)

## 1. Performance Measures

*How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List performance measures and how they will be recorded. Include a detailed monitoring plan; if applicable (see below).*

The restoration project's success will be measured by monitoring vegetation response and changes in water level on the marsh surface, as described in the monitoring plan below. Additional metrics will include the number of land trust members and community volunteers involved in the project's implementation and maintenance, as well as any press coverage or social media about the restoration efforts.

## 2. Monitoring Plan

Save The Bay and the Westerly Land Trust staff will establish monitoring transects to document changes to vegetation communities and water levels over time. Monitoring will be conducted pre- and post-restoration. Save The Bay uses a line-point intercept method to monitor vegetation and conducts water level monitoring along each point of the transect. The Westerly Land Trust and Save The Bay will conduct three years of monitoring: 1 year pre-restoration and 2 years post-restoration. Additionally, drone imagery will be collected by Save The Bay before and after restoration to assess the spatial extent of vegetation recovery. Photo stations will be established in the salt marsh, and the Westerly Land Trust staff will take photos at least annually at these stations to assess vegetation response and determine the need for ongoing maintenance. The presence and absence of mosquito larvae will be assessed pre- and post-restoration. Adaptive management will be implemented in subsequent years in response to monitoring data.

**References:**

Adamowicz, S.C., G. Wilson, D.M. Burdick, W. Ferguson, and R. Hopping. 2020. Farmers in the marsh: Lessons from history and case studies for the future. *Wetland Science & Practice* 183–195.

Besterman, A., R. Jakuba, W. Ferguson, D. Brennan, Costa, J., L. Deegan. 2021. Buying Time with Runnels: a Climate Adaptation Tool for Salt Marshes. *Estuaries and Coasts*. https://doi.org/10.1007/s12237-021-01028-8

Hartley, M.J. and A.J. Weldon, eds. 2020. Atlantic Coast Joint Venture's Saltmarsh Sparrow Conservation Plan.

Reinert, S. E. (2006). Avian nesting response to tidal-marsh flooding: literature review and a case for adaptation in the Red-winged Blackbird. *Studies in Avian Biology*, *32*, 77.

Watson, E., W. Ferguson, L. Champlin, J. White, N. Ernst, H. Sylla, B. Wilburn, C.Wigand. 2022. Runnels Mitigate Marsh Drowning in Micro-Tidal Marsh. *Frontiers in Environmental Science*. https://www.frontiersin.org/articles/10.3389/fenvs.2022.987246/full

## VII. PROJECT BUDGET TEMPLATE

| BUDGET CATEGORY | CRMC REQUEST | MATCH | MATCH PENDING OR SECURED? (select one) | SOURCE OF MATCH | TOTAL |
|---|---|---|---|---|---|
| Project Management, Implementation and Maintenance: Westerly Land Trust staff and overhead rate of 10% | $4,232 | | | | $4,232 |
| Project Design, Permitting, Implementation and Monitoring: Save The Bay staff time, mileage, and overhead rate of 10% | $10,768 | | | | $10,768 |
| Project Implementation: Low-ground pressure excavator use | $5,000 | | | | $5,000 |
| Project Implementation and Maintenance: Westerly Land Trust volunteers | | $7,306 | secured | Westerly Land Trust volunteers | $7,306 |
| Project Implementation and Monitoring: Save The Bay interns | | $974 | secured | Save The Bay interns | $974 |
| **TOTAL** | $20,000 | $8,280 | | **TOTAL PROJECT COST** | $28,280 |

## VIII. BUDGET NARRATIVE (one page maximum)

The Coastal and Estuarine Habitat Restoration Trust Fund request will be used to fund the Westerly Land Trust's time for project coordination, implementation, and maintenance, and for Save The Bay's staff time to finalize the restoration plans, submit the federal and state permit applications, implement the project, and conduct pre- and post-restoration vegetation monitoring. Additionally, the funds will be used to rent the Rhode Island Department of Environmental Management's low-ground-pressure excavator. In-kind services will be provided by Westerly Land Trust volunteers and Save The Bay interns.

Westerly Land Trust Staff and Overhead: The Westerly Land Trust's Land Stewardship Manager will spend 115 hours on project coordination, volunteer recruitment, project implementation, maintenance, and report writing at $32 per hour. The federal overhead rate of 15% has been applied to staff time. Total Westerly Land Trust expenses will be $4,232.

Save The Bay Staff, Mileage & Overhead: Wenley Ferguson, Save The Bay's Director of Restoration, will spend 57 hours at $54.17/hour to finalize restoration plan, write permit applications, conduct project implementation and monitoring; Ben Gaspar, Salt Marsh Restoration Ecologist, will spend 58 hours at 49.55/hour to operate the excavator during the restoration implementation phase of the project; Alison Famiglietti, Restoration Technician will spend 63 hours at $31.29/hour assisting with restoration implementation, monitoring and maintenance. The round trip to Avondale Marsh is 100 miles; 16 trips will be 1,600 miles at $0.665/mile for a total of $1,064. The federal overhead rate of 15% has been applied to staff time. Total Save The Bay expenses will be $10,768.

RIDEM Mosquito Abatement Program's excavator: RIDEM's low-ground-pressure excavator will be rented for 5 days at $1,000 per day, totaling $5,000.

The Westerly Land Trust volunteers will spend 210 hours on tidal hydrology restoration, maintenance, and photo station monitoring valued at the federal volunteer rate of $34.79 for a total of $7,306.

Save The Bay interns will spend 28 hours on restoration implementation and monitoring, valued at the federal volunteer rate of $34.79 for a total of $974.

*Figure 1: Impounded water on the marsh platform causing vegetation die-off and marsh subsidence.*

*Figure 2: Impounded brackish water allowing Phragmites to outcompete native salt marsh vegetation.*

*Figure 3: Agricultural embankment along edge of upper marsh covered with woody invasive shrubs.*

*Figure 4: Phragmites clogging main drainage feature causing brackish water to become impounded on the marsh.*

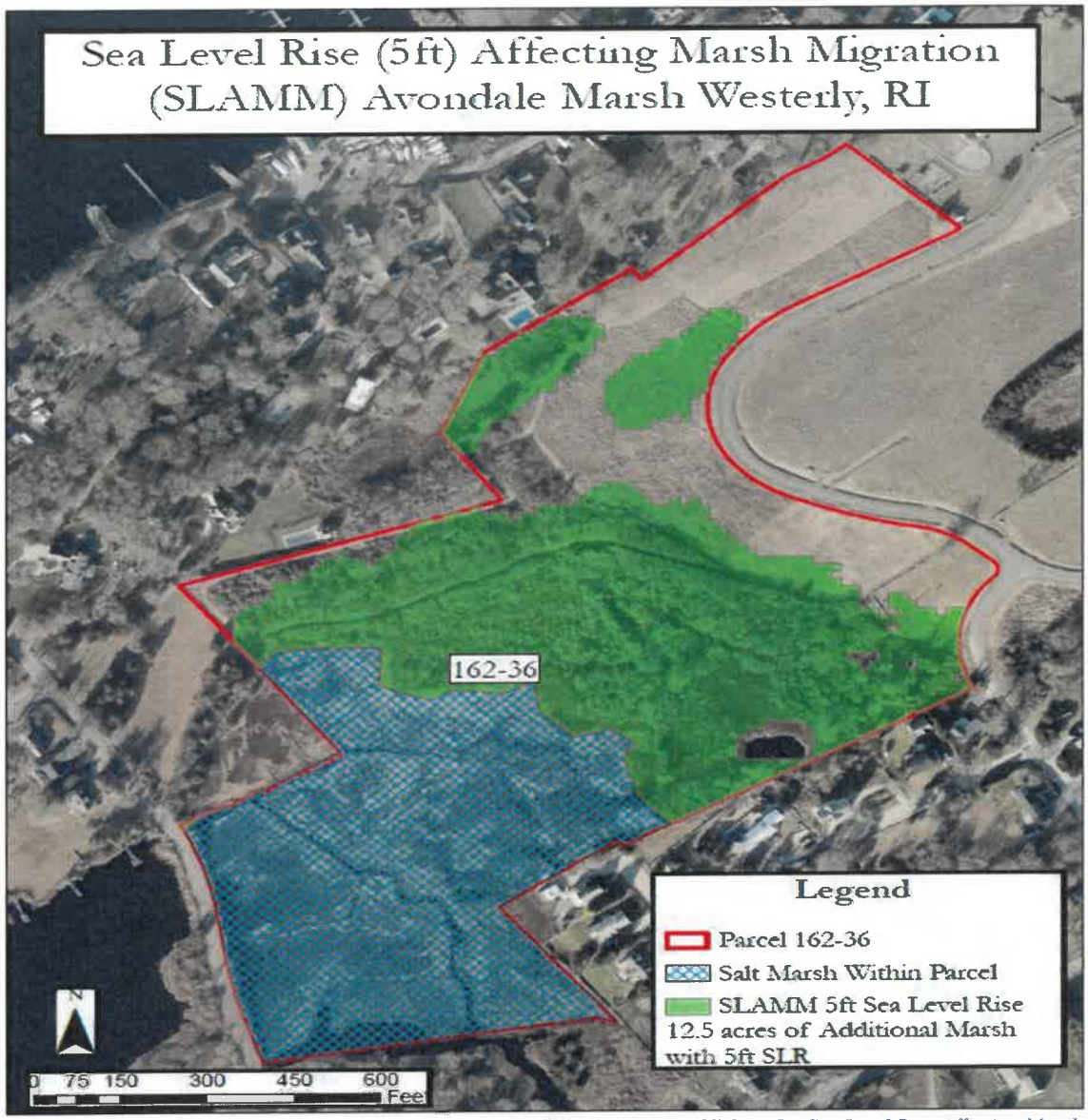



*Figure 5: Estimation of future salt marsh area with 5' of sea level rise. Source URI EDC's Sea Level Rise Affecting Marsh Migration Map*

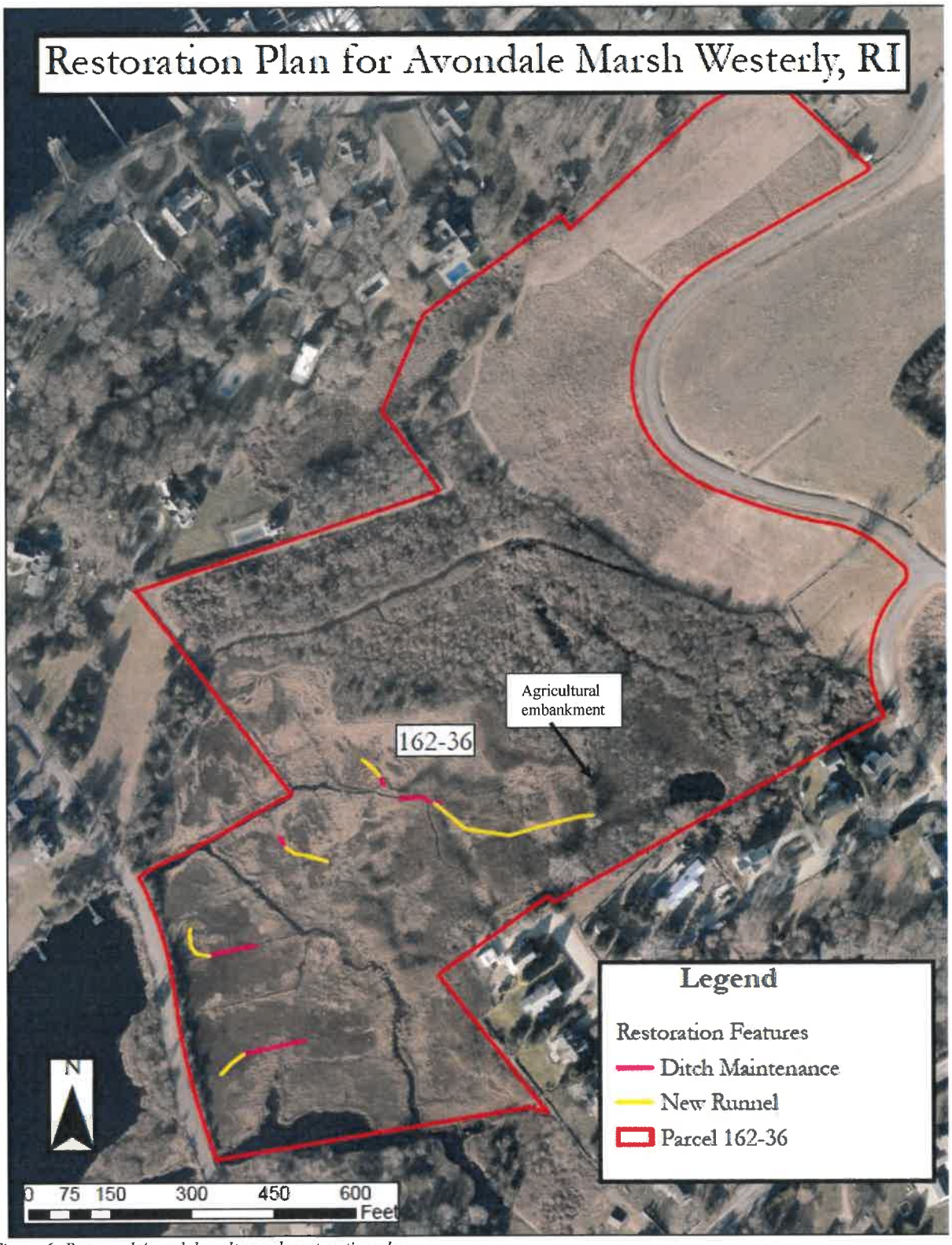



*Figure 6: Proposed Avondale salt marsh restoration plan*

## IX. ADDITIONAL MATERIALS

Please include the following with your application:

_X_ Site and Locus Maps

_X_ Ground-level photographs of existing site conditions

_X_ Aerial photographs, if available

_X_ Preliminary design drawings, maps or engineering plans, if available

__ Pertinent physical, ecological, biological, and cultural / historical survey data
*Information included in the narrative*

_X_ Letters of support

_X_ Proof of Ownership

*Town of Westerly*
*Rhode Island*

OFFICE OF THE TOWN MANAGER
Shawn M. Lacey, Town Manager

Town Hall
45 Broad Street
Westerly, RI 02891
TEL: (401) 348-2530
www.WesterlyRI.gov

January 16, 2026

Rhode Island Coastal Resource Management Council
Oliver Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, R.I., 02879

Dear Rhode Island Coastal Resources Management Council,

The Town of Westerly is pleased to support the Westerly Land Trust's application to the Rhode Island Coastal and Estuary Habitat Restoration Fund for the Avondale Salt Marsh Restoration Project.

The goals of the Avondale Salt Marsh Restoration Project are consistent with the Town of Westerly's Comprehensive Community Plan, which emphasizes the protection of coastal and estuarine resources, wetlands, and community resilience. By restoring marsh platform hydrology, this project advances the Town's goals of improving water quality, enhancing natural flood mitigation, and strengthening resilience to sea-level rise and climate-related impacts. The Town also recognizes the project partner, Save the Bay, as an expert in marsh restoration and is pleased to support the partnership.

The Town of Westerly values the commitment demonstrated by the Westerly Land Trust and Save The Bay to science-based habitat restoration and long-term stewardship, we strongly support this application and encourage CRMC to consider it fully and favorably. Thank you for your consideration.

Sincerely,

Shawn M. Lacey
Town Manager

# Avondale Homeowners Association

January 21, 2026

Rhode Island Coastal Resource Management Council
Oliver Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879

Dear Rhode Island Coastal Resources Management Council,

The Avondale Homeowners Association has an especially close relationship with The Westerly Land Trust for both geographical and historical reasons.

From a geographic perspective, Avondale surrounds The Preserve. Picture Avondale as a box with the Preserve being inside that box. This unique hamlet of the Town of Westerly, RI is bounded on two sides by The Pawcatuck River, Colonel Willy's Cove, which is also part of The River as well as the adjacent wetlands. The health of the river, the cove and the surrounding wetlands are of paramount importance to the homeowners of Avondale.

From an historical perspective, Avondale has numerous structures from both the 17 & 1800's including The Avondale Chapel which is more than 250 years old and remains an active house of worship, as well as a home from the late 1800's which used to be the Post Office of Avondale.

The Avondale Farm Preserve was the first acquisition made by The Westerly Land Trust some 30 years ago. The acquisition was funded by generous donations from the Avondale community as well as grants. The Avondale Homeowners Association (AHA) was founded subsequent to the creation of the Land Trust to perform work in our mutual best interests. The AHA and its members are generous contributors to The Preserve, the Avondale Chapel and other not for profit organizations which strengthen this community. The motto of AHA is "We help turn Avondale into a community rather than just a neighborhood".

We can think of no better and more responsive neighbor than The Westerly Land Trust. We have begun donating to Save The Bay and hope to increase that effort going forward.

We fully support the effort by The Westerly Land Trust and Save The Bay to enhance the health of the wetlands which are so integral to the Avondale Community. We are happy to answer any questions.

Thank you,

Kirk Materne, President

Tom Malone, Treasurer

**Avondale Homeowners Association | PO Box 1152, Westerly, RI 02891 | 917-941-3005**

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WARRANTY DEED

K.J.P. ASSOCIATES, L.L.C., a Delaware limited liability company duly authorized to do business in the State of Rhode Island, for consideration paid, grants to THE WESTERLY LAND TRUST, a Rhode Island non-profit corporation; with WARRANTY COVENANTS:

PARCEL I:

That certain tract or parcel of land, with all the buildings and improvements thereon, situated in Avondale, so called, in the Town of Westerly, County of Washington, State of Rhode Island, laid out and designated as Lots Numbered 4 through 34, excepting only Lot 22, and an open space area laid out and designated on that plat entitled, "AVONDALE FARMS SUBDIVISION, WESTERLY, RHODE ISLAND, SIEGMUND & ASSOCIATES, INC. CONSULTING ENGINEERS, 49 PAVILION AVENUE, PROVIDENCE, RI 02905, LASZLO S. SIEGMUND REGISTERED PROFESSIONAL ENGINEER OWNER AVONDALE FARMS ASSOCIATES, L.P. 822 MADISON AVENUE, NEW YORK, NEW YORK 10021 LAYOUT PLAN ZONING CLASSIFICATION R-30 PLAT NO. 162/LOT NO. 036 DATE MAY, 1994 SCALE 1"=100'", which said plat is duly recorded with the Records of Land Evidence in said Town of Westerly in Envelope Number 633 (the "Plan").

TAX $ 5040.00 DATE 10-22-98 RECORDED 005073 REAL ESTATE TRANSFER TAX

Together with all right, title and interest in the road, open space areas, and in all land shown on the above described Plan, and together with all right, title and interest in the restrictions recorded in Book 313 at page 61 and the restrictions recorded in Book 557 at page 14, as amended in Book 630 at page 313.

PARCEL II:

That certain lot or parcel of land located in the Town of Westerly, County of Washington and State of Rhode Island, being situated on Colonel Willie Cove, meaning and intending to describe all land now or formerly owned by Avondale Farms Associates, L.P. located on the westerly side of Avondale Road, so called, bounded on the east by said Avondale Road, bounded on the south by land now or formerly of James J. Longolucco, bounded on the west by said

1

Colonel Willie Cove and bounded on the north by land now or formerly of Norman G. Kenyon.

The undersigned hereby certifies that this transfer is exempt from the smoke detector law as provided in R.I.G.L. Section 23-28.35-14.

IN WITNESS WHEREOF, K.J.P. ASSOCIATES, L.L.C. has caused these presents to be executed by its duly authorized Manager this 14th day of October, 1998.

K.J.P. ASSOCIATES, L.L.C.,
a Delaware Limited Liability
Company

BY: _____
Khalil Rizk
ITS: Manager

STATE OF
COUNTY OF

In New York on the 14th day of October, 1998, before me personally appeared Khalil Rizk, Manager of K.J.P. ASSOCIATES, L.L.C., to me known and known by me to be the party executing the foregoing instrument, and he acknowledged said instrument, by him executed, to be his free act and deed individually, his free act and deed in his said capacity and the free act and deed of K.J.P. ASSOCIATES, L.L.C.

JANET GUARNIERI
Notary Public, State of New York
No. 01GU5067113
Qualified in Queens County
Commission Expires October 18, 2001

_____
Notary Public
My Commission Expires: _____

Grantee's Mailing Address:
The Westerly Land Trust
Attn: Jonathan D. Eckel, President
c/o Eckel Insurance, Inc.
75 Granite Street
Westerly, RI 02891

2

DONNA L. GIORDANO, CMC/AAE, TOWN CLERK
WESTERLY, RI RET: _____

**AUTHORIZED SIGNATURE**

**AUTHORIZED AGENT OF LEAD ORGANIZATION**

Jennifer Fusco, Executive Director

Signature

1/22/26

Date

Return your completed proposal by 4:00 p.m. on **January 23, 2026** to:

**Bruce Lofgren, AICP**
**RI Coastal Resources Management Council**
**Oliver Stedman Government Center**
**4808 Tower Hill Road**
**Wakefield , RI 02879**
**blofgren@crmc.ri.gov|**

Applicants are required to submit one (1) signed hard copy of the proposal form and one (1) electronic copy in Adobe PDF format. **Please submit electronic copy as a **SINGLE PDF FILE** containing all application materials.**

Contact Bruce Lofgren at by email or **401-782-4196** with any questions.

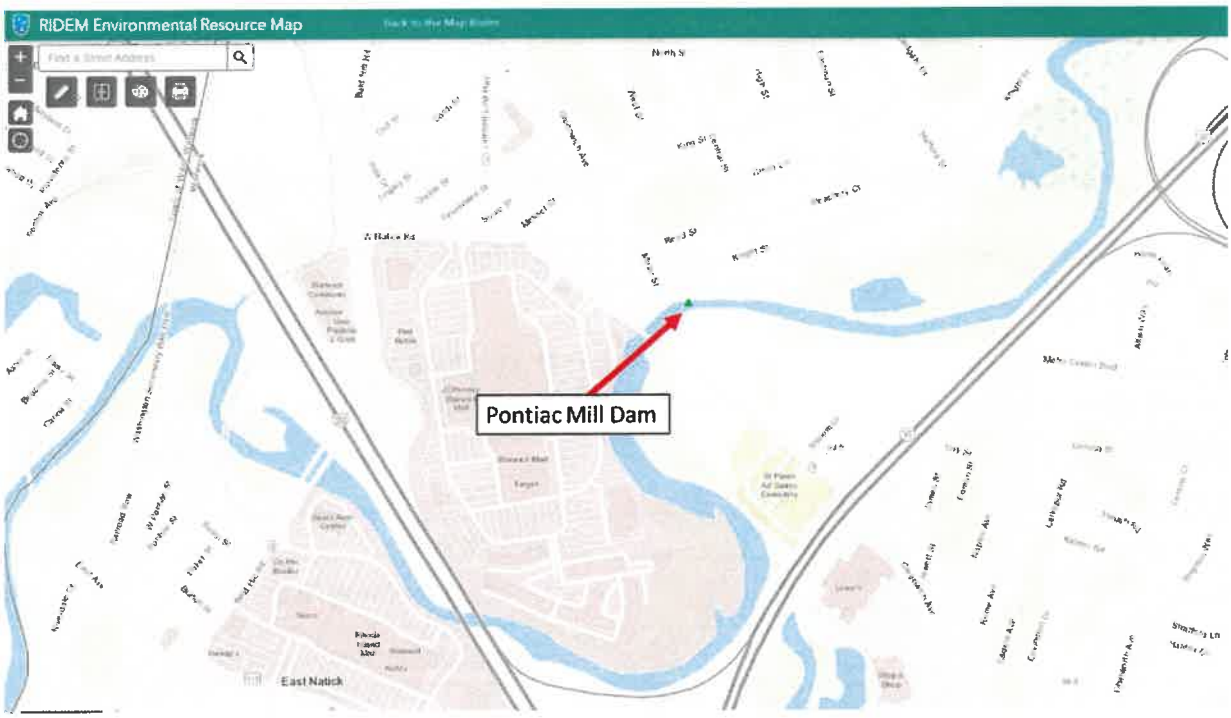
# Rhode Island Coastal and Estuary Habitat Restoration Fund
# Full Proposal Form for Planning Projects 2025/2026

****for design or construction projects please use Full Proposal Form**

## I. PROJECT SUMMARY

1. **Project Title:** Pontiac Dam Site Survey to Support Dam Removal Design and Permitting

2. **Project Location and coordinates** *(include map)*: Northeast of Greenwich Avenue in Warwick, Rhode Island. The coordinates of the dam are 41°43'34.5"N 71°28'16.9"W.




3. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: River System (Riparian Migratory Corridor for Anadromous Species)

4. **If other, please specify**:

5. **Targeted restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: Dam removal

6. **Potential future benefits resulting from proposed planning project:** Restoration of a riparian migratory corridor for anadromous fish and aquatic organisms, and enhancement of water quality. The project will also reduce flooding and enhance community resiliency.

7. **Project partners** *(organizations providing financial or other support to the project)*: Rhode Island Department of Environmental Management, City of Warwick, Pontiac Dam owners (Union Mill LLC and Picerne Real Estate Group), U.S. Fish and Wildlife Service, NOAA, and Rhode Island Chapter of Trout Unlimited. Letters of support from these project partners for previously funded phases of the Pontiac Dam project are attached.

8. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** Yes **If yes, year(s) funding was awarded:** $55,000 in 2024 to complete a bathymetric and sediment survey upstream of the dam, collect environmental DNA samples from the Pawtuxet River, and coordinate meetings with the dam owners.

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## II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Robert Nero
2. **Organization**: Pawtuxet River Authority and Watershed Council
3. **Address:** 282 Pulaski Street, Unit 4
4. **City:** Coventry **5. State:** RI **6. Zip:** 02816
7. **Phone:** 401-615-7039 **8. Email:** pra@pawtuxet.org
9. **Property Owner(s):** Union Mill LLC and Picerne Real Estate Group (co-owners of dam)

## III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

| | | |
|---|---|---|
| **Amount Requested from Trust Fund** | | **$20,000** |
| **Matching Funds** | **Project Partner(s)** | **Amount of Match** |
| *In-Kind (2024 SNEP Watershed Implementation Grant)* | *Pawtuxet River Authority* | *$124,500* |
| *In-Kind* | *Pawtuxet River Authority* | *$1,000* |
| | | |
| | **TOTAL PROJECT COST** | **$145,500** |

## IV. PROPOSAL NARRATIVE

**1. Justification and Purpose**

*Briefly describe the proposed planning project. What questions does it propose to answer? What are the restoration goals and anticipated long-term and short-term outcomes. Describe the human impacts and previous restoration activities within the proposed study area. If the project area includes multiple impacted sites, please describe the impacts and previous restoration activities at each.*

Following the removal of the Pawtuxet Falls Dam in 2011, the Pontiac Dam now remains the first obstruction to fish passage from tidal waters. Providing fish passage at this location by either fully or partially removing the Pontiac Dam will provide access to an additional 2.5 river miles and approximately 35 acres of habitat area upstream of the Pontiac Dam. Since the Pawtuxet Falls Dam

removal, there have been several studies conducted assessing dam removal and fish passage alternatives at the Pontiac Dam, but these studies identified several data gaps.

The PRA is currently using CEHRTF and SNEP SWIG grant funding to perform studies to fill some of the data gaps from previous studies, including conducting fisheries surveys, bathymetric and sediment surveys, hydrologic and hydraulic (H&H) modeling, and conceptual designs. Under 2024 CEHRTF grant, PRA contracted a consultant to perform a bathymetric and sediment survey upstream of the dam, collect environmental DNA samples from the Pawtuxet River to gather species information, and hold meetings with the dam owners. Matching funds under the 2024 CEHRTF grant included in-kind assistance from Rhode Island Department of Environmental Management Division of Fish and Wildlife, who performed an electroshocking fisheries survey downstream of Pontiac Dam to gather additional data on fish species present in the Pawtuxet River.

The SNEP SWIG grant funding is being used to update existing H&H modeling from 1D to 2D, complete a scour analysis and sediment transport analysis, develop conceptual drawings for dam removal alternatives, and conduct preliminary consultation with municipalities and state and federal agencies. Full or partial removal of the Pontiac Dam are the preferred alternatives, and those alternatives are being prioritized during this current conceptual design phase. PRA was also recently awarded a National Fish and Wildlife Foundation (NFWF) National Coastal Resiliency Fund (NCRF) grant to continue moving the project toward the construction phase. Activities under the NFWF NCRF funding include performing a wetland delineation in the vicinity of the dam, a cultural resources evaluation of the dam, a further update of the H&H modeling, development of final engineering designs, public outreach, and preparation and submittal of the necessary state and federal permits for construction.

The PRA is seeking funding to perform a survey of the current topography of Pontiac Dam, its surrounding appurtenances, and areas immediately upstream and downstream of the dam that have been altered or impacted by recent flooding. There have been several landscape, structural, and channel changes in the vicinity of the Pontiac Dam in the last several years from flooding and flood mitigation efforts by the Pontiac Mill dam owners that have amplified the need for an updated topographic survey of the site. Additionally, through recent acquisition of historical data from a previous consultant with which PRA had contracted for the 2020 study on Restoration of Anadromous Fish Passage at the Pontiac Mill Dam, PRA discovered that previously collected topographic data was not collected by a licensed surveyor. Some spot elevations had been collected to inform previous concepts for fish passage at the site, but because they were not surveyed by a licensed surveyor, the points could have unknown accuracy and quality control issues. As such, the accuracy of these elevation points is not reliable for final refinement of conceptual designs and modeling, and the site needs to be topographically surveyed by a Rhode Island licensed surveyor with appropriate quality control protocols in place. The recent addition and enhancement of a flood wall by the Pontiac Mill owners reinforced the need for the new topographic survey. Survey measurements collected in the pond and the downstream channel will define the edge of water and existing surface water elevations along the stream channel, sufficient for a U.S. Army Corps of Engineers (USACE) Hydraulic Engineering Centers-River Analysis System (HEC-RAS) analysis. Most importantly, if funding for this survey is awarded, the Pontiac Dam project as a whole will have enough funding to go through to the final design and permitting phase.

Short-Term Goal: To collect site topographic data to aid in developing accurate engineering design alternatives to progress the Pontiac Dam removal project to construction phase. Long-term Goal: Support dam owners and stakeholders in making an informed decision on a balanced approach which satisfies the dam owners' needs and provides fish passage and flood benefits for the community.

**2. Project Activities, Schedule and Work Plan**

*Describe the planned project activities, and explain how each activity will help to plan for restoration of ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and final project reports will be submitted.*

The PRA will develop a scope of work for the topographic survey, and hire a surveyor to conduct the survey. A professional surveyor licensed in Rhode Island will conduct a topographic survey of the Pontiac Dam, its appurtenances, and areas immediately upstream and downstream of the dam that have been altered or impacted by recent flooding. Measurements collected in the pond and the downstream channel will define the edge of water and existing surface water elevations along the stream channel, sufficient for a USACE HEC-RAS analysis. The surveyor will provide a topographic AutoCAD model that incorporates all topographic data collected into one seamless topography model that can be easily incorporated into the existing modeling for the dam.

**Project Timeline:**

**Spring 2026**: Develop a scope of work for the survey. Hire surveyor. **Summer 2026:** Conduct topographic survey. **Fall 2026**: Prepare final summary report. Final report submitted to CEHRTF.

**3. Coordination and Public Support**

*How will the project lead organization coordinate with other stakeholder groups, and which groups will be included? Describe planned or completed community / stakeholder education and outreach efforts.*

The PRA has contacted and held meetings with the dam owners during previous and current stages of this project. Both owners have been happy with the recent progress on the project and fully support moving the project forward. Their letters of support for previously funded phases of the project are provided. PRA will continue to communicate with the dam owners to keep them updated on the project and get their opinion on the design alternatives. PRA understands that it is crucial to maintain a collaborative partnership with the dam owners to ensure that the project moves forward smoothly. Coordination and preliminary consultation with municipalities, federal and state agencies, and the public on the Pontiac Dam project is occurring under a SNEP SWIG grant. Data collected during this funding request will be incorporated into those discussions. These meetings and coordination events will be held at critical milestones in the future once drawings and data are updated and developed. Additionally, various federal and state agencies and outreach events were included in previous studies: the PRA's *Restoration of Anadromous Fish Passage at the Pontiac Mill Dam* (2020) and Center for Ecosystem Restoration (CER) *Pontiac Dam, Pawtuxet River, RI Restoration Needs & Recommendations* (2020).

Under the 2024 CEHRTF grant, the project team worked with RIDEM Division of Fish and Wildlife to collect fish species data downstream of the dam. In the summer of 2025, RIDEM conducted a fisheries survey downstream of the dam via electroshocking as a matching contribution to the grant. PRA and its subcontractor also consulted with RIDEM to determine the best locations to collect environmental DNA (eDNA) samples.

**4. Planning Consistency and Restoration Priority**

*Is the proposed project consistent with the goals of a local, state or regional planning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidance).*

The Pawtuxet River has been the focus of previous anadromous fish restoration projects by RIDEM, NOAA, USFWS, and other local non-profits since the removal of Pawtuxet Falls Dam in 2011. The Pontiac Dam is now the first obstruction to fish passage from tidal waters, and restoring fish passage by fully or partially removing the dam would restore river connectivity and provide access to approximately 2.5 river miles of spawning habitat upstream in the Pawtuxet River. As discussed above, other data collection activities, modeling, and design components working toward removal of the Pontiac Dam have recently been funded by state and regional grants, including the CEHRTF, SNEP SWIG, and NFWF NCRF grants. As such, this project has gained significant momentum in the past 2 years.

In the 2019 Coastal Resilience Assessment of the Narragansett Bay and Coastal Rhode Island Watersheds published by the National Fish and Wildlife Foundation, the removal of Pontiac Dam was ranked as the top priority project on the community exposure index for resilience projects in Narragansett Bay.

The Strategic Plan for the Restoration of Anadromous Fishes to Rhode Island Coastal Streams published by RIDEM Division of Fish and Wildlife also lists Pontiac Dam as a primary obstruction within the Pawtuxet River, specifically for anadromous fish species including alewife, blueback herring, and American shad. The PRA is aware that it is one of CRMC's policies to maintain and enhance anadromous fish runs.

**5. Species of Concern**

*Does the planning project address threats to wildlife species listed as federally or state endangered, threatened, or species of concern within Rhode Island? Please specify which species will benefit and how. For a list of species, see the Rhode Island National Heritage Program's listing of animals at:* http://ww.rinhs.org/wp-content/uploads/ri_rare_animals_2006.pdf or *a listing of plants at:* http://www.rinhs.org/wp-content/uploads/ri_rare_plants_2007.pdf

The Rhode Island Wildlife Action Plan (RIWAP) (2015) lists several Species of Greatest Conservation Need (SGCN), several of which are known to inhabit the Pawtuxet River. These include anadromous SGCN: alewives, blue back herring, and American shad, and well as catadromous species American eel. American eel were the most identified species from the 2025 electroshocking fisheries survey and eDNA sampling downstream of Pontiac Dam. River herring genus, which includes blue back herring and alewives, was the third most identified fish species DNA strand in the eDNA samples collected in 2025 downstream of the dam. The Pawtuxet River also contains several other SGCN including freshwater fish (e.g. brook trout) and turtles (e.g. spotted turtle). The RIWAP notes that the presence of dams on rivers and streams is the primary threat to these fish species because the obstructions have reduced their historic spawning range. Removing the dam would allow these species to freely migrate through the river. Additionally, the eDNA samples collected under the 2024 CEHRTF grant included analysis for mussels, birds, reptiles, amphibians, and mammals. As such, benefits or impacts to those species will be included to support future funding requests and decisions on the best course of action for the dam.

**6. Coastal Resiliency**

*How will present and future impacts of hazardous coastal storm events and sea level rise be considered during the project planning and design phases? What impact will the final project have on resilience of coastal or estuarine habitat?*

Anadromous fish restoration is a priority for the state of Rhode Island. Restoring fish passage by fully or partially removing the Pontiac Dam will have the potential to restore and enhance habitat for river herring, alewives, American shad, and American eel. Herring and shad are keystone species in the

ecosystem, playing a crucial role in maintaining the health and ecosystem function of Narragansett Bay. Additionally, several alternatives for the Pontiac Dam have demonstrated improved flood resiliency to upstream communities (although this varies across alternatives). Although this topographic survey is a small step, complex projects like this often require several small steps, and the survey proposed in this proposal will support a well-balanced and informed decision-making process regarding the future removal or bypass alternative.

**7. Permitting**
*List any federal, state or local permits required to complete the project and the permit application status for each.*

No federal, state, or local permits are required to complete the topographic survey proposed for this funding request. However, the survey results will be used to develop alternatives for dam removal. Once an alternative has been selected, the PRA anticipates the following permit applications:
State: RIDEM Wetlands Application to Alter Freshwater Wetlands
Federal: Army Corps of Engineers General Permit
Preparation and submittal of permit applications will be conducted under the NFWF NCRF grant.

**8. Capacity of Lead Organization** (attach additional materials if necessary)
*Demonstrate the capacity of the lead and/or partner organizations to successfully complete the proposed project by providing any or all of the following: a) a description of the organization(s) b) resume(s) or summary of qualifications of involved personnel c) evidence of successfully completed habitat restoration or conservation planning projects.*

The Pawtuxet River Authority is an agency of the State of Rhode Island created under Rhode Island General Laws at title 46 chapter 24. Additionally, the organization has been designated as the official "watershed council" of the Pawtuxet River in Rhode Island by the State of RI Rivers Council. The Authority does business as the "Pawtuxet River Authority & Watershed Council." The PRA is authorized in Rhode Island statute "to provide for land and water conservation, construct and maintain hiking and biking trails, flood control and water pollution control facilities, preserve wetlands, construct dams, stream diversion, dikes, walls and pumping stations." The Authority's mission is to "improve, preserve, and protect the Pawtuxet River." Additionally, the PRA also provides recreational facilities along the river and has been granted 501(c)(3) tax status by the IRS.

The PRA has a long history of implementing successful restoration projects, specifically related to dam removal and fish passage. Most notable was the removal of the Pawtuxet Falls Dam in 2011 which paved the way for the PRA to champion the removal of the Pontiac Dam. In addition to the Pawtuxet Falls dam, the PRA has led diverse teams of consultants and contractors on several planning, design, and construction projects throughout the watershed focused on public recreational access. The PRA also actively maintains their sites through a dedicated team of volunteers. The PRA is completely volunteer based, and as such, all work by volunteers and board members overseeing and managing this project is being purposed as match and will be at the current standard volunteer rate (currently at $34.79).

**9. External Factors and Hazard Mitigation**
*Identify existing external (off-site) factors that may be affecting habitat within the study area. How will external factors be considered? What are the likely effects hazardous coastal storm events and sea level rise within the study area and how will these be considered?*

The lower portion of the Pawtuxet River Watershed where the dam is located is highly urbanized and has experienced wetland and floodplain encroachment, which reduce natural ecosystem services and flood attenuation and water quality (nutrient and sediment) filtration. These external site impacts in turn can reduce a river's ability to provide viable habitat even if structures like the Pontiac Dam are removed. As mentioned above, more extreme and severe precipitation events are only anticipated to increase with greater frequency due to climate change. With the dam removed, additional funding will be available to address upstream improvements and restoration.

## V. EVALUATING PROJECT SUCCESS (one page maximum)

### 1. Performance Measures and Deliverables

*How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List all deliverables (e.g. reports, updates, websites, etc.) associated with the project.*

This stage of the project will be evaluated as a success when the topographic survey has been completed and the results are finalized in AutoCAD compatible format. The results of the survey will be integrated into the modeling and engineering designs, which are being funded under a National Coastal Resiliency Fund grant.

### 2. Monitoring Plan

*Describe any monitoring activities that are part of the planning project. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references.*

Since this project is still in the initial development stage, a monitoring plan is not appropriate at this time. Once the project is carried forward into future design and construction phases, then the PRA will implement monitoring pre and post construction for fluvial morphology, fisheries, habitat, and benefits to SGCN. The topographic survey proposed as a part of this application will bring the project that much closer to construction phase.

## VI. PROJECT BUDGET TEMPLATE

| BUDGET CATEGORY | CRMC REQUEST | MATCH | MATCH PENDING OR SECURED? (select one) | SOURCE OF MATCH | TOTAL |
|---|---|---|---|---|---|
| Surveyor Services (Topographic Survey) | $20,000 | $500 | Secured | In-kind | $20,500 |
| H&H Modeling, Scour Analysis, Sediment Transport Analysis, Downstream Pipe Investigation, Preliminary Design | $0 | $124,500 | Secured | SNEP SWIG 2024 (In-kind) | $124,500 |
| Project Management and Grant Management | $0 | $500 | Secured | In-kind | $500 |
| **TOTAL** | | | | **TOTAL PROJECT COST** | **$145,500** |

## VII. BUDGET NARRATIVE (one page maximum)

*Please provide a description and justification for each line item included in the project budget form (e.g. for personnel costs, provide hourly and fringe rates, for travel specify rate and estimated number of miles). Please specify any match requirements for each source of funding. Please include costs associated with required annual and final reports to CRMC. Be sure to detail how CRMC funds will be used.*

The PRA will develop a scope of work for a topographic survey that is sufficient for the incorporation and development of future designs and permitting for removal of the Pontiac Dam Site.

**Surveyor Services for Topographic Survey**
$20,000 CRMC Ask | $500 Match | $20,500 Total Cost
The PRA will hire a qualified surveyor who provides the best value to the PRA. Surveyor tasks will include the following:

- The surveyor will conduct a topographic survey with 1-ft contour interval and spot elevations as needed to define high and low areas, breaks and slope and other relevant features. The work will be completed by a Rhode Island Professional Land Surveyor. This data will provide information on elevation of the dam, its appurtenances, and the water surface. The survey will also define the edge of river. This work is anticipated to take a 2-person crew approximately 1 working field day to complete. Additional time will be needed for field preparation, mobilization, and demobilization. The survey data will be synthesized into one seamless topography model in AutoCAD and provided in a single PDF file.
- The PRA's Project Manager, Bob Nero, will provide contractor oversight, attend meetings, and review deliverables. This will include approximately 15 hours of his time at a rate of $34.79/hr.

**H&H Modeling, Scour Analysis, Sediment Transport Analysis, Downstream Pipe Investigation, Preliminary Design**
$0 CRMC Ask | $124,500 Match | $124,500 Total

PRA is currently conducting work under the SNEP SWIG grant to conduct H&H modeling, a scour analysis, a sediment transport analysis, and develop preliminary conceptual designs for removal of the Pontiac Dam. The funding also includes an investigation of the pipe downstream of the dam and continuing outreach and consultation with the dam owners, municipalities, state and federal agencies, and the public.

**Project Management and Grant Management**

$0 CRMC Ask | $500 Match | $500 Total

Robert (Bob) Nero, Chairman and Project Manager for the PRA will be supported by Katie DeGoosh (vice chairman) and other board members as appropriate. Bob will be the primary point of contact and oversee the entire project from start to finish, including grant management, and contractor solicitation. Bob and supporting PRA volunteers will provide in-kind time at the current standard volunteer rate of $34.79/hr for a minimum of 15 hours, or more as necessary to fully execute the project and grant requirements.

## IX. ADDITIONAL MATERIALS

Please include the following with your application:

____ Site and Locus Maps

____ Ground-level photographs of existing site conditions

____ Aerial photographs, if available

____ Preliminary design drawings, maps or engineering plans, if available

____ Pertinent physical, ecological, biological, and cultural / historical survey data

____ Letters of support

**AUTHORIZED SIGNATURE**

**AUTHORIZED AGENT OF LEAD ORGANIZATION**

Signature _____ Date 1/23/26

Return your completed proposal by 4:00 p.m. on **January 23, 2026** to:

**Bruce Lofgren, AICP**
**RI Coastal Resources Management Council**
**Oliver Stedman Government Center**
**4808 Tower Hill Road**
**Wakefield , RI 02879**
**blofgren@crmc.ri.gov|**

Applicants are required to submit one (1) signed hard copy of the proposal form and one (1) electronic copy in Adobe PDF format. **Please submit electronic copy as a **SINGLE PDF FILE** containing all application materials.**

Contact Bruce Lofgren at by email or **401-782-4196** with any questions.

CRMC
COASTAL RESOURCES MANAGEMENT COUNCIL

# Rhode Island Coastal and Estuary Habitat Restoration Fund
# Full Proposal Form 2025/2026

****for planning projects please use Full Proposal Form for Planning Projects**

## I. PROJECT SUMMARY

1. **Project Title:** Galilee Salt Marsh Tide Gate Repair and Recalibration

2. **Project Location and coordinates** *(include map)*: Galilee Bird Sanctuary, Point Judith Pond, Narragansett, RI (Figure 1); Western Culvert: 41.380278, -71.505278; Eastern Culvert: 41.379167, -71.498889

3. **Project type** *(Design, Construction or Other)*: Permitting and Construction

4. **If other, please specify:** NA

5. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: Salt Marsh

6. **If other, please specify**: NA

7. **Restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: Repair and recalibration of existing self-regulating tide gates

8. **Total acreage or miles (river systems) of habitat to be restored, or project area planning unit size:** 100 acres

9. **Project benefits:** Maintain tidal exchange into the Galilee Salt Marsh while limiting impacts of sea level rise and storms on the marsh platform and adjacent residential properties.

10. **Project partners** *(organizations providing financial or other support to the project)*: Save The Bay, Ducks Unlimited, USFWS

11. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** X **If yes, year(s) funding was awarded:** 2023

## II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Kimberley Justham
2. **Organization:** RI DEM Division of Fish and Wildlife
3. **Address:** 277 Great Neck Road
4. **City:** West Kingston **5. State:** RI **6. Zip:** 02892
7. **Phone:** (401)449-3904 **8. Email:** kimberley.justham.ctr@dem.ri.gov
9. **Property Owner(s):** RIDEM Division of Fish and Wildlife

Applicant must document ownership of project site or permission to perform all proposed restoration, maintenance and monitoring activities *(include appropriate documentation)*. **See Attachment 1**

## III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

| | | |
|---|---|---|
| | **Amount Requested from Trust Fund** | **$50,000** |
| **Matching Funds** | **Project Partner(s)** | **Amount of Match** |
| Competitive State Wildlife Grant (CSWG) | | $30,000 |
| Monitoring and staff time for management plan | Ducks Unlimited | $30,000 |
| RIDFW staff time for permitting and repairs | | $5,000 |
| | **TOTAL PROJECT COST** | **$115,000** |

## IV. PROPOSAL NARRATIVE (five pages maximum)

### 1. Justification and Purpose

The Galilee salt marsh is a 100-acre tidal wetland complex composed of tidal creek, high salt marsh, and low salt marsh habitats and is managed for hunting and wildlife conservation by the RIDEM Division of Fish and Wildlife (RIDFW). The Galilee Salt Marsh has been specifically identified as a key nesting area for the at-risk saltmarsh sparrow (*Ammospiza caudacuta*), a Rhode Island Species of Greatest Conservation Need. The marsh became tidally restricted from Point Judith Pond in 1956 with the construction of Galilee Escape Road, which originally consisted of a single undersized culvert to accommodate tidal exchange. As a result of the muted tidal exchange, the salt marsh habitat became dominated by *Phragmites australis*. In 1997, RIDFW installed four self-regulating tide gates (tide gates) on two new culverts to enhance tidal exchange. The tide gates were designed and calibrated to restore salt marsh habitat by re-establishing tidal connectivity to Point Judith Pond while preventing flooding of adjacent residential development bordering the marsh. Additional restoration activity occurred within the marsh including installation of tidal creeks and fill removal. The restoration of tidal exchange reduced the coverage of *Phragmites australis* and increased native salt marsh vegetation along the creeks and on the marsh platform. However, due to improper functioning of the tide gates and legacy agricultural structures, including embankments and ditch spoils, the marsh platform has lost elevation, leading to significant areas of impounded water. Because of this impaired drainage and reduced elevation, the marsh experiences greater periods of flooding than would be expected under the preferred hydrological regime. The current restoration project, funded by a 2023 CEHRTF grant and being conducted by Save The Bay in coordination with RIDFW, is to restore the hydrology of the marsh platform and improve high salt marsh habitat for tidal salt marsh nesting birds. The proposed tide gate repair and recalibration project is being informed by a hydraulic study of the marsh commissioned by RIDFW that included an assessment of the condition and function of the tide gates (**Attachment 2**). The project proposed for 2025/2026 CEHRT funding is to repair and recalibrate the tide gates based on the study's recommendations, recent evaluations by RIDFW staff (Photos 1 and 2), and a Habitat Management Plan to be drafted by Ducks Unlimited.

The short-term goal of the 2025/26 CEHRT funding is to repair the existing tide gates so that they are operational and able to be effectively managed to maintain tidal exchange while minimizing impacts to the marsh and adjacent residential properties from sea level rise and more intense and frequent storm events. The long-term goals of the tide gate repair and recalibration are to improve overall salt marsh health and increase the amount of available high-quality saltmarsh sparrow nesting habitat by improving sediment transport/capture and the ability of the marsh to build elevation. Two years of saltmarsh sparrow nest monitoring data have shown that flooding of the marsh is resulting in nest failures. In 2025, at least 45% of nest failures were attributed to flooding. Repair and recalibration of the tide gates is imperative to restore the tidal regime to habitable levels for saltmarsh sparrows and the high-marsh nesting habitats they rely on.

### 2. Project Activities, Schedule and Work Plan

RIDFW, USFWS and Save The Bay will install water loggers and apply for additional funding for tide gate repairs through the SNEP SWIG in Winter/Spring of 2026. Ducks Unlimited will also start to draft a Habitat Management Plan (HMP) for the Galilee Salt Marsh during that timeframe, utilizing data from the hydrologic study and ongoing restoration project. In Summer 2026, RIDFW, USFWS, and Save The Bay will

continue to monitor marsh vegetation, in-marsh water levels, and tidal marsh bird nesting and Ducks Unlimited will continue work on the Galilee Salt Marsh HMP. Over the Winter of 2026/2027, Ducks Unlimited will incorporate the water logger and summer monitoring data into a final draft of the HMP with water level recommendations for supporting high marsh, minimizing saltmarsh sparrow nest loss due to flooding, and effectively managing the invasive plant *Phragmites australis.* RIDFW/Save The Bay will submit the required state and federal permit applications. RIDFW will conduct repairs to the tide gates during the Spring of 2027, including but not limited to, replacement of non-functional parts and removal of sediment and rocks from in front of the flap gates. After repairs have been completed, RIDFW will calibrate the tide gates in coordination with project partners and the HMP. Both repairs to and calibration of the tide gates will occur outside of the saltmarsh sparrow nesting season, which spans May through August. Repair and calibration of the tide gates will help to reduce the number and severity of flooding events within the marsh, reducing impacts to nesting saltmarsh sparrows and surrounding properties. Annual project reports will be submitted by January 31 the following year. The final project report will be submitted within three months of final analysis of water level monitoring data.

Timeline:
**Winter/Spring 2026**: Installation of monitoring devices by RIDEM, USFWS and Save The Bay. Apply for additional funding from SNEP SWIG to cover the remaining cost of tide gate replacement parts/installation. Ducks Unlimited starts to draft HMP in coordination with RIDEM, USFWS and Save The Bay.
**Summer 2026**: RIDFW, USFWS, and Save The Bay continue monitoring marsh vegetation, in-marsh water levels, and tidal marsh bird nesting. Ducks Unlimited continues work on HMP.
**Winter 2026/2027**: Ducks Unlimited finalizes HMP, which includes the elevations required for submittal of state and federal permits. RIDFW/Save The Bay draft and submit state and federal permit applications.
**Spring 2027**: RIDFW conducts the repair and calibration of the tide gates.
**Summer –Fall 2027**: Re-installation of monitoring devices to conduct post restoration monitoring.

**3. Minimization of Adverse Impacts**

The current configuration of the tidal control structures is four self-regulating tide gates on two culverts. RIDFW is planning a phased approach to the repairs, repairing one pair of culverts while the second pair is left as is. The second pair of culverts will be addressed as funding becomes available and recalibrated as guided by the HMP. Work will be conducted outside of the saltmarsh sparrow/tidal marsh bird nesting seasons. It is anticipated that this approach will result in minimal impacts to tidal exchange within the marsh and to saltmarsh sparrow nest success. Additionally, the HMP will set habitat/management objectives and triggers for adaptive management actions.

**4. Public Support**

RIDFW and project partners will share information about the restoration project with community partners including the Salt Ponds Coalition and the Town of Narragansett's Harbor Commission and Conservation Commission. The Salt Ponds Coalition, Ducks Unlimited, and Save The Bay have provided letters of support for the project (**Attachment 4**).

## 5. Economic and Educational Benefits

The economic benefits of maintaining salt marsh hydrology through properly functioning and calibrated tide gates include improved nursery habitat for recreationally and commercially valuable fish and shellfish species and improved recreational opportunities for the public, such as fishing and birdwatching. Tide gates that are functioning properly and able to be effectively managed will also provide protection to adjacent infrastructure and residential development during coastal storms. Through funding from a separate grant, Save The Bay will install an interpretive sign to educate the public on how the restoration activities, including the tide gate repair and recalibration, will improve salt marsh health. RIDEM and project partners will share information about the restoration project with community partners including the Salt Ponds Coalition and the Town of Narragansett's Harbor Commission and Conservation Commission.

## 6. Coastal Resiliency

Due to current levels of development around the Galilee salt marsh (**Figure 1**), there is limited potential for salt marsh migration. The loss of vegetated marsh from sea level rise poses a threat to the ecological health of the marsh and the functions and values that it provides for fish and wildlife habitat, carbon sequestration, and nutrient cycling. Properly functioning and calibrated tide gates will help to mitigate the negative impacts of storm surges associated with frequent storm events and sea level rise by managing water levels within the marsh. Additionally, the ability to manage tidal flows with the tide gates will allow for an increase in sediment transport and capture, helping the marsh to build back elevation.

## 7. Planning Consistency and Restoration Priority

USFWS's Northeast region has identified the conservation of the saltmarsh sparrow and its habitat as a regional priority, including the most recent strategic planning document for the Coastal Program (Northeast Region Strategic Plan, 2017-2021). This plan specifically includes the intent to "facilitate projects to restore and enhance salt marsh, particularly high marsh habitat, to improve habitat quality for Saltmarsh Sparrow and other priority species." The Atlantic Coast Joint Venture recently published a Saltmarsh Bird Conservation Plan for the Atlantic Coast (2019) in which they identify saltmarsh sparrow among the highest priority species for conservation. The plan identifies as a priority the implementation of promising management actions including using existing infrastructure (e.g., berms and tide gates) to dampen spring tides or storm surge to improve nest success.

## 8. Species of Concern

The Galilee Salt Marsh has been specifically identified as a key nesting area for the saltmarsh sparrow (*Ammospiza caudacuta*) and seaside sparrow (*Ammodramus maritimus*), both Rhode Island Species of Greatest Conservation Need. Saltmarsh sparrows are still successfully nesting in Galilee marsh, but two years of nest monitoring data show that their nests are being impacted by flooding conditions on the marsh platform. While the birds are adapted to typical flooding associated with the monthly lunar tides, they are not adapted to increased flooding from rising seas and more frequent and powerful storms. Repair and calibration of the tide gates is required to reduce flooding of the marsh from these events.

**9. Permitting**

Federal, state or local permits required to complete the project include:

- Coastal Resources Management Council Assent
- Rhode Island Department of Environmental Management Water Quality Certificate
- General Permit from the Army Corps of Engineers (USACE). During the permitting process through the USACE, federal agencies, including EPA, USFWS, and NOAA are consulted to ensure that the tidal hydrology restoration does not affect endangered species or essential fish habitat.

Permit applications will be drafted and submitted during the Winter of 2026/2027.

**10. Capacity of Lead Organization** (attach additional materials if necessary)

The RIDFW Galilee self-regulating tide gate repair and recalibration project is being conducted in partnership with the US Fish and Wildlife Service (USFWS), Save The Bay, and Ducks Unlimited. USFWS will assist with water level monitoring, analysis of the data, and saltmarsh sparrow nest monitoring. Save The Bay has been and will continue to assist with permitting, monitoring, and in-marsh work. Ducks Unlimited will develop a habitat management plan based on the data collected. RIDFW will continue to monitor saltmarsh sparrow nests, conduct permitting for the tide gate repair, and purchase and install the required parts. If needed, a construction contractor will be utilized for repairs/calibration that cannot be completed by RIDFW.

Key Partners:

- Jonah Saitz, Biologist, USFWS Southern New England Estuary Project and Coastal Program, specializing in GIS and tidal wetland Restoration
- Alison Kocek, Wildlife Biologist, USFWS Southern New England Estuary Project and Coastal Program, specializing in tidal wetland restoration, tidal marsh birds recovery, and saltmarsh sparrow
- Wenley Ferguson, Director of Habitat Restoration, Save The Bay, specializing in designing projects, developing permit applications, overseeing implementation and conducting pre and post restoration monitoring for tidal hydrology restoration projects.
- Ben Gaspar, Restoration Ecologist, Save The Bay, specializing in implementing and monitoring salt marsh restoration projects.
- Bri Benvenuti, Regional Biologist for New England, Ducks Unlimited, specializing in coastal wetlands, coastal hydrology, and habitat management.
- Franco Gigliotti, Regional Biologist for New England, Ducks Unlimited, specializing in Atlantic Coast wetlands, wetland wildlife, and coastal resiliency.
- Sam Miller, Non-game bird biologist, RIDFW, specializing in saltmarsh sparrow surveys and monitoring.

## V. SUSTAINABILITY (one page maximum)

### 1. Maintenance

*What is the estimated "lifespan" of each planned restoration activity? What are the anticipated short-term and long-term (beyond the funding period) operation and maintenance requirements of the project? Specify who will be responsible for funding and carrying out each O & M activity. Indicate when and with what frequency activities will occur.*

RIDFW anticipates that the planned repairs to and annual maintenance of the self-regulating tide gates will effectively extend the life span of those structures by up to 30 years. RIDFW will be responsible for yearly inspections and maintenance of the structures.

### 2. External Factors and Hazard Mitigation

*Identify existing external (off-site) factors that could reduce the chances of achieving the project goals (e.g. stormwater inputs to the site from the surrounding drainage area). Explain how these external factors will be addressed. Describe any additional measures taken to help ensure long-term success of the project (e.g. installation of stormwater management practices or securing of conservation easements). What are the likely future effects of hazardous coastal storm events and future sea level rise on the proposed project and how will these be addressed?*

Increasing sea levels and storm occurrence/severity may require future recalibration of the tide gates to maintain their efficacy. The management plan prepared by Ducks Unlimited will include estimates for tide gate calibration at future intervals to account for increased inundation.

## VI. EVALUATING PROJECT SUCCESS (one page maximum)

### 1. Performance Measures

*How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List performance measures and how they will be recorded. Include a detailed monitoring plan; if applicable (see below).*

The success of the project will be measured by consistently achieving water levels in the marsh within the ideal range as identified by the HMP. Data loggers will be used post-restoration to determine whether the tide gates are actuating properly to achieve the specific water levels indicated in the HMP.

### 2. Monitoring Plan

*Describe any planned or completed pre- and post-project monitoring activities. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references.*

Monitoring transects have been established at the Galilee salt marsh restoration to document changes to vegetation communities and water levels over time. Monitoring will be conducted pre- and post-restoration. Save The Bay uses a line point intercept method to monitor vegetation and conducts water level monitoring along each point of the transect, with established photo stations. The current 2023 CEHRTF grant includes two years of monitoring during the project and up to five years of monitoring post-restoration, with funding through Save The Bay and other sources to be secured in future years.

RIDFW has an ongoing monitoring effort for tidal marsh birds, including saltmarsh sparrow, seaside sparrow, clapper rail and willet at the Galilee marsh.

Water level monitoring will be conducted using three Hyfi water loggers, one north of the Escape Road and one at the each of the culverts south of the Escape Road. Water level data will be collected prior to and after tide gate repairs. Deploying water loggers at the culverts will allow partners to confirm what tide heights the tide gates are currently actuating at and whether adjustments to their calibration are effectively reducing marsh platform inundation. The data collected by the Hyfi water loggers will also be combined with data from the on-marsh water level loggers deployed by Save The Bay to see how water levels at the tide gates impact marsh surface inundation.

## VII. PROJECT BUDGET TEMPLATE

| BUDGET CATEGORY | CRMC REQUEST | MATCH | MATCH PENDING OR SECURED? (select one) | SOURCE OF MATCH | TOTAL |
|---|---|---|---|---|---|
| Purchase parts required to repair tide gates | $50,000 | | | | $50,000 |
| Purchase parts required to repair tide gates | | $30,000 | secured | Competitive State Wildlife Grant (CSWG) | $30,000 |
| Ducks Unlimited Staff Time: develop management plan | | $30,000 | secured | Ducks Unlimited Staff Time (In-Kind) | $30,000 |
| RIDFW Staff Time: permitting and tide gate repair | | $5,000 | secured | RIDFW Staff Time (In-Kind) | $5,000 |
| Purchase parts required to repair tide gates | | $170,000 | Pending ;Application planned | SNEP Watershed Implementation Grant (EPA) | $170,000 |
| **TOTAL** | $50,000 | $235,000 | | **TOTAL PROJECT COST** | $285,000 |

## VIII. BUDGET NARRATIVE (one page maximum)

*Please provide a description and justification for each line item included in the project budget form (e.g. for personnel costs, provide hourly and fringe rates, for travel specify rate and estimated number of miles). Please specify any match requirements for each source of funding. Please include costs associated with required annual and final reports to CRMC. Be sure to detail how CRMC funds will be used.*

McWane Plant & Industrial provided a quote of $248,489 for replacement parts for the self-regulating tide gates (Attachment 2). RIDFW plans to use $30,000 from the secured CSWG grant award and potential funding from this CEHRTF grant in the amount of $50,000 towards the cost of the repair parts. RIDFW will apply to the SNEP Watershed Implementation Grant (SWIG) to cover the remaining cost of repair parts. Tide gate repairs will be phased to utilize available funds to effect positive changes within the salt marsh as quickly as possible. Additional tide gate repairs will be undertaken as (SNEP/other) funds become available.

Ducks Unlimited has secured $30,000 in private funding to cover the cost of water logger rental and installation and for DU staff to develop a habitat management plan for the Galilee Salt Marsh.

RIDFW Habitat Biologist, Kim Justham, will spend 82 hours at $60.52 per hour developing permit applications and reviewing the management plan.

## IX. ADDITIONAL MATERIALS

Please include the following with your application:

__X__ Site and Locus Maps: **Figure 1**

__X__ Ground-level photographs of existing site conditions: **Photo Log, Attachment 2**

__X__ Aerial photographs, if available: **Figure 1**

__X__ Preliminary design drawings, maps or engineering plans, if available: **Attachment 2**

__X__ Pertinent physical, ecological, biological, and cultural / historical survey data: **Attachment 2**

__X__ Letters of support: **Attachment 4**

**AUTHORIZED SIGNATURE**

**AUTHORIZED AGENT OF LEAD ORGANIZATION**

**Signature** **Date**

Return your completed proposal by 4:00 p.m. on **January 23, 2026** to:

**Bruce Lofgren, AICP**
**RI Coastal Resources Management Council**
**Oliver Stedman Government Center**
**4808 Tower Hill Road**
**Wakefield , RI 02879**
blofgren@crmc.ri.gov|

Applicants are required to submit one (1) signed hard copy of the proposal form and one (1) electronic copy in Adobe PDF format. **Please submit electronic copy as a **SINGLE PDF FILE** containing all application materials.**

Contact Bruce Lofgren at by email or **401-782-4196** with any questions.

CRMC
COASTAL RESOURCES MANAGEMENT COUNCIL

**References:**

Adamowicz, S.C., G. Wilson, D.M. Burdick, W. Ferguson, and R. Hopping. 2020. Farmers in the marsh: Lessons from history and case studies for the future. *Wetland Science & Practice* 183–195.

Atlantic Coast Joint Venture. 2024. Saltmarsh Restoration Priorities for the Saltmarsh Sparrow: Rhode Island. Version 2.0. Available at: https://acjv.org/documents/RI_SALS_comp_guidance_doc.pdf

Berry, W. J., Reinert, S. E., Gallagher, M. E., Lussier, S. M., & Walsh, E. 2015. Population status of the seaside sparrow in Rhode Island: a 25-year assessment. *Northeastern Naturalist*, *22*(4), 658-671.

Hartley, M.J. and A.J. Weldon, eds. 2020. Atlantic Coast Joint Venture's Saltmarsh Sparrow Conservation Plan.

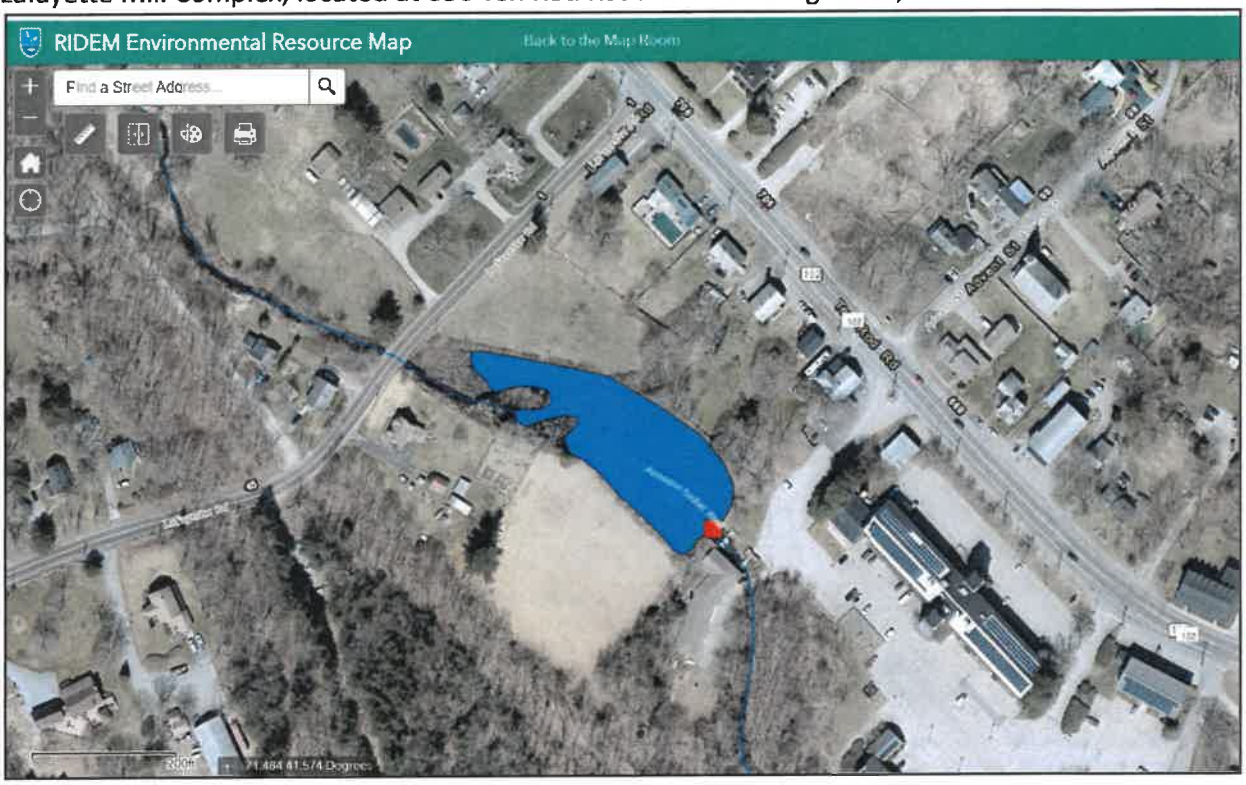
**Full Proposal Form 2025/2026**

****for planning projects please use Full Proposal Form for Planning Projects**

## I. PROJECT SUMMARY

1. **Project Title:** Removal of the Rodman Mill Dam, and Associated Site Improvements to Enhance Climate Resiliency on the Annaquatucket River in North Kingstown, Rhode Island

2. **Project Location and coordinates** *(include map)*: The Rodman Mill Dam is located west of the Lafayette Mill Complex, located at 650 Ten Rod Road in North Kingstown, Rhode Island.




3. **Project type** *(Design, Construction, or Other)*: Planning, Design, and Permitting

4. **If other, please specify:** Not applicable

5. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: River System

6. **If other, please specify**: Not applicable

7. **Restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: Dam Removal

8. **Total acreage or miles(river systems) of habitat to be restored, or project area planning unit size:** Removal of the dam would restore a 1-acre millpond to a riverine system, and open up approximately 2.7 miles of stream habitat for fish passage.

9. **Project benefits:** Increased river connectivity for aquatic organisms, including river herring, improved water quality by removing impoundment, and revegetation of forested wetland along the riverbanks.

10. **Project partners** *(organizations providing financial or other support to the project)*: Bakeford Properties LLC (property owner), Town of North Kingstown, EA Engineering, Save The Bay

11. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** Yes **If yes, year(s) funding was awarded:** 2023 for $25,000 and 2024 for $49,000

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## II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Kate McPherson

2. **Organization:** Save The Bay

3. **Address:** 100 Save The Bay Drive

4. **City:** Providence **5. State:** RI **6. Zip:** 02905

7. **Phone:** 401-272-3540 **8. Email:** kmcpherson@savebay.org

9. **Property Owner:** Michael Baker (Bakeford Properties LLC). The Rodman Mill Dam is owned by the Condo at Lafayette Mill (formerly known as Lafayette Mill Complex Associates). The Condo at Lafayette Mill is also responsible for the operation and maintenance of the dam and the downstream areas included in this project. Mr. Michael Baker is the owner and primary point of contact for the Condo at Lafayette Mill. Applicant must document ownership of the project site or permission to perform all proposed restoration, maintenance, and monitoring activities *(see attached letter from Mr. Baker on pg 18).*

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## III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

| **Amount Requested from Trust Fund** | | **$49,426** |
|---|---|---|
| **Matching Funds** | **Project Partner(s)** | **Amount of Match** |
| In Kind | Save The Bay | $6,634 |
| In Kind | Bakeford Properties LLC | $1,000 |
| Cash | Bakeford Properties LLC | $4,000 |
| | **TOTAL PROJECT COST** | **$61,060** |

## IV. PROPOSAL NARRATIVE (five pages maximum)

- **Justification and Purpose**

  *Describe the human impacts and previous restoration activities at the proposed project site. If multiple sites, please describe the impacts and previous restoration activities at each). Briefly describe the proposed project, its restoration goals, long-term and short-term outcomes.*

  The project team has examined dam removal alternatives at the Rodman Mill Dam on the Annaquatucket River and is seeking funding to advance the design and prepare for required permitting. The privately owned dam was considered a high-hazard dam in poor condition during RIDEM's most recent assessment in 2025. Furthermore, the RIDEM Office of Dam Safety recently conducted a spillway capacity study and found that this dam does not pass the 100-year storm, requiring the owner to either remove it or rebuild the dam and spillway in a way that would withstand severe storms. The dam creates a shallow impoundment that is impaired by high levels of Enterococcus, total phosphorus, and non-native aquatic plants. The Annaquatucket River has been the focus of anadromous fish restoration projects, with fish ladders at all downstream dams. This dam is the last obstruction to fish passage in this system, and removal would restore river connectivity and provide access to approximately 2.7 river miles (approximately 44%) in the Annaquatucket River up to the Lafayette Trout Hatchery. The long-term goal for this project is to provide upstream fish passage to the Annaquatucket River, increase the resilience of this river system by restoring a free-flowing river, and improve water and habitat quality in the river.

- **Project Activities, Schedule and Work Plan**

  *Describe the planned on-the-ground project activities, and explain how each activity will help to restore ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and final project reports will be submitted.*

  **Project Activities To Date:**

  EA Science, Engineering, and Technology identified this dam as a priority for removal, given downstream restoration efforts, and contacted the owner, Michael Baker, who expressed interest in a removal project. Permission from the landowner to proceed with the project has been secured. Mr. Baker has significant experience coordinating and managing construction projects on-site. As the property owner/manager, Mr. Baker will work closely with Save The Bay throughout the project.

  In June 2023, RICEHRTF awarded the project team $25,000 to fund a reconnaissance study to address some of the challenges of the site, which included stormwater inputs from town and state roads, upstream road and culvert infrastructure, driveway access across the Annaquatucket, and buildings owned by Michael Baker immediately downstream of the dam. Save The Bay hired EA Science, Engineering, and Technology to assist with the reconnaissance study, which included a structural assessment of the spillway and structures tied into the spillway, collection of three sediment samples for physical and chemical analysis (two upstream and one downstream of the spillway), an estimate of sediment volume using sediment probes and depth-to-refusal information, assessment of water uses including potential water withdrawals from within the impoundment, review of stormwater inputs to the river from state and local roads, assessment of potential effects of a lower water level on upstream infrastructure, review of endangered species habitat records, and a meeting with project partners.

In 2024, RICEHRTF awarded funds to develop a dam removal feasibility study, which included wetland edge flagging, survey work, modeling, 30% design, and public outreach. The results of the feasibility study indicate that dam removal is feasible, so the next step is to advance the design and obtain permits.

**Planned Activities**
Under this grant, the project team will develop a scope of work for 60% design and discussion of permitting needs. EA Engineering and a cultural resource management firm will be hired by Save The Bay to assist with the following tasks:

- Draft a 60% Design
- Attend a pre-permitting meeting with RIDEM
- Prepare historical documentation in accordance with SHPO

**Project Timeline**
Winter 2026: Synthesise feedback from public workshop. Summer 2026: Develop a scope of work for 60% design and cultural resource study. Hire a cultural resource management firm. Autumn 2026: Continue to work with EA Engineering to refine the 30% design that was produced for the feasibility study, incorporating feedback from the public workshop. Winter 2026-2027: Cultural resource management firm develops a draft report for SHPO review. Schedule a pre-application meeting with the RIDEM Office of Water Resources Freshwater Wetlands Permitting, Water Quality Certification, and others as required. Spring 2027: Consultant develops 60% designs. Submit final report to CEHRTF.

**Leveraging CEHRTF Funding**
This project has a current proposal pending with the NBEP Design, Planning, and Capacity Building Activities to Remove Barriers for Aquatic Habitat Connectivity in the Narragansett Bay Region grant program. Should Save The Bay be awarded the NBEP funds, we will be able to advance work on the Rodman Mill Dam and further leverage funding from the CEHRTF grant program. NBEP funding would be used to complete a QAPP for wetland biological evaluation (a requirement of EPA funding), draft and final permit applications for RIDEM and USACE, and respond to permit agency comments. Should Save The Bay not receive the NBEP grant, we would anticipate applying to the CEHRTF grant program in 2026 to provide support for activities not awarded under the NBEP grant.

- **Minimization of Adverse Impacts**
  *What are the potential impacts resulting from project activities (e.g. the disturbance of sensitive species by construction activities), and how will these impacts be minimized (e.g. scheduling construction to avoid disturbance of sensitive species).*

Since this phase of the project is purely information-gathering, minimal impacts on the wetland system are anticipated. Additional information about the wetland plant and animal species that will be affected will be gathered, but no physical samples will be required. Later in the planning process, a potential construction sequencing scenario to minimize adverse impacts from the dam removal will be developed, including addressing dewatering, sediment management, and site stabilization measures.

- **Public Support**
  *Demonstrate public support for the project by providing evidence of communication with adjacent landowners, community members and other stakeholders. Describe planned or completed community / stakeholder education and outreach efforts.*

  A conceptual design and artistic rendering were developed to support public outreach this winter. The project team mailed fliers to abutters on 12/19/25, advertising a community meeting held on 1/22/26 to discuss the potential restoration project. We also shared the flier electronically with all tenants at Lafayette Mill, the Narrow River Preservation Association, the North Kingstown Land Conservancy, the Town Council, the Conservation Commission, and the Planning Commission. Eighteen community members attended, and feedback from the meeting is being digested with additional communication with community members planned for permitting phases. In general, many folks understand that the dam is in poor condition and needs to be addressed. There is general interest in protecting upstream habitat, preserving the history of the dam, and increasing fish passage. Save The Bay will share updates with members and supporters through its publications and social media.

- **Economic and Educational Benefits**
  *How will the proposed project provide direct economic and/or educational benefits to a community and/or the state?*

  Removal of this high-hazard dam will reduce long-term inspection and maintenance costs for the property owner and reduce the workload for the RIDEM Office of Dam Safety.

  Rodman Mill Dam is 1.5 miles away from the Wickford Middle School. The property is also adjacent to Ryan Park, a popular destination for open-space recreation. As such, future river restoration here can highlight to the public specific adaptation strategies to restore riverine habitats. There may be future opportunities to install interpretive signage about the benefits of riverine restoration for water quality, increased river connectivity for anadromous and riverine species, and improved habitat conditions for spawning. As an educational tool, the dam removal will show habitat restoration in action. Fishing for riverine species will likely improve as well.

  Many mill sites in Rhode Island are privately held and face the same challenges as the Lafayette Mill Complex, and this project can serve as a showcase for other dam owners and redevelopers to emulate and ultimately better understand how ecological restoration can work at their mill sites while preserving the aesthetic attributes of old mills.

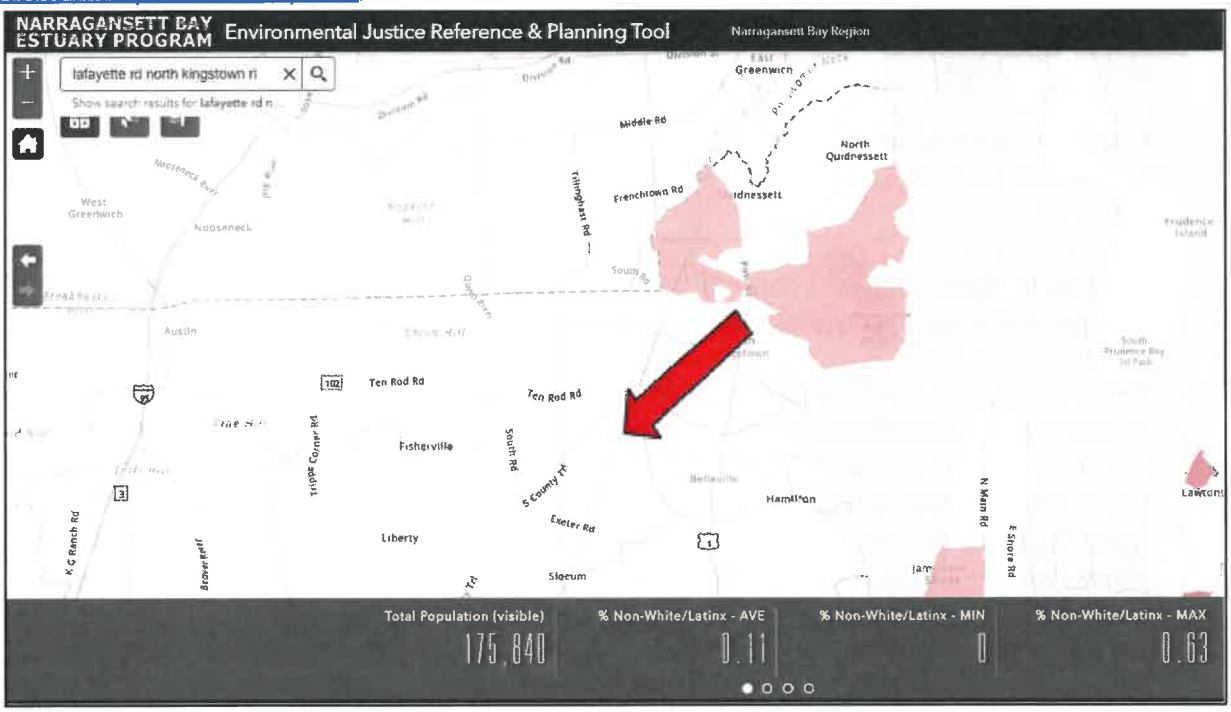
- **Climate Change and Coastal Resiliency**
  *How have the present and future impacts of climate change been considered during the project planning and design phases? What impact will the project have on resilience of coastal or estuarine habitat to climate change?*

  The Rodman Mill Dam is in poor condition and failed a spillway capacity study that modeled more severe storms expected due to climate change. It was constructed over 180 years ago and, as a result, it was not built to meet today's design/construction standards or stream flows. With increased intensity and recurrence of severe storm events, the dam is at greater risk of failure. The most recent inspection identified several deficiencies with the dam embankments, structural components, and downstream channel. Some of these issues included deterioration, undermining, and cracking. Several of these dam issues have proved difficult for the dam owner to repair, and repeated storm events continue to exacerbate these issues.

Removal of the Rodman Mill Dam will benefit the community and enhance ecosystem resilience. Removing the dam and restoring the river to a natural stream channel, mimicking the natural channel once in place at the site over 180 years ago, will help protect existing infrastructure, eliminate the risk of loss of life related to a dam failure, and remove hazardous infrastructure from the community. Additionally, the approximately 2.7 miles of stream that are restored once the dam is removed will allow for the migration and reproduction of blueback herring and alewives over the next 25 years. These species are critical to the health of Narragansett Bay and to public use of its resources.

- **Environmental Justice**

  *Will the proposed project take place within or otherwise benefit environmental justice "priority areas" as defined by the Narragansett Bay Estuary Program's analysis of Environmental Justice in the Narragansett Bay Region? Does the proposed project incorporate Environmental Justice concerns as defined by the US EPA's Guidance on Environmental Justice and Equitable Development?*




The project takes place in North Kingstown, RI, and is not within any environmental justice priority areas. The Annaquatucket is a relatively small watershed that flows directly into Narragansett Bay. There are no known EJ areas within the watershed. The concerns outlined in the EPA's Guidance on Environmental Justice include equitable development. In the context of environmental justice and planning, equitable development improves public involvement, supports collaborative problem-solving, and makes a visible difference in underserved, under-resourced, and overburdened communities. Lower-income community members and people of color are successfully guiding the changes in their communities rather than merely reacting to them. The project team has solicited feedback from community members and will incorporate it into the design and any eventual river restoration.

- **Planning Consistency and Restoration Priority**

  *Is the proposed project consistent with the goals of a local, state or regional planning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidance).*

The Annaquatucket River has been the focus of anadromous fish restoration projects by RIDEM and TNC, including fish ladders at the Bellville Pond Dam and Hamilton Reservoir Dam. This dam remains the last obstruction to fish passage in this system, and removal would restore river connectivity and provide access to approximately 2.7 river miles of spawning habitat in the Annaquatucket River up to the Lafayette Trout Hatchery.

- **Species of Concern**
  *Will the project result in benefits to wildlife species listed as federally or state endangered, threatened, or species of concern within Rhode Island? Please specify which species will benefit and how.*

  The section of the Annaquatucket River impeded by the Rodman Mill Dam is within a Natural Heritage Area (data updated July 2020; see Figure 8). As part of the reconnaissance study, Save The Bay contacted the Rhode Island Natural Heritage Society to understand what species have been documented in the area. *Aureolaria pedicularia* and *Tephosia virginiana* have been observed in the area; however, not in the mill complex itself, and neither are aquatic species likely to be affected by a dam removal. In general, the inclusion of land within a Natural Heritage Area is an indicator of high-quality habitat and the potential benefit for many species, not just rare ones. River restoration can and does benefit species, including freshwater mussels and anadromous fish, which are negatively impacted by dams within their ranges.

- **Permitting**
  *List any federal, state or local permits required to complete the project and the permit application status for each.*

  At this stage of the project, no federal, state, or local permits are required to complete the feasibility study. However, once a project has been selected, we anticipate the following permit applications:
  - State: RIDEM Wetlands Application to Alter Freshwater Wetlands
  - Federal: Army Corps of Engineers General Permit
  - State: Review by the Rhode Island Historical Preservation & Heritage Commission

- **Capacity of Lead Organization** (attach additional materials if necessary)
  *Demonstrate the capacity of the lead and/or partner organizations to successfully complete the proposed project by providing any or all of the following: a) a description of the organization(s) b) resume(s) or summary of qualifications of involved personnel c) evidence of successfully completed habitat restoration or conservation projects.*

  Save The Bay has a long track record of successful restoration projects funded through the Trust Fund. We have been both project proponents and supporting partners. We have been partners on dam removal and fish passage projects on the Pawcatuck, Pawtuxet, Ten Mile, Kickemuit, and Blackstone Rivers. We have also successfully completed salt marsh restoration and riparian restoration projects throughout the watershed. Kate McPherson, Save The Bay's Narragansett Bay Riverkeeper and Professional Wetland Scientist, will be the project lead on the completion of this project.

## V. SUSTAINABILITY (one page maximum)

### 1. Maintenance

*What is the estimated "lifespan" of each planned restoration activity? What are the anticipated short-term and long-term (beyond the funding period) operation and maintenance requirements of the project? Specify who will be responsible for funding and carrying out each O & M activity. Indicate when and with what frequency activities will occur.*

This phase of the project does not include maintenance. An ultimate dam removal and restoration would be designed to provide future fish passage with minimal maintenance. At this stage in the project, it is not clear which design elements or associated maintenance would be incorporated into a dam removal proposal.

### 2. External Factors

*Identify existing external (off-site) factors that could reduce the chances of achieving the project goals (e.g. stormwater inputs to the site from the surrounding drainage area). Explain how these external factors will be addressed. Describe any additional measures taken to help ensure long-term success of the project (e.g. installation of stormwater management practices or securing of conservation easements).What are the likely future effects of climate change and future sea level rise on the proposed project and how will these be addressed?*

This site is somewhat impacted by stormwater runoff. Stormwater inputs include at least a stormwater outfall from Ten Rod Road owned by RIDOT, outfalls from Lafayette Road owned by the Town of North Kingstown, as well as runoff from the impervious surfaces of the mill complex. The typical contaminants in stormwater runoff from developed areas and roadways are expected to be present in the river, including road salts and sand, heavy metals, hydrocarbons, and bacteria. There are some pipes discharging flow to the river downstream of the dam, and the feasibility study conducted a dye test that indicated these pipes convey stormwater. We are not aware of any buried infrastructure along or beneath the edge of the Pond/River. The Town of North Kingstown has been made aware of the feasibility study results and will be a project partner going forward. A consultation with RIDOT will be conducted if required.

## VI. EVALUATING PROJECT SUCCESS (one page maximum)

### 1. Performance Measures

*How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List performance measures and how they will be recorded. Include a detailed monitoring plan; if applicable (see below).*

This stage of the project will be considered a success when:

- Community feedback has been synthesised, reported back to attendees, and comments are incorporated into the next phase of design.
- A pre-application meeting with RIDEM has been scheduled, and their comments have been incorporated into the design.
- Site plans that show the 60% design have been developed.
- A cultural resource management firm completes the following tasks:
    - Review survey reports, local histories, historical maps, and online resources to identify previous cultural resource documentation for historic properties in the vicinity of the dam.
    - Develop a historical context statement for the project area.
    - Visit the site to identify areas of archaeological sensitivity within the project area and document them with photographs and notes.
    - Prepare a report that describes the research findings and the site visit.
    - Delineate a recommended Area of Potential Effects (APE) for the project, identify properties within the APE that are listed or may be eligible for listing in the National Register of Historic Places (National Register), and identify areas of archaeological sensitivity within the APE.
    - Prepare a letter initiating consultation for the project with RISHPO and other consulting parties, including the Narragansett Indian Tribe and the Town of North Kingstown.

### 2. Monitoring Plan

*Describe any planned or completed pre- and post-project monitoring activities. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references (see CRMC website for information on established monitoring protocols).*

Since this project is still in the initial design development phase, a monitoring plan of the impoundment area is not required at this time. In other dam removal projects, Save The Bay has monitored wildlife use, nonnative invasive species, sediment accumulation that may block aquatic organisms, and, if appropriate, fish migration.

## VII. PROJECT BUDGET TEMPLATE

| BUDGET CATEGORY | CRMC REQUEST | MATCH | MATCH STATUS | SOURCE OF MATCH | TOTAL |
|---|---|---|---|---|---|
| Project Management and Meetings | $ 6,218 | | | | |
| Draft and Final 60% Design | $ 31,149 | | | | |
| Pre-Permitting Meeting | $ 2,176 | | | | |
| Cultural Assessments | $ 9,882 | | | | |
| Save The Bay staff time on grant management, reporting, project oversight, and mileage. | $0 | $6,634<br>$4,000 | Secured<br>Secured | Save The Bay<br>Bakeford LLC | $10,634 |
| Dam Owner | $0 | $1,000 | Secured | Bakeford LLC | $1,000 |
| **TOTAL** | **$49,426** | **$11,634** | **Secured** | **TOTAL PROJECT COST** | **$61,060** |

## VIII. BUDGET NARRATIVE (one page maximum)

*Please provide a description and justification for each line item included in the project budget form (e.g. for personnel costs, provide hourly and fringe rates, for travel specify rate and estimated number of miles). Please specify any match requirements for each source of funding. Please include costs associated with required annual and final reports to CRMC. Be sure to detail how CRMC funds will be used.*

**Project Management and Meetings** $6,218 CRMC Ask

EA Engineering will be hired to continue engineering aspects of the project, attend meetings, manage engineering staff, and manage engineering deliverables.

**Draft and Final 60% Designs** $13,148 CRMC Ask

EA Engineering will draft a 60% design, prepare a draft Basis of Design Memorandum, and update the hydrologic and hydraulic (H&H) modeling. The project team will provide feedback, and EA will produce the final 60% designs, which will then be used for permitting. The project work includes time for all necessary labor and direct costs.

**Pre-Permitting Meeting** $2,176 CRMC Ask

Once a draft 60% design has been created, the project team intends to request a pre-permitting meeting with the RIDEM Office of Freshwater Wetlands Permitting to discuss the Application to Alter Freshwater Wetlands and Water Quality Certification permit application process. We will ask about the requirements for the water control plan and sediment management, as well as any wildlife time-of-year restrictions that the Department may require.

**Cultural Assessments** $9,882 CRMC Ask

A cultural resource management firm will be hired to assess the historical resources on-site. We anticipate the scope of work to include a review of survey reports, local histories, historical maps, and online resources to identify previous cultural resource documentation in the vicinity of the dam. The firm will conduct a site visit, develop a historical context statement for the project area, and prepare a report that describes the research findings. Finally, the firm will prepare a letter initiating consultation with the Rhode Island State Historic Preservation Office (RISHPO) and other consulting parties, including the Narragansett Indian Tribe and the Town of North Kingstown.

**Save The Bay Project Management** $0 CRMC Ask | $10,634.11 [$4,000 of which will be covered by a contribution from Bakeford Properties LLC, with a Save The Bay in-kind match of $6,634.11]

Save The Bay Staff Time

Save The Bay's Kate McPherson, Narragansett Bay Riverkeeper and Professional Wetland Scientist, will support this project through communication with the property owner, project management, meetings with EA Engineering, the cultural resource management firm, RIDEM, and partners, assist with continuing outreach to abutters and community members, and other tasks as necessary to complete the project. Kate will also conduct a review of the 60% design and attend the RIDEM pre-application meeting. Kate will also support the project by conducting an assessment of existing water quality and habitat conditions to support permit development. Charges calculated using Kate's hourly billable rate of $50 (which includes the organization's 27% fringe benefit rate for all staff) for 120 hours of time for a total of $6,000.

Wenley Ferguson, Director of Habitat Restoration, will support the project, estimated at 20 hours at an hourly rate of $54.17 (which includes the organization's 27% fringe benefit rate for all staff) for a total of $1,083.40.

Kristine Waxman, Director of Finance, will support the project, managing invoicing and billables with contractors. Kris will contribute 25 hours to this grant at an hourly rate of $67.01 (which includes the organization's 27% fringe benefit rate for all staff) for a total of $1,675.25

Mileage for the grant will be provided in-kind by Save The Bay at an estimated 84 miles for 2 round-trip at the federal rate of 0.66 per mile.

Bakeford Properties LLC Match

Mr. Mike Baker of Bakeford Properties LLC will contribute $1,000 in in-kind match support through his participation in meetings, plan reviews, and community outreach. Mr. Baker will also provide a $4,000 cash match to support Save The Bay's staff time (Ferguson, Waxman) and overhead(15% at $1,387.06) on this grant.

As stated in section IV of the proposal narrative, Save The Bay has also applied to the NBEP Design, Planning, and Capacity Building Activities to Remove Barriers for Aquatic Habitat Connectivity in the Narragansett Bay Region grant program. Should Save The Bay be awarded the NBEP funds, we will be able to advance work on the Rodman Mill Dam and further leverage funding from the CEHRTF grant program. NBEP funding would be used to complete a QAPP for wetland biological evaluation (a requirement of EPA funding), draft and final permit applications for RIDEM and USACE, and respond to permit agency comments. The total request pending with NBEP is $51,483. Should Save The Bay not receive the NBEP grant, we would anticipate applying to the CEHRTF grant program in 2026 to provide support for activities not awarded under the NBEP grant.

## IX. ADDITIONAL MATERIALS

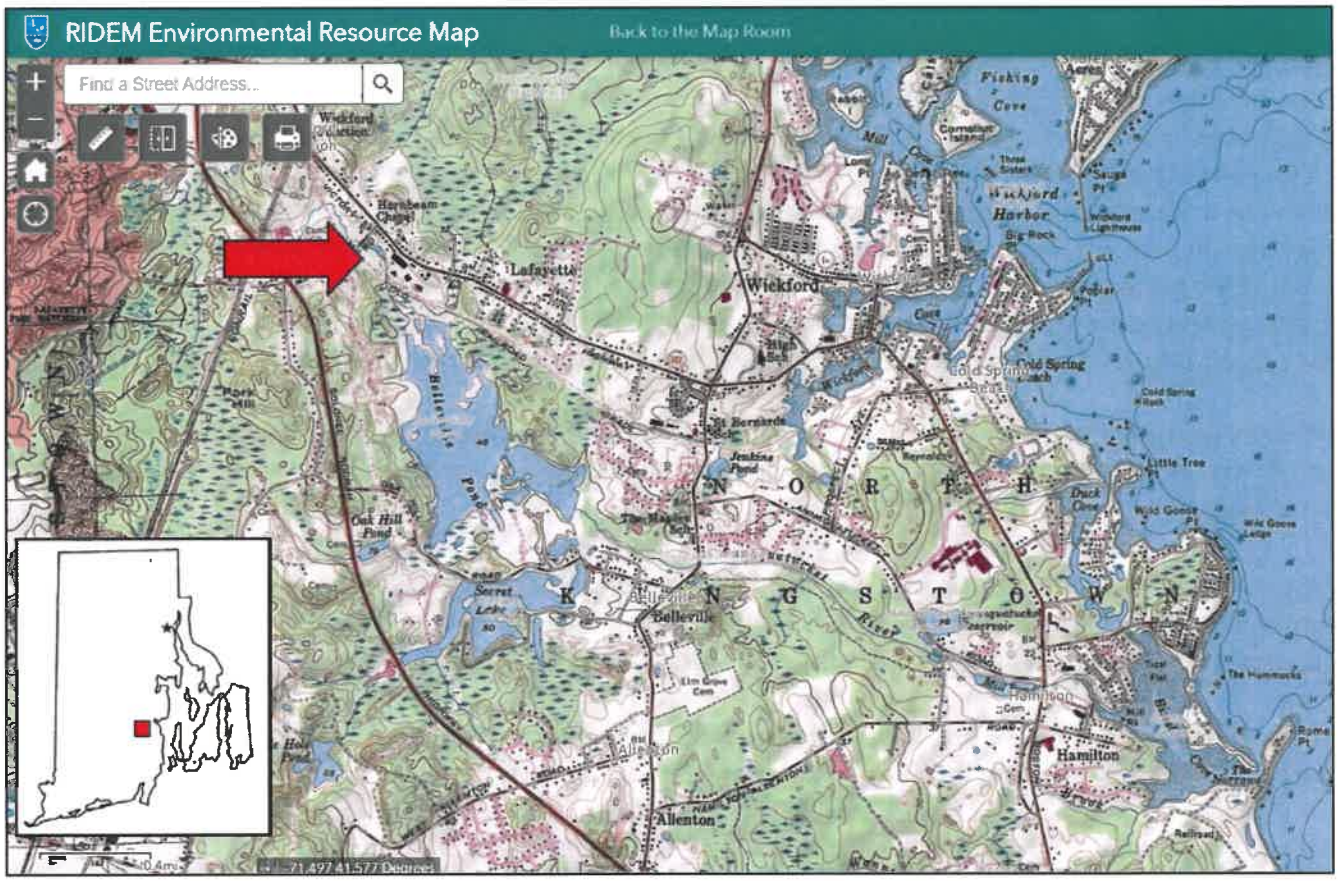



Figure 1: Locus Map featuring a USGS Topographic Map, Wickford Quadrangle, depicting the Annaquatucket River and the project's proximity to Narragansett Bay. The red arrow points to Rodman Mill Pond and the dam location.

Figure 2: Photo taken during the November 8, 2022, site meeting of the Rodman Mill Dam spillway, within the Annaquatucket River in North Kingstown. Property owner Michael Baker is located in the top right corner of the photograph, describing site conditions.

Figure 3: View northwest of the impoundment looking upstream from the dam structure. Photo taken November 8, 2022.

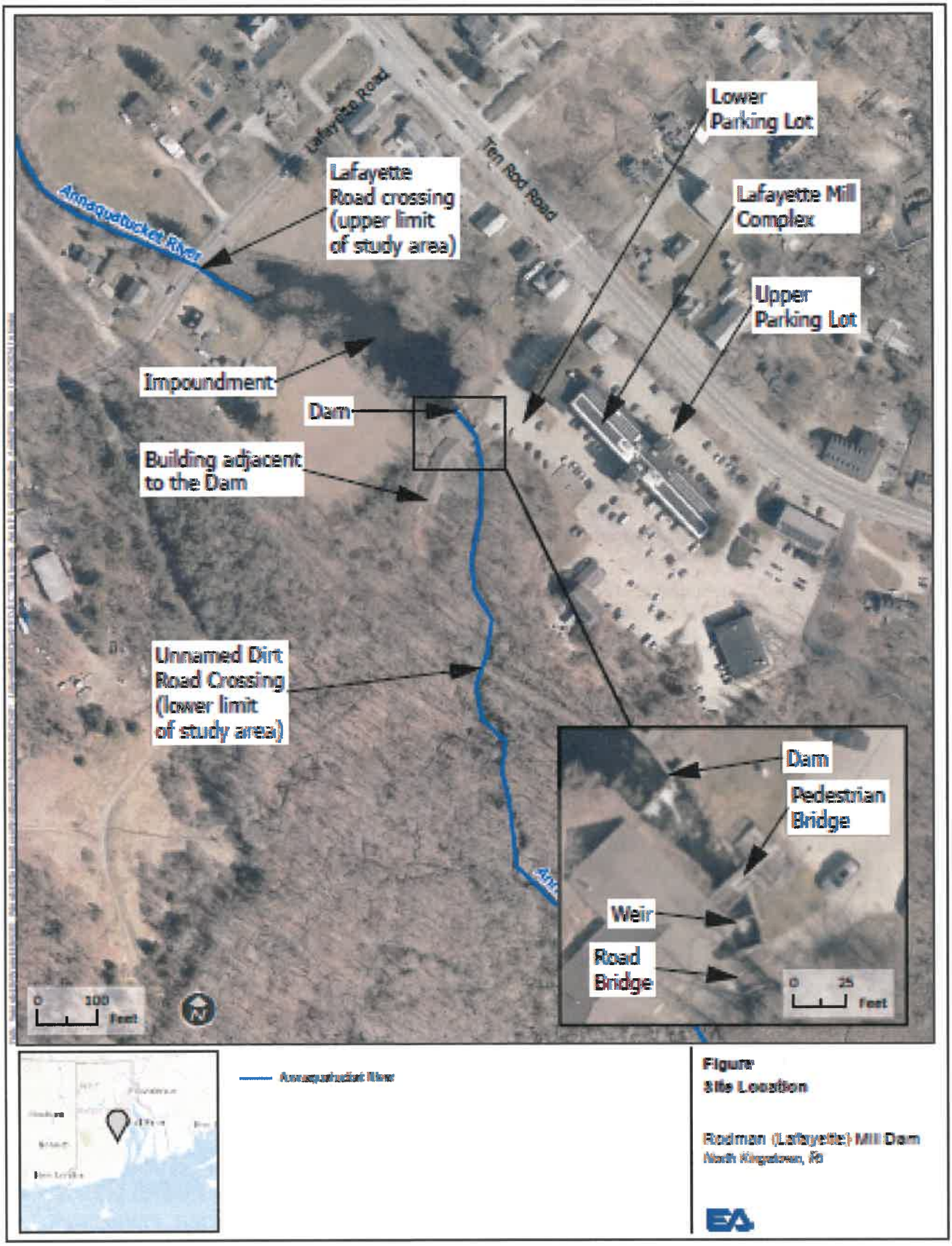

Lafayette Road
Ten Rod Road
Annaquatucket River
Lafayette Road crossing (upper limit of study area)
Lower Parking Lot
Lafayette Mill Complex
Upper Parking Lot
Impoundment
Dam
Building adjacent to the Dam
Unnamed Dirt Road Crossing (lower limit of study area)
Dam
Pedestrian Bridge
Weir
Road Bridge
0 100 Feet
0 25 Feet
Annaquatucket River
Figure
Site Location
Rodman (Lafayette) Mill Dam
North Kingstown, RI

Figure 4: Labeled aerial photograph.

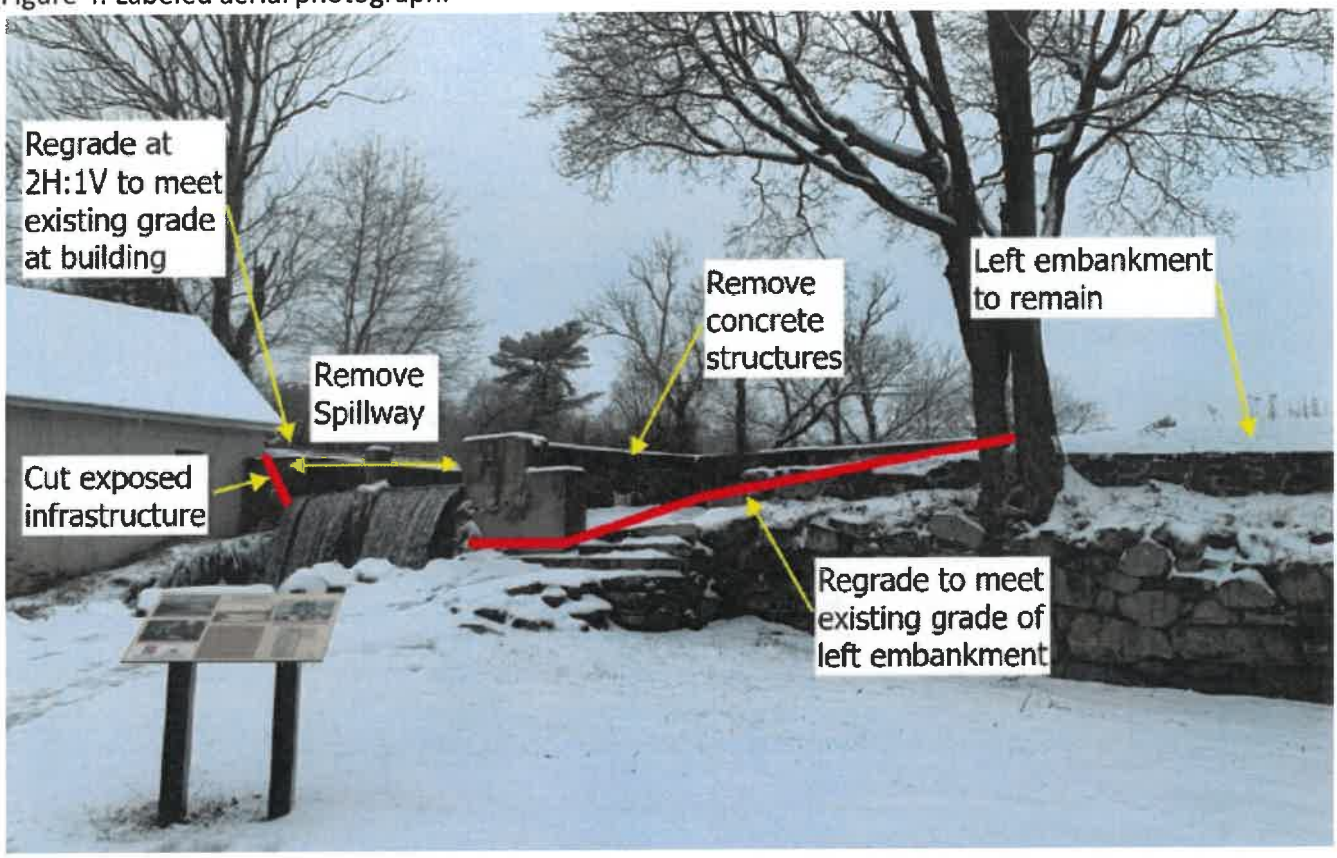



Figure 5: View west from the lower parking lot of the conceptual full spillway and partial embankment removal.

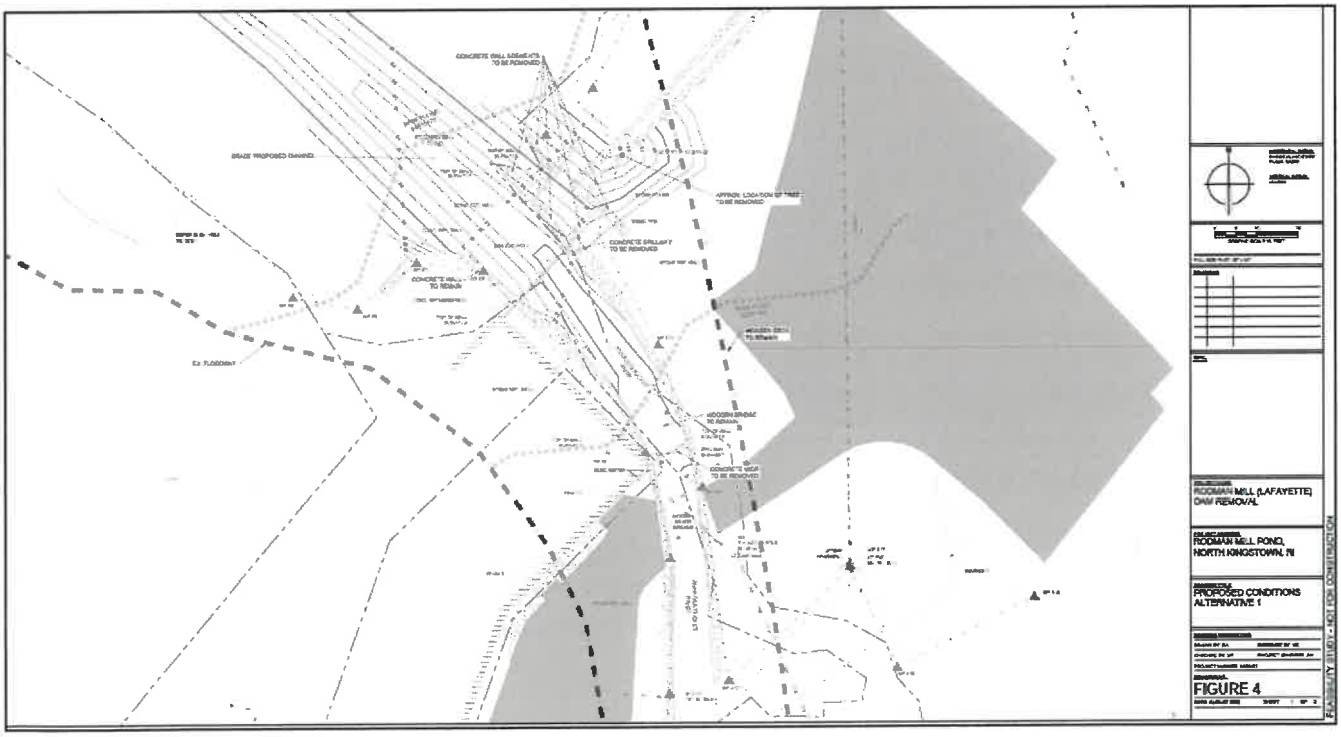



Figure 6: 30% design from the Feasibility Study that shows regrading necessary for a full spillway and partial embankment removal.

Figure 7: Artistic rendering depicting generally what a dam removal might look like at Rodman Mill Pond.

Natural Heritage Rare Species Areas near Rodman Mill Dam.


Aureolaria pedicularia (north): located in power line ROW just north of RR tracks.
Aureolaria pedicularia (south): located in power line ROW between Ryan Park footpath and Route 4.
Tephosia virginiana: located just south of Route 102 at 514 Ten Rod Road.

Figure 8: Consultation with the RI Natural Heritage Survey confirmed that the project will not impact any rare species, despite its location within a Natural Heritage Area (updated December 2022). The red arrow points to the Rodman Mill Pond impoundment.

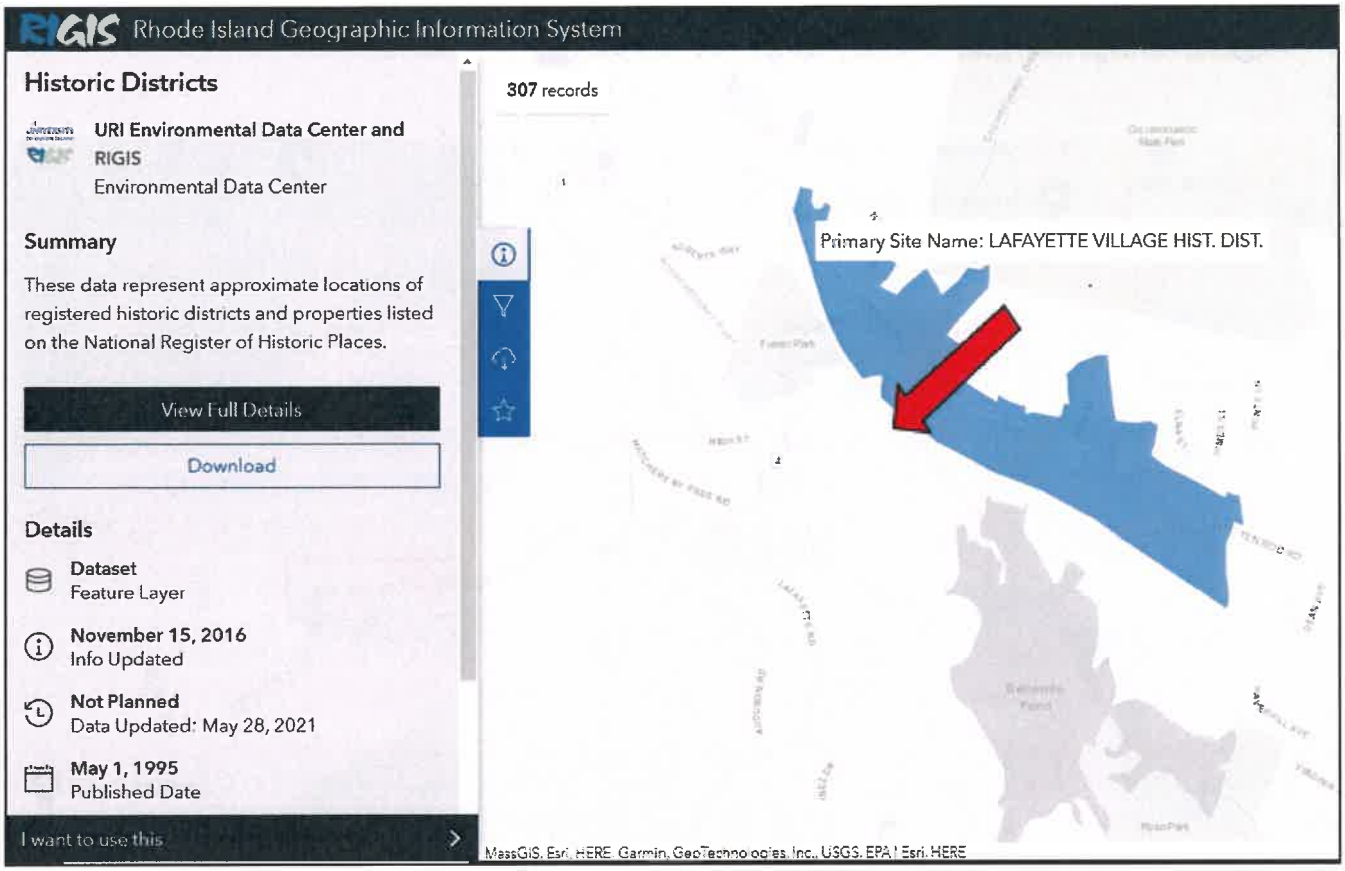



Figure 9: The property is within the Lafayette Village Historic District. Save The Bay has consulted with the state Historical Preservation and Heritage Commission and intends to hire a cultural resources management firm to facilitate coordination during this next phase of the project.

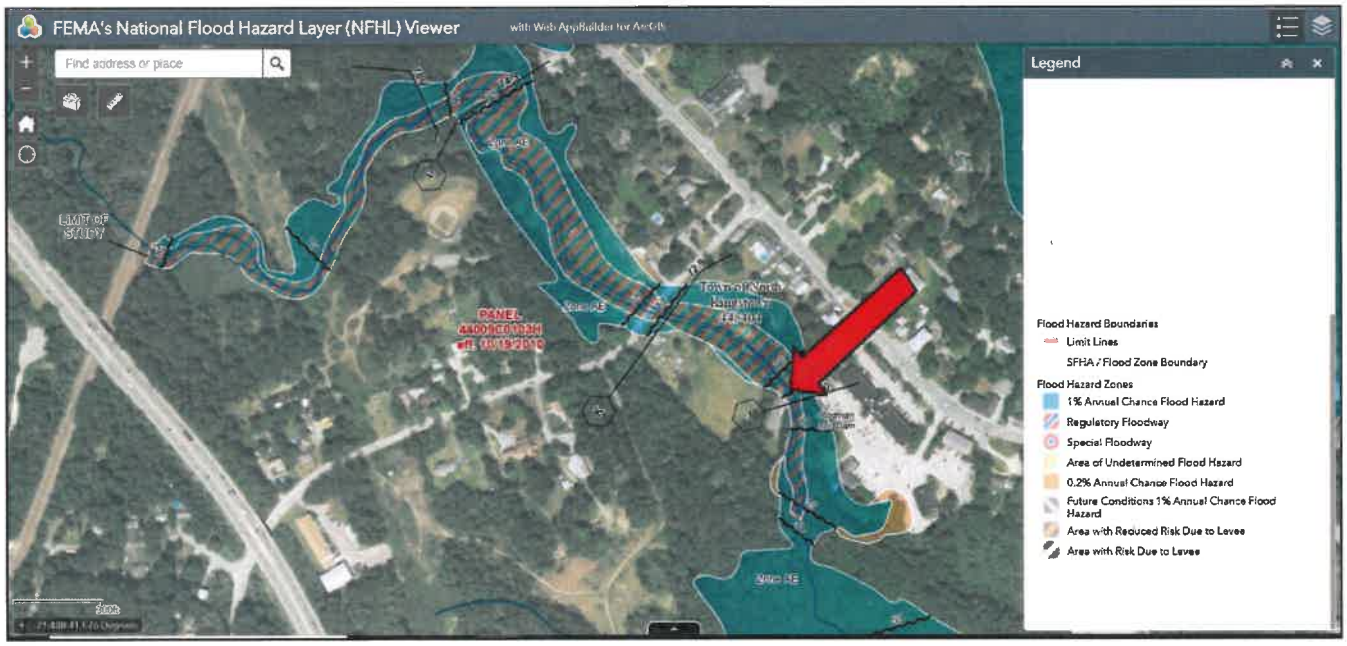



Figure 10: Floodplain and floodways as mapped by the Federal Emergency Management Agency (FEMA) of the Annaquatucket River. The red arrow points to the dam. Rodman Mill Dam is categorized as a high-hazard dam in poor condition by RIDEM's Office of Dam Safety.

January 21, 2026

CRMC
Bruce Lofgren, AICP
Oliver Stedman Government Center
4808 Tower Hill Road
Wakefield, RI 02879

Dear Mr. Lofgren,

I am Mike Baker, owner of Bakeford Properties LLC and the Mill at Lafayette (Assessor's Plat 7, Lot 11 in North Kingstown), and I have given permission to Save The Bay to apply for the CRMC Trust Fund Grant to advance the design, conduct the required cultural assessment, and prepare for the permitting process for the potential dam removal at Rodman Mill Dam. We have already completed a reconnaissance study and a feasibility study with dam removal alternatives. The Rodman Mill Dam is in bad shape, and I am interested in pursuing dam removal. The long-term goal for this project is to provide upstream fish passage to the Annaquatucket River, increase the resilience of this river system by restoring the river, and improve the water and habitat quality in the impoundment.

Sincerely,

Mike Baker
Bakeford Properties LLC
Mill at Lafayette
Owner/Manager

TROUT UNLIMITED
RHODE ISLAND

January 23, 2026

Bruce Lofgren, AICP
RI Coastal Resources Management Council
Oliver Stedman Government Center
4808 Tower Hill Road
Wakefield, RI 02879

Dear B. Lofgren,

Rhode Island Trout Unlimited is in full support of Save The Bay's application for the CEHRTF grant to advance the design and apply for permits to remove the Rodman Mill Dam, on the Annaquatucket River in North Kingstown, at the Lafayette Mill Complex. RITU is very familiar with this site and has worked with property owner Michael Baker to apply for grant funding in the past to get this project started.

Removal of this high hazard dam, which is in poor condition, will remove a probable threat to human health and property. Restoration of natural floodplain areas above the spillway will create a more resilient river corridor. Removal of this dam will also restore over 2 miles of fish habitat to the Annaquatucket River for both native cold-water species as well as anadromous fish. With fish ladders on the dams present downstream, this project has the potential to open the watershed to full restoration for anadromous fish, and Sea Run Brook Trout in particular. Rhode Island Trout Unlimited fully supports Save The Bay's proposal for funding from CRMC to explore restoring river continuity and improve the resiliency of the Annaquatucket River watershed. We look forward to continuing to work with them on restoration and resiliency efforts.

Thank you for your time and consideration.

Sincerely,

Glenn Place, President
Rhode Island Trout Unlimited

203 Arcadia Road
Hope Valley, Rhode Island 02382
https://www.rhodeislandtu.org

Save The Bay
Attn: Kate McPherson, Riverkeeper
100 Save The Bay Drive
Providence, RI 02905

January 18, 2026

Subject: Supporting the request for funding for further study of the removal of the Rodman Mill Dam to Enhance Climate Resiliency on the Annaquatucket River in North Kingstown, Rhode Island.

Dear Ms. McPherson,

The Land Conservancy of North Kingstown (LCNK) fully supports Save The Bay's application for funding from the CRMC Habitat Trust Fund to conduct further efforts advancing the removal of the Rodman Mill Dam. As we stated in our letter of support on March 30, 2024, the dam is on the Annaquatucket River, a critical part of the ecosystem in North Kingstown. The mission of the LCNK is to protect open space and natural habitat in North Kingstown, and to educate the citizens of North Kingstown about the importance of that preservation. The removal of the Rodman Mill Dam would support that mission in at least two ways.

A number of species will benefit from the enhanced habitat resulting from removal of the dam, but probably none more than our two species of river herring, the Alewife and the Blueback Herring. According to NOAA Fisheries the numbers of both species are way down in recent years. This is due in part to the fact that so much of their spawning habitat is unavailable to them because of dams like the Rodman Mill Dam. These fish are critical as forage to several local fisheries, including those of Striped Bass and Bluefish. The decline of river herring has gotten lots of public attention, as evidenced by a recent prominent article in the *Providence Journal*, *Independent*, and *Standard Times*. The importance of the removal of the dam to provide access to the river herrings former spawning grounds is something which could be easily explained by signage at the former dam site. Failure of that dam would adversely impact the Rodman Mill properties immediately downstream. It could also be detrimental to others farther downstream.

The dam is located in an area adjacent to a major mill restoration which is easily accessible to the public. The combination of the name recognition of the herring, and the publicly available location of the dam makes this a great educational opportunity, as well as an opportunity for ecological restoration of riparian land.

The LCNK remains very excited about this project, and we are happy to do whatever we can do to help it come to fruition. Thank you for all that you do to benefit North Kingstown, and the entire Narragansett Bay Watershed.

Sincerely,

Walter Berry

Walter Berry
Stewardship Co-chair
Land Conservancy of North Kingstown

I was lucky to grow up next to the pond. We all, as Lafayette youth, grew up with it. We fished, swam, ice-skated, and played hockey on or in the Mill Pond. As fond as my memories are of it, I do think it is time for the dam to go before it collapses.

I have attached a picture of some inhabitants of the pond enjoying a sunny day. You may have to zoom it a bit to see them all.

Feel free to contact me if I can be any further help.

Sincerely,
Walter T.
North Kingstown Resident

**AUTHORIZED SIGNATURE**

**AUTHORIZED AGENT OF LEAD ORGANIZATION**

Signature

1/23/2026
Date

Return your completed proposal by 4:00 p.m. on **January 23, 2026** to:

**Bruce Lofgren, AICP**
**RI Coastal Resources Management Council**
**Oliver Stedman Government Center**
**4808 Tower Hill Road**
**Wakefield , RI 02879**
**blofgren@crmc.ri.gov**

Applicants are required to submit one (1) signed hard copy of the proposal form and one (1) electronic copy in Adobe PDF format. **Please submit electronic copy as a **SINGLE PDF FILE** containing all application materials.**

Contact Bruce Lofgren at by email or **401-782-4196** with any questions.

CRMC
COASTAL RESOURCES MANAGEMENT COUNCIL

# Rhode Island Coastal and Estuary Habitat Restoration Fund
# Full Proposal Form 2026/2027

## I. PROJECT SUMMARY

1. **Project Title:** Oakland Beach Coastal Invasive Species Mitigation and Habitat Restoration Preparation

2. **Project Location and coordinates** *(include map)*:
   Oakland Beach, Warwick, Rhode Island
   Coastal parcel (City of Warwick Parcel 375–562)
   Coastal Setting: Public coastal shoreline with maritime dune and maritime shrubland habitats


3. **Project type** *(Design, Construction or Other)*: Invasive plant management and native plantings
4. **If other, please specify:**
   Target Invasive Species
   Oriental / Asian Bittersweet (*Celastrus orbiculatus*), Japanese Honeysuckle (*Lonicera japonica*), Japanese Knotweed (*Reynoutria japonica*), Tree of Heaven (*Ailanthus altissima*), Mugwort (*Artemisia vulgaris*)
5. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: Coastal dune and maritime shrub habitat within public access areas

6. **If other, please specify**:

7. **Restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: Invasive plant management and replanting

8. **Total acreage or miles(river systems) of habitat to be restored, or project area planning unit size:** encompasses approximately .3 acre

9. **Project benefits:** Improved coastal habitat function and resilience. Reduced invasive species pressure along a public shoreline. Protection of dune stability and erosion control. Enhanced conditions for future native vegetation establishment. Long-term ecological and public resource benefits.

10. **Project partners** *(organizations providing financial or other support to the project)*: City of Warwick, Save The Bay, RINLA Apprenticeship program

11. **__This is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund? No If yes, year(s) funding was awarded:**

---

## II. PROJECT MANAGER CONTACT INFORMATION

1. **Name: Angela Stamoulos**

2. **Organization: Oakland Beach Revival Society**

3. **Address: 292 Sea View Drive**

4. **City: Warwick** **5. State: RI** **6. Zip: 02889**

7. **Phone: 6178756118** **8. Email: angela.stamoulos@nemoves.com ; oaklandbeachrevivalsociety@gmail.com**

9. **Property Owner(s)**:
Applicant must document ownership of the project site or permission to perform all proposed restoration, maintenance and monitoring activities *(include appropriate documentation).*

We have secured permission by the City of Warwick.
*See Attached letter from the City of Warwick*

## III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

| Amount Requested from Trust Fund | | $12,000 |
|---|---|---|
| **Matching Funds** | **Project Partner(s)** | **Amount of Match** |
| | **City of Warwick- Department of Public Works (staff assistance)** | In kind |
| **$7,500** | **Oakland Beach Revival Society- Volunteer labor, post treatment brush cutting, planting, documentation and maintenance** | In kind |
| **$5,566** | **Additional Community Partners- labor, donated materials & supplies for planting** | in kind |
| **$600** | **Southern RI Conservation District- Public and educational outreach** | in kind |
| | **Total Project Cost** | **$25,666** |

## IV. PROPOSAL NARRATIVE (five pages maximum)

### 1. Justification and Purpose

*Describe the human impacts and previous restoration activities at the proposed project site. If multiple sites, please describe the impacts and previous restoration activities at each). Briefly describe the proposed project, its restoration goals, long-term and short-term outcomes.*

The Oakland Beach coastal trail area in Warwick, Rhode Island, has been significantly altered by decades of watershed development and unmanaged growth within coastal buffer and dune systems. These impacts have degraded the natural coastal buffer, allowing dense infestations of herbaceous and woody invasive plant species to displace native vegetation, reduce wildlife habitat, and weaken shoreline resilience to storm events and flooding.

The proposed invasive plant management and coastal buffer restoration project builds directly on the coastal resilience project conducted by the City of Warwick in coordination with Save The Bay in 2023 that included removing low-lying sections of Strand Avenue and Sea View Drive that were vulnerable to flooding and erosion. After the paved areas were removed, public parking and a public path were installed and a dune was created in the area of the former roadways. Save The Bay engaged community volunteers in the planting of dune grass. This resilience project improved shoreline stability and reduced vulnerability to coastal hazards in adjacent areas. However, unmanaged invasive species directly south of the resilience project location at Oakland Beach, particularly Japanese knotweed, pose a serious risk of spreading into and undermining the recently completed coastal resilience project. Without targeted treatment, these invasives are likely to spread into restored areas, threatening ecological function and prior public investment.

This project proposes a three-year invasive species management effort (2026–2028) across approximately .3 acre of coastal habitat, focusing on maritime dune and maritime shrubland communities. Target species

include Oriental bittersweet, Japanese honeysuckle, Japanese knotweed, Tree of Heaven, and mugwort. Management actions will reduce invasive plant cover, limit further spread of these invasive species, and prepare the site for future native habitat restoration. All work will be conducted using integrated vegetation management techniques appropriate for sensitive coastal environments and in compliance with CRMC regulations and the CRMC Coastal Buffer Planting Guide.

Restoration goals include enhancing native plant diversity and structure, improving shoreline stability and erosion resistance, increasing public safety and visibility along the public coastal trail, and providing opportunities for volunteer engagement and environmental education. Short-term outcomes include invasive species removal, installation of native coastal vegetation, and establishment of a monitored restoration area. OBRS plans to prioritize planting native beach grass in the first year to stabilize bare sand in the dune restoration area. Once invasive species treatment has been conducted for two growing seasons , OBRS will plant a combination of warm season grasses and native coastal shrubs in the invasive species management areas. Long-term outcomes include increased ecological diversity, improved stormwater infiltration, enhanced habitat for pollinators and birds, and strengthened coastal resilience.

Oakland Beach is a historically under-invested coastal neighborhood that has experienced repeated flooding and storm damage. By continuing and protecting recent coastal resilience investments, this project will deliver lasting environmental and social benefits while improving the safety, aesthetics, and ecological function of a heavily used public shoreline corridor and fostering long-term community stewardship.

**2. Project Activities, Schedule and Work Plan**

*Describe the planned on-the-ground project activities, and explain how each activity will help to restore ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and final project reports will be submitted.*

The Oakland Beach Revival Society will work in coordination with the City of Warwick to finalize the invasive plant management and restoration plan, including preparation and submission of the CRMC permit application. Save The Bay will review the final plan and provide technical guidance on invasive species management and native replanting strategies.

The project will implement an integrated vegetation management approach emphasizing manual and mechanical control methods, with targeted, species-specific herbicide application conducted by Water & Wetland, a licensed aquatic and wetland vegetation management contractor. These actions will reduce invasive plant dominance, stabilize coastal soils, and support recovery of native dune and maritime shrubland communities.

The project area currently supports native plant species including, black willow (*Salix nigra*), smooth sumac (*Rhus glabra*), and native grasses such as American beachgrass (*Ammophila breviligulata*), little bluestem (*Schizachyrium scoparium*), and switchgrass (*Panicum virgatum*). Existing native vegetation will be retained and protected during all management activities.

Following invasive species control, supplemental planting will utilize CRMC Coastal Planting Zone 1 and Zone 2 approved native species (see site map) to enhance dune stability, restore maritime shrubland structure, and improve wildlife habitat.

**Zone 1 – Maritime Dune (Proposed Native Replacement)**

- **Grasses & Groundcovers:** *Ammophila breviligulata* (American beachgrass), *Panicum virgatum* (switchgrass)
- **Perennials:** *Solidago sempervirens* (seaside goldenrod)
- **Shrubs/Groundcovers:** *Morella pensylvanica* (northern bayberry), *Prunus maritima* (beach plum)

**Zone 2 – Coastal Shrubland (Landward / Back Dune)**

- **Shrubs & Small Trees:** *Viburnum dentatum* (arrowwood), *Prunus serotina* (black cherry), *Rosa virginiana* (wild rose)
- **Groundcovers & Grasses:** Native grasses and forbs suited to moderate salt spray conditions (e.g., *Panicum virgatum*, *Solidago sempervirens*), along with additional shrub species typical of herbaceous coastal edges.

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**Year 1 – 2026**

**April 2026: Project Preparation and Site Review**

- Conduct pre-treatment site inspections to confirm invasive species extent, update treatment maps, and finalize the invasive plant management plan with the City of Warwick and with guidance from Save The Bay.
- Prepare and submit a CRMC permit application on behalf of the City of Warwick.
- Coordinate with Water & Wetland, municipal staff, and licensed applicators to finalize work schedules.

*These activities ensure treatments are accurately targeted, reduce unnecessary disturbance, and improve ecological outcomes.*

**August 2026: Targeted Herbicide Treatment (Water & Wetland)**

Once the permit is received, treatment will be performed in August or September 2026 in Zone 2, by Water & Wetland. AquaNeat or Glyphosate 5.4 (glyphosate) will be paired with a non-ionic surfactant, which acts as a sticking agent and assists with herbicide penetration into target plants. The herbicide mixture will be applied via foliar spray using a low-volume backpack sprayer.

Additionally, hand-wiping of individual plants located on the fringe of non-target native species will be incorporated as needed to minimize off-target impacts. Treatment will commence on a date without excessive winds and will occur only when no rain is forecasted for a minimum of six (6) hours post-treatment.

Unless otherwise specified, the treatment price does not include cutting or removal of dead plant material.

**September–October 2026: Mechanical and Manual Vegetation Control and Targeted Herbicide Treatments**

- Once CRMC assent is received, cut and remove Oriental bittersweet and Japanese honeysuckle vines from native shrubs and trees in Zones 2.

- Apply cut-stump herbicide treatments to bittersweet and honeysuckle where necessary to prevent resprouting.
- Treat Tree of Heaven using cut-stump methods to prevent root suckering.
- Manually remove small mugwort patches where feasible, minimizing soil disturbance.
- Apply foliar or stem-injection herbicide treatments to Japanese knotweed following flowering.

*These actions immediately reduce competitive pressure on native vegetation, increase light availability, and improve structural diversity.*

**October 2026: Documentation**

Conduct post-treatment site assessment and photo documentation.

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**Year 2 – 2027**

**March–April 2027: Annual Reporting and Adaptive Planting**

Submit an annual project report to CRMC/DEM summarizing Year 1 activities, treatment areas, and preliminary outcomes.
Conduct debris cut-back and gentle mulching by leaving material in place to protect soils and dispose as needed.

Plant dune grass, American beach grass, in coordination with Save The Bay to enhance the dune restoration area outside of the knotweed treatment area, shown as Zone 1.

**May–June 2027: Monitoring and Adaptive Planning**

Monitor treated areas for invasive regrowth, including Japanese knotweed rhizome emergence and Tree of Heaven root suckers.
Refine Year 2 treatment priorities based on monitoring results.

**May–June 2027: Follow-Up Mechanical and Manual Control**

Re-cut regrowth of bittersweet and honeysuckle vines.
Remove newly established Tree of Heaven saplings and mugwort patches using manual methods.

**August–September 2027: Follow-Up Herbicide Treatments**

Zone 2- Repeat targeted herbicide treatments, with Water & Wetland, for Japanese knotweed, Tree of Heaven regrowth, and woody vines as needed.

**October–December 2027: Documentation**

Conduct site assessment and photo documentation.

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**Year 3 – 2028**

**March–April 2028: Site Preparation and Maintenance**

Conduct cut-back of remaining invasive regrowth and gently mulch by leaving material in place to stabilize soils and reduce erosion.

**April–May 2028: Restoration Planting with Native Species**

Implement restoration planting with native grasses and shrubs in Zones 2. A minimum 30-day waiting period following invasive treatments will be observed prior to planting. American beachgrass, Panicum, and 1 gal native shrubs will be planted early in the spring planting window to ensure optimal establishment and survival.

**October–December 2028: Final Assessment and Reporting**

Conduct final site assessment and photo documentation.
Submit the **Final Project Report** to CRMC/DEM detailing completed activities, treatment effectiveness, restoration outcomes, and long-term management recommendations.


***3.*** **Minimization of Adverse Impacts**

*What are the potential impacts resulting from project activities (e.g. the disturbance of sensitive species by construction activities), and how will these impacts be minimized (e.g. scheduling construction to avoid disturbance of sensitive species).*

Invasive species management may result in short-term, temporary disturbance to wildlife utilizing dune and maritime shrubland habitats. Activities will be scheduled outside of peak songbird nesting periods where practicable, with primary herbicide treatments occurring in late summer and early fall to minimize wildlife impacts. Low-impact, manual removal methods will be used wherever feasible, and heavy equipment and root excavation will not be used within dune habitats to protect soil stability and natural shoreline processes. Existing native dune vegetation will be retained for erosion control, and treated invasive vegetation may be left in place temporarily where appropriate to reduce soil exposure. Herbicides will be applied only through targeted methods by licensed applicators in accordance with RIDEM regulations, with no broadcast spraying. Native vegetation will be identified prior to treatment, and invasive vines will be cut at the base to prevent damage. Public access will be maintained to the maximum extent practicable, with temporary signage and coordination with the City during active management

**4. Public Support**

*Demonstrate public support for the project by providing evidence of communication with adjacent landowners, community members and other stakeholders. Describe planned or completed community / stakeholder education and outreach efforts.*

Public support is an important component of the proposed project, as Oakland Beach is a highly visible public shoreline used by residents, visitors, and adjacent property owners.

**Existing and Ongoing Communication**

Adjacent landowners and neighborhood associations have been informed of ongoing concerns related to invasive plant spread, shoreline stability, and habitat degradation at Oakland Beach through routine communications and coastal management discussions.

Coordination with municipal departments will ensure project activities are consistent with local land management goals and public safety considerations.

**Planned Community and Stakeholder Outreach**

Prior to the initiation of on-the-ground work, OBRS will provide notice of planned invasive management activities through appropriate channels such as the municipal website, social media, or on-site signage.

OBRS has created a community outreach FB group and will also communicate with neighbors and property owners through that vehicle. On that FB group we will be publishing regular short educational videos about the project overall as well as short educational videos about invasive and native plants.

Temporary informational signage will be installed near treatment areas during active management periods to explain the purpose of the project, the invasive species being addressed, and the long-term ecological benefits.

The OBRS will be available to respond to questions or concerns from residents and beach users during implementation.

**Education and Stewardship Benefits**

Outreach efforts will emphasize the connection between invasive species management, dune stability, coastal resilience, and protection of public shoreline resources.

The project will serve as a visible demonstration of best management practices for invasive species control in coastal environments, supporting broader public understanding and acceptance of restoration activities.

Information generated through this project, including lessons learned and treatment outcomes, may be shared with local conservation groups, coastal managers, and community stakeholders to encourage continued stewardship.

**5. Economic and Educational Benefits**

*How will the proposed project provide direct economic and/or educational benefits to a community and/or the state?*

**Economic Benefits**

**Protection of Coastal Infrastructure and Public Assets:** By reducing invasive species pressure and improving dune and coastal shrub habitat, the project supports shoreline resilience and helps protect public infrastructure, recreational areas, and municipal investments at Oakland Beach from erosion and storm impacts.

**Cost-Effective Management:** Early intervention and multi-year invasive species control reduce long-term maintenance costs associated with the spread of invasive plants.

**Support for Local Economy and Recreation:** Oakland Beach is a popular public destination. Improving habitat condition and shoreline stability enhances the aesthetic and recreational value of the shoreline and beach area, supporting local tourism, small businesses, and seasonal economic activity.

**Use of Local Services:** Project implementation will utilize licensed applicators, environmental professionals, and municipal staff, supporting local and regional employment in coastal management and restoration fields.

**Educational Benefits**

**Public Awareness and Environmental Education:** On-site signage and public communication will educate residents and visitors about invasive species, coastal habitat function, and the importance of dune and shrub habitat in protecting shorelines.

**Demonstration of Best Management Practices:** The project will serve as a visible example of responsible invasive species management in a coastal environment, providing learning opportunities for watershed residents, municipal staff, volunteers, and other coastal managers.

**Long-Term Stewardship Ethic:** By connecting invasive species control to broader concepts such as coastal resilience and climate adaptation, the project fosters greater public understanding and support for coastal stewardship statewide.

**6. Coastal Resiliency**

*How have the present and future impacts of hazardous storm events and sea level rise been considered during the project planning and design phases? What impact will the project have on resilience of coastal or estuarine habitat?*

The project addresses storm impacts and sea level rise by restoring native vegetation structure and reducing invasive monocultures that are prone to failure during storms. Improved dune and coastal shrub habitat buffers wave energy, and increases the site's adaptive capacity, providing a foundation for future nature-based resilience strategies.

**7. Planning Consistency and Restoration Priority**

*Is the proposed project consistent with the goals of a local, state or regional planning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidance).*

The project is consistent with the Rhode Island Coastal Resources Management Program, CRMC's Coastal and Estuarine Habitat Restoration Strategy, the State Guide Plan, and statewide coastal resilience initiatives. It addresses priority needs related to invasive species management, shoreline vegetation enhancement, and climate adaptation in a highly exposed coastal area.

**8. Species of Concern**

*Will the project result in benefits to wildlife species listed as federally or state endangered, threatened, or species of concern within Rhode Island? Please specify which species will benefit and how. For a list of species, see the Rhode Island National Heritage Program's listing of animals at:* http://www.rinhs.org/wp-content/uploads/ri_rare_animals_2006.pdf or *a listing of plants at:* http://www.rinhs.org/wp-content/uploads/ri_rare_plants_2007.pdf

While no site-specific surveys have documented listed species within the project area, invasive species control will indirectly benefit state and federally listed coastal wildlife and plants by improving habitat structure, foraging conditions, and shoreline stability. The project aligns with Rhode Island Natural Heritage Program goals to conserve rare species through habitat improvement and invasive species reduction.
In adjacent areas where invasive species management has been done for several years, we have seen the recolonization of several natives such as Common Milkweed, Beach Pea, and Smooth Sumac, as well as monarch butterflies.

**9. Permitting**

*List any federal, state or local permits required to complete the project and the permit application status for each.*

Required permits will include a CRMC Assent, CRMC buffer zone review, and a RIDEM Division of Agriculture herbicide permit. All work will comply with applicable CRMC and RIDEM regulations.

**10. Capacity of Lead Organization** (attach additional materials if necessary)

*Demonstrate the capacity of the lead and/or partner organizations to successfully complete the proposed project by providing any or all of the following: a) a description of the organization(s) b) resume(s) or summary of qualifications of involved personnel c) evidence of successfully completed habitat restoration or conservation projects.*

The Oakland Beach Revival Society has the administrative, technical, and regulatory capacity to implement this project. Project managers, Angela Stamoulos and Jessica Turcios, will oversee project coordination, permitting and reporting, while qualified environmental professionals and licensed applicators will conduct invasive treatments. OBRS' experience managing public resources ensures successful project delivery. Both Angela and Jessica attended URI and CRMC's Invasive Plant Management Training program and are URI/CRMC certified Invasive Managers.

## V. SUSTAINABILITY (one page maximum)

### 1. Maintenance

*What is the estimated "lifespan" of each planned restoration activity? What are the anticipated short-term and long-term (beyond the funding period) operation and maintenance requirements of the project? Specify who will be responsible for funding and carrying out each O & M activity. Indicate when and with what frequency activities will occur.*

The primary restoration activity—targeted invasive species control—has an estimated **effective lifespan of 3–5 years** per treatment cycle, depending on species, site conditions, and reinvasion pressure. Woody invasive treatments (bittersweet, honeysuckle, Tree of Heaven) provide multi-year suppression when properly applied, while herbaceous species (knotweed) require follow-up management to maintain control.

This CEHRTF-funded project represents an **initial intensive management phase (2026–2028)** designed to significantly reduce invasive dominance and establish conditions suitable for longer-term habitat restoration.

**Short-Term Operation and Maintenance (2026–2028)**
During the funding period, O&M will include targeted follow-up invasive treatments, seasonal monitoring, minor hand removal of new growth, and adaptive management based on field conditions. Activities will occur primarily May–October.
**Responsibility:** Oakland Beach Revival Society will oversee all O&M using CEHRTF funds in coordination with qualified contractors and licensed applicators,.

**Long-Term Operation and Maintenance (Post-Funding)**
Post-funding O&M will focus on preventing reinvasion and protecting restoration investments through annual or biennial monitoring, spot or manual removal of isolated regrowth, integration with routine municipal maintenance, and coordination with future planting or stabilization projects. Activities will occur annually or as needed based on site conditions.
**Responsibility:**
Oakland Beach Revival Society will assume responsibility for post-grant O&M through routine maintenance in coordination with the City of Warwick. OBRS will seek future grant or partnership opportunities.

### 2. External Factors and Hazard Mitigation

*Identify existing external (off-site) factors that could reduce the chances of achieving the project goals (e.g. stormwater inputs to the site from the surrounding drainage area). Explain how these external factors will be addressed. Describe any additional measures taken to help ensure long-term success of the project (e.g. installation of stormwater management practices or securing of conservation easements).What are the likely future effects of hazardous coastal storm events and future sea level rise on the proposed project and how will these be addressed?*

Potential external factors include stormwater runoff from adjacent development, public foot traffic, nearby invasive seed sources, and disturbance from coastal storms. These risks will be addressed through focused follow-up treatments, monitoring near invasion pathways, coordination with municipal staff, and adaptive management following disturbance events.

The project minimizes hazard impacts by retaining native vegetation, avoiding soil disturbance, and using low-impact invasive control methods that maintain dune and shoreline stability. Anticipated effects of future storms and sea level rise include periodic erosion and vegetation loss.

## VI. EVALUATING PROJECT SUCCESS (one page maximum)

### 1. Performance Measures

*How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List performance measures and how they will be recorded. Include a detailed monitoring plan; if applicable (see below).*

Project success will be evaluated based on measurable reductions in invasive species coverage, improved habitat condition, and effective implementation of project activities.

**Performance Measures**

**Reduction in invasive species cover:**
Percent cover of target invasive species will be visually estimated and photo-documented before treatment and annually thereafter. Success is defined as a ≥85% reduction in invasive cover within treated areas by the end of 2027.

**Treatment effectiveness and regrowth control:**
Presence and extent of resprouting or reinvasion will be recorded during follow-up site visits. Success is defined as controlled regrowth requiring only spot treatment rather than broad re-treatment.

**Native vegetation response:**
Qualitative observations of native plant survival and regeneration will be documented to confirm improved habitat structure and soil stability.

**Implementation milestones:**
Completion of planned treatments, follow-up work, and reporting within the proposed schedule will be tracked and documented.

### 2. Monitoring Plan

*Describe any planned or completed pre- and post-project monitoring activities. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references.*

Monitoring will assess invasive species treatment effectiveness, native vegetation recovery, and site stability, and will inform adaptive management throughout the project. Monitoring will be led by the **Oakland Beach Revival Society** in coordination with the **City of Warwick**, **Save The Bay**, and project contractors. Will include permanent photo points, visual estimates of invasive and native plant cover, mapping of priority invasive species, survival counts of planted dune grass and shrubs, and qualitative site condition observations. Repeat photography and standardized field notes will ensure consistent documentation.

**Year 1 – 2026 (Baseline and Post-Treatment)**

- **April 2026:** Baseline photo points and documentation of invasive extent and site conditions.
- **September–October 2026:** Post-treatment monitoring to assess effectiveness and identify follow-up needs.

**Year 2 – 2027 (Effectiveness and Adaptive Management)**

- **March–April:** Early-season monitoring for regrowth, site stability, and dune grass survival in Zone 1.
- **May–June:** Peak-season monitoring to guide mechanical and herbicide follow-up treatments.
- **September–October:** Post-treatment monitoring to document cumulative invasive reduction.

**Year 3 – 2028 (Restoration Success)**

- **March–April:** Pre-planting monitoring to confirm restoration readiness.
- **May–June:** Post-planting monitoring of native species survival and establishment.
- **September:** Late-season assessment of long-term site condition.
- **October–December:** Final site assessment and photo documentation.

Monitoring results will be summarized in **annual reports** and a **Final Project Report** submitted to **CRMC/DEM**, including photographs, monitoring findings, and long-term management recommendations to support stewardship by the City of Warwick.

## VII. PROJECT BUDGET

| BUDGET CATEGORY | Description | 2026 | 2027 | 2028 | CRMC REQUEST | MATCH | MATCH PENDING OR SECURED? (select one) | SOURCE OF MATCH | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| Debris Management Services & Equipment | Invasive/ Debris removal/Disposal | - | $4,000 | $4,000 | $2,000 | $6,000 | secured | OBRS Volunteer | $8,000 |
| Herbicide Application<br><br>Water & Wetland | Licensed applicator services and materials | $3,250 | $2,275 | - | $5,525 | | | | $5,525 |
| Project Coordination, Documentation & monitoring | Permit, Site inspections, photo monitoring | $500 | $500 | $500 | - | $1,500 | secured | OBRS Volunteer | $1,500 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | , field documentation | | | | | | | | |
| Equipment & Supplies | Hand tools | $273 | $273 | $274 | $820 | | | | $820 |
| Public Outreach/ Relations | Temporary on-site information | $200 | $200 | $200 | - | $600 | secured | Southern RI Conservation District | $600 |
| Native plants/ species | Shrubs | - | - | $865 | $865 | | | | $865 |
| | Beach Grass | - | $200 | $680 | $880 | | | | $300 |
| | Panicum virgatum plugs | - | - | $1610 | $1610 | | | | $1610 |
| | Delivery | - | $150 | $150 | $300 | | | | $300 |
| Labor /Restoration Planting | Planting Grass plugs & shrubs (volunteers) | - | $2,783 | $2,783 | - | $5,566 | secured | OBRS & Community Partners | $5,566 |
| | **TOTAL** | $4,223 | $10,381 | $11,062 | $12,000 | $13,666 | | **TOTAL PROJECT COST** | $25,666 |

## VIII. BUDGET NARRATIVE (one page maximum)

*Please provide a description and justification for each line item included in the project budget form (e.g. for personnel costs, provide hourly and fringe rates, for travel specify rate and estimated number of miles). Please specify any match requirements for each source of funding. Please include costs associated with required annual and final reports to CRMC. Be sure to detail how CRMC funds will be used.*

**Debris Management Services and Equipment**
Grant funds will support invasive species removal and debris management. Costs are based on contractor-provided quotes.

Year 2 & 3 supports targeted follow-up control to address regrowth.

The Oakland Beach Revival Society (OBRS) will provide an in-kind volunteer match totaling approximately 80% of total project costs, which is substantially secured. Volunteer efforts will include debris removal, site preparation, and monitoring.

The CRMC funding request represents 20% of the total contractor-quoted cost, with remaining costs met through in-kind services and partner support.

**Herbicide Application**
Grant funds will be used for targeted herbicide treatments performed by licensed applicators, Water & Wetland, a Jones Lake Management partner, in full compliance with RIDEM regulations. Treatments will be applied in Year 1 and Year 2, with costs based on contractor-provided quoted prices.

**Monitoring & Documentation/ Project Management**

Project coordination, contractor oversight, permit compliance, and preparation of annual and final reports will be conducted by OBRS managers. These services, including annual monitoring, fixed-point photo documentation, and field observations to evaluate treatment effectiveness and guide adaptive management, will be provided as a secured in-kind match.

**Equipment & Supplies**
Grant funds will be used to purchase hand tools for cutting and removing invasive plants and for restoration planting activities, including tools necessary for installing native grasses, shrubs, and perennials.

**Public & Educational Outreach**
Grant funds will be used to design and install temporary signage to inform the public of restoration activities, ensure public safety, and educate visitors about the ecological impacts of invasive species and the benefits of native coastal restoration. Public relations and educational outreach—including community updates, volunteer engagement, and informational materials—will be provided in-kind through volunteer support and partnerships with the Oakland Beach Revival Society (OBRS) and the Southern Rhode Island Conservation District.

**Plants**
Grant funds will support the purchase of native plant materials for coastal restoration, including American

beachgrass (*Ammophila breviligulata*), 1-gallon native shrubs, native warm-season grasses, and coastal perennials.

Year 2 – Zone 1: Planting will include planting 5 bundles of American beachgrass at $40 per bundle, sourced from Cape Cod Organic Farm (approximately 225 bare-root culms per bundle), plus delivery.

Year 3 – Zone 2: Restoration will include 17 bundles of American beachgrass at $40 per bundle, plus delivery, sourced from Cape Cod Organic Farm.

Additional plantings will include 1-gallon native shrubs installed at 6-foot on-center spacing (estimated $11 per plant) and native warm-season grass plugs (*Panicum virgatum*) installed at 30-inch on-center spacing, along with native perennials to enhance dune stability, erosion control, and habitat value.

**Labor – Restoration and Planting (Community Volunteers)**

Community volunteers will conduct native planting activities under the oversight of the Oakland Beach Revival Society (OBRS) and with technical guidance from Save The Bay. Volunteer labor will support installation of dune grasses, shrubs, and perennial species in designated restoration zones. The value of volunteer contributions is calculated using the federal volunteer labor rate of $34.79 per hour. These services have been secured and will be provided as an in-kind match to support project implementation.

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**Funding Responsibility**

CEHRTF funds are requested in the amount of $12,000 toward the total $25,666 project cost. The Oakland Beach Revival Society will provide project match through in-kind contributions, including volunteer labor, planting, debris removal, documentation, and community-based educational outreach. The Oakland Beach Revival Society will also assume responsibility for long-term site stewardship and maintenance following project completion.

## IX. ADDITIONAL MATERIALS

Please include the following with your application:

Site and Locus Maps

Ground-level photographs of existing site conditions

Aerial photographs, if available


__ Preliminary design drawings, maps or engineering plans, if available



__ Pertinent physical, ecological, biological, and cultural / historical survey data

__ Letters of support

EXECUTIVE CHAMBER

CITY OF WARWICK
FRANK J. PICOZZI
MAYOR

January 7, 2026

Angela Stamoulos
Oakland Beach Revival Society
292 Sea View Drive
Warwick, RI 02889

Dear Angela:

Please accept this letter of support for the Oakland Beach Revival Society's RI Coastal & Estuary Habitat Restoration Fund grant application.

The City supports your organization's efforts to strengthening the natural buffer between upland areas and the shoreline in the Oakland Beach area. As you mention in your grant application, the Oakland Beach Restoration Project ("Project") "enhances coastal resilience by replacing invasive, shallow-rooted plants with deep-rooted native species such as bayberry, switchgrass, and beach plum. The Project will help to increase native plant root stability, reduce coastal erosion from storm surge and wave action, and improve stormwater infiltration.

I am thankful of the efforts of the Oakland Beach Revival Society and other neighborhood organizations in the Oakland Beach area to invest time and energy to assist the City in becoming climate change resilient.

Regards,

Frank J. Picozzi

3275 POST ROAD • WARWICK, RHODE ISLAND 02886 • (401) 738-2000 • FAX (401) 738-6639

SAVE THE BAY.
NARRAGANSETT BAY

THE BAY CENTER
100 Save The Bay Drive
Providence, RI 02905
phone: 401 272 3540

SOUTH COUNTY OFFICE
8 Broad Street
Westerly, RI 02891
phone: 401 315 2709

HAMILTON FAMILY AQUARIUM
23 America's Cup Ave, First Floor
Newport, RI 02840
phone: 401 324 6020

January 6, 2026

Bruce Lofgren
RI Coastal Resources Management Council
Oliver Stedman Government Center
4808 Tower Hill Road
Wakefield, RI 02879

Dear Bruce,

I am writing on behalf of Save The Bay in support of the Oakland Beach Revival Society's proposal "Oakland Beach Bike Path and Coastal walkway invasive species mitigation" to the Rhode Island Coastal and Estuarine Habitat Restoration Fund. Save The Bay has collaborated with the Oakland Beach Revival Society on the development of a plan to control invasive vegetation including knotweed in the dune and coastal shrub habitat owned by the City of Warwick.

The goal of the proposal is to restore the dune and coastal buffer by controlling the dense stand of the invasive Japanese knotweed, which has outcompeted native grasses and shrubs along the shoreline at the mouth of Brushneck Cove in the Oakland Beach neighborhood. Save The Bay collaborated with the City of Warwick on the planning and implementation of a coastal resilience project on this City owned parcel which included removing sections of Sea View Drive and Strand Avenue and restoring a dune in the former paved areas. The proposed invasive plant management and coastal buffer restoration project builds on the City's 2023 resilience project by controlling invasive knotweed in the area directly south of the road removal and planting native grasses and shrubs once the knotweed is controlled.

Save The Bay will be an active participant in this project providing in-kind services of staff time on the finalizing the invasive management and planting plan in coordination with the Oakland Beach Revival Society and the City of Warwick. We will also assist with the planting phase of the project by training the volunteers.

We look forward to continuing to work with the Oakland Beach Revival Society and the City of Warwick on restoring the coastal habitats along Brushneck Cove and Oakland Beach.

Sincerely,

Wenley Ferguson

Wenley Ferguson
Director of Restoration

savebay@savebay.org
SAVEBAY.ORG

Southern Rhode Island Conservation District

9 East Ave STE F Rm 2
Westerly, RI 02891
www.sricd.org
https://www.facebook.com/SRICDinfo/

Bruce Lofgren
RI Coastal Resources Management Council
Oliver Stedman Government Center
4808 Tower Hill Road
Wakefield, RI 02879

Dear Mr. Lofgren,

I am writing on behalf of Southern Rhode Island Conservation District in support of the Oakland Beach Revival Society's proposal "Oakland Beach Bike Path and Coastal walkway invasive species mitigation" to the Rhode Island Coastal and Estuarine Habitat Restoration Fund. Save The Bay has collaborated with the Oakland Beach Revival Society on the development of a plan to control invasive vegetation including knotweed in the dune and coastal shrub habitat owned by the City of Warwick.

The goal of the proposal is to restore the dune and coastal buffer by controlling the dense stand of the invasive Japanese knotweed, which has outcompeted native grasses and shrubs along the shoreline at the mouth of Brushneck Cove in the Oakland Beach neighborhood. The proposed invasive plant management and coastal buffer restoration project builds on the City's 2023 resilience project by controlling invasive knotweed in the area directly south of the road removal and planting native grasses and shrubs once the knotweed is controlled.

The Southern Rhode Island Conservation District will be an active participant in this project providing in-kind services of staff time outreach and education for the invasive management and planting plan in coordination with the Oakland Beach Revival Society, Save the Bay, and the City of Warwick. We will also assist with the planting phase of the project by assisting with the training the volunteers.

We look forward to continuing to work with the Oakland Beach Revival Society and the City of Warwick on restoring the coastal habitats along Brushneck Cove and Oakland Beach.

Sincerely,

Gina T. Fuller

Gina T. Fuller
District Manager

**AUTHORIZED SIGNATURE**

**AUTHORIZED AGENT OF LEAD ORGANIZATION**

_____ _____

**Signature** **Date**

Return your completed proposal by 4:00 p.m. on **January 23, 2026** to:

**Bruce Lofgren, AICP**
**RI Coastal Resources Management Council**
**Oliver Stedman Government Center**
**4808 Tower Hill Road**
**Wakefield , RI 02879**
blofgren@crmc.ri.gov|

Applicants are required to submit one (1) signed hard copy of the proposal form and one (1) electronic copy in Adobe PDF format. **Please submit electronic copy as a **SINGLE PDF FILE** containing all application materials.**

Contact Bruce Lofgren at by email or **401-782-4196** with any questions.

**Rhode Island Coastal and Estuary Habitat Restoration Fund**
**Full Proposal Form 2025/2026**

## I. PROJECT SUMMARY

1. **Project Title:** Enhancing Eelgrass Resilience and Thermal Tolerance through Seed-Based Restoration and Enhancement Approaches

2. **Project Location and coordinates** *(include map)*:
Restoration and research will be conducted in the following South Shore coastal ponds: Winnapaug (Westerly), Ninigret (Charlestown), and Green Hill Pond (Charlestown), including within an eelgrass restoration site created by the U.S. Army Corps of Engineers in Winnapaug Pond (See Figure 1). The exact location of common garden restoration sites will be guided by survey work conducted during the summer of 2026, considering depth, subaqueous soils, current eelgrass extent at nearby beds, and current uses (boating, moorings, etc.). The general locations of our common gardens include:
   - Winnapaug Pond: 41 20.004 N, 071 46.800 W
   - Ninigret Pond: 41 22.140 N, 071 38.922 W
   - Green Hill Pond: 41 21.978 N, 071 37.116 W

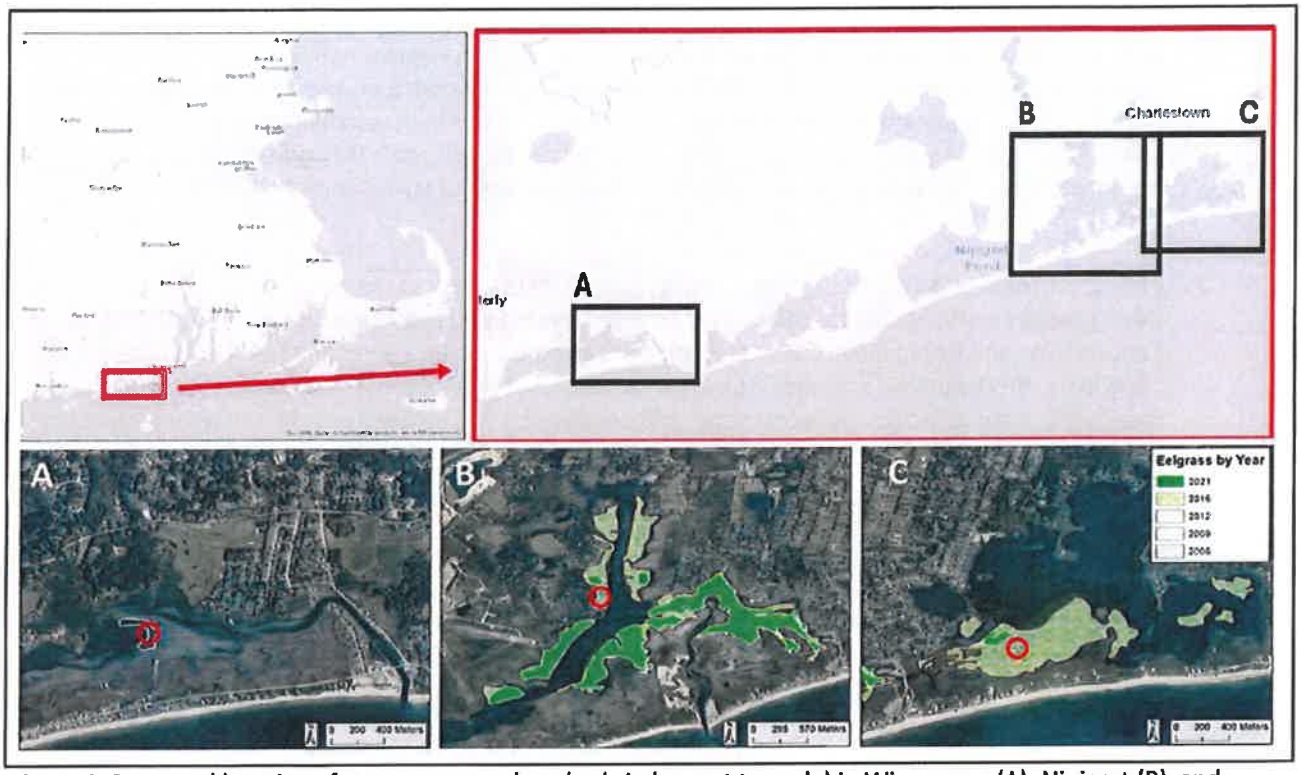


**Figure 1.** Proposed locations for common gardens (red circles, not to scale) in Winnapaug (A), Ninigret (B), and Green Hill Ponds (C). Eelgrass restoration site created by the U.S. Army Corps of Engineers shown as white polygon in Panel A. Legend displays color scheme of eelgrass spatial extent from aerial surveys conducted between 2006 and 2021. Eelgrass has not been present in Winnapaug Pond since the 1980s.

**Project type** *(Design, Construction or Other)*: Restoration, Research, Monitoring and Assessment.

1. **If other, please specify:**

2. **Habitat type** *(River System, Salt Marsh, Seagrass, Shellfish Bed, other)*: Seagrass bed, nearshore habitat (subtidal, submerged).

3. **If other, please specify:**

4. **Restoration technique** *(e.g. re-vegetation, tidal restoration, etc.)*: Re-vegetation

5. **Total acreage or miles(river systems) of habitat to be restored, or project area planning unit size:**

   As part of this study will establish a common garden (400m$^2$) plot in three South Shore coastal ponds (Winnapaug, Ninigret, and Green Hill Pond (Charlestown)), with a total area of 1,200m$^2$ (1.2 km$^2$ or 0.3 acres). We expect the eelgrass planted in these restoration plots to expand over time.

6. **Project benefits:**
   This project will provide direct ecological, management, and regional benefits by advancing seed-based eelgrass restoration approaches that increase habitat extent, genetic diversity, and climate resilience in Rhode Island coastal waters. By improving eelgrass seed processing, storage, and deployment methods, and by applying these techniques at targeted restoration sites, the project will support greater eelgrass bed persistence, strengthen shoreline and marsh protection, and enhance habitat for fisheries. The work is explicitly integrated into broader regional efforts to develop scalable, science-based eelgrass restoration approaches, including coordinated common-garden experiments that evaluate the performance and thermal tolerance of seed sources from Virginia, New York, and Rhode Island. By introducing thermally tolerant eelgrass sources into at-risk meadows and historically populated eelgrass habitats, this approach will increase genetic diversity, improve population stability, and enhance thermal tolerance, helping eelgrass beds adapt to rising ocean temperatures. Together with development of a habitat suitability index and policy-relevant guidance on seed use and transfer, the project provides actionable tools that support adaptive management, maximize restoration success, and contribute to long-term coastal resilience at both state and regional scales.

7. **Project partners** *(organizations providing financial or other support to the project)*:
   During project implementation, community-based organizations such as the Salt Ponds Coalition, Watch Hill Conservancy, and Ocean Ridge Civic Association will contribute critical local and historical context and participate directly in field activities. These groups will assist with eelgrass flowering and seed development monitoring, seed collection and processing, and deployment and retrieval of light and temperature loggers. Importantly, this project also engages directly in regulatory development. In partnership with the Rhode Island Sea Grant Legal Program and the Roger Williams University Law Fellow Program, we will examine the policy landscape surrounding eelgrass seed transfers in Rhode Island. This research will produce actionable, science-based tools and insights that directly advance eelgrass restoration and management in Rhode Island.

8. **Is this is an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** No. **If yes, year(s) funding was awarded:**

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## II. PROJECT MANAGER CONTACT INFORMATION


1. **Name:** Eric Schneider

2. **Organization:** Rhode Island (RI) Department of Environmental Management (DEM), Division of Marine Fisheries (DMF)

3. **Address:** 3 Fort Wetherill Rd

4. **City:** Jamestown **5. State:** RI **6. Zip:** 02835

7. **Phone:** 401-423-1933 **8. Email:** eric.schneider@dem.ri.gov

**Property Owner(s)**: State of Rhode Island (submerged lands).

*Applicant must document ownership of project site or permission to perform all proposed restoration, maintenance and monitoring activities (include appropriate documentation).*

The project sites are in subtidal waters, owned by the State of RI. RI DEM is the management entity with statutory authority over marine resources (§20-1-2) in RI, including the management and restoration of eelgrass. At present, no permits are required for the proposed activities. As part of the project, potential future RI DEM regulations will be developed, likely requiring RI DEM permits for future work. As a component of the primary grant (RI Sea Grant) award process, RI DMF completed a NOAA NEPA review that included aspects related to permissions, land ownership, permitting, and state and federal designations. The proposed project restoration sites are not federally designated as unique geographic areas of notable recreational, ecological, scientific, cultural, historical, scenic, economic, or aesthetic importance. The south shore coastal pond region is recognized, but not officially designated, for its ecological importance as nursery habitat for finfish and for historically supporting shellfish resources. There are no ESA-listed and/or MMPA species that may occur and overlap with the proposed activity.

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## III. BUDGET SUMMARY

(List individuals or organizations providing financial or in-kind support to the project under Project Partners)

| **Amount Requested from Trust Fund** | | **50,000** |
|---|---|---|
| **Matching Funds** | **Project Partner(s)** | **Amount of Match** |
| RI DMF research vessel, tow vehicle, trailer (in-kind) | RI DMF | 15,900 |
| Federal funds awarded to RI DMF by RI Sea Grant and DEM funds (in-kind) | RI DMF, RI Sea Grant | 152,927 |
| Other project funds, including federal funds awarded by RI Sea Grant for, and matching funds provided by, project partner URI GSO (in-kind) | RI Sea Grant, URI GSO | 227,825 |
| | **TOTAL PROJECT COST** | **430,752** |

## IV. PROPOSAL NARRATIVE (five pages maximum)

### 1. Justification and Purpose

*Describe the human impacts and previous restoration activities at the proposed project site. If multiple sites, please describe the impacts and previous restoration activities at each). Briefly describe the proposed project, its restoration goals, long-term and short-term outcomes.*

Eelgrass (Zostera marina) is a critical marine habitat that provides numerous ecosystem services in estuaries and along coastlines throughout New England by creating habitat for numerous marine species including commercially and recreationally important fish (e.g., striped bass, black sea bass, fluke, flounder, and tautog) and shellfish (e.g., blue crabs, bay scallops), sequestering carbon, buffering wave energy, improving water quality, and stabilizing sediments[7,8,9,1,6,11]. This submerged aquatic vegetation (SAV), is recognized as a keystone, native species[4]. The U.S. Regional Fishery Councils identifies eelgrass as an Essential Fish Habitat and have designated locations in Rhode Island (RI) state waters with eelgrass as a Habitat Area of Particular Concern. As stated in the RI CRMC Red Book, the Council's goal is to preserve, protect and where possible, restore SAV habitat.

Eelgrass is threatened by rapidly warming water temperatures and has exhibited heat-driven declines more than 80% loss at its southern extent and signs of thermal stress in select embayments nearly coastwide[2,5,12]. In RI, eelgrass acreage in the Southshore coastal ponds has declined by 53% since 2009[3], underscoring the urgent need for research and restoration efforts. Traditional methods, primarily transplanting adult eelgrass shoots, are often labor-intensive and limited in terms of success and spatial scale[10]. In contrast, seed-based restoration offers a scalable and cost-effective approach with greater potential for long-term resilience, especially when incorporating thermally resilient sources and adaptive management strategies. Despite the increased interest and need for seed-based restoration in many Atlantic Coast states, including RI, basic questions remain regarding the performance of seeds sourced from regions with warmer water temperatures (e.g., Chesapeake Bay and mid-Atlantic), that may have increased thermal tolerance, including the rate of germination and survival in RI waters, and whether these exceed local RI eelgrass sources. There is also a need to identify areas in Narragansett Bay with the highest suitably for eelgrass restoration.

While physical processes such as sediment dynamics, water quality, light availability, and disturbance regimes are well-established drivers of eelgrass distribution and restoration success, recent efforts indicate that these factors alone do not fully explain eelgrass persistence under rapidly warming conditions. Temperature stress has emerged as a primary driver of contemporary eelgrass decline, and restoration can fail even at sites with suitable physical conditions, indicating increasing biological constraints on resilience[13]. Projected summer water temperatures are likely to exceed physiological thresholds for many local eelgrass populations, suggesting that restoration success will increasingly depend on the adaptive capacity of planted material[14]. Accordingly, genetic diversity, thermal tolerance, and assisted gene flow are identified as key mechanisms for enhancing resilience, with common-garden experiments serving as a necessary step to distinguish genetic performance from site-specific physical drivers and to evaluate risks associated with non-local seed sources[14]. These approaches are not intended to replace appropriate site selection or management of physical stressors, but to address a restoration bottleneck that physical habitat improvements alone cannot overcome under projected climate conditions[13,14]. In addition, this work is designed to directly contribute to and leverage ongoing regional, seed-based eelgrass restoration efforts along the U.S. Atlantic Coast by applying coordinated common-garden and seed-based methods that generate transferable and management-relevant results across states.

### 2. Project Activities, Schedule and Work Plan

*Describe the planned on-the-ground project activities, and explain how each activity will help to restore ecosystem functions. List specific project activities and when they will occur (month and year). Indicate when annual and final project reports will be submitted.*

RI DMF, in partnership with the University of Rhode Island (URI), applied for and was awarded funding from RI Sea Grant (PI Eric Schneider (RI DMF) and Co-PIs Thaïs Fournier (RI DMF) and Candace Oviatt, PhD, (URI)) to integrate scientific research, policy, and community engagement to inform adaptive restoration techniques and policy frameworks for eelgrass seed-based restoration to increase coverage, genetic diversity, and climate resilience. To accomplish this goal, the project will (1) leverage the RISG Legal Program to assess regulations and develop options

for guidelines and policy frameworks that enable responsible seed collection, storage, and transfer across jurisdictions; (2) evaluate seed processing and storage methods to maximize viability and germination to improve future seed-based restoration; (3) conduct multi-site common-garden experiments comparing survival and thermal tolerance of seeds from Virginia, New York, and Rhode Island to determine whether southern sources perform as well as or better than local sources; (4) develop a Habitat Suitability Index (HSI) using historical and current water quality, sediment, light, and distribution data to identify priority restoration areas in the middle and upper Narragansett Bay and guide future seeding; and (5) engage local partners in applied restoration, outreach, training, and policy development. RI DMF is leading objectives 1, 2, 3, and 5, as well as contributing to objective 4. Thus, the requested CEHRTF funds will be used as match and directly contribute to these specific objectives, as well as provide the match required for the full project to move forward (i.e., RI DMF required matching funds). The requested CEHRTF funds will result in $8.62 of leveraged funds for every $1 of CEHRTF funding. Work associated with this two-year project is expected to begin in June of 2026 and run through January 2028. The following general timelines are expected for each Objective (O) conducted by RI DMF and directly supported by the requested matching funds: O-1, June–Dec. 2026; O- 2, seed collection and processing, June–Oct. 2026; O-3, common garden establishment (Aug.–Oct. 2026) and post-planting monitoring using SCUBA (Oct. 2026–Nov. 2027); and O-5, Aug. 2026–June 2028. RI DMF, and thus these funds, will also contribute (staff expertise and support) to O-4 (June 2026–Dec. 2026), as well as a final report and manuscript development (Oct.–Dec. 2027).

**3. Minimization of Adverse Impacts**

*What are the potential impacts resulting from project activities (e.g. the disturbance of sensitive species by construction activities), and how will these impacts be minimized (e.g. scheduling construction to avoid disturbance of sensitive species).* Project activities are non-construction based and will not disturb sensitive species or habitats. Work is limited to eelgrass seed collection; small, targeted seed-based restoration in previously unvegetated areas; and routine monitoring by trained staff and divers. No dredging, excavation, or shoreline alteration is proposed; therefore, no adverse impacts to sensitive species are anticipated.

**4. Public Support**

*Demonstrate public support for the project by providing evidence of communication with adjacent landowners, community members and other stakeholders. Describe planned or completed community / stakeholder education and outreach efforts.* This project is supported by strong, ongoing collaboration with state agencies, local organizations, and community stakeholders engaged in coastal habitat restoration and management. Project planning and site selection have been coordinated with RI DMF; coastal municipalities; and partners involved in eelgrass restoration and water quality protection. These entities will be engaged through regular coordination meetings, data sharing, and joint planning associated with prior and current eelgrass restoration and monitoring efforts. Communication with adjacent landowners and local stakeholders has occurred through established outreach channels led by RIDMF and coastal stakeholder groups. The project builds directly on prior, publicly supported eelgrass restoration and monitoring work in Rhode Island's coastal ponds and Narragansett Bay, which has included public briefings, and stakeholder discussions. Planned outreach and education efforts include sharing project goals and results through public presentations; coordination meetings with coastal managers and practitioners; and dissemination of findings via reports, presentations, and accessible summaries for community audiences. Where appropriate, project results will be integrated into partner outreach activities to support broader awareness of eelgrass restoration, climate resilience, and coastal ecosystem health.

**5. Economic and Educational Benefits**

*How will the proposed project provide direct economic and/or educational benefits to a community and/or the state?* The proposed project will provide direct economic and educational benefits to Rhode Island by generating applied science that supports cost-effective eelgrass restoration, fisheries management, and coastal resilience planning. By improving understanding of eelgrass seed viability, establishment success, and site suitability, the project will help resource managers reduce uncertainty and costs associated with future restoration efforts, increasing the efficiency of state and federally funded habitat investments. Project results will directly inform management decisions relevant to commercial and recreational fisheries, including shellfish and finfish species that rely on eelgrass habitat for nursery and foraging functions. Strengthening eelgrass restoration outcomes supports long-term ecosystem services such as water quality improvement and shoreline stabilization, which underpin Rhode Island's blue economy and

coastal tourism. The project will also deliver educational benefits through training and hands-on research opportunities for community participants in coastal ecology fieldwork, restoration science, and monitoring methods. Findings will be shared with state agencies, practitioners, and the public through Sea Grant outreach channels, presentations, and publicly accessible summaries, increasing scientific literacy and supporting workforce development in coastal and marine science.

**6. Coastal Resiliency**

*How have the present and future impacts of hazardous storm events and sea level rise been considered during the project planning and design phases? What impact will the project have on resilience of coastal or estuarine habitat?* This research will produce actionable, science-based tools and insights that directly advance eelgrass restoration and management in Rhode Island. This work will directly plant eelgrass seeds in restoration plots across three South Shore coastal ponds. Eelgrass beds attenuate waves, slow near-bed currents, and stabilize sediments; these functions reduce local erosion and help buffer fringing marsh edges, supporting marsh persistence and migration as water levels rise. In addition, by refining seed-based restoration techniques and evaluating thermally resilient seed sources, combined with developing a habitat suitability index (HSI) for eelgrass restoration in Narragansett Bay, this project addresses key restoration bottlenecks and advances the State Habitat Restoration Strategy by restoring priority SAV habitats that buffer exposed shorelines and marsh fringes, improving the system's capacity to absorb frequent storm energy and recover after disturbance.

**7. Planning Consistency and Restoration Priority**

*Is the proposed project consistent with the goals of a local, state or regional planning initiative? Please specify initiative and explain (see CRMC website for guidance). Does the proposed project involve a state, regional or federal priority habitat restoration need or special consideration? Please specify and explain (see CRMC website for guidance).* The proposed project is consistent with multiple local, state, and regional planning initiatives that prioritize the protection, restoration, and long-term resilience of submerged aquatic vegetation, particularly eelgrass, in Rhode Island. The project directly aligns with the Rhode Island Coastal Resources Management Program (CRMP), which establishes policies to preserve, protect, and where feasible restore coastal habitats, including eelgrass, and recognizes its ecological importance within state waters. Eelgrass is further designated by the U.S. Regional Fishery Management Councils as Essential Fish Habitat and, in specific locations in Rhode Island, as Habitat Areas of Particular Concern, with an explicit management goal articulated in the CRMC Red Book to preserve, protect, and restore submerged aquatic vegetation. The project is also consistent with Rhode Island Department of Environmental Management eelgrass conservation and restoration guidance, which identifies eelgrass as a priority habitat and supports restoration, monitoring, and science-based management to improve habitat resilience and ecosystem services. At the regional scale, the proposed work supports the Narragansett Bay Estuary Program Comprehensive Conservation and Management Plan, which identifies eelgrass restoration as a key strategy for improving water quality, restoring habitat, and supporting fisheries and coastal resilience, as well as the EPA Southeast New England Program Strategic Plan, which prioritizes eelgrass and other coastal habitat restoration projects that enhance ecosystem function, water quality, and climate resilience across the Narragansett Bay watershed. Collectively, these frameworks establish eelgrass restoration as a state, regional, and federally recognized priority habitat need, and the proposed project directly addresses these restoration priorities through applied research and restoration approaches designed to support long-term ecological and management outcomes.

**8. Species of Concern**

*Will the project result in benefits to wildlife species listed as federally or state endangered, threatened, or species of concern within Rhode Island? Please specify which species will benefit and how.*

While the project does not directly target listed species, eelgrass restoration will provide indirect but meaningful habitat benefits to several wildlife species in Rhode Island that are listed as state or federally endangered, threatened, or species of concern by the Rhode Island Natural Heritage Program. Restored eelgrass beds increase structural habitat complexity, prey availability, and water quality, which support multiple life stages of fish and invertebrates that are prey for protected species, and provide shelter and nursery habitat essential for ecosystem function. Species expected to benefit include, but are not limited to:

- Winter flounder (*Pseudopleuronectes americanus*); a Rhode Island species of concern that uses eelgrass beds as nursery habitat for juveniles, benefiting from increased refuge and prey availability.

- American eel (*Anguilla rostrata*); listed as a Rhode Island species of concern, which utilizes eelgrass habitats for foraging and shelter during estuarine life stages.
- Bay scallop (*Argopecten irradians*); a Rhode Island species of concern that relies on eelgrass for settlement, refuge from predation, and enhanced survival, in particular during early life stages.

Eelgrass restoration improves water clarity and sediment stabilization, which can enhance broader estuarine habitat conditions benefiting coastal birds of conservation concern that rely on productive nearshore ecosystems for feeding. Overall, the project supports ecosystem-based conservation by restoring a foundational habitat that underpins the recovery and resilience of multiple protected species, consistent with state and regional biodiversity conservation goals.

**9. Permitting**

*List any federal, state or local permits required to complete the project and the permit application status for each.*

RI DEM is the management entity with statutory authority over marine resources (§20-1-2) in RI, including the management and restoration of eelgrass. At present, no permits are required for the proposed activities. As part of the project, potential RI DEM regulations may be developed, likely requiring RI DEM permits for future work. As a component of the primary grant (RI Sea Grant) award process, RI DMF completed a NOAA NEPA review that included aspects related to permissions, land ownership, permitting, and state and federal designations (See the above Property Ownership Section for details).

**10. Capacity of Lead Organization** (attach additional materials if necessary)

*Demonstrate the capacity of the lead and/or partner organizations to successfully complete the proposed project by providing any or all of the following: a) a description of the organization(s) b) resume(s) or summary of qualifications of involved personnel c) evidence of successfully completed habitat restoration or conservation projects.*

Project Leadership: RI DEM DMF implements several programs aimed at managing and conserving (assessing, restoring, and enhancing) marine habitat, including eelgrass and other SAV, in state waters. RI DMF coordinates eelgrass restoration work in RI, serves on several regional and coast-wide habitat and restoration committees, and maintains relationships and partnerships with external partners.

Eric Schneider (PI, Principal Marine Biologist, RI DEM DMF). E. Schneider is an ecologist with expertise in fisheries management, fisheries and restoration ecology, community ecology, and sustainability sciences. Eric represents RI DMF on several state, regional, and coastwide technical and steering committees focused on fisheries management and habitat conservation. Eric currently oversees several aspects of the RI DMF Habitat Restoration Program, with a primary focus in shellfish and eelgrass assessment, restoration, and enhancement. Eric is the PI for research focused on eelgrass flowering phenology to inform seed collection, research to quantify the fish production provided by eelgrass and oyster habitat in RI state waters, and also leading the development of the RI Shellfish Restoration and Enhancement Plan, which aims to address the needs of both stakeholders and managers by integrating the coupled social-ecological complexities of the state's shellfish resources into a science-based, state-wide plan.

Thaïs Fournier (Co-PI, Fisheries Specialist, RI DEM DMF) brings a strong background in eelgrass restoration, water quality research, and stakeholder engagement. She has designed and managed ecological research projects across a range of coastal ecosystems, including in New Zealand, Mexico, California, and Massachusetts. Her work with National Estuarine Research Reserves focused on monitoring invasive species and evaluating environmental-related impacts on coastal habitats, consistently integrating education and outreach into scientific efforts. While at the Nantucket Natural Resources Department, Thaïs led estuarine monitoring programs and implemented eelgrass restoration using both transplanting and seed-based methods. As a Coastal Resilience Extension Specialist with Rhode Island Sea Grant and the Coastal Resources Center at URI, she supported local communities through interdisciplinary research, technical assistance, and environmental resilience outreach. Currently, she co-leads the RI DMF eelgrass restoration program, where she oversees field surveys, reproductive phenology research, and seed storage protocol development to inform scalable restoration strategies across the region.Facilities: The RI DEM Fort Wetherill Seawater Facility will be used to support seed processing, storage, and germination experiments. This

covered facility includes ten 350-gallon tanks connected to a flow-through seawater system, allowing for the controlled holding of eelgrass flowering shoots, seed release, and maintenance of water quality conditions necessary for experimental restoration work.

## V. SUSTAINABILITY (one page maximum)

### 1. Maintenance

*What is the estimated "lifespan" of each planned restoration activity? What are the anticipated short-term and long-term (beyond the funding period) operation and maintenance requirements of the project? Specify who will be responsible for funding and carrying out each O & M activity. Indicate when and with what frequency activities will occur.* The primary restoration activity for this project is seed-based eelgrass restoration, which is designed to establish self-sustaining eelgrass beds with a functional lifespan measured in decades, provided environmental conditions remain suitable. Once successfully established, eelgrass meadows persist through natural vegetative growth and seed production and do not require active maintenance comparable to engineered shoreline projects. Short-term operation and maintenance (during the funding period) will consist of planned post-restoration monitoring to evaluate seed germination, shoot density, survival, and bed expansion. Monitoring will occur seasonally following planting, using SCUBA surveys consistent with RI DMF supported protocols. These activities will be carried out by RI DMF staff in collaboration with project partners, using existing agency capacity and project funds. Long-term maintenance beyond the funding period is expected to be minimal. No physical maintenance (e.g., replanting, sediment management, or infrastructure upkeep) is anticipated unless unforeseen environmental disturbances occur. Long-term stewardship will be supported through integration of restored sites into existing state eelgrass monitoring and management programs. Continued observation of restored areas may occur at reduced frequency as part of routine monitoring, subject to available state and federal resources. RI DMF will be responsible for post-project oversight, consistent with its mandate for eelgrass conservation and restoration in Rhode Island waters. Information generated through this project will also support adaptive management, helping agencies refine future restoration site selection and methods to reduce the need for repeated intervention and maximize long-term restoration success.

### 2. External Factors and Hazard Mitigation

*Identify existing external (off-site) factors that could reduce the chances of achieving the project goals (e.g. stormwater inputs to the site from the surrounding drainage area). Explain how these external factors will be addressed. Describe any additional measures taken to help ensure long-term success of the project (e.g. installation of stormwater management practices or securing of conservation easements).What are the likely future effects of hazardous coastal storm events and future sea level rise on the proposed project and how will these be addressed?* Several external, off-site factors could influence the success of the proposed seed-based eelgrass restoration, including watershed-scale nutrient and sediment inputs, episodic stormwater runoff, coastal storm disturbance, and long-term climate stressors such as warming temperatures and sea level rise. Elevated nutrient and sediment loading from surrounding developed watersheds can reduce water clarity and light availability, limiting eelgrass establishment.

Physical disturbance from coastal storms and extreme precipitation events may increase turbidity or redistribute sediments and seeds; this risk is mitigated by employing seed-based restoration methods that place seeds below the sediment surface and by selecting relatively protected sites within coastal ponds that experience lower wave energy. Anticipated future stressors, including sea level rise and increasing summer water temperatures, are addressed directly through the evaluation of local and regional seed sources in common-garden experiments to identify thermally resilient sources and enhance genetic diversity, thereby increasing the adaptive capacity, resistance, and long-term persistence of restored eelgrass meadows under changing environmental conditions.

## VI. EVALUATING PROJECT SUCCESS (one page maximum)

### 1. Performance Measures

*How will the success of the project be measured in relation to the restoration goals set forth in this proposal? List performance measures and how they will be recorded. Include a detailed monitoring plan; if applicable (see below).*

Primary biological performance measures include eelgrass seed viability and germination success associated with different seed processing and storage methods, seedling establishment and survival within restoration and common-garden plots, and shoot density and persistence over time. These measures will be recorded through laboratory-based viability assessments, controlled germination observations, and repeated field-based monitoring of seeded plots. Comparative performance of local (Rhode Island) and regional seed sources will serve as a key indicator of restoration success, with performance measures focused on relative survival, establishment, and tolerance to thermally stressful conditions within common-garden experiments. Environmental parameters, including water temperature and site conditions relevant to eelgrass survival and stress, will be documented to contextualize biological results and evaluate exposure to thermal stress. Applied and management-oriented performance measures include completion of policy guidance related to eelgrass seed transfer, development of best practices for seed-based restoration, and delivery of training and outreach activities to support long-term implementation by managers and partners. Together, these performance measures provide a comprehensive framework for assessing progress toward restoration success, climate resilience, and future applicability of seed-based eelgrass restoration strategies.

### 2. Monitoring Plan

*Describe any planned or completed pre- and post-project monitoring activities. For each monitoring activity list the frequency and month/year of start and end date and the parameters measured. List the entity or entities responsible for funding and carrying out each monitoring activity, and describe how results will be made available to CRMC and the public. If using an established monitoring protocol, please provide references.*

Pre-project monitoring includes evaluating seed viability and germination potential under different processing and storage methods prior to field deployment, which occurred in summer 2025 and will continue in summer 2026. Results from these assessments will be used to inform optimal planting timing and restoration methods. Post-project monitoring will focus on common-garden plots established in South Shore coastal ponds. Monitoring will begin following seeding and will continue monthly Oct. 2026–Feb. 2027 throughout the growing season and across project years to assess seedling establishment, survival, shoot density, and persistence. Monitoring will then continue to be conducted at bimonthly intervals from Mar. 2027–Nov. 2027 growing season using diver-based surveys and standardized observation protocols described in the project narrative. All monitoring activities will be carried out by the RI DMF, with support from project partners as described in the project narrative. Funding for monitoring is incorporated into the project budget and aligned with the proposed research and restoration activities. Results will be summarized in project reports and made available to CRMC and other stakeholders through written deliverables, presentations, and outreach products. Findings will also be shared with the broader restoration community to inform future eelgrass restoration efforts and management decisions consistent with the project's goals.

**Project Timeline:** Project activities and key events (milestones) displayed as either field (F) or non-field (X) elements over the duration of the project.

| | Year 1 - 2026 | | | | | | | | | | | | Year 2 - 2027 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan |
| Seed transfer policy | X | X | X | X | X | X | | | | | | | | | | | | | | | | | | |
| Seed collection | | | | F | F | F | | | | | | | | | | | | | | | | | | |
| Seed processing and testing | | | | | X | X | X | X | X | | | | | | | | | | | | | | | |
| Common garden preparation | | | F | | F | | F | | F | | | | | | | | | | | | | | | |
| Common garden planting | | | | | | | | | X | | | | | | | | | | | | | | | |
| Monthly common garden monitoring | | | | | | | | | F | F | F | F | F | | | | | | | | | | F | |
| Twice-monthly common garden monitoring | | | | | | | | | | | | | | F | F | F | F | F | F | F | F | F | | |
| HSI data collection and development | | | | | F | F | F | F | F | | X | X | X | | | | F | F | F | F | X | X | | |
| Outreach | | | X | X | X | | | | X | | | | | | X | | | | | | X | | X | |
| Reporting and manuscript development | | | | | | | X | | | | | | X | | | | | | X | | X | X | X | X |

## VII. PROJECT BUDGET TEMPLATE

| BUDGET CATEGORY | CRMC REQUEST | MATCH | MATCH PENDING OR SECURED? (select one) | SOURCE OF MATCH | TOTAL |
|---|---|---|---|---|---|
| DEM Personal | | | | | |
| Schneider | 0 | 18,743 | Secured | RI DMF funds[1] | 18,743 |
| Macfarlan | 986 | 8,269 | Secured | RI DMF funds[1] | 9,255 |
| Equipment | 0 | 0 | | | - |
| Travel | 1,750 | 1,750 | Secured | RI DMF funds[1] | 3,500 |
| Supplies | 2,853 | 5,704 | Secured | RI DMF funds[1] | 8,557 |
| Contracts | | | | | - |
| ASMFC | 33,920 | 76,745 | Secured | RI DMF funds[1] | 110,665 |
| RWU Law Program | 1,500 | 3,000 | Secured | RI DMF funds[1] | 4,500 |
| Other | | | | | - |
| RI DMF Vessel, Trailer, Truck | 0 | 15,900 | Secured | RI DMF funds[2] | 15,900 |
| DEM Audit Fee | 25 | 189 | Secured | | 214 |
| | | | | | - |
| Total Direct Costs | 41,034 | 130,300 | Secured | | 171,334 |
| | | | | | - |
| Indirect elidable costs | 41,034 | 103,555 | Secured | | 144,589 |
| Indirect (FY25 NICRA @ 21.85%) | 8,966 | 22,627 | Secured | | 31,593 |
| | | | | | - |
| RI DEM Total Costs | 50,000 | 152,927 | Secured | | 202,927 |
| Other Matching Funds (Partner Contributions from RI Sea Grant Award) | | 227,825 | Secured | RI DMF funds[3] | 227,825 |
| | | | | | |
| TOTAL | 50,000 | 380,752 | | TOTAL PROJECT COST | 430,752 |

[1] RI DMF funds (secured from RI Sea Grant Award).

[2] RI DMF funds (In-kind RI DMF Matching Funds provided by RI DMF vessel, trailer, and truck use).

[3] RI Sea Grant funds for other project costs (awarded to URI GSO as part of the Grant Award).

## VIII. BUDGET NARRATIVE (one page maximum)

The following budget justification is consistent with RI DMF budget submitted to the Rhode Island Sea Grant 2026-2028 Research Competition that was selected for funding. RI Sea Grant will provide the federal requested funds (listed in this budget narrative as "matching funds") providing RI DMF can provide the RI Sea Grant required matching funds (50% of federally requested funds). The CEHTF funds requested in this proposal are aligned to provide the remaining (i.e., lacking) "federal match" required under the RI Sea Grant award, satisfying the federal funding award requirement.

**Personnel:** Eric Schneider, principal investigator. During Year 1, Schneider estimates 0.37 months of salary and fringe, at a monthly salary and fringe rate of $8,096 and $5,531, respectively totaling $5,033. These costs are supported by "matching funds. During Year 2, Schneider estimates 0.96 months of salary and fringe, at a monthly salary and fringe rate of $8,501 and $5,808, respectively (5% increase from year 1) totaling $13,710. These costs are supported by "matching funds". Reuben Macfarlan, PhD. We are requesting $986 of CEHTF funds and will be providing $8,269 of matching funds supported by RI Sea Grant awarded funds. During Year 1, Macfarlan estimates 0.23 months of salary at a monthly salary and fringe rate of $7,728 and $5,226, respectively. This equals a total of $2,985. A portion of these costs ($1,999) are supported by "matching funds", including RI Sea Grant awarded funds. We plan to apply $986 of CEHTF requested funds as "state match" for the RI Sea Grant awarded funds. During Year 2, Macfarlan estimates 0.46 months of salary and fringe, at a monthly salary and fringe rate of $8,114 and $5,488, respectively (5% increase from year 1) totaling $6,270. These costs are supported by "matching funds

**Permanent Equipment:** No funding requested.

**Travel:** To support travel costs for Schneider (PI) in Year 2, including airfare, accommodation, ground transportation, and meeting registration, to travel to and participate in a regional or national meetings for dissemination of project updates and results, we are requesting $1,750 of CEHTF funding that will compliment 1,750 of matching funds provided by RI Sea Grant award.

**Materials and supplies:** We are requesting $2,853 of CEHTF funds, to be used as RI Sea Grant required match, and will be providing $5,704 of matching funds supported by RI Sea Grant awarded funds. Additional information is available upon request. Briefly, items include field survey supplies, SCUBA gear inspection, repair, replacement, data loggers, and seed processing and seeding materials.

**Subawards/Contractual Costs:** Atlantic States Marine Fisheries Commission (ASMFC): Contractual support for a Fisheries Specialist I (Thais Fournier, Co-PI) from the Atlantic States Marine Fisheries Commission (ASMFC) for a total request of $33,920 of CEHTF funds and we will be providing $76,745 of matching funds, of which $73,777 is supported by RI Sea Grant awarded funds and $2,968 is expected to be provided by DEM matching funds (cash). Thais Fournier is an existing contract employee, via ASMFC, coordinating eelgrass research and leading field survey work, including seed collection and processing, for RI DEM DMF. During year 1, costs include a monthly salary and fringe costs of $5,210 and $2,991, respectively ($34.35/hr. and $19.72/hr) for 975 hours during year 1. This equals a salary ($33,491) and fringe ($19,227) cost of $52,718. ASMFC applies an indirect rate of 12%, equal to $6,326 for a total cost of salary, fringe, and indirect of 59,044. We are requesting CEFHT funds to support the proportion of RI Sea Grant required state matching funds, equal to $19,681 that will be matched by funds awarded by RI Sea Grant $39,363. Year 2: Costs include a monthly salary and fringe cost of $5,469 and $3139, respectively ($36.06/hr. and $20.70/hr) for 831 hours during year 2. This equals a salary ($28,545) and fringe ($16,387) cost of $4,337. To support travel costs for Fournier (Co-PI), including airfare, accommodation, ground transportation, and meeting registration, to travel to regional or national meetings for dissemination of project updates and results, we estimate a cost of $1,753 for year 2. ASMFC applies an indirect rate of 12%, equal to $5,531 for a total cost of salary, fringe, and indirect of $51,621. We are requesting CEFHT funds to support the proportion of RI Sea Grant required state matching funds, equal to $14,239 that will be matched by funds awarded by RI Sea Grant, $34,414 and $2,968 is expected to be provided by DEM matching funds (cash).

RI Sea Grant Law Fellow: A RI Sea Grant Law Fellow will bring legal and policy expertise directly into research-driven restoration initiatives. The cost to support a Law Fellow of one semester is $4,500, with a CEHTF request of $1,500 (i.e., required RI Sea Grant state match), matched by $3,000 from a RI Sea Grant Award.

**Other:** RI DMF daily rate for use of the RI DMF R/V 16' Maritime skiff, trailer, and tow vehicle is $300 ($9,125 per month). During year one, 17 days (0.56 months) of vessel use will be needed to support pre-seed collection monitoring, reproductive shoot collection, common garden siting, establishment, and monitoring. During year two 36 days (1.18 months) of vessel use will be needed to support common garden monitoring. We are requesting no funds for vessel, trailer, and tow vehicle costs and applying 53 equal to $15,900 as in-kind match. **DEM Audit Fee:** RI DEM applies a (mandatory) audit fee equal to 0.05% of total match ($380,752). The is fee estimated at $25 requested and $189 matching funds. This is required for all state grant agreements.

**Indirect Costs** The FY25 NICRA is 21.85%. As stated in the RI DEM NIRCA, the cost basis includes the following categories: salary, fringe, travel, supplies, other, and the first $50,000 of contractual and subawards. We are requesting $8,966 and are expected to provide $22,627 matching funds for indirect. Indirect costs are negotiated as part of the NICRA and may increase or decrease with subsequent NICRA agreements.

## IX. ADDITIONAL MATERIALS

Please include the following with your application:

__ Site and Locus Maps

__ Ground-level photographs of existing site conditions

__ Aerial photographs, if available

__ Preliminary design drawings, maps or engineering plans, if available

__ Pertinent physical, ecological, biological, and cultural / historical survey data

__ Letters of support

**AUTHORIZED SIGNATURE**

**AUTHORIZED AGENT OF LEAD ORGANIZATION**

Signature _____ Date 3/16/2026

Return your completed proposal by 4:00 p.m. on **January 23, 2026** to:

**Bruce Lofgren, AICP**
**RI Coastal Resources Management Council**
**Oliver Stedman Government Center**
**4808 Tower Hill Road**
**Wakefield , RI 02879**
**blofgren@crmc.ri.gov|**

Applicants are required to submit one (1) signed hard copy of the proposal form and one (1) electronic copy in Adobe PDF format. **Please submit electronic copy as a **SINGLE PDF FILE** containing all application materials.**

Contact Bruce Lofgren at by email or **401-782-4196** with any questions.

CRMC
COASTAL RESOURCES MANAGEMENT COUNCIL

**Literature Cited**


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# Rhode Island Coastal and Estuary Habitat Restoration Fund
# Full Proposal Form for Planning Projects 2025/2026

****for design or construction projects please use Full Proposal Form**

## I. PROJECT SUMMARY

1. **Project Title:** Engaging Woonasquatucket Watershed Communities in Coastal Resilience and Habitat Restoration
2. **Project Location and coordinates:** Woonasquatucket River Watershed (see attached map set)
3. **Habitat type:** River System, Riparian Buffers
4. **If other, please specify:** N/A
5. **Targeted restoration technique:** Our project will incorporate a variety of mostly native vegetation forward habitat restoration techniques throughout our watershed – 52 square miles. Our full watershed has a profound impact on RI's coastal resources and Narragansett Bay habitats and systems. Project activities ensure improved and restored physical habitat structure, water chemistry, site specific hydrology, and control of non-native invasive species through re-vegetation with native species. By engaging trained restoration leaders, the public, and municipalities in identifying, planning for and pursuing restoration projects across several habitat types – riparian habitats, freshwater wetlands, and nature-based stormwater treatment with native species/pollinator habitats – watershed communities create unified approaches to watershed assessments, and preliminary designs for three to five top-ranked restoration sites (depending on funding). Processes and plans will guide collective restoration efforts in our watershed for decades to come.
6. **Potential future benefits resulting from proposed planning project:** By leveraging significant funding and community-centered strategies, and by supporting trained resident leaders working closely with WRWC staff, consultants, municipalities, and partners, the project delivers multiple benefits to habitats, wildlife, and communities—both in outcomes and in process. The project takes a comprehensive watershed-wide approach by completing an assessment of restoration and flood-mitigation opportunities and advancing 3 to 5 priority projects. This planning process connects previously disconnected people, places, and efforts, fostering collaboration and shared pursuit of resources. A coordinated, system-wide approach accelerates and expands restoration benefits across diverse habitats and techniques that will benefit both the upper watershed and the lower estuarine portion of the Woonasquatucket River.
7. **Project partners:** All affected municipalities in our watershed have signed on as partners – Providence, North Providence, Johnston, Smithfield, North Smithfield, and Glocester. Other partners include our consultants, Fuss & O'Neill and Blue Cities, Inc., community organizations and Health Equity Zones (HEZs), and new and already engaged residents in watershed municipalities.
8. **Is this an ongoing project that has previously received funds from the CRMC Coastal and Estuarine Habitat Restoration Fund?** No **If yes, year(s) funding was awarded:**

## II. PROJECT MANAGER CONTACT INFORMATION

1. **Name:** Alicia J. Lehrer, Executive Director
2. **Organization:** Woonasquatucket River Watershed Council (WRWC)
3. **Address:** 45 Eagle Street, Suite 202
4. **City:** Providence **5. State:** Rhode Island **6. Zip:** 02909
7. **Phone:** 401.861.9046 **8. Email:** alehrer@wrwc.org
9. **Property Owner(s):** N/A

## III. BUDGET SUMMARY

| | | |
|---|---|---|
| | **Amount Requested from Trust Fund** | **$ 23,574** |
| **Matching Funds** | **Project Partner(s)** | **Amount of Match** |
| Cash | National Fish & Wildlife Foundation (NFWF) National Coastal Resilience Fund (NCRF) Grant | $ 306,125 |
| Cash | United Way of Rhode Island (UWRI) PVD Equity Fund | $ 6,900 |
| Cash | Private funders secured by Blue Cities, Inc. | $ 45,000 |
| | **TOTAL PROJECT COST** | **$ 381,599** |

## IV. PROPOSAL NARRATIVE

### 1. Justification and Purpose for Planning Project

WRWC proposes a watershed wide inventory, planning and design process based on effective widespread engagement and coordinated approaches to support immediate, short- and long-term deployment of effective restoration techniques at the most critical sites along our urbanized American Heritage River/contiguous wildlife corridor and its vulnerable surrounding habitats and neighborhoods. The project's outputs, benefits, and results are strengthened by significant leveraged funding and aligned past and ongoing efforts. Together, these will position WRWC and our partners to identify and prioritize habitat restoration approaches across the 52-square-mile watershed, helping focus shared resources and action on effective conservation and restoration of estuarine and river habitats where community and municipal benefits are most needed.

In the short term, WRWC and the municipalities and resident leaders with whom we coordinate will co-identify and complete preliminary design on 3 to 5 priority projects and develop a prioritized plan for a coordinated watershed wide habitat restoration effort. For the long-term, our plan will set us up for success for the next 10 to 20 years as we work with our many partners to secure funding and implement the projects that will make the most meaningful impact to our human communities and our target habitat species.

Requested funds will add necessary capacity to ensure we can bring targeted populations and sectors together to address the most pressing habitat and legacy challenges, and that current and future efforts align and effectively

restore our watershed as intended. With previous CEHRT funds, WRWC has chipped away piecemeal at many valuable projects including two dam removals, three fish passage projects, two streambank restoration segments, invasive plant management and habitat improvements in the lower part of the Woonasquatucket watershed (Johnston, North Providence, and Providence). We have had tremendous success with our fish passage and streambank restorations, bringing 35,800 river herring back to the Woonasquatucket for spawning at our best count year.

At the same time, we also have observed that with each project there have been lost opportunities that occur when we don't have sufficient funding and capacity to widely and effectively engage the public and the municipalities in informing plans and projects. Without their input, important community and municipality goals often get left behind. Now, in addition to taking a much larger and more targeted approach to watershed restoration by completing a comprehensive assessment of restoration and flood mitigation opportunities, we propose strategic and broad community, municipality and partner engagement to secure and expand the benefits provided by upcoming and future projects. Through these projects, our aim is to restore and improve habitats, species and systems in ways that add immeasurable cultural, economic, aesthetic, environmental and climate value to local communities, the state of RI, and the Narragansett Bay region.

## 2. Project Activities, Schedule and Work Plan

We propose to use the October 2001 "Woonasquatucket River Riparian Buffer Restoration Study" as a basis for engagement and activities, which includes an inventory of 44 potential restoration sites. Centering the efforts and expertise of trained frontline restoration leaders who have completed both our 2- year *Campeones Climáticos* (Climate Champions) (Campeones) technical training program and our 10-month *Nuevas Voces* (New Voices) leadership development and civic engagement training program, we will bring municipalities, community members, partners and changemakers together to update the study. *Study* update goals include 1) Reflecting changes to site conditions, environmental practices, and design standards that have occurred since 2001; 2) Incorporation of climate change resiliency and environmental justice factors, which were not in the original study; and 3) Site assessments and preliminary designs of three to five top-ranked restoration sites. One site will be selected for demonstration purposes; the updated *Plan* will guide restoration efforts for 10 to 20 years.

Project activities are predicated on 1) Preparation in process and/or completed with consulting engineers and hydrology assessors; 2) On WRWC's wildly successful climate and environmental justice cohort programming and ongoing investment in lower watershed autonomous Latino Community problem solving/community development that enable co-leadership with those most affected by climate and legacy environmental challenges across WRWC's work; and 3) Already existing relationships and shared efforts with municipalities and key stakeholders in watershed cities and towns.

We have selected and are already working with Fuss & O'Neill (F&O) as our engineer to conduct the preliminary watershed assessment. Concurrently, we are also working with Blue Cities, Inc. (BCI), an innovative assessment collaborative that specializes in identifying opportunities to restore historical hydrology. In our experience, F&O is an "outside the box" partner willing to go the extra mile to engage frontline voices and co-leadership. BCI has secured their own private funding to work with us, engaging graduate and undergraduate students at Harvard University in helping to identify and prioritize opportunities to restore natural systems in accordance with their historic hydrologic function. BCI similarly prioritizes community and "7th generation" concerns that often uplift ecological value and long-term sustainability over temporal, lowest common denominator quick fix approaches. The two assessments completed with these consulting partners through funding from other sources will build on one another to give all involved a new perspective on how best to invest funding in the Woonasquatucket River watershed to restore habitat, decrease flooding and improve resilience to climate change on behalf of the once forgotten people, wildlife and resources that constitute our present and future.

WRWC is planning our proposed work as a one-year project that flows as follows:
November 2025 to March 2026 (with matching funds)

- Begin assessment work F&O and BCI (various desktop GIS analysis methods used) along with data gathered from watershed municipalities including Municipal Resilience Plans (MRP) from each

- Identify and/or hire WRWC staff to begin outreach and engagement with watershed residents, municipalities and other interested groups
- Set up initial outreach and engagement meetings

March 2026 to September 2026 (with CRMC and matching funds)

- WRWC hosts two or more meetings in each watershed community using preliminary analysis from F&O and BCI incorporating MRPs to solicit community input on priority sites for restoration
- WRWC engages our Campeones in reviewing assessments, identifying priorities, and engaging other frontline and watershed residents in prioritization

October 2026 to March 2027 (with matching funds)

- F&O incorporates priorities and information collected through assessments and engagement into final assessment report in preparation for preliminary design of up to five priority watershed projects

Detailed activity steps include but are not limited to the following descriptive list presented with rough ideas of when they will occur. Our flexible timeline enables activities to take place concurrently or in progression to best meet the needs and preferences of the diverse communities and stakeholders involved while also completing assessments, plans and designs in accordance with temporal and financial goals. Suggesting an April 1, 2026, start date, they include:

1) April-May – Meeting series with all municipalities, to include
    a. Meetings with key staff members and elected officials
    b. Follow up meetings with primary engaged stakeholders and partners suggested by key staff and who we already work or partner with
    c. Attendance at city/town council meetings with requests to be added to meeting agendas
2) April-May-June – Initial Public Outreach, Bilingual Spanish/English where appropriate, to feature:
    a. Tabling at partner and community events, especially those convened by or through an HEZ
    b. Dedicated Info sessions and/or tabling at our own events, examples of WRWC events here https://wrwc.org/events/
    c. Charettes at libraries and other community hubs organized in conjunction with local planners, municipal resilience staff and related departments, and consulting teams
3) June-July-August – Staff/stakeholder/consultant work sessions and concurrent public updates, ensuring:
    a. Outputs incorporate and align with public input, existing MRPs, other existing plans such as 2025 update of Statewide Coastal Resilience Plan, City of Providence Climate Justice Plan, Central Providence Unidos Roadmap 2023-2032, etc.
    b. Outputs will include study updates forming a new watershed restoration plan with new assessments, prioritized list of sites, recommendations for site-specific restoration techniques and BMPs
    c. Well-designed public information pieces, presentations, and input solicitation distributed in two languages watershed wide add transparency and momentum
    d. Updates and other project storytelling on our website, through our newsletter, event announcements, social media, etc., keep project and project outputs in constant public view
4) September – Celebrations of Progress and Presentations of Work Completed to Date at Olneyville Resilience Hub in Providence, Leo Bouchard Environmental Education Center in Smithfield, the Tri County HEZ Hub in Johnston, and other select locations to expand awareness and engagement at critical juncture and add more fodder with BCI for F&O final output production.
5) October 2026-March 2027
    a. Preliminary design of up to five priority projects
    b. At least three presentations of those projects throughout the watershed to gain input before moving forward in the design process
    c. WRWC and municipal partners work together to secure funding for final design and project implementation as well as funding for future restoration priorities
6) March 2027 – Submission of Annual/Final Project Report to CRMC

In support of all the above, we already have begun expanding targeted outreach lists to parters, change agents, and stakeholders. Engaging our current cadre of Latino community restoration and resilience leaders and our strong and well-developed collaborations with the two HEZs in our watershed that date back to each of their formation and application processes, ensures vulnerable climate and environmental justice neighborhoods and communities are centered throughout the project. At WRWC, community engagement is led by residents and centers resident-to-resident outreach and input as new programs and projects are developed. Engagement occurs through resident leaders, staff, partners, and municipal processes. Events and activities use shared practices—such as resident facilitation, bilingual outreach, and simultaneous translation—to address racism, classism, and other forms of marginalization. WRWC views this work as its "undoing racism" practice, and community empowerment and co-governance are now embedded in all downriver programs and projects.

**3. Coordination and Public Support**

As described above, this entire project is focused on WRWC coordinating with stakeholders. To ensure effective coordination and public support for the above activities in accordance with our proposed timeline, we request funds from CRMC to dedicate staff time towards fully engaging watershed residents and municipalities in Providence, North Providence, Johnston, Smithfield, North Smithfield, and Glocester as described. Centering strategies and efforts led by trained frontline resident restoration and resilience leaders working closely with staff, consultants, municipalities and partners, ensures this project, in combination with recent plans of all kinds, will help to uplift and prioritize technical and collectively desired benefits to habitats, wildlife, and people, per above, both through what it achieves and how it produces results. These can include expanded public access to safe and clean waters in addition to climate-proof streambanks, aesthetic improvements, tree canopy expansions, and de-paving as part of stormwater management. We strive to prioritize green restoration techniques that add native plants and provide pollinator habitat in addition to other benefits. As such, multiple benefits, representing the widest range of community problem solving, autonomy and uplift, add significant value to existing and future restoration and conservation efforts.

**4. Planning Consistency and Restoration Priority**

From the estuarine portion of our river up to Rising Sun Mills in Providence, all the way to the uppermost stretches in North Smithfield, our watershed has a profound deleterious impact on RI's coastal resources and Narragansett Bay habitats and systems. As such, project activities work toward improving and restoring physical habitat structure, water chemistry, site specific hydrology, and control of non-native invasive species through re-vegetation with native species. Engaging the public and municipalities in identifying, planning for and pursuing restoration projects across several habitat types including riparian habitats, freshwater wetlands, and nature-based stormwater problem solving with native species and pollinator habitats is the central and consistent focus of our planning project. Coordinated, collaborative, strategic, and effective restoration plans are our intended results. Outputs that incorporate and align with public input, existing MRPs, and other existing plans, such as the 2025 update of The RI Statewide Coastal Resilience Plan, The City of Providence Climate Justice Plan, The Central Providence Unidos Roadmap 2023-2032, etc., ensures buy in and basis for ongoing collaboration. By the end of our project, watershed communities will be unified in our approaches with site assessments and preliminary designs in hand of the five top-ranked restoration sites. One site will be selected for demonstration purposes, but the overall planning processes and plans will guide collective restoration efforts in our watershed from where our river connects to other waterways and Narragansett Bay in downtown Providence to the top of the state in North Smithfield for the next 10 to 20 years.

Our project is well-timed because all our watershed communities have now completed their own prioritizations through Municipal Resilience Planning (MRP). WRWC was an active participant in the Johnston, Smithfield and North Smithfield planning processes; through these we were able to introduce ourselves to key stakeholders in those municipalities and we listened carefully to the priorities that emerged through their planning processes to identify points of connection with WRWC's watershed goals that form another basis for our project. Centering frontline leadership, outreach and lived experience and prioritizing habitats and restoration techniques that work to address conditions where they are most impaired, even if the sites themselves are located upriver, ensure this

project is consistent with CRMC's restoration priorities of enhancing habitats' resiliency to climate change on projects located within Environmental Justice communities and/or that address Environmental Justice Concerns.

**5. Species of Concern**
We expect all restoration projects to improve downstream runs of fish species we have previously targeted through past restoration efforts. These include Riverine Alewife, American Shad, and Blueback Herring – life stages egg, larva, and spawning adults; Red Drum – juvenile and young-of-year; Sea Run Brook Trout – egg, larva, juvenile, young-of-year, and spawning adult. Success of fish runs which leads to an increase in breeding populations of birds on the Woonasquatucket. Some of the bird species of concern shown in the RINHS rare animals list, such as black crowned night heron and the hooded merganser, are already observed on the Woonasquatucket. WRWC's green restoration projects will include pollinator plantings that improve all local pollinator species populations.

**6. Coastal Resiliency**
With sufficient capacity, staffing, and connections, our project brings people together with designers and planners. Our intended results form a comprehensive approach to watershed restoration through completion of a watershed-wide assessment of restoration and flood mitigation opportunities, catalyzing 1 to 5 projects in the process. With the right people, partners, processes and equity-driven practices in place, and WRWC as the connective tissue to ensure all opportunities for engagement are pursued, the pathway to planning enables previously siloed actors, areas and activities to effectively and deeply connect. Connection forges unity and collective project/funding pursuits. Coordinated system wide approaches accelerate, amplify and improve habitat restoration outcomes across all types of habitats and restoration techniques.

Guidance and input from trained frontline leaders, the involvement of all municipalities and HEZs, outreach that builds on existing partnerships and direct connection with thousands of households and individuals who participate in WRWC's education, recreation and stewardship offerings each year, will enable empowered and informed citizenries and sectors to re-rank and re-prioritize restoration sites. Utilizing widely distributed skills and lived experience across all watershed communities as they help prioritize nature-based solutions where they live ensures rankings promote benefits where they are most needed, in our case the historically under-invested neighborhoods and stretches of the river in the most flood prone lower watershed areas that are also the most impacted by the effects of our changing climate and legacies of industrialization.

**7. Permitting** N/A. We will not trigger permitting requirements until after the proposed project.

**8. Capacity of Lead Organization** (attach additional materials if necessary)
The Woonasquatucket River Watershed Council (WRWC) has been engaged in restoration and community engagement work, largely focused on the impaired and under resourced downriver neighborhoods of Providence, for over two decades. Over the last 25 years, we restored 75 acres of parkland, built the 7-mile Woonasquatucket River Greenway (multi-use trail) to connect Olneyville to downtown Providence, reclaimed tens of acres of brownfields as parkland, restored fish passage at the first five dams on the river, we co-founded the Olneyville Collaborative which became the Central Providence Opportunities HEZ and then Central Providence Unidos, and we launched our Greening the Greenway initiative which has enabled us to develop and see through to completion over a dozen nature-based green stormwater infrastructure (GSI) and streambank restoration projects. We also launched our Nuevas Voces cohort training which has expanded into many community-run offshoots including Campeones and the Olneyville Resilience Hub, and we have engaged thousands upon thousands of residents in education, restoration, stewardship and recreation.

Relative to our sector, we have a long history of coordinating diverse project partners and stakeholders to ensure and install successful restoration projects under the leadership of Alicia Lehrer, WRWC's Executive Director. To date, we have successfully completed five fish passage projects for which we express our deep appreciation to

the Coastal and Environmental Habitat Restoration Trust for ongoing support to complete them all. Lisa Aurecchia, WRWC's Director of Projects, has successfully coordinated and overseen project development, RFP development, bid management, and construction for dozens of projects throughout the Woonasquatucket Watershed including 15 green infrastructure projects completed in the last five years. In addition, WRWC now has two Professional Engineers on staff to help direct projects, work with consultants, and develop plans and engagement materials. Mark Pereira, our Civil Engineer, has over 18 years of experience in designing and overseeing nature-based projects. Bridget Zwack, our Environmental Engineer, has over 10 years of experience in project management and working with municipal partners. Staff resumes are available upon request.

One of our organizational strengths is our ability to align our environmental justice, K-12 education, community empowerment and co-leadership work, with our work to restore the Woonasquatucket as a natural, recreational, and cultural resource for Rhode Island. WRWC plays a critical role in ongoing restoration efforts in the watershed, including but not limited to the initiative to restore fish runs to the Woonasquatucket; restore the Centredale Manor Superfund site; wetland restoration efforts such as the Deerfield Park and Department of Public Works projects in Smithfield; and riparian restoration projects such the Manton Streambank Restoration Project just completed in 2025 with thanks to funding support from CEHRTF. WRWC brings local knowledge and the ability to coordinate resident engagement, funding, and partners to facilitate project successes. Towards these ends, WRWC has successfully completed, or is on track to successfully complete, dozens of federal assistance agreements through numerous federal agencies including meeting all reporting requirements and submission of acceptable final technical reports. Our experienced staff is a well-oiled machine in managing grants, tracking funding sources, and producing results.

**9. External Factors and Hazard Mitigation**

WRWC and our consultants are considering effects of both sea level rise and increased and more intense heat and storms when assessing our watershed and prioritizing projects. Our consultants are using the latest models of predicted sea level rise and storm impacts through 2050. We know that this means our streambank restorations will need to be stronger, our stormwater projects will need to capture and treat larger and more frequent storms, and our habitat plantings will need to weather both flood and drought conditions.

## V. EVALUATING PROJECT SUCCESS (one page maximum)

### 1. Performance Measures and Deliverables

Intended outputs and measures of success include the following. Not all are immediately measurable, but those that are will be carefully tracked:

- Completed assessment of restoration and flood-mitigation opportunities and corresponding report
- Advance of 3 to 5 priority projects (30% designs)
- A planning process that connects previously disconnected people, places, and efforts measured by numbers of engaged municipal staff members/elected officials or key stakeholders (at least 3 in each municipality and likely more) and residents (at least 25 in each municipality)
- Public engagement (at least two meetings with engaged municipal staff/elected officials/key stakeholders) and at attendance at two or more public events in each community
- Plans and designs that align with existing MRPs and other plans
- The extent to which the project fosters collaboration and shared pursuit of resources over time
- The extent to which the project fosters a coordinated, system-wide approach that accelerates and expands restoration benefits across diverse habitats and techniques over time
- The extent to which the project results in benefits to both the upper watershed and the lower estuarine portion of the Woonasquatucket River
- One annual/final report to CEHRT

We will track participation through event registrations, sign-in and attendance sheets, and project success through the number, type and efficacy of engagement and planning events and work sessions, and how successfully input is incorporated into the prioritized project plans. Documentation and work products will be provided along with each report over the life of the project.

We will evaluate the degree to which communities and municipalities feel the project will produce successful results and if the work products are reflective of their input through one-on-one and survey evaluation protocols. We will record the evaluations electronically either through survey monkey or google forms. Formative and summative evaluation will be led by the designated staff leads. Replicating success and transferring results will remain an ongoing endeavor through workshops and presentations about the project during conferences, webinars and online publication.

### 2. Monitoring Plan

The WRWC River Ranger team maintains restoration sites and monitors them for such factors as slumping and erosion on a weekly basis. WRWC engages and trains diverse volunteers to monitor fish return annually at the Rising Sun Mills Fish Ladder using the RIDEM F&W monitoring protocol. The WRWC reports results through our Constant Contact email list, on our website, in our newsletter and directly to project partners.

WRWC also monitors seven sites along the Woonasquatucket for water quality through the URI Watershed Watch program. Recently, our Spanish-speaking resident leaders became part of the team completing regular water quality monitoring at our four sites in the Providence section of the river.

Additionally, the WRWC began a new volunteer monitoring program in 2014 that we continue annually. Volunteers collect fish community data annually through an electrofishing program at two sites, one upstream in Smithfield, and one downstream in Providence on the Woonasquatucket River.

WRWC plans to continue these monitoring activities so we can assess whether our efforts are making a positive impact on water quality and wildlife populations we seek it restore.

## VI. PROJECT BUDGET TEMPLATE

| BUDGET CATEGORY | CRMC REQUEST | MATCH | MATCH PENDING OR SECURED? (select one) | SOURCE OF MATCH | TOTAL |
|---|---|---|---|---|---|
| Personnel: WRWC Staff Time for Watershed Assessment Project Management | | $ 34,611 | SECURED | National Fish & Wildlife Foundation (NFWF) National Coastal Resilience Fund (NCRF) Grant | $ 34,611 |
| Personnel: WRWC Staff Time Engaging Providence Resident Leaders (Campeones) in Watershed Assessment | | $ 8,105 | SECURED | NFWF NCRF Grant | $ 8,105 |
| Personnel: WRWC Staff Time Outreach to and Coordination with Woonasquatucket Watershed Municipalities in Developing Watershed Assessment and Identifying Priority Projects | $ 10,071 | | | | $ 10,071 |
| Supplies | | $ 2,809 | SECURED | NFWF NCRF Grant | $ 2,809 |
| Consultant/Contractor Fees:Blue Cities/Harvard Students Watershed Study to identify and prioritize opportunities to restore natural systems | | $ 45,000 | SECURED | Private Funders | $ 45,000 |
| Consultant/Contractor Fees: Intiial Watershed Assessment (Fuss & O'Neill) | | $ 150,000 | SECURED | NFWF NCRF Grant | $ 150,000 |
| Consultant/Contractor Fees: 30% Designs of Selected Prioirty Projects (Fuss & O'Neill) | | $ 100,000 | SECURED | NFWF NCRF Grant | $ 100,000 |
| Consutant/Contractor Fees: Community Outreach and engagement consultant | $ 12,003 | | | | $ 12,003 |
| Other: Campeones Stipends for Engagement in Assessment and Identifying Priority Projects in Providence portion of Watershed | | $ 6,000 | SECURED | United Way of Rhode Island (UWRI) PVD Equity Fund | $ 6,000 |
| WRWC Indirect Rate/Overhead (15% of Project Costs - excludes all but $25,000 of. consultant fees)) | $ 1,500 | $ 11,500 | SECURED | NFWF NCRF Grant and UWRI PVD Equity Fund | $ 13,000 |
| **TOTAL** | **$ 23,574** | **$ 358,025** | | **TOTAL PROJECT COST** | **$ 369,596** |

## VII. BUDGET NARRATIVE (one page maximum)

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|---|
| **Personnel (Rounded Rates Include Fringe @33%):** WRWC Staff Time for Watershed Assessment working with Fuss &O'Neill, and Blue Cities, Inc.<br>WRWC ED (Alicia Lehrer): 100 hours @ $76/hour = $7,600<br>WRWC Director of Projects (Lisa Aurecchia): 100 hours @ $61/hour = $6,100<br>WRWC Environmental Engineer (Bridget Zwack): 239.17 hours @ $59/hour = $14,111<br>WRWC Civil Engineer (Mark Pereira): 100 hours@ $68/hour = $6,800<br>TOTAL: $34,611 FUNDED ENTIRELY THROUGH CASH MATCH FROM NFWF NCRF |
| **Personnel (Rounded Rates Include Fringe @33%):** WRWC Staff Time Engaging Providence Resident Leaders (Campeones) in Watershed Assessment<br>WRWC ED (Alicia Lehrer): 20 hours @ $76/hour = $1,520<br>WRWC Community Action Director (Shiloh Cabot-Miller): 75 hours @ $37/hour = $6,100<br>Campeones Program Facilitator (Maria Jose Gutierrez Paz): 30 hours @ $43/hour = $1,290<br>WRWC Community Action Coordinator (Nicole Wright): 63.3 hours @ $28/hour = $1,772<br>WRWC Civil Engineer (Mark Pereira): 11 hours@ $68/hour = $748<br>TOTAL: $8,105 FUNDED ENTIRELY THROUGH CASH MATCH FROM NFWF NCRF |
| **Personnel (Rounded Rates Include Fringe @33%):** WRWC Staff Time outreach and Coordination w/ Watershed Municipalities and residents, and CEHRT required reporting by Rebekah Greenwald, Director of Grants w/ assistance from WRWC staff working on project<br>WRWC ED (Alicia Lehrer): 21 hours @ $76/hour = $1,596<br>WRWC Director of Projects (Lisa Aurecchia): 10 hours @ $61/hour = $610<br>WRWC Environmental Engineer (Bridget Zwack): 40 hours @ $59/hour = $2,360<br>WRWC Community Action Director (Shiloh Cabot-Miller): 30 hours @ $37/hour = $1,110<br>WRWC Director of Grants (Rebekah Greenwald): 15 hours @ $51/hour = $1,020<br>WRWC Communications Manager (Chris Dalpe): 30 hours @ $37/hour = $1,110<br>WRWC Community Action Coordinator (Nicole Wright): 29.40 hours @ $28/hour = $820<br>WRWC Civil Engineer (Mark Pereira): 25 hours@ $68/hour = $1,700<br>TOTAL: $10,071 CRMC CEHRT REQUESTED FUNDS |
| **Supplies**<br>Large Format Maps: 25 @$50 per map = $1,250<br>Meeting Supplies: $1,559<br>TOTAL: $2,809 FUNDED ENTIRELY THROUGH CASH MATCH FROM NFWF NCRF |
| **Consultant/Contractor Fees:** Blue Cities/Harvard U Students - Watershed Study to identify and prioritize opportunities to restore natural systems<br>Lump Sum & TOTAL: $45,000 FUNDED ENTIRELY THROUGH CASH MATCH PRIVATE SOURCES |
| **Consultant/Contractor Fees:** Initial Watershed Assessment (Fuss & O'Neill)<br>Lump Sum & TOTAL: $150,000 FUNDED ENTIRELY THROUGH CASH MATCH FROM NFWF NCRF |
| **Consultant/Contractor Fees:** 30% Designs of Selected Priority Projects (Fuss & O'Neill)<br>Lump Sum & TOTAL: $100,000 FUNDED ENTIRELY THROUGH CASH MATCH FROM NFWF NCRF |
| **Consultant/Contractor Fees:** Outreach consultant (to be selected)<br>Lump Sum & TOTAL: $12,003 CRMC CEHRT REQUESTED FUNDS |
| **Other:** Campeones Stipends for Engagement in Assessment and Identifying Priority Projects in Providence estuarine portion of Woonasquatucket River Watershed and engaging other community members<br>8 Campeones compensated through stipends: 30 hours each @ $25/hour (8 X 30 X 25)= $6,000<br>TOTAL: $6,000 FUNDED ENTIRELY THROUGH CASH MATCH FROM UNITED WAY PVD EQUITY FUND |
| **WRWC Indirect Rate/Overhead** (15% of Project Costs - excludes all but $25,000 of consultant fees)<br>15% of $10,071 = $1,500 CRMC CEHRT REQUESTED FUNDS<br>15% of $6,000 = $900 CASH MATCH FROM PVD EQUITY FUND<br>15% of all other direct funds = $10,600 CASH MATCH FROM NFWF NCRF<br>TOTAL: $13,000 |

## IX. ADDITIONAL MATERIALS

Please include the following with your application:

X Site and Locus Maps (see preliminary assessment maps attached to F&O's letter)

___ Ground-level photographs of existing site conditions

___ Aerial photographs, if available

X Preliminary design drawings, maps or engineering plans, if available (see preliminary assessment maps attached to F&O's letter)

___ Pertinent physical, ecological, biological, and cultural / historical survey data

X Letters of support

**AUTHORIZED SIGNATURE**

**AUTHORIZED AGENT OF LEAD ORGANIZATION**

| | |
|---|---|
| | January, 23, 2026 |
| **Signature** | **Date** |

Return your completed proposal by 4:00 p.m. on **January 23, 2026** to:

**Bruce Lofgren, AICP**
**RI Coastal Resources Management Council**
**Oliver Stedman Government Center**
**4808 Tower Hill Road**
**Wakefield , RI 02879**
blofgren@crmc.ri.gov

Applicants are required to submit one (1) signed hard copy of the proposal form and one (1) electronic copy in Adobe PDF format. **Please submit electronic copy as a **SINGLE PDF FILE** containing all application materials.**

Contact Bruce Lofgren at by email or **401-782-4196** with any questions.

CRMC
COASTAL RESOURCES MANAGEMENT COUNCIL