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January 25, 2022

Maureen O'Meara
Town Planner
Cape Elizabeth, Maine

RE: Preliminary Design and Feasibility Study for Spurwink Avenue Tidal Road Crossing

Dear Maureen,

The Wells Reserve proposes to develop a funding request for preliminary design and feasibility assessment for replacement of the Spurwink Avenue tidal stream crossing of the Spurwink River in Cape, Elizabeth in partnership with the town and state natural resource agencies.

The crossing is owned and maintained by the town and was included in a 2018 assessment of priority stream crossings¹. The study ranked the culvert as a medium priority, with a recommended replacement window of 5-10 years due to deterioration of the structure, impacts to natural resources, and public safety. The structure was installed in 1987 and consists of a round corrugated aluminum pipe with invert set at stream grade.



The inlet of the Spurwink Avenue tidal crossing is almost underwater at high tide creating unsafe hydraulic conditions.

The Spurwink Ave crossing is identified as a high priority habitat restoration site by the Wells Reserve due to the restriction of tidal flow to the upstream marsh. The area upstream of the crossing includes

¹ Cape Elizabeth Culvert and Habitat Assessment. March 22, 2019. Town of Cape Elizabeth. URL: <https://www.capeelizabeth.com/media/Reports/Culvert%20and%20Habitat%20Assessment%20Study%20Dated%20March%202022,%202019.pdf>

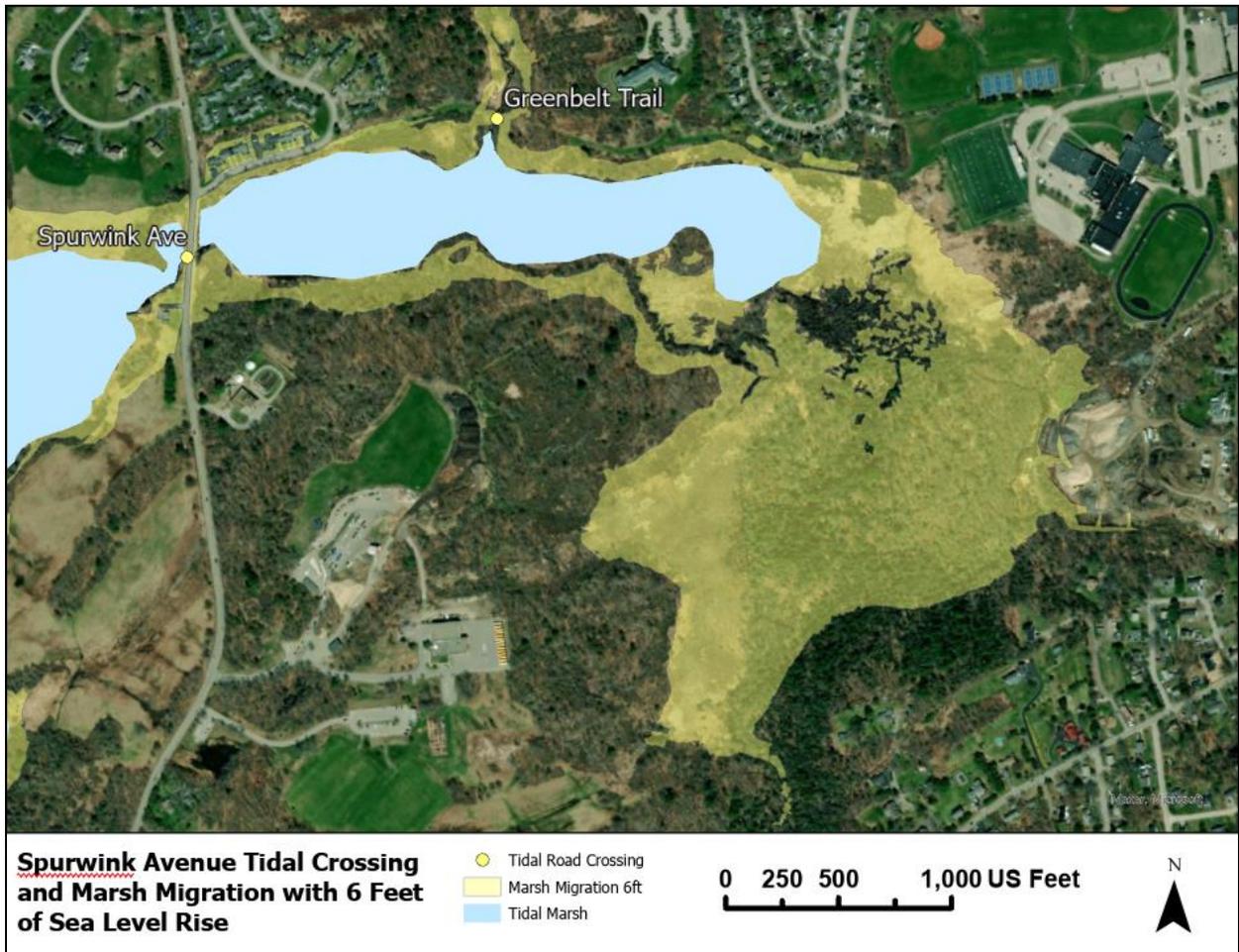


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approximately 25 acres of tidal wetland which is either owned by the town or the Cape Elizabeth Land Trust. Adjacent areas of undeveloped land and freshwater wetland have the potential to support an additional 84 acres of future tidal wetlands created by increased tidal flooding from sea level rise. However, restriction of tidal flow by the roadway and culvert limits the potential for upstream wetlands to respond to sea level by limiting flooding and associated sediment transport. Additionally, the crossing has been identified as a limiting factor for restoration of tidal hydrology at the upstream greenbelt crossing of Willow Brook, which is slated to be replaced in 2022.



A feasibility study would enable the town to study the impacts of the current road crossing on upstream habitat and assess the potential for increased resilience of the crossing through an appropriately sized structure, as well as potential impacts to upstream habitat, property, and infrastructure. Due to the potential for increased tidal flooding upstream of the crossing as the result of future culvert replacement, an in-depth study of tidal hydrology and elevation is required to maximize the performance and safety of the crossing structure.

Funding and technical assistance is currently available for design and replacement of municipal culverts through a variety of sources including both state and federal transportation and habitat restoration grant programs. The Wells Reserve has identified several natural resource focused funding sources that



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would be a good fit for the Spurwink Avenue project. Of immediate interest are new grants funded through the recently passed Infrastructure Investment and Jobs Act (IIJA) and distributed by the National Oceanic and Atmospheric Administration through awards to the Maine Coastal Program. Other potential funding sources that the Wells Reserve is aware of which could supplement the project include the Maine DEP Municipal Culvert Upgrade Program, the Maine Coastal Communities Grant Program, and the FEMA BRIC program. There may be additional funding sources from IIJA to the Federal Highway Administration and Maine DOT.

Currently one of the best opportunities is the IIJA Maine Coastal Program, which is requesting that partners submit tidal road crossing projects (design, final engineering, or construction) for inclusion in an application to be submitted in spring 2022. Sub-awards will be made to partnering road owners to complete projects that adhere to the CoastWise project design and implementation guidelines for tidal road crossing projects, and which are deemed to be high priority by Maine Coastal Program. **This funding will require little or no local cost share**, presenting a unique opportunity for proactive planning that will not incur undue costs to municipalities. Selected projects could receive awards as early as summer 2022. The RFP announcement is expected in late winter or early spring 2022.

Wells Reserve requests that the Town of Cape Elizabeth approve the inclusion of the Spurwink Avenue crossing in a list of priority projects submitted to Maine Coastal Program for the southern Maine region. Wells Reserve would provide technical support for development of any associated application material and coordinate with Maine Coastal Program in partnership with town staff. Should the project receive funding Wells Reserve would provide ongoing support for development of project scope, engineering RFP process, workplan development, implementation, reporting, and supplemental fundraising as requested by the town.

For more information, or to request the Spurwink Avenue tidal crossing be included in the regional priority project list, please contact Jacob Aman at jaman@wellsnerr.org or 207-646-1555 x112.

Regards,

A handwritten signature in black ink that reads "Jacob Aman".

Jacob Aman
Stewardship Director