



Saugus River Watershed Council

8 May 2015

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Attention MEPA Analyst: Holly Johnson

RE: Expanded Environmental Notification Form for Ballard Street Salt Marsh Restoration Project,
MEPA #: 15346

Dear Secretary Beaton,

The Saugus River Watershed Council (SRWC) is a non-profit organization founded in 1991 to protect and restore the natural resources of the Saugus River watershed. We respectfully submit the following comments regarding the Expanded Environmental Notification Form for the Ballard Street Salt Marsh Restoration Project in Saugus.

Background

The Rumney Marshes ACEC is a 2,785 acre urban salt marsh system extending into Saugus, Lynn, Revere, Boston and Winthrop. This region, including the Saugus / Pines River (an Outstanding Resource Water), was designated as an ACEC in 1988 to preserve its critical environmental value as one of the most biologically significant salt marshes north of Boston. The marsh provides habitat for marine life such as flounder, alewife, rainbow smelt, American eel, soft shelled and razor clams, mussels, as well a variety of native and migratory birds. The Rumney Marshes Area of Critical Environmental Concern is one of the most important natural resource area in the Saugus River watershed.

The Saugus River Watershed Council has been actively involved in protecting and restoring the natural resources of the region by working with federal, state and local agencies to implement the Rumney Marshes Salt Marsh Restoration Plan, monitor and promote restoration of historic fisheries, monitor and improve water quality, remove illegally dumped debris, and educate the public about the natural resources of Rumney Marsh. Thanks to increased environmental enforcement and local cleanup efforts, the Massachusetts Division of Marine Fisheries in conjunction with local communities reopened shellfish beds (conditionally with depuration) in the Saugus / Pines River estuary during 2007.

The Saugus River Watershed Council has been actively involved in reviewing and commenting on the proposed Ballard Street Salt Marsh Restoration project as well as previously proposed plans to implement this salt marsh restoration project. Over the past two years, the Saugus River Watershed

Council has met directly and had numerous discussions with members of the project team and environmental agency staff members to review and provide feedback on various elements of the proposed project. We have also participated in local Conservation Commission meetings, community meetings, and attended the MEPA scoping session and site visit during April 2015.

Project Description

The Massachusetts Department of Conservation and Recreation has submitted an Expanded Environmental Notification Form along with a Request for a Waiver of the requirement to prepare an Environmental Impact Report (EIR) for the Ballard Street Salt Marsh Restoration Project located within the Saugus portion of the Rumney Marshes Area of Critical Environmental Concern. The project exceeds MEPA thresholds for altering salt marsh and other wetlands, requiring preparation of a mandatory EIR unless a waiver is granted.

The project area is currently comprised of two degraded salt marsh areas now separated by a sand and gravel berm (former fill for I-95). While portions of the berm have been removed for beneficial reuse as part of the Winthrop Beach Nourishment Project, the remainder of the berm will remain in place at the request of local residents to act as a visual and sound barrier to Route 107 and the Wheelabrator Saugus waste incineration facility and associated ash landfill. For purposes of this project, the two marsh areas on either side of the berm are referred to as the Western Marsh and the Eastern Marsh. Conditions in both marshes have been negatively impacted over the years by illegal filling, and restrictions to tidal influence. The site currently includes a mix of upland, invasive vegetation (mostly *Phragmites*), freshwater marsh, and limited salt marsh. The Western marsh abuts Eastern Avenue in Saugus. A drainage ditch was constructed on the west side of Eastern Avenue in Saugus – the Town of Saugus maintains an easement for this area which is impacted by storm water drainage from the East Saugus neighborhoods. The drainage ditch is connected to the Western Marsh via two culverts running under Eastern Avenue.

The proposed project combines the two goals of restoring degraded salt marsh within the Rumney Marshes Area of Critical Environmental Concern, and enhancing flood control to lessen the impacts of coastal and inland rain storms on the local neighborhood.

The preferred alternative for this project (Alternative #4 in the EENF) would create a 36.9 acre salt marsh system (an increase of 33 acres of salt marsh over existing conditions). Alternative #4 involves the following elements:

- Removing the 'tide gate' at Ballard Street to allow unrestricted tidal flow to the Eastern Marsh from the Saugus River
- Installing an earthen dike with a 12" culvert (BA2) across a stream channel to separate the Eastern and Western Marshes while allowing a different tidal regime for each
- Installing a new open-topped culvert (BR2) and self-regulating tide gate at Bristow Street to allow full tidal flow to the Western Marsh from the Pines River channel (SRT will control elevation to about 1 foot lower than in the Eastern Marsh)
- Installing a new culvert with a duck bill (BR3) next to BR2 to allow additional egress of waters from the marsh during high tidal events
- Removing the board blocking the existing Bristow Street east culvert (BR1)

- Fitting two existing culverts under Eastern Avenue (E1 and E2) with duck bill valves to prevent tidal flow into the drainage ditch while still allowing storm water runoff during rainstorms to drain into the Western Marsh
- Installing a new culvert under Eastern Avenue (E3) to improve drainage from the neighborhood
- Excavating 50,000 cubic yards of materials to lower the Western Marsh – materials would be used on site to shore up the sand embankment and be placed in two designated fill areas
- Excavating channels within the Western Marsh to facilitate tidal flow

SRWC Comments Regarding the EENF

The Saugus River Watershed Council is a strong proponent of implementing the Ballard Street Salt Marsh Restoration Project. Given the existing constraints of the site, we believe that the project design, as outlined by the MA Department of Conservation in partnership with the MA Division of Ecological Restoration in the EENF, represents a careful balance between achieving the goals of restoring salt marsh habitat to the maximum extent possible while protecting the community from flooding.

For approximately two decades, this project has been researched, discussed and presented in various forms through the local, state and federal environmental permitting process. With all of the starts and stops over the years, it is encouraging to finally see momentum and funding available to implement much needed environmental improvements to this degraded area. We appreciate the extensive research, planning and community outreach undertaken by the current team of MA Department of Conservation and Recreation and MA Division of Ecological Restoration, along with consultants Parsons Brinkerhoff and Applied Coastal Research & Engineering.

While we support the proposed project, we respectfully request that the project proponent be required to address the concerns and issues outlined in this letter during the environmental permitting phase. Given the number of years that this project has been in the works and the nature of the project as a salt marsh restoration effort, we believe that these issues can be adequately addressed through supplemental details provided during the environmental permitting process and would not necessarily require submittal a full Environmental Impact Report.

Enhancing Fish Habitat

In order to manage hydraulic conditions separately between the proposed Eastern and Western marsh areas, the project proponent proposes constructing a berm across an existing channel and installing a 12" culvert (culvert BA2) within the berm to provide limited flow into the Western Marsh. While we understand that the reasons for this proposal are to maintain optimum water levels without causing flooding in the neighborhood, the Saugus River Watershed Council recommends that this aspect of the project be revisited to ensure maximum benefit to fish passage and habitat. The currently proposed 12" culvert would most likely not be adequate to promote fish passage between the two marsh areas. Even if well-maintained and clear of debris, the size of this culvert limits opportunities for fish to pass between the two marsh systems. At the same time, culverts of this size are difficult to maintain as they are easily blocked by brush or debris. If a berm with some type of culvert is maintained in the final project plan, the design for the fish passage mechanism should be

accompanied by a maintenance program that will ensure long-term benefit to accessible fish habitat in the Western Marsh.

Balancing Wetlands Restoration and Flood Protection in a Changing Climate

One of the most complex aspects of this project is identifying an approach that restores the maximum amount of salt marsh while also alleviating existing flooding conditions to the extent feasible. As we grapple with the realities of climate change and increasingly intense rain storms which will inevitably combine with some high tide events, finding creative solutions for coastal protection is becoming increasingly important.

As part of the strategy to address flooding concerns, the proposed project recommends eliminating the tidal connection between the storm water drainage area along Eastern Avenue in Saugus and the Western Marsh cell. Given the overall context of this site, the Saugus River Watershed Council supports this proposal as it is part of a broader approach to achieving 33 acres of newly restored salt marsh in a complex and flood-prone project area. However, we also recognize that this portion of the project - the proposed conversion of tidally influenced wetland to freshwater-only drainage - does not represent ecological restoration. We recommend that the project proponent consult with the Massachusetts Department of Environmental Protection to identify the most appropriate permitting strategy to ensure that this aspect of the project does not end up creating an unwelcome precedent that could negatively impact efforts to protect similar tidally influenced wetlands that act as drainage areas throughout the state of Massachusetts.

Upgrading Infrastructure

Additional detail is needed to ensure that adequate capital upgrades and associated funding are provided for this project. Many of the proposed changes to existing culverts involve removing previously installed barriers or otherwise adapting currently inadequate or failing infrastructure. Where existing infrastructure, such as the Ballard Street culvert connecting the Saugus River to the Eastern Marsh area, is utilized – a structural analysis should be implemented to ensure that the existing infrastructure is sound enough to provide a lasting solution. If and where needed, existing infrastructure should be upgraded and / or replaced with new culverts to extend the capital life of this project.

Marsh Excavation and Placement of Fill

The proposed project involves excavating 50,000 cubic yards of material from the Western Marsh and utilizing that material for on-site vs. off-site disposal. SRWC recommends that a contingency plan be developed in case the utilization of materials on site is not sufficient for all fill disposal. Excavation activities should be designed to maintain a vegetated buffer along Eastern Avenue and keep existing trees in place wherever possible. The project proponent should also be mindful of the visual aesthetics as well as environmental value of onsite areas where the fill is placed.

Maintenance and Operations

SRWC appreciates the project proponent's goal of designing a project that minimizes maintenance and operating costs and vulnerabilities. Designing a project with multiple points of tidal flow to and

from the marsh will help alleviate the potential negative impacts associated with unexpected problems, failures or blockages associated with the various culverts.

However, ensuring the short and long-term success of this complex project will still require a significant commitment to regular site inspections and routine maintenance to make sure all of the components are operating as designed. Existing conditions on the site, such as dilapidated structures, crushed culverts, rusted out barriers, debris blocking flow, etc., all illustrate the important role that maintenance and operations must play in making sure that the proposed design doesn't end up in the same neglected condition as existing infrastructure throughout Rumney Marsh.

The project proponent should provide a detailed maintenance and operations plan that includes a timeline and responsible party for operations, inspections and maintenance of every culvert associated with this project. The plan should also outline procedures to be followed during intense coastal storm events.

Short and Long-Term Monitoring and Contingency Plans

The EENF indicates that the MA Division of Ecological Restoration would provide monitoring of the site to evaluate success of the marsh restoration project. The Saugus River Watershed Council recommends that this effort be formalized in the environmental permitting process and expanded to include a contingency plan. The complexities of the plan, the environmental importance of this site, and the neglected state of previous tidal control devices in Rumney Marsh, all justify a clear and significant commitment to ensuring long term success of this project. The project proponent should develop a monitoring program with performance measures and schedule to regularly assess the viability of this salt marsh restoration project. The project proponent should also create a contingency plan that identifies clear steps to be taken if the project does not meet its restoration goals. This plan could be included as part of the Notice of Intent to be filed with the Saugus Conservation Commission.

Project Funding

Concerns have been raised about whether or not adequate funding has been set aside for this project. The Saugus River Watershed Council has been assured by the project proponents as well as our legislative leaders, that there is full support at the state level to ensure implementation of this project. A detailed project budget is needed to demonstrate that the \$2 million will be adequate for the project. Due to the importance of this project to the region as well as the high level of commitment from our public leaders, we trust that additional funding will be provided if the costs of this project exceed the \$1 million in state funding and \$1 million federal grant from US Fish and Wildlife Service already committed.

Interpretive Features

Implementation of the Ballard Street Salt Marsh Restoration Project provides a unique opportunity to educate the public about the natural resources and wildlife of the Rumney Marshes ACEC as well as the benefits associated with marsh restoration efforts. The Saugus River Watershed Council encourages the project proponents to develop and implement interpretive features such as educational panels to educate the public about this valuable saltmarsh ecosystem. SRWC would be willing to assist with development of content for interpretive signage or other features that could be

installed near the pedestrian bridge, in the area of the current parking lot on Bristow Street, or other locations.

Please contact me at 781-233-5046 or srw@shore.net if you have any questions about the Saugus River Watershed Council or our comments regarding the Ballard Street Salt Marsh Restoration Project. Thank you in advance for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Joan LeBlanc". The signature is fluid and cursive, with the first name "Joan" being larger and more prominent than the last name "LeBlanc".

Joan LeBlanc
Executive Director

Cc: Senator Thomas McGee
Speaker of the House Robert DeLeo
Representative Donald Wong
Representative RoseLee Vincent
Georgeann Keer, MA Division of Ecological Restoration
Joe Orfant, MA Department of Conservation and Recreation
Rachel Burckardt, Parsons Brinkerhoff
Kathryn Glenn, MA Coastal Zone Management
Ed Reiner, US Environmental Protection Agency
Phil DiPietro, MA Department of Environmental Protection
David Pierce, MA Division of Marine Fisheries
Town of Saugus, Board of Selectman
Saugus Conservation Commission
Heidi Ricci, Massachusetts Audubon