

Coming Together for Clean Water EPA's Strategy to Protect Americas Waters & Savin Hill Cove, MA



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Major Problems Facing Our Water Today

- “Nutrients Sediments and novel synthetic pollutants (ex. endocrine disruptors) are posing new challenges for the scientific and management community alike” (2).
- “Aquatic Habitats and species are impacted by multiple stressors, including contaminants, habitat degradation and reduced flows” (2).
- Financial resources needed to correct the problems.
- “Climate Change Impacts shifts in the hydrological cycle such as severe storms, extreme rainfall, longer droughts, more rain & snow events, earlier spring melt, warming waters, sea level rise and ocean acidification” (3).
- “Urbanization, population increase, degradation of water and wastewater infrastructure” (4).

Major Problems Facing Savin Hill Cove, MA Today

- The constant flooding of Morrissey Boulevard.
- Flooding of contaminated waters and storm runoff into Savin Hill Cove, from Morrissey Boulevard and the heavy transportation it receives daily.
- Sedimentation build up in the cove effecting marine transport.
- The threat of increasing water levels due to Global Climate Change, increasing urbanization as populations move towards cities, and loss of the local natural habitat.

Coming Together for Clean Water

- A forum that was implemented to hear the participants visions first hand for the future of Americas waters, and invaluable opportunity to collectively rethink EPA's path forward in the 21st century. An essential precursor to the EPA's Strategy to protect Americas Waters.
- The two main goals to focus on were **healthy watersheds and sustainable communities**.
- Some themes presented at this forum, **related to Savin Hill Cove**, were:
 - Climate change, population increase, urbanization and degradation of water and wastewater infrastructure will compound the challenge.
 - The public is largely unaware of the severity of current and future challenges.

Recreation:

- “Develop comprehensive approaches to help transform previously degraded urban waters into community assets by linking environmental programs with existing priorities such as economic development, adding environmental components to economic programs in pilot areas, and facilitating water clean up efforts” (9).
- At Savin Hill Cove, not only are we planning to restore the salt marsh habitat and mudflats to act as a filter and buffer, but recreational plans, such as salt marsh walkways will be included. Sustainable materials used for the walkway are a necessity as well as signs along the walkway to promote knowledge of the flora and fauna in the area as well as any animals that may be seen. Yearly clean ups of the area are also a strong possibility as the amount of litter from Morrissey Boulevard will effect the habitat.

Example of Proposed Walkway



EPA's Strategy to Protect Americas Waters

- Issued in September 2010 from the EPA. Goal is to *protect and restore our waters to ensure that drinking water is safe, aquatic ecosystems sustain fish, plants, and wildlife, and economic recreational subsistence activities (5).*
- *Two Primary Objectives of : 1. Protect Human health & 2. Protect and restore watershed and aquatic ecosystems.*
- *There are many key areas that were focused on (and can all be connected to the Restoration of Salt Marshes and Mudflats of Savin Hill Cove, MA.*

EPA Strategy &

The Restoration of Salt Marsh and Mudflats in Savin Hill Cove, MA

- *Three specific efforts from the EPA Strategy to Protect Americas Waters are directly related to Savin Hill Cove, MA are:*
 - *3.) Restore degraded waters- enhance the ability of the EPA states and tribes to restore degraded waters, restore ecosystems, and take action to increase the number of restored water bodies, including nutrient impaired waters.*
 - *4.)Reduce Pollution from Discrete Sources- Reduce significant point-source pollution discharges that continue to contaminate waterways.*
 - *5.)Enhance Watershed Resiliency and Revitalize Communities- Implement sustainable approaches and technologies that will reduce the impacts and risks associated with climate change, population growth, increased urbanization, infrastructure gaps, and other factors.*

3.) Restoring Waters

- Our nations large aquatic ecosystems continue to face pressure due to growing population and increasing developments (7).
- With increasing populations & urbanization - transportation on Morrissey Boulevard & pollutants in the water will only continue to become more concentrated and increase in abundance. The water levels due to flooding will only continue to get worse unless a natural system is put into play. The Salt Marsh will buffer the area for the flooding, and act as a filter to the surrounding waters effected by runoff and automobile pollutants.

4.) Reduce Pollution from Discrete Sources

- “EPA seeks to increase protection of our waters from pollution by reducing current loadings and preparing for substantial predicted increases associated with development, urbanization, climate change and other factors” (8).
- Key Actions similar to those needed at Savin Hill Cove, MA are:
 - Strengthen programs to reduce pollution from point sources including controlling pesticide discharges **as well as release of contaminants from vessels and reducing pollution from sewage treatment plants**, developing effluent guidelines for key sectors.
 - With the marina right in the vicinity and many boats residing in the immediate surrounding area, strict guidelines for any possible boat discharge into Savin Hill Cove can be taken into account and rectified.

References:

- *Coming Together for Clean Water, The Challenges and Opportunities for protecting Americas Waters. EPA.*