

Environmental Justice Screening Form

Project Name	Straightway Water Treatment Facilities Improvements
Anticipated Date of MEPA Filing	8/15/2024
Proponent Name	Town of Barnstable, Department of Public Works
Contact Information (e.g., consultant)	Kleinfelder, 1 Beacon St. Boston, MA 02108; Kate Riley, kariley@kleinfelder.com
Public website for project or other physical location where project materials can be obtained (if available)	https://townofbarnstable.us/Departments/watersupply/Straightway-Water-Treatment-Plant.asp
Municipality and Zip Code for Project (if known)	Barnstable, MA 02601
Project Type* (list all that apply)	Water Supply, Treatment / Conveyance
Is the project site within a mapped 100-year FEMA flood plain? Y/N/unknown	No
Estimated GHG emissions of conditioned spaces (click here for GHG Estimation tool)	n/a improvement / expansion of a drinking water treatment facility

Project Description

1. Provide a brief project description, including overall size of the project site and square footage of proposed buildings and structures if known.

This project will provide a public health benefit and increase the drinking water quality, reliability, and resiliency of the Town of Barnstable’s Hyannis Water System (HWS). HWS operates three drinking water treatment complexes with a total of 12 wells and serves a year-round population of approximately 18,000 people which surges to about 35,000 in the summer. Recent summer demand has hit record highs, and without the proposed improvements, all wells and treatment facilities must pump continuously in summer. All the HWS’s wells are impacted by per- and poly-fluoroalkyl substances (PFAS) contamination and are treated to remove PFAS. However, some of the equipment is unwinterized and wells must be turned off during winter. Beginning in 2016, when the EPA’s PFAS Health Advisory was lowered from 300 to 70 nanograms per liter (ng/L), the Town voluntarily moved quickly to implement emergency seasonal PFAS treatment by installing unwinterized granular activated carbon (GAC) filter units. The PFAS removal at the Mary Dunn and Maher water treatment facilities have been winterized and can operate year-round to meet demand. However, the Straightway and Hyannisport Treatment Facilities (the project site) need improvements to winterize existing PFAS units, as well as to increase supply, pumping, and treatment capacity, to improve resiliency to sea level rise, and to improve system reliability for meeting current and future drinking water regulations.

The Straightway and Hyannisport Treatment Facilities, located at 228 Straightway and 132 Smith Street, respectively, are a critical HWS component located on approximately 48 acres of protected water supply land. The facility consists of four wells, five pumping and/or -treatment buildings (totaling

about 3,630 square feet), four unwinterized PFAS filters, and a storage tank. Combined, they have the potential to supply one-third of HWS's total supply. However, when operational, the facility is currently only providing 30% of what it is capable of producing and can only operate from March to October due to the PFAS filters lack of winterization. The specific project improvements will include the following:

- Supply – Well yields for the Hyannisport and Simmons Pond Wells are significantly reduced, and the wells need replacement due to screen and aquifer plugging with iron and manganese. This project will replace them with new, more reliable, and productive wells. The Straightway Well 2 is offline due to water quality concerns. Treatment improvements (described below) will allow the well to be reactivated, increasing available supply.
- Resiliency – The Hyannisport and Simmons Pond wells will be relocated to higher elevations above the 500-yr floodplain. Treatment operations will be relocated and centralized at the Straightway site, providing more protection from flooding. These original buildings (approximately 1,400 sqft) will be decommissioned at the end of the project and demolished to restore the floodplain. The new Straightway Treatment Facility will have fully redundant backup generators, each of which will be capable of independently powering the facility.
- Treatment – Raw water needs improved treatment for several contaminants of concern. This project will winterize the existing PFAS units, and construct a new 10,660 sqft treatment facility to provide the following improvements:
 - Raw water is elevated above the Secondary Maximum Contaminant Level (SMCL) for iron (Straightway 2) and manganese (all wells). Pre-treatment filters in the new building will remove iron and manganese to improve the lifespan and operational efficiency of the GAC units, reduce down-time, and increase capacity and reliability of PFAS treatment.
 - Raw water is elevated above the Office of Research and Standards Guideline (ORSG) for 1,4- Dioxane in Straightway 2 and Simmons Pond Wells. This project will include a new treatment technology (UV-AOP) in the new Straightway building to remove 1,4-Dioxane.
 - Raw water is above the Massachusetts PFAS drinking water limit in all four wells. Additional GAC units proposed for the new Straightway building will be able to treat the full flow of the wells.
 - Straightway Well 2 has been taken offline for high levels of PFAS6, 1,4-Dioxane, and Manganese. With the new building and improvements, Straightway Well 2 can be reactivated.
- Pumping – The existing Booster Pump Station is undersized for the future needs of the site. The pumping capacity will be doubled to treat the proposed facility capacity. In addition, the pumps for the Straightway Wells 1 and 2 will be upgraded.
- Environmental Benefits - In addition, the project will benefit the environment by relocating two existing wells further away from wetland resources and out of the floodplain which helps protect both the wells and the environment.

2. List anticipated MEPA review thresholds (301 CMR 11.03) (if known)

4) Water, subsection b), criteria 5: Expansion of an existing drinking water treatment plant by the greater of 1,000,000 or more gpd or 10% of existing capacity.

3. List all anticipated state, local and federal permits needed for the project (if known)

State:

- Massachusetts Historical Commission Approval
- Massachusetts Environmental Policy Act Approval (Environmental Notification Form; Environmental Impact Report; Environmental Justice Protocols)
- Coastal Zone Management review
- Massachusetts Department of Environmental Protection, Southeast Region Approvals (WS20,

WS25, WS29)

Local:

- Town of Barnstable
 - Conservation Commission, Order of Conditions
 - Site Plan Review
 - Stormwater Management Permit
 - Board of Health review
 - Building Permit; Fire Department review

Federal:

- US Fish & Wildlife Services review
- Federal Flood Risk Management Standard review

4. Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles of project site (can attach map identifying 5-mile radius from [EJ Maps Viewer](#) in lieu of narrative)

<https://arcg.is/HinOu0> - link to map. Populations are identified as:

- Minority
- Minority and Income
- Minority and English Isolation
- Minority, Income, and English Isolation

5. Identify any municipality or census tract meeting the definition of “vulnerable health EJ criteria” in the [DPH EJ Tool](#) located in whole or in part within a 1 mile radius of the project site

Barnstable does not meet the Vulnerable Health EJ Criteria for heart attack, childhood blood lead, low birth weight, or childhood asthma.

6. Identify potential short-term and long-term environmental and public health impacts that may affect EJ Populations and any anticipated mitigation

The project provides a long-term public health and environmental benefits, as described in item 1. During the short term, during construction of the improved infrastructure, residents close to the project may notice some construction noise. Direct abutters close to construction areas may see land clearing activities and utility upgrade installations in the public right of way. As mitigation, the HWS will require contractors to work during normal weekday working hours, to control dust, and to limit vehicle idling. Work areas upgradient (uphill) from wetland resources will have sedimentation and erosion control installed to protect environmental resources.

7. Identify project benefits, including “Environmental Benefits” as defined in 301 CMR 11.02, that may improve environmental conditions or public health of the EJ population

This project will provide a public health benefit and increase the drinking water quality, reliability, and resiliency of the Town of Barnstable’s Hyannis Water System (HWS). In addition, the project will benefit the environment by relocating the existing Hyannisport and Simmons Pond wells further away from wetland resources and out of the floodplain which helps protect both the wells and the environment. The original Hyannisport and Simmons Pond well buildings and paving will be removed to allow some revegetation in the wetland buffer zone.

8. Describe how the community can request a meeting to discuss the project, and how the community can request oral language interpretation services at the meeting. Specify how to request other accommodations, including meetings after business hours and at locations near public transportation.

The EJ community can request a meeting to discuss the project and request oral language interpretation services at the meeting or other accommodations by contacting The Hyannis Water Systems email: hyanniswater@town.barnstable.ma.us

Matthew Wrobel at 774-487-5330 or Kelly Collopy at 774-487-5782