

Water Resources Management Update

Barnstable Town Council

January 30, 2025
Town Hall Hearing Room



Town of Barnstable
Department of Public Works



CWMP Regulatory Compliance

Watershed Permit

- Submitted on September 1, 2023, with the request for a Watershed Permit covering the entire Town of Barnstable, and to remain on the previously approved 30-year implementation schedule
- Completed MassDEP Administrative Review on August 1, 2024
- Technical Review meeting held with MassDEP on September 16, 2024
- Draft Permit Review meeting held with MassDEP on November 26, 2024

Five-Year Adaptive Management Plan Update

- Comprehensive Wastewater Management Plan Ad Hoc Committee meeting monthly
 - Meeting on January 25, 2025, focused on how the CWMP supports community and economic growth
 - Featured speakers: Andrew Gottlieb, Executive Director, Association to Preserve Cape Cod and James Kupfer, Director, Planning & Development, Town of Barnstable
- Resources, agendas, and meeting recordings available at: <https://barnstablewaterresources.com/ad-hoc-committee/>
- This Committee will be instrumental in preparing policy and adaptive management recommendations to be presented as part of the five-year update

Available Sewer Connections

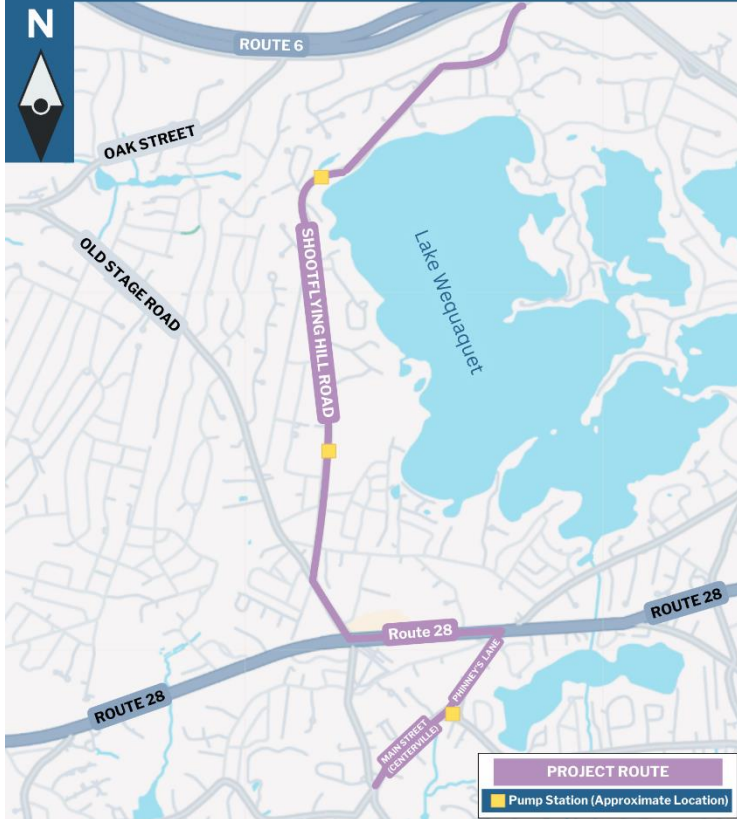
Name	Project Status	Available Connections	Completed Connections	Percent Connected	Active Permits
Stewart's Creek ⁺	Completed	227	193	85.0%	0
Hyannis Avenue [§]	Completed	17	11	64.7%	1
Strawberry Hill Road	Closeout	151	72	47.7%	14
Route 28 East [*]	Closeout	154	-	-	-
TOTAL		549	276	65.8%	15

⁺Project completed prior to CWMP

[§]Privately funded project, benefiting the CWMP

^{*}DPW Project closeout notification distributed on 12/27/24, Health Division Notice to Hook-Up in progress. Includes remaining properties identified within Strawberry Hill Road Sewer Expansion Project that were reliant on the Phinney's Lane Pump Station for connection.

Centerville Village Sewer Expansion Project North Phase



Centerville Village Sewer Expansion Project North Phase

Status: Construction Startup

- Contractor: C.C. Construction, Inc.
- Status: Pre-construction activities
- Project Notification Outreach: Began September 2024
- Sewer Installation: Anticipated March 2025
- Estimated Completion: Spring 2027



Project Route

- A portion of Route 28, from Pinney's Lane to Old Stage Road
- Old Stage Road, from Route 28 to Shootflying Hill Road
- Shootflying Hill Road, from Old Stage Road to Service Road
- Pinney's Lane, from Route 28 to Mother's Park Road
- Portions of Main Street, from Mother's Park Road to Old Stage Road

Pump Station Locations

1. Town owned parcel, 567 Shootflying Hill Road
2. Easement on a portion of 944 Shootflying Hill Road
3. Mother's Park Road

Centerville Village Sewer Expansion Project North Phase

Contract Conditions

- Monday – Friday, 7:00AM – 3:30PM
- Work within Route 28 will be overnight, 9:00PM – 5:00AM
- No work on Town observed holidays or from Memorial Day to Labor Day
- May be modified upon approval of DPW Director

Upcoming Roadwork

- **Mother's Park Startup**
 - **Anticipated to commence Tuesday, February 4, 2025**
 - First phase of work includes: site clearing, utility disconnections, filling
 - Will facilitate the new intersection realignment of Main Street, Phinney's Lane, and North Main Street (*next slide for images*)
- **Sewer Installation**
 - **Anticipated to commence Monday, March 3, 2025**
 - (2) locations: Shootflying Hill Road (vicinity of 944) and intersection of Main Street and Phinney's Lane
 - Will require road closures; traffic management plans in review
 - Public outreach includes: variable messaging boards, in-road signage, media releases, mobile app, social media, Barnstable e-News, print mailer to properties along project route and auxiliary neighborhoods



567 Shootflying Hill Road Pump Station



944 Shootflying Hill Road Pump Station

Centerville Village Sewer Expansion Project - North Phase

Mother's Park Road

Mother's Park: Existing Conditions



Mother's Park: Anticipated Project



- Approved Article 97 legislation
- Will discontinue Mother's Park Road and realign the intersection of Main Street, Pinney's Lane, and North Main Street
- Net increase in size of park (approx. 3,485 square feet)
- New sidewalks and crosswalks, new parking area
- Second open space created on south side of intersection

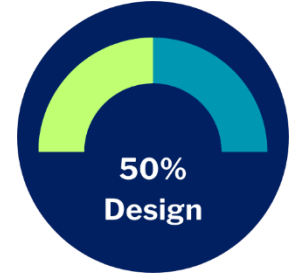
Centerville Village Sewer Expansion Project South Phase



Centerville Village Sewer Expansion Project South Phase

Status: In Design

- Consultant addressing Town comments on 50% design plans
- Anticipated Construction Start: Fall 2025 (Tentative)



Project Route

- Old Stage Road, from Old Post Road to Main Street
- The bulk of Main Street, Centerville
- A portion of Craigville Beach Road

Next Steps

- Anticipate hosting a public information meeting to review status of design in Spring/Summer 2025

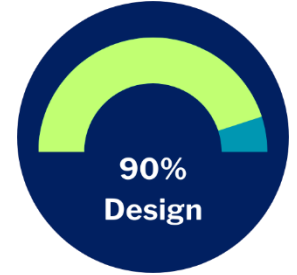
Route 28 West Sewer Expansion Project



Route 28 West Sewer Expansion Project

Status: In Design

- Consultant addressing Town comments on 90% design plans
- Anticipated Construction Start: Fall 2025
- Estimated Completion: Spring 2028



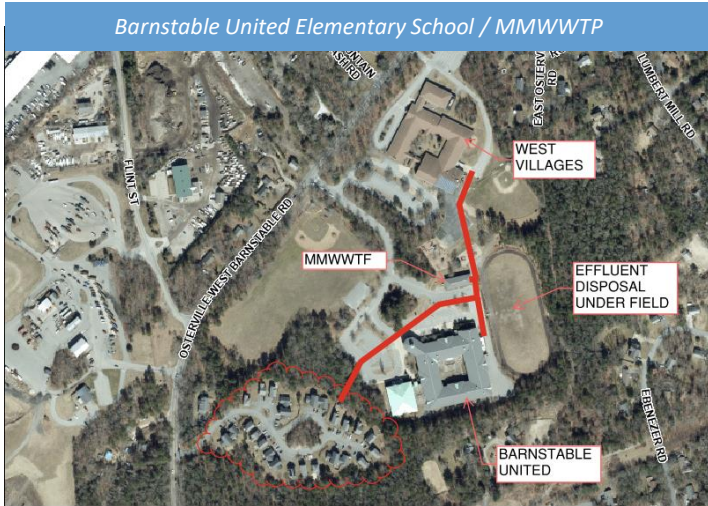
Project Route

- Route 28, from Phinney's Lane to Route 149
- Osterville-West Barnstable Road, from Flint Street to Bumps River Road
- Bumps River Road, from Osterville-West Barnstable Road to the Cape Cod Collaborative School
- Old East Osterville Road, Oldham Road, and Marquand Drive

Pump Station Locations

1. A portion of the former Marstons Mills School Property
2. A town-owned parcel located on Oldham Road
3. Within the vicinity of the intersection of Osterville-West Barnstable Road and Concord Lane
4. A portion of the Cape Cod Collaborative Campus

Route 28 West Sewer Expansion Project



The CWMP identified decommissioning of the facility as a goal of the program for several factors including the significant capital costs associated with rehab and the ability to remove nitrogen from nitrogen sensitive watershed.

Project Objectives

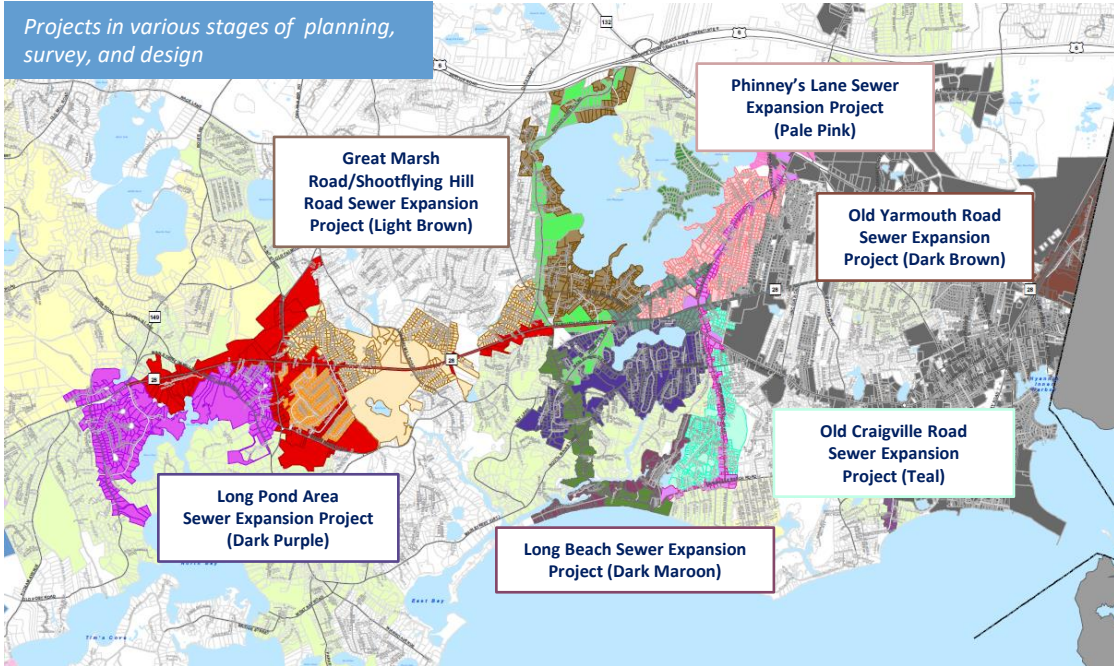
- To install critical infrastructure serving as the backbone of the sewer program
- To decommission and connect the existing Marstons Mills Wastewater Treatment Plant (MMWTP) to the newly expanded municipal collection system
- Without the infrastructure to be installed as part of this project, the westward expansion of the municipal sewer system as required in the CWMP cannot be achieved and the MMWTP would need to be independently upgraded

Next Steps

- **Public Information Meeting: Wednesday, February 5, 2025**
 - **6:00 PM at the Barnstable Adult Community Center** (825 Falmouth Road Hyannis)
 - This meeting is intended to provide property owners with the opportunity to discuss status of sewer design plans
 - Printed notification mailed to all property owners identified to receive sewer as part of the project
 - Briefings with Barnstable School Committee and Cape Cod Collaborative

Additional Sewer Expansion Projects In Design

Projects in various stages of planning, survey, and design



Phinney's Lane Neighborhoods

- Final design awarded to Weston Sampson
- Construction anticipated to commence in Fall 2026

Long Pond Area and Long Beach Road Projects

- Preliminary design completed
- Preparing RFP for final design
- Construction anticipated to commence in 2027

Great Marsh Road/Shootflying Hill Road Neighborhoods

- 75% survey plan received and in review
- Construction anticipated to commence in 2028

Old Yarmouth Road Project

- Survey complete; preliminary design on-going
- Construction anticipated to commence in 2028

Old Craigville Road Project

- Survey complete; preliminary design on-going
- Construction anticipated to commence in 2030

720 Main Street Pump Station Replacement Project

Status: Under Construction

- Project remains on budget and on schedule
- Work hours: Monday – Friday, 7:00AM – 4:00PM
- Estimated completion: Spring 2025

In-Road Sewer Construction

- In-road work has resumed in the following locations:
 - Dumont Drive connection into pump station
 - South Street @ Sea Street connection
 - Sewer tie-ins on Main Street

Project Objectives:

- Part of the Town’s Sewer Pump Station Rehabilitation Program
- Will address capacity concerns within the Town’s Growth Incentive Zone (GIZ) as well as replace aging infrastructure



Water Pollution Control Facility

Nitrogen Removal and Headworks Improvements Project

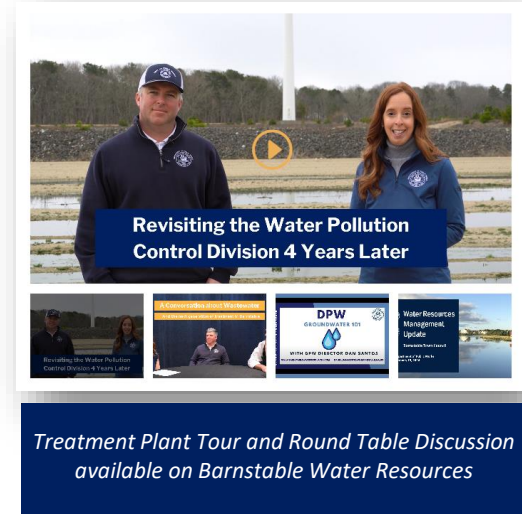
- **Status: In design, 90% design plans received, under review**
 - SRF Loan Application submitted
 - MBR Manufacturer Committee has recommended Veolia Zeeweed MBR
- Anticipated Construction Start: Fall 2025
- Estimated Completion: Spring 2028
- #1 ranked project in 2024 Clean Water Fund Intended Use Plan (IUP)

Effluent Disposal Evaluation

- **Status: Analysis in progress**
 - Water Reuse and Disposal Alternatives Analysis continues with consultant, CDM Smith
 - Hosting monthly meetings with MassDEP

Bearses Way Sewer Extension and Vacuum Sewer Removal Project

- **Status: Under Construction**
 - Coordinated in collaboration with MassDOT Bearses Way Shared Use Path Project
 - In-road construction commenced on Monday, January 27, 2025
 - First phase of work anticipated to take 2 weeks
 - Requires road closure (Bearses Way, from Pitcher's Way to Enterprise Road)



Straightway & Hyannisport Water Treatment Facilities Improvements

Status: In Design

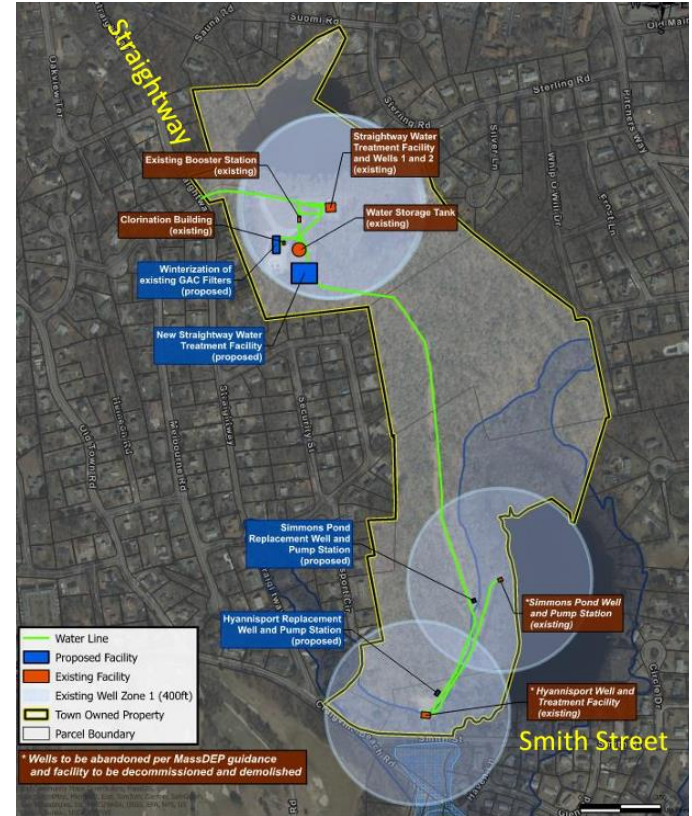
- SRF Loan Application submitted
- Fall 2024 – Winter 2025: Final design and permit approvals
- Spring – Summer 2025: Bidding and contract award
- Anticipated Construction: Fall 2025 (approx. 2-year duration)

Project Objectives

- Maximize the permitted capacity of the Hyannis Water System
- Restore the amount of water that the wells can supply to permitted capacity
- Allow the water treatment facility to operate year-round
- Improve the water treatment process to further improve water quality
- Protect the wells and buildings from flooding
- Improve overall system resiliency

Project Information

- Presentation of Cape Cod Commission, Thursday 1/30/25 at 3:00PM
- Project page available on Town of Barnstable website:
<https://townofbarnstable.us/Departments/watersupply/Straightway-Water-Treatment-Plant.asp>



Water Quality

Clamshell Cove Road and Old Shore Road, Cotuit Stormwater Improvement Projects

- **Status: Reviewing 90% design plans**
- Construction anticipated to begin Fall 2025
- Natural Resources Conservation Service (NRCS) grant to fund drainage improvements to reduce stormwater
- Project materials available at: <https://barnstablewaterresources.com/stormwater/>

Mystic Lake Alum Treatment

- **Status: Completed December 3-5, 2024**
- Will resume monitoring in April 2025 through October 2025

Cyanobacteria Monitoring Program

- **Status: Program will resume Spring 2025**
- Seasonal Water Quality Sampler, Barnstable Health Division, job opening available on Town website

Long Pond Marstons Mills, Floating Treatment Wetland Pilot Project

- **Status: Project is stored for the winter season**
- Samples to be taken in Spring and Fall 2025
- Final Report due in 2026
- Research project by UMass Dartmouth's School for Marine Science & Technology (SMAST)

