



Water Resources Management Update

Barnstable Town Council

**Department of Public Works
June 15, 2023**



Phase 1 Efforts to Protect Barnstable's Water Resources



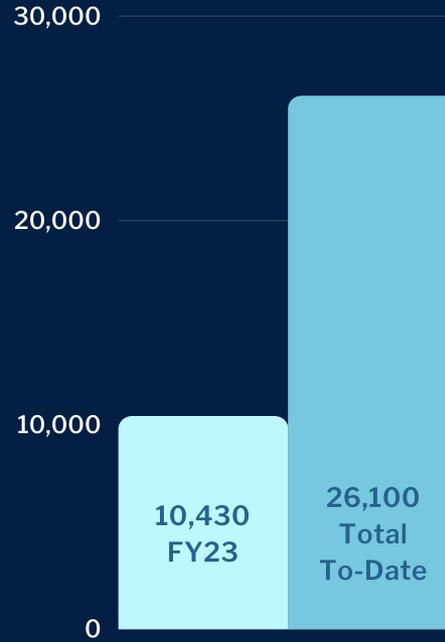
Year 2
of 10 year implementation schedule



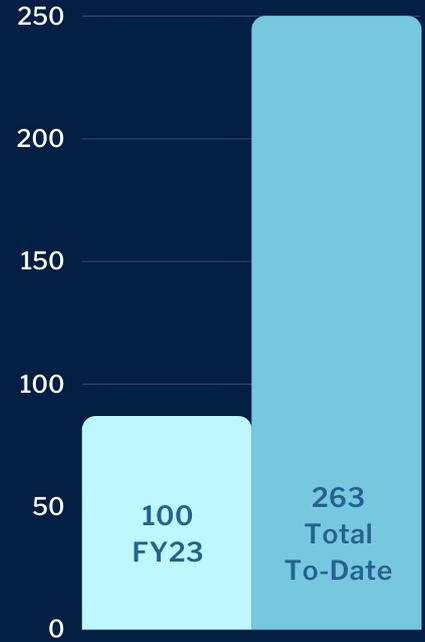
Centerville River Watershed
treated by current Phase 1 projects



Spring 2024
anticipated date for first connections



Linear Feet of Sewer Installed



Sewer Service Stubs Installed

Strawberry Hill Road Sewer Expansion Project

Project Status: Construction completed

Strawberry Hill Road
Sewer Expansion Project
(Yellow)

95%
COMPLETE

Sewer Construction:

- Sewer construction completed on-time and on budget
- Sewer service riser construction anticipated this fall
 - Work will occur in the shoulder, does not require digging within the roadway
 - Includes a targeted section of properties along the project route, south of Route 28
- Anticipated sewer availability for first connections in Spring 2024

Strawberry Hill Road Sewer Pump Station:

- Electrical service for the pump station anticipated to be completed this fall



Vineyard Wind Project



Project Status: Duct bank installation and cable pulling complete

Remaining work:

- Cable splicing and testing along the project route
- Requires single-lane alternating traffic
- Will resume in this fall

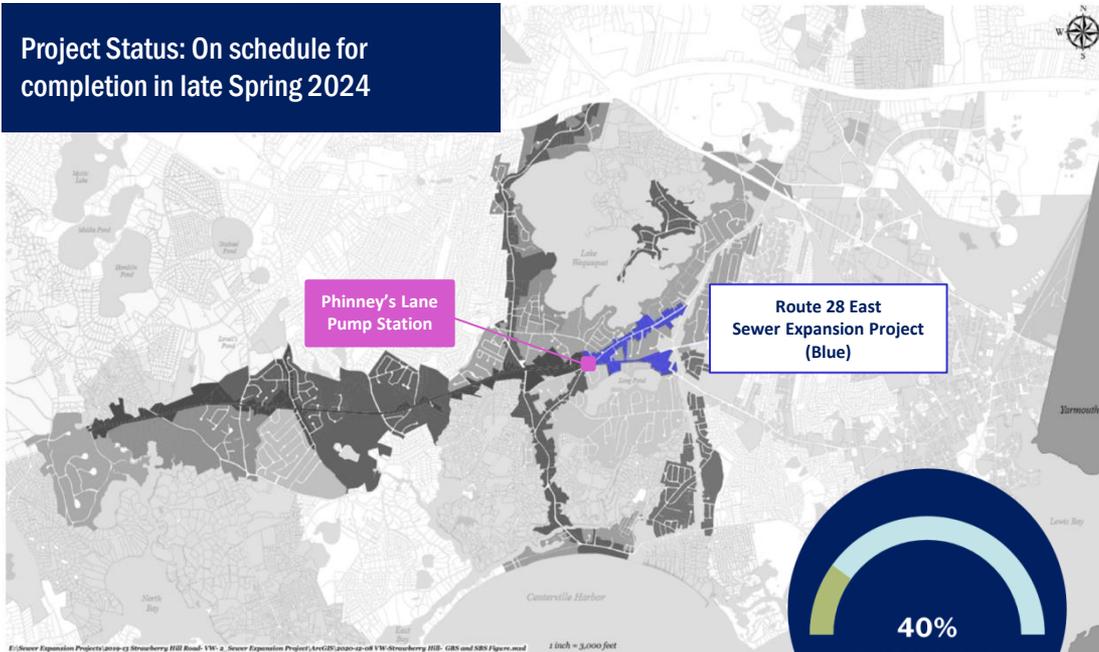
Anticipated final paving schedule of disturbed roadways:

- Spring 2023:
 - Craigville Beach Road – complete
 - Strawberry Hill Road (Craigville Beach to Pine Street) – complete
- Fall 2023:
 - Attucks Lane – scheduling in progress
 - Strawberry Hill Road (Pine Street to Route 28)
 - Phinney's Lane
 - Wequaquet Lane



Route 28 East Sewer Expansion Project

Project Status: On schedule for completion in late Spring 2024



Off-Road Sewer Construction:

- Barnstable Intermediate School
 - Beginning Monday, 6/19
 - Work will take place in the shared used path in front of the school
 - ADA-compliant pedestrian detour will be available
- Water Pollution Control Facility
 - Site preparation has commenced
 - Construction anticipated week of 7/3
 - Work will begin in the shoulder in front of Structures and Grounds advancing 'cross country' toward the WPCF

Phinney's Lane Pump Station:

- Installation of upper deck and support system on-going



June 2023



Water Pollution Control Facility

Solids Processing Facility Upgrades

- Construction continues to advance
- Project anticipated to reach completion before the end of 2023

Nitrogen Removal and Headworks Improvements

- Nutrient removal conceptual design in review

Effluent Disposal Evaluation

- Contracting for next phase of work



CWMP Communications

Barnstable Water Resources Update

- Soft launch of redesigned homepage and main interior pages
- Modified navigation and improved search functionality
- Mobile friendly optimization
- Accepting feedback from Barnstable Water Resources subscriber list

WaterResources@town.barnstable.ma.us

NEWS & UPDATES LIBRARY CONTACT

BARNSTABLE Water Resources water quality. *defined*

WASTEWATER PLAN PHASE I PROJECTS ANTICIPATED COSTS SEWER CONNECTION WATER QUALITY MONITORING FAQ's LEARN MORE

Protecting Barnstable's Water Resources

The Comprehensive Wastewater Management Plan (CWMP) is a town-wide, state approved, science-based plan to protect Barnstable's coastal waters, ponds, and drinking water by managing nutrient pollution from wastewater.

I'm looking for

- Am I Eligible for New Sewer Service?**
Determine if property is included in a sewer expansion project
- How Do I Hook-Up?**
Understand your responsibilities as a property owner
- Anticipated Costs**
Explore financing options and available loan support
- Road Closures**
View our real-time traffic map powered by Waze
- FAQs**
Review common sewer connection questions

WaterResources@town.barnstable.ma.us

NEWS & UPDATES LIBRARY CONTACT

BARNSTABLE Water Resources water quality. *defined*

WASTEWATER PLAN PHASE I PROJECTS ANTICIPATED COSTS SEWER CONNECTION WATER QUALITY MONITORING FAQ's LEARN MORE

Sewer Connection

If you have been advised that your property is included in an upcoming sewer expansion project, the following steps apply to you.

- 1. Complete Sewer Connection Form**
Prior to construction beginning in the roadway, the Department of Public Works will contact you and ask you to fill out a Sewer Connection form.
- 2. Town Sewer Construction**
As sewer construction progresses within the roadway, a sewer service stub will be installed at the edge of your property within the Town right-of-way.
- 3. Order to Connect**
Upon project completion, the Health Department will issue notification letters for all properties eligible to connect to municipal sewer.
- 4. Hire a Licensed Sewer Installer**
Your licensed sewer installer will do the actual construction necessary on your property enabling you to connect to sewer.
- 5. Residential Construction**
Your licensed sewer installer will apply for necessary permits prior to commencing work on your property.
- 6. Inspection Process**
Upon satisfactory installation, a DPW Inspector will sign off on the completed sewer connection, generating a tie card.
- 7. Septic Abandonment**
The de-commissioning and/or removal or filling of septic systems will be determined on a property by property basis, by the health department.
- 8. Utility Billing**
Property owners will be charged a sewer service user fee, based on their water usage. The typical residential sewer usage bill averages \$45 annually.



Water Quality Monitoring

Cyanobacteria Monitoring

- Resumed 5/23/23 in collaboration with Town's consultant, Association to Preserve Cape Cod (APCC)
- Updates and reports posted at:
BarnstableWaterResources.com/Water-Quality-Monitoring

Embayment Monitoring

- Annual Embayment Monitoring will resume on 7/6 – 7/7
 - For shared estuaries, additional samples are collected by Yarmouth (Lewis Bay) and Mashpee (Popponesett Bay)
- Key element in CWMP monitoring program
 - Overview of program presented at 10/20/22 Town Council Meeting by Senior Project Manager, Amber Unruh:
<https://streaming85.townofbarnstable.us/CablecastPublicSite/show/10221?channel=1&seekto=9629>

Water quality monitoring for the 2023 season began on May 23, 2023. All water bodies tested in Barnstable were acceptable. Should a Town water body fail to achieve an acceptable result, public advisories will be posted below via a Town of Barnstable Water Quality Report.

TOWN COUNCIL APPROVED MONITORING MAP & SAMPLED DATA

Town of Barnstable Water Quality Reports

September 22, 2022: Water quality monitoring resumed. A Blooming is present at Lewis Pond due to increased phosphorus levels. The pond will be sampled again next year. For more information on the Blooming, visit the website at https://www.townofbarnstable.com/2022/09/22/water-quality-monitoring-resumes/ .	September 16, 2021: Water quality monitoring resumed. A Blooming is present at Lewis Pond due to increased phosphorus levels. The pond will be sampled again next year. For more information on the Blooming, visit the website at https://www.townofbarnstable.com/2021/09/16/water-quality-monitoring-resumes/ .	October 1, 2022: Water quality monitoring resumed. A Blooming is present at Lewis Pond due to increased phosphorus levels. The pond will be sampled again next year. For more information on the Blooming, visit the website at https://www.townofbarnstable.com/2022/10/01/water-quality-monitoring-resumes/ .
--	--	---

Cyanobacteria Monitoring Map

Barnstable County has partnered with the Association to Preserve Cape Cod (APCC) and other environmental organizations, including the Cape Cod DEP, to monitor water quality in the Cape Cod estuary. For more information regarding the publication of the monitoring program, please visit <https://www.townofbarnstable.com/2022/09/22/water-quality-monitoring-resumes/>.

PRINT THE MAP OR VISIT OUR WEBSITE

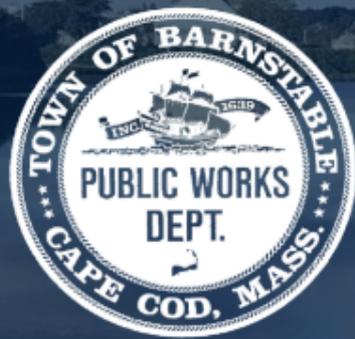
UNDERSTANDING CYANOBACTERIA ADVISORY ICONS

Protect Yourself and Your Pets

Algae Contact If you have any contact with water, rinse off immediately.	Children Keep children away from algae in the water or on the shore.	Pets Do not let pets get into or drink the water or eat scum.	Swimming No swimming when blooms are present.
Do Not Drink Do not swallow water. Do not use water for cooking, boiling or filtering and not make it safe.	Stay Out Stay out of the water until further notice. Do not touch scum in the water or on shore.	Shellfish Do not eat shellfish from this water.	Fishing Throw away fish, clean fillets with tap or bottled water before cooking.

NEXT BARNSTABLE





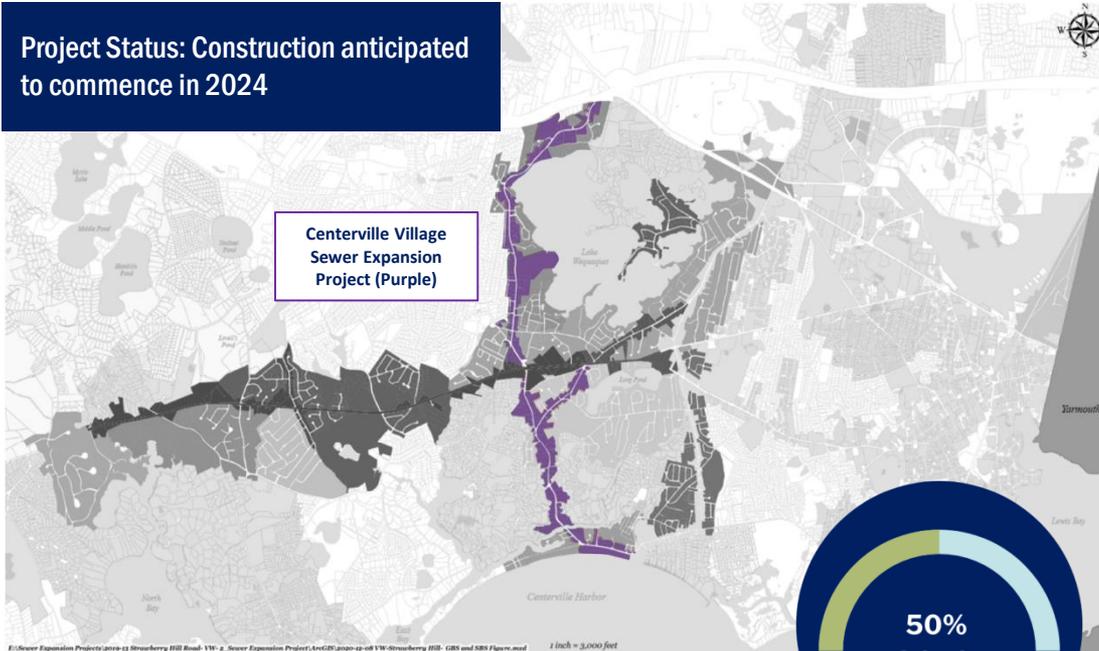


Resources

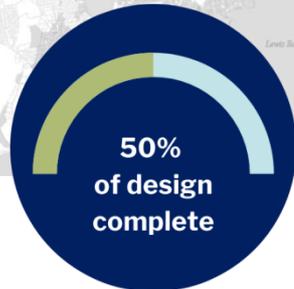
Centerville Village Sewer Expansion Project

Project Status: Construction anticipated to commence in 2024

Centerville Village Sewer Expansion Project (Purple)



E:\Sewer Expansion Projects\Jan12-13 Strawberry Hill Road - VV - a - Sewer Expansion Project\ArcGIS\Jan12-13 VV Strawberry Hill - GIS and MR Figure.mxd 1 inch = 3,000 feet



Expedites sewer expansion with roadways along proposed Park City Wind on-shore duct bank installation route

Project Details:

- Completed review of 50% sewer design plans
- Continuing efforts to site pump station locations and associated easement options

Outreach Efforts:

- Initial public comment periods have closed
- Evaluating all feedback and formalizing public comment summary, to be published on BarnstableWaterResources.com



Route 28 West Sewer Expansion Project

Project Status: Construction anticipated to commence in 2025

Route 28 West Sewer Expansion Project (Red)

Preliminary design

Extends sewer on Route 28 from Phinney's Lane to Route 149

Project Details:

- Allows for sewer expansion in the Three Bays Watershed
- Design contract awarded to Weston & Sampson
- Preliminary design continues

E:\Sewer Expansion Projects\2019-23 Strawberry Hill Road_VW_4_Sewer Expansion Project_ArcGIS\2020-22-08_VW-Strawberry Hill_GIS and S&S Figures.mxd 1 inch = 3,000 feet



Additional Sewer Expansion Projects in Design



Phinney's Lane Neighborhood Project:

- Internal design team has completed 30% design
- Continuing private roadway utility easement takings and siting of sewer pump stations
- Construction anticipated to commence in 2025

Old Craigville Road, Old Yarmouth Road & Shootflying Hill Road Projects

- Survey efforts ongoing
- Construction anticipated to commence in 2026 (Old Craigville), 2026 (Old Yarmouth) and 2027 (Shootflying Hill)

Long Pond Area Project

- Survey complete & design on-going
- Construction anticipated to commence in 2027

Long Beach and Great Marsh Road Projects

- Preliminary design funding proposed in FY24 Capital Budget
- Construction anticipated to commence in 2027 (Long Beach) and 2028 (Great Marsh)

