

BARNSTABLE
Water Resources

Protecting Barnstable's Water Resources



Protecting Barnstable's Quality of Life

Perhaps no feature is more important to the quality of life and unique character of our community than the health of our coastal waters, freshwater ponds, and drinking water. We all benefit from our water resources being protected and preserved. The Town's pristine beaches and sparkling lakes and ponds provide endless opportunities for recreation and respite for residents and visitors alike, and help to keep the local economy vibrant.

The health of Barnstable's waters is at risk.

Over the years we have come to learn about the impacts of nitrogen pollution on our coastal estuaries. Currently, five of Barnstable's seven coastal embayments are designated as "impaired waters" in violation of federal Clean Water Act standards. Numerous freshwater ponds have experienced algal anoxic conditions and outbreaks of cyanobacteria.

The primary source of nitrogen pollution is wastewater from septic systems. Septic systems allowed under current Title 5 regulations do little to remove the excess nitrogen choking our coastal waters. Other nutrients and pollutants from septic systems threaten the health of freshwater ponds. Building wastewater infrastructure to reduce the amount of nutrients and pollutants entering our waters is necessary to protect our environment, property values, local economy, and our quality of life.

Barnstable's Clean Water Plan

Fortunately, Barnstable is leading the way on clean water solutions. Building on more than a decade of scientific study and engineering design, the Town has put forward a Comprehensive Wastewater Management Plan (CWMP) to protect our coastal, inland and drinking water resources. Barnstable's plan is science-based, and has been rigorously reviewed and approved by state environmental agencies.

The CWMP identifies measures that will remove 100% of the nitrogen needed to meet federal standards and safeguard the health of our coastal waters, ponds and drinking water for generations to come. The CWMP also provides additional benefits to the community in the form of increased opportunities for affordable housing, economic development and redevelopment, consistent with the Town's Local Comprehensive Plan.

Features of the CWMP include:

- » Install 190 miles of new sewer infrastructure with 87 pump stations to serve approximately 11,800 properties across Town.
- » Use innovative and nature-based wastewater treatment approaches, including denitrifying septic systems, inlet dredging to improve flushing, green stormwater management projects, and shellfish aquaculture. These projects will be carefully monitored and, if effective in reducing significant amounts of nitrogen, could reduce the amount of sewerage needed.
- » Enhance the efficiency and capacity of the Hyannis Wastewater Treatment Plant.

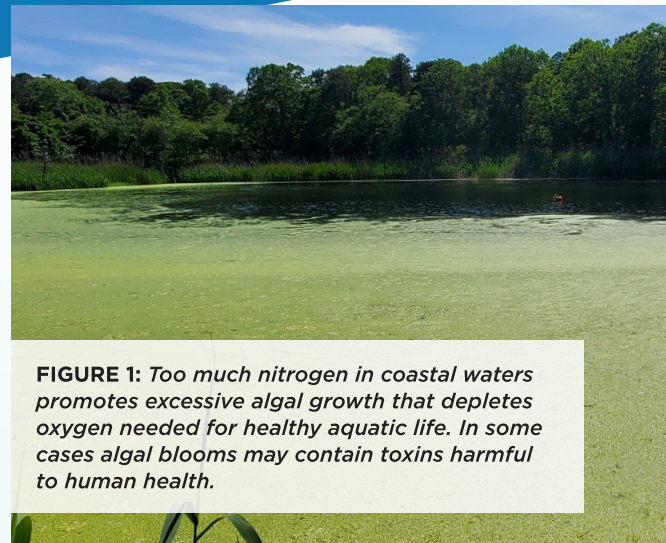
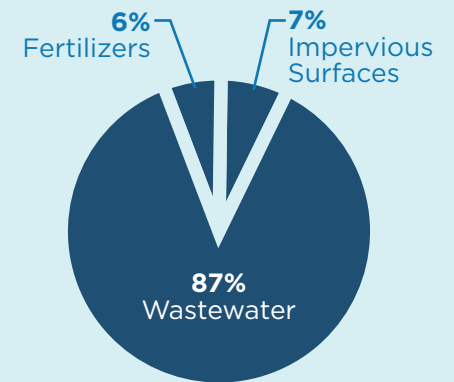


FIGURE 1: *Too much nitrogen in coastal waters promotes excessive algal growth that depletes oxygen needed for healthy aquatic life. In some cases algal blooms may contain toxins harmful to human health.*

FIGURE 2:
**ESTIMATED SOURCES OF
WATERSHED NITROGEN LOAD**



Financing the Clean Water Plan

The planning level cost estimate to implement the 30-year plan is \$1.4 billion, subject to change as the plan is adaptively managed. Construction activities will be funded in five-year increments to ensure accuracy based on detailed project design, and to align with the Town's Capital Improvement Plan. The initial five-year need of \$145 million accomplishes 50% of Phase 1. For more information on the Town's financing plan, visit [BarnstableWaterResources.com](https://www.barnstablewaterresources.com) and go to the "Plan Financing" page.

The Town has already invested \$30 million in Phase 1 sewer expansion projects. Construction of the Merchants Way sewer extension project was completed in 2020. Through innovative partnerships with local businesses such as Cape Cod Five and Vineyard Wind, the Town has been able to streamline projects, resulting in fewer disruptions to local residents and businesses, and significant cost savings to Barnstable taxpayers.

The sewer expansion will occur in three phases over thirty years.

			Properties added to sewer service	% of nitrogen removed
<div></div>	Phase 1	2020-2030	4,735	40
<div></div>	Phase 2	2031-2040	3,820	40
<div></div>	Phase 3	2041-2050	2,377	20
<div></div>	Stage 1	unscheduled	253	*
<div></div>	Stage 2	unscheduled	483	*
<div></div>	Stage 3	unscheduled	155	*
<div></div>	Already Sewered			
TOTAL			11,823	100

*Stages refer to sewer expansion in areas that do not have a determined schedule. The Town intends to pursue sewer expansion in these areas if a western treatment and disposal solution becomes a reality.

Phase 1 sewer expansion has begun construction.

A

Marstons Mills Main Street

B

Prince Cove

C

Osterville-West Barnstable Road

D

Route 28 Marstons Mills

E

Osterville Woods

F

Lumbert Mill

G

Route 28 Centerville

H

Great Marsh Road

I

Shootflying Hill Road

J

Huckins Neck

K

Kidd's Hill Area

L

Merchant's Way

M

Phinney's Lane

N

Route 28 East

O

Long Pond Area

P

Strawberry Hill Road

Q

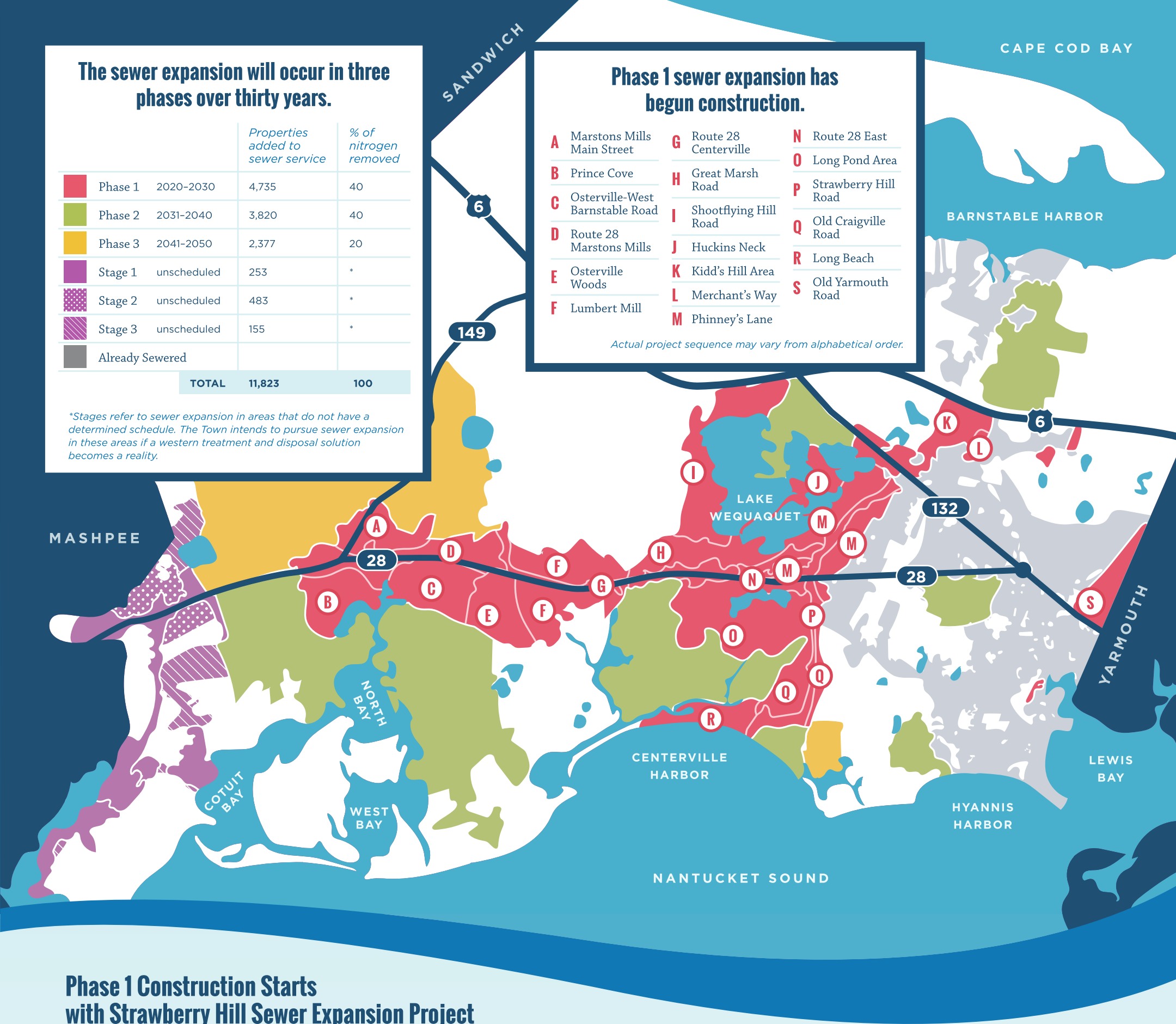
Old Craigville Road

R

Long Beach

S

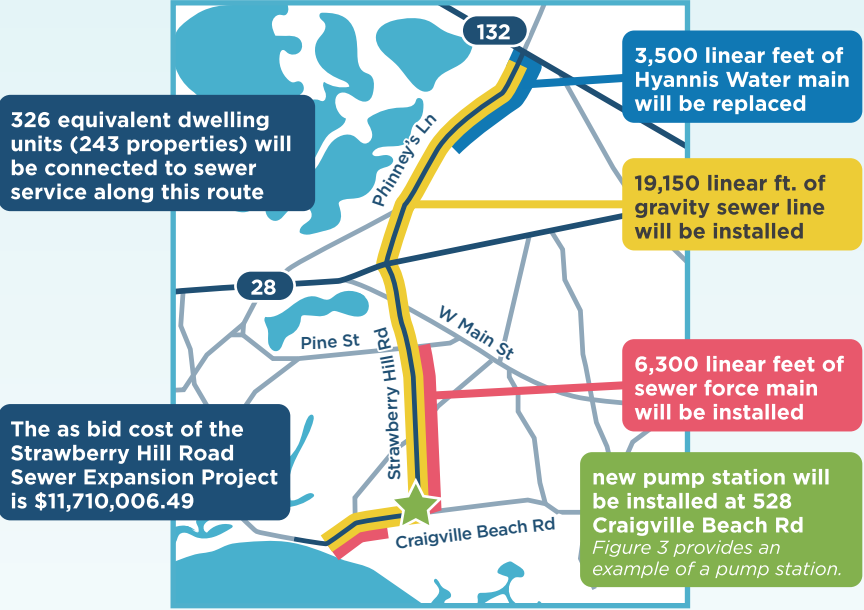
Old Yarmouth Road



Phase 1 Construction Starts with Strawberry Hill Sewer Expansion Project

The new gravity sewer will be installed in portions of Craigville Beach Road, Strawberry Hill Road, Wequaquet Lane and Phinney's Lane in the village of Centerville. Construction will begin in the Fall of 2021 and extend through the Spring of 2023. The project is being coordinated with the Vineyard Wind 1 Project. Coordination of the two projects will reduce construction-related disruption to local roads and neighborhoods, and save taxpayer dollars.

Quick Facts About the Strawberry Hill Sewer Expansion Project:



More info about the Strawberry Hill Sewer Expansion Project:

- » [BarnstableWaterResources.com](https://barnstablewaterresources.com)
- » Department of Public Works: 508-790-6400 or paul.ruszala@town.barnstable.ma.us
- » Visit <https://barnstablewaterresources.com/sewer-property-lookup/> to see if your property is among the properties to be connected by this project or other Phase 1 projects.

A Community-based Solution

The Town has stressed the importance of community engagement in the development and implementation of the CWMP. Since 2016 there have been more than 100 public meetings with Town officials, civic and village associations, business groups and community stakeholders to review and discuss the CWMP.

Ways to Stay Informed

Visit [BarnstableWaterResources.com](https://barnstablewaterresources.com). This Town website provides access to current news and information about the Town's sewer plan, beaches, ponds, drinking water, and more. Use the site's "property look-up" tool to find out if your property will be sewered, or check for construction updates, Town Council actions and special events. You can also access this page from the Barnstable Water Resources logo link on the Town of Barnstable home page.

Email waterresources@town.barnstable.ma.us to send a comment or question, or to sign up for the Community Currents e-newsletter. Community Currents delivers updates about sewer construction activities and other news right to your inbox.



FIGURE 3: Electrical equipment, as shown here, will be the most visible part of the pump station to be installed at 528 Craigville Beach Road.