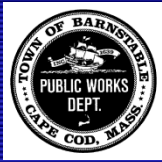


Barnstable Town Council

Update on Wastewater Efforts In Barnstable

Department of Public Works
September 17, 2020



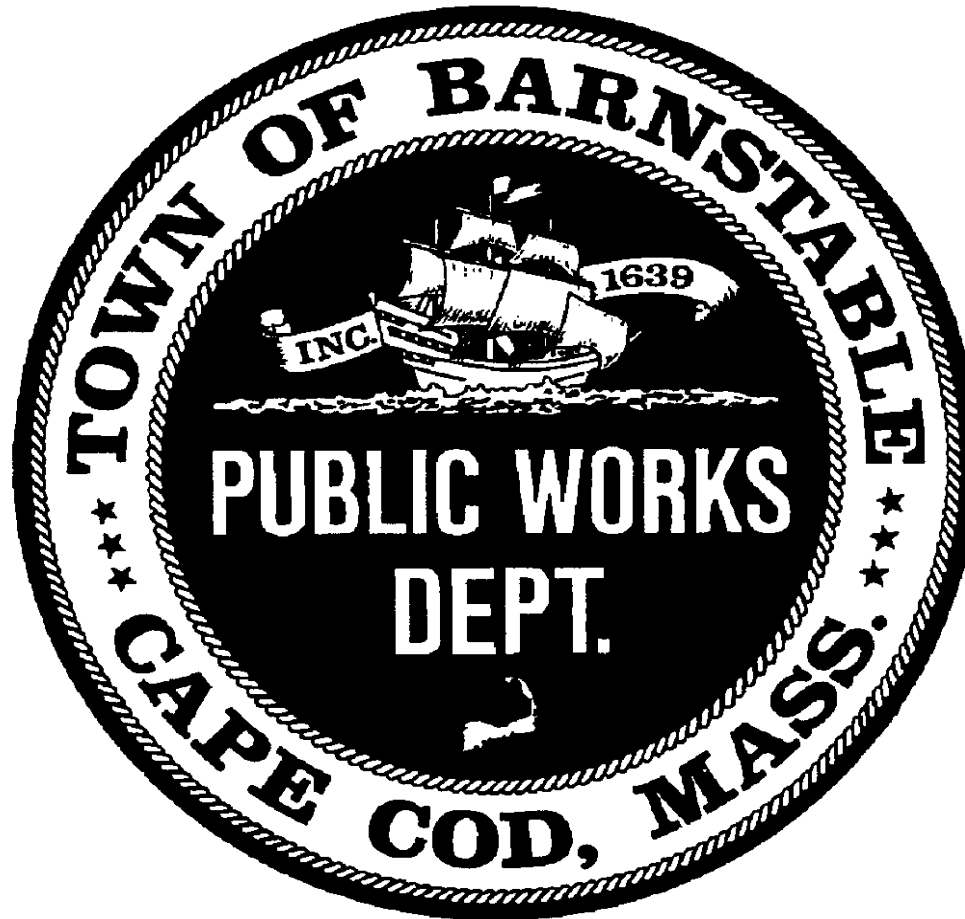
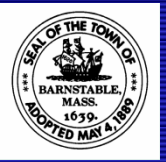
Update Since August

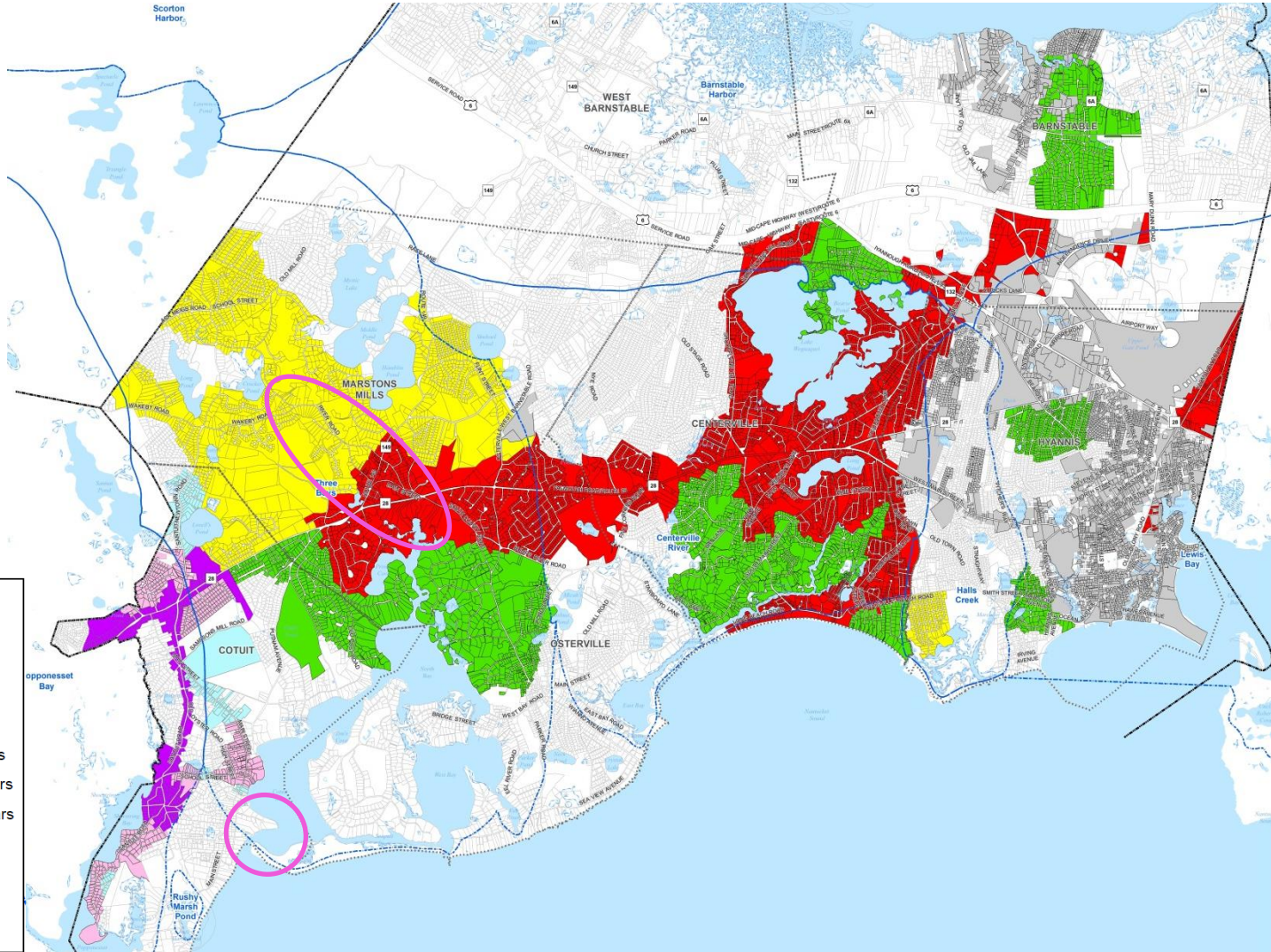
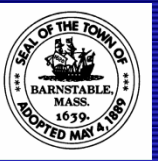


- **CWMP**
 - *Continue the Development of the Single EIR*
 - *Expected submission October 2020*
- **JBCC**
 - *No new information*
- **Mothers Park**
 - *Continuing to work on road ownership issues*
- **Projects**
 - *Rt 28 East (pump station & Sewering at Phinney's Lane and 28)*
 - *Preliminary Design continues*
 - *Boring work in Route 28 has begun*
 - *Winter 2021/22 Construction Start Target*
 - *Long Pond, Phinney Lane, and Rt 28 to Rt 149 survey commenced*
 - *Survey completion Target March 2021*
 - *Strawberry Hill Road Project*
 - *Continuing design and coordination with Vineyard Wind designers*



Discussion?





Legend

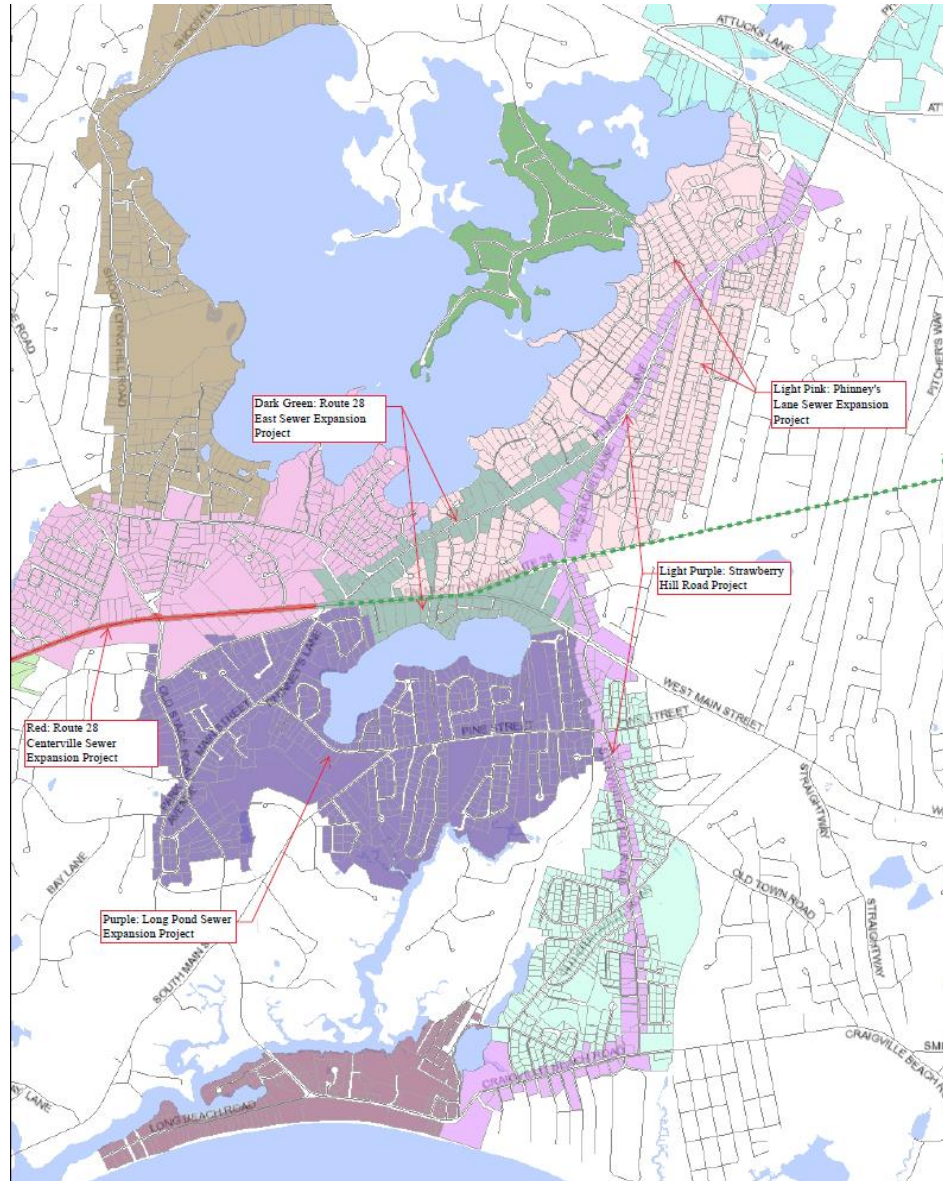
- District Villages
- Watersheds
- Parcels

Sewer Phasing

- Phase 1: 0-10 Years
- Phase 2: 11-20 Years
- Phase 3: 21-30 Years
- Stage 1
- Stage 2
- Stage 3
- Existing Sewer

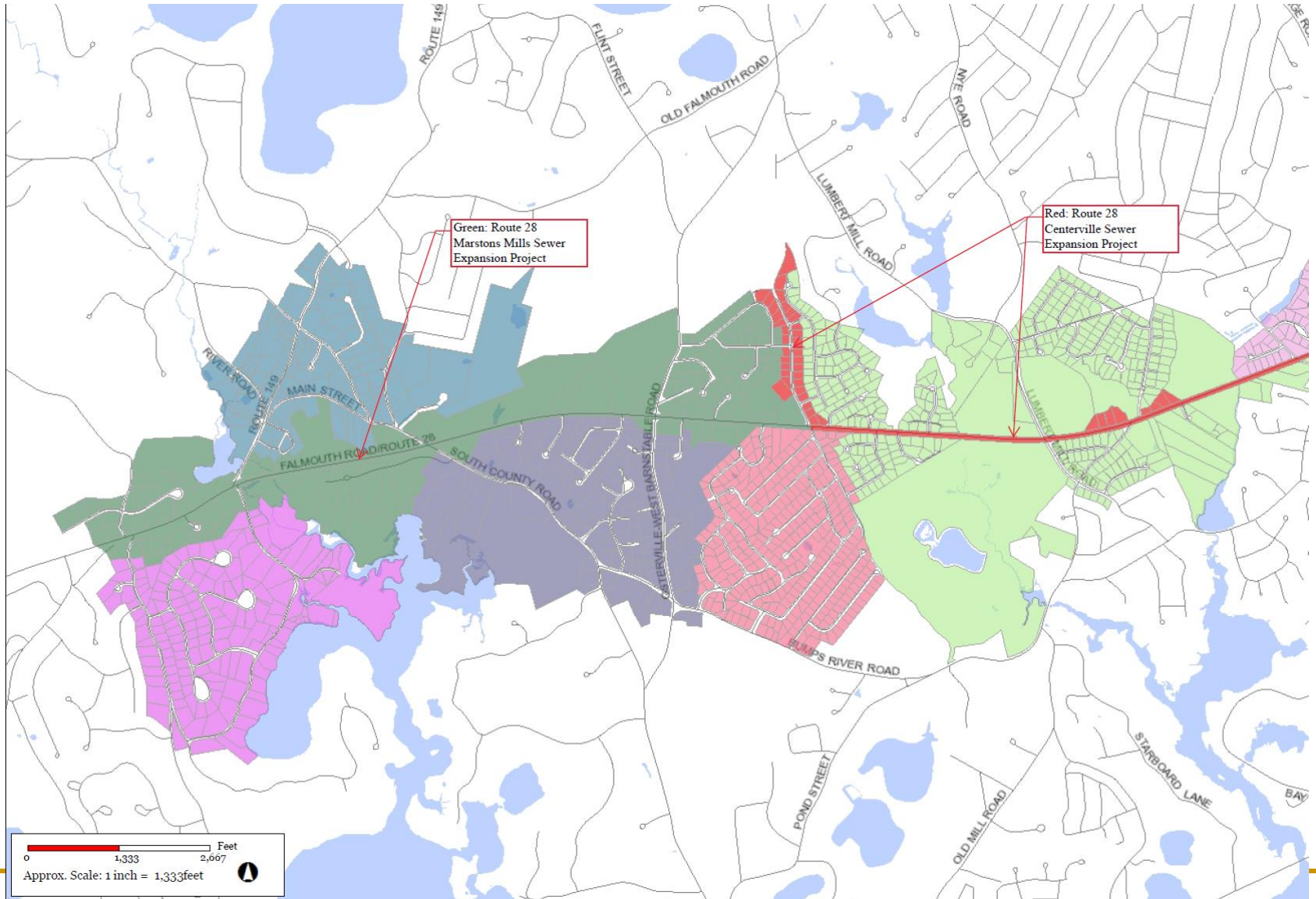


Phase I Projects - East





Phase I Projects - West

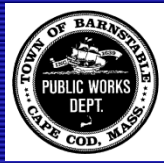




Financial Policy Decisions



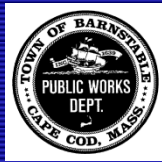
- *How will the town differentiate General Benefit Facility costs from Specific Benefit Facility costs?*
- *What assessment method will be used for allocating those costs?*
- *What limit, if any, will be set on the maximum amount for a sewer assessment?*
- *What interest rate will be charged on sewer assessments?*
- *What amortization period will be used sewer assessments?*
- *When will a property abutter be required to hookup?*



Financial Policy Decisions - Continued



- *Will bond amortization be authorized beyond 20 years?*
- *Will the General Fund contribute to the program? If so;*
 - *How much?*
 - *What mechanism will be used?*
- *Will a Systems Development Charge be included?*
- *Should the town pursue special legislation to create a revolving loan program?*
 - *Amortization period and loan rate?*
- *Should the town administer a connection program?*



General Policy Issues



- *Effluent Disposal*
- *Handling of Private Roads*
 - *Easements needed for the pipes*
 - *With the planned improvements does the Town take them?*
- *Governance of the sewer system (Sewer Commissioners)?*
- *Approval of an updated Sewer Use Ordinance*
 - *Has a series of decisions associated with it*
- *Inter Municipal Agreements*
 - *Watershed Permits*
 - *Shared Technology*
 - *Conveyance of flows through adjoining Towns (JBCC)*



Projects Funded and Underway



- *Phinneys Lane Sewer Expansion*
 - *Conceptual Design \$315,000*
 - *Final Design \$735,000*
- *Long Pond Area Sewer Expansion*
 - *Conceptual Design \$402,000*
 - *Final Design \$938,000*
- *Attucks Lane Sewer Extension*
 - *Design \$100,000*
- *Cotuit Bay Channel Dredging*
 - *Phase I \$1,000,000*
 - *Phase II \$750,000*
- *Marstons Mills School Pump Station & Collection System*
 - *Conceptual Design \$612,000*



Projects Funded and Underway



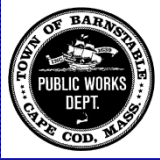
- *Marstons Mills River Treatment System*
 - *Evaluation \$250,000*
 - *Design \$612,000*
- *WPCF Effluent Disposal Capacity Study*
 - *\$195,000*
- *WPCF Effluent Disposal Location Evaluation*
 - *\$150,000*
- *WPCF and Collection System Improvements*
 - *Biowin Modeling \$55,000*
 - *Clarifier Upgrades and Rehab \$2,289,505*
 - *Generator Upgrades \$904,000*
 - *Solids and Septage Receiving Building Improvements*
 - *Design \$450,000*
 - *Sewer Capacity Evaluation \$200,000*
 - *Pump Station Evaluation \$200,000*



Projects Funded and Underway



- *Joint Base Cape Cod WWTF and Effluent Disposal Analysis*
 - \$250,000
- *Cotuit and Western Marstons Mills Sewer*
 - *Conceptual Design \$250,000*
- *Vineyard Wind Associated Sewering*
 - *Design \$835,000*
 - *Construction \$8,500,000*
- *Municipal Separate Storm Sewer System (MS4) Program*
 - *Part 1 \$87,500*
 - *Part 2 \$150,000*
- *Route 28 and Yarmouth Road Associated Sewering*
 - \$1,300,000



Summary of Funding for CWMP



Funding Sources		
Estimated Principal Subsidies on Bond Issues	\$112,229,437	11%
Sewer Assessments	\$255,764,639	24%
Investment Earnings	\$11,397,346	1%
General Fund Contribution	\$70,500,000	7%
System Development Charges	\$19,624,000	2%
User Rate Revenue	\$128,524,045	12%
Rooms and Meals Taxes including STR	\$463,211,220	44%
Total funding sources	\$1,061,250,687	100%



Phase I Implementation



Project	Number of Parcels Connected	Wastewater Captured (gpd)	Total N Removed (kg/day)	% of Total N Removed in Phase 1
Merchants Way	7	0	4.7	6.0%
Strawberry Hill Road	240	47,066	0.9	1.2%
Route 28 East	49	9,440	11.4	14.7%
Old Yarmouth Road	131	22,603	0.6	0.7%
Phinneys Lane	653	94,200	7.9	10.1%
Long Beach	203	37,647	3.6	4.7%
Route 28 Centerville	41	5,534	4.1	5.3%
Huckins Neck	148	21,506	3.3	4.2%
Long Pond Area	606	114,599	5.9	7.6%
Great Marsh Road	406	79,299	5.3	6.8%
Old Craigville Road	397	41,512	2.4	3.1%
Route 28 Marstons Mills	157	36,429	3.3	4.2%
Osterville Woods	328	59,571	5.2	6.7%
Shootflying Hill Road	348	52,306	1.7	2.2%
Lumbert Mill	357	53,221	9.4	12.0%
Osterville-West Barnstable Road & South County Road	153	32,787	3.7	4.8%
Marstons Mills Main Street	144	24,123	2.1	2.8%
Prince Cove	158	32,972	0.0	0.0%
Attucks Lane / Kidds Hill Area	87	16,893	2.2	2.9%
Total	4,613	781,708	77.7	100.0%¹

**Phase 1 is 44%
of the Overall
Plan.**