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?
Phase I Projects - East

Map showing various projects in the Town of Barnstable, Department of Public Works.
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?
• 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

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Estimated Principal Subsidies on Bond Issues</td>
<td>$112,229,437</td>
<td>11%</td>
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<tr>
<td>Sewer Assessments</td>
<td>$255,764,639</td>
<td>24%</td>
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<tr>
<td>Investment Earnings</td>
<td>$11,397,346</td>
<td>1%</td>
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<tr>
<td>General Fund Contribution</td>
<td>$70,500,000</td>
<td>7%</td>
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<tr>
<td>System Development Charges</td>
<td>$19,624,000</td>
<td>2%</td>
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<tr>
<td>User Rate Revenue</td>
<td>$128,524,045</td>
<td>12%</td>
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<tr>
<td>Rooms and Meals Taxes including STR</td>
<td>$463,211,220</td>
<td>44%</td>
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<tr>
<td><strong>Total funding sources</strong></td>
<td><strong>$1,061,250,687</strong></td>
<td><strong>100%</strong></td>
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### Phase I Implementation

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

Phase 1 is 44% of the Overall Plan.