

**Town of Colchester**  
**Public Works Department**

**CLEAN WATER**  
**NEWSLETTER**  
**SPRING 2024**



Photo Credit: Cathy Chamberlain

**We've Supersized!**

This edition of the Clean Water Newsletter is dedicated to sharing all of the activities happening around water quality in Colchester, and describing the commitments the Town has made to ensure the current and future health of Lake Champlain and Malletts Bay.

**Not enough?**

For more information about the Town's stormwater program, projects, and policies, please visit:

[colchestervt.gov/1837/Stormwater-Utility](http://colchestervt.gov/1837/Stormwater-Utility)

**? Did You Know ?**

The Town maintains almost 22 miles of underground stormwater piping, and over 1,000 collection structures.

**Getting Involved**

**ADOPT  
A STORM  
DRAIN**



Protect local  
waterways

**Sign up!**

[adopt-a-drain.org](http://adopt-a-drain.org)

**Adopt-A-Drain**

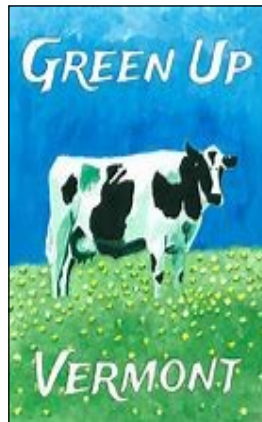
Since it's debut in 2022, 24 drains have been adopted in Colchester, and over 330 lbs of trash & debris have been collected from storm drains that would otherwise have ended up in our Lake, rivers & streams.

Visit: [VT.adopt-a-drain.org](http://VT.adopt-a-drain.org)

**Green Up Day**

Come out and help clean up community roadsides on May 4th to keep Vermont beautiful. If left in place, debris and litter can be transported to our lakes and streams. Each year in May, volunteers collect tons of trash, tires, and debris for proper disposal. In 2024, there were 1620lbs of trash and 7.6 TONS of tires collected from roadsides in Colchester.

Visit: [www.greenupvermont.org](http://www.greenupvermont.org)



**WALKING  
YOUR  
DOG?**

*Scoop your poop,  
even in the woods.*

**RETHINKRUNOFF.ORG**

**Pick Up Pet Waste**

Dog waste carries harmful bacteria that can end up in our waterways. The town provides over 15,000 pet waste bags in our parks and beaches each year. Please help by picking up after your pet.

Visit: [rethinkrunoff.org](http://rethinkrunoff.org).

**Catch Basin Stenciling Event**

The Colchester Conservation Commission is hosting a storm drain stenciling event on Saturday, June 22. We will meet at the entrance to the South Bay Circle neighborhood at 10:00AM to view a demonstration of how to apply the stencils and why they are important. Paints, stencils, and light refreshments provided. Stay tuned for more information, and please RSVP by June 1 to [DPW@colchestervt.gov](mailto:DPW@colchestervt.gov)

**Stormwater Information**

Water Quality Hotline: (802)-264-5628

General stormwater inquiries: (802)-264-5620

**From the Director**

We hope this newsletter provides helpful information to you. Considering regulatory requirements, public safety, project coordination, and the availability of resources from the community, a strategic approach is necessary for the selection, prioritization, and implementation of stormwater work on a Town wide basis. This will ensure that the Town ultimately achieves long term regulatory compliance and addresses the Town's water quality needs in the most cost-effective manner possible. This will require that some projects proceed before others. The community simply cannot afford to do everything at once, similar to how we can not re-pave or construct sidewalks on every road at the same time. Instead we need to be selective about the overall prioritization and implementation of stormwater work on a Town wide basis.

A good example of this process in action is related to direct discharges to Lake Champlain. A number of these exist along East and West Lakeshore Drive, where stormwater from public roadways and private lands has drained to the lake for decades through Town stormwater outfalls. Understandably, questions have been posed as to why the Town isn't prioritizing improvements for those discharges.

- There are no state or federal regulatory requirements that these direct discharges be upgraded.
- The steep slopes and site constraints at these locations make water quality improvements extremely difficult and expensive in comparison to other locations where more effective water quality improvements can be constructed at considerably less expense.
- Even after considering these factors, work is being advanced on these direct discharges when and where possible. The Town has installed liners on three of these outfalls to ensure the pipes remain structurally intact, and is actively working toward a significant upgrade to an outfall draining the largest area of roadway within inner Malletts Bay. This project is expected to cost in excess of \$1 million. While there is no requirement that this specific project be done, it is expected to significantly reduce the amount of phosphorus entering the bay, which will help the Town comply with it's phosphorus control plan requirements.

As my 30+ years of being the Public Works Director comes to a close in June, I am sincerely grateful for this community's interest in water quality, and to have been able to lead these efforts for the Town.

*Public Works Director, Bryan Osborne*


**TOWN OF COLCHESTER**  
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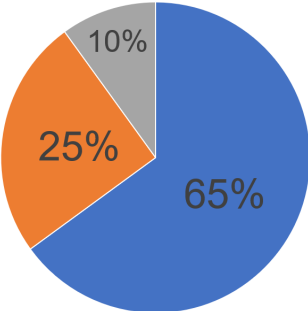

POSTAL PATRON

**CLEAN WATER NEWSLETTER**



How Does the Town Decide What Stormwater Work To Complete?	
<p><i>The Town is balancing four things with regard to stormwater work:</i></p> <ul style="list-style-type: none"> <li>• <i>Completing non-discretionary projects and maintenance required by state and federal permits</i></li> <li>• <i>Performing discretionary repairs and maintenance of the Town’s drainage system</i></li> <li>• <i>Performing discretionary upgrades to the Town’s drainage system</i></li> <li>• <i>Performing all stormwater work within available human and financial resources.</i></li> </ul>	<h3>Maintenance of Drainage System</h3> <p>The Town maintains the community’s drainage system as comprehensively as resources will support, to protect residents, visitors, plant, and animal life for now and for future generations. While there are no regulatory requirements that this work be done, the Department of Public Works considers this work important to the community for public safety and quality of life, and performs the following discretionary maintenance activities:</p> <ul style="list-style-type: none"> <li>• System repairs (ensure pipes and structures are watertight and performing)</li> <li>• Pipe lining (restore structural integrity of pipes to avoid collapses, causing sinkholes or other hazards at roadway surface)</li> <li>• Ditching (ensure runoff has a stabilized place to sink into ground or travel along)</li> <li>• Stormwater pump maintenance (to avoid pump failures causing ponding)</li> </ul>
	 <h3>Upgrades to Drainage System</h3> <p>The Town also works to manage the volume and location of runoff and reduce flooding. While there are no regulatory requirements that this work be done, the Department of Public Works considers this work important to the community for public safety and quality of life, and performs the following discretionary system upgrades:</p> <ul style="list-style-type: none"> <li>• Increasing the size of culverts crossing beneath roadways and driveways to reduce roadway and environmental damage.</li> <li>• Increasing the size of other existing underground drainage pipes that are not large enough to accept high intensity storm events.</li> <li>• Construction of new drainage improvements where there are currently limited or no drainage systems in place.</li> </ul>



Project Implementation and Achievements	
<h3>Resource Allocation</h3> <p>The chart below shows how financial resources must be allocated among areas of water quality focus to meet requirements:</p>  <p>65% = required projects and maintenance 25% = discretionary repairs and maintenance 10% = discretionary upgrades</p> <p>Required work is expected to cost approximately \$14 million over the next 15 years.</p>	<h3>Water Quality Achievements</h3> <p><i>We are very proud of the work that has been accomplished within the last decade with regards to water quality:</i></p> <ul style="list-style-type: none"> <li>• A \$2 million study that assessed all water resources of the Town and gave key recommendations related to maintaining and improving water quality (creation of Stormwater Program to secure adequate funding for improvement projects, implement sewers in Malletts Bay).</li> <li>• Completion of significant planning work to provide a road map for both regulatory and non-regulatory water quality improvements (Mallets Bay Scoping Study, Phosphorus Control Plan, Flow Restoration &amp; Chloride Response Plans).</li> <li>• Completion of a comprehensive assessment of all 1,000 stormwater structures and 22 miles of underground piping to determine their structural condition and develop a capital repair and replacement program.</li> <li>• Installation of over 4,300 linear feet of structural liners in stormwater pipes, including three direct discharges to the Lake in Malletts Bay.</li> <li>• Final design of neighborhood scale stormwater improvements within the Moorings Stream watershed (construction planned in the Shore Acres neighborhood in 2024) and Smith Creek watershed (construction planned for 2025).</li> <li>• Securing over \$1.3 million in grant funding.</li> <li>• Spending over \$1 million on improvements: Morehouse Culvert (\$475,000), East Rd culvert (\$32,000), Galvin Hill/Coon Hill upgrades (\$66,000), Hercules Drive (\$198,000), Porters Point Road (\$65,000), Lower Mountain View Drive (\$50,000), Spot Repairs (\$119,000), Police station outfall (\$67,000, see below)</li> </ul>
<h3>Available Resources</h3> <p>All stormwater related programs, policies, and projects are completed or overseen by two full-time technical staff members and two maintenance workers. While stormwater is one of six functional areas of public works, approximately 28% of the department’s administrative resources are dedicated to stormwater, demonstrating the Town’s strong commitment to stormwater and water quality. However even with this strong allocation of resources, the Public Works Department is at full capacity and unable to advance additional stormwater work with the current available staffing levels.</p>	
<h3>Project Implementation</h3> <p>Project phases that must be completed prior to putting a shovel in the ground include:</p> <ul style="list-style-type: none"> <li>• Project “scoping” which incorporates public input to evaluate needs and potential solutions. This planning process does not commit the Town to advance these projects nor does it attempt to prioritize them against other Town needs.</li> <li>• Securing additional funding through grants.</li> <li>• Engineering and design of the improvements.</li> <li>• Securing all required local, state, and federal permits.</li> <li>• Working with private property owners to secure all temporary or permanent access to their property needed for the improvements.</li> <li>• Competitively bidding the projects and awarding contracts consistent with the Town’s purchasing policy.</li> <li>• Outreach and public safety coordination to ensure the traveling public is informed and safe at all times.</li> <li>• Inspection and construction oversight, of the project.</li> </ul>	