

City Manager..... (802) 334-5136  
City Clerk / Treasurer..... 334-2112  
Public Works..... 334-2124  
Zoning Adm. / Assessor..... 334-6992  
Recreation / Parks..... 334-6345  
Fax..... 334-5632



City of Newport  
222 Main Street  
Newport, Vermont 05855  
[www.newportvermont.org](http://www.newportvermont.org)

## **Newport City Council Meeting**

### **Regular Meeting Agenda**

**Monday, February 08, 2021, beginning at 6:30 p.m.**

### **REMOTE MEETING**

**The Municipal Building is Closed as part of the Stay Home/Stay Safe Measures  
In Order to Participate Remotely:**

**Phone 1- (978) 990-5000 and enter PIN: 185354#**

**or**

**by Computer go to <https://freeconferencecall.com> and join the meeting by using id:  
cityofnewportremote**

City Council: Paul Monette, Mayor  
Dan Ross, Council President  
Kevin Charboneau  
Melissa Pettersson  
John Wilson

Laura Dolgin, City Manager  
James D. Johnson, City Clerk/Treasurer

### **\*\* Bond Vote Information Meeting Related to the Proposed Water Tower # 1\*\***

1. Call the Regular Council Meeting to Order
2. Bond Vote Information Meeting Related to the Proposed Water Tower - Wayne Elliott
3. Approve Minutes of February 01, 2021
4. Comments by Members of the Public
5. New Business
6. Old Business
7. Set Next Regularly Scheduled Council Meeting: March 1, 2021 @ 6:30pm for the Regular & Informational Meeting about the Annual Meeting; March 2, 2021, Annual Meeting and @ 8:00 p.m. to bring up any other business from the Annual Meeting; Next Regular City Council meeting: March 15, 2021
8. Executive Session: Evaluation of Public Officer or Employee, 1 VSA 313(3)(a)(3)
9. Executive Session: Employment Evaluation of City Manager, 1 VSA 313(3)(a)(3)
10. Adjourn

Non-confidential Materials Pertaining to this Agenda are Available for Viewing & Download on the City's Website at <https://www.newportvermont.org/> Commencing at 9:00 a.m., the Morning of the Meeting.

### Newport City Council Meeting Participation Guidelines

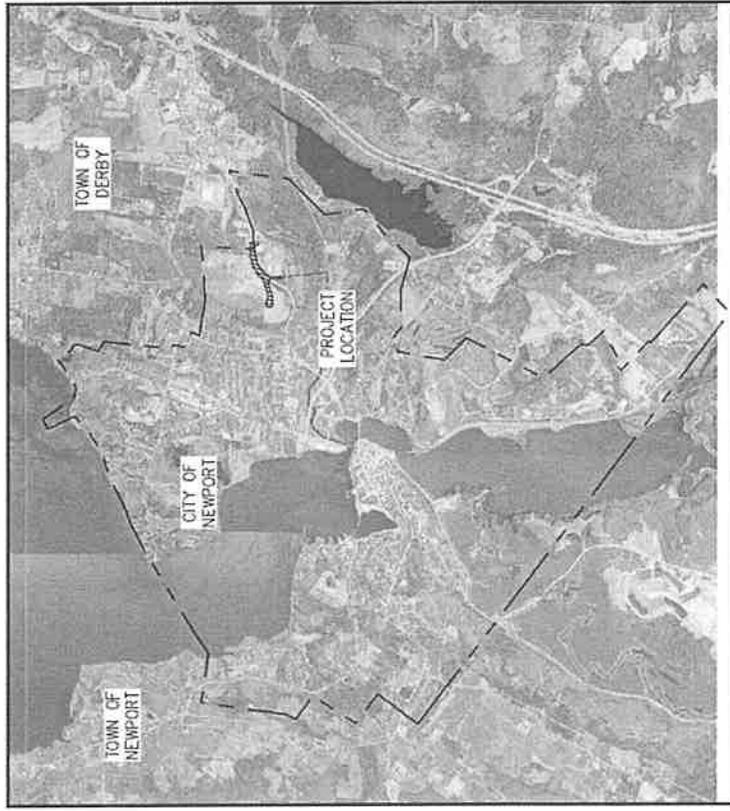
Newport City Council meetings are for the purpose of allowing Council members to conduct City business. Distinct from public hearings or town meetings, City Council meetings are held in public, but are not meetings of the public. City Council meetings are the only time the City Council members have to discuss, deliberate and decide upon City matters. In an effort to conduct orderly and efficient meetings, the Mayor kindly requests your cooperation and compliance with the following guidelines per the policy adopted on December 21, 2015 and ratified on January 23, 2017, April 1, 2019, and again on March 16, 2020.

1. Please be respectful of each other, Council members, city staff, and the public.
2. Please raise your hand to be recognized by the Mayor. Once recognized, please state your name and address or affiliation.
3. Please address only the Mayor and not members of the public, staff, or presenters.
4. Please abide by any time limits. Time limits will be used to ensure everyone is heard and that there is sufficient time for the Council to complete their agenda within a reasonable timeframe.
5. The Mayor will make a reasonable effort to allow everyone to speak once before speakers address the Council a second time per the limits adopted on March 16, 2020.
6. Once public comment has been heard, discussion will be limited to the City Council members.
7. Please do not interrupt or mock other speakers or otherwise exhibit disruptive behavior during the City Council meeting.
8. Please do not repeat the points made by others, except to indicate agreement or disagreement with other views.
9. Please use the hallway for side conversation. It is difficult to hear speaker remarks when side conversations are occurring in the Council Chamber.
10. Presentations to the Council are not open to public comment. However, per the policy adopted on December 21, 2015, matters on the agenda requiring a vote are open to public comment immediately prior to the Council vote.
11. Individuals who do not abide by these procedures will be asked to leave the Council Chamber.

# City of Newport Eastside Water System Improvements

Bond Vote Information Meeting

February 8, 2021



Source: "Palin Hill Reservoir". Google Earth. Image Date: 5/12/2018. Accessed: 01/21/2021

PUBLIC INFORMATION  
REMOTE MEETINGS

Monday, February 8, 2021  
6:30 pm

Monday, March 1, 2021  
6:30 pm

BOND VOTE

IN-PERSON VOTING

Newport City Municipal Building

Tuesday, March 2, 2021

8:00 am to 7:00 pm

ABSENTEE/EARLY VOTING

Ballots available February 11, 2021

Must be returned by close of polls on  
March 2, 2021

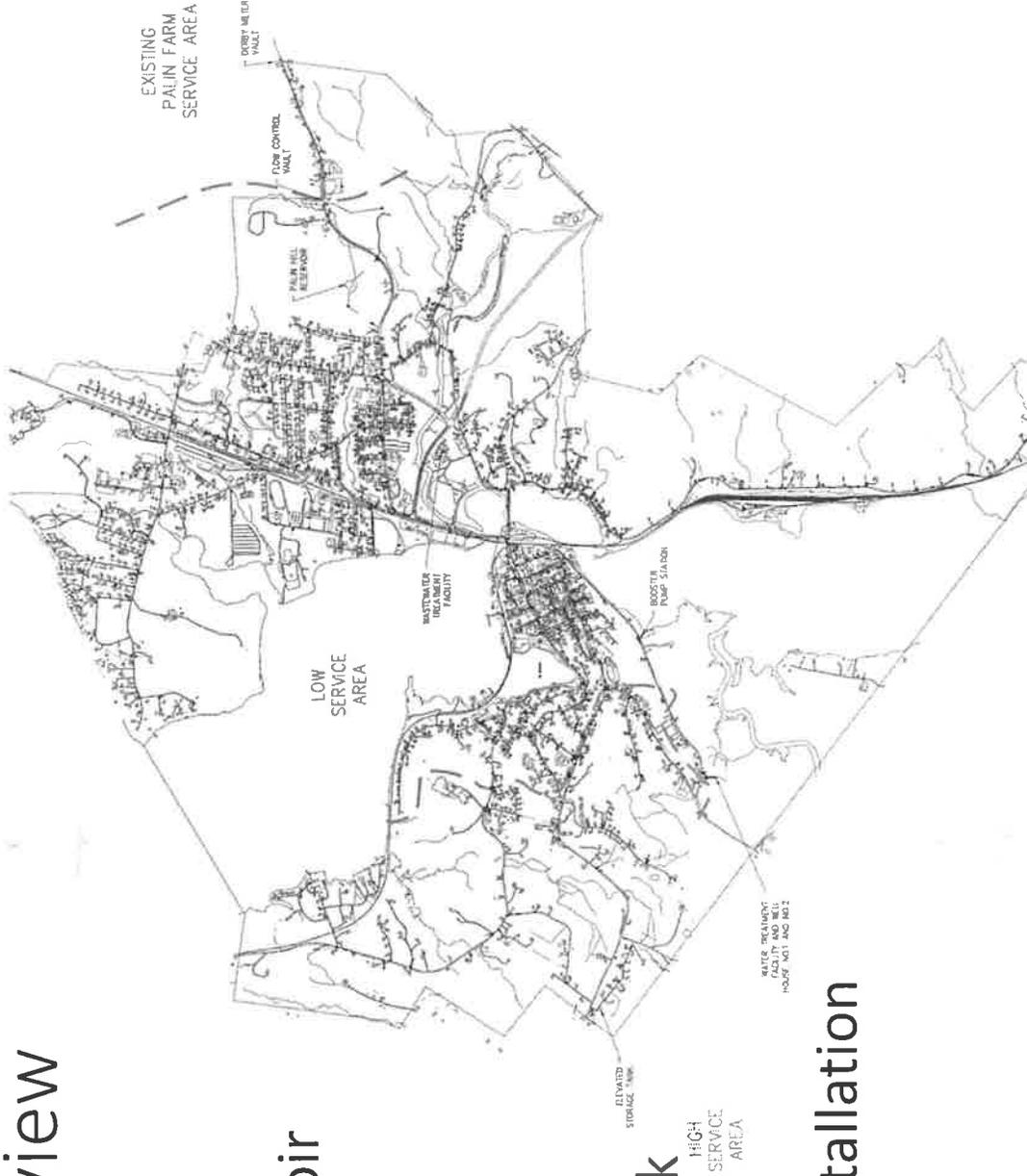
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# Project Overview

➤ Palin Hill Reservoir Refurbishment

➤ East Side Water Storage Tank

➤ Water Meter Installation



## History – Derby Road Service Area

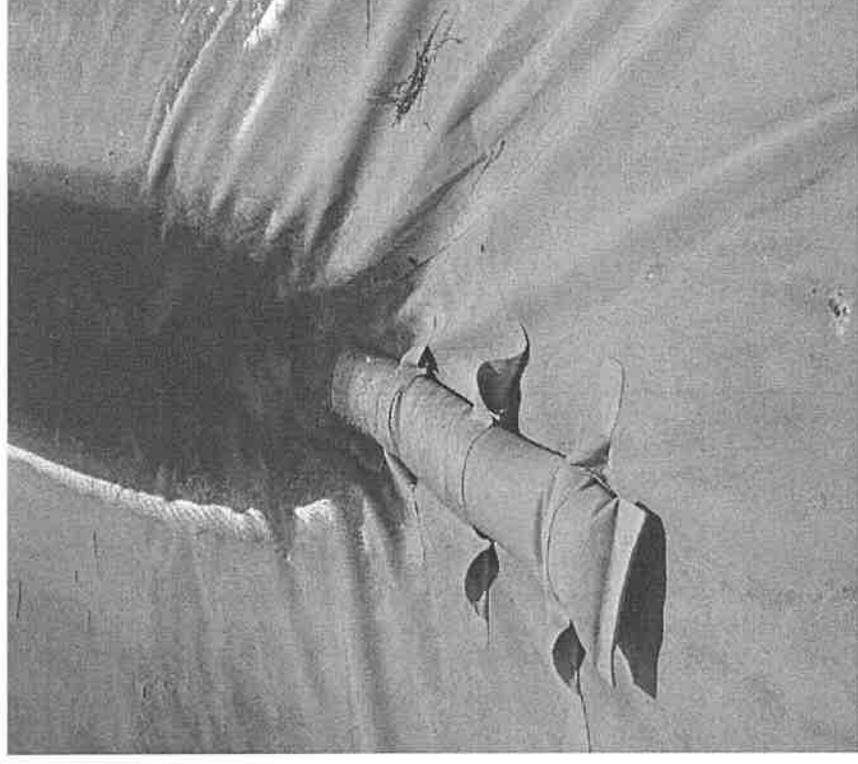
- 1999: Derby Road water main constructed. Water supplied from the Village of Derby Center due to water pressure requirements.
    - Connection governed by an Interlocal Agreement.
  - 2006: Village of Derby Center modifies water rates to include the reserve water allocation fee.
  - 2007: City installs new wells and water treatment plant.
  - 2007 to 2014: Litigation between City of Newport and Village of Derby Center over fees charge.
  - 2017: Separation Agreement negotiated with the Village of Derby Center and City paid \$50,000 as part of the Agreement.
    - First bond vote held in November.
-

## History - Palin Hill Reservoir

- 1960's: Palin Hill Reservoir Constructed.
  - Originally an open-top reservoir, but a floating cover was added later.
- 1999: Floating cover replaced.
- 2014: Inspection by State DWGPD indicates that the floating cover is aging and will need replacement soon.
- 2019: Inspection by the State DWGPD indicates that the floating cover has reached the end of its useful life and instructs the City to start the replacement process.

# Purpose and Need – Palin Hill Reservoir

- City's primary water storage reservoir.
- The liner and cover protect the City's drinking water from contamination, but has reached the end of their useful life span.
- State of Vermont is requiring replacement of the cover per the latest Sanitary Survey.

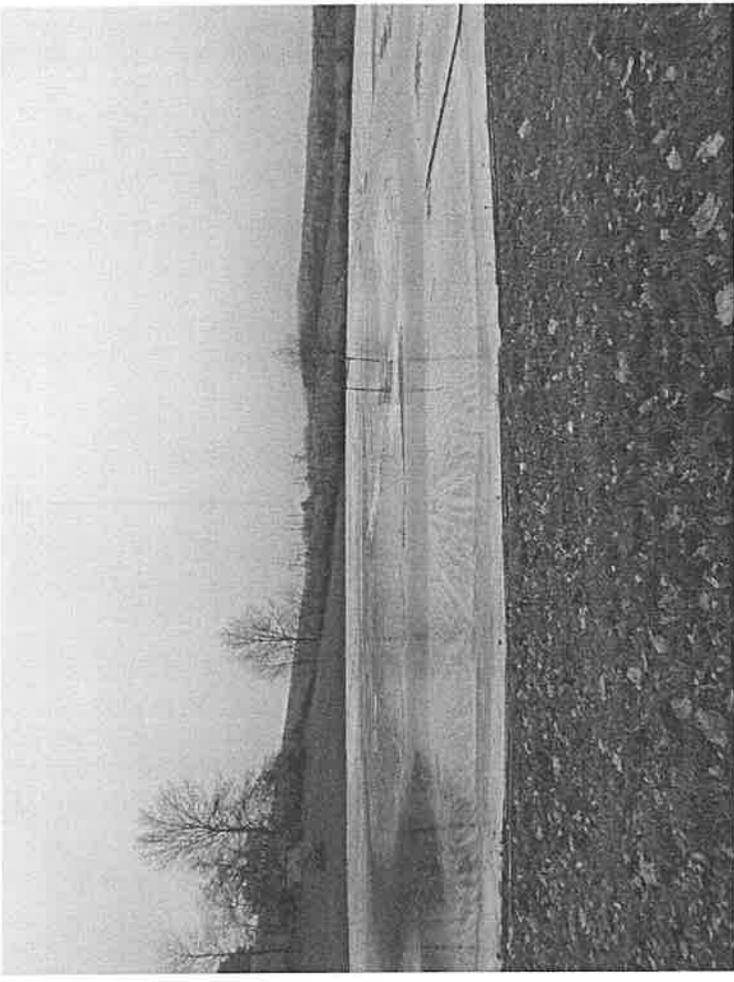


# Project Needs – Eastside (Derby Road) Service Area

- The current agreement with the Village of Derby Center does not allocate the City enough water to support long-term development in this area nor it is clear if Derby has additional water allocation to offer.
  - Historical usage: 4,000 to 8,000 gallons per day
  - Maximum allocation from Village: 10,000 gallons per day
- Disconnecting from the Village of Derby Center will reduce long-term financial risks associated with the Village's water rates.
  - Current payments to Village: < \$22,000 per year
  - Surcharges (reserve water allocation fees) for excess water usage
- Unreliable fire protection supplied by the Village of Derby Center
- Construction of a new tank will allow the City to disconnect this portion of the water system from the Village of Derby Center and supply both domestic and fire flow demands.

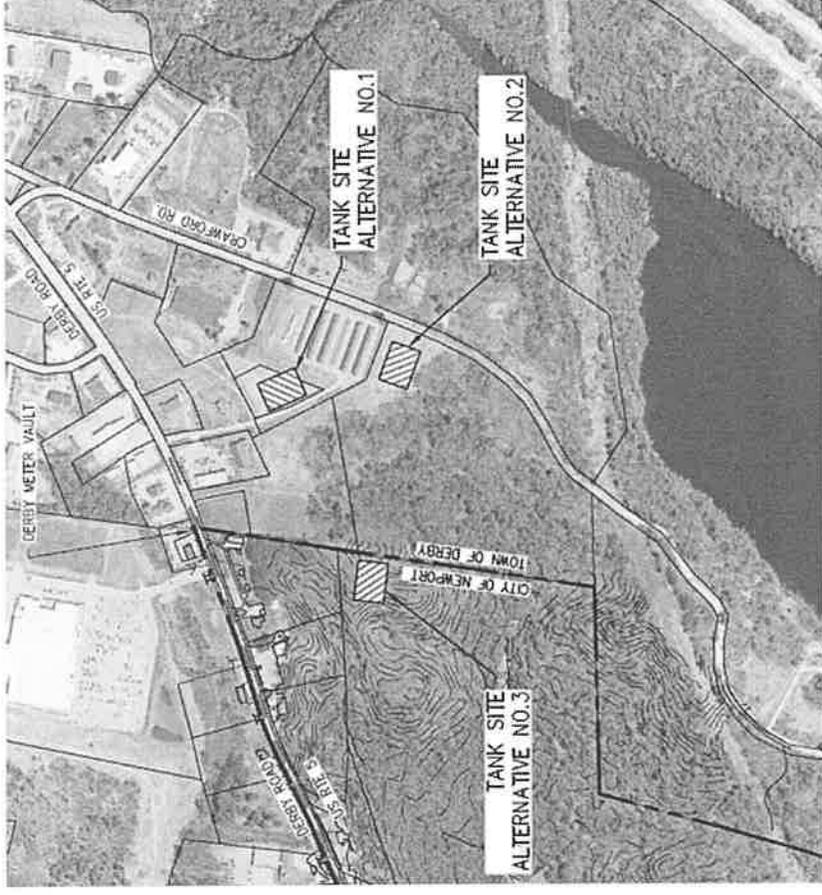
# Palin Hill Reservoir Alternatives

- Replacement with new tank
  - HIGH cost: \$2,830,000
- Replace liner and floating cover
  - Estimated cost: \$400,000



# Eastside (Derby Road) Service Area Storage Tank Alternatives

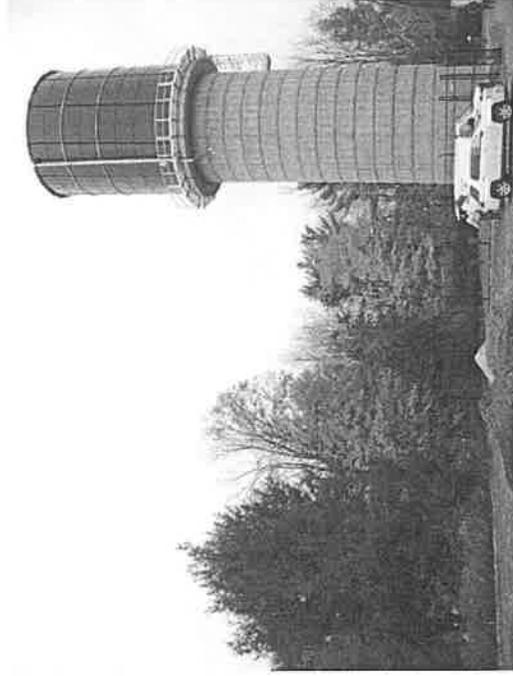
- Booster Pumping
- Tank Type
- Tank Material
  - Maintenance Requirements
- Tank Sites
  - Cost Evaluation
  - Non-Monetary Criteria
  - Located within City
- Long-Term Operation & Growth



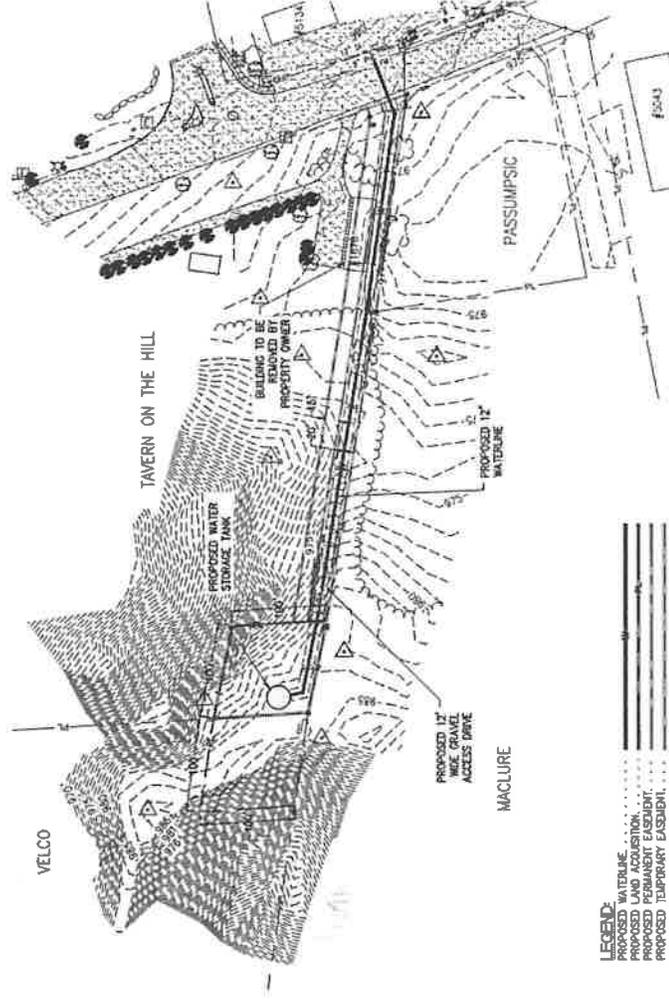
Alternative Sites

# Eastside (Derby Road) Proposed Project

- 210,000-gallon glass-fused steel elevated tank.
- Booster pump station.



Elevated glass fused steel tank.  
Paxton, MA 209,000 gallons.

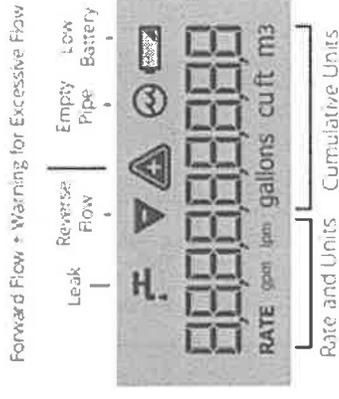


# Water Metering Benefits

- The City can implement an improved rate structure that is more equitable than the current flat-fee rates.
- All water customers will have water meters for consistent billing rates.
- Encourages water conservation, which preserves system capacity and reduces operating costs.
- Gives customers more control over their own water bills.
- Helps the City to take advantage of better federal funding opportunities for water and sewer infrastructure.

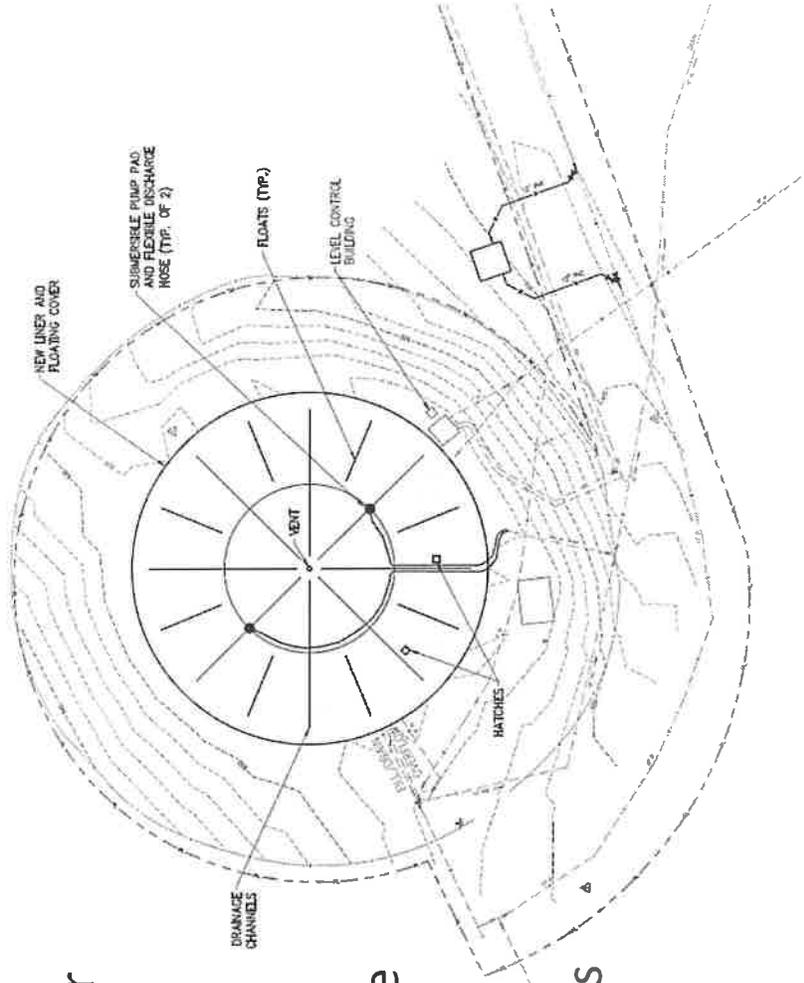
# Water Meter Alternatives

- 1,850 service connections
- City has been installing 80 to 100 meters each year
- Approximately 765 remaining unmetered connections will need meters
- Ultrasonic Meters w/ AMR Technology
  - No moving parts
  - Compatible with City's meter reading system



# Proposed Project Summary

- New liner and floating cover for Palin Hill Reservoir.
- New elevated storage tank and booster pump station for Eastside (Derby Road) service area.
- Installation of 765 water meters to fully meter the system.



# Estimated Construction Costs

	Current Construction Cost Estimate	Projected Construction Cost Estimate
Contract No. 1 - Palin Hill Reservoir Liner & Cover Replacement	\$400,000	\$406,000 ENR 11665 (April 2021)
Contract No. 2 - Derby Road Service Area Improvements and East Side Storage Tank	\$2,340,000	\$2,422,000 ENR 11900 (January 2022)
Contract No. 3 - Water Meters	\$970,000	\$1,034,000 ENR 12250 (March 2023)
<b>Total</b>	<b>\$3,710,000</b>	<b>\$3,862,000</b>

# Total Project Cost Summary and Bond Amount

Item Description	Total Estimated Cost
<b>Construction</b>	
Palin Hill Reservoir Liner & Cover Replacement	\$406,000
Derby Road Service Area Improvements & East Side Storage Tank	\$2,422,000
Water Meters	\$1,034,000
<b>Construction Subtotal</b>	<b>\$3,862,000</b>
<b>Construction Contingency</b>	
Construction Contingency (10%)	\$386,200
<b>Construction Contingency Subtotal</b>	<b>\$386,200</b>
<b>Step II - Final Design and Permitting</b>	
Final Design Basic Services	\$110,500
Subsurface Investigation	\$7,400
Special Services	\$25,400
<b>Step II Subtotal</b>	<b>\$143,300</b>
<b>Step III - Construction Phase Services</b>	
Construction Basic Services	\$432,000
Special Services	\$10,000
<b>Step III Subtotal</b>	<b>\$442,000</b>
<b>Other Costs</b>	
Permit Fees	\$10,000
Administrative	\$40,000
Legal & Fiscal	\$40,000
Short Term Interest	\$60,000
<b>Other Subtotal</b>	<b>\$150,000</b>
<b>Total Project Cost</b>	<b>\$4,983,500</b>
<b>Use</b>	<b>\$4,985,000</b>

➤ **Recommend Bond Amount:**  
**\$4,985,000**

# Available Funding Sources and Possible Funding Scenarios

## **USDA Rural Development (USDA RD)**

- RD Apply application submitted in December 2020
- Grants of up to 75% of total project cost. Typical grant for this type of project is approximately 40%.
  - **Positive bond vote required to receive a funding offer**
- Loan @ 1.75%, 30-year term

## **Funding Scenario**

- A 40% grant (estimated) and remainder of costs covered by 30-year, 1.75% loan.
- Annual loan payment of \$128,910 paid by water customers.
- \$9.80 increase per quarter for a typical residential customer.

# Project Schedule

Projected Date	Task
2021	<p>March 2 Conduct bond vote</p> <p>August Palin Hill Reservoir Liner &amp; Floating Cover Replacement</p>
2022	<p>June Start Water Storage Tank &amp; Booster Pump Station Construction</p> <p>October Complete Water Storage Tank &amp; Booster Pump Station Construction</p>
2023	<p>April Start Water Meter Installation</p> <p>October Complete Water Meter Installation</p>

# Next Steps

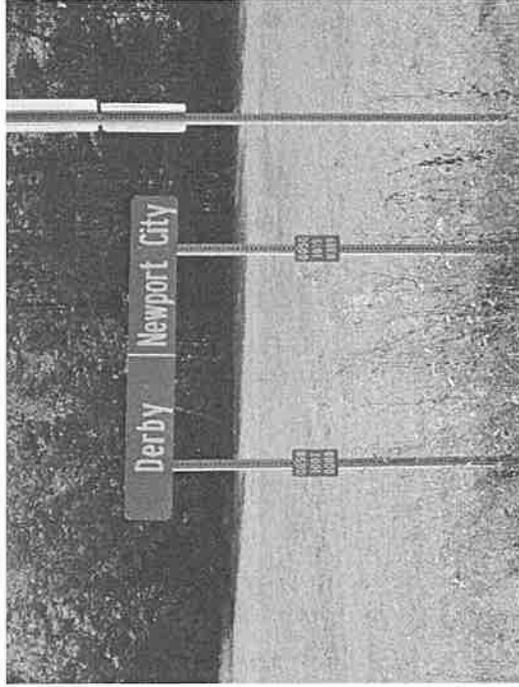
- Bond Vote on Tuesday, March 2<sup>nd</sup>, 2021 (in-person)
  - All City residents can vote on the bond.
- Absentee/Early Voting

## Article 1

Shall the general obligation bonds of the City of Newport in an amount not to exceed Four Million Nine Hundred Eighty-Five Thousand dollars \$(4,985,000), subject to reduction from available state and federal construction grants-in-aid and other financial assistance, be issued for the purpose of (1) constructing a water system storage tank on the easterly side of the City, (2) replacement of the Palin Hill Reservoir Liner and Floating Cover and (3) installation of remaining unmetered water service connections in the City, together with functionally related storage and transmission appurtenances and additions, such as improvements estimated to cost Four Million Nine Hundred Eighty-Five Thousand dollars \$(4,985,000)

Project ballot item, Article 1.

# QUESTIONS?



## **Council Minutes**

DRAFT

**February 1, 2021**

A duly warned meeting of the Newport City Council was held remotely on February 1, 2021. Participating in the meeting were Mayor Paul Monette, Council President Daniel Ross, Council Members Melissa Pettersson, John Wilson, and Kevin Charboneau, City Manager Laura Dolgin, City Clerk/Treasurer James D. Johnson, Public Works Director Tom Bernier, Police Chief Travis Bingham, Fire Chief John Harlamert, Recreation Director Jessica Booth, Rebecca Therrien, Wayne Elliott, Elaine Collins, Lynette Claudon, members of the Press and Public.

Mayor Monette called the meeting to order at 6:30 PM.

### **Public Hearing on the CSO Long Term Control Plan (power point attached)**

Wayne Elliott from A&E Engineering gave an overview of the proposed plan.

### **Approval of Minutes**

Mr. Charboneau moved to approve the minutes of January 11, 2021. Seconded by Mr. Wilson, motion carried unanimously.

Mr. Ross moved to approve the minutes of January 25, 2021. Seconded by Mr. Wilson, motion carried unanimously.

### **Comments by the Public**

Anne Chiarello commented on the budget.

### **Annual Newport City Elementary School Presentation (attached)**

Principal Elaine Collins gave a presentation on the proposed Elementary School budget.

### **Sewer Allocation Request**

Mr. Wilson moved to approve the Wastewater Allocation request from Bradley Reservoir for the property located at 511 Sias Ave. Seconded by Mr. Charboneau, motion carried unanimously.

**Truck Body & Plow Bid** (attached)

Ms. Pettersson moved to accept the bid from Viking Cives for a truck body and plow in the amount of \$32,700. Seconded by Mr. Wilson, motion carried unanimously.

**Resolution for Better Places Grant Application** (attached)

The grant if awarded will be used to enhance the parklet proposed for the municipal parking lot.

Mr. Charboneau moved that the City of Newport is the owner of property located at 222 Main St. Newport, VT. and that the City Council authorizes the use of a portion of this lot for the construction of a Downtown Pocket Parklet. Seconded by Ms. Pettersson.

Discussion: Mr. Wilson asked how many parking spaces will be lost in the municipal lot? Ms. Dolgin stated that seven spaces would go away however two spaces were added during the revamping of the parking lot last spring. The Parklet will enhance Main St. and add a green space with a view of the lake.

Ms. Pettersson, Mr. Ross, and Mr. Charboneau voted in favor of the motion. Mr. Wilson voted against the motion. Motion carried.

**Bond Resolution Certificate**

Ms. Pettersson moved to approve the Water Tower Bond Resolution Certificate. Seconded by Mr. Charboneau, motion carried unanimously.

**Coin Drops** (attached)

Mr. Wilson moved to approve the 2021 Coin Drop schedule. Seconded by Ms. Pettersson, motion carried unanimously.

**Parades**

Mr. Charboneau moved to approve the parade requests submitted and two requests need to submit permit applications. Seconded by Mr. Ross, motion carried unanimously.

The parades requested are Memorial Day Parade May 31st, Light up the Night Parade December 4<sup>th</sup>, and a Parade by Kingdom Games, Memphremagog Water Shed, and Kingdom Games July 23<sup>rd</sup>, 2021.

**New Business**

Mayor Monette noted that the 2020 Annual Report is on the city's website and is at the printers.

DRAFT

**Old Business**

None

**Next Meeting Date**

The next meeting will be held remotely on February 8, 2021 and will include a Public Hearing on the Water Tower.

**Adjourn**

Mr. Charboneau moved to adjourn at 8:18 PM. Seconded by Ms. Pettersson, motion carried unanimously.

Attested: \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_ 2021

\_\_\_\_\_ Mayor

City Manager ..... (802) 334-5136  
334-3891  
City Clerk/Treasurer ..... 334-2112  
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Fax ..... 334-5632



City of Newport  
222 Main Street  
Newport, Vermont 05855

TO: Laura Dolgin/City Manager  
FROM: Thomas L. Bernier/P.W. Director *TLB*  
DATE: January 27, 2021  
RE: Dump Body and Plow

We received two bids recently for a dump body and plow which will be installed on the new 2021 Ford F550 cab & chassis that is on order. We have gone through the bids to compare them with our specifications. The two bids are as follows:

- |                                      |          |
|--------------------------------------|----------|
| 1) Viking Cives (USA) Williston, VT  | \$32,700 |
| 2) H.P. Fairfield, LLC Hopkinton, NH | \$32,400 |

We have gone through both bids to make sure they are including everything we had requested. Both these bids meet our specifications. Viking was just awarded the body & plow bid on our big truck for \$5,673 less than H. P. Fairfield. The shop that this truck will be equipped at for H. P. Fairfield is there Skowhegan ME location. We would have to travel there a few times during the installation of all the components. Our last F550 was done by H. P. Fairfield and we experienced multiple issues that their customer service was less than adequate. I feel for the \$300 difference and to travel to Williston is why, I would like approval to accept the bid price from Viking Cives for \$32,700.

To: City Council  
From: Laura Dolgin, City Manager, and Tom Bernier, Director of Public Works  
Date: January 21, 2021

Re: Permission to apply for Better Places Grant Opportunity for Pocket Park

We have an opportunity to apply for another grant, called Better Places, which if awarded, will be used to enhance the pocket parklet which is part of the Downtown Transportation Grant Intersection Improvement, slated to occur this winter and spring. This park will be located in the upper area of our municipal building parking lot, on the corner of Main and Fyfe St. The intersection improvement calls for closing in the Main Street entrance into the parking lot. The Better Places grant is written by Mike Welch through the RCDI grant.

This pocket park will enhance our main corridors streetscape along with allowing a green space that will include a 14'x16' pergola with a solar roof to generate electricity to power the lighting in this park. It will have bench seating throughout, lighted concrete walkway, with a circle block planter. This will all be surrounded by wood and tin flower boxes with benches attached, concrete retaining wall covered in flowers, shade trees, flowering wall trellis, and various flower planters.

The City will expand our array of colorful flowers in this area so that users of the park will be able to enjoy the park looking down through the middle of our parking lot at the views of the Lake. We have received letters of support from some of our downtown businesses.

The job estimate has \$9,000 for labor and \$5,000 for equipment use/cost. This is a guess as there may be costs that have been overestimated. We will also designate the \$35,000 one time private donation towards this park. The capital can be designated if needed.

Labor & Equipment	\$14,000
Private Donation	\$35,000
Grant	\$20,000
Capital	<u>\$12,000</u>
	<b>\$81,000</b>

Should the Council see fit to approve moving forward in this application, the wording of the Resolution should read as follows:

Resolved: That the City of Newport is the owner of property located at 222 Main St., Parcel ID 133001, and that the City Council authorizes the use of a portion of this lot for the construction of a Downtown Pocket Parklet.

Thank you.

## COIN DROPS - 2021

Council Approved: 2/01/2021

<u>Organization</u>	<u>Date</u>	<u>Time</u>
Veterans of Foreign Wars of the U.S. Auxiliary	May 29th (Sat.)	8AM – 2PM
Newport Parks & Recreation Department	June 12th (Sat.)	8AM – 2PM
Newport Fire Department	July 10th (Sat.)	8AM – 2PM
American Legion Post #21	August 14th (Sat.)	8AM – 2PM
Veterans of Foreign Wars of the U.S. Post #798	Sept. 11 <sup>th</sup> (Sat.)	8AM – 2PM
Rotary Club of Newport	October 9th (Sat.)	9AM – 3PM
Disabled American Veterans (DAV)	November 13 <sup>th</sup> (Sat.)	9AM – 3PM



## **NEWPORT CITY ELEMENTARY**

166 Sias Ave. Newport, VT 05855

Phone: 802-334-2455 \* Fax: 802-334-0161

Elaine Collins, Principal \* Aaron Larsen, Assistant Principal

Dear Newport City Council Members,

It has been my privilege to be the principal at Newport City Elementary School for the last five years. In a normal year, the team at NCES is dedicated and committed to their work. However, working in a school during a worldwide pandemic has highlighted that our team is truly passionate about educating our students. Although some of our students have opted for virtual learning or for home schooling, most students are coming to school each day. The safety protocols and cleaning/disinfecting have been challenging to implement but have very much become part of our normal routines and have allowed us to continue to provide in-person learning. We appreciate that parents and community members have been playing their part in keeping our numbers in our area low enough so that we can keep students in school.

The pandemic has interrupted everyone's lives to varying degrees. As a result of these disruptions in school, several things came to light:

- The importance of school in children's and family's lives was highlighted. Although we have all struggled with fear about the pandemic, I firmly believe it is in children's best interests to be in school. Parents were doing the absolute best to provide what students needed during the shutdown, but many of them were also trying to manage full-time jobs while simultaneously helping their children learn. Children learned, but not as much as they would have had they been in school and many experienced struggles with their social-emotional health.
- Since we weren't able to teach as much of the curriculum to students and many students couldn't learn as well in the on-line format, most students came back from the school closure with academic gaps and increased social-emotional needs. Subsequently, it is even more important for us to provide the social-emotional and academic supports now that we were providing before the pandemic.

As you can see from the enclosed budget, our budget is up 5.71%, with a difference of \$352,712 from last year to this. There are several reasons for this:

- As you may already know, statewide healthcare negotiations are resulting in a higher employee contribution to healthcare, so when teacher negotiations settled, there was a higher pay increase given to offset the increased health care costs. This resulted in a 4% pay increase for this next school year.
- The amount that we pay for our Newport preschool students who go to other preschool programs has increased from \$46,500 in this current year to \$93,000 next year. We have overspent this line item for the last couple of years, so wanted the budget to reflect what we are actually spending. Preschool students have the ability to go to any state-approved program, private or public, and we are required to pay tuition for them.
- Our Title I revenues will be less during this next year. Our Title I funds pay for academic interventionists in our building. Currently we are using interventionists to push into every math and literacy block. This model has been very successful and we would like to continue to have the current number of interventionists to support our students' academic needs, especially given the context of the closure and COVID. Those two positions cost approximately \$130,000.

*The mission of the NCES is to educate the whole child to become a caring, productive participant of the community.*

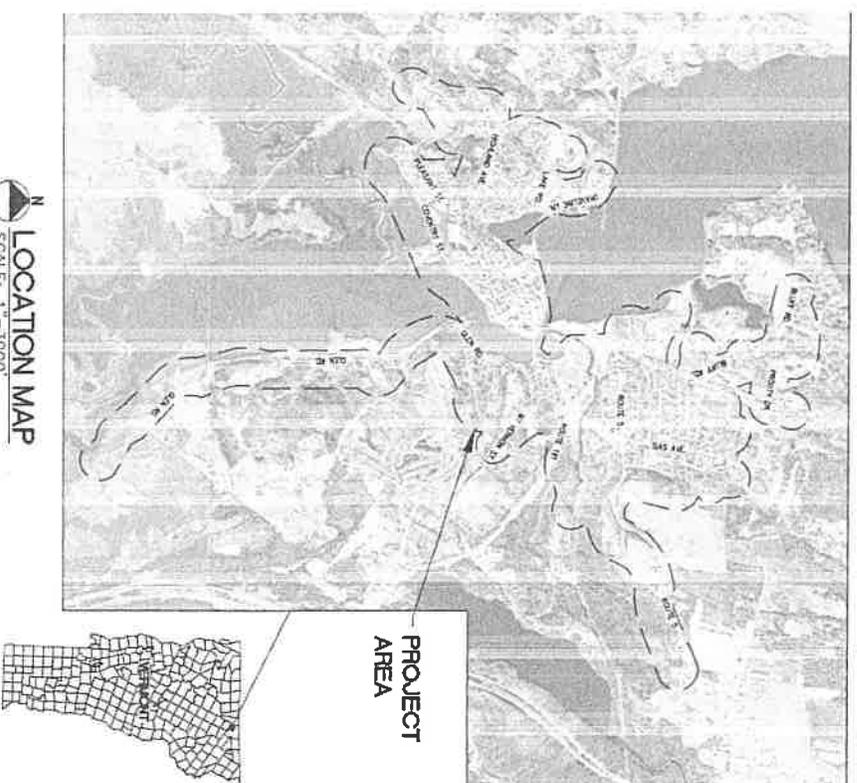
**City of Newport**  
**Combined Sewer Overflow**  
**Long Term Control Plan (LTCP)**

**Public Presentation**

**February 1, 2021**

# Background

- State issued an updated 1272 Order in February 2019.
- A+E selected to prepare a Long Term Control Plan (LTCP) for the City of Newport.
- LTCP is funded by the State as 100% loan forgiveness.
- Vermont CSO Rule (Environmental Protection Rules, Chapter 34, adopted August 25, 2016) required municipalities with CSO outfalls to develop a long-term control plan (LTCP)
  - Components of the LTCP are a combination of the VT CSO Rule and the EPA CSO LTCP guidance document



# Long Term Control Plan Requirements

- A description of actions already taken to address CSOs;
- An evaluation of existing conditions within the affected drainage catchments;
- A set of criteria to evaluate the water quality issues in the receiving waters and alternative projects to address these issues;
- A collection of potential projects designed to satisfy the desired water quality requirements;
- An evaluation of and prioritized schedule for selected projects;

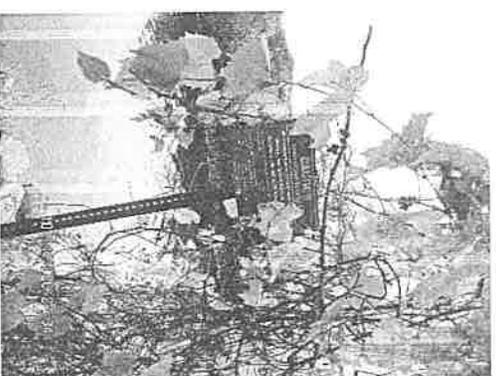
## Long Term Control Plan Requirements (Cont.)

- A financial plan to fund the projects;
- A plan to monitor water quality during and after implementation of the selected projects in order to determine if the chosen criteria have been met;
- An assurance that new sources of stormwater and wastewater to the Combined Sewer System (CSS) do not increase the volume, frequency or duration of CSO events.
- An executive summary that makes it easy for the public to understand how their municipality intends to control or eliminate CSOs.

## 9 Minimum Control Measures (9MC)

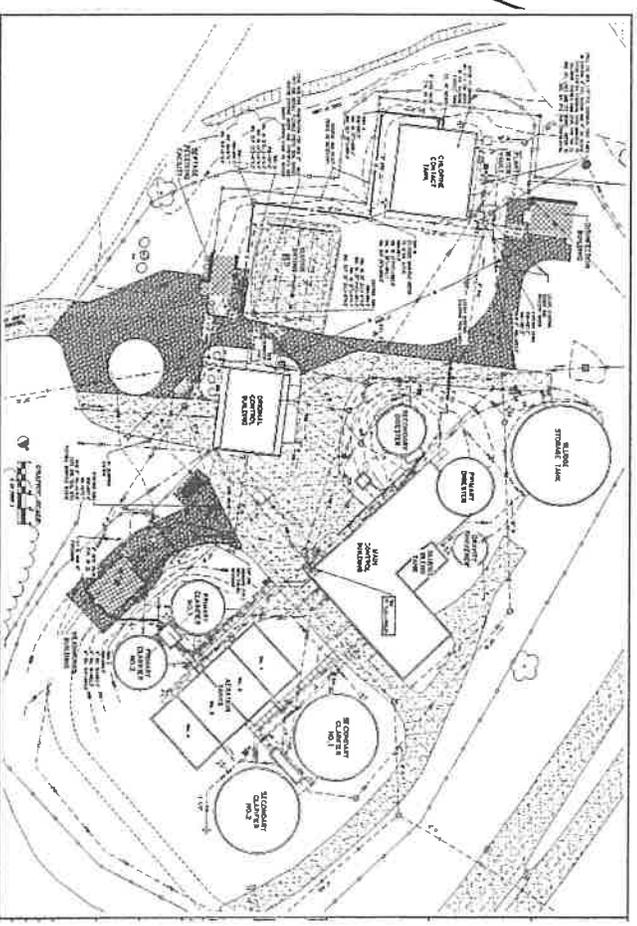
- 9MC are actions defined by the United States Protection Agency for the long term reduction of overflows in CSO systems. These minimum controls measures include.
  - Regular operations and maintenance of sewer collection system and CSO outfalls.
  - Optimizing use of sewer collection system and WWTF to minimize overflows.
  - Public notification and monitoring efforts.

Warning sign of City of  
Newport CSO Overflow



# Newport CSO Abatement Improvements

- Major sewer and storm separation effort in the mid 1990's.
- Upgrades to Influent Pumping capacity at WWTF to handle higher influent flows in 2006.
- Closure of Spring Street Clyde River Crossing and Overflow in 2012. Accomplished via installation of new piping and the reversal of the flow direction.



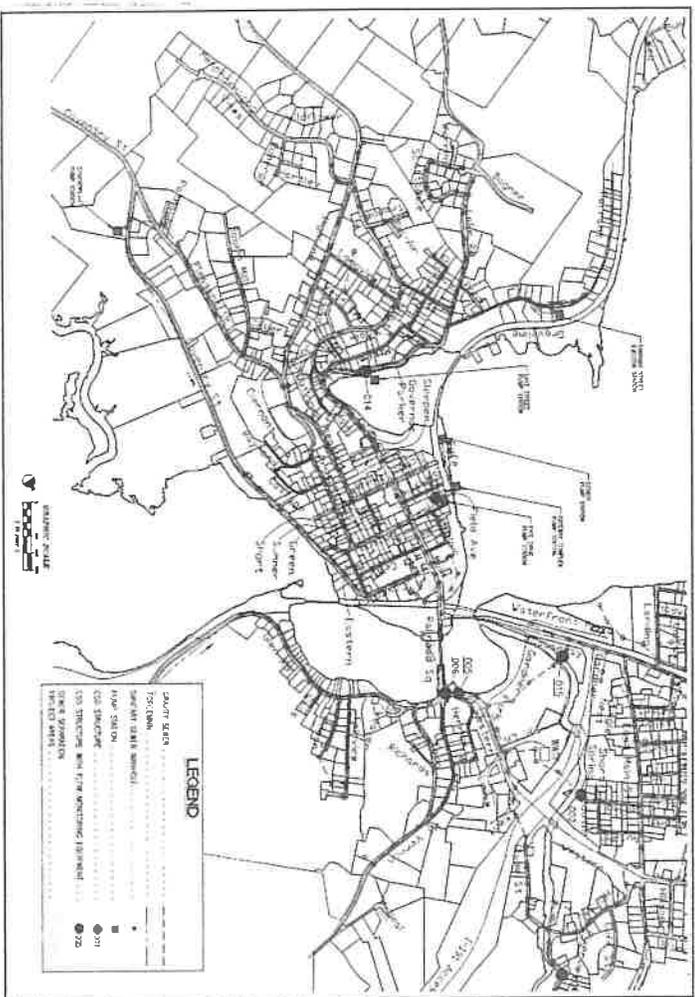
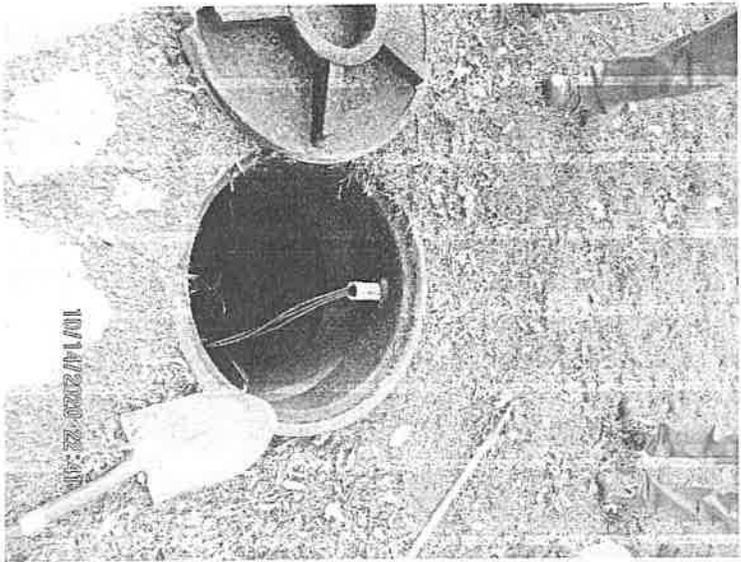
City of Newport WWTF

# Newport CSO Outfalls

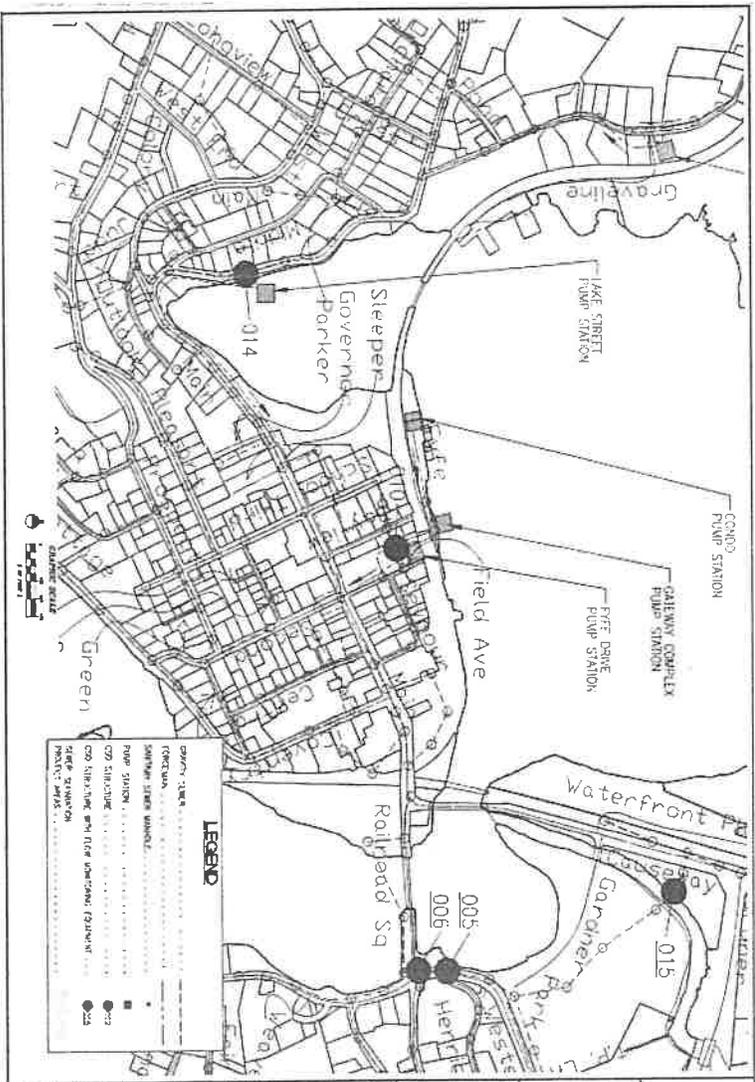
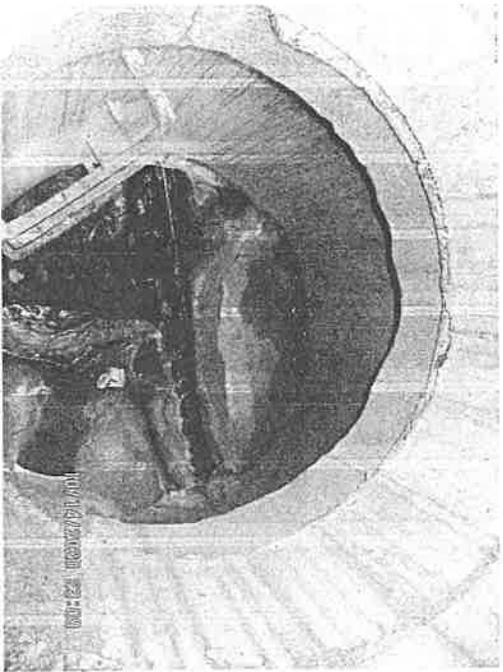
➤ Six Remaining CSO Outfalls

Name	S/N #	Location
Western Avenue	S/N 006	44.936682, -72.202376
Bayview Street/ Fyfe Drive PS	S/N 010	44.036306, -72.211427
Union Street/ Indian Head PS	S/N 013	44.951468, -72.196010
Lake Road PS	S/N 014	44.934064, -72.217006
Causeway Spihon	S/N 015	44.403623, -72.2040217
Bluff Road PS	S/N 016	44.9548909, -72.204133

# Western Ave (S/N 006)



# Bayview St/Fyfe Drive PS (S/N 010)

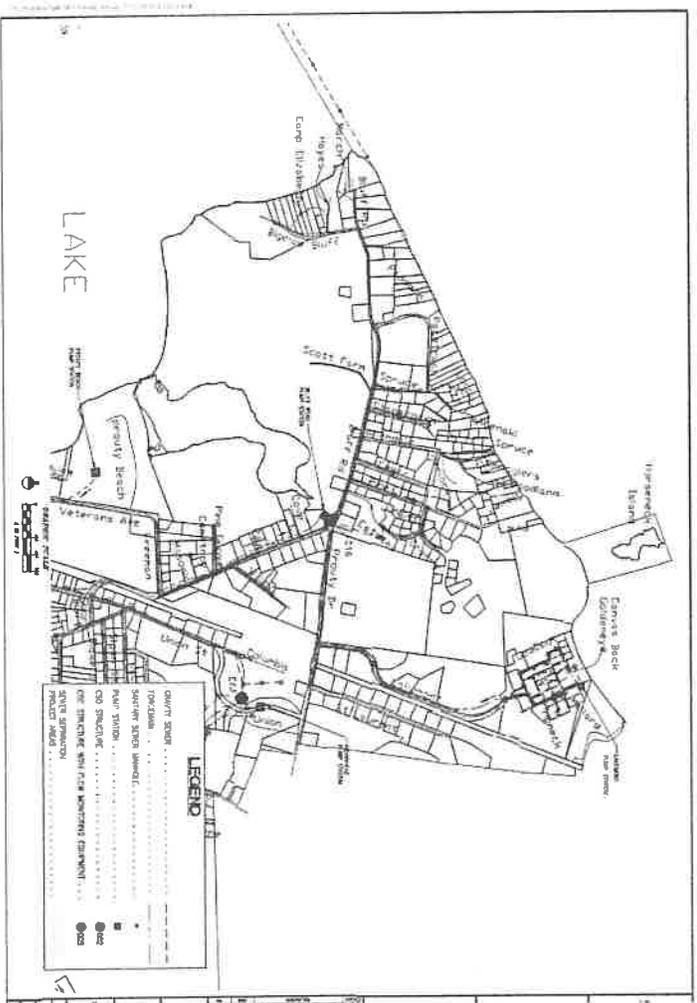
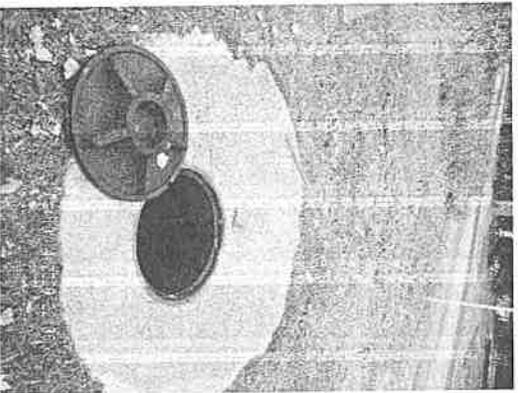
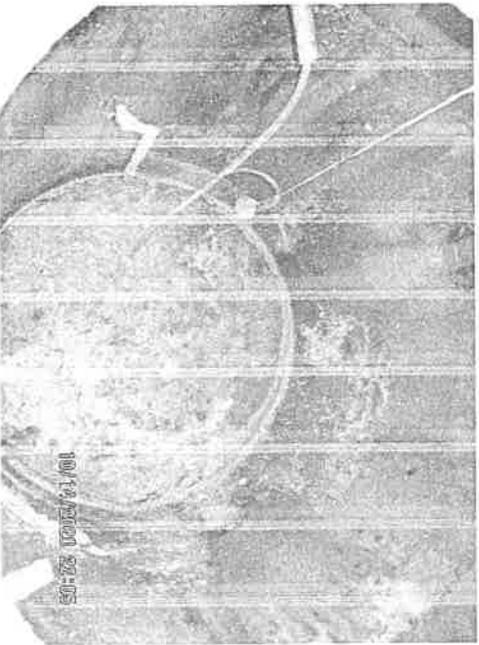








# Bluff Road PS (S/N 016)



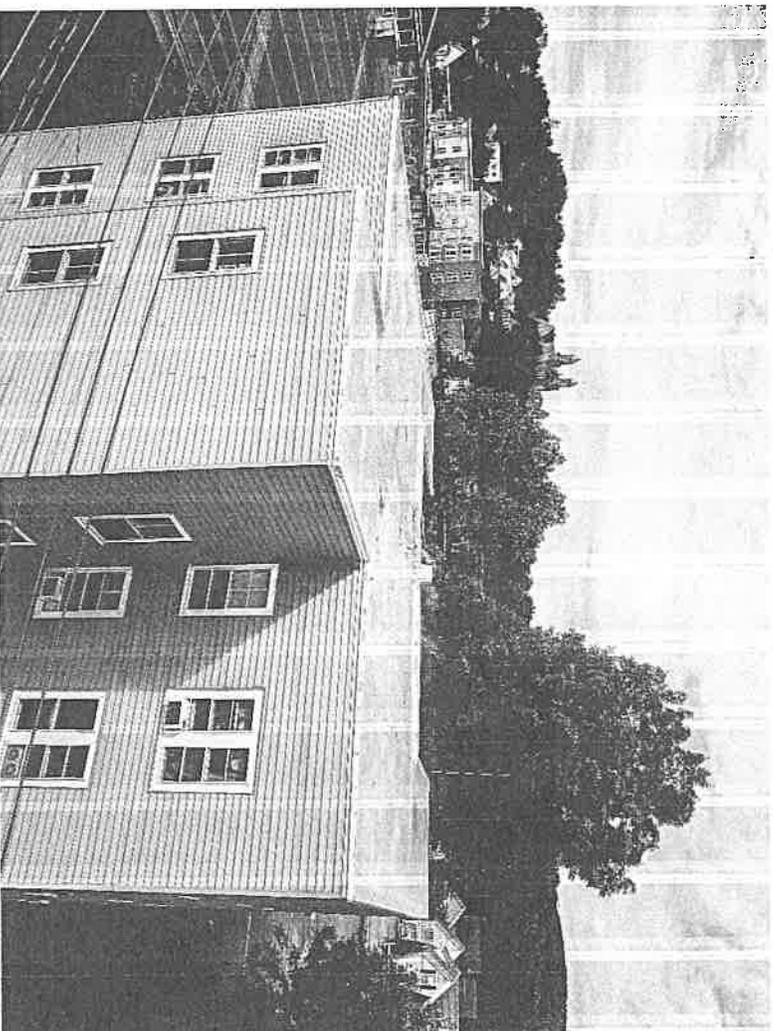
# Recent Overflows

- One CSO event recorded since 2015.

Date	Location	Event Precipitation (Inches)	Approximate Volume (Gallons)
11/1/2019	Bluff Road PS	3.29	>10,000 – 100,000

# Aerial Assisted Smoke Testing

- July 22<sup>rd</sup> and Oct 15<sup>th</sup> 2020
- Vermont Rural Water and Fluidstate Consulting.
- Investigated Bayview and Bluff Road Service Areas

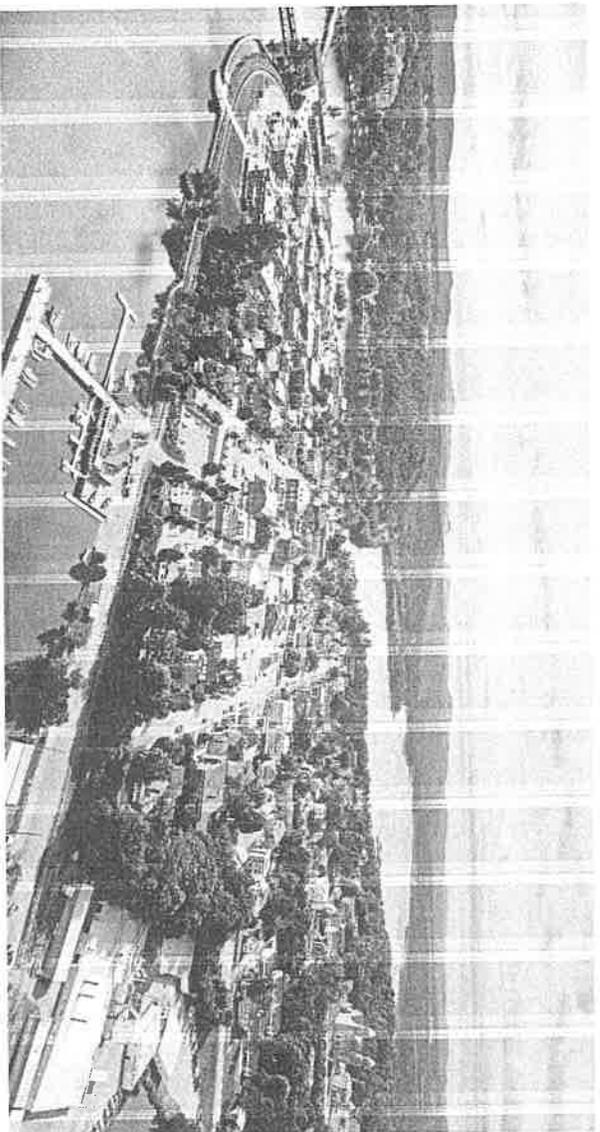


# Smoke Testing Results

- Select roofs identified in Bayview/Fyfe Drive PS sewer service area.
- No sources of infiltration identified in North Country Hospital area (Bluff Road sewer service area).

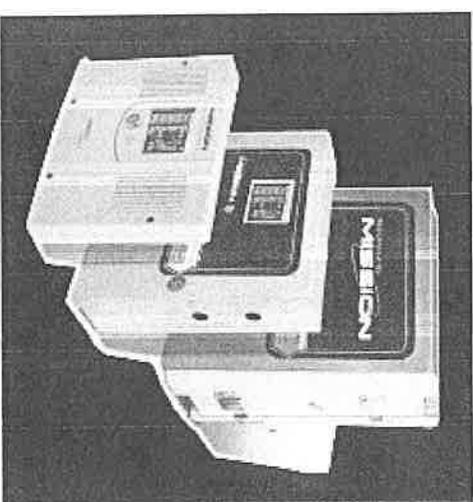
**Identified Remaining Commercial Roofs Connected to Sewer System**

Building Street Address	Approximate Roof Area (Square Feet)	Flow Contribution to WWTF During Design Storm (gal)
97 School St	1,200	2,020
35 Bayview St	2,400	4,039
<b>Total</b>	<b>3,600</b>	<b>6,059</b>



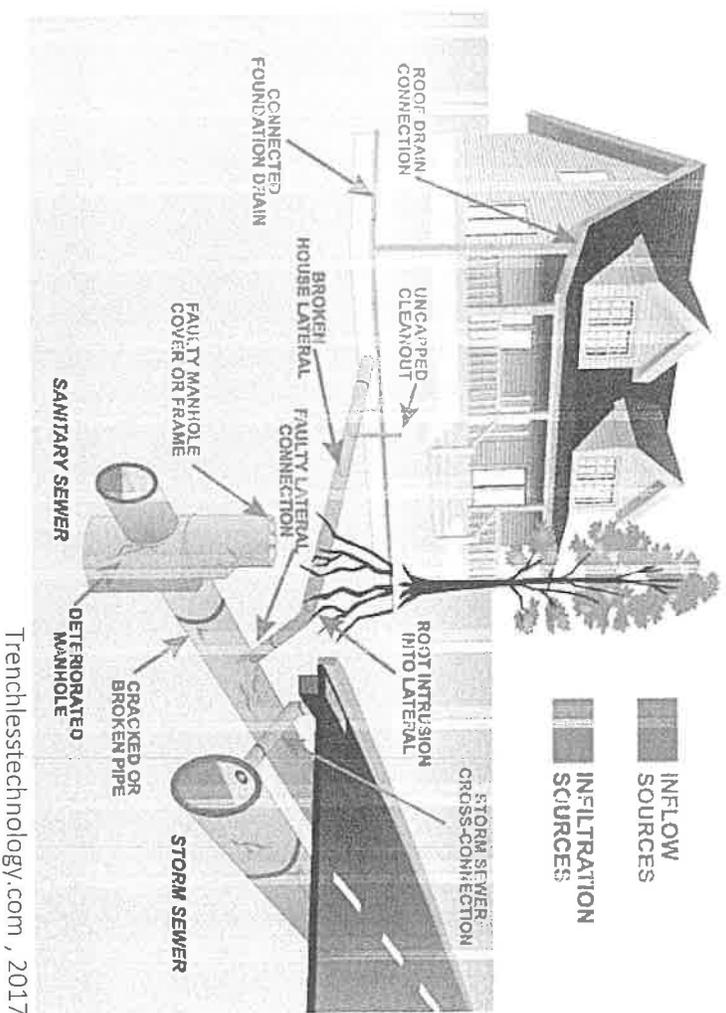
# Installation of Monitoring Equipment

- Installation of Mission 123 level monitoring equipment:
  - Western Ave (S/N 006)
  - Causeway Siphon(S/N 015)
- Provides web based data and real time trending
- Monitoring equipment paid for through State Clean Water program as 100% loan forgiveness



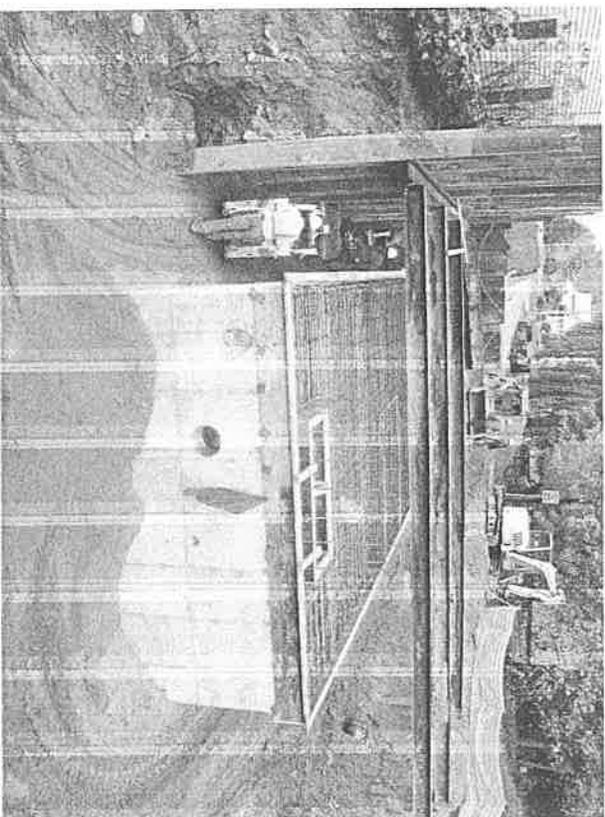
# CSO Abatement Alternatives

- Treatment
- Storage
- Separation
- Green Stormwater Infrastructure
- Inflow and Infiltration Reduction
- Reclassification to SSO
- Closure



# Offline Storage

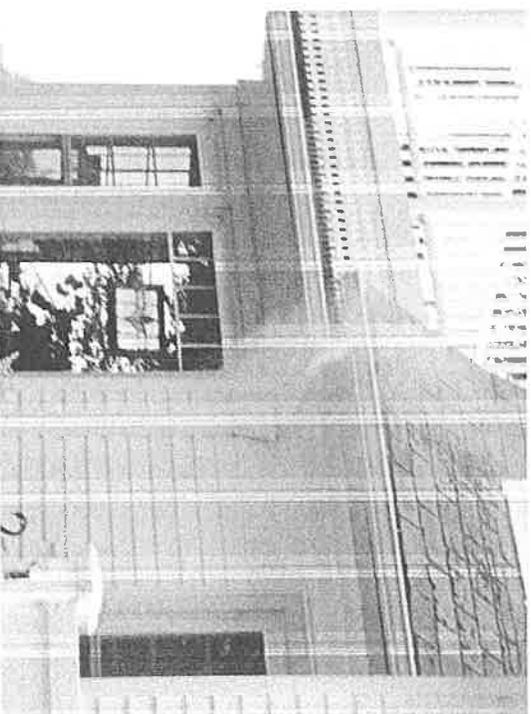
Advantages	Disadvantages
<ul style="list-style-type: none"><li>• Storage capacity can abate the majority of overflows.</li></ul>	<ul style="list-style-type: none"><li>• This approach might not completely mitigate the occurrence of CSO events if an extreme event occurred</li></ul>
<ul style="list-style-type: none"><li>• Tanks can be installed with no disruptions to existing infrastructure.</li></ul>	<ul style="list-style-type: none"><li>• Appropriate tank sizing is not possible without specific overflow peak flow and volumes, and rainfall data.</li></ul>
<ul style="list-style-type: none"><li>• This approach is very simple and cost effective to operate and maintain.</li></ul>	<ul style="list-style-type: none"><li>• Doesn't reduce any sources inflow or infiltration into the sewer system. All I+I flow must still be treated by the WWTF.</li></ul>
<ul style="list-style-type: none"><li>•</li></ul>	<ul style="list-style-type: none"><li>• Tank siting can be challenging at the overflow locations due to lack of available land and environmental restrictions.</li></ul>



Enosburg Falls Offline  
Storage Tank

# Separation of Roof Drains

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Disconnection of roof drains provides a direct reduction in flow to the overflows and WWTF.</li> </ul>	<ul style="list-style-type: none"> <li>• This approach might not completely address the occurrence of CSO events.</li> </ul>
<ul style="list-style-type: none"> <li>• A reduction in flow reaching the plant can reduce the operations and maintenance costs at the WWTF.</li> </ul>	<ul style="list-style-type: none"> <li>• Separation work generally occurs on private property and requires private funding and buy in from the property owner to complete.</li> </ul>
<ul style="list-style-type: none"> <li>• Costs of replumbing may be eligible for funding under WRRDA 2014, but a formal request would need to be determined.</li> </ul>	<ul style="list-style-type: none"> <li>• Significant renovations are generally required to modify the interior plumbing.</li> </ul>
<ul style="list-style-type: none"> <li>• </li> </ul>	<ul style="list-style-type: none"> <li>• It is not cost effective to take of the smaller roofs unless this work can be done at a reasonable cost as the flow reduction is not significant.</li> </ul>



Connected Roof Drain  
in Newport VT

# Reclassification versus Closure

- Reclassification to a Sanitary Sewer Overflow (SSO) provides a flow path in case of equipment malfunction or failure.
  - Reclassification can only occur for sewer service areas that do not have combined sewers or sources of inflow.
- Closure of a CSO eliminates a means for wastewater to escape the sewer system.
  - Consideration must be made to surcharging of sewer lines in wet weather events in order to not negatively impact private property.

# Summarized LTCP Recommendations:

- **Western Ave (S/N 006)**
    - Continued data acquisition with level monitoring equipment.
    - Evaluate closure.
  - **Bayview Street/ Fyfe Drive PS (S/N 010)**
    - Coordinate disconnection of roof drains to eliminate sources of inflow.
    - Evaluate the addition of overflow storage.
  - **Union Street/ Indian Head PS(S/N 004)**
    - Further investigation of rainfall and pump station run times.
    - Closure.
  - **Lake Road PS (S/N 014)**
    - Reclassification to SSO.
  - **Causeway Siphon/Overflow (S/N 015)**
    - Continued data acquisition with level monitoring equipment.
    - Evaluate closure.
  - **Bluff Road PS (S/N 016)**
    - Replacement of existing wet well with larger wet well to provide more storage.
  - Reclassification to SSO.
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# Draft Implementation Plan for 1272 Order

- 2021
  - Complete LTCP.
  - Monitor rainfall data and water levels at Causeway Siphon and Western Ave Overflows.
- 2022
  - Coordinate with property owners for disconnection of roof drains in Bayview and Fyfe Drive Sewer Service Area to eliminate inflow.
  - Monitor rainfall data and water levels at Causeway Siphon and Western Ave Overflows.
  - Evaluate closure of Indian Head PS based on rainfall intensity data and PS run times.
  - Begin preliminary engineering study for additional storage for Fyfe Drive PS and Bluff Road PS.
- 2023
  - Complete final design for additional storage for Fyfe Drive PS and Bluff Road PS.
  - Complete smoke testing for Lake Road PS Sewer Service area to reclassify to SSO.
  - Monitor rainfall data and water levels at Causeway Siphon and Western Ave Overflows.
- 2024
  - Construct additional storage for Fyfe Drive PS and Bluff Road PS.
  - Evaluate abatement alternatives for Causeway Siphon and Western Ave Overflows.
- 2025

# QUESTIONS?

