# About Article #2 on the March 1 Ballot

The City of Vergennes will have a special March 1 ballot asking residents to consider approving a bond for a complete renovation of the city's decades-old sewer collection system and wastewater treatment facility (WWTF).

If approved, this bond vote will allow the City to pursue additional grant funding but does not commit the community to move forward with any project.

# Why is this Project Needed Now?

# 1.

Our Collection and Treatment Facilities are old and need to be replaced

# 2.

We need to stop Polluting Lake Champlain & Otter Creek

# 3.

State and Federal Funding Opportunities are Available for Municipal Sewer Projects



Our Collection and Treatment Facilities are old and due for replacement, upgrade

#### CITY FACILITY CONDITION

Macdonough Drive Pump	Built in 1962. Handles 75% of the sewer flows and
Station	discharges untreated sewage to Otter Creek
	during heavy rain events.

Sewer Main Running	Built in 1962.
Under Otter Creek	

Sanitary Sewer Collection	Built pre-1910 with significant sewer line
System	replacement in 1978-1979.

Wastewater Treatment	Built in 1962 with significant upgrades in 1978-
Facility and Head Works	1979 and 2000.

- We are polluting
- Otter Creek
- and
- Lake Champlain



- City discharges untreated sewage from the Macdonough Drive pump station during heavy rain events.
- In April, 2018 the Department of Environmental Conservation issued a 1272 order requiring Vergennes to submit a Long-Term Control Plan by October 2019. <u>City did not meet this deadline.</u>
- Although DEC has exercised considerable enforcement discretion, the City must comply with this order, as the continuance of enforcement discretion is not guaranteed.

State and Federal Funding Opportunities are Available for Municipal Sewer Projects • City has secured \$6 million in federal and state grant funding.

 Based on discussions with state and federal funders, it is likely the City will receive additional state and federal grants for renovation of the treatment plant and collection system.

#### **Macdonough Drive Pump Station**

#### Add storage, screening, and pumping capacity

- abate sewer overflows at the pump station.
- improve the reliability of the pumps, and energy efficiency
- improve worker safety while reducing maintenance needs.
- Increase storage to allow for flow equalization during wet weather events and keep sewage out of Otter Creek.



#### **Macdonough Drive Pump Station**

- Addition of advanced screening equipment will allow for removal of "rags" (fibrous materials that don't break down after being flushed down your plumbing) and other debris which can damage or clog pumps.
- Removal of "rags" is currently done by hand



## Rehabilitate Sewer Main Running Under Otter Creek, add second, back-up main

- Rehabilitate the existing 60-year-old cast-iron sewer main running under Otter Creek
- Add a second sewer main under Otter Creek to increase capacity and reliability of the pump station's ability to convey wastewater to the Wastewater Treatment Facility
- Rehabilitating the existing pipe will both improve pumping efficiency and reduce the likelihood of a leak.
- Adding a second sewer main provides redundancy, allowing the one line to be inspected or repaired while sewage is still transported to the WWTF.



#### Upgrade treatment plant's intake capacity (called the Headworks)

- The current headworks building is not configured well, partly due to the addition of new process equipment during a retrofit in 2000.
- There are hydraulic limitations that make flow measurement difficult and some of the influent process equipment is not in the correct configuration.
- Building is subject to corrosive gasses and moisture and equipment degrades quickly. Needs ventilation improvements.
- Refurbishing headworks will improve the accuracy of flow measurements, provide more efficient grit and rag removal, help protect the plant equipment's longevity and reduce the amount of effort required by the operators.



#### Upgrade treatment plant's intake capacity (called the Headworks)







### **Replace the City's Aging Wastewater Treatment Facility**



• Wastewater treatment facility built in 1978. At the end of its useful life.



 Much of the equipment has been repeatedly repaired, and some replacement parts are no longer available.

### **Replace the City's Aging Wastewater Treatment Facility**

- Lack of a secondary clarifier results in sludge being settled in the chlorine contact tanks, which requires the operators to clean them on a weekly basis
- Can also contribute to e coli violations from rising sludge.
- Additional solids in the chlorine contact chamber may also increase the amount of chlorine used to disinfect the effluent which means more money spent on chemicals.



### **Replace the City's Aging Wastewater Treatment Facility**



- Existing super primary lagoon and cloth filter system is an obsolete Wastewater Treatment
   Facility configuration that doesn't perform efficiently.
- City is Increasingly challenged to meet current discharge permit limits for phosphorus at the full design flow.

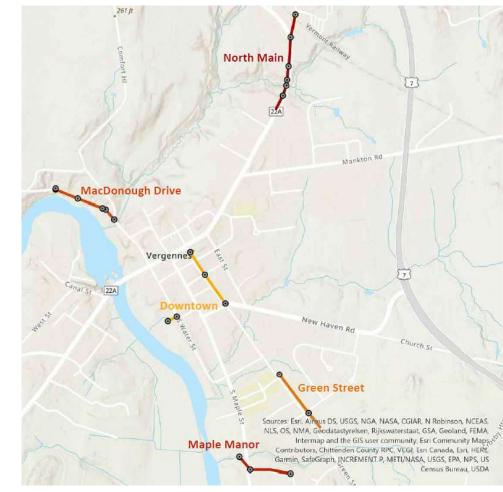


 Upgrading the current lagoon system with a new space saving, cost effective, and efficient sequencing batch reactor system will improve energy efficiency, greatly reduce the possibility of equipment failures and allow the City to meet more stringent effluent limits anticipated in the future.

#### **Repair or Replace Five Sections 5 sections (5,000 linear feet)**

#### of leaky sewer pipes

- Leaky sewer pipes cause groundwater to enter the sewer system and contribute to persistent sanitary sewer overflows into Otter Creek,
- Leaky pipes transport clean groundwater to the WWTF to be unnecessarily treated at considerable expense.
- Additional investigation will indicate the location and scope of other necessary repairs in the collection system, which consists of approximately 100,000 linear feet of sewer pipe.
- Leaking pipes can also cause sinkholes which can damage property and endanger the public.



#### **Sump Pumps**

- Sump pumps and other drainage pipes that are connected to the sewer collection system add groundwater and stormwater to our treatment facility and contribute to the overflows at the Macdonough Drive pump station.
- City ordinance prohibits sump pumps and drains from being connected to the sewer system. We'll be asking residents to ensure compliance with this ordinance.
- Many communities with this problem have started a similar sump pump elimination programs with good success.
- Because it will take time to disconnect every sump pump in Vergennes, it will still be necessary to take other measures right now -- improving the collection and treatment systems -- to prevent overflows.



How much will it cost?

**Total Project Cost = \$25.5 million,** funded with a combination of Federal and State grant and loan funds, plus an increase in sewer fees.

Federal and state grant and loan funds \$12.25 million
+ Increase in annual sewer rates\* \$12.25 million

= TOTAL PROJECT COST \$25.5 million

\*sewer rates increased gradually over the next four years.

# How much will it cost?

SEST CASE	WORST CASE
	If Vergennes receives least possible amount of Federal and State funding
5,500,000.00	\$25,500,000.00
12,822,200.00	- \$8,060,000.00
2,677,800.00	\$17,440,000.00
\$860.00	\$1,040.00
2% increase	108% increase
\$360.00	\$540.00
	ennes Receives all al & State Funding identified 25,500,000.00 12,822,200.00 22,677,800.00 \$860.00 22% increase

How much will my sewer fees increase?

#### BEST CASE: Projected Sewer Bill

#### WORST CASE: Projected Sewer Bill

Year	Annual Bill	Quarterly Bill	Year	Annual Bill	Quarterly Bill
2021 - 2022	\$500	\$125	2021 - 2022	\$500	\$125
2022 - 2023	\$600	\$150	2022 - 2023	\$640	\$160
2023 - 2024	\$720	\$180	2023 - 2024	\$815	\$204
2024 - 2025	\$860	\$215	2024 - 2025	\$1,040	\$260

# Why Bond Now?

- A bond vote is required for the City to have matching funds available for grant and loan requirements.
- Federal and state agencies that award funding for sewer upgrades, look for a commitment from a local community in the form of available matching funds, usually obtained by passing a bond vote.
- The bond vote, however, doesn't commit the City to move forward with any project.
- Vergennes City Council will still need to approve each stage of the project

# Article #2 on the March 1 Ballot

• Article #2 on the March 1 ballot asks residents to vote on a bond to renovate the city's decades-old sewer collection system and wastewater treatment facility.

· · · ·	CITY OF VERGEN	NES OFFICIAL BA	ALLO I	
Twenty-Five Million F reduced by state and by the City for the im the City's wastewater	ral obligation bonds or notes of the Five Hundred Thousand dollars ( l federal grants-in-aid estimated a provements, be issued for the p r collection system and treatment fillion Five Hundred Thousand do	\$25,500,000), which aut at eight million to thirteer purpose of financing the t facility, the estimated co	horized amount shall be million dollars received cost of improvements to	YES O NO O

• The bond vote, however, doesn't commit the City to move forward with any project.

Vergennes City Council will still need to approve each stage of the project

# How to vote in the Annual City Election, March 1, 2022

#### **Request an Absentee Ballot Package**

Visit the City's website – <u>www.Vergennes.org</u> – and to request an absentee ballot package for the Annual City Election. The ballot package will include the local ballot, the ANwSD ballot, and the Patricia Hannaford Career Center Ballot. Absentee ballots will be ready by February 9th. You may submit an absentee ballot request at any time and a ballot package will be mailed to you as soon as they are available. If you have any questions about the Annual City Election, or voter registration process, contact City Clerk Britney Aube by phone at 802-877-2841, or be by email at clerk@vergennes.org.

#### Or, Vote in Person at the Vergennes Fire Station on March 1

• Polling site at the Vergennes Fire Station, 50 Green Street in Vergennes, is open on March 1, 2022, from 9 am to 7 pm