



**CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS**

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Chapin Spencer
DIRECTOR OF PUBLIC WORKS

M E M O R A N D U M

To: Tenzin Chokden, Clerks Office
From: Chapin Spencer, Director
Date: March 13, 2020
Re: Public Works Commission Agenda

Please find information below regarding the next Commission Meeting.

Date: **March 18, 2020**
Time: 6:30 – 9:00 p.m.
Place: **645 Pine St – Main Conference Room**

A G E N D A

ITEM

- 1 Call to Order – Welcome – Chair Comments
- 2 5 Min Agenda
- 3 10 Min Public Forum (3 minute per person time limit)
- 4 45 Min Water Resources Rates & Affordability Study
 - A Presentation, C. Spencer & M. Moir
 - B Commissioner Discussion
 - C Public Comment
 - D Action Requested – None

Non-Discrimination

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- 5 15 Min State Revolving Fund Loan Approvals
A Communication, M. Moir
B Commissioner Discussion
C Public Comment
D Action Requested – Vote
- 6 5 Min Approval of Draft Minutes of 2-19-2020
- 7 10 Min Director's Report
- 8 10 Min Commissioner Communications
- 9 **Adjournment & Next Meeting Date – April 15, 2020**

CITY OF BURLINGTON

Water Resources Division

FY 21 Rate and Affordability Program Proposal

March 18, 2020



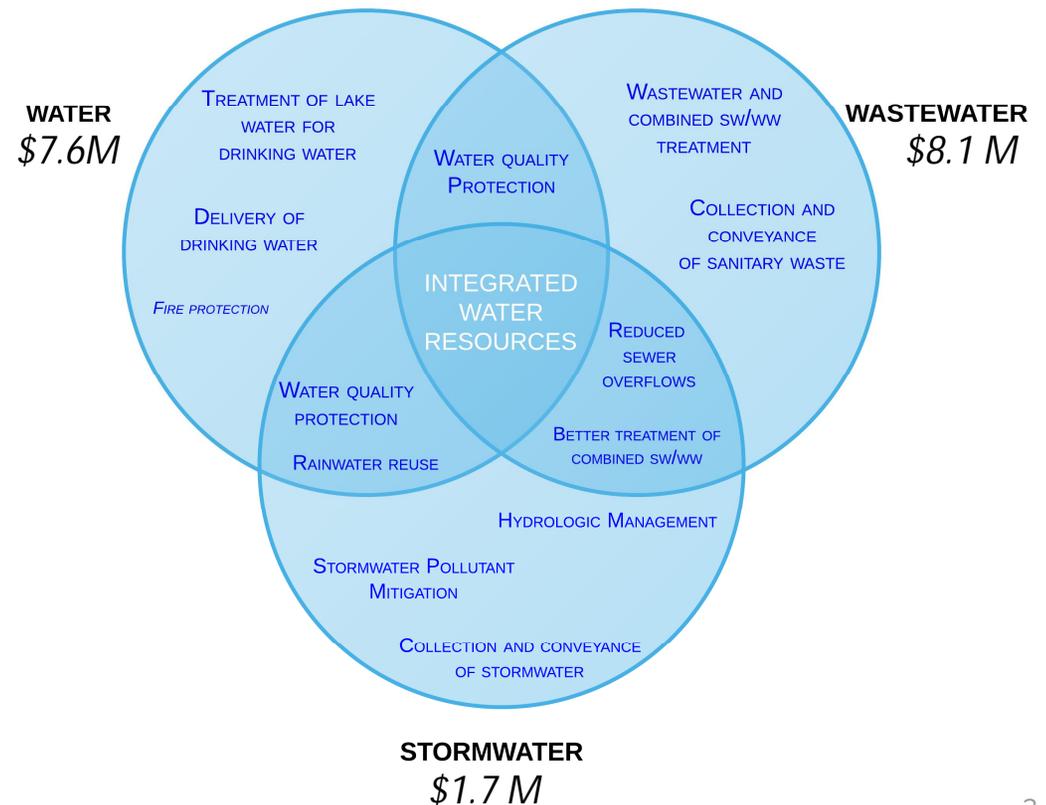
Agenda

- Overview Water Resources utilities
- Reason for the rate study
- Financial needs of the Water Resources Division
- Rate design recommendation
- Affordability program recommendation
- Customer impacts
- Next steps

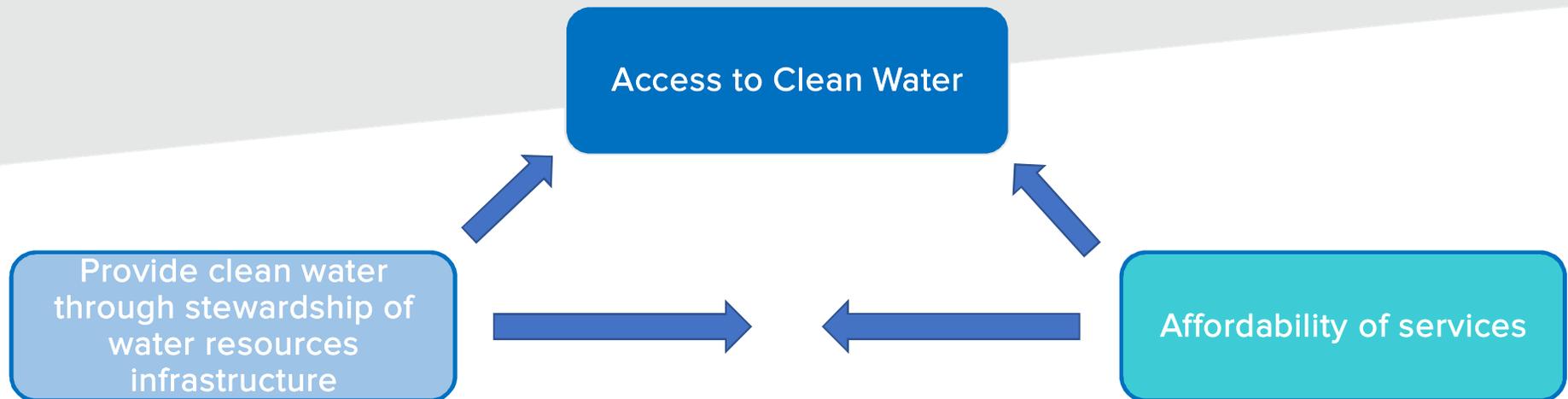


Water Resources Overview

- 3 separate **enterprise funds**
 - › Each fund is independently responsible for the recovery of annual revenue requirements
 - › No reliance on property taxes
- Serve approximately 10,000 connections and 42,000 residents
- 43 full-time staff



Crossroads: Our Core Values & Existing Rate Structure



Sustainable funding is crucial to ensuring access to clean water because we need money to take care of the infrastructure that produces and delivers clean, safe drinking water and collects, treats and manages wastewater and stormwater before it drains to our rivers and the lake. However, when utility costs are not affordable then rate payers may not have equal access to the essential amount of water needed to live.

Rate and Affordability Study - Refresher

- April 2019 – City Council directs Water Resources to evaluate affordability, alternate rate structures, and alternate revenue sources
- Stakeholder process began Fall 2019

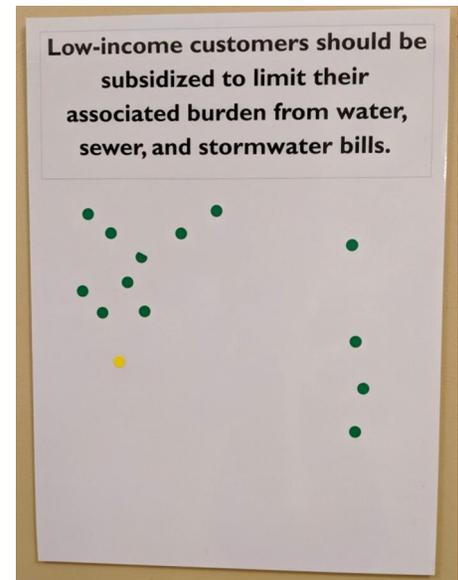


OBJECTIVES:

1. Ensure affordability of rates
2. Improve financial health & sustainability, and revenue stability
3. Ensure rates are recouping costs of the services provided in an equitable manner

Key Feedback from Fall 2019 Outreach Meetings

- Strong **positive** response to:
 - › concepts of protecting access to “essential life water”
 - › subsidizing low-income customers and a tiered residential rate
- **Tentative** support (some attendees needed more details) for implementing:
 - › a capacity fee for new development
 - › fire protection fees (private and public)
- **Mixed** reaction to charging more for irrigation water:
 - › we adjusted our approach based on learning that some stakeholders concerns were related to irrigation for community based food growing systems
- Other feedback/interactions:
 - › need for better customer billing portal, budget plans
 - › request for ability to bill utility costs for separate units in multi-unit properties
 - › some interest (but not universal) in smart metering (real time usage data)
 - › great opportunity for education/interaction with customers



Example of feedback from Open House attendees who participated in dot exercise

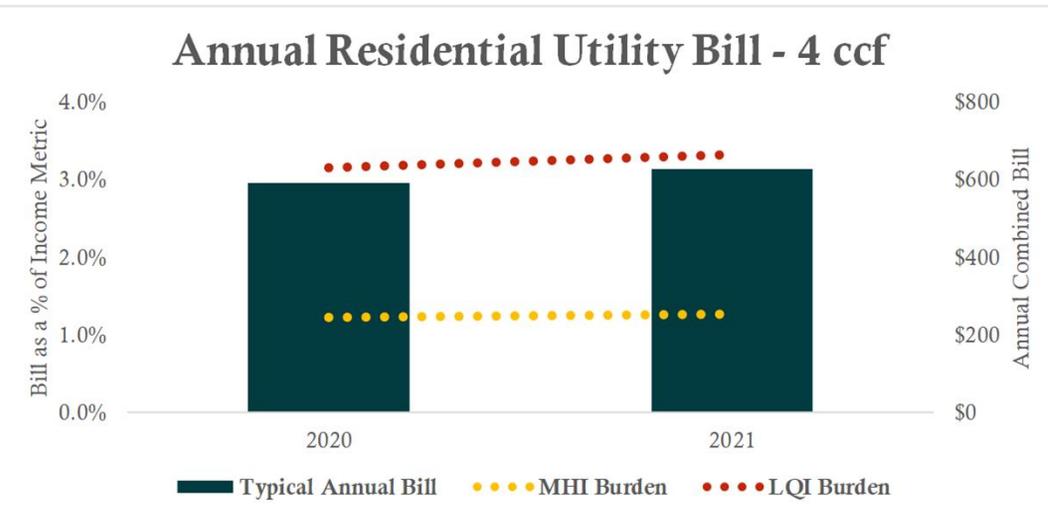
Customer Affordability Analysis



Burlington Utility Affordability Dashboard



MEDIAN HOUSEHOLD INCOME 2020 \$48,415	MEDIAN HOUSEHOLD BURDEN 2020 1.3%	LOWEST QUINTILE INCOME 2020 \$18,736	LOWEST QUINTILE BURDEN 2020 3.3%	% LIVING IN POVERTY 2020 15.6%	ANNUAL UTILITY BILL 2020 \$628	BILL IN HOURS OF MIN. WAGE 2020 55
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Burden by Area

Choose Area ↓

Service Area	Water Consumption (Ccf/Month)	% of Single Family Bills Below	Annual Income		
			Mean of LQI \$10,960	Lowest Quintile \$18,736	Median \$50,432
0	0%	0%	0.7%	0.4%	0.2%
1	8%	8%	1.9%	1.1%	0.4%
2	22%	22%	3.1%	1.8%	0.7%
3	40%	40%	4.2%	2.5%	0.9%
4	57%	57%	5.4%	3.1%	1.2%
5	71%	71%	6.5%	3.8%	1.4%
6	80%	80%	7.7%	4.5%	1.7%
7	86%	86%	8.9%	5.2%	1.9%
8	90%	90%	10.0%	5.9%	2.2%
9	92%	92%	11.2%	6.6%	2.4%
10	94%	94%	12.4%	7.2%	2.7%



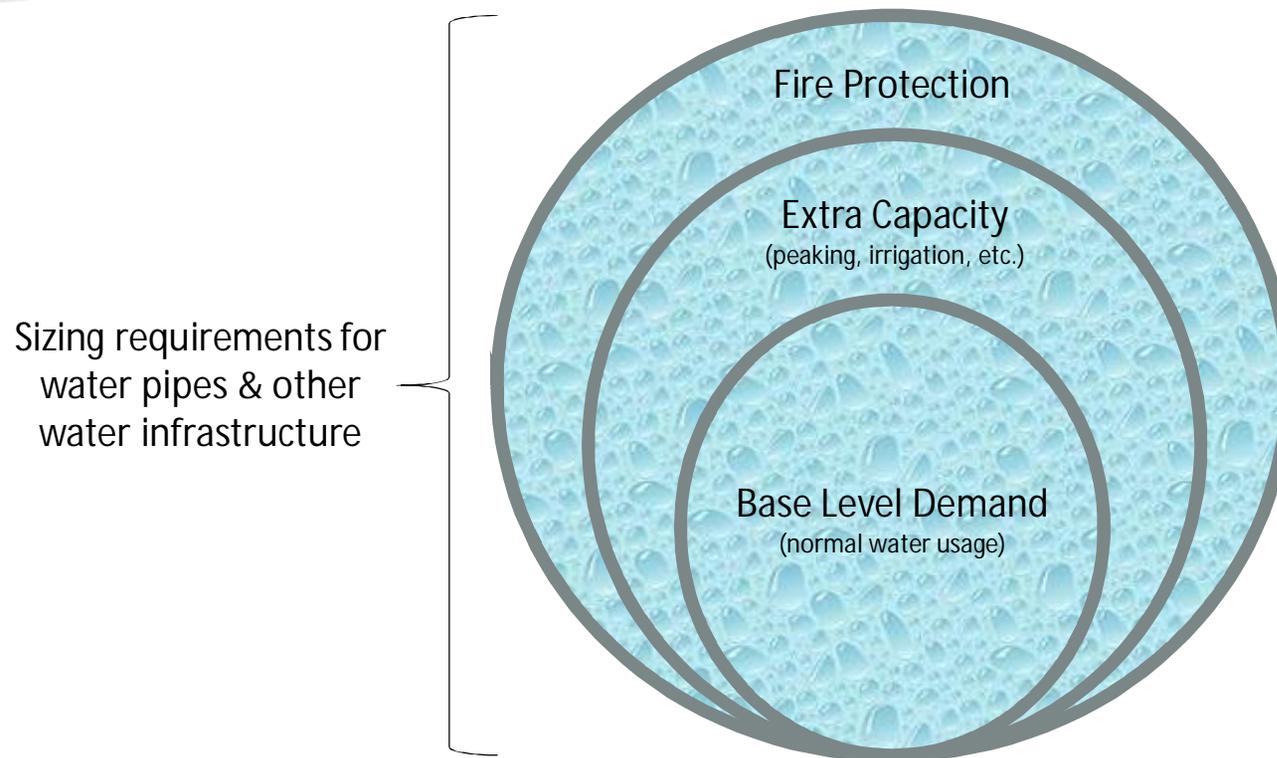
Current Rates (FY 2020)

	Water	Wastewater	Minimum Allowance (cubic feet/month)
<u>Minimum Charge (by meter size)</u>			
5/8"	\$ 0	\$ 0	0
3/4"	\$ 0	\$ 0	0
1"	\$ 22.73	\$ 31.74	512
1.5"	\$ 45.51	\$ 63.55	1,025
2"	\$ 72.68	\$ 101.49	1,637
3"	\$ 145.32	\$ 202.93	3,273
4"	\$ 248.28	\$ 346.70	5,592
6"	\$ 454.12	\$ 634.14	10,228
8"	\$ 1,044.51	\$ 1,458.55	23,525
<u>Volumetric Rate</u>			
All Customers	\$ 4.44	\$ 6.20	
Water Only	\$ 4.53	N/A	
			Stormwater
			Monthly Fee
			FF Single
			\$6.60
			FF Duplex
			\$6.56
			FF Triplex
			\$7.56
			Non-Res (per 1,000 sf)
			\$2.47

Currently, we charge customers the same rate for volumetric Water usage even though it costs more to build and maintain a system for certain users.

Costs of Providing Water Service

Why serving certain customer classes costs more...



Proposed Rate & Policy Changes

Rate Proposals	What is it?	Why do it?
Fixed Charges by Meter Size	A water and wastewater fixed charge that increases based on the size of the customer's water meter	<ul style="list-style-type: none"> • Is industry best practice – reflects cost of service • Improves revenue stability and predictability • Encouraged by bond rating agencies
Lifeline Rate Tier	"Essential" water consumption (below median usage) is charged at a lower rate, only applicable to single-family residential account holders	<ul style="list-style-type: none"> • Provides affordability assistance for customers that use "typical" amount of water (400 cf/month) • Incentivizes efficient water use
Class-Based Rates	Different rates for different classes of customers	<ul style="list-style-type: none"> • Supports all residential customers (single- & multi-family) • Can justify the strains each customer type puts on the utility's infrastructure
Irrigation Rate	A separate, higher rate for those who solely use water for irrigation (with the exception of community gardening initiatives)	<ul style="list-style-type: none"> • Irrigation often contributes to peak water use, which necessitates system expansion and associated costs • Send price signal to conserve water when use is not for basic needs
Private Fire Protection Charges	A separate, fixed, monthly charge that escalates with connection size for those who have private fire service or hydrants	<ul style="list-style-type: none"> • Water Resources has invested in system capacity to serve private properties during a fire event, thus the customers who benefit from this service should pay for that capacity
Water Resources Assistance Program (WRAP)	An affordability program that waives the proposed fixed monthly water and wastewater charge for residential customers at or below 185% of the Federal Poverty Level.	<ul style="list-style-type: none"> • Provides relief to low-income single-family residential customers • Allows greater ability to control their bill (no fixed charge)

Financial Needs of Water Resources Division

Sufficient Revenue is Required for:

1. Operation and Maintenance
2. Debt Service and Bond Covenant Requirements (debt coverage ratios, restricted capital reserves)

Revenue is Prudent to support:

3. Annual PayGo Capital
4. Designated Capital Reserves

Revenue is Desired to support:

5. Additional Customer Assistance Programs (loans/grants for service lines, conservation practices)

Fund	Modeled % Revenue Needs Increase
Water	6%
Wastewater	7%
Stormwater	5%

- The FY21 budget is currently in development!
- The above represents the upper bounds of revenue needs based on current information
- Typical residential customer would see an approximate 6.4% increase, assuming no structural changes

Proposed Water & Wastewater FY 2021 Rates

	Water		Wastewater		Private Fire
	Status Quo	Proposed	Status Quo	Proposed	Proposed
<u>Fixed Charge per Month (by meter size or fire service size)</u>					
5/8"	\$ -	\$ 3.56	\$ -	\$ 5.75	\$ 33.73
3/4"	-	5.51	-	8.90	33.73
1"	24.09	12.25	33.89	19.78	33.73
1.5"	48.24	25.35	67.83	40.94	33.73
2"	77.04	45.45	108.32	73.39	33.73
3"	154.02	92.48	216.57	149.33	33.73
4"	263.15	132.33	370.01	213.67	33.73
6"	481.30	146.06	676.75	235.84	97.97
8"	1,107.01	712.16	1,556.56	1,149.94	208.77
Private Fire Hydrant	N/A	N/A	N/A	N/A	97.97
<u>Volumetric Rate (per 100 cf)</u>					
Single-family Residential					
Tier 1	\$ 4.71	\$ 1.67	\$ 6.63	\$ 6.43	N/A
Tier 2	4.71	4.16	6.63	6.43	N/A
Duplex	4.71	2.50	6.63	6.43	N/A
Triplex	4.71	2.50	6.63	6.43	N/A
Multi-Family Residential	4.71	2.50	6.63	6.43	N/A
Mixed Residential & Commercial	4.71	2.50	6.63	6.43	N/A
Irrigation/Heating/Cooling	4.80	6.66	6.63	6.43	N/A
Commercial	4.71	3.75	6.63	6.43	N/A
City	4.71	3.75	6.63	6.43	N/A

Water Resources Assistance Program (WRAP)

Proposed Assistance Program: Rate Assistance

Rate Assistance Goals	Provide low income customers with meaningful financial relief on their bill.
	Limit administrative burden on Water Resources to implement and maintain program. Explore developing an expansion plan to include other residential property types.
Rate Assistance Details	Waive the water & wastewater monthly fixed meter charge for eligible single family residential properties.
	Households must be living at or below 185% of the Federal Poverty Level.
	Eligible residents will need to provide proof of enrollment in an existing State or Federal benefit program (e.g., Lifeline, 3SquaresVT, Crisis Fuel, SSI, Reach Up, etc.) to be qualified for one year waiver.



FUTURE Assistance Programs

Infrastructure Assistance	Make grant funding available to all residential rate payers for condition assessments of sewer laterals.
	Make low interest (or no interest) loans available to all residential rate payers to replace failing water services or sewer laterals.
Conservation Assistance	Provide efficiency rebates for low flow toilets and energy star appliances.
	Provide free tools (e.g., rain barrels) to implement improved stormwater management practices.

Customer Impacts of New Rate Structure

Who will see lower bills?	Opportunities to further lower Bills
Low income customers who are eligible and sign up for WRAP discount will see reduced bills because of the fixed meter charge waiver.	Customers can further shrink their bill by implementing water conservation practices to reduce consumption above the Tier 1 level (i.e., 400 CF).
Single family residential customers with typical consumption will see little or no increase in bills because of the lifeline rate.	All single family residential customers can implement water conservation practices to reduce consumption above the Tier 1 level (i.e., 400 CF).
Who will see increases on their bills?	Opportunities to mitigate bill increases
All properties with private fire services or hydrants will see increased bills because of the fixed charge per protective infrastructure.	Customers can remit updated information about their fire protection infrastructure for validation against existing records.
Irrigation customers will see increased bills because of the fixed meter charge and rate.	Customers can decide whether to retain their irrigation system or explore removal.
Customers with large meters but low usage will see increased bills because the minimum allowance has been eliminated.	Customers can request an evaluation of whether their existing meter(s) can be reduced in size.
Customers with vacant homes or very low usage will see increased bills because of the fixed meter charge.	Customers can decide whether to have their meter removed and water shut off during an extended period of vacancy.



Customer Impacts of New Rate Structure



Caveat! These are estimated customer bills based on FY19 customer class trends.

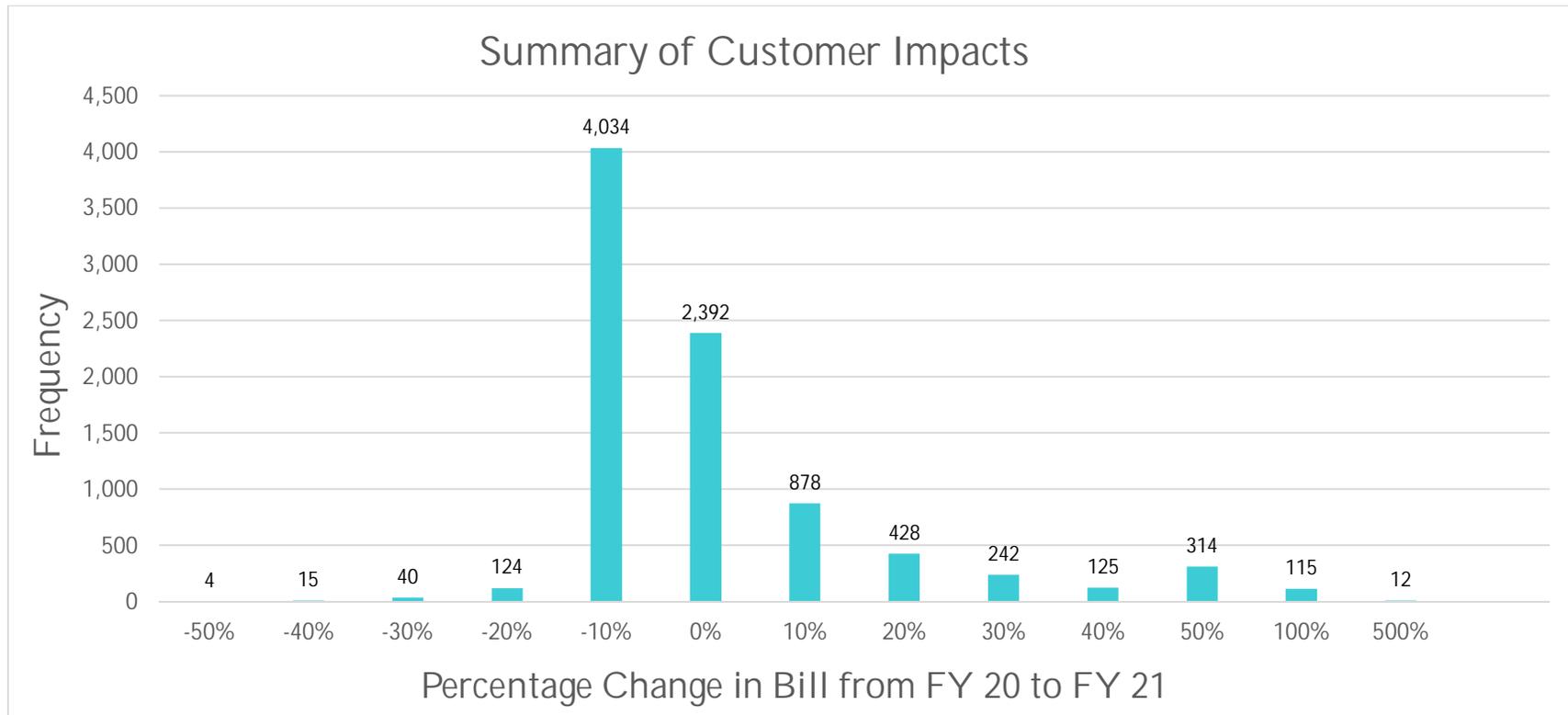
Actual bills will vary based on water consumption. Meter size and private fire services and hydrants will also affect bills. See “Customer Impacts Chart and Examples” in supplementary handouts.

Customer Description	Meter Size	Usage per Month (cf)	Fire Connection	Stormwater Basis	FY 20 Monthly Bill	Proposed FY 21 Monthly Bill	Difference (\$)	Difference (%)	Comments
Low-Volume WRAP Participant	5/8"	200	No	Single-Family	\$ 28.62	\$ 23.37	\$ (5.25)	-18.4%	Significant decrease in bill from WRAP Program!
Typical WRAP Participant	5/8"	400	No	Single-Family	\$ 50.65	\$ 40.09	\$ (10.56)	-20.8%	Significant decrease in bill from WRAP Program!
Low-Volume Single-Family	5/8"	200	No	Single-Family	\$ 28.62	\$ 33.32	\$ 4.70	16.4%	Customer has a fixed charge for the first time, but bill only increases \$5/month
Typical Single-Family	5/8"	400	No	Single-Family	\$ 50.65	\$ 50.07	\$ (0.58)	-1.1%	Benefits from lifeline rate (cheaper water)
Typical Multi-Family	5/8"	600	No	Duplex	\$ 72.63	\$ 71.95	\$ (0.69)	-0.9%	Benefits from lower multi-family volumetric rate
Typical Multi-Unit Residential	5/8"	900	4"	4,000 sq. ft. of IA	\$ 108.99	\$ 136.87	\$ 27.88	25.6%	Potentially large increase due to fixed charge, fire protection, and low consumption
Small Commercial	5/8"	1,000	No	4,000 sq. ft. of IA	\$ 120.00	\$ 125.31	\$ 5.30	4.4%	Small increase
Small Commercial	5/8"	1,000	4"	4,000 sq. ft. of IA	\$ 120.00	\$ 159.03	\$ 39.03	32.5%	Large increase due to fire protection availability
Large Commercial	1.5"	12,400	6"	13,000 sq. ft. of IA	\$ 1,397.48	\$ 1,505.98	\$ 108.50	7.8%	Modest increase due to fire protection availability
Typical Irrigation	5/8"	1,000	No	1,000	\$ 45.95	\$ 72.62	\$ 26.66	58.0%	Significant increase to incentivize conservation

Distribution of Draft Customer Impacts



Caveat! These are estimated customer bills based on FY19 customer class trends. Actual bills will vary based on water consumption. Meter size and private fire services and hydrants will also affect bills. See “Customer Impacts Chart and Examples” in supplementary handouts.



Next Steps

q Outreach (March 2020-April 2020)

- Ø NPAs 
- Ø Meet with key community partners and other large users
- Ø Individual notification to customers with fire services, hydrants & irrigation meters
- Ø Host informational public meeting for all rate payers
- Ø Regular updates to project webpage including a recordings of presentations and opportunities to request an account impact summary or remit general feedback and questions.

q Continuous Improvement (March 2020-July 2020)

- Ø Incorporate feedback from all stakeholders
- Ø Review, validate and respond to impact summary requests
- Ø Ongoing QA/QC with data and required updates to billing system

q Approvals (April 2020-June 2020)

- Ø City Council vote on rate structure, fire & WRAP proposals
- Ø City Council vote for FY 21 Mayoral budget and all City rates

q Implementation (July 2020-August 2020)

- Ø Proposed changes effective on 7/1/20
- Ø Bills mailed starting 8/19/20



Project Website

<https://www.burlingtonvt.gov/DPW/Water/AffordabilityProject>

Thank you!





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Chapin Spencer
PUBLIC WORKS DEPARTMENT DIRECTOR

Megan Moir
WATER RESOURCES DIVISION DIRECTOR

MEMORANDUM

TO: DPW Commission

FROM: Megan Moir, Ashley Walenty and Martin Lee, DPW - Water Resources

DATE: March 13, 2020

CC: Chapin Spencer, DPW Director
Steve Roy, Senior Water Resources Engineer

RE: DPW Commission Authorization to Issue Water and Wastewater Revenue Bonds for Construction of:

- Drinking Water Distribution System Improvements
- Wastewater Disinfection System Improvements
- Wastewater Pump Station Infrastructure Improvements
- Wastewater SCADA/PLC Computerized Control System Improvements
- Wastewater Collection System Improvements

INTRODUCTION

Even though Board of Finance and City Council ultimately provide the authorization for Burlington Water Resources to apply for and execute State Revolving Loans from the Drinking Water State Revolving Fund (DWSRF) and Clean Water State Revolving Fund (CWSRF), because the DPW Commission is the entity ultimately responsible for the management of the wastewater and drinking water systems, it is prudent to have the Commission approve the issuance of this new debt.

The sections below provide background on the projects that are to be funded through the issuance of this debt. This memo requests that the DPW Commission approve the attached supplemental bond resolutions:

- Drinking Water System Revenue Bonds, Series 2020 for up to \$1,094,000
- Wastewater System Revenue Bonds, Series 2020 for up to \$7,700,000

We will be returning to the DPW Commission in April to seek authorization for Stormwater

Revenue bonds to fund Stormwater Collection System work.¹

Drinking Water Distribution Improvements Background

Since we received bond vote approval in 2016, we have been actively rehabilitating water mains throughout the city every construction season. To date, we have used \$7.25M of our \$8.344M voter approval – which has enabled us to rehabilitate 7.7 miles of our 110-mile water distribution system. This construction year we have more water main rehabilitation planned as part of a joint construction contract that covers water distribution work, sewer collection system improvements and stormwater collection system improvements. The construction contract may span from 2020 to 2021. The distribution project cost estimate (with contingency) is \$1,960,059.

The water main rehabilitation work will be funded with remaining bond proceeds from the \$2M 2018B Bond sale (\$776,704) and a small amount (\$89,355) of annual PayGo capital funding, but will also need to leverage our remaining voter approved \$1.094 M in capital funding. This year will be Burlington's first year in recent history to utilize Drinking State Revolving Fund (DWSRF) money to fund a portion of the construction project.² This memo seeks approval to submit a loan application to the DWSRF program that will result in the issuance of up to \$1.094M in new debt for to cover a portion of the water distribution construction costs. This project is close to being competitively bid for construction. Because of loan processing timelines, the State recommends applying for the construction loan in advance of bidding. The final loan amount will be based on the final cost of the project (within the loan limit).

The DWSRF carries specific requirements during procurement, design, and construction phases of projects. While this adds some time on the front end, it is balanced by the lower borrowing costs (less than 3% administration/interest rates), ability to extend repayment out past 20 years and a delayed repayment period (1 year from the completion of construction) which gives us some flexibility in budgeting for debt service. Both of these benefits can result in mitigated rate increases for our residents and customers.

Drinking Water Project Summary

The **Distribution System Improvements project** is being bundled with other City construction work. The joint project is called the 2020 Distribution and Collection System Improvements project. The work includes: Relining of up to 5,600 feet of water mains, installation of up to 2,000 feet of a new water mains as well as relining of up to 45,000 linear feet of sewer and stormwater mains, replacement of up to 2,500 feet of sewer and stormwater mains. The construction contract will also include full width paving restoration on streets that are coincident with the capital paving program. The intent of the bundled construction project is to ensure the contractor is responsible for coordinating different work types across different project locations in the City Right of Way. We believe this will encourage the contractor to be more efficient. The construction contract will likely span between 2020 and 2021. Bid documents are being

¹ This is because debt incurred for the portions of the stormwater collection system upgrade must be paid back by the Stormwater enterprise fund. As such, a separate Stormwater System Revenue General Bond Resolution must be prepared and then brought to the DPW Commission, Board of Finance and City Council for approval. The timing of the Wastewater projects is more critical and so these projects (including the Wastewater portion of the collection system project) are being advanced now.

² Similar to the Clean Water State Revolving Fund (CWSRF), which offers low interest loans to municipalities for infrastructure projects, State also has a Drinking Water State Revolving Fund (DWSRF) loan program. The final admin and interest rates are determined by a number of factors including the Median Household Income of the community the rate payer burden in paying the debt service. The State has informed us that we will likely qualify for an admin/interest rate of less than 3%, which makes the DWSRF borrowing costs less than the private bond market.

completed now so a contractor can be solicited and construction work can start in the spring or summer of 2020. Design work has been completed in-house by DPW staff engineers. However, we have procured a resident engineer for the bundled contract that was approved by the Board of Finance and City Council on March 9, 2020.

Drinking Water Project Cost and Loan Summary

The following summary table outline the estimated project construction costs and the corresponding DWSRF Loan for which we are seeking approval. We have estimated a not to exceed (NTE) value equal to our remaining bonding authority (\$1,094,000) for our loan application (Draft Loan Application attached) to ensure there is adequate contingency to make reasonable scope of work adjustments during the final review of the scope by the State:

Distribution System Improvements Funding Plan

Funding Source	Estimated Costs	Total Estimated Project Cost¹ (with contingency)
Remainder of Bond Proceeds	\$776,704	\$1,960,059
Fund 460 (Water Fund)	\$89,355 ²	
DWSRF Step III Loan (remainder of 2016 Bond Authority)	\$1,094,000	

Note 1: Includes Resident Engineer costs (\$70,839)

Note 2: Additional enterprise capital funds are possible. The amount shown is what is currently needed from Fund 460 to meet current total estimate project estimates.

Please note that the current construction bid documents include some bid alternates which will allow for project costs to be lowered if necessary to fall within available funds for the proposed distribution work. Prior to construction we will seek Board of Finance and City Council approval to execute a construction contract and at that time will re-affirm our funding plan above to detail the revenue that will pay for the actual bid costs.

Clean Water (Wastewater) Improvements Background

The Clean Water Resiliency Plan (CWRP) advances seven key areas to stabilize and modernize Burlington’s wastewater and stormwater system. We have been actively working on implementing all facets of the CWRP since receiving 92% voter approval for the \$29,958,000 Bond vote in November 2018. More information on the CWRP can be found here:

<https://www.burlingtonvt.gov/dpw/water/cwrp/>

This memorandum focuses on critical next steps in advancing three key areas: (1) Investing in our wastewater treatment plants (disinfection systems and Main Plant SCADA/PLC computerized control system); (2) updating the Flynn and Fletcher pump stations; (3) updating our Wastewater collection system. These projects are close to being competitively bid for construction.

Water quality and rate affordability guide every decision we make. Therefore, we are advancing work through loans from the Clean Water State Revolving Fund (“CWSRF”). The CWSRF carries specific requirements during procurement, design, and construction phases of projects. While this adds some time on the front end, it is balanced by a lower cost (2% admin fee), potential access to subsidy and pollution control grants, repayment periods that can extend past 20 years where appropriate for longer life infrastructure, and a delayed repayment period (1 year from the completion of construction) which gives us some flexibility in budgeting for debt

service. These benefits result in mitigated rate increases for our residents and customers.

Additionally, the State has designed an innovative natural resources project³ sponsorship program called the Water Infrastructure Sponsorship Program (WISPr) which allows traditional wastewater and stormwater infrastructure project borrowing to create funds that can be used restore wetlands and streams, create river corridor easements, plant stream buffers, restore lake shoreland, remove dams and other projects that create water quality benefits. Funds for these type of projects are created by the municipality borrowing up to 110% of the cost of the traditional project. The State then makes the extra borrowing debt service cost neutral by adjusting the administrative fee rate to reflect 100% forgiveness of the sponsored project. The resulting administrative fee will be further reduced by 0.1% to provide overall debt service cost savings to the municipality. So while participation in WISPr is optional, we are interested because it supports other Vermont water quality projects and it provides a modest financial benefit for our ratepayers (See Attachment A for program details). Lastly, it is possible that Burlington may be receive additional phosphorus reduction credit for the water quality benefits derived from these natural resource projects (See Attachment B). We are planning on pursuing WISPr sponsorship for all of our projects except the SCADA/PLC project which is on an expedited timeline.

The request for approval documented in this memo represent the first steps to initiate borrowing for up to \$7,039,446 of our \$30M voter authorization, and an initial WISPr sponsorship amount of up to \$660,554 for a rounded total of up to \$7,700,000.

Wastewater Project Summaries:

Disinfection and Wastewater Infrastructure Improvements includes work to replace critical disinfection equipment. Each of Burlington's WWTPs has a disinfection system that provides chemical treatment to ensure bacteria levels in the plant's effluent remain low. While we have replaced significant portions disinfection equipment since the Main WWTP upgrade in 1994, critical pieces of equipment that are original to the upgrade 25 years ago remain in service. In 2018, two of the three WWTPs (Main and North Plants) experienced three different failure incidents in their disinfection systems. Bid documents are being completed now so a contractor can be solicited and construction work can start in the spring or summer of 2020.

Remote Wastewater Infrastructure Improvements design work includes upgrading and/or replacing approximately eleven of the twenty-five existing wastewater pump stations throughout the City's network. Most of the current pump stations in the City's network are 50 years or older and recent failures have resulted in emergency repairs. This work is planned to be accomplished throughout multiple phases to ensure the projects are spread out over the duration of the proposed bond timeline as this will allow for sufficient staff resource and preserve the ongoing resiliency of the system. Bid documents are being completed now so a contractor can be solicited and construction work on two pump stations, Flynn and Fletcher, can start in the spring or summer of 2020.

SCADA/PLC (Supervisory Control and Data Acquisition/Programmable Logic Control) is commonly referred to as the "controls" at a wastewater treatment plant (WWTP) and it is built with industrial computer components. SCADA/PLC improvements were identified as a high

³ Natural resources projects are defined as a project to protect, conserve, or restore natural resources, including the acquisition of easements and land for the purposes of providing water quality benefits (24 VSA Chapter 120 §4752).

priority project because the 1993 vintage hardware that controls Main WWTP has exceeded its useful life. In the summer of 2018 there was a failure of a component of the controls system at the Main Wastewater Plant that contributed to a wastewater discharge violation. We have worked with the State to advance this project as a design/build. The design portion is complete and we are now ready for construction this summer.

Collection System Improvements is being bundled with other City construction work. The joint project is called the 2020 Distribution and Collection System Improvements project. The work includes: Relining of up to 5,600 feet of water mains, installation of up to 2,000 feet of a new water mains, relining of up to 45,000 linear feet of sewer and stormwater mains, replacement of up to 2,500 feet of sewer and stormwater mains. The construction contract will also include full width paving restoration on streets that are coincident with the capital paving program. The intent of the bundled construction project is to ensure the contractor is responsible for coordinating different work types across different project locations in the City Right of Way. We believe this will encourage the contractor to be more efficient. The construction contract will likely span between 2020 and 2021. Bid documents are being completed now so a contractor can be solicited and construction work can start in the spring or summer of 2020. We are not seeking approval of engineering services as part of this project because design work has been completed by DPW staff engineers. As mentioned above, this memo only approves the work planned for the upgrades on the wastewater portion of the collection system, specifically the sanitary and combined sewer pipes and manholes.

Wastewater Project Cost and Loan Summary:

All of these Wastewater project costs will be funded through the CWSRF program. The following summary tables outline the costs that comprise the total CWSRF Loan amounts for which we are seeking approval. Step III Construction Loans roll up all of the costs incurred on a project, including previous Step I (Planning) or Step II (Final Design) loans. DPW engineering project management time during the construction phases is eligible for loan reimbursement. We plan on leveraging this opportunity for most projects and we have estimated DPW engineering costs associated with each project in the following tables. We have estimated not to exceed (NTE) values for our loan applications to ensure there is adequate contingency to make reasonable scope of work adjustments during the final review of the scope by the State and during the bid process.

We are also showing the expected loan forgiveness awarded to these projects during the planning and design phase (\$516,762 in total) and, for the WISPr authorization, the additional loan increment (10% of project cost) and the overall debt service cost savings expected under the WISPR sponsorship program should our infrastructure projects be successfully matched with a natural resource project. The WISPr fund sponsorship borrowing does not impact the total amount of our bonding authority.

Disinfection and Wastewater Infrastructure Improvements

Item	Estimated Costs	Loan Type
Preconstruction eligible costs which include consulting engineers and staff engineers	\$195,000	Step III Loan Construction Costs which includes all preconstruction eligible costs and Step III costs (TOTAL NTE \$2,430,400)
Step III: DPW Staff Engineering NTE	\$41,000	
Step III: Wright Pierce Construction Engineering	\$247,800	
Step III: Construction Estimate with contingency	\$1,917,600	
Step III: Construction Permits	\$29,000	
WISPr Capacity (10% of project costs)	\$243,040	Total Loan including WISPr funding: \$2,673,440

Loan principal forgiveness: \$97,500

Amount of borrowing costs to be forgiven under WISPr: \$243,040

Estimated additional borrowing cost savings due to WISPr (0.1% admin fee savings): \$27,181

Remote Wastewater Infrastructure Improvements

Item	Estimated Costs	Loan Type
Preconstruction eligible costs which include consulting engineers and staff engineers	\$170,704	Step III Construction Loan which includes all preconstruction eligible costs (TOTAL NTE \$1,563,754)
Step III: DPW Staff Engineering NTE	\$43,000	
Step III: Hoyle Tanner and Associates Construction Engineering	\$164,850	
Step III: Construction Estimate with contingency	\$1,167,600	
Step III: Construction Permits	\$17,600	
WISPr Capacity (10% of project costs)	\$156,375	Total Loan including WISPr funding: \$1,720,129

Loan principal forgiveness: \$85,532

Amount of borrowing costs to be forgiven under WISPr: \$156,375

Estimated additional borrowing savings due to WISPr (0.1% admin fee savings): \$14,640

SCADA/PLC Project

Item	Estimated Costs	Loan Type
Step III: Construction Estimate with contingency	\$400,000	Step III Construction Loan which includes all preconstruction eligible costs (TOTAL NTE \$425,000)
Step III: DPW Staff Engineering NTE	\$25,000	
WISPr Capacity (10% of project costs)	N/A	N/A

Loan principal forgiveness: \$100,000

Collection System Improvements (Wastewater Only)

Item	Estimated Costs	Loan Type
Preconstruction eligible costs which include consulting engineers, staff engineers and permitting	\$467,821	Step III Construction Loan which includes all preconstruction eligible costs (TOTAL NTE \$2,611,298)
Step III: Construction Estimate with contingency	\$2,143,478	
WISPr Capacity (10% of project costs)	\$261,129	Total Loan including WISPr funding: \$2,872,427

Loan principal forgiveness: \$465,408

Amount of borrowing costs to be forgiven under WISPr: \$261,129

Additional borrowing cost savings due to WISPr (0.1% admin fee savings): \$30,730

The above are estimates prior to construction bidding. The total amount of estimated borrowing (with WISPr) is \$7,690,996. **The request for overall loan authorization request (with WISPr sponsorship) is up to \$7,700,000.**

Motion for the DPW Commission

DPW Water Resources requests that the DPW Commission approve the following motions:

1. To approve the DPW Commission Supplemental Bond Resolution for Issuance of Water System Revenue Bonds, Series 2020, up to \$1,094,000
2. To approve the DPW Commission Supplemental Bond Resolution for Issuance of Wastewater System Revenue Bonds, Series 2020, up to \$7,700,000.

Thank you for your consideration of this request.

ATTACHMENTS

- Attachment A: Department of Environmental Conservation WISPr Procedure (6/4/2019)
- Attachment B: Memo from Stormwater Program regarding potential phosphorus credit for flood plain restoration projects
- Attachment C: DPW Commission Supplemental Bond Resolution for Issuance of Water System Revenue Bonds, Series 2020.
- Attachment D: DPW Commission Supplemental Bond Resolution for Issuance of Wastewater System Revenue Bonds, Series 2020.

State of Vermont
Agency of Natural Resources
Department of Environmental Conservation

Procedure:	Vermont Water Infrastructure Sponsorship Program (WISPR)	Effective Date:	6/4/2019
Applicable To:	Department of Environmental Conservation	Revision Date:	XX/XX/XXXX
Prepared/ Revised by:	Ashley Lucht and Terisa Thomas	Approved By:	Eric Blatt

A.L.

T.T.

E-SIGNED by Eric Blatt
on 2019-06-04 16:27:30 GMT

Procedure Objective

To outline policy and procedure surrounding the state of Vermont Clean Water State Revolving Fund (CWSRF) sponsorship program, Vermont Water Infrastructure Sponsorship Program (WISPR). This program was authorized under Act 185 of 2018 and described in 24 VSA Chapter 120 §4752 as: *“an arrangement in which natural resource projects are paired with water pollution abatement and control facilities projects, as defined in 10. V.S.A. §1571 for the purposes of water quality improvement. Under the sponsorship program, a municipality may obtain a loan for both a natural resources project and a water pollution abatement and control facilities project. The loan rate and terms shall be adjusted to forgive all or a portion of the natural resources project over the life of the loan. Only municipalities and nonprofit organizations may receive funds under a sponsorship program.”*

Background

WISPr is intended to address a limited and under-assisted category of water resource needs in Vermont known as natural resource projects. While significant progress has been made in reducing the impacts of municipal wastewater treatment on water quality, the best available data indicates that impacts from nonpoint source runoff, habitat degradation, and watershed disturbances may be impeding overall rates of water resource improvements. The goal of WISPr is to counter the loss of ecological function and biological diversity that jeopardize the health of Vermont’s water resources. This program will help achieve this goal by providing additional funds to finance the implementation of natural resource projects that protect or restore water resources.

WISPr intends to utilize the Clean Water Initiative Program’s Ecosystem Restoration Grants Application Manual for project eligibility, application requirements, and implementation expectations. There are expectations and requirements that are WISPr specific which are outlined in this Policy.

Impacted Departments or Divisions

Staff within the Facilities Engineering Division, Watershed Management Division and Clean Water Initiative Program.

Governing Documents

- Environmental Protection Rule Chapter 2, Municipal Pollution Control Priority System
- Clean Water Initiative Program’s Ecosystem Restoration Grants Application Manual, current version

Roles of Implementers and Sponsors:

Municipalities that apply for CWSRF loans are eligible to participate in WISPr by undertaking natural resource projects themselves or by sponsoring an approved project that is undertaken by a nonprofit entity. For purposes of this policy, the “sponsor” is the municipality that is applying for the traditional water pollution abatement and control facility project and the implementer will refer to the entity (either municipal or nonprofit) that will undertake construction, legal control, and long-term operation and maintenance of the natural resource project.

Sponsoring project types:

Water pollution abatement and control facilities projects are defined as eligible projects for the purposes of sponsoring natural resource projects. Water pollution abatement and control facilities projects, also referred to as “traditional” projects, may involve a number of project types. For example, any project that intends the prevention, management, treatment, storage, or disposal of:

- Stormwater
 - Gray Infrastructure:
 - Traditional pipe, storage, and treatment systems
 - Green Stormwater Infrastructure (GSI):
 - Rainwater harvesting
 - Bioswales
 - Green roofs, streets, parking
 - Pervious pavement
- Sewage
 - Wastewater treatment facility (WWTF) refurbishments or upgrades
 - Filtration or disinfection
 - Decentralized (soil-based) systems
- Combined Sewer Overflows (CSOs)
 - Separation of sanitary and storm sewer
 - Downspout disconnection

WISPr Project Types:

Sponsored projects must be natural resource projects and must be owned or controlled by either a municipality or nonprofit organization, except in the case of dam removal. Natural resource projects are defined as a project to protect, conserve, or restore natural resources, including the acquisition of easements and land for the purposes of providing water quality benefits (24 VSA Chapter 120 §4752).

WISPr eligible projects must be consistent with the Clean Water Initiative Program's Ecosystem Restoration Grants Application Manual, Section C Natural Resource Restoration and Protection Projects.

WISPr Eligibility Determination

1. All projects seeking WISPr eligibility must apply to ERP, WISPr will use the ERP grant funding cycle for solicitation of projects
2. All ERP eligible projects will be offered WISPr planning and/or design funding until the WISPr funding cap is reached
3. The Department will fund planning and/or design for NR projects using either WISPr or ERP
4. WISPr and CWIP staff will meet after project eligibility determinations are made to evaluate projects for pairing with Municipal projects

Ranking of WISPr Project(s) with a Municipal Project:

A municipality must indicate the intent to sponsor a WISPr project upon submittal of a Step III loan application.

Timing of WISPr Project:

Because the WISPr project is reliant on a municipal project for funding, the timing of project implementation and completion is critical for ensuring a viable WISPr project. The program will enforce timing of the projects as such:

1. The sponsored project must reach final completion, have submitted for final disbursement, and in the event of a municipal-non-profit agreement, costs transferred to the municipality's loan, prior to the sponsoring project's repayment start date.
2. The municipal project's final completion date governs the repayment start date.
3. It is the policy of the program that loans begin repayment one year after final completion as identified in the balancing change order for the sponsoring project.

Financial Arrangement of Sponsorship:

1. A municipality is eligible to sponsor a NR project based on a 10:1 CWSRF to WISPr ratio. For example, a \$1M pipe replacement project can sponsor up to a \$100,000 land conservation project.
2. The municipality will receive one loan for both projects. In the example given above, the loan will be for a total of \$1.1M.

3. The administrative fee rate will be reduced from 2% in one-tenth of a percent increments until the sponsored project is forgiven over the payback of the loan. As a benefit to the municipality for participating in WISPr, the loan will be further reduced by .1%. In the example given above, the loan would be reduced to a 0.9% administrative fee rate.

The program has a responsibility to ensure that this exemption only be applied to an amount that will be forgiven. Given the variable nature of projects and potential challenges in timing, the program will take the following steps:

1. An initial loan agreement and draft amortization schedule will be completed, assuming the projects proceed according to the schedule and that 100% of the sponsored project will be forgiven.
2. In the case where either project is unable to proceed according to schedule, regardless of fault, the municipal loan agreement will default to a non-sponsorship program loan agreement and the municipality will repay at the standard CWSRF administrative rate. Any funds previously disbursed to the sponsored project will be forgiven and attempts will be made to secure additional financing to finalize the project.
3. Additionally, the sponsoring project may come in under budget. In order to offer predictable financing for the sponsored project, the CWSRF will honor the originally proposed forgiveness amount and will adjust the administrative rate to cover 100% of the natural resources project. In the previous example, if the \$1M project ended as a \$800,000, the administrative rate will be reduced to forgive the full \$100,000.
4. If a sponsoring project's final costs are less than or equal to 50% of their initial agreement amount, the project will not receive the administrative rate reduction. In no situation will the administrative fee be below 0%.

WISPr Project Financing:

Municipality sponsoring a municipally-owned NR Project:

To proceed to an executed loan agreement, the following steps should be followed:

1. CWIP application
2. CWSRF Step III funding application for all project costs
3. Bond counsel opinion letter indicating the Municipality is eligible to sponsor a project using WISPr.

Upon execution of a loan agreement, all WISPr project expenses will be submitted to FED for disbursement using procedures already in place. All WISPr eligible project costs will be paid under the CWSRF (RF1-XXX) loan. Upon completion of both projects, the loan will be closed out and the administrative rate will be adjusted to reflect 100% forgiveness of the NR project.

Municipality sponsoring a Private Non-Profit-owned NR Project:

Once the IUP and Priority List are adopted, the CWSRF program will pair a municipal and WISPr project. The WISPr project will then need the following to receive a loan to implement the NR project:

1. CWIP application
2. Resumes for the organization's management team
3. Step III CWSRF application from municipality for all project costs
4. Bond counsel opinion letter indicating the Municipality is eligible to sponsor a NR project using WISPr.

Upon execution of a loan agreement with VEDA, all WISPr project expenses will be submitted to FED for disbursement using procedures already in place. All WISPr eligible project costs will be paid under the WISPr (SPR-XXX) loan. Once the WISPr project is complete, all costs will be transferred to the corresponding CWSRF (RF1-XXX) loan. Upon completion of the municipal project, the loan will be closed out and the loan administrative fee will be adjusted to reflect 100% forgiveness of the sponsored project.

Funding of Multiple Sponsored Projects:

There may be situations that occur where the sponsoring to sponsored project ratio allows for multiple sponsored projects. For example, if a municipality is completing a WWTF upgrade for a total cost of \$10M, the amount of eligible sponsored projects would be approximately \$1M. In this situation, the municipality may choose to sponsor only one project at a lower ratio. For example, a \$500k sponsored project may be identified and it would be forgiven at a ratio of 20:1.

However, a municipality may choose to pair with multiple sponsored projects that total the approximate 10:1 ratio. For example, two land conservation easements totaling \$100k, a dam removal of \$500k, and a wetland reconstruction project of \$400k may be identified. These four sponsored projects could be bundled together into one sponsorship application. The challenge to this arrangement would be timing multiple projects to ensure that all sponsored projects are completed prior to repayment start date of the sponsored project.

Municipal Bonding Requirements:

Act 185 provided the governing body the authority to participate in the sponsorship program without formal voter authorization provided that:

- The amount of the debt incurred for the natural resource project does not exceed an amount to be forgiven or cancelled upon the completion of the project, and
- The municipality obtains voter approval for the water pollution abatement and control facilities project (the sponsoring project).

Federal Crosscutter Requirements for Sponsored Projects:

Treatment Works Policy

As of September 2017, Vermont CWSRF adopted its Treatment Works Policy, wherein it defined which project types would be considered treatment works versus non-treatment works. Based on that policy, WISPr projects will be considered non-treatment works projects. This means these projects are exempt from the following federal crosscutters:

- American Iron & Steel
- Davis Bacon Wage Act
- Fiscal Sustainability Planning
- Environmental Review

Utilization of Tier 2 Funds

The CWSRF will be using Tier 2, or repayment funds, to support WISPr projects. This means WISPr funds can be used as a non-federal match for projects where this is required. It also means that the only Federal Crosscutter that applies to these funds is Disadvantaged Business Enterprise (DBE).

Vermont Department of Environmental Conservation

Watershed Management Division
1 National Life Drive, 2 Main
Montpelier, VT 05620-3522

Agency of Natural Resources

[phone] 802-828-1535
[fax] 802-828-1544

MEMORANDUM

TO: James Sherrard Jr., Stormwater Program Coordinator, City of Burlington

FROM: Padraic Monks, Stormwater Program Manager

DATE: 2/28/2020

RE: Floodplain Access Projects and Phosphorus Credit For Stormwater Requirements

We support the implementation of certain natural resource projects for credit towards phosphorus reduction requirements under the Municipal Separate Storm Sewer System General Permit (MS4 GP).

The Department of Environmental Conservation's Watershed Management Division has reviewed and supports certain methodologies that estimate the phosphorus that may be removed from surface waters as part of floodplain restoration projects. Further, these methodologies may be used to estimate the fraction of phosphorus removed that is appropriately attributable to developed land sources.

Where a floodplain restoration project or similar project results in an increase in the amount of phosphorus entrained in a floodplain, and where such a project is able to estimate the fraction of phosphorus attributable to developed land sources, and where a municipality sponsors such a project, and where such a project is in the watershed for which the municipality is subject to permit requirements to reduce stormwater-related phosphorus, the municipality may apply to receive credit for the project under the Phosphorus Control Plan requirements of the MS4 GP.

The actual phosphorus reduction credit available to the municipality is project-specific and is subject to DEC review and approval. The extent of eligible phosphorus reduction credit is dependent on the accuracy of the information provided in support of the project, the extent of municipal sponsorship of the project, and any other relevant consideration.

Finally, given the Department's overall TMDL implementation strategy for reducing phosphorus from stormwater contemplates addressing stormwater at its source, and given the uncertainty of the ultimate efficacy of natural resource projects in addressing phosphorus reduction from stormwater, the Department reserves the ability to limit the overall fraction of phosphorus reduction from these projects credited towards a municipality's Phosphorus Control Plan – any such limit would be determined in advance of project design and implementation. The Department is committed to further investigation and stakeholder input in determining whether a limit is necessary, and what that limit should be.

CITY OF BURLINGTON, VERMONT

Public Works Commission

RESOLUTION

Be it resolved by the Board of Public Works Commissioners of the City of Burlington, Vermont (the “City”) as follows:

Section 1
Authorization

The Board of Public Works Commissioners (the “Board”) hereby authorizes the issuance of revenue bonds or notes in a principal amount not to exceed **\$1,094,000** to provide for the financing of capital additions and improvements to the waterworks system (the “Water System”), including (i) capital improvements to the City’s underground pipe and water distribution system, water mains, services, valves and hydrants, (ii) to fund a debt service reserve fund, and (iii) pay costs of issuance of such revenue bonds. The Board deems the issuance of revenue bonds or notes as hereby authorized to be in the public interest.

At the Special City Meeting of the City, held November 8, 2016, the voters of the City authorized the issuance of Revenue Bonds in one or more series in a combined aggregate amount not to exceed \$8,344,000 to finance and carry out such capital improvements to the Water System (collectively, the “Project”).

Pursuant to such vote, and the City Charter, and upon the recommendation of the Board, the City adopted a General Bond Resolution dated May 1, 2017 (as amended and supplemented, the “General Bond Resolution”).

The City has issued (i) \$3,250,000 Water System Revenue Bonds, Series 2017, (ii) \$2,000,000 Water System Revenue Bonds, Series 2018, and (iii) \$2,000,000 Water System Revenue Bonds, Series 2018B, pursuant to the General Bond Resolution. The City has not issued any other revenue bonds under the General Bond Resolution to date.

The Series 2020 Bonds (the “Series 2020 Bonds”) are to be issued pursuant to a Supplemental Resolution, to be adopted by the City Council. It is estimated that the Series 2020 Bonds will be payable, by serial maturities, sinking fund installments, term bonds or a combination thereof, in the years 2020-2041, both dates being approximate, as may be approved by the City Council.

It is expected that the Series 2020 Bonds will be issued to the Vermont Municipal Bond Bank (the “Bond Bank”) through the State of Vermont Drinking Water State Revolving Loan Fund (DWSRF). The Series 2020 Bonds may be issued through a public offering in the event the City Chief Administrative Officer determines that such a public offering would be more advantageous to the City than the issuance of the Series 2020 Bonds to the Bond Bank.

Section 2
Authorization of Series 2020 Bonds

The Board hereby approves to be issued a Series of Bonds designated “Water System Revenue Bonds, Series 2020” in the total principal amount not to exceed **\$1,094,000**. The Series 2020 Bonds shall be issued for the financing of capital additions and improvements to the waterworks system, including (i) capital improvements to the City’s underground pipe and water distribution system, water mains, services, valves and hydrants, (ii) to fund a debt service reserve fund, and (iii) pay costs of issuance of such revenue bonds. The Series 2020 Bonds shall bear interest at the rates per annum and shall mature on such dates as specified in the Supplemental Resolution adopted by the City Council.

The Board hereby further approves the issuance of the Series 2020 Bonds and the funding of the Renewal and Replacement Fund as determined in connection with the issuance of the Series 2020 Bonds.

Section 3
Certain Findings and Determinations

The Commissioners of the Department of Public Works hereby finds and determines as follows:

(a) The City issued \$3,250,000 Water System Revenue Bonds, Series 2017 pursuant to the General Bond Resolution on June 6, 2017. The City issued \$2,000,000 Water System Revenue Bonds, Series 2018 pursuant to the General Bond Resolution on May 22, 2018. The City issued \$2,000,000 Water System Revenue Bonds, Series 2018B pursuant to the General Bond Resolution on November 28, 2018. No other bonds have heretofore been issued under the General Bond Resolution.

(b) There are no outstanding bonds, notes or other evidence of indebtedness payable from and secured by a lien or charge upon the Net Revenues pledged under the Resolution other than (i) the Water System Revenue Bonds, Series 2017, the Water System Revenue Bonds, Series 2018, and the Water System Revenue Bonds, Series 2018B, and (ii) the prior obligations consisting of a note issued by the City to the Vermont Department of Environmental Conservation Clean Water State Revolving Fund in the original principal amount of \$228,006, which is payable from the Net Revenues pledged under the Resolution.

Section 4
Award of Bonds; Official Statement; Further Action

The City’s Chief Administrative Officer, the City’s Director of Financial Operations, and the Director of Public Works are, and each of them hereby is, authorized either singly or together:

(a) to execute and deliver a loan application and a loan agreement with the Bond Bank for a loan from the State of Vermont under the Drinking Water State Revolving Loan Fund program, in such form as the signing officer shall approve;

(b) if the Series 2020 Bonds are not issued to the Bond Bank under the Drinking Water State Revolving Loan Fund program, to execute and deliver an underwriting agreement, bond purchase agreement, or contract of purchase negotiated with a financial institution engaged to underwrite, market and sell the Series 2020 Bonds (the “Underwriter”) with respect to the Series 2020 Bonds, in such form as the signing officer shall approve;

(c) to prepare, make public, execute and deliver to and authorize distribution by the Underwriter to prospective purchasers and investors of a Preliminary Official Statement with respect to the Series 2020 Bonds;

(d) to prepare, make public, execute and deliver to and authorize distribution by the Underwriter to prospective purchasers and investors of an Official Statement substantially in the form of the Preliminary Official Statement after the same has been completed by the insertion of the interest rate and other data with respect to the Series 2020 Bonds and by making such other changes or corrections as the signing officer or officers may approve, such officer’s or officers’ execution to be conclusive evidence of such approval;

(e) to execute and deliver a Continuing Disclosure Undertaking substantially in the form attached to the Official Statement, with such changes or corrections as the signing officer or officers may approve, such officer’s or officers’ execution to be conclusive evidence of such approval;

(f) execute a Series Certificate evidencing determinations or other actions taken pursuant to the authority granted hereby, and such Certificate shall be conclusive evidence of the action or determination of the Chief Administrative Officer, or Director of Financial Operations of the City and the Director of the Department of Public Works as stated therein, which Series Certificate shall specify the following, which are to be determined in the discretion of the Chief Administrative Officer, or Director of Financial Operations of the City and the Director of the Department of Public Works, subject to the authorization and restrictions contained in this Resolution:

- i. To determine the aggregate principal amount of the Series 2020 Bonds, in an amount not to exceed the amount authorized under the section captioned, “Authorization” hereof, and to determine that the proceeds to be derived from the issuance of such Bonds;
- ii. To determine the maturities, maturity amounts of each of the Series 2020 Bonds and interest payment dates of the Series 2020 Bonds;
- iii. To determine which Series 2020 Bonds are to be designated as Serial Bonds and which Series 2020 Bonds are to be designated as Term Bonds, and to determine the sinking fund requirements for any such term Bonds;
- iv. To determine the interest rate or rates for the Series 2020 Bonds; provided, however, that if the average true interest cost rate on the Series 2020 Bonds is to exceed **4.50%**, the issuance and sale of the Series 2020 Bonds shall be subject to the approval of the City’s Board of Finance;
- v. To determine the redemption provisions of the Series 2020 Bonds in accordance with the provisions of Section 4 and Section 5 hereof,

- vi. To determine if the Series 2020 Bonds are to be issued as tax-exempt obligations;
 - vii. To determine the dated date of the Series 2020 Bonds;
 - viii. To determine the date or dates of sale and issuance of the Series 2020 Bonds;
 - ix. To determine whether the Series 2020 Bonds, or any portion thereof, shall benefit from the issuance of an insurance policy or other form of credit enhancement; provided, however, that in making such determination, Chief Administrative Officer or Director of Financial Operations of the City and the Director of the Department of Public Works shall be entitled to rely upon a certificate or certificates of the Underwriter to the effect that the present value of the premium paid to obtain the such credit enhancement is less than the present value of the interest reasonably expected to be saved as a result of having such enhancement, using the yield on the Series 2020 Bonds (determined with regard to the premium paid for the such enhancement) as the discount rate for this purpose; and
 - x. If a form of credit enhancement supports the payment of the principal of and interest on all or a portion of the Series 2020 Bonds, to accept provisions which are a condition precedent to the issuance of the form of credit enhancement to the extent such provisions are not inconsistent with the Bond Resolution.
- (g) to execute such other documents, enter into such covenants and take such other actions as are necessary or advisable to effect the issuance and delivery of the Series 2020 Bonds, the loan from the Bond Bank under the Drinking Water State Revolving Loan Fund, and the application of the proceeds thereof in accordance with the provisions of this Supplemental Resolution.

CITY OF BURLINGTON, VERMONT

Public Works Commission

RESOLUTION

Be it resolved by the Board of Public Works Commissioners of the City of Burlington, Vermont (the “City”) as follows:

Section 1
Authorization

The Board of Public Works Commissioners (the “Board”) hereby authorizes the issuance of Wastewater System Revenue bonds, notes or other evidence of indebtedness in a principal amount not to exceed \$7,700,000 to provide for (i) the financing of various improvements to the City’s wastewater treatment and collection system (the “Wastewater System”) and (ii) payment of the costs of issuance of such revenue bonds. The Board deems the issuance of revenue bonds as hereby authorized to be in the public interest.

At the Special City Meeting of the City, held June 21, 1988, the voters of the City approved a \$13 million grant and a \$26 million loan from the State of Vermont and authorized the issuance of Revenue Bonds, in an amount not to exceed \$26,000,000 to repay such loan, in order to finance and carry out certain capital improvements to the Wastewater System, including a Lake Champlain pollution abatement project;

Pursuant to such vote, and the City Charter, the City adopted a General Bond Resolution dated December 6, 1990, and amended and restated as of December 9, 2013 (as amended and supplemented, the “General Bond Resolution”).

The City previously issued three series of Wastewater System Revenue Bonds under the General Bond Resolution, consisting of (i) 1990 Series 1 Bonds, in the original principal amount of \$5,378,105 (the “1990 Series Bonds”), (ii) 1992 Series 1 Bonds in the original principal amount of \$15,449,196, and subsequently increased to \$19,403,807 (the “1992 Series Bonds”), and (iii) Wastewater System Revenue Refunding Bonds, Series 2014, in a principal amount of \$14,645,620 (the “Series 2014 Bonds”). As of the date hereof, only the Series 2014 Bonds are outstanding under the General Bond Resolution.

At the Special City Meeting of the City, held November 6, 2018, in furtherance of the City’s Clean Water Resiliency Plan, the voters of the City authorized the issuance of revenue bonds or notes in one or more series, in an amount not to exceed \$29,958,000 in the aggregate, to be issued pursuant to the City Charter and subchapter 2 of Chapter 53 of Title 24, Vermont Statutes annotated, payable only from the net revenues of the wastewater system and stormwater system, as may be determined by the City Council, for the purpose of paying for capital additions and improvements to the City’s wastewater and stormwater systems, including (i) improvements to the wastewater treatment plants and disinfection systems, (ii) improvements to the wastewater and stormwater collection system, (iii) improvements for combined sewer runoff and overflow

mitigation, treatment and runoff reduction, (iv) programmatic improvements, and implementation of a pollution control asset management system, and (v) funding debt service reserve funds and paying costs of issuance (collectively, the “Project”).

The City is implementing the Clean Water Resiliency Plan (CWRP) in phases.

The Wastewater System Revenue Bonds, Series 2020 (the “Series 2020 Bonds”) are to be issued pursuant to a Supplemental Resolution to be adopted by the City Council. It is estimated that the Series 2020 Bonds will be payable, by serial maturities, sinking fund installments, term bonds or a combination thereof, in the years 2020-2041, both dates being approximate, as may be approved by the City Council.

It is expected that the Series 2020 Bonds will be issued to the Vermont Municipal Bond Bank (the “Bond Bank”) through the State of Vermont State Revolving Loan Fund. The Series 2020 Bonds may be issued through a public offering in the event the City Chief Administrative Officer determines that such a public offering would be more advantageous to the City than the issuance of the Series 2020 Bonds to the Bond Bank.

Of the amount of debt to be incurred, it is expected that of such amount \$703,044 shall be without voter authorization under 24 V.S.A. Section 4755 for a natural resources project under the State of Vermont Water Infrastructure Sponsorship Program (WISPr). Such natural resource project will be paired with the water pollution abatement projects being undertaken by the City. Vermont State law provides that under the sponsorship program (WISPr), a municipality may obtain a loan for a natural resources project and a water pollution abatement project, with the loan rate and terms adjusted to forgive the portion of the natural resources project over the life of the loan. Vermont law provides that notwithstanding any other provisions of law, a municipality may execute notes and incur debt without voter approval in order to fund such a natural resource project under the WISPr program (24 V.S.A. Section 4755). Accordingly, up to \$703,044 of Series 2020 Bonds, determined at the time of issuance, shall not be applied against the aggregate amount of bonds authorized by the voters of the City at the Special Meeting held November 6, 2018.

Section 2

Authorization of Series 2020 Bonds

The Board hereby approves to be issued a Series of Bonds designated “Wastewater System Revenue Bonds, Series 2020” in the total principal amount not to exceed \$7,700,000. The Series 2020 Bonds shall be issued for the financing of Project Costs in furtherance of the City’s Clean Water Resiliency Plan (the “2020 Project”). The 2020 Project consists of (i) disinfection project consisting of upgrades of disinfection systems at Main, East and North Wastewater treatment plants for proper disinfection of wastewater effluent, (ii) remote wastewater pump station improvements consisting of upgrades of Flynn and Fletcher Wastewater Pump Station infrastructure to ensure proper collection and pumping of wastewater from low lying areas to a Wastewater Treatment Plant, and (iii) upgrade of the SCADA/PLC computerized controls system at Main Plant, and (iv) capital improvements to the wastewater collection system consisting of replacement or rehabilitation of gravity sanitary and combined sewer pipes and related structures.

The Series 2020 Bonds shall bear interest at the rates per annum and shall mature on such dates as specified in the Supplemental Resolution adopted by the City Council.

The Board hereby further approves the issuance of the Series 2020 Bonds and the funding of the Renewal and Replacement Fund as determined in connection with the issuance of the Series 2020 Bonds.

Section 3

Certain Findings and Determinations

The Commissioners of the Department of Public Works hereby finds and determines as follows:

(a) No bonds have heretofore been issued under the Resolution except (i) the 1990 Series Bonds, (ii) the 1992 Series Bonds, and (iii) the Series 2014 Bonds;

(b) Other than the Series 2014 Bonds and there are no outstanding Bonds, notes or other evidence of indebtedness payable from and secured by a lien or charge upon the Net Revenues pledged under the Resolution.

Section 4

Award of Bonds; Official Statement; Further Action

The City's Chief Administrative Officer, the City's Director of Financial Operations, and the Director of Public Works are, and each of them hereby is, authorized either singly or together:

(a) to execute and deliver a loan application and a loan agreement with the Bond Bank for a loan from the State of Vermont under the State Revolving Loan Fund program, in such form as the signing officer shall approve;

(b) if the Series 2020 Bonds are not issued to the Bond Bank under the State Revolving Loan Fund program, to execute and deliver an underwriting agreement, bond purchase agreement, or contract of purchase negotiated with a financial institution engaged to underwrite, market and sell the Series 2020 Bonds (the "Underwriter") with respect to the Series 2020 Bonds, in such form as the signing officer shall approve;

(c) to prepare, make public, execute and deliver to and authorize distribution by the Underwriter to prospective purchasers and investors of a Preliminary Official Statement with respect to the Series 2020 Bonds;

(d) to prepare, make public, execute and deliver to and authorize distribution by the Underwriter to prospective purchasers and investors of an Official Statement substantially in the form of the Preliminary Official Statement after the same has been completed by the insertion of the interest rate and other data with respect to the Series 2020 Bonds and by making such other

changes or corrections as the signing officer or officers may approve, such officer's or officers' execution to be conclusive evidence of such approval;

(e) to execute and deliver a Continuing Disclosure Undertaking substantially in the form attached to the Official Statement, with such changes or corrections as the signing officer or officers may approve, such officer's or officers' execution to be conclusive evidence of such approval;

(f) execute a Series Certificate evidencing determinations or other actions taken pursuant to the authority granted hereby, and such Certificate shall be conclusive evidence of the action or determination of the Chief Administrative Officer, or Director of Financial Operations of the City and the Director of the Department of Public Works as stated therein, which Series Certificate shall specify the following, which are to be determined in the discretion of the Chief Administrative Officer, or Director of Financial Operations of the City and the Director of the Department of Public Works, subject to the authorization and restrictions contained in this Resolution:

- i. To determine the aggregate principal amount of the Series 2020 Bonds, in an amount not to exceed the amount authorized under the section captioned, "Authorization" hereof, and to determine that the proceeds to be derived from the issuance of such Bonds;
- ii. To determine the maturities, maturity amounts of each of the Series 2020 Bonds and interest payment dates of the Series 2020 Bonds;
- iii. To determine which Series 2020 Bonds are to be designated as Serial Bonds and which Series 2020 Bonds are to be designated as Term Bonds, and to determine the sinking fund requirements for any such term Bonds;
- iv. To determine the interest rate or rates for the Series 2020 Bonds; provided, however, that if the average true interest cost rate on the Series 2020 Bonds is to exceed **4.50%**, the issuance and sale of the Series 2020 Bonds shall be subject to the approval of the City's Board of Finance;
- v. To determine the redemption provisions of the Series 2020 Bonds in accordance with the provisions of Section 4 and Section 5 hereof,
- vi. To determine if the Series 2020 Bonds are to be issued as tax-exempt obligations;
- vii. To determine the dated date of the Series 2020 Bonds;
- viii. To determine the date or dates of sale and issuance of the Series 2020 Bonds;
- ix. To determine whether the Series 2020 Bonds, or any portion thereof, shall benefit from the issuance of an insurance policy or other form of credit enhancement; provided, however, that in making such determination, Chief Administrative Officer or Director of Financial Operations of the City and the Director of the Department of Public Works shall be entitled to rely upon a certificate or certificates of the Underwriter to the effect that the present value of the premium paid to obtain the such credit enhancement is less than the present value of the interest reasonably expected to be saved as a result of having such enhancement,

using the yield on the Series 2020 Bonds (determined with regard to the premium paid for the such enhancement) as the discount rate for this purpose; and

- x. If a form of credit enhancement supports the payment of the principal of and interest on all or a portion of the Series 2020 Bonds, to accept provisions which are a condition precedent to the issuance of the form of credit enhancement to the extent such provisions are not inconsistent with the Bond Resolution.

(g) to execute such other documents, enter into such covenants and take such other actions as are necessary or advisable to effect the issuance and delivery of the Series 2020 Bonds, the loan from the Bond Bank under the Clean Water State Revolving Loan Fund, and the application of the proceeds thereof in accordance with the provisions of this Supplemental Resolution.

Burlington Department of Public Works Commission Meeting
Draft Minutes, February 19, 2020
645 Pine St. – Main Conference Room

Meeting video link: <https://www.cctv.org/watch-tv/programs/burlington-public-works-commission-150>

Commissioners Present: Tiki Archambeau (Chair); Brendan Hogan (Vice Chair); Chris Gillman ; Solveig Overby; Peggy O’Neill-Vivanco, Pablo Bose; Jim Barr

Item 1 – Call to Order – Welcome – Chair Comments

Chair Archambeau calls meeting to order at 6:34 p.m. and made opening comments.

Item 2 – Agenda

ACTION: Commissioner Barr made a motion to approve the Agenda.
Commissioner Gillman seconded
Unanimous Approval

Item 3 – Public Forum

- Gentleman came in and spoke about the North Winooski Avenue two hours parking being removed, as it is not regularly enforced by the police. Businesses in this area do not want the two hour parking limit.
- Ben Katz of Overlake Park came in stating that the parking on this street is a 4 hour only limit between 8:00 a.m. and 5:00 p.m. making it hard for residents living on the east side of the street to get in and out of their driveways.
- Hans Van Weer of Overlake Park came in with the same concerns.

Item 4 – Consent Agenda

- A Removal of one ADA Parking Space on Main St Adjacent to Memorial Auditorium
- B Reallocation of One 30 Minute Time Limited Parking Space to a One-Hour Time Limited Parking Space on Marble Avenue
- C. Removal of Two-Hour Time Limited Parking on North Winooski Avenue
- D. Cherry Street vehicle Loading Zone

Commissioner Overby asked about the two-hour parking by the Community Health Center on Riverside Avenue.

Commissioner Barr made a motion to accept the Consent Agenda
Commissioner Gillman seconded
Unanimous Approval

Item 5 – Slope Failure Presentation – Norman Baldwin, City Engineer

Norman Baldwin advised that they were assessing the slopes in the city, especially looking at the ones on Manhattan Drive and Riverside Avenue identifying areas of risk. The Collision Car place on Riverside Avenue has put infill in but did not get any permits for this work. There were also a couple of places adjacent to this property that also had

infill put in without permits. There was a question about who is the responsible if someone gets hurt, who is responsible for the liability issues. There was also concerns if the property owners had any sense of concern for their properties going downhill.

Paul Beerman is a Geologist with UVM and this is what he studies. He noticed the small landslides in summer and then in October noticed serious cracking in the ground. There was a suggestion about getting a slope zoning ordinance before much more construction occurs. He also suggested getting a Geo Tech Engineer to evaluate and make sure site is secured before putting a building in place.

Item 6 – Winooski Avenue Transportation Study

Senior Transportation Planner Nicole Losch spoke about doing this study since late 2017 and we are in the process of wrapping this up. We want the street to be safe traveling and inviting for people traveling on the street. There will be a mini roundabout tested in the downtown and we hope to implement changes by September. Union Street will stay as it is for right now.

Item 7 – Franklin Square Acceptance Update – Philip Peterson

Mr. Peterson stated that in 1975 Franklin Square was considered an accepted street but was never dedicated, so now we have to get a boundary surveyor and a legal description of the property and once it is a dedicated street there is work that has to be done.

Item 8 – Garage Occupancy Presentation – Jeff Padgett

This was a discussion on the Lakeview and College Street garage. He stated that the greater flexibility that was granted to them has made a huge improvement. They have gotten more pass holders and have made more money. There were suggestions on getting a trolley or some sort of transportation to people from the garages to the Marketplace. In addition, suggestions on some better Way finding signage needs to be added.

Item 9 – Approval of Draft Minutes 1-15-2020

Commissioner Barr made a motion to approve the Draft Minutes of 1/15/2020.

Commissioner O'Neill seconded.

Unanimous approval

Item 10 – Director's Report

There are currently 30 traffic requests in the que

Water Rate Study - March meeting and City Council on March 9th

See attached report in reference to the bike share

Case for Fraud for Management parking garage agreements – Company was charged the market rate in 2017, there was an in kin agreement for \$90.00 per month. This was an issue that did not go through commissioner and in 2014 this did not go through the commission.

Megan Moir has come in tonight to go over the water main break that occurred in the City over the weekend. It was stated that the initial break was south of Main Street for

the boil water order and then we were getting calls from people out of North Avenue so it was decided to do a city wide boil water order. There was a lot of information put out on social media and updated frequently throughout the weekend until the notice was lifted.

Commissioner Overby asked about the bike share contracts. Mr. Goulding stated that the Gotcha Corporation is committed to the e bikes but they are affected by the Carona virus that is going on overseas.

Item 11- Commissioner Communications

Commissioner Bose stated that the city did a good job during the snowstorm on snow removal.

Commissioner Hogan stated that there was a crosswalk that is still blocked with snow would like to see that removed.

Commissioner Overby thanked the staff for their efforts during the snow storm and the notifications for the water break. She inquired about how the sidewalk plows did not do some of the streets during the storm and some of the streets. It was explained that during the height of the storm only the main areas going out of city were plowed and there was a snow bank which helped to get streets cleaned up after the storm. Commissioner Overby stated a bench was destroyed on St. Paul Street not sure if by plow or what.

Item 12 – Adjournment & Next Meeting – March 18, 2020

Commissioner Barr made a motion to adjourn.

Commissioner Gillman seconded

Unanimous approval.

Meeting ended at 9:30 p.m.



**CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS**

645 Pine Street, Suite A
Burlington, VT 05401
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www.burlingtonvt.gov/dpw

To: DPW Commissioners
Fr: Chapin Spencer, Director
Re: **DPW Director's Report**
Date: March 13, 2020

COVID-19 PLANNING:

The department has been an active partner in the City's COVID-19 planning efforts. We have developed a Continuity of Operations Plan (COOP) and a Work from Home (WFM) plan to be implemented as needed. We are developing additional engagement opportunities beyond public meetings for upcoming projects. As you know, many of our services are critical to the ongoing operation of the City and we are proactively developing plans and protocols to ensure continuous operation of our water, wastewater and transportation systems. Contact: Chapin Spencer, cspencer@burlingtonvt.gov.

TRAFFIC REQUESTS:

As of 3/2/20, we had 31 traffic requests in queue – we had 30 in queue last month. The majority of outstanding items are crosswalk related.

WATERFRONT RAIL & BIKE PATH RELOCATION:

Over the past several months, the City Administration and individual Councilors have urged VTrans and Vermont Railway System to look creatively at how to achieve the goal of passenger rail in a way that minimizes impact of overnighing and servicing the train on our community. Over the past month, there has been a great deal of collaborative work between VTrans, Vermont Rail Systems and the City and I am very appreciative of everyone's efforts. As a result of this effort, I am pleased to report that the State announced yesterday a solution that stores and services the train where the City has been asking for it to be put – in the railyard. The solution also does not require a second track between King and College streets. There are issues to work through and I will summarize them for the Commission at the meeting, but overall this is a tremendously positive development that should allow the civil site work to proceed that will enable Amtrak to come to Burlington. Contact: Chapin Spencer, cspencer@burlingtonvt.gov.

WATER RESOURCES RATE STUDY:

At the Council's request last year as part of the FY'20 budget process, we procured a consultant to develop an alternate water rate structure that would mitigate impacts on low-volume, low-income users. We presented the proposed rate structure at a planned March 9, 2020 City Council work session. The presentation can be found on BoardDocs at this location: [https://go.boarddocs.com/vt/burlingtonvt/Board.nsf/files/BMFTRE766A42/\\$file/Burlington_VT_City_Council_Rate_Presentation_3-9-2020_Final.pdf](https://go.boarddocs.com/vt/burlingtonvt/Board.nsf/files/BMFTRE766A42/$file/Burlington_VT_City_Council_Rate_Presentation_3-9-2020_Final.pdf). We plan to update the DPW Commission this month. Contact: Megan Moir, mmoir@burlingtonvt.gov.

CONSOLIDATED COLLECTION

The consultant for the joint South Burlington, Burlington and CSWD study has finalized the draft report for coordinated trash/recycling/organics collection and it is available for public review and feedback (<https://www.burlingtonvt.gov/dpw/Maintenance/Consolidated>). The public meeting will

be March 24, 6pm at Contois Auditorium. We are planning a presentation for the Commission at the April meeting. Contact: Lee Perry, lperry@burlingtonvt.gov.

Feel free to reach out with any questions prior to Wednesday's Commission meeting. Thank you.



FOR IMMEDIATE RELEASE
March 12, 2020

Contact: Dan Delabruere, Agency of Transportation
802-279-2647, Daniel.Delabruere@vermont.gov

Vermont Agency of Transportation announces Amtrak Burlington train parking location

Barre, Vt. – For three decades, Vermont has sought to bring Amtrak passenger service to Burlington. In 2021, Amtrak’s Ethan Allen Express train, which currently travels from New York City to Rutland, will extend service to Burlington, achieving a key goal of the Vermont State Rail Plan.

The Ethan Allen Express is expected to arrive in Burlington in the evening and depart southbound in the morning for New York City, with planned stops in Middlebury and Vergennes. The train will run seven days a week, 365 days a year. Burlington’s Union Station, located at the bottom of Main Street on Burlington’s waterfront, will be the northern stop for the train

Today, the Vermont Agency of Transportation (VTrans) announces a key decision to store the Amtrak train overnight in the Vermont Rail System (VRS) railyard south of Maple Street. Overnight storage of the Amtrak train in the railyard had been previously identified in a study conducted by the Chittenden County Regional Planning Commission, but the prior cost was not advantageous, a new, workable solution has been found.

Burlington Mayor Miro Weinberger tasked his team to work with the Agency of Transportation to push for further examination of potential alternatives for the train parking location. Through consideration of additional public input and exhaustive evaluation of sites, and re-evaluation of the railyard footprint, a cost-effective means of storing the train in the railyard has been identified. The plan will not impact existing railyard operations and has the support of the parties. Because of the Amtrak overnight storage location in the railyard, the parties have agreed that a second track between Maple Street and College Street will not be required.

“This decision represents substantial assessment and collaboration by VTrans, the City of Burlington, and Vermont Rail System, as well as serious consideration of public response,” said Transportation Secretary Joe Flynn. “All parties agree that this is a sound decision, and we are excited to move forward to bring Amtrak passenger service to Burlington, Vergennes and Middlebury.”

“This is the great outcome for Burlington that achieves all the goals the City has had throughout this process,” said Mayor Weinberger. “Thanks to close collaboration between the City, the Vermont Agency of Transportation, and Vermont Rail Systems, we are restoring passenger rail service to downtown Burlington for the first time in decades, while also protecting the vibrancy of our waterfront, improving the Bike Path, and minimizing impacts on Burlington residents and businesses. I am very appreciative of the responsiveness, partnership and leadership of Secretary Flynn and Governor Scott on this effort. I look forward to seeing the Ethan Allen Express roll into the station in Burlington soon!”

More information and updates are available at <https://vtrans.vermont.gov/rail/amtrak-burlington>.

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