Appendix G

Public Participation Documentation

Burlington Water Resources Division
Megan J. Moir, Division Head
235 Penny Lane | P.O. Box 878
Burlington, VT 05401
(802) 863-4501
water-resources@burlingtonvt.gov

MEMORANDUM

Date: July 27, 2022
Re: Public Outreach for LTCP

City staff presented the Long-Term Control Plan on Tuesday, July 26 at 5:00 p.m. as part of the regularly scheduled meeting for the Transportation, Energy and Utilities Committee of Burlington's City Council (TEUC). The meeting was recorded, and can be viewed at the following link: July 26, 2022 TEUC Meeting

Meeting agendas are posted in hard copy at the following locations:

- Burlington City Hall (149 Church Street)
- DPW Main Office (645 Pine Street)
- Fletcher Free Library (235 College Street)

Meeting agendas are also posted electronically in the following locations:

- DPW Calendar (https://www.burlingtonvt.gov/DPW/Calendar)
- City Meeting Calendar (City Calendar)
- TEUC web page (https://www.burlingtonvt.gov/CityCouncil/TEUC)

Residents and interested parties have several options to stay informed on Burlington's various projects, scheduled meetings, etc.: https://www.burlingtonvt.gov/dpw/engagement

Staff have conducted additional outreach on the LTCP as part of the larger Integrated Water Quality Planning process. Information on outreach conducted as part of the Integrated Plan can be found in Chapter 6 of the City's Integrated Water Quality Plan.

The following items have been provided with this Appendix:

- 7/26/2022 TEUC Meeting Agenda
- LTCP Presentation slide deck
- 7/26/2022 TEUC Meeting Minutes
- Chapter 6 of Burlington's Integrated Water Quality Plan

CITY OF BURLINGTON, VERMONT
CITY COUNCIL TRANSPORTATION, ENERGY & UTILITIES COMMITTEE

c/o Department of Public Works
645 Pine Street, Suite A
Post Office Box 849
Burlington, VT 05402-0849

802.863.9094 VOX
802.863.0466 FAX
802.863.0450 TTY
www.burlingtonvt.gov

Councilor Jack Hanson, Chair, *East District*
Councilor Mark Barlow, *North District*
Councilor Eugene Bergman, *Ward 2*

Inquiries:
Madeline Suender
802.735.5324
msuender@burlingtonvt.gov

Transportation, Energy and Utilities Committee of the City Council
Tuesday, July 26, 2022, 5PM

DPW Front Conference Room
645 Pine St, Burlington, VT 05482
Masks Optional

Join via Zoom, https://us02web.zoom.us/j/84603122855
To call into the meeting, including to speak during public comment:
Phone number: 312-626-6799, Webinar ID: 846 0312 2855
If you prefer to attend in a physical location, you may join us at 645 Pine St in the front conference room

–DRAFT AGENDA–

1. **Agenda**
2. **Minutes of 6/21/22**
3. **Public Forum**
4. **Bikeshare Update**
   - Rob Goulding
   - Information
5. **GMT Strategic Planning**
   - Chapin Spencer, Jon Moore
   - Information
6. **Long-Term Control Plan Presentation**
   - Jenna Olson, Megan Moir
   - Information
7. **Committee Mission Statement**
   - Jack Hanson
   - Action
8. **Director's Report**
9. **Councilors' Update**
10. **Next Meeting 8/23/22**
11. **Adjourn**

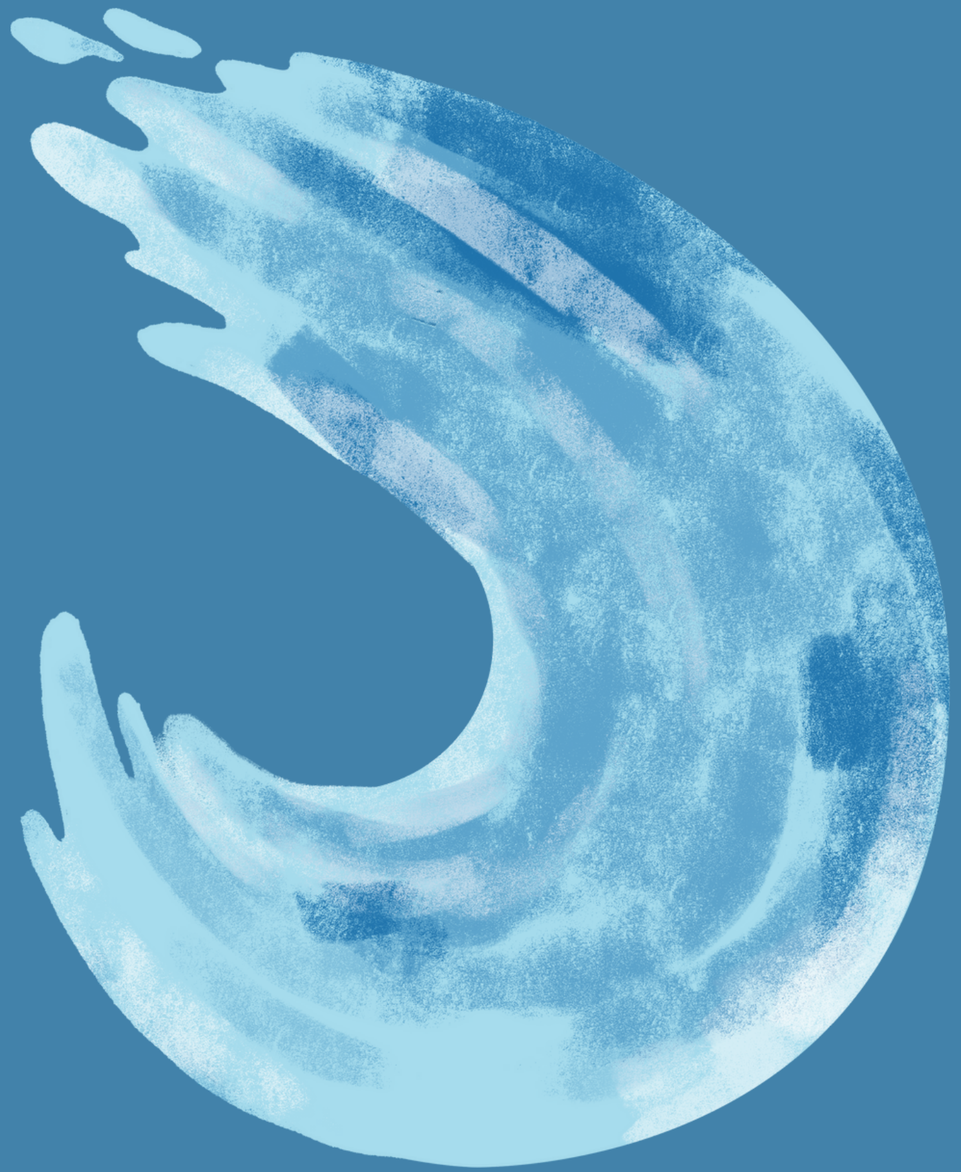
BURLINGTON'S
LONG-TERM CONTROL PLAN
(LTCP)

July 26, 2022

Jenna Olson
Water Policy & Programs Manager

AGENDA

- **Where** this fits with everything else
- **Why** do we need a Long-Term Control Plan?
- **What** is a Long-Term Control Plan?
- **How** are we meeting LTCP requirements?
- **Timeline** for implementation
- Next Steps
- Comments & Questions



WHERE DOES THIS FIT?

Municipal Separate Storm Sewer System (MS4) Permit
Phosphorous Control Plan (Lake Champlain TMDL)
Municipal Roads General Permit
State Stormwater Permits & "3-Acre" sites

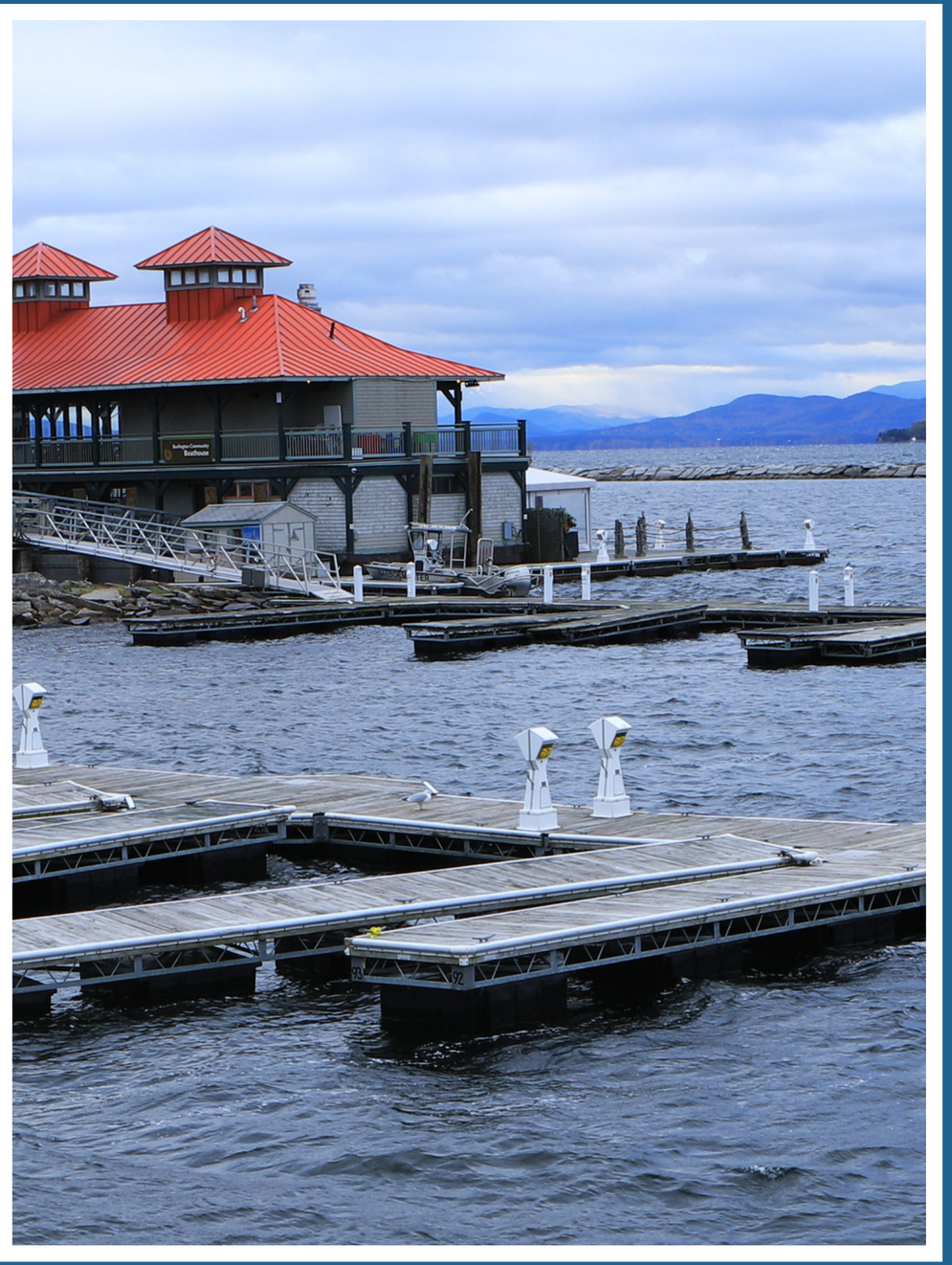
Wastewater Treatment Plant Permits (NPDES)

Flow Restoration Plans (FRPs)
Englesby Brook
Potash Brook
Centennial Brook

Long-Term Control Plan
1272 Order

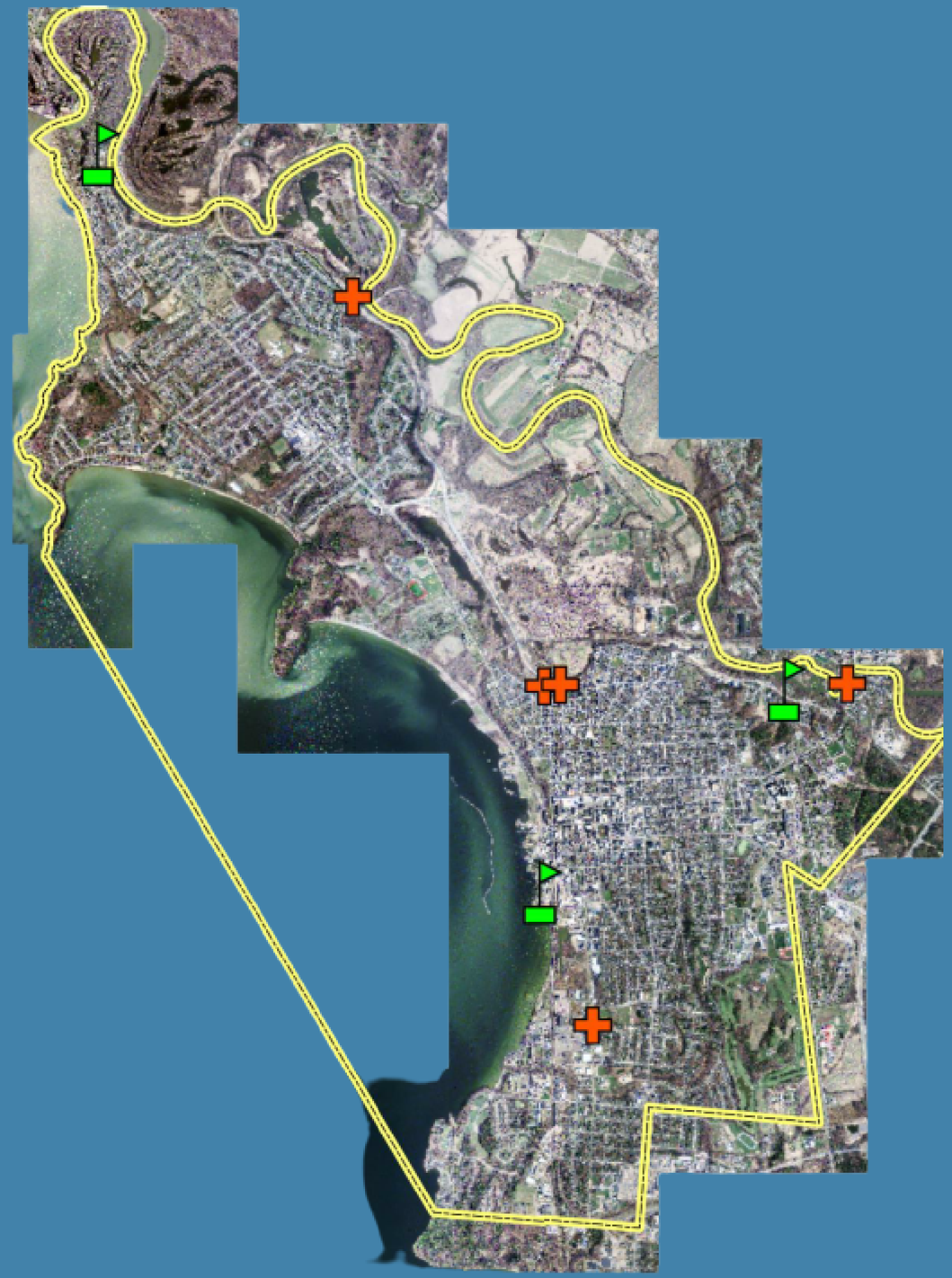
WHY DO WE NEED A LTCP?

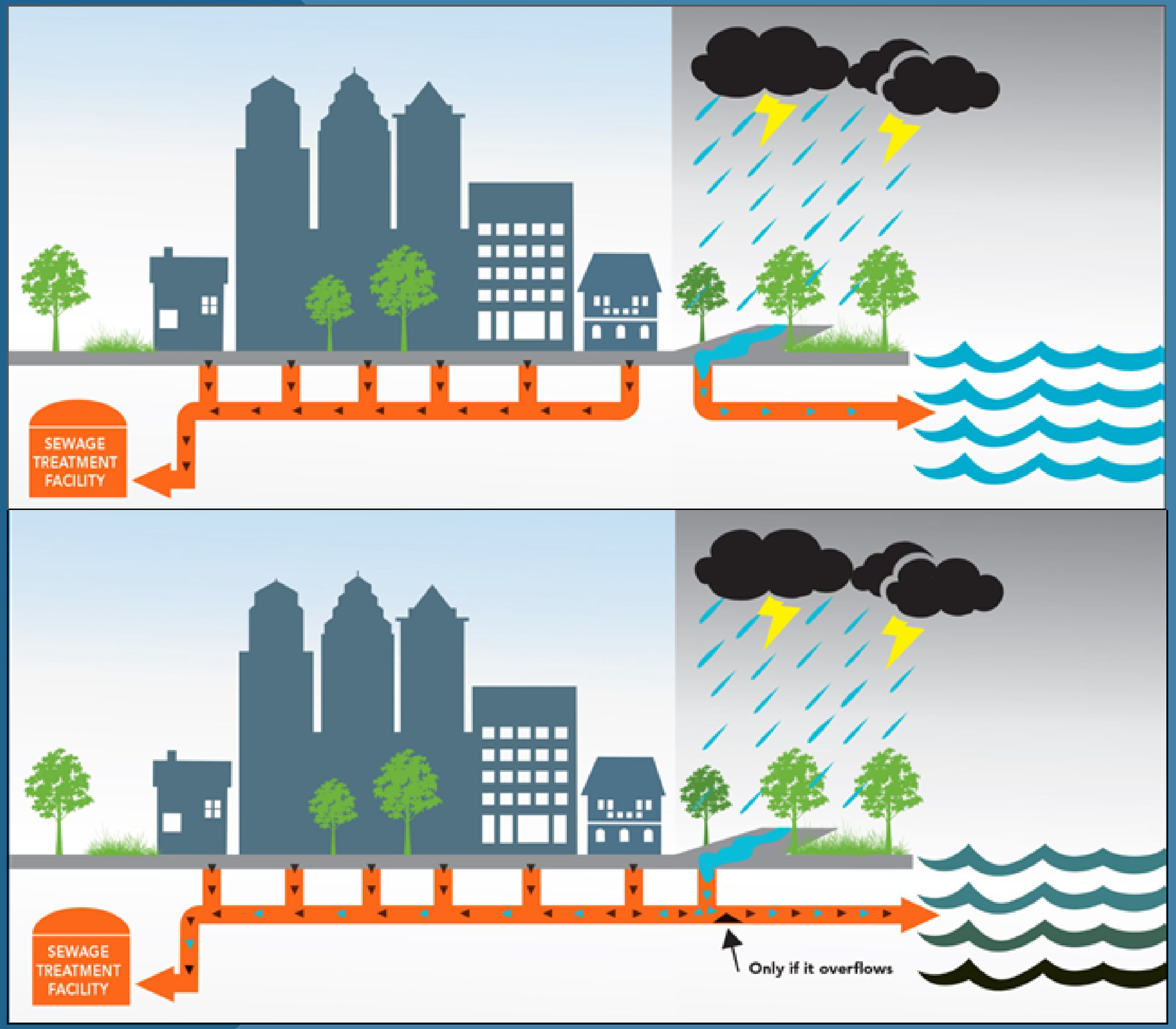
- BTV has combined sewers
- State of Vermont's 2016 CSO Rule
- 1272 Order



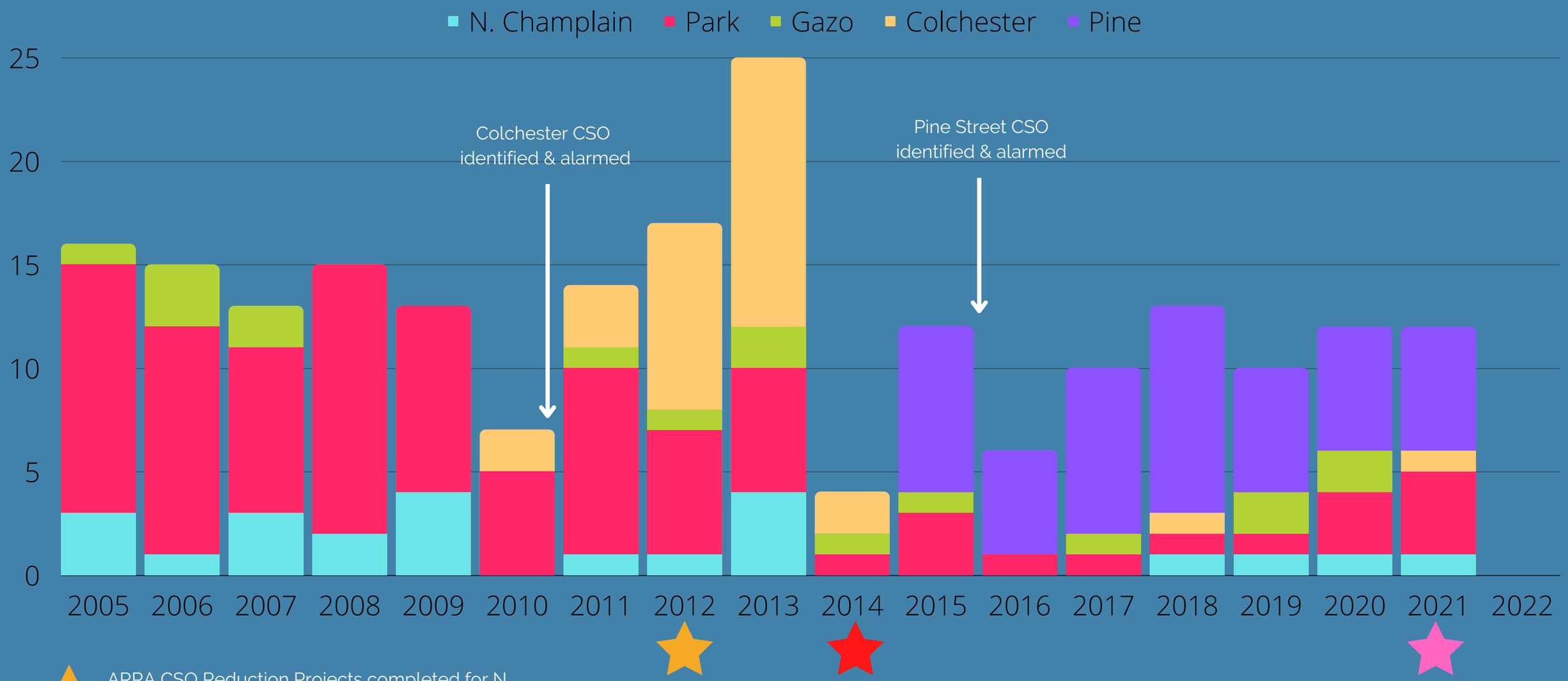
In 2022, Burlington has **5** combined sewer overflow locations, **reduced from 12**.

Prior to 1994 upgrades, Burlington was discharging an average of 170 million gallons of untreated, non-disinfected combined flows directly to area waters every time it rained.



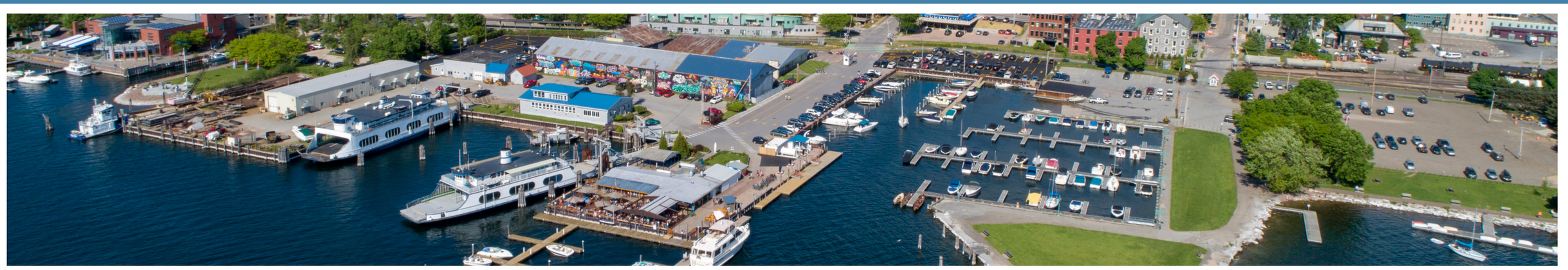

SEWAGE TREATMENT FACILITY
SEWAGE TREATMENT FACILITY
Only if it overflows

CSO Frequency | 2005 - 2021



WHAT IS A LONG-TERM CONTROL PLAN?

- Specific plan to address combined sewer overflows (CSOs)
- Outlines explicit actions City will take to mitigate CSO discharges
- Establishes a schedule for implementation
- Provides a framework for DEC to monitor progress
- Establishes a financing plan / financial capability analysis



HOW DOES BURLINGTON PROPOSE TO MEET LTCP REQUIREMENTS?

STORAGE	VOLUME CONTROL	SURCHARGE IDENTIFICATION AND PREVENTION
300,000 gallon storage tank along Pine Street.	Implementation of stormwater mitigation measures above CSO areas	1. **Enhanced flow metering & modeling** 2. Backwater prevention program development 3. Pipe upsizing / distributed storage

1 STORAGE

Installation of a 300,000 gallon storage tank that will capture excess flow during storm events that exceed the capacity of the collection system. Once capacity is available at the treatment plant, the stored combined sewage will be released to the collection system so that those flows can travel to the plant for treatment

Estimated Cost:
$4.7 million

Estimated Timeline:
Aug. 2022 - Mar. 2024 - Design
Apr. 2024 - Apr. 2026 - Bidding & Construction
May 2026 - July 2026 - Start-up & Commissioning

2

DISTRIBUTED VOLUME CONTROL

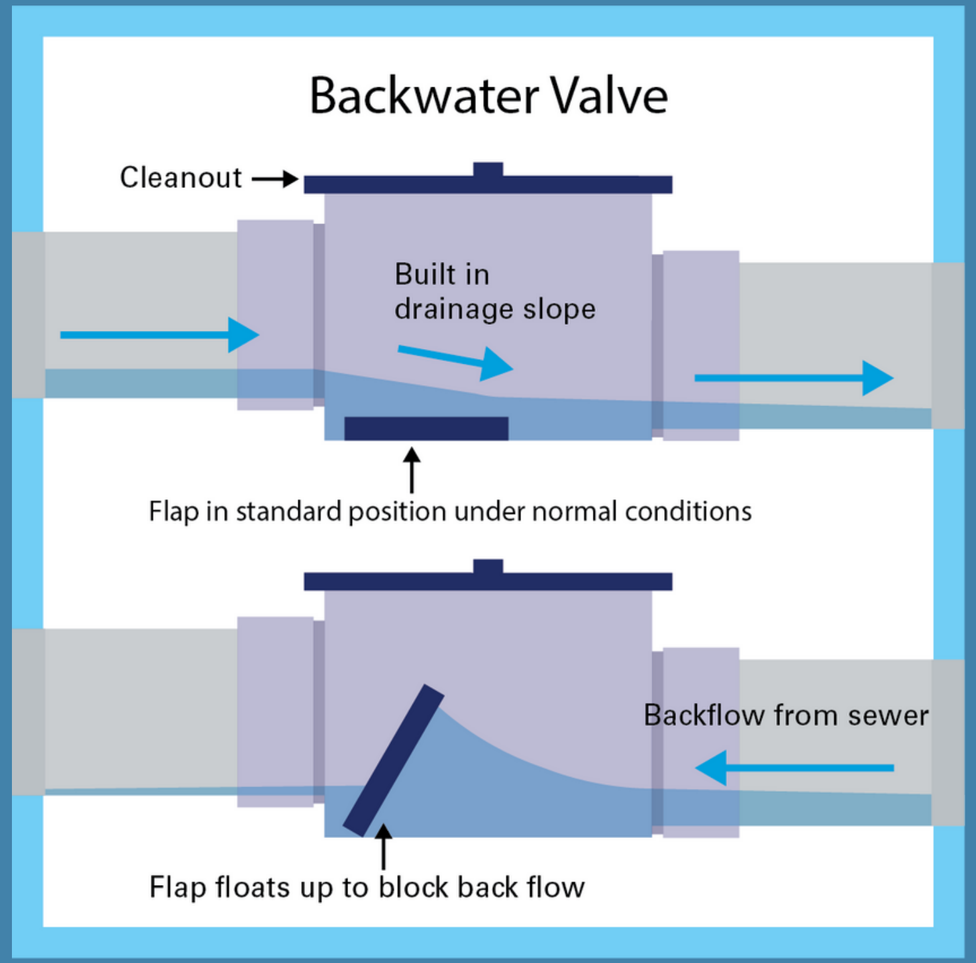
Part of the City's proposed Integrated Plan, this includes installation of distributed green infrastructure to provide volume control in the combined sewer - specifically above CSO points. A total of 65 systems are proposed, that would manage a collective 71 acres of impervious cover (**as much storage as almost 3 Olympic swimming pools**!)

Estimated Cost:
Will vary by system - estimated $100K / acre managed

Estimated Timeline:
October 2021 - March 2030
>> **14 GSI projects were constructed in the South End above the Pine Street CSO in fall 2021**; an additional 3 GSI systems will be installed in the ONE by the end of 2022. <<

3 SURCHARGE PREVENTION

There are three proposed items nested within this category, including re-metering and enhanced H/H modeling of the collection system, development of a basement surcharge prevention program, and (depending on the outcome of metering and modeling) pipe upsizing and more distributed storage projects.



Estimated Cost:
TBD

Estimated Timeline:
2022-2023: Basement Surcharge Program
2022-2025: Re-metering & modeling:
2025-2040: Pipe Upsizing (if needed) / distributed storage

IMPLEMENTATION SCHEDULE

STORAGE	VOLUME CONTROL	SURCHARGE PREVENTION
Aug. 2022 - Mar. 2024: Design **Apr. 2024 - Apr. 2026:** Bidding & Construction **May 2026 - July 2026:** Start-up & Commissioning	**Oct. 2021 - Mar. 2030:** Project Design & Implementation	**2022-2023:** Basement Surcharge Program **2022-2025:** Re-metering & modeling: **2025-2040:** Pipe Upsizing (if needed) / distributed storage

NEXT STEPS

- DEC approves City's Long-Term Control Plan
- DEC issues a new 1272 Order
- City continues implementation & reporting process per Rule for 5-year term, and updates LTCP at the next cycle

QUESTIONS & COMMENTS

CITY OF BURLINGTON, VERMONT
CITY COUNCIL TRANSPORTATION, ENERGY & UTILITIES COMMITTEE

c/o Department of Public Works
645 Pine Street, Suite A
Post Office Box 849
Burlington, VT 05402-0849

802.863.9094 VOX
802.863.0466 FAX
802.863.0450 TTY
www.burlingtonvt.gov

Councilor Jack Hanson, Chair, *East District*
Councilor Mark Barlow, *North District*
Councilor Eugene Bergman, *Ward 2*

Inquiries:
Madeline Suender
802.735.5324
msuender@burlingtonvt.gov

Transportation, Energy and Utilities Committee of the City Council
Tuesday, July 26, 2022 – 5PM

–DRAFT MINUTES–

Call to order by Chair Jack Hanson at 5:03PM

1. **Agenda**

Councilor Bergman moved to approve agenda. Seconded by Councilor Barlow All in favor passed unanimously.

2. **Minutes of 6/21/22**

Councilor Bergman moved to approve minutes. Seconded by Councilor Barlow. All in favor passed unanimously.

3. **Public Forum**

No public comment. Closes at 5:03PM

4. **GMT Strategic Planning (moved to top of agenda to accommodate staff schedules)**
   - Chapin Spencer, Jon Moore, Charlie Baker, Tom Derenthal, Jamie
   - Information

Councilor Bergman – Begin conversation regarding alignment of City's climate change and transportation goals with work from City Reps. Net Zero Energy Road Map passed in 2019, talks about paradigm shift that needs to happen.

Chair Hanson – CC has taken a stand and supported fair free transit and expansion of transit. Looking to find better ways to coordinate with specific end goal in mind.

Director Spencer – GMT Board recognized we want to expand services and be more sustainable and reliable. Regional Planning Studies have been done and not moving forward.

Jon Moore – Presents

Charlie Baker – Discusses how communities can benefit wholistically from transit. Will look into GMT state wide discussions at upcoming CATMA meetingp.

Tom Derenthal – Pressure on Finances is significant moving past FY24 shortcomings. The budget in current year does not allow flexibility or investing.
Jon Moore – 1.5 million projected need in FY25. FY24 we are looking to minimize service cuts at best.

Max Schindler – CCRPC alternate. Supports Coalition building, fair free, and mass transit.

Jon Moore – For FY24 we will assume we will be charging a fair because we are unsure of funding we will receive to compensate.
Chair Hanson – Budget shortcomings can change if we change the status quo. Need to work now to identify new money for FY24

Councilor Barlow – Questions on FY23 ridership projections and funding shortcuts. Covid Projections, are they returning to 'normal'. Masks required? How do we lobby early to the state?
Jon Moore – Ridership is still unpredictable. Masks encouraged. GMT lobbies early. VPTA has a lobbyist contracted for this purpose. Annual meeting for VPTA is tomorrow and we will talk about this state wide perspective that policy doesn't meet needs.

Councilor Bergman – Starting tomorrow at VPTA we should be pushing for something big to present at the CATMA meeting. Report back after meeting tomorrow so we can begin to build this coalition. There should be a November meeting with legislators. Try to get a caucus. Transportation is number one emissions generator identified in City's climate plan.
Jon Moore – Status quo is a problem. Coalition building, advancing transit financing study is best shot at growing and meeting demand. Will provide update on tomorrow's VPTA meeting. Each regional planning agency could build their own coalition to then come together for the state.

Chair Hanson – Need fundraising plan and who we would go to and how we could raise money.
Jon Moore – We are looking at ways of creating public private partnerships. CATMA is one partner who is invested and we will model this agreement with other businesses.

Chapin Spencer – Jon Moore is leaving GMT so we will be looking for a replacement as we move forward with this.

Chair Hanson – Amtrack, service starts Friday. Are you making changes to make connection?
Jon Moore – Not immediately, waiting 6 months to see how train preforms and what time works best.

Chair Hanson – Real time signage and tracking at bus stops.
Jon Moore – Previous vendor could not support this but current vendor can.
Jamie – They are currently part way there with some real time signage.

Chair Hanson – Continue this conversation at next meeting.

Closes item at 6:19

5. **Bike Share Update**
   - Rob Goulding
   - Information

See memo.

Chapin Spencer – Staff has worked well with other partners to explore putting together a pilot for the rest of the year but it will be a heavy lift. Local bike shops to consider. Would recommend we work with community and plan for 2023 but open to hearing thoughts.

Councilor Bergman – The bike shops weighed and were skeptical. Have there been conversations with them about a local consortium they could be involved in, even if on design front?
Chapin Spencer – Previously had these conversations but have not since recent Bolt news. If we hold until 2023 we could work with local community.
Rob Goulding – Worked closely with local shops to understand concerns and work with them.

Councilor Barlow – Questions about Bolt equipment, is City in possession of everything?
Rob Goulding – We are in possession of any bike left in the City ROW that we have seen. We have vast majority that were still in operation in Chittenden County.

Councilor Barlow – What will happen to all the equipment?
Chapin Spencer – Usually we auction but could consider some sort of repurposing, we would need to see how compatible equipment is, as we don't have chargers. Maybe some entity could give them new life in the area.

Councilor Barlow – Is there any City financial liability from this right now?
Rob Goulding – Some resources gathering equipment and staff time. Believe Contract language removes liability from our half, can talk to attorney to confirm.
Chair Hanson – Was anything spelled out in the contract to plan for this?
Rob Goulding – Unsure. We want to evaluate best use for these bikes at the end of these 30 days.

Chair Hanson – What are next steps? My interest is to patch something in, in the meantime to not loose critical time with summer months and colleges coming back. Less robust process because this is a short-term pilot and circumstantial. Years of input from TEUC so you have the background of where council stands on this.
Councilor Bergman – Curious as to how realistic this is?
Jack Hanson – Authorizing, not mandating. Showing partners if we want to make this happen, the City is on board. If there is an entity that is ready to roll then we should be open to that to fill need and get a pilot that can inform longer term solution.
Chapin Spencer – Direction of giving us the option to move forward if possible is friendly. We have communicated with three vendors to explore a pilot option.
Councilor Barlow – Supportive of, as soon as reasonably possible, replacing bikeshare. Wondering if we have been in contact with other communities that were left by Bolt to see what their ideas are?
Rob Goulding – CATMA and CCRPC have helped with this coordination. Have been in contact with four communities that have recently been left by Bolt.

Item closes at 6:45 PM.

6. **Long-Term Control Plan Presentation**
    - Jenna Olson
    - Information

See presentation.

Councilor Bergman – Budget Council passed has all this work included? Financing?
Jenna Olson – FY23 budget passed accounts for what is currently under way and short term. We are aggressively perusing state level financing.
Chapin Spencer – This is historic time with federal funds to act now.
Jenna Olson – Green infrastructure systems in south end and those going in the ONE were funded by $1 mill grant at the end of 2018. Match free dollars from the state.

Councilor Barlow – Storage tank at Calahan. Impacts to programming?
Jenna Olson – We are working very closely with Parks to continue to work to minimize disruptions. There will be some impacts with the scale of project. Timing with Parkway to minimize construction and traffic impacts. We have plenty of time to plan and be deliberate and give adequate notice.
Councilor Bergman - When are you looking to contact users of two fields? Suspect the fields are scheduled a year out.
Jenna Olson– Still in preliminary design. Suspect more directed outreach will come when we are close to 90% design and we have some construction phase plans in mind. Providing as much notice as possible.

Item closes at 7:12PM

7. **Committee Mission Statement**
    - Jack Hanson
    - Action

The Transportation, Energy, and Utilities Committee studies and makes recommendations to the City Council on issues concerning all modes of transportation, and interrelated development issues; ~~energy plans, rates, and other issues;~~ issues related to energy and the City's Net Zero Energy Roadmap, and utility matters regarding, but not limited to, electric, water, sewer, and telecommunications.

Closes at 7:20PM

8. **Director's Report**

Chapin Spencer - Looking at long term water resources needs. Our waste water plants have not had substantial capital work since late 90s. Significant needs at all plants. Interested to come to August Council meeting to request preliminary Engerineering for this work. Estimated price is ~$1.2 million. State revolving funds are available and favorable for this review and upgrade of wastewater treatment facilities.
REP – Have gotten close to refining three alternatives. Will meet again with stakeholders in next three weeks and then have public meeting to inform a preferred alternative.

Councilor Barlow – Question about LTCP and funding.
Chapin Spencer – We are taking a broad look at our upcoming needs wholistically. Will come to you with a good sense of what all these investments will require.
Bergman – Would like to know impact on rates.

9. **Councilors' Update**

Councilor Bergman – N Winooski Bike Lane issues going in August to NPA?
Chapin – NAP reached out and asked us to present. There were questions about if we would go in August or September. We have been reaching out to try to get a meeting with BHA and update from CHC. We want to come when there is substantial news. TBD on date.

10. **Next Meeting 8/23/22**

Front Conference Room not available. GMT potential location. Councilor Bergman remote.

11. **Adjourn**

Councilor bergman motions to adjourn. Seconded by Councilor Barlow. Passes unanimously. Meeting ends 7:30PM

Chapter 6 Public and Regulatory Agency Participation Plan

6.1. Introduction

Through each of the phases of Integrated Plan development, the City of Burlington has incorporated robust participation, engagement, and feedback opportunities both for the broader public, and also for direct stakeholders in the regulated community, and in regulatory agencies. This Chapter provides an overview of the City's equity and environmental justice context; the findings of the public involvement work conducted in 2015 and 2020 to develop this Integrated Plan; and the plan for stakeholder engagement and public participation in the implementation phase, which is more fully detailed in Chapter 13, Monitoring and Adaptive Management.

Element 3 of the US EPA Integrated Plan framework requires the City to develop and document "A process which opens and maintains channels of communication with relevant community stakeholders in order to give full consideration of the views of others in the planning process and during implementation of the plan." Achieving actual "participation," however, is materially different from "communication" and "considering views." "Participation" means that the public and regulatory agencies should have some degree of agency and influence in how the City designs and chooses a Preferred Portfolio, and how the City implements that plan moving forward. In both its engagement of the public and regulators in the preparation of this Plan, and in designing the Participation Plan for the implementation phase, the City team has worked to identify:

- What *types of decisions* the public and regulatory agencies could help influence, both in developing this IP and during implementation;
- What *types of participation* provide realistic, meaningful, and equitable ways to allow the public and regulatory agencies to influence those decisions; and
- What *structures and resources* are needed to carry out those participation actions successfully.

The COVID-19 pandemic occurred in the midst of developing this Integrated Plan, requiring the City to substantially alter its public participation approach. Because many of the communication and participation channels typically used (such as City-wide town hall meetings) could not be used, the City put together a combination of direct mailings in multiple languages, online public presentations, internet and paper-based surveys, static displays at community locations, and "pop-up" outreach at outdoor sites where physical distancing could be maintained. Many valuable lessons came from this experience that will inform the City's outreach and participation work in the future; above all, the exceptionally high rate of participation in the community surveys and positive feedback from online meetings provided strong indicators that citizens were both informed and motivated to participate in setting priorities for the Integrated Plan.

Despite the multiple phases of work and the disruptions of the COVID-19 pandemic, community input on water quality priorities has been remarkably consistent over this eight-year span. As discussed in this Chapter, Burlington's citizens expressed clear desires for making investments that achieve the greatest and quickest benefits for water quality; overall cost was an important, but not the most important, value. Citizens also were more concerned about pollution reduction than implementing certain types of projects, a value is reflected in Project Portfolio 1's prioritization of two major capital projects in early years of IP implementation. Along with Chapter 13, this Chapter also provides a road map for ensuring continued regulatory agency and public participation during implementation.

6.2. Burlington's Equity and Environmental Justice Context

Burlington has a long and proud tradition of broad citizen engagement in governance and policy-setting. Equity and diversity have been an important focus in recent years; the City of Burlington Diversity & Equity Strategic Plan, transmitted to the City Council on June 23, 2014, provides important context for the City's actions and investments, including the goals of this Integrated Plan and recommended approaches for public participation.

> Ethnic and racial minorities and New Americans (i.e., refugees, immigrants, and asylum seekers) represent the fastest-growing segment of the City of Burlington's population.
>
> *Source: City of Burlington Diversity & Equity Strategic Plan, 2014*

Environmental justice is defined by the US EPA as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies[27]." US EPA's basic definition goes on to state:

This goal will be achieved when everyone enjoys:

- The same degree of protection from environmental and health hazards, and
- Equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

The environmental justice movement arose from the experience of disadvantaged communities, primarily people of color, who experienced inequities in environmental protection and a preponderance of polluting uses and adverse environmental conditions in their communities – often as a result of deliberate locational decisions. Burlington does not, on the whole, represent a community with evident environmental justice challenges for water and wastewater infrastructure. Historically, the City of Burlington has not had a history of environmental facilities and polluting uses in its residential neighborhoods. The one Superfund site at the Pine Street Barge Canal, the McNeil generating station, and the City's wastewater treatment plants were not sited in residential areas; their operations do not disproportionately affect the City's minority and New American residents. The impacts of phosphorus loads and insufficient infrastructure affect the community and region as a whole, by limiting recreational use of Lake Champlain that is open and accessible to all. In fact, the Lake and its beaches represent an important public 'cooling center' (for swimmers and non-swimmers alike), which constitutes an important climate resilience and climate equity measure for the City and region.

[27] https://www.epa.gov/environmentaljustice

Some localized conditions, however, have greater impacts in Burlington's Old North End. The Old North End, congressionally designated as an Enterprise Community in 1995 to address persistently high rates of poverty, unemployment, and socioeconomic distress, is one of Vermont's most racially and ethnically diverse neighborhoods. As one of the City's oldest neighborhoods, the Old North End also has some of the most substantial infrastructure upgrade needs. Most notably, some areas continue to experience basement sewer back-ups, which represent a health risk to residents.

From the standpoint of Integrated Planning, an environmental justice concern would arise if a polluting use or one that could introduce new odors or adverse conditions (such as a new or expanded wastewater treatment plant or pump station) were to be sited in a part of the City with a greater population of people of color, Indigenous people, or New Americans. The Preferred Portfolio does not include any such new facilities or expansions in or near residential areas. The more relevant question for this Integrated Plan is whether and where investments will be targeted to afford everyone "…the same degree of protection from environmental and health hazards," thereby improving environmental justice overall. From this standpoint, the selected Project Portfolio includes several measures and investments intended to address ongoing challenges in the Old North End. Notably, the schedule (See Table 12-1) prioritizes green stormwater infrastructure for combined sewer reduction in the Old North End in the first five years of the Integrated Permit.

Finally, ensuring and enhancing access to the decision-making process is addressed by the planned structure of the Stakeholder Advisory Group, which will include both geographic representation from the Old North End (and all other City neighborhoods) and representation by organizations representing New Americans and Old North End residents. This structure and the monitoring information proposed in this Plan is intended to address these needs directly so that over time, the benefits of IP implementation lead to everyone enjoying "a healthy environment in which to live, learn, and work."

6.3. Stakeholder Engagement by Plan Phase

A seven-year process, illustrated in Figure 6-1 below, has culminated in preparation of this Public and Agency Participation Plan. This process has not been strictly linear, nor has one form of public and agency participation (such as a single stakeholder group or communication process) been used throughout. However, the input received, especially on community values and project priorities, has been instrumental in shaping the successful 2018 bond vote on the City's Clean Water Resiliency Plan (CWRP), the Project Portfolios in this Integrated Plan, and the recommended Adaptive Management plan and Stakeholder Advisory Group for implementation. The sections below review the City's actions and the key outcomes from public and agency participation at each past phase.

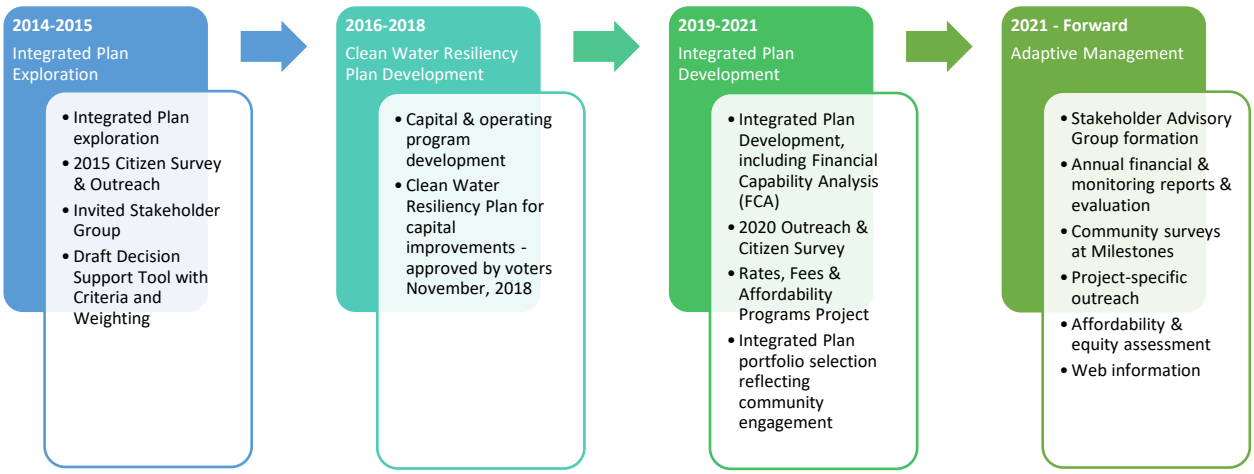


Figure 6-1: Progression of Stakeholder Engagement in Integrated Plan Development

2014-2015: Integrated Plan Exploration

The original exploration of integrated planning began in 2014, when the City received one of US EPA's four national grants for public assistance to explore Integrated Planning. An invited Stakeholder Group was convened to explore the potential applicability of integrated planning to the City's water infrastructure challenges. This group developed a working knowledge of integrated planning and Clean Water Act principles relevant to the regulatory and physical infrastructure needs across the City's water sectors. Based on this information, the stakeholders' own sector-based knowledge, and findings of a 2015 community survey, the group developed project evaluation criteria and general weighting factors for the City to use when considering new capital projects. The ultimate result was a "Project Prioritization Tool"[28] with criteria and weighting factors for projects. This tool has, in pertinent part, been incorporated into the Portfolio Evaluator Tool used in this Integrated Plan. Perhaps most importantly, participants were supportive of Integrated Planning as a tool for cost effectively evaluating the City's path forward. The participation and engagement in this survey thus set the direction for the alternatives analyses that form the technical framework in this Integrated Plan.

2016-2018: Clean Water Resiliency Plan Development

From 2016 through 2018, the City undertook a major outreach effort to develop and successfully pass the CWRP, a comprehensive approach to stabilize and modernize the City's wastewater and stormwater systems. Culminating in a successful bond vote to support $30 million in capital improvements, including $19.9 million for wastewater and $10.1 million for stormwater, the Clean Water Resiliency Plan is funding upgrades to high-risk wastewater and stormwater infrastructure underway today. CWRP funds also are supporting the cost of constructing green infrastructure projects. The cost of servicing the debt issued under the CWRP will, once fully issued, add approximately $5.36 per month to the Water Resources Utility Bill paid by a typical single-family residence.

28 https://www.burlingtonvt.gov/sites/default/files/MACRO_Burlington%20Decision%20Support%20Tool%20Example-2pg_0.pdf

Unlike the exploration of integrated planning in 2014-2015, the CWRP phase was focused on developing the City's November 2018 bond vote proposal and securing public support for its approval. The proposal reflected the findings of the community survey and stakeholder process, notably the community's desire to stabilize and modernize infrastructure in order to prevent pollution and combined sewer overflows. With that input in hand, the CWRP phase focused on developing the comprehensive financial proposal and explaining its impacts and benefits. This was achieved through three key communication pathways:

1. A comprehensive web portal on the City's website, with Frequently Asked Questions, financial information, links to supporting technical documents, recorded presentations, infographics, and mapping Dashboard showing the location and type of projects completed.
2. An interactive Mayor's Town Hall event on September 27, 2018, "Town Hall: A Community Conversation on Water Quality;" and
3. Presentations to each of the City's Neighborhood Planning Assemblies (NPAs).

Since the bond vote, updates have been provided through the City's website as well as through in-person events, including rain barrel workshops and regular, standing open house events and tours of the City's Wastewater Treatment plants. While these in-person events have been suspended during the COVID-19 pandemic, the City intends to offer these again when public health guidance allows as a key part of Integrated Plan implementation.

2019-2021: Integrated Plan Development and Public Participation

In developing this Integrated Plan, the City drew on the outreach and participation from earlier phases to develop a focused and intensive public participation process in 2020. The 2020 process informed both the selection of the project portfolio, and this participation plan for the adaptive management phase. Preparation of the Integrated Plan overlapped with the public outreach effort for the Clean Water Resiliency Plan, following soon after, the City had provided widespread outreach on the City's water infrastructure systems and financial needs to Neighborhood Planning Assemblies, City boards, and the public. The CWRP outreach provided an especially strong base of knowledge from which to begin outreach on the Integrated Plan.

From May through September 2020, the City conducted a multi-part communication and public outreach program designed to gain public input on how the Integrated Plan portfolios should be prioritized. Using multiple communication and participation methods, the costs, environmental and regulatory benefits, and community impacts of different investment areas and project options were presented, allowing the community to weigh in on what approaches and relative investments best addressed their concerns, values, and hopes. The City used a combination of static website information, public presentations, and "story boards" to communicate, as effectively as possible, the potential benefits and trade-offs of different water quality investments.

Quite evidently, the public involvement process had to be designed to meet physical distancing requirements and limits on gatherings imposed by the State's response to the COVID-19 pandemic. The process outlined below met these requirements and largely overcame the challenges, offering important lessons and pointers for maintaining robust and inclusive public involvement in the future.

1. First, six online, interactive public workshops were held by City staff and the consultant team. The first presentation was recorded and posted on the IP project web page. These workshops included an

overview of the Clean Water Resiliency Project, the City's past integrated planning work, the regulatory and community objectives of integrated planning, and the potential areas for investment under an Integrated Permit (i.e., wastewater treatment, combined sewer system, separate storm sewer system, and non-structural controls). A total of 20 individuals participated in these online workshops, which offered extended, live question-and-answer opportunities with City staff and consultants. An in-session survey using the online workshop platform was used, which helped refine the questions for the larger community survey.

2. Next, in August 2020, post cards were sent to every mailing address (residential and non-residential) in Burlington informing citizens of the IP website information, providing the survey link, and the opportunity to participate. The post card information included translation in the six languages most commonly spoken by Burlington residents.

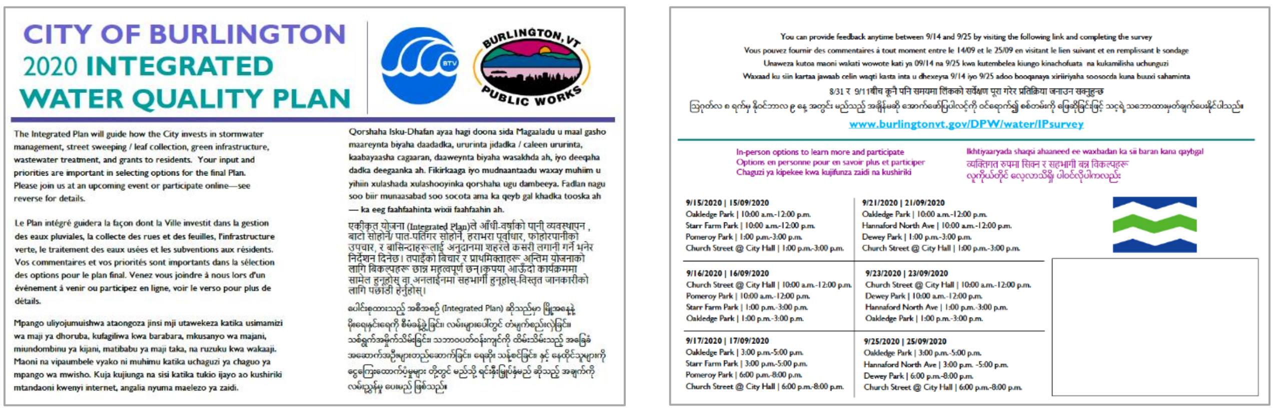


Figure 6-2: Mailer Sent to All Burlington Mailing Addresses, August 2020

3. The Integrated Plan Survey was launched September 10th, once the post cards were received, and was available to residents through September 28th. The online version was available through the City's website; a link also was sent out through multiple City email channels including the Neighborhood Planning Assemblies. A total of 366 valid survey responses were received through the online platform, representing 0.85% of the City's residents. Paper copies were made available at all of the pop-up public outreach events and at City Hall. Results of the survey, which included structured and open-ended questions, are summarized under Section 6.4.

4. Finally, in September 2020, a total of twenty-four (24) "pop-up" outreach events were held at four public park locations, dispersed throughout the City: the Starr Farm Park in the New North End, Oakledge Park in the South End, Pomeroy Park in the Old North End, and on Church Street. Six, two-hour slots were staffed at each park, providing opportunities for informal, drop-in information on the Integrated Plan, the City's larger water resource efforts, and how to provide input. The centerpiece of each event was a series of "story boards" (see Appendix E) distilling the Integrated Plan areas and the choices to be made in selecting a preferred portfolio.

The pop-up outreach events, set up outdoors in order to comply with COVID-19 distancing protocols in place at the time, did provide visibility for the project in the larger community. While attendance and interactions were somewhat limited due to the pandemic restrictions, the story boards and graphic format were able to be refined based on the experience and feedback received. These graphics and

formats are likely to provide a partial template for annual reporting to the Stakeholder Advisory Group and community during implementation.

6.4. Public Participation Findings

The survey made available to residents in September 2020 began with an overview of the City's phosphorus reduction obligations, and then offered respondents a series of structured and open-ended questions to gauge their opinion and input on priorities for the Integrated Plan. Questions were structured to elicit input on both project characteristics, and also the "trade-offs" among and between different potential portfolios. Characteristics that were tested included total cost; pollutant-reducing effectiveness; energy use and greenhouse gas emissions; regulatory certainty; use of green stormwater infrastructure versus underground options; willingness to pay for stormwater retrofits; and the degree of disruption to citizens' daily experiences. The "disruption factor" included questions about on-street parking, leaf collection, street flooding, and local construction projects.

6.4.1. Overall Goals and Outcomes

The most critical findings influencing portfolio selection came from two questions on Integrated Plan priorities and goals. When asked to choose the one statement best reflecting their priorities for how the City should go about meeting its phosphorus goals, nearly half of respondents (48.6%) said the City should choose the option that reduces pollution in Lake Champlain as quickly as possible, even if the cost is higher than for other options. The next most common response (19.7%) was to choose the option with the lowest energy use and Green House Gas (GHG) emissions, while only 11.5% selected the option that would have the lowest costs.

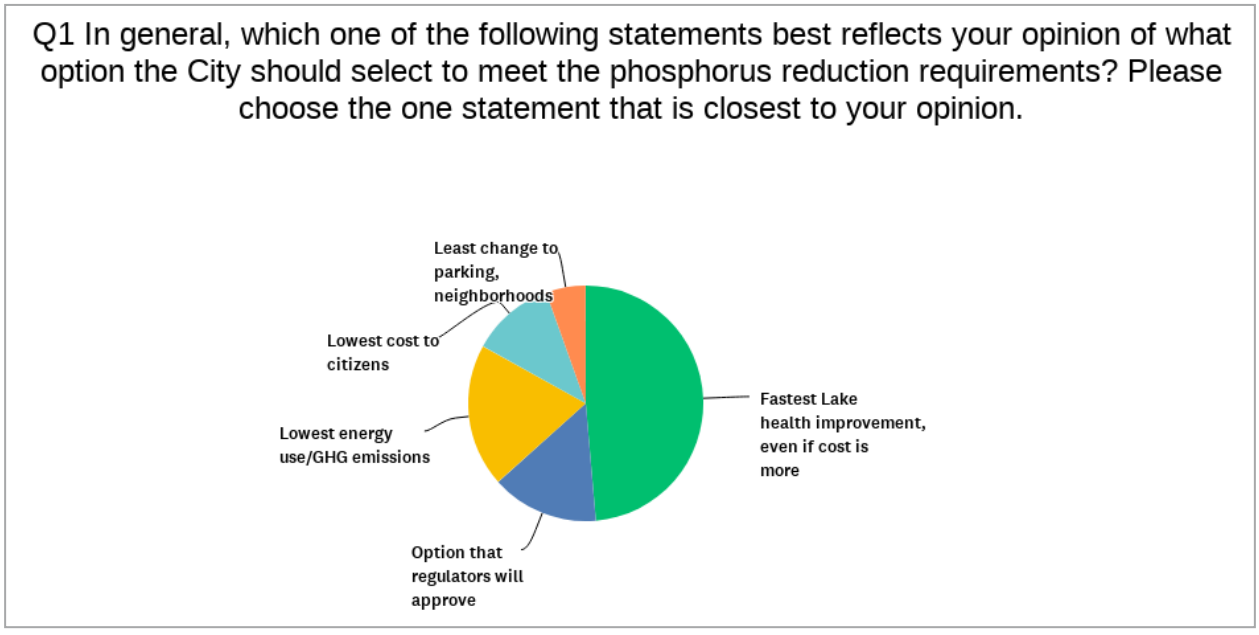


Figure 6-3: Survey Question 1, Overall Goal for the Integrated Plan

When respondents were asked to rank outcomes from 1 (most important) through 7 (least important), Lake Champlain's health was the top-ranked outcome, followed by the closely related goal of reducing CSOs. The related goals of maximizing use of GSI and ensuring equitable distribution of impacts and benefits throughout the City, were the third and fourth priority outcomes. Cost stability and total cost

were fifth and sixth; minimizing change and disruption, which has been a significant challenge for individual surface GSI projects in some areas of the City, was ranked as least important.

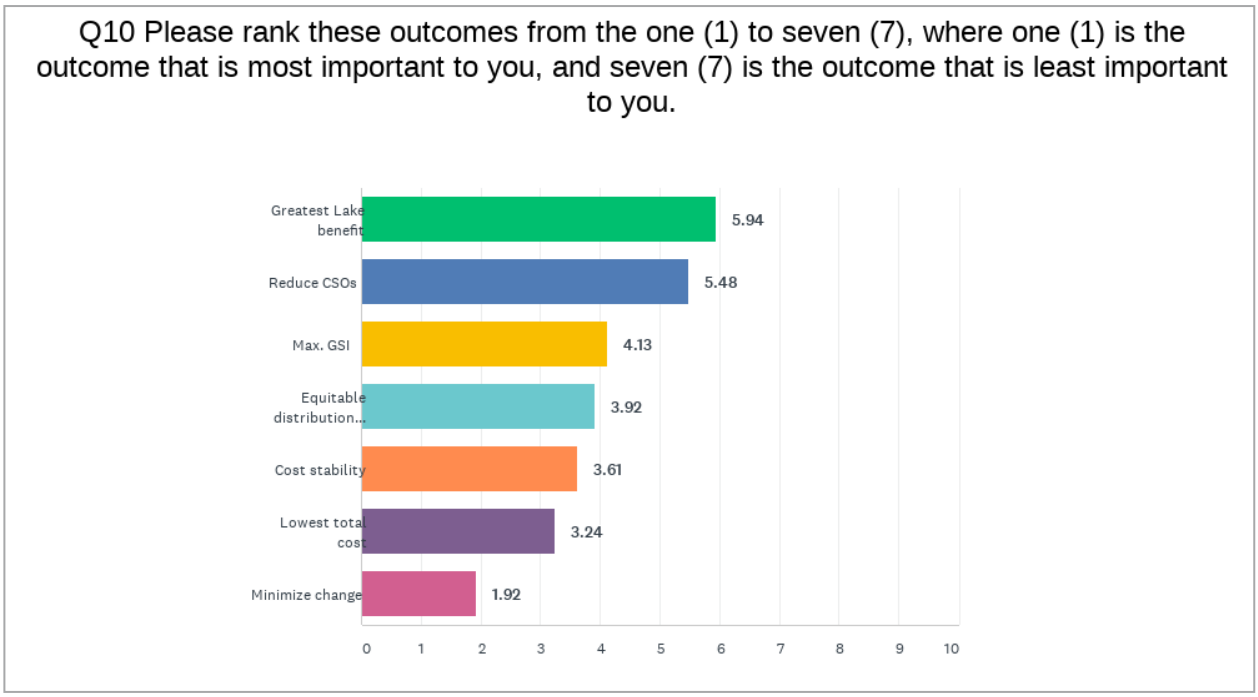


Figure 6-4: Survey Question 10, Ranked Outcomes

To help deal with a challenging issue for Water Resources staff, with importance for MS4 and combined sewer improvements, the survey asked about respondents' familiarity with GSI and their feelings about the use of surface GSI versus underground storage. Respondents were asked whether underground storage should be used where neighbors prefer the option, or where on-street parking can be preserved. By and large, all categories of respondents supported maximum use of surface GSI, with those who are "somewhat" or "very" familiar with GSI choosing this option more frequently than those who are "not at all" familiar with GSI.

Table 6-1: GSI Preference among Survey Respondents

Q3. Preference for using GSI vs. Underground Storage by Familiarity with City GSI Projects			
	Not at All Familiar with GSI	Somewhat Familiar with GSI	Very Familiar with GSI
% of All Respondents	23.5%	47.5%	29.0%
Use the least expensive option	16.3%	6.9%	11.3%
Use underground storage instead of GSI where it preserves parking, even if underground is more expensive	12.8%	12.1%	13.2%
Use the option preferred by immediate neighbors	10.5%	12.6%	8.5%
Maximize the use of GSI where technically feasible	55.8%	67.2%	64.2%

Residents were asked for input on leaf collection and street sweeping activities, two important options for phosphorus reduction through non-structural programs. The questions on leaf pick-up were intended

to help the City plan for its collection programs. Having the City pick up leaves either on more regular recycling days or the same set of recycling days in the fall was preferred by more than half of the respondents who have participated in the City's leaf collection program in the past; having a central drop-off point during the fall season was seen as desirable by about 41%.

Table 6-2: Leaf Pick-Up Option Preferences by Respondents Participating in Leaf Collection

Leaf pick-up options (choose any you prefer)	Of respondents who have participated in leaf collection:
% of All respondents	175
Pick up on regular recycling days in fall	62%
Pick up on more recycling days in fall	57%
Have a central drop-off during fall	41%
Have a central drop-off on 3-4 days	13%

Regarding street sweeping, respondents were asked under what circumstances they would be amenable to more aggressive enforcement of on-street parking rules that improved street sweeping. Respondents expressed support for the type of strong on-street parking rule enforcement that is needed for more effective street sweeping. If the City can show that there is a substantial pollution reduction benefit that offsets other costs, the total of "Yes" responses would be 82%, making this a very important question for the Stakeholder Advisory Group and adaptive management process.

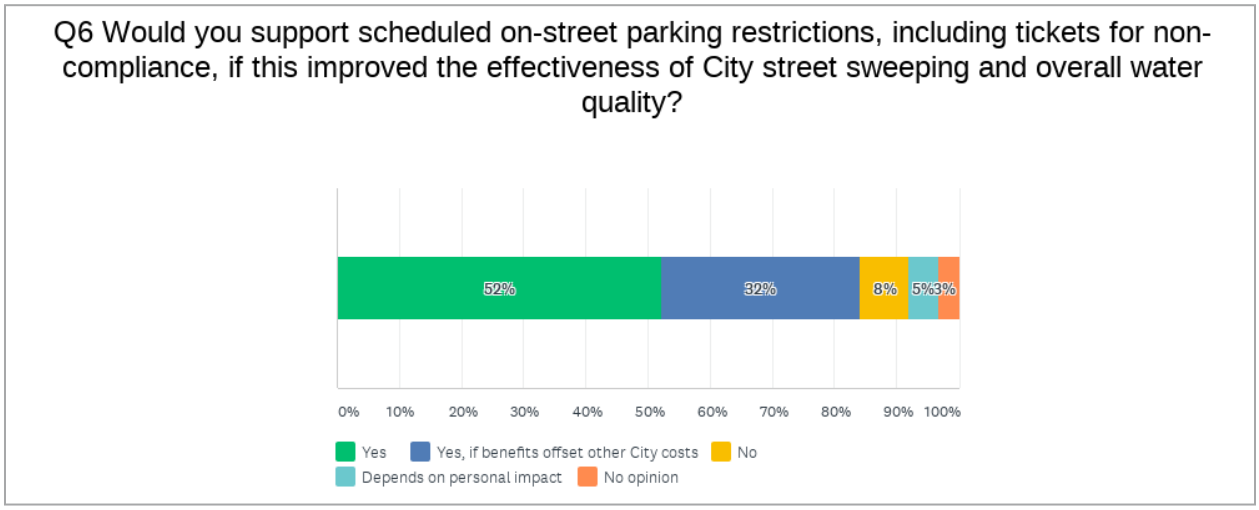


Figure 6-5: Support for On-Street Parking Restrictions to Support Street Sweeping

Finally, the survey gathered residents' input on financial incentives for residential storm water retrofits. Residents were asked how much of a financial incentive, and with what financing or payback terms, they would need to undertake a $1,000 project (e.g., rain gardens, small rainwater harvesting system, etc.) and an $8,000 project (e.g., permeable driveway, combination project, etc.). While one-third of respondents expressed interest in installing a retrofit, one-quarter said their response would depend on financial assistance, and another 22% of respondents were renters who did not believe the question applied to them. Of those who responded, there was a significant difference in responses between the $1,000 option (i.e., simple project) and the $8,000 option (i.e., full retrofit or driveway). This will have important implications for design of a retrofit option and estimating its potential reach if that option under the Preferred Portfolio is exercised.

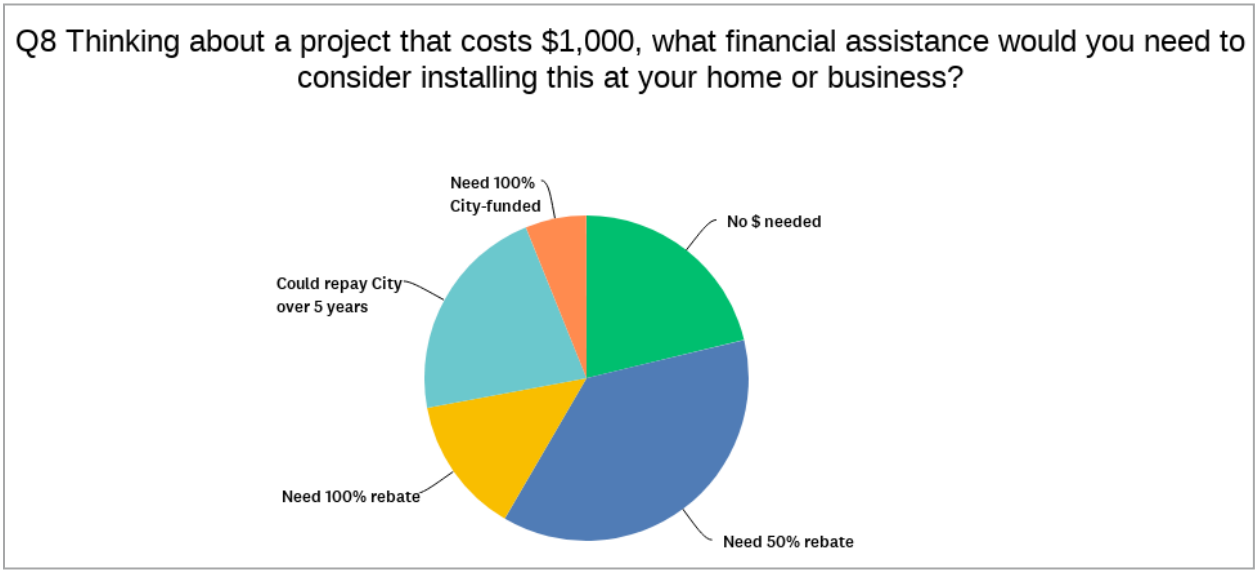


Figure 6-6: Financial Support Needed for $1,000 Stormwater Retrofit

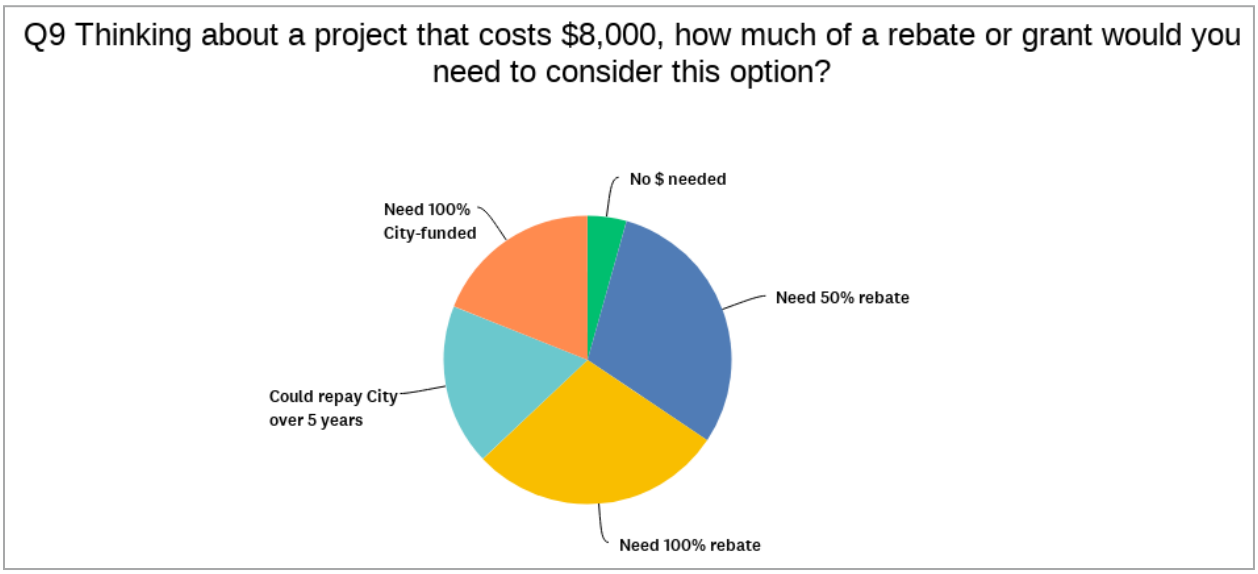


Figure 6-7: Financial Support Needed for $8,000 Stormwater Retrofit

6.5. Public and Regulatory Agency Participation Plan

Moving forward, public and regulatory agencies will participate through ongoing and periodic activities. Some will be standing processes related to the Stakeholder Advisory Group and adaptive management process; others will be specific to individual projects, notably the Calahan Park CSO storage project and various Green Stormwater Infrastructure installations around the City. Overall, the public and regulatory agencies will be invited to participate and to be informed about IP implementation through six avenues:

1. Quarterly work by the Stakeholder Advisory Group, supported by Water Resources Staff (Section 6.5.1 and Appendix F)

2. Annual Reporting to the Stakeholder Advisory Group, City boards, and regulatory agencies (Chapter 13)
3. Regular updates of standing City communication channels, with an emphasis on recommendations to address diversity and equity (Section 6.5.3)
4. Outreach and opportunities to participate in grant and incentive programs, including residential retrofits (Portfolio add-on project 3a)
5. Periodic community surveys, likely at milestone points in IP implementation (Chapter 13)
6. Project-specific outreach, community meetings, and public hearings on specific projects

6.5.1. Stakeholder Advisory Group

The backbone of ongoing public participation will be the Stakeholder Advisory Group (Appendix F). As part of accepting this Integrated Plan and advancing a request to the Vermont Department of Environmental Conservation for an Integrated Permit, the Burlington City Council will be committing to support for the Stakeholder Advisory Group's formation and facilitation by City staff, with all meetings subject to City and Vermont Open Meeting Law and notification guidelines.

Purpose and Composition

Intended to be convened as an *ad hoc* committee by the City Council, the Stakeholder Advisory Group will act in accordance with the Protocols and Operating Principles set forth in Appendix F. Composition of the Stakeholder Advisory Group is intended to ensure broad geographic representation from the City's neighborhoods, as well as representation from specific interests affected by how, when, and at what cost the City proceeds with IP projects. Invitations to participate will be extended to organizations and boards, not to individuals. Identified stakeholder organizations will include established environmental advocacy organizations active in Lake Champlain issues, along with representatives of the City's recreation and waterfront-dependent businesses. Consistent with the City's Diversity and Equity goals, representatives will be included from community-focused organizations in the Old North End and organizations working with New Americans. Each NPA will be asked to provide a representative to ensure that there are ongoing and consistent information pathways into the NPAs.

Responsibilities

The Stakeholder Advisory Group is intended to be the principal "intake point" for staff updates, periodic monitoring information, financial reports, and community issues raised around all of the projects in the IP portfolio; as such, it is also intended to be the body that undertakes the first steps of decision-making related to adaptive management (see Figure 13-2 and Figure 13-3). Therefore, participation in the Stakeholder Advisory Group will require active commitment on the part of the invited organizations to ensure that the same designee attends and participates actively in quarterly meetings. All participating organizations also will have the responsibility to bring pertinent information back to their membership through their own communication channels.

Stakeholder Advisory Group members will play an especially important role helping staff identify appropriate times and opportunities for engaging the broader public, regulatory agencies, and other jurisdictions. The timing and content of a community survey, or the need for targeted neighborhood outreach around a particular IP project, are examples of the types of public participation and outreach actions that are expected to be identified and developed by the Stakeholder Advisory Group's members, working with Water Resources staff.

Adaptive Management Role

Finally, the Stakeholder Advisory Group will help Water Resources staff identify appropriate points for adaptive management decisions. As outlined in Chapter 13, re-prioritization or other adaptive management actions would be initiated by staff based on monitoring and brought first to the Stakeholder Advisory Group for consideration. Thereafter, recommendations would go through the City boards and councils with direct jurisdiction (i.e., Development Review Board, Planning Commission, Board of Public Works, Board of Finance, and City Council) and as required, to Vermont DEC.

6.5.2. Regulatory Agency Participation

Regulatory Agencies, notably the Vermont Department of Environmental Conservation and US EPA Region 1, principally will be engaged through periodic review of required reporting, and through ongoing invitations and encouragement to participate as observers in the Stakeholder Advisory Group process. As noted in the Protocols and Operating Principles document, VT DEC and US EPA are planned to receive all Stakeholder Advisory Group agendas, staff memoranda, meeting minutes, and other materials on an "FYI" basis. This relationship is intended to support strong communication between agencies and the City's stakeholders around community needs and regulatory processes.

6.5.3. Supporting Burlington's Diversity and Equity Goals

As noted under Section 6.1, Burlington is not a conventional environmental justice community, where past, spatially defined inequities related to socioeconomic or racial disadvantage must be actively remedied by investments in the Integrated Plan. Instead, the City will be challenged to ensure that the IP process – especially individual project implementation and adaptive management decisions – takes into account the City's Diversity and Equity goals and context, includes active measures to promote equity, and takes in data that can help the City further its goals for equity and inclusion.

IP implementation and the Monitoring Plan (Chapter 13) can support several important recommendations of the City's *Diversity & Equity Strategic Plan*. First, under III. Data Collection and Analysis, Water Resources can support Recommendation III.B.2 by ensuring that information on how to submit questions, survey requests, compliments, or complaints is readily available on the website in all of the designated languages (English, French, Arabic, Nepalese, Somali, etc.). Translation may need to be provided for the "email us!" link (https://www.burlingtonvt.gov/dpw/water/integratedplan).

Second, as part of the Monitoring and Adaptive Management Plan, Water Resources staff can help address Recommendation III.B.3 by identifying, where possible, general demographic information on those who are:

1. Attending events or trainings
2. Requesting services
3. Receiving information on stormwater retrofits
4. Living or managing businesses in neighborhoods experiencing basement back-ups and street flooding
5. Requesting financial relief from Water Utility Bills

Third, as noted under V. Burlington Office of Equity and Civil Rights, Water Resources staff and the Stakeholder Advisory Group members are encouraged to use the Equity Lens questions in evaluating the effectiveness of public outreach events, leaf collection, street sweeping parking bans, the residential retrofit program (as implemented), other community grants (i.e., easement trees), and communications efforts such as the website. This may require additional or outside support to assess participants' experience (or reasons why diverse groups have not participated); the Stakeholder Advisory Group and staff are encouraged to consider appropriate points to solicit this information as programs are implemented. Questions based on the Equity Lens approach would include:

1. Were there barriers to participation or use of the program faced by diverse groups? Which groups or populations? What is the impact of the policy/program on diverse groups?

These questions are applicable to incentive programs, public participation opportunities, and non-structural pollution reduction. For example, were there challenges implementing leaf pick-up or alternate-side parking bans in specific neighborhoods that have more under-represented or New American residents and businesses?

2. How did you reduce or remove the barriers? What changes have you made to the policy/program/service so that diverse groups will benefit from it? What human and budgetary resources have been identified or allocated?

The Stakeholder Advisory Group will be an important forum (and its members important resources) for assessing resource distributions and discussing how to address program and participation barriers. Annual reporting under the Monitoring Plan will provide this budgetary information.

3. How will you measure the results of the policy/program to see if it works to successfully remove barriers or create opportunities for diverse groups/populations?

The Monitoring Plan also provides a framework to evaluate the distribution of resources, non-structural actions (e.g., street sweeping, catch basin cleaning, residential retrofits, etc.) and capital projects across the City's neighborhoods.