
The Utility Advisory Committee will hold this meeting in person, in the **City Hall Map Room**. Attendance may be in person or the meeting is also accessible via the Zoom meeting platform.

Remote meeting on Zoom
Please click the link below to join the webinar:
<https://bainbridgewa.zoom.us/j/85322271874>
or Telephone: 1 253 205 0468
Webinar ID: 853 2227 1874

Agenda

1. Call to Order/Roll Call – 5:30 PM

2. Approval of Agenda/Conflict of Interest Disclosure

3. Council Liaison Report

4. Regular Business

- a) Approval of minutes from 6/12/24 and 7/18/24
- b) 2024 Comprehensive Plan Periodic Update and [Winslow Subarea Plan Update](#) – Draft Environmental Impact Statement Road Show – 30 min
- c) Review and discuss the Stormwater System Plan Summary and Implementation Memo (see attached) – 25 min
- d) Review recent water system coordination meeting with Kitsap Public Utility District – 20 min
- e) Public Works Update – 15 min

5. Public Comment

In person public comment is accepted at this time on any topic of public interest. Each commenter will have three minutes, or such amount as the meeting chair determines, to speak. Public comment is not taken on individual agenda items during the meeting. Public comment is simply received by the Utility Advisory Committee, with no response, and the Utility Advisory Committee

Utility Advisory Committee meetings are wheelchair accessible. If you require additional ADA accommodations, please contact the Public Works department at 206-842-2016 or cityadmin@bainbridgewa.gov by noon on the day preceding the meeting.

cannot deliberate on items that are not on the agenda. The lack of comment is not an endorsement or a denial of the comment.

Please refer to guidelines and instructions for public comment, including orderly behavior and civility in remarks, attached below. Remote public comment is allowed with advance notice by 4:00 p.m. on the business day before the meeting to cityadmin@bainbridgewa.gov, provided that all remote commenters shall be required to display their true name and to keep their camera turned on to show their true uncovered face while delivering their comments.

[Link to Instructions for Public Comment](#)

6. Good of the Order

7. Adjourn

City of Bainbridge Island Utility Advisory Committee

Meeting Minutes for June 12, 2024

Meeting convened – 5:00 pm

Members Present; Wanda Schulze, Andy Maron, Charlie Averill, Sheina Hughes, Ted Jones, Svend Brandt-Erichsen

Also Present: Chris Wierzbicki (Public Works Director), Jon Quitslund (City Council liaison), Jeff Hansen (HDR Engineering)

Minutes of May 16 meeting approved

Wastewater Beneficial Re-use Project

Jeff Hansen presented a progress report.

The study has considered potential sources of reclaimed water and locations for treatment plants – Winslow, mid-island and the south end of the island.

In Winslow, the alternatives are a centralized facility, which would treat water at the Winslow wastewater treatment plant to a level that would allow reuse, or a decentralized facility, which would involve developing a small package plant in upper part of sewershed.

To initiate wastewater reclamation mid-island would require development of a new treatment facility. For a project at the south end, treatment could occur at the Sewer District 7 facility.

The study has identified the following potential uses for reclaimed wastewater:

- Irrigation – at the wing point golf course, City parks, or school fields
- Groundwater recharge – a limited assessment of the potential for groundwater recharge was completed previously. The current study is drawing on that work.
- Other uses are possible, but the scale of those potential uses is more limited and capital intensive. For example, reclaimed water may be used for toilet/urinal flushing, or could be applied to some commercial uses.

Alternatives selected for further study focused on the Winslow area – both centralized and decentralized alternatives.

During the last 6 months, a desktop evaluation of groundwater recharge feasibility was completed and a groundwater recharge favorability model was developed.

Key factors affecting groundwater recharge include:

- Geology – presence of glacial till layer near surface
- Hydrogeology
- Soil characteristics
- Slope stability

This work has identified areas with physical characteristics that could have the potential for groundwater recharge –

- Grand Forest (although this area is likely not feasible due to the distance from existing sewer infrastructure)
- West of Eagle Harbor
- Sakai Park

The assessment of the feasibility of a satellite treatment facility in the Winslow area considered:

- The potential source of wastewater for reclamation: intercepting wastewater in the upper portion of the Winslow sewershed, for local use in that area.
- A key consideration is the availability of sewer flow (volume).

A previous study was completed in 2021 of the New Brooklyn sewer basin, which includes the schools, the Copper Top development and the North Town Woods development.

That study found that summer flows (dry weather) were about 54,000 gallons/day(gpd), with projected future growth to 67,000 gpd. This represents about 10% of existing dry weather flow to the Winslow WWTP.

The New Brooklyn basin volume also equates to about two thirds of identified City irrigation, excluding the Wing Point golf course. One of the potential reuses for reclaimed water would be to displace the use of groundwater for this irrigation.

Summary of Alternatives Considered:

Alternative 1 – Centralized Treatment at the Winslow WWTP

1A – Reuse for golf course irrigation

- Treatment: Would need to upgrade disinfection
- Distribution: pump station, minimal piping
- Capital cost \$ 6 million

1B – City irrigation and GW Recharge

- Treatment: same as for 1A, plus add granulated carbon to remove contaminants of emerging concern (e.g. PFAS) – likely needed for GW recharge
- Distribution – pump station, extensive piping, storage tank
- Capital cost \$18 million

Committee members suggested that that City investigate the Environmental Protection Agency's water use for the treatment system at the Eagle Harbor Superfund Site and whether reclaimed water could be used for that purpose. That could provide an alternative use for a centralized reclamation facility.

Alternative 2 – Decentralized Treatment

- Locate a package plant at or near Sakai Park
- Reclaimed water could be used for irrigation or groundwater recharge
- Groundwater recharge facilities typically involve a subsurface infiltration gallery. An alternative is open recharge ponds.
- Location would put the facility near a potential recharge location at Sakai Park

- Alternatively, water could be piped along High School Road to Johnson Farm

2A – Irrigation only

Treatment – Satellite Treatment Facility membrane bioreactor (MBR), booster chlorination

Distribution – Pump station, moderate piping, storage tank

Cost - \$12 million

2B – Irrigation and GW recharge

Treatment; Same as 2A, with addition of Granular Activated Carbon

Distribution: Pump Station, Moderate Piping, Storage Tank, Recharge Basin

Cost - \$15 million

Annual Reuse (million gallons)

1A: 33.5

1B: 14.6

2A: 4.5

2B: 11.8

Unit Cost (per gallon)

1A: \$0.17

1B: \$1.20

2A: \$2.70

2B: \$1.29

Operating costs of decentralized treatment plant not included

Discussion

The committee discussed implications of the work completed to date with City staff, including questions or areas for potential further evaluation prompted by the presentation. The discussion included possible purposes for a wastewater reclamation project, including water conservation and reducing load on the Winslow WWTP. It also discussed the potential financial benefits associated with the project, as understood from the estimates prepared to date, as well as financial considerations that may not be captured by the existing study.

The committee also had questions regarding the risks of treatment plant upsets and what impacts an upset could have on the Winslow sewer system. Another consideration the committee identified is the need to decide how the cost of water reclamation would be distributed – whether those costs would be allocated to the water utility, the sewer utility, the general fund, or some mix of funding sources. The committee and City staff also noted that if the proposed use for reclaimed water were to supply the Wing Point golf course, then terms for that arrangement would have to be negotiated with Wing Point.

Next Steps for Water Reuse Study

- Finalize cost estimates
- Complete a draft technical memo
- Key areas likely to be recommended for further evaluation:
 - Complete site-specific assessment of feasibility for potential groundwater recharge areas

- Evaluate consistency with future plans for Sakai Park
- Develop a more quantitative assessment of the potential benefits of groundwater recharge (e.g., enhancement to groundwater, reduction in flows to WWTP)

Review Public Sewer Element of Comp Plan

The Committee began discussion of the Sewer Element of the comprehensive plan. However, after a few preliminary points the discussion was deferred to the next committee meeting.

It was noted that the City Council has focused on the City's relationship with Sewer District #7 and City's south end system. One member asked whether the Comp Plan should include, as background, a description of how sewage treatment is organized on the Island, and whether the septic systems used over much of the Island should be addressed in the Plan. These points were discussed but no recommendations were made.

Discussion began regarding Plan Goal U-12. There was a discussion of whether the goal was adequate in addressing protection of public health and the environment but no recommendations for changes to the goal were proposed or adopted

Policy U12.1 – no comments

Policy U12.2 – 12.3 – no comments

Policy 12.4 – There was discussion regarding this policy as it relates to new public sewer facilities. One member suggested considering whether to change criteria a. for expansion of the City's sewer system.

There followed a discussion of the Plan's existing criteria for explanation of the sewer system and whether the City should study expansion to additional service areas. There also was discussion as to whether there should be a goal or action item calling for investigation to determine whether septic systems are failing in areas of the Island and for strategies for responding to failing systems. Committee members also noted the need to coordinate work in this area with the Kitsap County Public Health District.

No recommendations were made regarding Policy 12.4 and the Committee agreed to pick up its review of the Sewer Element of the Comp Plan at its next meeting.

Meeting Adjourned – 7:00 pm.

UTILITY ADVISORY COMMITTEE

Minutes - July 18, 2024

Meeting called to order by Co-Chair Averill at 5:30 pm

Members Present: Co-Chair Charlie Averill, Wanda Schulze, Andy Maron, Sheina Hughes (Zoom), Martin Pastucha (Zoom and in person), Ted Jones (Zoom) , Council Liaison Jon Quitslund

Absent: Svend Brandt-Erichsen,

Also Present: Chris Wierzbicki, Public Works Director

1. Public Comment: Committee members discussed the policy recently adopted by the council for public comment at advisory committee meetings. The Committee felt that some of the provisions in the policy varied from the manner in which it has operated in the past, particularly in the taking of comments from interested or affected public during discussion of specific agenda items and availability of the UAC for members of the public to bring concerns about issues impacting City utilities. The Committee felt that it might in the future vary from the new policy on those subjects when necessary or expeditious.

2. Disclosure of Conflicts of Interest: None

3. Council Liaison Report. Councilmember Quitslund reported that the Draft Environmental Impact Statement (DEIS) will be released on July 26, 2024, and that a 60-day comment period will follow. Mr. Quitslund encouraged committee members to review the DEIS, and suggested the Committee may wish to submit comments. The Committee tentatively scheduled this item for the September meeting.

4 a) Minutes of 6/12/24 were not available and were not approved.

b) Stormwater System Plan:

PW Director Wierzbicki presented a draft of a Preliminary Implementation Cover Memo for the Stormwater System Plan for discussion. During the discussion, it became apparent that the Committee favored a prioritization of the

150 recommendations in the System Plan such as in the Cover Memo, but believes a 3-5 page “Executive Summary” of the Plan should also be prepared.

c) Draft 2025 Capital Improvement Plans (CIP):

PW Director Wierzbicki briefed the Committee on his preliminary draft of the CIPs of the three utilities, to be approved by the City Council later in the year. He explained suggested changes in the three plans, explained the reasoning for each, and sought feedback. The Committee made various comments on each plan, and generally supported the changes.

Ted Jones departed the meeting at 6:30.

d) Comprehensive Plan Utility Element Review - Public Sewer

The Committee continued discussion of the public sewer section of the current Utility Element to gauge whether changes might be made. The Committee discussed Policies U 12.5 (re-use), U 12.6 (effluent discharge), U 12.7 (tertiary treatment), and U 12.8 (Sewer District No. 7), and determined that more in depth analysis and discussion will be necessary on those topics when crafting the policies for the 2025 Comp Plan Update.

The Committee inquired about how effluent in the Day Road “light manufacturing area” is being treated in the Comprehensive Plan.

The meeting adjourned at 7:00 p.m.

Co-Chair



Stormwater System Plan: Summary and Implementation Memo

September 19, 2024

Prepared by:

Christopher Wierzbicki, PE
Public Works Director

In coordination with the
Utility Advisory
Committee

Prepared for:

City Manager
City Council



Background

The Stormwater System Plan, completed in September, 2024, broadly assesses the City of Bainbridge Island's Stormwater Management Program and provides over 150 unique recommendations to help COBI maintain a storm drainage program that is compliant with federal, state and local regulations, and aligns with the City's Comprehensive Plan.

In coordination with the Utility Advisory Committee, City staff developed this summary memo that aims to provide high-level guidance to the City Council and the City Manager on prioritizing the recommendations and developing near-term actions for implementing the Plan.

Many of the recommendations are already being pursued, and others may be within reach with updates to the Storm and Surface Water Utility rates. This summary document aims to highlight critical elements of the City's stormwater work, and identify near-term actions and opportunities that will strengthen the program.

Completing the System Plan provides an opportunity to continue building a "One Water" plan that coordinates the City's storm, surface, ground, drinking and waste-water efforts.



Stormwater regulations have objectives for **utility management** and **the environment**:

- Preventing flooding
- Ensuring public safety
- Minimizing property damage
- Protecting "receiving waters" including streams, aquifers and Puget Sound.

Regulatory Framework

The Stormwater System Plan was developed using best management practices for public safety and environmental protection, as well as the requirements of federal, state and local regulations, including the following:

- **Federal** Environmental Protection Agency (EPA) Clean Water Act
- **State** Department of Ecology (DOE) National Pollutant Discharge Elimination System (NPDES) permit, including:
 - WW Phase II Stormwater Permit – for small City stormwater systems
 - Construction Permit – public/private construction
 - Industrial Permit – public/private industrial sites
- **City** Municipal Code 15.20 & Stormwater Management Manual for Western Washington.

In most cases, these regulations determine the activities, practices and procedures that make up the City's stormwater management program - all of which were evaluated by the Stormwater System Plan.

Stormwater Program Elements

The Stormwater System Plan includes 150 recommendations in 5 key focus areas

On-the-Ground Actions

- Capital projects
- Preservation projects
- Operations and maintenance
- Facility inspection



Administration

- Annual report
- Record keeping
- Inter-agency coordination
- Infrastructure data collection
- Water quality monitoring



Compliance

- Runoff control
- Illicit discharge detection
- Total maximum daily loads (TMDL)
- Source control



Awareness

- Education and outreach
- Public participation



Thinking Ahead

- Planning
- Climate change adaptation





Stormwater by the Numbers

2,388

Catch basins

450

Annual development permits

423

Drainage culverts

380

Management facilities

239

Miles of drainage pipes and ditches

7

Total combined full-time stormwater employees (FTEs)

2

Total FTEs working >50% on stormwater

0.5

Stormwater project managers



Stormwater fees are collected annually through property tax bills. Fees are based on impervious surface.

Fees charged by Bainbridge Island are lower than average for the region.

Annual fee revenue averages between \$3-\$4 million. The stormwater fund balance has been growing steadily due to deferred projects.

Fee revenue may be sufficient to cover the cost of the stormwater program, but staff resources and increasing regulatory requirements limit the program's output.

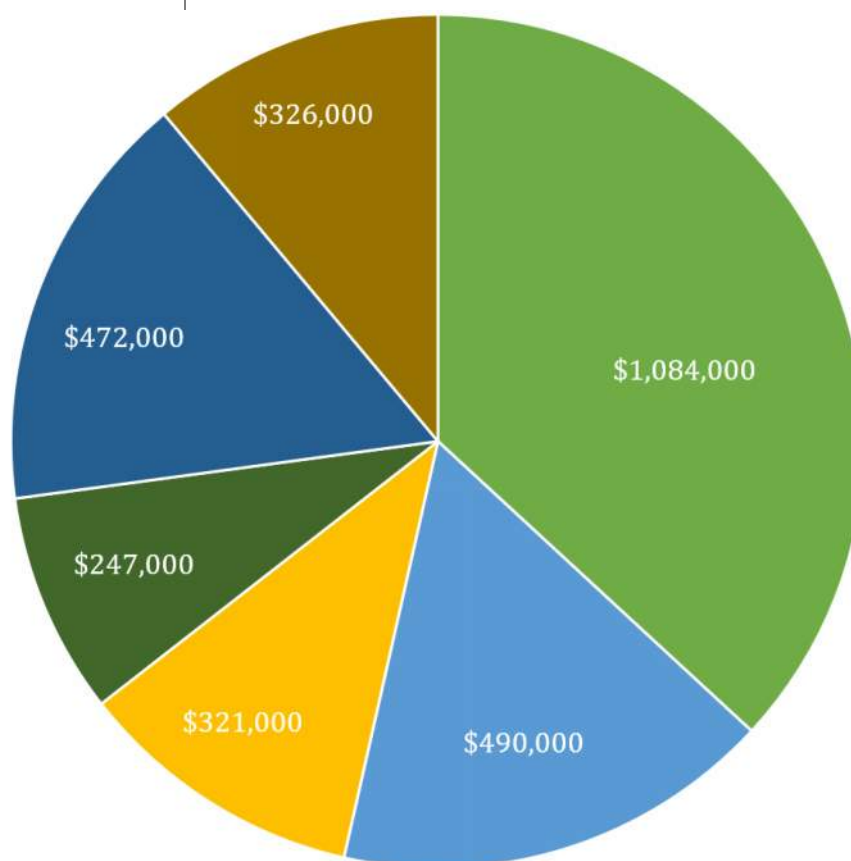
Revenue and Spending

2023 Annual Stormwater Rates for Single Family Homes in the Kitsap Region



City of Bainbridge Island Stormwater Utility Annual Fund Balance





■ Capital projects / preservation

■ Operations and maintenance

■ Stormwater planning

■ Public education and outreach

■ Compliance

■ Administration

Programmatic work

Annual spending on the stormwater program in 2023 totaled over **\$2.9M**, about \$600K less than the annual revenue.

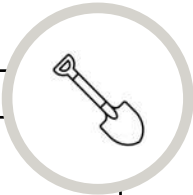
Spending was split almost 50/50 between infrastructure preservation and maintenance, and programmatic work.



Stormwater Program Outcomes

In the last 6 years, only 3 medium-sized stormwater capital projects were completed, and only 37% of the preservation budgets were expended.

Rating	On-the-Ground Actions
	Capital projects
	Preservation projects
	Operations and maintenance
	Facility inspection



The City's NPDES permit requires that 100% of the stormwater system be mapped by 2024. To date, only about 50% is complete.

Rating	Administration
	Annual report
	Record keeping
	Inter-agency coordination
	Infrastructure data collection
	Water quality monitoring



Stormwater Program Outcomes

The City has less than 1 FTE dedicated to stormwater inspections for the 400-500 permits issued annually, and no dedicated staff for the mandated source control program.

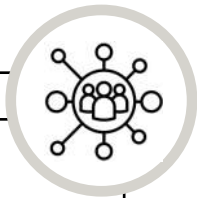
Education is a key component of the City's permit, which is audited each year.

Climate change adaptation includes projects to address sea-level rise flooding and ground/surface water recharge.

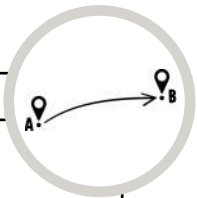
The City's water quality findings are slightly better, but closely mimic findings from regional reports such "The State of the Sound" (stateofthesound.wa.gov)



Rating	Compliance
	Runoff Control
	Illicit Discharge detection
	Total maximum daily load (TMDL)
	Source control



Rating	Awareness
	Education and outreach
	Public education



Rating	Thinking Ahead
	Planning
	Climate change adaptation



Rating	Water Quality Findings
	Sediment sampling
	Bacteria levels
	Surface water temperatures
	Returning salmon populations

The City should prioritize improving the **capacity** and **consistency** of the stormwater program.

The programmatic side of the City's stormwater work is mostly functioning despite limited resources, but will become less so as regulatory demands increase. The work supporting stormwater infrastructure demands is growing - and will continue to grow as the system ages and the community's desire for environmental enhancements increases. Therefore, the City should prioritize actions that address:

- Prioritizing maintenance and preservation of existing infrastructure;
- Building capacity to support upcoming regulatory requirements and larger and better defined investments in capital improvements; and,
- Enhancing efforts to ensure compliance with stormwater regulations.

Recommendations and Next Steps

1.



In progress: Fill the vacant GIS Technician position, and advance progress on stormwater system mapping and development of an asset management strategy.

2.



In progress: Consider the Stormwater System Plan recommendations during the evaluation of stormwater utility rates in Q1 2025.

3.



Mid-Biennium Budget (2026): Consider filling staffing gaps in operations (2) and engineering (1) to advance infrastructure improvements and reduce compliance risks.

4.



2027-2028 Budget: Increase operational and capital program funding to reduce the maintenance backlog and advance environmental enhancement projects.

5.



2028 and beyond: Revisit progress and plan a formal update the Stormwater System Plan recommendations.

