

Puget Sound Beach Combined Sewer Overflow (CSO) Control Projects

Murray Basin

Public Meeting Summary

March 29, 2010, 6:00-8:30 pm

Southwest Community Center, 2801 SW Thistle St, Seattle, WA 98126

Overview

On March 29, 2010, the King County Wastewater Treatment Division (WTD) hosted a public meeting for the Puget Sound Beach Combined Sewer Overflow (CSO) Control Projects in the Murray basin. Approximately 19 members of the public attended the meeting.

Meeting Purpose

The meeting was intended to –

- Present three alternative means for CSO control in the Murray basin
- Present how these alternatives were developed
- Explain why the three alternatives are being considered for further evaluation
- Hear from the community about the alternatives

Public Meeting Approach

Shahrzad Namini, King County project manager, started the meeting and introduced the team. John Phillips, King County CSO Program; Jeff Lykken, the lead engineer for the Murray basin; Kevin Dour, the project engineer for the Murray basin; and Bob Wheeler, the meeting facilitator, gave a PowerPoint presentation that included the following topics:

- CSO Control Program Overview
- CSO Beaches Projects Objectives
- CSO Control Approaches
- Murray Basin Requirements
- Murray Basin Alternatives
- Next Steps

Following the presentation, there was a period for meeting attendees to ask questions of the project team and to provide input on the alternative means of CSO control.

Afterwards, meeting attendees were encouraged to view informational posters that were set up around the meeting room and talk with members of the project team. Flip charts were available to record questions and input.

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Meeting attendees were informed of and encouraged to use a variety of methods for submitting questions and input, which include the following:

- Web: www.kingcounty.gov/csobeachprojects
- E-mail: CSOBeachProjects@kingcounty.gov
- Phone: 206-263-7301
- Feedback forms (available at the public meeting)

Because of the project schedule, meeting attendees were encouraged to provide input by mid-April, 2010. Input received by then will provide the best opportunity to inform the evaluation of the three alternatives. Input is always welcome and will be used throughout the facility planning process.

List of Informational Posters

- Basin Map showing City System/County System & Combined System/Separated System
- Map of each alternative with basin inset (3 boards)
- Map of all three alternatives
- “What is a Combined Sewer Overflow?”
- CSO Control approaches overview
- Factors used for alternatives evaluation
- Decision Process graphic

List of Handouts Available

- Information Packet
 - Meeting agenda
 - Diagram of decision process
 - Map of basin
 - Feedback form
- Public Information Document
- Dept. of Ecology CSO fact sheet
- Ratepayer report
- “Don’t Flush Trouble” flier
- RainWise brochure (City of Seattle)
- “Natural Drainage Systems” (City of Seattle)

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Summary of Questions and Input

Questions and input from the public are summarized below.

There were multiple questions and remarks on the following topics.

Impacts to Lowman Beach Park

- What facilities would be above grade and what would be below grade in the park?
- Would the two old trees be removed? Those trees are more than 100 years old and cannot be replaced.
- Lowman Beach Park is not an appropriate place for this work; the park is too important.
- Many people walk and ride their bikes through this area. There are many truck trips in and out to service the pump station, which creates a hazard. There shouldn't be more utility work here.
- Could the above grade facilities moved so as not to impact the tennis court? Could you put a tennis court on top of the storage tank?
- The community worked extensively on plans for the electrical generator project for the Murray Pump Station and recommended a below grade facility. Why is the electrical generator now shown in a different location and above grade?

Response: The specifics of where facilities will be located, whether they will be located above or below grade, and how the construction site would be restored will be determined with public input during the design phase for the proposed alternative. The current drawings show one possible configuration with the storage tank below grade and the odor control and electrical facilities above grade. The storage tank would require an access point on top.

Because flows in the Murray basin converge only right before reaching Murray Pump Station, the CSO control project will need to be located somewhere near the pump station.

About three years ago the community urged WTD to consider locating the electrical generator facilities underground in the street right-of-way. WTD did preliminary analysis and found that it was not possible to meet codes and access for safety at that location. There have been no additional discussions about the electrical generator project until now.

The specifics of where the electrical generator will be located will be worked out during the design phase. The current drawings show one possible configuration.

Response (Seattle Dept. of Parks and Recreation representative): The Dept. of Parks and Recreation has policies about locating utilities in public parks. The department is in communication with WTD about this project.

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Influence of flows from Barton Pump Station

- How much of the flow at Murray Pump Station comes from the Barton Pump Station?
- There is a similar CSO control project proceeding in the Barton basin. WTD has not selected a CSO control alternative for the Barton basin yet. Will what is selected in the Barton basin impact what is needed in the Murray basin?
- Will WTD do everything possible in the Barton basin to minimize the storage needs in the Murray basin?

Response: Approximately half of the flow at Murray Pump Station is pumped from the Barton Pump Station.

WTD is upgrading the Barton Pump Station to a capacity of 33 million gallons per day (MGD). The capacity of the force main between the Barton and Murray pump stations is 33 MGD. If Barton Pump Station were not upgraded, storage for CSO control in the Murray basin might be reduced from 1 million gallons to 750 thousand gallons. It would mean increased storage in the Barton basin.

Demand management/green stormwater infrastructure

- How much could the storage volume be reduced by using demand management methods in the Murray basin?
- Bioswales are being used in South Lake Union to reduce the flow of stormwater into storm sewers. Why can't something similar be done here?
- Building storage seems like an outdated approach to controlling CSOs.
- What is the definition of a "steep" slope? Is SW Othello St. too steep for demand management?
- Stormwater should be kept separate and flows in combined sewers should be reduced. Are King County and the City of Seattle working to reduce flows and minimize CSO control solutions? Is increased CSO infrastructure needed because of predicted larger future storm events?

Response: The project team found that there is not enough opportunity for stormwater disconnection in Murray basin to substantially reduce the size or cost of storage. The Murray basin is partially separated, meaning that some impervious surface is already connected to a separated storm system. There is impervious surface connected to the combined sewer system in areas scattered throughout the basin, but there is no large, contiguous area that could be disconnected. Disconnection cannot be pursued on steep slopes or in areas with existing drainage problems. Much of the potential disconnection in the basin is on private property rather than public right-of-way, which makes it less feasible.

Controlling CSOs in a combined sewer is different than slowing the flow of stormwater to storm sewers. Green stormwater infrastructure has been used very successfully to control stormwater in storm systems, but that does not necessarily mean it can reliably control CSOs to the regulatory limit.

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SW Othello St. is considered a steep slope, which is defined as a 33% or greater slope by the City of Seattle.

The City of Seattle has improved its stormwater codes, which should gradually reduce the flow of stormwater into the system, which will reduce CSOs. It should not be necessary to overbuild CSO control solutions now because we hope to rely on them less in the future.

Response (Seattle Public Utilities representative): The City of Seattle is working to control its CSOs to the same level that is required of King County. To serve the entire city, we aim to meet current regulation as opposed to overbuilding to meet an unknown future need.

“Beach Drive area combined pipe and tank storage” alternative

- Would you need to buy the private properties where storage is shown or could you put storage underneath the buildings on those properties?
- Removing people’s homes would be a major impact.
- How much would it cost to acquire the private properties? Who is responsible for relocating tenants?

Response: Storage could not be constructed underneath the existing buildings. If this were to become the proposed alternative, King County would work with the owners and tenants of the properties and go through an established property acquisition process. The process includes a fair market determination for the property cost and potential relocation benefits. The property owners have been notified that this is one of the alternatives under consideration.

Environmental considerations

- Are rectangular tanks more subject to failure than round pipes in earthquakes?
- Doesn’t King County have a disaster mitigation plan that states critical infrastructure should no longer be built in tsunami zones or liquefaction zones?

Response: All storage will be constructed to International Building Code (IBC) standards and King County standards for seismic safety.

Decision process

- The cost estimates for each alternative include only engineering estimates of construction costs; they don’t include property acquisition, permits, street use or other costs. Will these alternatives be evaluated before true costs are known?
- Why does the draft facility plan for this project have to be done by December 2010?

Response: Planning level cost estimates are developed for the design elements (what would be constructed) at a very high level in order to compare alternatives. Detailed cost estimating will happen at the final design phase for the selected project.

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Completing the draft facility plan by December 2010 is a milestone established in the permit granted by the Dept. of Ecology for the West Point wastewater treatment plant.

Public input

- Will all of the elected officials and City of Seattle agencies who have been briefed about the alternatives be briefed again about the public input that is being provided?
- What happens to our public input?
- The City of Seattle is forming a CSO Sounding Board. Does WTD have a Sounding Board?
- There was a subcommittee of the Morgan Community Association that worked with WTD on the previous planning work for the generator project. We should have been consulted about this project.
- This was an excellent presentation. Will it be posted on the website?

Response: Public input will be summarized and posted on the project website. The PowerPoint presentation will also be posted on the project website.

Public input is used to develop and refine alternatives. The project team looks for input from the community to help shape/refine the alternatives using basin-specific issues and knowledge, and to make sure good ideas have not been overlooked.

Public input is also used to develop and refine the various factors that are used to evaluate alternatives. For example, information about community priorities regarding parks and natural areas will help to inform analysis of environmental and community factors. Public input on all of the factors is important to King County to help develop a well-rounded approach to identifying the proposed alternative for further environmental review.

Some input relates more to design and construction; feedback related to these phases will be carried forward to those project phases.

The City of Seattle is creating its own CSO control plan now. King County had a citizen Sounding Board in the 1990s when it was creating a CSO control plan. However, WTD staff work closely with Seattle Public Utilities staff, and we will be interested to hear any input from their Sounding Board that might affect King County's projects.

Response (Seattle Dept. of Parks and Recreation representative): I will brief parks department management about the input provided at this month's public meetings and we will have follow-up meetings with WTD.

Additional questions and input from the public included the following:

- What will this project achieve in the big picture of Puget Sound health and public health? Is it really necessary? (Response: CSO control is required under the federal Clean Water Act and by the state Department of Ecology. There are five million

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gallons of combined sewer overflows annually at the Murray CSO on average. King County's CSOs total 900 million gallons annually on average. The Puget Sound Partnership Action Agenda identifies toxics in stormwater as the top priority for cleaning up Puget Sound. King County and the City of Seattle are the biggest contributors of stormwater to Puget Sound. Controlling CSOs in the Murray basin is part of a larger effort to clean up Puget Sound.)

- The distributed pipe storage in Beach Dr SW and Murray Ave SW alternative would come close to the Pelly Place Natural Area. That should be added to the list of challenges for this alternative.
- Couldn't you put storage on the beach? (Response: There are multiple challenges to building storage on the beach. Environmental regulations make it very difficult to get permits for a project on the beach. Construction would be difficult on the beach, and community impacts would likely be high.)
- WTD should put storage under Lincoln Park to control CSOs for both the Barton basin and the Murray basin. It makes more sense to do one large project that can be "oversized" to handle any future problems than to do "band-aid" solutions in multiple urban areas. This could happen with political will. (Response: The project team looked at the potential for a storage tunnel under Lincoln Park. Preliminary geotechnical analysis showed that the geology of the area would make it very difficult to successfully bore a tunnel. Tunneling under Lincoln Park would entail major construction at either end of the tunnel, at Barton Pump Station and Murray Pump Station, so it would not reduce construction impacts at Murray Pump Station. Preliminary cost estimates were very high.)
- Where on the map is the ordinary high water mark or the seawall at Lowman Beach Park? (Response: We would need to look up the ordinary high water mark. We can point out the approximate location of the seawall.)
- What does the City of Seattle say about the potential for ripping up some streets? (Response: WTD is in communication with Seattle Department of Transportation. They have concerns about potential traffic impacts that would have to be addressed.)

Attendance

Puget Sound Beach CSO Control Project Team

King County Wastewater Treatment Division

Shahrazad Namini, Project Manager; Linda Sullivan, Capital Projects Managing Supervisor; John Phillips, CSO Control Program; Mary Wohleb, Assistant Project Manager; Bill Wilbert, Environmental Programs Managing Supervisor; Hien Dung, Real Estate Services; Sue Meyer, Environmental Planning ; Martha Tuttle, Community Relations; Monica Van der Vieren, Community Relations

Carollo Engineers

Brian Matson, consultant team project manager

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Tetra Tech

Jeff Lykken, Barton and Murray basins lead engineer; Kevin Dour, Barton and Murray basins project engineer

Triangle Associates, Inc.

Bob Wheeler, facilitator; Ellen Blair, community relations support

Seattle Public Utilities

Sahba Mohandessi