

Seattle Public Utilities
Combined Sewer Overflow Control Program
Frequently Asked Questions (FAQ)

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Q. What is a consent decree?

A. A consent decree is a settlement of a law suit. It is a written agreement between all parties to the law suit, in this case the Washington Department of Ecology (Ecology), the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Justice that describes the actions that must be taken to resolve the alleged violations of law.

Q. Why is Seattle willing to enter a consent decree?

A. A consent decree avoids the cost of litigation, provides adequate time to reach compliance with EPA guidelines and provides Seattle certainty with regard to regulatory requirements.

The U.S. Department of Justice gave notice of intent to file a law suit on behalf of the U.S. Environmental Protection Agency (EPA)¹ alleging Seattle had violated the Clean Water Act through its discharge of combined sewer overflows and sanitary sewer overflows. Rather than disputing the alleged violation, Seattle has chosen to negotiate a settlement by agreeing to implement a schedule for completion of a long-term combined sewer overflow (CSO) Control Plan and to implementing CSO control measures to meet the requirements of the Clean Water Act.

With agreement, U.S. Justice will formally file the suit and the consent decree simultaneously with the federal court.

Q. Who has to approve the decree?

A. The federal court.

First and foremost, the terms of the decree must be acceptable to the U.S. Department of Justice, the EPA, Ecology and Seattle Public Utilities (SPU). Once the entities find the terms acceptable, the proposed decree will be filed in federal court where a federal court judge will review it terms, allow for interested parties to comment and may issue the decree as final provided all parties agree to its terms.

¹ The Department of Justice gave notice of intent to sue in the Fall of 2011. The actual suit will be filed simultaneously with the proposed consent decree in Federal Court this summer.

Q. Will the public have an opportunity to comment on the proposed consent decree?

A. The federal court will hold a hearing and allow interested parties to comment on the decree.

Q. When will the decree be approved?

A. Seattle anticipates the decree will be approved by the end of 2012. However, this schedule is subject to change depending upon the court's schedule and the number and complexity of issues raised by interested parties.

Q. What's different about this consent decree?

A. This decree allows but does not require Seattle to prepare an integrated plan whereby the CSO long-term control plan can be integrated with stormwater control and treatment to achieve greater environmental benefit than if only the CSO plan were done. Second, it allows Seattle to implement a performance-based program to maintain its system of pipes, pumps and storage facilities, instead of an inflexible prescriptive program.

Q. How much time does Seattle have to implement the requirements of the decree?

A. The proposed decree requires Seattle to submit a CSO control plan by 2015, which will achieve control of all the city's CSO outfalls by the year 2025. Control is defined in the State rule and Consent Decree as no more than one untreated discharge per outfall per year on average. What is unique about the proposed agreement is that it allows Seattle to prepare and implement, instead, an integrated plan involving *both* separated stormwater discharges and CSOs — as long as the proposed stormwater projects will result in benefits to water quality beyond those that would be expected if only the CSO projects were implemented. Under the consent decree, the city is still required to control all of its CSOs to the state standard, even if it chooses to implement an integrated plan.

Seattle has been given until 2018 to complete an integrated plan, but to achieve coordination with the overall CSO control plan, Seattle intends to complete an integrated plan by 2015, the same date required for a long-term control plan.

Q. Are there any penalties associated with the consent decree?

A. Yes, there are both upfront penalties, referred to as "civil penalties," and stipulated penalties, which are monetary penalties prescribed for failure to meet the required schedule milestones in the decree. The Civil Penalties are \$350,000, of which \$175,000 is paid to the Washington State Department of Ecology and \$175,000 is paid to the U.S. Environmental Protection Agency.

Stipulated penalties range from \$1,000 a day to \$7,500 a day, depending on the severity of the failure to comply with the requirements of the Decree.

Q. Is Seattle the only city to have a CSO Consent Decree?

A. No, in fact, Seattle is one of the last in the nation to have a consent decree. The EPA has initiated legal action against nearly all cities with combined sewer overflows across the United States. These are typically older, larger cities in the northern tier of the country where stormwater (rain, snow and other weather events) is managed by discharging stormwater directly into the sanitary sewer system. Chicago and Milwaukee were among the first cities to construct major CSO control systems. Recently, New York and Philadelphia signed agreements with the ability to implement significant green stormwater control measures to control overflows.

In the Pacific Northwest, Portland, Oregon has completed a combined sewer overflow program. Portland has been under a state court ordered decree to control overflows to the Willamette River. Portland has spent over \$1.4b on CSO control measures, mostly deep large storage tunnels.

Q. How are you saving \$375 million with this consent decree?

A. These savings are related to that part of the consent decree having to do with sanitary sewer overflows that occur as a result of pipe blockages or other problems, and often result in residential sewer backups. Seattle, like all large cities, manages an extensive network of sewer and drainage facilities throughout the city.

There are over 1,500 miles of sewer pipelines and 500 miles of storm drainage lines that require constant inspection, preventive maintenance, repair and replacement. Some of these facilities date back to the early 1900s when they were dug and installed, mostly by hand. When there are failures, such as pipeline breaks or blockage, sewage backs up and causes local flooding — or flows into local waterways. Overflows of sanitary sewage into water bodies are illegal under the Clean Water Act and must be prevented.

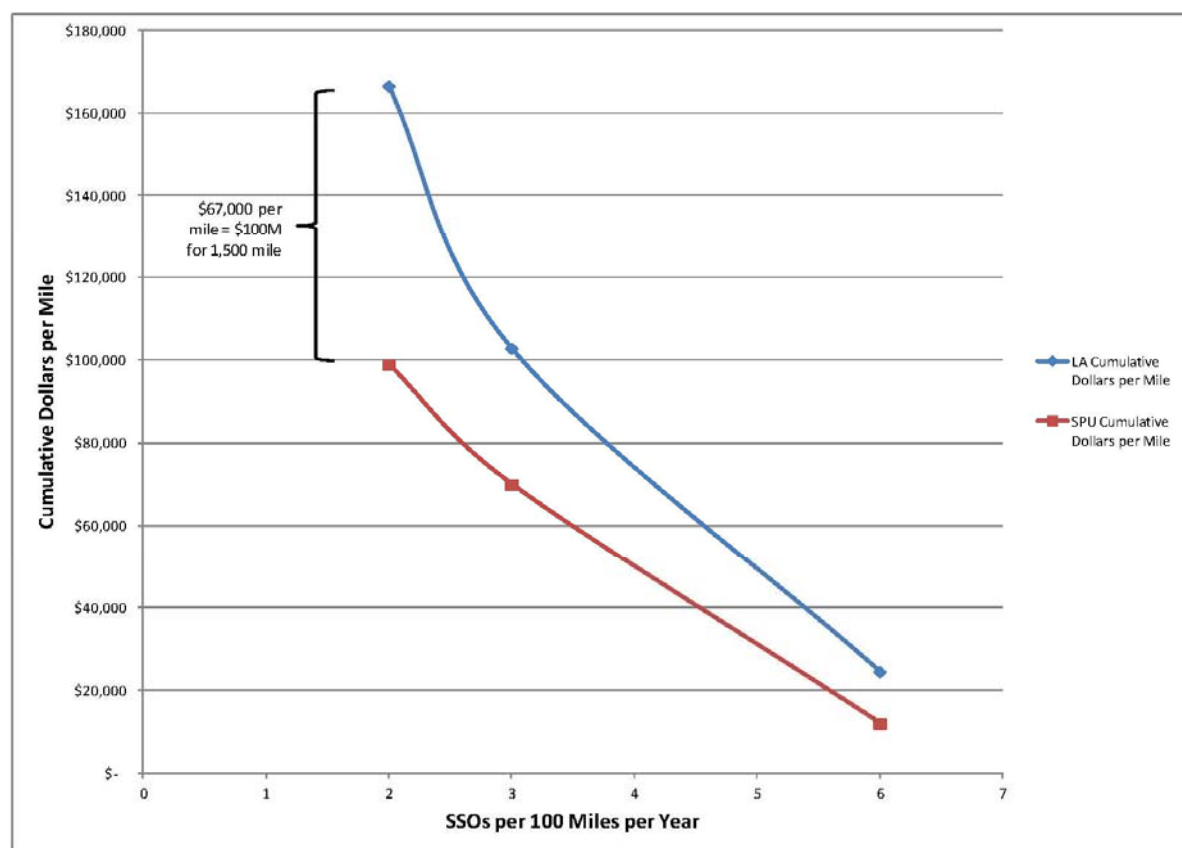
Over the past 100 years there have been varying degrees of attention to maintaining the sanitary system and, as a result, Seattle is playing catch-up to reduce failures and assure continuous, quality service.

Fortunately — unlike many large, older cities — SPU has been very proactive in introducing advanced technology to inspect and manage its sanitary system resulting in significant improvement and a continuous focus on performance. Year by year, the incidence of overflows has been declining. Because of this proactive stance and its success, the consent decree terms allow continuation of a performance based approach — whereas other cities such as Los Angeles, San Diego and Honolulu have been required by EPA to implement very prescriptive inspection and rehabilitation programs.

SPU presented its case to continue its current program to EPA officials in Washington D.C. late last year, and won terms in the consent decree that allow SPU to continue its current performance management program. SPU is required to show continued progress in reducing sanitary sewer overflows moving toward no overflows — or EPA will impose the more prescriptive, costly requirements.

The difference between these prescriptive requirements and SPU's performance management program is estimated at \$375 million over the next 13 years (2012 to 2025). And it is highly likely that, with the implementation of sophisticated inspection technology and analytical methods, SPU will not only reduce the incidence of overflows but reduce the overall cost of maintenance, repair and replacement.

Los Angeles, Seattle: Sewer Maintenance Financial Impact



Q. The consent decree allows for an “integrated plan.” What does that mean?

A. The consent decree allows but doesn't require Seattle to prepare an “integrated plan” of stormwater and CSO projects to achieve the greatest environmental benefit based on a combination of CSO control and stormwater treatment projects. Seattle will integrate high priority stormwater projects with its long-term control plan to achieve greater

environmental benefit than would otherwise be achieved by implementing CSO control projects only. An integrated plan will allow Seattle to invest its ratepayers' dollars in projects that achieve the greatest environmental benefits first. In other words, there will be a greater return on investment with a combination of CSO and stormwater projects than solely focusing on CSO projects with less environmental benefit.

Seattle has committed that it will achieve equal or more pollutant load reduction by the year 2025 than it would otherwise achieve with a CSO program only. This can be accomplished with a mix of high priority stormwater and CSO control projects.

An integrated plan must provide for the completion of Seattle's CSO program and set an ultimate completion date for CSO control.

Q. When will it be done?

A. Seattle intends to submit an integrated plan by May 2015, the same time the CSO long-term control plan is required, even though the consent decree allows up to 2018 for submittal of such plan. This timing will help SPU coordinate development of an integrated plan with the long-term control plan and address both in the programmatic environmental impact statement.

A. Why did you want to bring stormwater projects into this proposed consent decree?

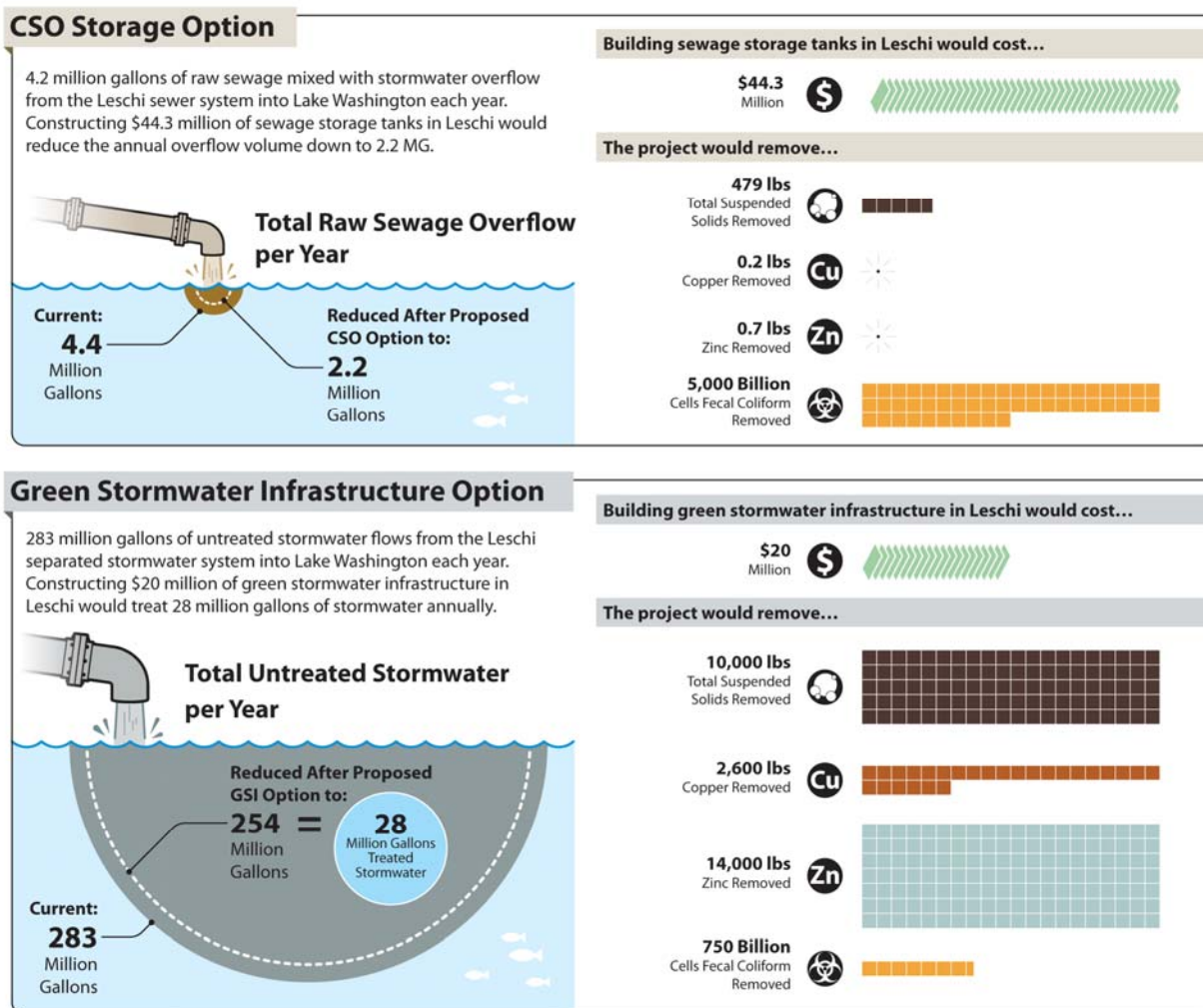
A. Most studies and scientists agree that better control of stormwater is necessary to protect water quality, including that of Puget Sound and its adjacent water bodies. It only makes sense to address this major source of pollution, rather than investing in CSO projects only.

Stormwater discharges carry significant loads of metals (such as zinc and copper), pesticides, and organic compounds — all toxic to aquatic organisms — from Seattle streets and yards and roofs. Stormwater is discharged to local waters whenever it rains, unlike CSOs that discharge only when very wet weather or storm conditions overwhelm the pipe system. CSOs, on the other hand, contain very high levels of raw sewage bacteria and industrial chemicals in addition to stormwater.

During wet weather, when CSOs do not overflow, the combined sewage flow is piped to the West Point Wastewater Plant for treatment. During storms, both combined sewage as well as separated stormwater discharge to local waters. So, there is benefit in controlling both combined sewage overflows and treating stormwater discharges.

In some of Seattle's drainage basins the cost of removing pollutants is very effective through stormwater treatment methods. The graphic below, showing Lake Washington's Leschi basin, illustrates this point. Stormwater treatment through green infrastructure

methods in this particular basin produces far greater pollutant reduction per dollar invested than would CSO control alone.



In addition to this Leschi example, SPU estimates that, on average, \$1 million spent on stormwater projects in the City would significantly reduce the discharge of toxic compounds, such as the metal zinc, which would be reduced by 5,600 pounds — whereas the same million dollars invested in CSO control only would remove 6 pounds of zinc.

Q. Will stormwater projects replace or substitute for CSO control projects.

A. The CSO program must be finished. The consent decree does not allow for a substitution of stormwater projects for CSO projects. It will be possible to sequence the implementation of stormwater projects such that less effective CSO projects are deferred for a time. But, the CSO program must be finished and the integrated plan is required to set a finish date.

Q. What about the Windermere, Genesee and Henderson projects that are in design now, will they be deferred?

A. No, they will not be deferred. They will be finished on their current schedules. These are critical “early action” projects needed to reduce the discharge of contaminants contained in stormwater and sewage to our most sensitive fresh water bodies, where human contact is most likely to occur. SPU will continue to give priority to the protection of public health as it prioritizes and schedules the implementation of CSO control projects throughout the city.

Q. How will the Integrated Plan affect your combined sewer overflow program? Will you implement the whole program eventually? When?

A. The integrated plan will be an integration of stormwater projects and the long-term control plan for CSO correction. SPU must propose a schedule for implementation of the integrated plan and all remaining CSO control measures as expeditious as possible that may include an extension to the final CSO construction completion milestone. Approval of that schedule remains with EPA and WDOE.

Q. Won't this just add more cost to an already expensive program and how will this flexibility help manage increasing utility rates?

A. The cost to 2025 will not be greater than Seattle would otherwise be obligated to pay for CSO control. By preparing an integrated plan, Seattle can manage its expenditures by sequencing high value projects first and scheduling lower priority projects into the future, to avoid peak expenditures that would drive up rates.

Q. How will this proposed consent decree and the flexibility you say it provides help with Puget Sound protection?

A. Stormwater discharges are a continuous drip of toxic pollutants into local waterways like the Duwamish and the Ship Canal. The discharge of metals, hydrocarbons, pesticides and organic chemicals from stormwater is significantly greater than from CSO discharges. Discharges to the Duwamish and Ship Canal, in particular, contribute the flow of toxics to Puget Sound and destroy habitat and degrade the aquatic environment. Seattle will be addressing the recognized primary source of contamination to the Sound, and protect critical habitat by focusing on stormwater.

Q. What kind of stormwater projects and where do you anticipate implementing?

A. We will prioritize stormwater projects that have the greatest potential benefit to receiving waters and that are most cost effective. Projects would range from enhanced street sweeping, to bio-filtration (green infrastructure) to various other forms of stormwater treatment.

Projects will be located to protect the most sensitive waters based on protection of human health and safety, water quality standards, environmental impact and water quality impairment.

Q. Will green infrastructure projects be a part of this new flexibility?

A. Green infrastructure projects will play a central role in the development of the integrated plan. Green infrastructure can play a vital role in the reduction of pollutants discharged from separated stormwater, as well as from CSOs. Implementation of green infrastructure on separated road runoff has a proven track record in reducing pollutant loading to local waters.

Q. How will future green infrastructure projects be different from the ones you implemented in Ballard?

A. SPU is applying the lessons learned from the Ballard pilot raingardens to future projects. In particular, we learned how unique each location for a raingarden can be even within the same block, and that it is necessary to do extensive up front technical work to ensure that the raingardens will function as designed.

Equally important, SPU will be working sooner with neighborhood groups to engage interested and affected citizens in the development and design of Green Infrastructure.

Q. You describe this as a breakthrough in flexibility in meeting environmental requirements; how is this different? What flexibility do you now have that wasn't available before?

A. Until this flexibility was provided, CSO control and stormwater management were enforced and implemented as separate and distinct programs. Prioritization of projects was confined to within these distinct programs — not holistically. While, stormwater and CSO control have complimentary goals of protecting the environment, SPU's freedom to prioritize investment between the two was not readily available or easy to do within the regulatory framework. EPA has now provided a framework for doing this integration

The regulatory framework simply did not accommodate an integrated approach focused on the greatest return on the investment. For example, CSO control requirements focus on volume and frequency of overflows without regard to the total pollutant load reduction achieved nor how the same investment in stormwater control projects could achieve greater pollutant load reduction to the same waters.

With an integrated plan, Seattle can sequence projects and invest in those that will provide the greatest public health and environmental benefit the earliest. This is wise use of our financial resources.

The integrated approach does not relieve Seattle of accomplishing control of both CSOs and stormwater, but it allows a more cost effective use of rate payers dollars and an earlier return of environmental benefit.

Q. Where do you expect to implement projects first and what type of projects do you foresee?

A. Development of priority projects for local waters (CSO and stormwater) will be the primary challenge of the integrated plan. The consent decree outlines very specific criteria to accomplish this prioritization with focus on public health and safety, water quality standards, environmental impact and impaired waters. SPU will carefully document how these criteria are applied and the resulting definition of and sequencing of projects.