## King County

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1200 King County Courthouse 516 Third Avenue Seattle, WA 98104

## Legislation Details (With Text)

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Title: AN ORDINANCE relating to combined sewer overflow control policies, amending Ordinance 13680,

Section 8, as amended, and K.C.C. 28.86.080 and Ordinance 13680, Section 18, as amended, and

K.C.C. 28.86.180.

**Sponsors:** Larry Phillips

Indexes: Natural Resources, Department of

Code sections: 28.86.080 -, 28.86.180 -

Attachments: 1. Ordinance 17587.pdf, 2. 2013-0147 transmittal letter.docx, 3. 2013-0147 fiscal note.xlsx, 4. 2013-

0147 Staff report - CSO policy revisions (04-03-13).doc, 5. 2013-0147 Attachment 1 - Crosswalk of CSO Policy Revisions-Explanation.doc, 6. 2013-0147 Attachment 2 - CSO Policy legislation.doc, 7. 2013-0147 Power Point Presentation - CSO policies (4-3-13).pptx, 8. 05-01-13 Staff Report with attachments, 9. 2013-0147 Staff report - CSO policies (5-7-13).doc, 10. 2013-0147 Attachment 1 - Xwalk of CSO Policies (5-7-13).docx, 11. 2013-0147 Revised Staff Report - CSO policy revisions (05-

06-13).doc

Date	Ver.	Action By	Action	Result
5/20/2013	2	Metropolitan King County Council	Hearing Held	
5/20/2013	2	Metropolitan King County Council	Passed	Pass
5/7/2013	2	Transportation, Economy, and Environment Committee	Recommended Do Pass Substitute Consent	Pass
5/1/2013	1	Regional Water Quality Committee	Recommended Do Pass Substitute	Pass
3/25/2013	1	Metropolitan King County Council	Introduced and Referred	

Clerk 05/06/2013

AN ORDINANCE relating to combined sewer overflow control policies,

amending Ordinance 13680, Section 8, as amended, and K.C.C. 28.86.080 and

Ordinance 13680, Section 18, as amended, and K.C.C. 28.86.180.

## STATEMENT OF FACTS:

1. Ordinance 17413, approving an amendment to the county's long-term combined sewer overflow ("CSO") control plan was adopted on September 17, 2012.

2. Ordinance 17413, Section 1, E., requires the King County executive to propose legislation to

revise policies for the Regional Wastewater Services Plan to be consistent with the amended long-term CSO control plan within six months following the adoption of this ordinance.

BE IT ORDAINED BY THE COUNCIL OF KINGCOUNTY:

SECTION 1. Ordinance 13680, Section 8, as amended, and K.C.C. 28.86.080 are hereby amended to read as follows:

A. Explanatory material. The CSO control policies are intended to guide the county in controlling CSO discharges. Highest priority for controlling CSO discharges is directed at those that pose the greatest risk to human health ((, particularly at bathing beaches,)) and environmental health ((, particularly those that threaten species listed under ESA)). The county will continue to work with federal, state and local jurisdictions on regulations, permits and programs related to CSOs and stormwater. The county will also continue its development of CSO programs and projects based on assessments of water quality and contaminated sediments.

B. Policies.

CSOCP-1: King County shall plan to control <u>its</u> CSO discharges ((and to work with state and federal agencies to develop cost-effective regulations that protect water quality. King County shall meet the requirements of state and federal regulations and agreements)) by the end of 2030 to meet:

- 1. The state's CSO control standard of an average of one untreated discharge per CSO outfall per year based on a twenty-year moving average, and
  - 2. Conditions of National Pollutant Discharge Elimination System permit requirements;
- 3. conditions of the Environmental Protection Agency/Washington state Department of Ecology Consent Decree.

CSOCP-2: ((King County shall give the highest priority for control to CSO discharges that have the highest potential to impact human health, bathing beaches and/or species listed under ESA.)) King County shall continue to work with state and federal agencies to develop cost-effective regulations that protect water quality.

King County shall meet the requirements of state and federal regulations and agreements.

CSOCP-3: Consistent with the Environmental Protection Agency/Washington state Department of

Ecology Consent Decree and the county's long-term CSO control plan as approved through Ordinance 17413,

King County shall give the highest priority for control of CSO discharges that have the highest potential to

impact:

- 1. Human health through contact with CSO flows or fish consumption; or
- 2. Environmental health, such as in areas where sediment remediation is under way or anticipated or where there is potential to impact species listed under ESA.

CSOCP-((3))4: ((Where King County is responsible for stormwater as a result of a CSO control project, the county shall participate with the city of Seattle in the municipal stormwater national pollutant discharge elimination system permit application process.)) Consistent with its legal authority, if King County constructs new projects that would separate stormwater from its combined system that result in separated stormwater discharges to waterways, the county shall coordinate with the city of Seattle in the city's municipal stormwater National Pollutant Discharge Elimination System permit (MS4) process as appropriate.

CSOCP-((4))5: ((Although King County's wastewater collection system is impacted by the intrusion of clean stormwater, conveyance and treatment facilities shall not be designed for the interception, collection and treatment of clean stormwater.))King County's wastewater conveyance and treatment facilities shall not be designed to intercept, collect and treat new sources of stormwater. However, King County may evaluate benefits and impacts to the county system from accepting stormwater from the city of Seattle that is not currently in the combined system and shall consider factors including, but not limited to existing capacity, benefits and costs to ratepayers and the regional system, operational impacts, payment to county for value of the use of available capacity and for the costs of conveyance and treatment of new sources of stormwater and compliance with state and federal regulations and commitments.

CSOCP-((5))6: In accordance with King County's industrial waste rules and regulations, including

K.C.C. 28.84.050K.1 and 28.84.060, the county shall accept contaminated stormwater runoff from industrial sources and shall establish a fee to capture the cost of transporting and treating this stormwater. Specific authorization for such discharge is required.

CSOCP-7: King County shall consider implementing green stormwater infrastructure projects to control CSOs when results of technical, engineering, and benefit/cost analyses and modeling demonstrate it is a viable and cost-effective CSO control method.

CSOCP-((6))8: King County((, in conjunction with the city of Seattle,)) shall ((implement stormwater management programs in a cooperative manner that results in a coordinated joint effort and avoids duplicative or conflicting programs)) consider implementing joint CSO control projects with the city of Seattle when it is cost-effective, is within county legal authorities and can be accomplished within the schedule outlined in the Environmental Protection Agency/Washington state Department of Ecology Consent Decree and the county's approved long-term CSO control plan.

CSOCP-((7))9: King County shall implement its long-range sediment management strategy to address its portion of responsibility for contaminated sediment locations associated with county CSOs and other facilities and properties. Where applicable, the county shall implement and cost share sediment remediation activities in partnership with other public and private parties, including the county's current agreement with the Lower Duwamish Waterway Group, the Department of Ecology and the Environmental Protection Agency, under the federal Comprehensive Environmental Response, Compensation and Liability Act.

CSOCP-((8))10: Consistent with the Environmental Protection Agency/Washington state Department of Ecology Consent Decree, King County shall assess CSO control projects, priorities and opportunities using the most current studies and information available, for each CSO Control Plan ((Update)) Amendment as required by the Department of Ecology in the ((NPDES)) National Pollutant Discharge Elimination System permit renewal process((, which is approximately every five to seven years. Before completion of an NPDES required CSO Control Plan Update, the executive shall submit a CSO program review to the council and

RWQC. Based on its consideration of the CSO program review, the RWQC may make recommendations for modifying or amending the CSO program to the council)).

((CSOCP-9: Unless specifically approved by the council, no new projects shall be undertaken by the county until the CSO program review has been presented to the council for its consideration. CSO project approval prior to completion of CSO program review (beyond those authorized in this subsection) may be granted based on, but not limited to, the following: availability of grant funding; opportunities for increased cost-effectiveness through joint projects with other agencies; ensuring compliance with new regulatory requirements; or responding to emergency public health situations. The council shall request advice from the RWQC when considering new CSO projects. King County shall continue implementation of CSO control projects underway as of December 13, 1999, which are the Denny way, Henderson/Martin Luther King, Jr. way/Norfolk, Harbor and Alki CSO treatment plants.))

CSOCP-11: Before completion of an National Pollutant Discharge Elimination System required CSO

Control Plan Amendment, the executive shall submit a CSO program review report to the council and RWQC.

The purpose of the review is to evaluate, at a minimum, changes to regulations, new technologies, existing

CSO control performance, and human and environmental health priorities that may affect implementation of the

CSO Control Plan. Based on its consideration of the CSO program review, RWQC may make

recommendations to the council for modifying or amending the CSO program, including changing the

sequencing of CSO projects. Any future updates or amendments to the county's long-term CSO control plan

are subject to Environmental Protection Agency and Washington state Department of Ecology approvals.

CSCOP-12: King County shall implement its CSO control projects in accordance with the

Environmental Protection Agency/Washington state Department of Ecology Consent Decree and the schedule
outlined in the county's approved long-term CSO control plan.

CSOCP-13: King County shall prepare a water quality assessment and monitoring study, consistent with the guidance provided in Ordinance 17413 and other applicable legal requirements, to inform the next

combined sewer overflow control program review in 2018.

SECTION 2. Ordinance 13680, Section 18, as amended, and K.C.C. 28.86.180 are hereby amended to read as follows:

- A. The RWSP operational master plan that was adopted by council in December 1999, shall be updated on a regular basis following substantive adopted policy revisions to the RWSP, and shall meet the requirements of K.C.C. chapter 4.04.
- B. The operational master plan shall contain projects related to major program elements and shall further define as necessary the major projects, projected capacity, milestones, projected completion dates, and estimated costs.
  - 1. Treatment capacity.
- a. Population and employment growth is projected to require the wastewater system capacity to expand from two hundred forty-eight mgd to three hundred four mgd by 2030. The estimated cost and list of treatment facilities and improvements to achieve this expanded capacity by 2030, shall be included in future RWSP operational master plans, summarized in RWSP annual reports and comprehensive reviews as outlined in K.C.C. 28.86.165.
- b. The Brightwater treatment plant at the Route 9 site shall be built with a capacity of thirty-six mgd by 2010 or as soon thereafter as possible to handle wastewater flows from a new north service area as defined in the plan. This plant would provide secondary treatment and would discharge treated effluent to Puget Sound. To facilitate the production of reclaimed water, the possibility of upgrading to tertiary treatment with a freshwater outfall should be investigated prior to subsequent expansions.
- c. Expanding the treatment capacity at the south treatment plant from one hundred fifteen mgd to one hundred thirty-five mgd by 2029. This expansion would handle increased wastewater flows from the southern and eastern portions of the service area. Some or all of the plant capacity could also be upgraded to tertiary treatment, to meet water quality standards or facilitate water reuse, as part of future expansions or in additions

to the secondary level of treatment using available land reserves at the plant site.

- d. The west <u>point</u> treatment plant will be maintained at its capacity of one hundred thirty-three mgd, primarily to serve the city of Seattle and handle flows from the combined sewers in the area. ((Additional facilities may be planned in the year 2018 to accommodate the extended peak CSO flows that will occur after storms once CSO control projects are constructed.))
  - 2. Conveyance facilities.
- a. Conveyance facilities are to be configured, sized, and scheduled to support the treatment plants by conveying wastewater to and treated effluent from the plants. The estimated cost, schedule and list of conveyance facility improvements, shall be included in future RWSP operational master plans, summarized in RWSP annual reports and comprehensive reviews as outlined in K.C.C. 28.86.165.
- b. King County will construct additional conveyance improvements (e.g., increasing conveyance and pump station capacity and extending conveyance) to accommodate increased flows in other parts of the service area to serve population growth in the smaller wastewater service basins and to prevent improper discharges from the sanitary system.
  - 3. I/I control.
- a. The I/I control program shall be implemented incrementally and be limited to projects that prove to be most cost effective. The estimated cost, schedule and list of I/I improvement projects, shall be included in future RWSP operational master plans, summarized in RWSP annual reports and comprehensive reviews as outlined in K.C.C. 28.86.165.
- b. The goal of the I/I control program is to reduce the expense of conveyance system improvements over time. Every ten years, beginning in 2010, the wastewater treatment division will conduct system monitoring to update hydraulic models and measure the effectiveness of I/I control and reduction in the system.
  - 4. CSOs.
  - a. ((CSOs shall be prioritized based on first controlling discharges that impact human health, bathing

beaches and/or species listed under ESA. The second priority is other CSO locations that have the potential to affect public health and safety. Third priority are all other CSO locations. The estimated cost, schedule and list of CSO control projects, will be reported in the CSO program review (preceding the west treatment plant NPDES permit renewal), and shall be included in future RWSP operational master plans, summarized in RWSP annual reports and comprehensive reviews as outlined in K.C.C. 28.86.165)) The county shall implement CSO control projects consistent with the schedule outlined in the county's long-term CSO control plan as approved in Attachment A to Ordinance 14713 and the Environmental Protection Agency/Washington state Department of Ecology Consent Decree.

- b. ((CSO projects may include:
- (1) constructing large underground tanks and tunnels to store combined flows during storms. These flows would then be pumped to the west treatment plant once the rain subsides; and
- (2) treating the combined sewage at existing CSO outfall locations using technology to remove solids and disinfect the combined sewage before discharge.
- e.)) Consistent with the Environmental Protection Agency/ Washington state Department of Ecology

  Consent Decree, the county may request ((R))refinements to the CSO program ((may be required)), including

  changes to the sequencing of projects, in response to changing conditions ((and)), new information and new

  regulations. ((The listing of species under the ESA may affect project priorities, schedules, and associated

  mitigation options.))
  - 5. Biosolids.
- a. King County will continue to produce Class B biosolids using anaerobic digestion at the south and west treatment plants and to implement the same process at the Brightwater treatment plant until a new technology can be used reliably. The plan also proposes that the county continue to evaluate alternative technologies to reduce the water content of biosolids while preserving their marketability. The primary objective of this evaluation will be to identify alternatives to digesters at the west treatment plant, a condition of

the West Point Settlement Agreement.

- b. As part of ongoing planning for its treatment plants, King County will periodically evaluate conventional, alternative and new solids processing technologies using criteria such as product quality (class A or B), marketability, odor and other potential community impacts, impact on sewer rates, reliability of the treatment process, amount of land needed for the treatment facility and the number of truck trips needed to transport the biosolids produced. Based on the results of this evaluation and public comment, the executive should recommend one of three biosolids handling scenarios at any of all of the treatment plants:
  - (1) continue using anaerobic digestion;
  - (2) supplement anaerobic digestion with another treatment technology; or
  - (3) replace anaerobic digestion with another treatment technology.
- c. The estimated cost, schedule and list of biosolids improvement projects, shall be included in future RWSP operational master plans, summarized in RWSP annual reports and comprehensive reviews as outlined in K.C.C. 28.86.165.
- d. The county should continue using a public-private partnership approach to recycling biosolids such as using biosolids on working forests in King County to enhance wildlife habitat and generate long-term income from selective timber harvests.
  - 6. Water reuse.
- a. The south and west treatment plants should continue to produce reclaimed water for non-potable uses and explore the production of reclaimed water at new facilities. King County will explore the production of reclaimed water at new facilities and work with water suppliers to plan and implement an accelerated water reuse program that could augment existing water supplies.
- b. If a public education and involvement program on water reuse is to be developed and implemented, it shall be coordinated with water conservation education programs. The estimated cost, schedule and list of water reuse projects, shall be included in future RWSP operational master plans, summarized in

RWSP annual reports and comprehensive reviews as outlined in K.C.C. 28.86.165.

- 7. Community treatment systems.
- a. Any operations under these policies shall require an operational master plan as described in K.C.C.
  4.04.200.C.1. Failure to submit such a plan shall cause the affected capital improvement project to be out of compliance with these polices.
- b. In addition to the requirements of K.C.C. 4.04.200.C.1, an operational master plan submitted under these policies shall include:
- (1) description of career retention programs that are to be structured in a manner consistent with the King County/metro merger, labor law and King County's labor contracts;
- (2) an engineering evaluation that confirms that the selected projects are most cost effective and technically efficacious and consistent with King County growth management policies for the surrounding area; and
- (3) explanation of how King County participation in community treatment systems is consistent with other water pollution abatement activities of the department of natural resources and parks, which currently operates centralized wastewater treatment facilities as contrasted with community treatment systems.