



**KING COUNTY**

1200 King County Courthouse  
516 Third Avenue  
Seattle, WA 98104

**Signature Report**

**May 20, 2013**

**Ordinance 17587**

**Proposed No. 2013-0147.2**

**Sponsors Phillips**

1 AN ORDINANCE relating to combined sewer overflow  
2 control policies, amending Ordinance 13680, Section 8, as  
3 amended, and K.C.C. 28.86.080 and Ordinance 13680,  
4 Section 18, as amended, and K.C.C. 28.86.180.

5 **STATEMENT OF FACTS:**

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

9 2. Ordinance 17413, Section 1, E., requires the King County executive to  
10 propose legislation to revise policies for the Regional Wastewater Services  
11 Plan to be consistent with the amended long-term CSO control plan within  
12 six months following the adoption of this ordinance.

13 **BE IT ORDAINED BY THE COUNCIL OF KINGCOUNTY:**

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

16 A. Explanatory material. The CSO control policies are intended to guide the  
17 county in controlling CSO discharges. Highest priority for controlling CSO discharges is  
18 directed at those that pose the greatest risk to human health (~~(, particularly at bathing~~  
19 ~~beaches,)) and environmental health (~~(, particularly those that threaten species listed~~~~

20 ~~under ESA~~). The county will continue to work with federal, state and local jurisdictions  
21 on regulations, permits and programs related to CSOs and stormwater. The county will  
22 also continue its development of CSO programs and projects based on assessments of  
23 water quality and contaminated sediments.

24 B. Policies.

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

29 1. The state's CSO control standard of an average of one untreated discharge per  
30 CSO outfall per year based on a twenty-year moving average, and

31 2. Conditions of National Pollutant Discharge Elimination System permit  
32 requirements;

33 3. conditions of the Environmental Protection Agency/Washington state  
34 Department of Ecology Consent Decree.

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

40 CSOCP-3: Consistent with the Environmental Protection Agency/Washington  
41 state Department of Ecology Consent Decree and the county's long-term CSO control

42 plan as approved through Ordinance 17413, King County shall give the highest priority  
43 for control of CSO discharges that have the highest potential to impact:

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

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

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

64 capacity and for the costs of conveyance and treatment of new sources of stormwater and  
65 compliance with state and federal regulations and commitments.

66 CSOCP-~~((5))~~6: In accordance with King County's industrial waste rules and  
67 regulations, including K.C.C. 28.84.050K.1 and 28.84.060, the county shall accept  
68 contaminated stormwater runoff from industrial sources and shall establish a fee to  
69 capture the cost of transporting and treating this stormwater. Specific authorization for  
70 such discharge is required.

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

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

82 CSOCP-~~((7))~~9: King County shall implement its long-range sediment  
83 management strategy to address its portion of responsibility for contaminated sediment  
84 locations associated with county CSOs and other facilities and properties. Where  
85 applicable, the county shall implement and cost share sediment remediation activities in  
86 partnership with other public and private parties, including the county's current

87 agreement with the Lower Duwamish Waterway Group, the Department of Ecology and  
88 the Environmental Protection Agency, under the federal Comprehensive Environmental  
89 Response, Compensation and Liability Act.

90 CSOCP-((8))10: Consistent with the Environmental Protection  
91 Agency/Washington state Department of Ecology Consent Decree, King County shall  
92 assess CSO control projects, priorities and opportunities using the most current studies  
93 and information available, for each CSO Control Plan ((Update)) Amendment as required  
94 by the Department of Ecology in the ((NPDES)) National Pollutant Discharge  
95 Elimination System permit renewal process((, which is approximately every five to seven  
96 years. Before completion of an NPDES required CSO Control Plan Update, the  
97 executive shall submit a CSO program review to the council and RWQC. Based on its  
98 consideration of the CSO program review, the RWQC may make recommendations for  
99 modifying or amending the CSO program to the council)).

100 ((CSOCP 9: Unless specifically approved by the council, no new projects shall  
101 be undertaken by the county until the CSO program review has been presented to the  
102 council for its consideration. CSO project approval prior to completion of CSO program  
103 review (beyond those authorized in this subsection) may be granted based on, but not  
104 limited to, the following: availability of grant funding; opportunities for increased cost-  
105 effectiveness through joint projects with other agencies; ensuring compliance with new  
106 regulatory requirements; or responding to emergency public health situations. The  
107 council shall request advice from the RWQC when considering new CSO projects. King  
108 County shall continue implementation of CSO control projects underway as of December

109 ~~13, 1999, which are the Denny way, Henderson/Martin Luther King, Jr. way/Norfolk,~~  
110 ~~Harbor and Alki CSO treatment plants.))~~

111 CSOCP-11: Before completion of an National Pollutant Discharge Elimination  
112 System required CSO Control Plan Amendment, the executive shall submit a CSO  
113 program review report to the council and RWQC. The purpose of the review is to  
114 evaluate, at a minimum, changes to regulations, new technologies, existing CSO control  
115 performance, and human and environmental health priorities that may affect  
116 implementation of the CSO Control Plan. Based on its consideration of the CSO  
117 program review, RWQC may make recommendations to the council for modifying or  
118 amending the CSO program, including changing the sequencing of CSO projects. Any  
119 future updates or amendments to the county's long-term CSO control plan are subject to  
120 Environmental Protection Agency and Washington state Department of Ecology  
121 approvals.

122 CSCOP-12: King County shall implement its CSO control projects in accordance  
123 with the Environmental Protection Agency/Washington state Department of Ecology  
124 Consent Decree and the schedule outlined in the county's approved long-term CSO  
125 control plan.

126 CSOCP-13: King County shall prepare a water quality assessment and  
127 monitoring study, consistent with the guidance provided in Ordinance 17413 and other  
128 applicable legal requirements, to inform the next combined sewer overflow control  
129 program review in 2018.

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

132           A. The RWSP operational master plan that was adopted by council in December  
133 1999, shall be updated on a regular basis following substantive adopted policy revisions  
134 to the RWSP, and shall meet the requirements of K.C.C. chapter 4.04.

135           B. The operational master plan shall contain projects related to major program  
136 elements and shall further define as necessary the major projects, projected capacity,  
137 milestones, projected completion dates, and estimated costs.

138           1. Treatment capacity.

139           a. Population and employment growth is projected to require the wastewater  
140 system capacity to expand from two hundred forty-eight mgd to three hundred four mgd  
141 by 2030. The estimated cost and list of treatment facilities and improvements to achieve  
142 this expanded capacity by 2030, shall be included in future RWSP operational master  
143 plans, summarized in RWSP annual reports and comprehensive reviews as outlined in  
144 K.C.C. 28.86.165.

145           b. The Brightwater treatment plant at the Route 9 site shall be built with a  
146 capacity of thirty-six mgd by 2010 or as soon thereafter as possible to handle wastewater  
147 flows from a new north service area as defined in the plan. This plant would provide  
148 secondary treatment and would discharge treated effluent to Puget Sound. To facilitate  
149 the production of reclaimed water, the possibility of upgrading to tertiary treatment with a  
150 freshwater outfall should be investigated prior to subsequent expansions.

151           c. Expanding the treatment capacity at the south treatment plant from one  
152 hundred fifteen mgd to one hundred thirty-five mgd by 2029. This expansion would  
153 handle increased wastewater flows from the southern and eastern portions of the service  
154 area. Some or all of the plant capacity could also be upgraded to tertiary treatment, to

155 meet water quality standards or facilitate water reuse, as part of future expansions or in  
156 additions to the secondary level of treatment using available land reserves at the plant  
157 site.

158 d. The west point treatment plant will be maintained at its capacity of one  
159 hundred thirty-three mgd, primarily to serve the city of Seattle and handle flows from the  
160 combined sewers in the area. (~~Additional facilities may be planned in the year 2018 to~~  
161 ~~accommodate the extended peak CSO flows that will occur after storms once CSO~~  
162 ~~control projects are constructed.~~)

163 2. Conveyance facilities.

164 a. Conveyance facilities are to be configured, sized, and scheduled to support  
165 the treatment plants by conveying wastewater to and treated effluent from the plants. The  
166 estimated cost, schedule and list of conveyance facility improvements, shall be included  
167 in future RWSP operational master plans, summarized in RWSP annual reports and  
168 comprehensive reviews as outlined in K.C.C. 28.86.165.

169 b. King County will construct additional conveyance improvements (e.g.,  
170 increasing conveyance and pump station capacity and extending conveyance) to  
171 accommodate increased flows in other parts of the service area to serve population  
172 growth in the smaller wastewater service basins and to prevent improper discharges from  
173 the sanitary system.

174 3. I/I control.

175 a. The I/I control program shall be implemented incrementally and be limited  
176 to projects that prove to be most cost effective. The estimated cost, schedule and list of  
177 I/I improvement projects, shall be included in future RWSP operational master plans,



178 summarized in RWSP annual reports and comprehensive reviews as outlined in K.C.C.  
179 28.86.165.

180 b. The goal of the I/I control program is to reduce the expense of conveyance  
181 system improvements over time. Every ten years, beginning in 2010, the wastewater  
182 treatment division will conduct system monitoring to update hydraulic models and  
183 measure the effectiveness of I/I control and reduction in the system.

184 4. CSOs.

185 a. ~~((CSOs shall be prioritized based on first controlling discharges that impact~~  
186 ~~human health, bathing beaches and/or species listed under ESA. The second priority is~~  
187 ~~other CSO locations that have the potential to affect public health and safety. Third~~  
188 ~~priority are all other CSO locations. The estimated cost, schedule and list of CSO control~~  
189 ~~projects, will be reported in the CSO program review (preceding the west treatment plant~~  
190 ~~NPDES permit renewal), and shall be included in future RWSP operational master plans,~~  
191 ~~summarized in RWSP annual reports and comprehensive reviews as outlined in K.C.C.~~  
192 ~~28.86.165)) The county shall implement CSO control projects consistent with the~~  
193 ~~schedule outlined in the county's long-term CSO control plan as approved in Attachment~~  
194 ~~A to Ordinance 14713 and the Environmental Protection Agency/Washington state~~  
195 ~~Department of Ecology Consent Decree.~~

196 b. ~~((CSO projects may include:~~

197 ~~(1) constructing large underground tanks and tunnels to store combined flows~~  
198 ~~during storms. These flows would then be pumped to the west treatment plant once the~~  
199 ~~rain subsides; and~~

200           ~~(2) treating the combined sewage at existing CSO outfall locations using~~  
201 ~~technology to remove solids and disinfect the combined sewage before discharge.~~

202           e.) Consistent with the Environmental Protection Agency/ Washington state  
203 Department of Ecology Consent Decree, the county may request ((R))refinements to the  
204 CSO program ((may be required)), including changes to the sequencing of projects, in  
205 response to changing conditions ((and)), new information and new regulations. ((The  
206 listing of species under the ESA may affect project priorities, schedules, and associated  
207 mitigation options.))

208           5. Biosolids.

209           a. King County will continue to produce Class B biosolids using anaerobic  
210 digestion at the south and west treatment plants and to implement the same process at the  
211 Brightwater treatment plant until a new technology can be used reliably. The plan also  
212 proposes that the county continue to evaluate alternative technologies to reduce the water  
213 content of biosolids while preserving their marketability. The primary objective of this  
214 evaluation will be to identify alternatives to digesters at the west treatment plant, a  
215 condition of the West Point Settlement Agreement.

216           b. As part of ongoing planning for its treatment plants, King County will  
217 periodically evaluate conventional, alternative and new solids processing technologies  
218 using criteria such as product quality (class A or B), marketability, odor and other  
219 potential community impacts, impact on sewer rates, reliability of the treatment process,  
220 amount of land needed for the treatment facility and the number of truck trips needed to  
221 transport the biosolids produced. Based on the results of this evaluation and public

222 comment, the executive should recommend one of three biosolids handling scenarios at  
223 any of all of the treatment plants:

224 (1) continue using anaerobic digestion;

225 (2) supplement anaerobic digestion with another treatment technology; or

226 (3) replace anaerobic digestion with another treatment technology.

227 c. The estimated cost, schedule and list of biosolids improvement projects,  
228 shall be included in future RWSP operational master plans, summarized in RWSP annual  
229 reports and comprehensive reviews as outlined in K.C.C. 28.86.165.

230 d. The county should continue using a public-private partnership approach to  
231 recycling biosolids such as using biosolids on working forests in King County to enhance  
232 wildlife habitat and generate long-term income from selective timber harvests.

233 6. Water reuse.

234 a. The south and west treatment plants should continue to produce reclaimed  
235 water for non-potable uses and explore the production of reclaimed water at new  
236 facilities. King County will explore the production of reclaimed water at new facilities  
237 and work with water suppliers to plan and implement an accelerated water reuse program  
238 that could augment existing water supplies.

239 b. If a public education and involvement program on water reuse is to be  
240 developed and implemented, it shall be coordinated with water conservation education  
241 programs. The estimated cost, schedule and list of water reuse projects, shall be included  
242 in future RWSP operational master plans, summarized in RWSP annual reports and  
243 comprehensive reviews as outlined in K.C.C. 28.86.165.

244 7. Community treatment systems.

245           a. Any operations under these policies shall require an operational master plan  
246 as described in K.C.C. 4.04.200.C.1. Failure to submit such a plan shall cause the  
247 affected capital improvement project to be out of compliance with these policies.

248           b. In addition to the requirements of K.C.C. 4.04.200.C.1, an operational  
249 master plan submitted under these policies shall include:

250                 (1) description of career retention programs that are to be structured in a  
251 manner consistent with the King County/metro merger, labor law and King County's  
252 labor contracts;

253                 (2) an engineering evaluation that confirms that the selected projects are most  
254 cost effective and technically efficacious and consistent with King County growth  
255 management policies for the surrounding area; and

256                 (3) explanation of how King County participation in community treatment  
257 systems is consistent with other water pollution abatement activities of the department of

258 natural resources and parks, which currently operates centralized wastewater treatment  
259 facilities as contrasted with community treatment systems.  
260

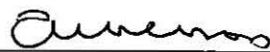
Ordinance 17587 was introduced on 3/25/2013 and passed by the Metropolitan King  
County Council on 5/20/2013, by the following vote:

Yes: 8 - Mr. Phillips, Mr. von Reichbauer, Mr. Gossett, Ms. Hague,  
Ms. Lambert, Mr. Dunn, Mr. McDermott and Mr. Dembowski  
No: 0  
Excused: 1 - Ms. Patterson


KING COUNTY COUNCIL  
KING COUNTY, WASHINGTON

  
Larry Gossett, Chair

ATTEST:

  
Anne Noris, Clerk of the Council

APPROVED this 31 day of May, 2013.

  
Dow Constantine, County Executive

RECEIVED  
2013 MAY 31 PM 3:57  
KING COUNTY CLERK  
KING COUNTY COUNCIL

Attachments: None