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Introduced By: Larry Phillips

nsr Proposed No.: 98-290

ORDINANCE NO. **13680**

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AN ORDINANCE relating to wastewater treatment and conveyance; adopting changes to the Comprehensive Water Pollution Abatement Plan, a King County functional plan; and adding a new chapter to K.C.C. Title 28.

PREAMBLE:

The King County council makes the following legislative findings regarding wastewater planning in its service area:

The Municipality of Metropolitan Seattle (Metro) was created by public vote in 1958 to exercise the powers conferred by chapter 35.58 RCW related to water pollution abatement. RCW 35.58.200 confers specific powers to prepare and implement a comprehensive water pollution abatement plan including provisions for waterborne pollutant removal, water quality improvement, sewage disposal and storm water drainage. In the exercise of those powers, the Metro’s governing body, the metropolitan council, adopted a comprehensive water pollution abatement plan for the Seattle metropolitan area by Resolution No. 23 on April 22, 1959. This plan has been supplemented and amended from time to time by various Metro resolutions and has been implemented in stages. It includes facilities for the conveyance and treatment of sewage and control of combined sewer overflows that include, but are not necessarily limited to, wastewater treatment plants, interceptor and trunk sewers, pumping stations, regulator stations, outfall sewers, storm sewers to divert storm water from sanitary sewers, lands for application of biosolids, property rights, buildings and other structures.

Pursuant to the authority of chapter 36.56 RCW and a special county election held November 3, 1992, the county on January 1, 1994, assumed

28 the rights, powers, functions and obligations of Metro, including operation
29 of Metro's water pollution abatement function.

30 The King County council, in assuming the legislative powers of Metro,
31 readopted by Ordinances 11032 and 12074, the Metro resolutions that
32 comprise the comprehensive water pollution abatement plan for King
33 County.

34 The Growth Management Act, chapter 36.70A RCW, requires counties to
35 develop growth management plans to ensure that facilities and services
36 necessary to sustain urban growth are in place when needed. This
37 supplement to the comprehensive water pollution abatement plan will help
38 assure that facilities and services are in place.

39 The King County Comprehensive Plan also requires that adequate facilities
40 and services are available or can be made available to adequately serve
41 growth and requires that all capital facilities plans be consistent with the
42 King County Comprehensive Plan. This supplement to the comprehensive
43 water pollution abatement plan will help assure that adequate facilities and
44 services are available.

45 King County provides conveyance, treatment and disposal of sewage
46 consistent with the terms of the agreements between Metro and local sewer
47 utilities. Those agreements provide for the county accepting sewage and
48 industrial waste delivered by those local governments to county's regional
49 wastewater treatment system, subject to such reasonable regulations as may
50 be adopted from time to time by the council. The county is also responsible
51 for compliance with all state and federal requirements applicable to the
52 planning, design, construction, operation and maintenance of its wastewater
53 treatment system. This supplement to the comprehensive water pollution
54 abatement plan will help assure the county continues to perform its
55 wastewater function consistent with its agreements with local governments
56 and in compliance with state and federal requirements.

57 King County has conducted an extensive public process in developing,
58 deliberating on and adopting this supplement to the comprehensive water
59 pollution abatement plan. The executive submitted a draft regional
60 wastewater services plan, draft environmental impact statement and draft
61 financing plan to the public in May 1997. The public's input was reflected
62 in the recommendations contained in the preferred plan for regional
63 wastewater services submitted to the council by the executive. The
64 Metropolitan King County Council's regional water quality committee
65 deliberations included public comments at its meetings and special meetings
66 throughout the county. The council heard public comment during its
67 deliberations as the committee of the whole. A public hearing was held
68 before the full council prior to adoption of the plan.

69 In accordance with the state Environmental Policy Act, chapter 43.21C
70 RCW, King County issued a determination of environmental significance
71 for the regional wastewater services plan on September 1, 1994, conducted a
72 forty-five-day scoping process for the determination, prepared and
73 circulated a draft environmental impact statement on May 7, 1997, provided
74 a ninety-day comment period, held five public hearings on the draft
75 environmental impact statement and prepared and circulated a final
76 environmental impact statement on April 27, 1998.

77 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

78 **SECTION 1. Definitions.** The definitions in this section apply throughout this
79 chapter unless the context clearly requires otherwise.

80 A. "Biosolids" means a primarily organic product produced by wastewater
81 treatment processes that can be beneficially recycled. The product may contain water,
82 sand, organic matter, microorganisms, trace metals and other chemicals.

83 B. "Capacity" and "rated capacity" mean the average wet weather flows that the
84 treatment plant or conveyance system is designed to handle. Average wet weather flows
85 are wastewater flows that occur during wet months but not during storms.

86 C. "Capacity charge" means a monthly charge levied on new connections,
87 reconnections and new uses as mitigation for growth.

88 D. "Community treatment system" means a treatment device or drainfield, or
89 both, that is shared by two or more property owners.

90 E. "Component agencies" means the cities, towns, counties and sewer districts that
91 retail wastewater treatment services, that dispose of any portions of their sanitary sewage
92 into the wastewater system and that have entered into a contract with the county for
93 providing for wastewater treatment.

94 F. "Comprehensive Water Pollution Abatement Plan" means a plan developed
95 pursuant to RCW 35.58.200.

96 G. “CSO” means a combined sewer overflow, which is an overflow from a
97 combined sewer that is designed to collect both sanitary sewage and stormwater runoff.
98 The overflows occur during storms when flows in the system exceed the capacity of the
99 wastewater collection system.

100 H. “ESA” means the federal Endangered Species Act.

101 I. “Existing customers” means all customers not included in the definition of new
102 customers.

103 J. “I/I” means inflow/infiltration, which is the total quantity of water from both
104 inflow and infiltration without distinguishing the source.

105 K. “Indirect potable use” means discharging reclaimed water to surface or
106 groundwater and withdrawing water for treatment prior to use as a drinking water source
107 from another location in the same watershed.

108 L. “Infiltration” means the water entering a wastewater system, including sewer
109 service connections, from the ground through such means as, but not limited to, defective
110 pipes, pipe joints, connections or manhole walls.

111 M. “Inflow” means the water discharged into a wastewater system, including
112 service connections from such sources as, but not limited to, roof leaders, cellar, yard and
113 area drains, foundation drains, cooling water discharges, drains from springs and swampy
114 areas, manhole covers, cross-connections from storm sewers and combined sewers, catch
115 basins, storm waters, surface runoff, street wash waters or drainage. “Inflow” does not
116 include, and is distinguished from, infiltration.

117 N. “Mgd” means million gallons per day, a measure of wastewater treatment
118 capacity,

119 O. “Monthly sewer rate” means the cost, in dollars, charged to a residential
120 customer equivalent.

121 P. “New customers” means a customer produced from:

122 1. New connections to the existing collection system, including:

123 a. flows from new single family and multiple unit residential connections;

124 and

125 b. new commercial or industrial connections;

126 2. Expansions in activity from existing connections, including:

127 a. conversion of residential units (single or multiple) to include additional

128 customers or equivalents, or both; and

129 b. expansions in commercial or industrial activity;

130 3. Septic to sewer conversions; and

131 4. I/I flows from the new connections and newly constructed conveyance systems.

132 Q. “Nonpotable use” means using reclaimed water for nondrinking water

133 applications that may include but are not limited to irrigation, industrial processing,

134 agricultural uses and stream augmentation.

135 R. “Reclaimed water” means wastewater that is treated to a sufficiently high level

136 that it can be safely used for intended purposes.

137 S. “Residential customer equivalent” means the factor in cubic feet of water used

138 to describe the discharge from a single-family residence. Commercial and industrial

139 customers are converted to residential customer equivalents based on the volume of water

140 consumption.

141 T. "RWQC" means the regional water quality committee, which is a regional
142 committee as defined by Section 270 of the King County Charter, with powers and duties
143 to "develop, review and recommend ordinances and motions adopting, repealing, or
144 amending county-wide policies and plans relating to the subject matter area for which a
145 regional committee has been established."

146 U. "RWSP" means the Regional Wastewater Services Plan.

147 V. "Shall" and "will" in a policy mean that it is mandatory to carry out the policy.
148 "Should" in a policy provides noncompulsory guidance and establishes some discretion in
149 making decisions. "May" in a policy means that it is in the interest of the county or other
150 named entity to carry out the policy but there is total discretion in making decisions.

151 W. "Wastewater revenues" means revenues from the monthly sewer rate, capacity
152 charge, grants and other revenues, such as interest income and charges for services,
153 available for the wastewater system.

154 X. "Wastewater system" means all the county's water pollution abatement
155 facilities, together with all lands, property rights, equipment and accessories necessary for
156 those facilities, and any other infrastructure, and all operations and programs provided by
157 the county under chapter 35.58 RCW, including but not limited to: 1. conveyance of
158 influent from component agencies; 2. treatment of sewage; 3. disposal of treated effluent;
159 4. production and recycling of biosolids; 5. regulation of I/I; 6. control of combined sewer
160 overflows; and 7. production of reclaimed water.

161 Y. "Water reuse" means using reclaimed water.

162 SECTION 2. Resolution No. 23 and all subsequent resolutions that amended and
163 implemented the comprehensive water pollution abatement plan, duly enacted by the

164 council of the Municipality of Metropolitan Seattle (Metro) and not expressly repealed by
165 that body effective not later than midnight, December 31, 1993, and that are not
166 inconsistent with the King County Charter or county ordinances, are hereby readopted and
167 ratified as the comprehensive water pollution abatement plan for King County.

168 SECTION 3. Under the provisions of the King County Charter and RCW
169 35.58.200, the RWSP, set forth in sections 1 and 4 through 15 of this ordinance, is hereby
170 adopted as a supplement to the comprehensive water pollution abatement plan for King
171 County. The RWSP provides policy guidance for the wastewater system through the year
172 2030.

173 SECTION 4. A. The RWSP policies, as set forth in this chapter, shall provide
174 direction for the operation and further development of the wastewater system, its capital
175 improvement program and, as necessary, the development of subsequent policies.

176 B. The RWSP explanatory material, as set forth in this chapter, provides
177 background information and generally describes the objectives of the RWSP policies.

178 C. Financial policies for the comprehensive water pollution abatement plan and its
179 supplement, the RWSP, are separately adopted in section 16 of this ordinance.

180 SECTION 5. Treatment plant policies (TPP). A. Explanatory material. The
181 treatment plant policies are intended to guide the county in providing treatment at its
182 existing plants and in expanding treatment capacity through the year 2030. The policies
183 direct that secondary treatment will be provided to all base sanitary flows. The county will
184 investigate possible tertiary treatment with a freshwater outfall to facilitate water reuse.
185 The policies also direct how the county will provide the expanded treatment capacity
186 necessary to handle the projected increases in wastewater flows resulting from population

187 and employment growth. The policies provide for the construction of a new treatment
188 plant (the north treatment plant) to handle flows in a new north service area, expansion of
189 the south treatment plant to handle additional south and east King County flows, and the
190 reservation of capacity at the west treatment plant to handle Seattle flows and CSOs. The
191 potential for expansion at the west and south treatment plants will be retained for
192 unanticipated circumstances such as changes in regulations. The policies address goals for
193 odor control at treatment plants and direct that water reuse is to continue and potentially
194 expand at treatment plants. The policies also describe a cooperative siting process for the
195 new north treatment plant and its outfall.

196 B. Policies.

197 TPP-1: King County shall provide secondary treatment to all base sanitary flow
198 delivered to its treatment plants. Treatment beyond the secondary level may be provided
199 to meet water quality standards and achieve other goals such as furthering the water reuse
200 program or benefiting species listed under the ESA.

201 TPP-2: King County shall provide additional wastewater treatment capacity to
202 serve growing wastewater needs by constructing a new north treatment plant in north King
203 county or south Snohomish county and then expanding the treatment capacity at the south
204 treatment plant. The west treatment plant shall be maintained at its rated capacity of one
205 hundred thirty-three mgd. The south treatment plant capacity shall be limited to that
206 needed to serve the eastside and south King County, except for flows from the North Creek
207 Diversion project and the planned six-million-gallon storage tank. The potential for
208 expansion at the west treatment plant and south treatment plant should be retained for
209 unexpected circumstances which shall include, but not be limited to, higher than

210 anticipated population growth, new facilities to implement the CSO reduction program or
211 new regulatory requirements.

212 TPP-3: Any changes in facilities of the west treatment plant shall comply with the
213 terms of the West Point settlement agreement.

214 TPP-4: King County shall establish goals for odor control at all treatment plants.
215 In order to establish these goals, the executive shall investigate potential technologies and
216 costs for odor control and recommend a policy to the council for inclusion in the RWSP.
217 This investigation shall be completed and a policy adopted in a timely manner so that
218 odors are controlled at existing plants and at any new plant. Odor control facilities and
219 equipment shall be designed and operated to meet these goals. In the case of the south
220 treatment plant, King County’s goal shall be to significantly reduce odor below baseline
221 levels established in the development of the 1993 south treatment plant air model.

222 TPP-5: King County shall undertake studies to determine whether it is
223 economically and environmentally feasible to discharge reclaimed water to systems such
224 as the Lake Washington and Lake Sammamish watersheds including the Ballard Locks.

225 TPP-6: When there are opportunities to transfer flows between King County's
226 treatment facilities and treatment facilities owned and operated by other wastewater
227 utilities in the region, the county shall evaluate them. Such evaluation shall include, but
228 not be limited to cost, environmental and community impacts, liability, engineering
229 feasibility, flexibility, impacts to contractual and regulatory obligations and consistency
230 with the level of service provided at the county owned and operated facilities.

231 TPP-7: King County may explore the possibility of constructing one or more
232 satellite treatment plants in order to produce reclaimed water. The county may build these

233 plants in cooperation with a local community and provide the community with reclaimed
234 water through a regional water supply agency. In order to ensure integrated water resource
235 planning, in the interim period prior to the development of a regional water supply plan,
236 King County shall consult and coordinate with regional water suppliers to ensure that
237 water reuse decisions are consistent with regional water supply plans. To ensure costs and
238 benefits are shared equally throughout the region, all reclaimed water used in the
239 community shall be distributed through a regional water supply agency consistent with a
240 regional water supply plan.

241 TPP-8: King County shall continue water reuse and explore opportunities for
242 expanded use at existing plants, and shall explore water reuse opportunities at all new
243 treatment facilities.

244 TPP-9: A comprehensive public involvement program shall be developed and
245 implemented to provide the public, at a minimum, the opportunity to give input on the
246 criteria and the screening process used for selecting the list of possible sites for the new
247 north treatment plant, its conveyance system and outfall and to comment on the final
248 selection of a site. The King County executive shall establish one or more committees to
249 aid in the siting of a north treatment plant. The committees shall, at a minimum, evaluate
250 siting criteria to be used and propose a narrowed list of sites for consideration by the
251 executive after consulting with the council as follows:

252 1. The King County executive shall transmit a motion to the council that
253 establishes the criteria by which sites will be selected; and

254 2. The executive shall provide the council with timely reports that detail the sites
255 that meet the criteria and are under consideration and, at a later date, those sites that are
256 final candidates for the siting of the north treatment plant.

257 TPP-10: Based on criteria approved by the council, the King County executive
258 shall have the final decision on the site for a north treatment plant.

259 SECTION 6. Conveyance policies (CP). A. Explanatory material. The
260 conveyance policies are intended to guide how major improvements to the wastewater
261 conveyance system, including building and upgrading the pipes and pump stations needed
262 to convey wastewater to the north treatment plant and building the outfall pipe from the
263 north treatment plant, will be accomplished. The policies also include guidance for other
264 major and minor conveyance improvements to accommodate increased flows in other parts
265 of the service area and to prevent improper discharges from the sanitary system.

266 The policies also direct the executive to develop and recommend policies to
267 implement equitable regional ownership of the conveyance system.

268 B. Policies.

269 CP-1: To protect public health and water quality, King County shall plan, design
270 and construct county wastewater facilities to avoid sanitary sewer overflows.

271 1. The twenty-year design storm shall be used as the design standard for the
272 county's separated wastewater system.

273 2. The south treatment plant effluent transfer system shall be designed with a five-
274 year design storm standard. When effluent volumes exceed the five-year design standard
275 and exceed the capacity of the south treatment plant effluent transfer system, secondary
276 treated effluent from the south treatment plant will be discharged to the Green/Duwamish

277 river until the flow subsides such that the flow can be discharged through the south
278 treatment plant effluent transfer system.

279 CP-2: King County shall construct the necessary wastewater conveyance facilities,
280 including, but not limited to pipelines, pumps, and regulators, to convey wastewater from
281 component agencies to the treatment plants for treatment and to convey treated effluent to
282 water bodies for discharge. Conveyance facilities shall be constructed during the planning
283 period of this plan to ensure that all treatment plants can ultimately operate at their rated
284 capacities. No parallel eastside interceptor shall be constructed. No parallel Kenmore
285 Interceptor shall be constructed.

286 CP-3: King County shall periodically evaluate population and employment growth
287 assumptions and development pattern assumptions used to size conveyance facilities to
288 allow for flexibility to convey future flows that may differ from previous estimates.

289 CP-4: The King County executive shall prepare and submit to the council
290 recommended policies for achieving uniform financing, construction, operation,
291 maintenance and replacement of all conveyance facilities within its service area.

292 CP-5: King County shall closely integrate water reuse planning and I/I study
293 results with planning for wastewater conveyance and treatment facilities. Water
294 conservation and demand management assumptions shall also be coordinated with
295 wastewater facility planning.

296 CP-6: King County executive shall prepare and submit to the council a study on
297 the impact of conveyance trenches on groundwater recharge and inflow and infiltration
298 including options and costs for limiting these impacts. Based on the study, the executive

299 shall recommend policies for council review and adoption for limiting these impacts
300 accompanied by a proposed work program and schedule for implementation.

301 SECTION 7. I/I policies (I/IP). A. Explanatory material. The I/I policies are
302 intended to guide the county in working cooperatively with component agencies to reduce
303 the amount of I/I that flows into component agencies' local collection systems, thereby
304 reducing the impact of I/I on the regional system's capacity. This cooperative process will
305 assess levels of I/I in local conveyance systems and construct pilot projects to demonstrate
306 the cost-effectiveness and environmental costs and benefits of local collection system
307 rehabilitation. The executive will develop and recommend long-term measures to reduce
308 existing and future levels of I/I into local collection systems. Incentives for component
309 agencies to meet the adopted target for I/I reduction may include a surcharge.

310 B. Policies.

311 I/IP-1: King County is committed to controlling I/I within its regional conveyance
312 system and shall rehabilitate portions of its regional conveyance system to reduce I/I
313 whenever the cost of rehabilitation is less than the costs of conveying and treating that flow
314 or when rehabilitation provides significant environmental benefits to water quantity, water
315 quality, stream flows, wetlands or habitat for species listed under the ESA.

316 I/IP-2: King County shall work cooperatively with component agencies to reduce
317 I/I in local conveyance systems by the following:

318 1. By July 1, 2001, the executive shall propose for council review and approval an
319 initial list of pilot rehabilitation projects dealing with the most serious and readily
320 identified I/I problem areas in the local sewer systems. By July 1, 2002, the executive
321 shall propose an additional list of pilot projects. The pilot rehabilitation projects shall be

322 used to demonstrate the effectiveness of I/I controls in the local sewer systems tributary to
323 the regional system.

324 2. By December 31, 2002, the county, in coordination with component agencies,
325 shall develop model local conveyance systems' design standards, including inspection and
326 enforcement standards, for use by component agencies to reduce I/I within their systems.

327 3. By December 31, 2003, the executive shall submit to the council a report defining
328 I/I levels in each of the local sewer systems, based on assessments of those systems, and
329 identifying options and the associated cost of removing I/I and preventing future increases.
330 The options should be informed by the results of the pilot rehabilitation projects described
331 in subsection 1 of this I/IP-2. The report shall analyze the options on cost-effectiveness
332 and environmental costs and benefits including but not limited to those related to water
333 quality, groundwater interception, stream flows and wetlands, and habitat of species listed
334 under the ESA.

335 The report shall include information on public opinion, obtained through surveys
336 and other appropriate methods, on the role of individual property owners in implementing
337 solutions to reduce I/I, having voluntary and mandatory property owner actions, the
338 willingness to pay to reduce I/I, and acceptable community options to reduce the I/I.

339 4. No later than December 31, 2004, utilizing the report described in subsection 3,
340 the executive shall recommend target levels for I/I reduction in local collection systems
341 and propose long-term measures to meet the targets. These measures shall include, but not
342 be limited to, establishing new local conveyance systems design standards, implementing
343 an enforcement program, developing an incentive based cost sharing program and
344 establishing a surcharge program. The overall goal for peak I/I reduction in the service

345 area should be thirty percent from the peak twenty-year level identified in the report.

346 The county shall pay one hundred percent of the cost of the assessments and pilot
347 projects.

348 I/IP-3: King County shall consider an I/I surcharge, no later than June 30, 2005, on
349 component agencies that do not meet the adopted target levels for I/I reduction in local
350 collection systems. The I/I surcharge should be specifically designed to ensure the
351 component agencies' compliance with the adopted target levels. King County shall pursue
352 changes to component agency contracts if necessary or implement other strategies in order
353 to levy an I/I surcharge.

354 **SECTION 8. Combined sewer overflow control policies (CSOCP). A.**

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

363 **B. Policies.**

364 CSOCP-1: King County shall plan to control CSO discharges and to work with
365 state and federal agencies to develop cost-effective regulations that protect water quality.
366 King County shall meet the requirements of state and federal regulations and agreements.

367 CSOCP-2: King County shall give the highest priority for control to CSO
368 discharges that have the highest potential to impact human health, bathing beaches and/or
369 species listed under ESA.

370 CSOCP-3: Where King County is responsible for stormwater as a result of a CSO
371 control project, the county shall participate with the city of Seattle in the municipal
372 stormwater national pollutant discharge elimination system permit application process.

373 CSOCP-4: Although King County's wastewater collection system is impacted by
374 the intrusion of clean stormwater, conveyance and treatment facilities shall not be designed
375 for the interception, collection and treatment of clean stormwater.

376 CSOCP-5: King County shall accept stormwater runoff from industrial sources and
377 shall establish a fee to capture the cost of transporting and treating this stormwater.
378 Specific authorization for such discharge is required.

379 CSOCP-6: King County, in conjunction with the city of Seattle, shall implement
380 stormwater management programs in a cooperative manner that results in a coordinated
381 joint effort and avoids duplicative or conflicting programs.

382 CSOCP-7: King County shall develop a long-range sediment management strategy
383 to prioritize clean up of contaminated sediments at specific CSO locations.

384 CSOCP-8: King County shall use the results of the 1998 water quality assessment
385 to assess CSO control projects and priorities before issuing the year 2000 CSO update
386 required by the county's national pollutant discharge elimination system permit. Prior to
387 the year 2005 CSO update, the executive shall evaluate the benefits of CSO control
388 projects along with other pollution control projects developed by King County and other
389 agencies. This CSO program review will include, but not be limited to the following:

390 maximizing use of existing CSO control facilities; identifying the public and
391 environmental health benefits of continuing the CSO control program; ensuring projects
392 are in compliance with new regulatory requirements and objectives such as the ESA and
393 the Wastewater Habitat Conservation Plan; analyzing rate impacts; ensuring that the
394 program review will honor and be consistent with long-standing existing commitments;
395 assessing public opinion; and integrating the CSO control program with other
396 water/sediment quality improvement programs for the region. Based on its consideration
397 of the CSO program review, the RWQC may make recommendations for modifying or
398 amending the CSO program to the council.

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

410 **SECTION 9. Biosolids policies (BP).** A. Explanatory material. The biosolids
411 policies are intended to guide the county to continue to produce and market class B
412 biosolids. The county will also continue to evaluate alternative technologies so as to

413 produce the highest quality marketable biosolids. This would include technologies that
414 produce class A biosolids.

415 B. Policies.

416 BP-1: King County shall strive to achieve beneficial use of wastewater solids. A
417 beneficial use can be any use that proves to be environmentally safe, economically sound
418 and utilizes the advantageous qualities of the material.

419 BP-2: Biosolids-derived products should be used as a soil amendment in
420 landscaping projects funded by King County.

421 BP-3: King County shall consider new and innovative technologies for wastewater
422 solids processing, energy recovery, and beneficial uses brought forward by public or
423 private interests. King County shall seek to advance the beneficial use of wastewater
424 solids, effluent, and methane gas through research and demonstration projects.

425 BP-4: King County shall seek to maximize program reliability and minimize risk
426 by one or more of the following: 1. maintaining reserve capacity to manage approximately
427 one hundred fifty percent of projected volume of biosolids; 2. considering diverse
428 technologies, end products, and beneficial uses; or 3. pursuing contractual protections
429 including interlocal agreements, where appropriate.

430 BP-5: King County shall produce and use biosolids in accordance with federal,
431 state and local regulations.

432 BP-6: King County shall strive to produce the highest quality biosolids
433 economically and practically achievable and shall continue efforts to reduce trace metals in
434 biosolids consistent with 40 C.F.R. Part 503 pollutant concentration levels (exceptional
435 quality) for individual metals. The county shall continue to provide class B biosolids and

436 also to explore technologies that may enable the county to generate class A biosolids cost-
437 effectively or because they have better marketability. Future decisions about technology,
438 transportation and distribution shall be based on marketability of biosolids products.

439 BP-7: When biosolids derived products are distributed outside the wastewater
440 service area, the county shall require that local sponsors using the products secure any
441 permits required by the local government body.

442 BP-8: King County shall work cooperatively with statewide organizations on
443 biosolids issues.

444 BP-9: King County shall seek to minimize the noise and odor impact associated
445 with processing, transporting and applying of biosolids, consistent with constraints of
446 economic and environmental considerations and giving due regard to neighboring
447 communities.

448 BP-10: Where cost-effective, King County shall beneficially use methane
449 produced at the treatment plants for energy and other purposes.

450 **SECTION 10. Water reuse policies (WRP).** A. Explanatory material.

451 The water reuse policies are intended to guide the county in continuing to develop
452 its program to produce reclaimed water. The county will coordinate its program
453 with regional water supply plans and work with state agencies and local
454 jurisdictions on opportunities for water reuse. The county will implement pilot
455 and demonstration projects. Additional projects shall be implemented subject to
456 economic and financial feasibility assessments, including assessing environmental
457 benefits and costs.

458 The water reuse policies, as in the treatment plant policies, intend that the county
459 continue producing reclaimed water at its treatment plants. The treatment plant policies
460 also address the potential construction of one or more satellite plants. These small plants
461 would provide reclaimed water, with the solids being transferred to the regional plants for
462 processing.

463 B. Policies.

464 WRP-1: King County shall actively pursue the use of reclaimed water while
465 protecting the public health and safety and the environment. The county shall accelerate
466 the development of a water reuse program to help meet the goals of the county to preserve
467 water supplies within the region and to ensure that any reclaimed water reintroduced into
468 the environment will protect the water quality of the receiving water body and the aquatic
469 environment.

470 WRP-2: Within twelve months of the adoptions of this plan, the King County
471 executive shall prepare for review by council a detailed work plan including tasks and
472 schedule for the development of a water reuse program and a process to coordinate with
473 affected tribal and local governments, the state and area citizens. Accompanying the work
474 plan shall be a list of potential pilot projects and associated costs. Development of the
475 water reuse program shall be coordinated with development of a regional water supply
476 plan.

477 WRP-3: Recycling and reusing reclaimed water shall be investigated as a possible
478 significant new source of water to enhance or maintain fish runs, supply additional water
479 for the region's nonpotable uses, preserve environmental and aesthetic values and defer the
480 need to develop new potable water supply projects.

481 WRP-4: King County’s water reuse program and projects shall be coordinated
482 with the regional water supply plans and regional basin plans, in accordance with state and
483 federal standards. Water reuse and water supply/resources must be developed in a manner
484 complementary with each other to allow the most effective management of resources in the
485 county.

486 WRP-5: King County shall implement nonpotable projects on a case-by-case basis.
487 To evaluate nonpotable projects, King County shall develop criteria which may include,
488 but are not limited to: cost; environmental benefits; fisheries habitat maintenance and
489 enhancement potential; community and social benefits and impacts; public education
490 opportunities; risk and liability; demonstration of new technologies; and enhancing
491 economic development.

492 WRP-6: King County shall work with local water purveyors, including when the
493 local purveyors update their water comprehensive plans, to evaluate the opportunities for
494 water reuse within their local service area.

495 WRP-7: King County shall develop an active water reuse public education and
496 involvement program to correspond with the development of the water reuse program and
497 be coordinated with other water conservation education programs.

498 WRP-8: King County shall utilize a forum or multiple forums to provide
499 opportunities for coordination and communication with the Washington state Departments
500 of Health and Ecology, which have the principal state regulatory roles in the planning,
501 design and construction of reuse facilities. The county shall involve other parties on these
502 forums, including but not limited to, the Corps of Engineers, Washington state Department
503 of Fish and Wildlife, National Marine Fisheries Service, United States Fish and Wildlife

504 Service, regional water suppliers, tribal governments, local water and wastewater districts,
505 cities, local health departments, watershed forums and environmental and community
506 groups.

507 WRP-9: King County shall work, on a case-by-case basis, with the Washington
508 state Departments of Health and Ecology on water reuse projects including, but not limited
509 to, those that are not specifically cited in the 1997 Department of Health and Ecology
510 Water Reclamation and Reuse Standards.

511 WRP-10: King County shall hold and maintain the exclusive right to any
512 reclaimed water generated by the wastewater treatment plants by the county.

513 WRP-11: King County’s water reuse program projects shall not impair any
514 existing water rights unless compensation or mitigation for such impairment is agreed to
515 by the holder of the affected water rights.

516 WRP-12: King County shall retain the flexibility to produce and distribute
517 reclaimed water at all treatment plants including retaining options to add additional levels
518 of treatment.

519 WRP-13: King County shall continue to fund pilot-scale and water reuse
520 demonstration projects, in whole or in part, from the wastewater utility rate base.

521 WRP-14: King County shall complete an economic and financial feasibility
522 assessment, including environmental benefits, of its water reuse program. The assessment
523 shall include the analysis of marginal costs including stranded costs and benefits to
524 estimate equitable cost splits between participating governmental agencies and utilities.
525 The assessment shall also include a review of existing and planned water and wastewater

526 facilities in an approved plan to ensure that water reuse facilities are justified when any
527 resulting redundant capacity as well as other factors are taken into account.

528 WRP-15: King County should pursue development of a water reuse program to
529 discharge reclaimed water to reduce freshwater consumption used in the operation of the
530 Ballard Locks as a priority water reuse project.

531 **SECTION 11. Wastewater services policies (WWSP).** A. Explanatory
532 material. The wastewater services policies guide the county in both providing
533 wastewater services to its customers and maintaining the wastewater system in a
534 cost-effective, environmentally responsible manner. These policies shall also guide
535 King County's development and operation of community treatment systems.

536 King County provides wholesale wastewater treatment and disposal service to
537 component agencies. The county's wastewater service area boundary generally coincides
538 with the boundaries of these component agencies, including certain areas in Snohomish
539 county and Pierce county. The county is to provide wastewater services to areas within the
540 respective urban growth boundaries and in rural areas only to protect public health and
541 safety, in conformance with state provisions and local growth management act policies and
542 regulations.

543 B. Policies.

544 WWSP-1: King County shall provide wastewater services to fulfill the contractual
545 commitments to its component agency customers in a manner that promotes environmental
546 stewardship, recognizes the value of wastewater in the regional water resource system and
547 reflects a wise use of public funds.

548 WWSP-2: King County shall continue to foster tribal relations as appropriate to
549 structure processes for joint water quality stewardship.

550 WWSP-3: King County shall not accept additional wastewater directly from
551 private facilities within the boundaries of a component agency without the prior written
552 consent of such component agency.

553 WWSP-4: King County's wastewater service area generally has been developed
554 along those boundaries adopted in the original metropolitan Seattle sewerage and drainage
555 survey, substantive portions of which were adopted as the county's comprehensive water
556 pollution abatement plan and amended. King County's wastewater service area consists of
557 the service areas of the component agencies with which a sewage disposal agreement has
558 been established (agreement for sewage disposal, section 2) and the county's service area
559 boundary is the perimeter of these areas. The service area boundary for sewer service
560 provided to Snohomish county and Pierce county shall not exceed each county's urban
561 growth boundary. The service area boundary within King County shall be consistent with
562 countywide planning policy CO-14 and the King County Comprehensive Plan which
563 permit sewer expansion in rural areas and resource lands where needed to address specific
564 health and safety problems. To protect public health and safety, the county may assume in
565 accordance with state procedures, the ownership of existing sewer treatment and
566 conveyance facilities that have been constructed by a sewer district organized under state
567 law.

568 WWSP-5: Extensions of existing conveyance facilities or construction of new
569 conveyance facilities must be consistent with King County's land use plans and policies,

570 and certified by potentially affected land use jurisdictions as consistent with their adopted
571 land use plans and policies.

572 WWSP-6: King County shall operate and maintain its facilities to protect public
573 health and the environment, comply with regulations and improve services in a fiscally
574 responsible manner.

575 WWSP-7: King County shall plan, design and construct wastewater facilities in
576 accordance with standards established by regulatory agencies and manuals of practice for
577 engineering.

578 WWSP-8: King County shall construct, operate and maintain facilities to prevent
579 raw sewage overflows and to contain overflows in the combined collection system. In the
580 event of a raw sewage overflow, the county shall initiate a rapid and coordinated response
581 including notification of public health agencies, the media, the public and the affected
582 jurisdiction. Preserving public health and water quality shall be the highest priority, to be
583 implemented by immediately initiating repairs or constructing temporary diversion systems
584 that return flow back to the wastewater system.

585 WWSP-9: To ensure the region’s multibillion-dollar investment in wastewater
586 facilities, ongoing maintenance and repair shall be a high priority of King County. The
587 wastewater maintenance budget, staffing levels and priorities shall be developed to reflect
588 the long-term useful life of wastewater facilities.

589 WWSP-10: King County shall establish a wastewater facilities assets management
590 plan, updated annually, establishing replacement of worn, inefficient and/or depreciated
591 capital assets to ensure continued reliability of the wastewater infrastructure.

592 WWSP-11: King County shall design, construct, operate and maintain its facilities
593 to meet or exceed regulatory requirements for air, water and solids emissions as well as to
594 ensure worker, public and system safety.

595 WWSP-12: King County shall accept sewage, septage and biosolids from outside
596 its service area provided that it is consistent with the King County Comprehensive Plan or
597 the comprehensive plan of the source jurisdiction, capacity is available and no operating
598 difficulties are created. The county shall establish a rate to recover costs from accepting
599 sewage, septage and biosolids from outside its service area.

600 WWSP-13: King County shall identify the potential for “liability protection” for
601 component agencies for unexpected costs associated with water quality requirements.

602 WWSP-14: King County shall continue its long-standing commitment to research
603 and development funding relating to water quality and technologies for the wastewater
604 system.

605 WWSP-15: King County will consider development and operation of community
606 treatment systems under the following circumstances:

- 607 1. The systems are necessary to alleviate existing documented public health
608 hazards or water quality impairment;
- 609 2. Connections to public sewers tributary to conventional wastewater treatment
610 facilities are not technically or economically feasible;
- 611 3. Installation of on-site septic systems is not technically feasible;
- 612 4. Properties to be served by said systems are within the jurisdiction and service
613 area of a local government authority authorized to provide sewer service;

614 5. The local sewer service provider agrees to own and operate the collection
615 system tributary to the community treatment system;

616 6. Development of the community systems and provision of sewer service are
617 consistent with all applicable utility and land use plans; and

618 7. Public sewer extensions shall be in compliance with King County
619 Comprehensive Plan Policy F-313 as in effect on March 11, 1999.

620 **SECTION 12. Water quality protection policies (WQPP).** A.

621 Explanatory materials. The water quality protection policies are intended to guide
622 King County in identifying and resolving regional water quality issues, protecting
623 public and environmental health and protecting the public's investment in
624 wastewater facilities and water resource management. Research and analysis are
625 required and will be used to evaluate water quality in county streams and other
626 bodies of water within the service district.

627 B. Policies.

628 WQPP-1: King County shall participate in identifying and resolving water quality
629 issues pertaining to public health and ecosystem protection in the region to ensure that the
630 public's investment in wastewater facilities and water resource management programs is
631 protected.

632 WQPP-2: King County shall evaluate the impacts and benefits of actions that
633 affect the quality of the region's waters and identify measures to meet and maintain water
634 quality standards.

635 WQPP-3: King County shall forecast future aquatic resource conditions that may
636 affect wastewater treatment decisions and work cooperatively to identify cost-effective
637 alternatives to mitigate water quality problems and enhance regional water quality.

638 WQPP-4: King County shall participate with its regional partners to identify
639 methods, plans and programs to enhance water quality and water resources in the region.

640 WQPP-5: King County executive shall implement a comprehensive water quality
641 monitoring program of streams and water bodies that are or could be impacted by influent,
642 effluent, sanitary system overflows or CSOs. The executive shall submit annually to
643 council for review a written report shall include:

644 1. Analysis and presentation of water resource sampling, environmental
645 monitoring, economic and other improvement data. The range of data to be gathered
646 should be based on water pollutants and elements that scientific literature identifies as
647 variables of concern in addition to data required by state and federal agencies.

648 2. Analysis regarding the impacts of CSOs and the benefits of abating CSOs. The
649 range of data to be gathered should be based on what is needed to substantiate the benefits
650 of abating overflows in addition to data required by state and federal agencies.

651 3. Other wastewater research activities undertaken by the executive.

652 4. The quality variability of biosolids over time.

653 WQPP-6: King County shall implement and maintain water quality, monitoring,
654 evaluating and reporting programs to support the national pollutant discharge elimination
655 system for wastewater and other permit applications, and ensure permit compliance.

656 WQPP-7: King County shall actively participate in the development of water
657 quality laws, standards and program development to ensure cost-effective maintenance or
658 enhancement of environmental and public health.

659 WQPP-8: King County shall assess the risk to human health and the environment
660 from wastewater treatment and conveyance activities, and use this information in
661 evaluating water pollution abatement control options.

662 SECTION 13. Wastewater planning policies (WWPP) A. Explanatory material.
663 The wastewater planning policies are intended to guide the county in its long-term
664 comprehensive planning for design and construction of facilities that meet the wastewater
665 needs of customers within the service area.

666 Recognizing that the RWSP is a complex and dynamic comprehensive
667 development guide that will regularly need to be updated, the county will conduct annual
668 reviews 1. of plan implementation and its consistency with policies, and 2. of scientific,
669 economic and technical information. Every three years conduct a comprehensive review of
670 the assumptions on which the RWSP is based.

671 These policies also express the intent of the council to request that the RWQC
672 continue review of the conditions and assumptions that guide the implementation of the
673 RWSP.

674 B. Policies.

675 WWPP-1: King County shall plan comprehensively to provide for the design and
676 construction of facilities that meet the wastewater system needs of the service area and
677 shall coordinate with other local jurisdictions to ensure that construction-related disruption
678 to neighborhoods is minimized.

679 WWPP-2: In planning future wastewater systems, King County shall make a long-
680 term assessment of wastewater system needs.

681 WWPP-3: In planning for facilities, King County shall work collaboratively with
682 other jurisdictions and look for opportunities to achieve cost savings.

683 WWPP-4: Facility sizing shall take into account the need to accommodate build-
684 out population.

685 WWPP-5: RWSP review processes. King County shall monitor the
686 implementation of and conduct the following reviews of the RWSP:

687 1. Implementation. The King County executive shall submit an annual written
688 report and shall report semiannually to the RWQC and the council on siting, permitting,
689 design and construction of any new treatment facilities and associated conveyances, project
690 cost estimates, schedules and issues of concern. The written report shall be submitted no
691 later than December 1 of each year until the facilities to implement the RWSP are
692 operational. The initial report shall identify key decision points during implementation.
693 The executive shall provide timely reports on these key decisions to allow for evaluation
694 for consistency with the adopted policies;

695 2. Annual plan review. The county should ensure that the RWSP reflects current
696 conditions. An annual review of the plan should address water pollution abatement, water
697 quality monitoring results, water conservation and water reclamation, ESA compliance,
698 septic system conversions to the regional sewer system, biosolids management, wastewater
699 public health problems, compliance with other agency regulations and agreements; and

700 3. Comprehensive three-year plan review. A comprehensive review of RWSP
701 shall be conducted every three years beginning in 2003. The purpose of the review is to

702 evaluate plan components, including but not limited to: the planning assumptions on the
703 rate and location of growth, phasing and size of facilities, and the effectiveness of policy
704 implementation for I/I reduction, water reuse, biosolids, CSO abatement, water quality
705 protection, environmental mitigation and public involvement. The executive shall transmit
706 a report to the RWQC and the council on the results of the review and may recommend
707 policy changes based on this report, changing regulations, technologies or other emergent
708 or relevant factors. The council should convene an engineering and science panel to
709 independently evaluate the report and recommendations and prepare findings.

710 **SECTION 14. Environmental mitigation policies (EMP).** A. Explanatory
711 material. The environmental mitigation policies are intended to guide King County in
712 working with communities to develop mitigation measures for environmental impacts from
713 the construction and operation of wastewater facilities. These policies also ensure that the
714 siting and mitigation processes for wastewater facilities are consistent with the Growth
715 Management Act and the state Environmental Policy Act.

716 B. Policies.

717 EMP-1: King County shall work with affected communities to develop mitigation
718 measures for environmental impacts created by the construction, operation, maintenance,
719 expansion or replacement of regional wastewater facilities. These mitigation measures
720 shall:

- 721 1. Address the adverse environmental impacts caused by the project;
- 722 2. Address the adverse environmental impacts identified in the county's
723 environmental documents; and

724 3. Be reasonable in terms of cost and magnitude as measured against severity and
725 duration of impact.

726 EMP-2: Mitigation measures identified through the state Environmental Policy Act
727 process shall be incorporated into design plans and construction contracts to ensure full
728 compliance.

729 EMP-3: The siting process and mitigation for new facilities shall be consistent
730 with the Growth Management Act and the state Environmental Policy Act, as well as the
731 lawful requirements and conditions established by the jurisdictions governing the
732 permitting process.

733 EMP-4: King County shall mitigate the long-term and short-term impacts for
734 wastewater facilities in the communities in which they are located. The county's goal will
735 be to construct regional wastewater facilities that enhance the quality of life in the region
736 and in the local community, and are not detrimental to the quality of life in their vicinity.

737 EMP-5: King County shall enter into a negotiated mitigation agreement with any
738 community that is adversely impacted by the expansion or addition of major regional
739 wastewater conveyance and treatment facilities. Such agreements shall be executed in
740 conjunction with the project permit review. Mitigation shall be designed and implemented
741 in coordination with the local community, and shall be at least ten percent of the costs
742 associated with the new facilities. For the south treatment plant and for the new north
743 treatment plant, a target for mitigation shall be at least ten percent of individual project
744 costs, or a cumulative total of ten million dollars for each plant, whichever is greater,
745 provided that mitigation funded through wastewater revenues is consistent with: chapter
746 35.58 RCW; Section 230.10.10 of the King County Charter; agreements for sewage

747 disposal entered into between King County and component agencies; and other applicable
748 county ordinance and state law restrictions.

749 SECTION 15. Public involvement policies (PIP). A. Explanatory material. The
750 public involvement policies are intended to guide the county in maintaining public
751 information and education programs and to engage the public and component agencies in
752 planning, designing and operating decisions that affect them.

753 B. Policies.

754 PIP-1: King County shall maintain public information/education programs and
755 engage the public and component agencies of local sewer service in the planning,
756 designing and operating decisions affecting them.

757 PIP-2: King County shall develop public information and education programs to
758 support county wastewater programs and shall lay the groundwork for public
759 understanding of and involvement in specific programs.

760 PIP-3: King County shall involve public officials and citizens of affected
761 jurisdictions early and actively in the planning and decision-making process for capital
762 projects.

763 PIP-4: King County shall inform affected residents and businesses in advance of
764 capital construction projects.

765 PIP-5: King County shall disseminate information and provide education to the
766 general public, private sector and governmental agencies regarding the status, needs and
767 potential future of the region's water resources.

768 PIP-6: King County shall actively solicit and incorporate public opinions throughout
769 the implementation of its comprehensive plan.

770 PIP-7: Beginning January 1, 2001, King County shall implement a public awareness
771 and education program regarding the environmental impacts and costs to wastewater rate
772 payers of I/I in the local and regional conveyance systems.

773 PIP-8: King County shall support regional water supply agencies and water
774 purveyors in their public education campaign on the need and ways to conserve water. King
775 County should promote pilot projects that support homeowner water conservation in
776 coordination with water suppliers and purveyors, emphasizing strategies and technologies
777 that reduce wastewater.

778 **SECTION 16. Financial policies (FP).** A. Under the provisions of the
779 King County Charter and RCW 35.58.200, these financial policies are hereby
780 adopted and declared to be the principal financial policies of the comprehensive
781 water pollution abatement plan for King County, adopted by the Municipality of
782 Metropolitan Seattle (Metro) in Resolution No. 23, as amended, and the RWSP, a
783 supplement to the plan.

784 B. Explanatory material.

785 1. Financial forecast and budget. Policies FP-1 through FP-7 are intended
786 to guide the county in the areas of prudent financial forecasting and budget
787 planning and are included to ensure the financial security and bonding capacity for
788 the wastewater system. This set of policies also addresses the county's legal and
789 contractual commitments regarding the use of sewer revenues to pay for sewer
790 expenses.

791 2. Debt financing and borrowing. Policies FP-8 through FP-11 are intended to
792 guide the county in financing the wastewater system capital program. These policies

793 direct that capital costs be spread over time to keep rates more stable for ratepayers by
794 the county issuing bonds. A smaller share of annual capital costs will be funded
795 directly from sewer revenues and capacity charges.

796 3. Collecting revenue. Policies FP-12 through FP-14 are intended to guide
797 King County in establishing annual sewer rates and approving wastewater system
798 capital improvement and operating budgets. Monthly sewer rates, which are the
799 primary source of revenue for the county's regional wastewater system, are to be
800 uniformly assessed on all customers. Customers with new connections to the
801 wastewater system will pay an additional capacity charge. The amount of that charge
802 is set by the council, within the constraints of state law.

803 4. Community treatment systems. Policy FP-15 is intended to guide the county
804 in the financial management of community treatment systems.

805 C. Policies.

806 1. Financial forecast and budget.

807 FP-1: The county shall maintain for the wastewater system a multiyear financial
808 forecast and cash-flow projection of six years or more, estimating service growth, operating
809 expenses, capital needs, reserves and debt service. The financial forecast shall be submitted
810 by the executive with the annual sewer rate ordinance.

811 FP-2: If the operations component of the proposed annual wastewater system
812 budget increases by more than the reasonable cost of the addition of new facilities,
813 increased flows, new programs authorized by the council, and inflation, or if revenues
814 decline below the financial forecast estimate, a feasible alternative spending plan shall be
815 presented, at the next quarterly budget report, to the council by the executive identifying

816 steps to reduce cost increases. The executive shall maintain an ongoing program of
817 reviewing business practices for savings and efficiencies; the results shall be reported in
818 the annual budget submittal.

819 FP-3: The county shall maintain for the wastewater system a prudent minimum
820 cash balance for reserves, including but not limited to, cash flow and potential future
821 liabilities. The cash balance shall be approved by the council in the annual sewer rate
822 ordinance.

823 FP-4: Unless otherwise directed by the council by motion, the King County
824 department of natural resources shall charge a fee that recovers all direct and indirect costs
825 for any services related to the wastewater system provided to other public or private
826 organizations.

827 FP-5: Water quality improvement activities, programs and projects, in addition to
828 those that are functions of sewage treatment, may be eligible for funding assistance from
829 sewer rate revenues after consideration of criteria and limitations suggested by the
830 metropolitan water pollution abatement advisory committee, and, if deemed eligible, shall
831 be limited to one and one half percent of the annual wastewater system operating budget.
832 An annual report on activities, programs and projects funded will be made to the RWQC.
833 This policy shall remain in effect until such time as a financial plan for the surface water
834 regional needs assessment is adopted and implemented.

835 FP-6: The calculation of general government overhead to be charged to the
836 wastewater system shall be based on a methodology that provides for the equitable
837 distribution of overhead costs throughout county government. Estimated overhead charges
838 shall be calculated in a fair and consistent manner, utilizing a methodology that best

839 matches the estimated cost of the services provided to the actual overhead charge. The
840 overall allocation formula and any subsequent modifications will be reported to the
841 RWQC.

842 FP-7: The assets of the wastewater system are pledged to be used for the exclusive
843 benefit of the wastewater system including operating expenses, debt service payments,
844 asset assignment and the capital program associated therewith. The system shall be fully
845 reimbursed for the value associated with any use or transfer of such assets for other county
846 government purposes. The executive shall provide reports to the RWQC pertaining to any
847 significant transfers of assets for other county government purposes in advance of and
848 subsequent to any such transfers.

849 2. Debt financing and borrowing.

850 FP-8: The county shall structure bond covenants to ensure a prudent budget
851 standard.

852 FP-9: King County should structure the term of its borrowings to match the
853 expected useful life of the assets to be funded.

854 FP-10: The wastewater system’s capital program shall be financed predominantly
855 by annual staged issues of long-term general obligation or sewer revenue bonds, provided
856 that:

857 All available sources of grants are utilized to offset targeted program costs;

858 Funds available after operations and reserves are provided for shall be used for the
859 capital program; excess funds accumulated in reserves may also be used for capital;

860 Consideration is given to competing demands for use of the county’s overall
861 general obligation debt capacity; and

862 Consideration is given to the overall level of debt financing that can be sustained
863 over the long term given the size of the future capital programs, potential impacts on credit
864 ratings, and other relevant factors such as intergenerational rate equity and the types of
865 projects appropriately financed with long-term debt.

866 FP-11: To achieve a better maturity matching of assets and liabilities, thereby
867 reducing interest rate risk, short-term borrowing shall be used to fund a portion of the
868 capital program, provided that:

869 Outstanding short-term debt comprises no more than fifteen percent of total
870 outstanding revenue bonds and general obligation bonds; and

871 Appropriate liquidity is available to protect the day-to-day operations of the
872 system.

873 3. Rates - sewer rates and capacity charge.

874 FP-12: Existing and new sewer customers shall each contribute to the cost of the
875 wastewater system. To implement this policy, rate and capacity charge methodology will
876 be adopted by the council, after consultation with the RWQC, consistent with state law.

877 1. King County shall maintain a uniform monthly sewer rate expressed as charges
878 per residential customer equivalent for all customers. Costs of infrastructure
879 improvements for new customers shall be recovered by a capacity charge.

880 2. King County shall pursue changes in state law to attain greater flexibility in
881 setting capacity charges. In 2000 King County shall seek to achieve the authority to set
882 such charges locally, in the same manner granted to cities and towns. Within six months
883 of achieving the authority to set such charges locally, the executive shall propose for
884 consideration by the council, after consultation with the RWQC, explicit policies for

885 setting the capacity charge including recommendations to achieve growth paying for
886 growth. Upon implementation of these explicit policies, the Seattle combined sewer
887 overflow benefit charge shall be discontinued.

888 3. The executive shall propose and the council adopt, after consultation with the
889 RWQC, explicit policies for the setting of customer monthly sewer rates;

890 4. King County shall charge its customers sewer rates sufficient to cover the costs
891 of constructing and operating its wastewater system. Revenues shall be sufficient to
892 maintain capital assets in sound working condition, providing for maintenance and
893 rehabilitation of facilities so that total system costs are minimized while continuing to
894 provide reliable, high quality service and maintaining high water quality standards. The
895 executive, in consultation with the RWQC, shall propose for council adoption policies to
896 ensure adequate debt service coverage and emergency reserves are established and
897 periodically reviewed;

898 5. Based on an analysis of residential water consumption, as of the effective date
899 of this section King County uses a factor of seven hundred fifty cubic feet per month to
900 convert water consumption of volume-based customers to residential customer equivalents
901 for billing purposes. King County shall periodically review the appropriateness of this
902 factor to ensure that all accounts pay their fair share of the cost of the wastewater system;

903 6. King County should attempt to adopt a multiyear sewer rate to provide stable
904 costs to sewer customers. If a multiyear rate is established and when permitted upon the
905 retirement by the county of certain outstanding sewer revenue bonds, a rate stabilization
906 reserve account shall be created to ensure that adequate funds are available to sustain the

907 rate through completion of the rate cycle. An annual report on the use of funds from this
908 rate stabilization account shall be provided annually to the RWQC; and

909 7. King County should periodically review the capacity charge to ensure that the true
910 costs of system expansion are reflected in the assessed charge. All reasonable steps should
911 be taken to coordinate fee assessments and accounting with component agencies to reduce
912 redundant program overhead costs.

913 FP-13: The executive shall prepare and submit to the council a report in support of
914 the proposed monthly sewer rates for the next year, including the following information:

915 Key assumptions: key financial assumptions such as inflation, bond interest rates,
916 investment income, size and timing of bond issues, and the considerations underlying the
917 projection of future growth in residential customer equivalents;

918 Significant financial projections: all key projections, including the annual
919 projection of operating and capital costs, debt service coverage, cash balances, revenue
920 requirements, revenue projections and a discussion of significant factors that impact the
921 degree of uncertainty associated with the projections;

922 Historical data: a discussion of the accuracy of the projections of costs and
923 revenues from previous recent budgets, and

924 Policy options: calculations or analyses, or both, of the effect of certain policy
925 options on the overall revenue requirement. These options should include alternative
926 capital program accomplishment percentages (including a ninety percent, a ninety-five
927 percent and a one hundred percent accomplishment rate), and the rate shall be selected that
928 most accurately matches historical performance in accomplishing the capital program and
929 that shall not negatively impair the bond rating.

930 FP-14. Expenditures from the wastewater revenues to correct water pollution
931 problems caused by septic systems shall occur only if such expenditures financially benefit
932 wastewater system current customers when the additional monthly sewer rate revenues
933 from these added customers are considered.

934 FP-15: The cost of community treatment systems developed and operated in
935 accordance with WWSP-15 would not be subsidized by the remaining ratepayers of the
936 county's wastewater treatment system.

937 **SECTION 17. Capital improvement program.** The capital improvement
938 program required to implement the comprehensive water pollution abatement plan, as
939 amended, including the RWSP, a supplement to the comprehensive water pollution
940 abatement plan, as amended, shall be prepared pursuant to K.C.C. 4.04.200 through
941 4.04.270.

942 **SECTION 18. Implementation.** A. The executive is hereby directed to prepare
943 and recommend to the council an operational master plan that meets the requirements of
944 K.C.C. chapter 4.04. If any portion of the proposed operational master plan is inconsistent
945 with the RWSP policies contained in this chapter, the executive shall submit at the same
946 time a proposed ordinance amending the affected policies.

947 B. The operational master plan shall contain the following major elements and shall
948 further define as necessary the major projects, projected capacity, projected completion
949 dates and estimated costs referenced in this chapter. The operational master plan shall
950 include a schedule and milestones for completion of the north treatment plant by 2010 and
951 a schedule and milestones for completion of the North Lake Interceptor as a tunnel by
952 2006 or sooner if possible.

953 1. Treatment capacity. Population and employment growth is projected to require
954 the wastewater system capacity to expand from 248 mgd to 304 mgd by 2030. The
955 estimated costs of treatment facilities to achieve this expanded capacity by 2030 is 277
956 million dollars 1998 net present value. The expanded capacity shall be provided by:

957 a. constructing a new north treatment plant on a site large enough to
958 accommodate ultimate plant build out in north King County or south Snohomish county
959 with a capacity of 36 mgd by 2010 or as soon thereafter as possible to handle
960 wastewater flows from a new north service area defined in the plan. This plant would
961 provide secondary treatment and would discharge treated effluent to Puget Sound. To
962 facilitate the production of reclaimed water, the possibility of upgrading to tertiary
963 treatment with a freshwater outfall should be investigated during the initial phase of
964 construction and subsequent expansions;

965 b. expanding the treatment capacity at the south treatment plant from 115 mgd to
966 135 mgd by 2029. This expansion would handle increased wastewater flows from the
967 southern and eastern portions of the service area. Some or all of the plant's capacity could
968 also be upgraded to tertiary treatment, to meet water quality standards or facilitate water
969 reuse, as part of future expansions or in addition to the secondary level of treatment using
970 available land reserves at the plant site; and

971 c. maintaining the west treatment plant at its capacity of 133 mgd primarily to serve
972 the city of Seattle and handle flows from the combined sewers in the area. Additional
973 facilities should be planned in the year 2018 to accommodate the extended peak CSO
974 flows that will occur after storms once CSO control projects are constructed.

975 2. Conveyance facilities.

976 a. The conveyance facilities are to be configured, sized and scheduled to support
977 the treatment plants by conveying wastewater to and treated effluent from the plants. The
978 estimated costs of conveyance facilities is 582 million dollars 1998 net present value.

979 Major projects, with the estimated date the facility will be on line, should include:

980 Parallel East Side Interceptor Section -1 (2000)

981 Increase York Pump Station capacity to 68 mgd (2000)

982 Parallel Auburn Interceptor Sections 1, 2, & 3 (2004)

983 Construct 6 million gallons of off-line storage at North Creek (2002)

984 Construct North Lake Interceptor and pump station to extend from the
985 McAleer/Lyon Trunk to the Kenmore Pump Station sized to create 10 million gallons of
986 storage (2006 or sooner if possible)

987 Construct forcemain from new Kenmore Pump Station to North treatment plant
988 (2010)

989 Construct 120 mgd pump station at Kenmore to pump to North treatment plant
990 (2010)

991 Construct tunnel from North treatment plant to Puget Sound, sized to accommodate
992 ultimate plant buildout (2010)

993 Construct North treatment plant outfall, sized to accommodate ultimate plant
994 buildout (2010)

995 Construct 3-5 million gallons of storage at south treatment plant to achieve a five-
996 year design storm standard of protection for the Effluent Transfer System (2030)

997 Construct Auburn Interceptor Storage (2020)

998 Increase North Creek Pump Station to 50 mgd (2016)

999 Modify York Pump Station to pump 35 mgd north (2016)

1000 Construct force main to convey flows from North Creek to Kenmore Pump Station

1001 (2016)

1002 b. King County will construct additional conveyance improvements (e.g.,

1003 increasing conveyance and pump station capacity and extending conveyance) to

1004 accommodate increased flows in other parts of the service area to serve population growth

1005 in the smaller wastewater service basins and to prevent improper discharges from the

1006 sanitary system.

1007 Extending the county’s ownership of conveyance policy into Snohomish county will

1008 increase the amount of conveyance owned and operated by King County. The assessment

1009 of this extension will be done and presented to the King County council and may include,

1010 but not be limited to, the Swamp Creek and North Creek Interceptors currently owned and

1011 operated by the Alderwood Water and Sewer District.

1012 3. I/I. The estimated cost for assessing the levels of I/I in local sewer systems is 16

1013 million dollars and the estimated costs of pilot projects is 15 million dollars, both in 1998

1014 net present value.

1015 4. CSOs.

1016 a. CSO projects shall be prioritized based on first controlling discharges that

1017 impact bathing beaches and species listed under ESA. The second priority is other CSO

1018 locations that have the potential to affect public health and safety. Third priority are all

1019 other CSO locations. The estimated cost for CSO control projects is 220 million dollars,

1020 1998 net present value. These project areas should be completed on the following

1021 schedule:

	Priority	Project areas and projects	Completion period
1022	1	<u>Puget Sound beaches</u> Norfolk 0.8 million gallon (MG) storage tank South Magnolia 1.3 MG storage tank SW Alaska 0.7 MG storage tank Murray 0.8 MG storage tank Barton Pump Station (PS) Upgrade North Beach storage tank & PS upgrade	2009-2011
1023			
1024			
1025			
1026			
1027			
1028			
1029			
1030	2	<u>Lake Washington ship canal, east side</u> University/Montlake 7.5 MG storage tank	2015
1031			
1032	3	<u>Duwamish River and Elliott Bay shoreline</u> Hanford #2 3.3 MG storage/treatment tank Lander 1.5 MG storage/treatment tank Michigan 2.2 MG storage/treatment tank Brandon 0.8 MG storage/treatment tank Chelan 4.0 MG storage tank Connecticut 2.1 MG storage/treatment tank King Street conveyance to Connecticut Hanford at Rainier 0.6 MG storage tank 8th Ave. S 1.0 MG storage tank W Michigan conveyance expansion Terminal 115 0.5 MG storage tank	2017-2027
1033			
1034			
1035			
1036			
1037			
1038			
1039			
1040			
1041			
1042			
1043			
1044	4	<u>Lake Washington ship canal, west side</u> Ballard 1.0 MG storage tank 3rd Ave W 5.0 MG storage tank 11th Ave NW 2.0 MG storage tank	2029-2030
1045			
1046			
1047			
1048	Other	West treatment plant - primary and secondary treatment enhancements to handle increased flows from CSO projects	2018
1049			
1050			
1051	b. The CSO projects may include:		
1052	(1) constructing large underground tanks and tunnels to store combined flows		
1053	during storms. These flows would then be pumped to the west treatment plant once the		
1054	rain subsides; and		
1055	(2) treating the combined sewage at existing CSO outfall locations using		
1056	technology to remove solids and disinfect the combined sewage before discharge.		

1057 Refinements to the CSO program may be required in response to changing
1058 conditions and new information. The listing of species under the ESA may affect project
1059 priorities, schedule and associated mitigation options.

1060 5. Biosolids.

1061 a. King County will continue to produce Class B biosolids using anaerobic
1062 digestion at the south and west treatment plants and to implement the same process at the
1063 north treatment plant until a new technology can be used reliably. The plan also proposes
1064 that the county continue to evaluate alternative technologies to reduce the water content of
1065 biosolids while preserving their marketability. The primary objective of this evaluation
1066 will be to identify alternatives to digestors at the west treatment plant, a condition of the
1067 West Point Settlement Agreement.

1068 As part of planning for the north treatment plant, King County should evaluate
1069 conventional, alternative and new solids processing technologies using criteria such as
1070 product quality (class A or B), marketability, odor and other potential community impacts,
1071 impact on sewer rates, reliability of the treatment process, amount of land needed for the
1072 treatment facility and the number of truck trips needed to transport the biosolids produced.
1073 Based on the results of this evaluation and public comment, the executive should
1074 recommend one of three biosolids handling scenarios at any or all of the treatment plants:

- 1075 (1) continue using anaerobic digestion;
1076 (2) supplement anaerobic digestion with another treatment technology; or
1077 (3) replace anaerobic digestion with another treatment technology.

1078 b. The estimated costs for the expanded solids handling facilities needed
1079 at both the new north treatment plant and the south treatment plant are 85 million
1080 dollars net present value.

1081 c. The county should continue using a public-private partnership approach
1082 to recycling biosolids such as using biosolids on working forests in King County
1083 to enhance wildlife habitat and generate long-term income from selective timber
1084 harvests.

1085 6. Water reuse program. The south and west treatment plants should continue to
1086 produce reclaimed water for nonpotable uses and explore the production of reclaimed
1087 water at new facilities. The work plan for the water reuse program is to be prepared no
1088 later than twelve months from the adoption of the RWSP. King County will work with
1089 water suppliers to plan and implement an accelerated water reuse program that could
1090 augment existing water supplies.

1091 If a public education and involvement program on water reuse is to be developed
1092 and implemented, it shall be coordinated with water conservation education programs. The
1093 estimated cost to evaluate potential future uses of reclaimed water and conduct pilot
1094 studies and demonstration projects is 20 million dollars net present value.

1095 7. Community treatment systems.

1096 a. Any operations under these policies shall require an operational master plan as
1097 described in K.C.C. 4.04.200 C.1. Failure to submit such a plan shall cause the affected
1098 capital improvement project to be out of compliance with these policies.

1099 b. In addition to the requirements of K.K.C. 4.04.200 C.1 an operational master
1100 plan submitted under these policies shall include:

1101 (1) description of career retention programs that are to be structured in a manner
1102 consistent with the King County/Metro merger, labor law and King County’s labor
1103 contracts;

1104 (2) an engineering evaluation that confirms that the selected projects are most cost
1105 effective and technically efficacious and consistent with King County growth management
1106 policies for the surrounding area; and

1107 (3) explanation of how King County participation in community treatment systems
1108 is consistent with other water pollution abatement activities of the department of natural
1109 resources, which currently operates centralized wastewater treatment facilities as
1110 contrasted with community treatment systems.

1111 C. The executive is hereby authorized to begin implementation of the RWSP
1112 pursuant to the 1999 capital improvement program appropriation. Implementation beyond
1113 1999 may proceed, provided that there is an approved operational master plan and the six-
1114 year capital improvement plan is updated in the 2000 adopted budget to reflect the adopted
1115 RWSP.

1116 SECTION 19. The executive is directed to include in the executive’s scope of
1117 work for the 2000 update to the Comprehensive Plan, the updating of the information in
1118 Technical Appendix Volume 1 with regard to sewerage treatment to reflect the addition of
1119 new treatment facilities pursuant to the RWSP.

1120 SECTION 20. Codification. Sections 1 through 18 of this ordinance should
1121 constitute a new chapter in K.C.C. Title 28.

1122 SECTION 21. Severability. If any provision of this ordinance, or its application
1123 to any person or circumstance is held invalid, the remainder of the ordinance, or its
1124 application to other persons or circumstances is not affected.

1125 SECTION 22. Direction to the clerk. The clerk is given direction to edit and revise
1126 this ordinance to the extent deemed necessary or desirable by the clerk and without changing
1127 the meaning of any such law, in the following respects only:

- 1128 A. Make capitalization uniform with that followed generally by the county.
- 1129 B. Make chapter or section division and subdivision designations uniform with that
1130 followed in the code.
- 1131 C. Substitute for the term "this ordinance," where necessary, the term "section,"
1132 "part," "code," "chapter," or "title," or reference to specific section or chapter numbers, as the
1133 case may require.
- 1134 D. Substitute for reference to a section of "this ordinance," the proper code section
1135 number reference.
- 1136 E. Strike out figures where merely a repetition of written words and substitute,
1137 where deemed advisable for uniformity, written words for figures.
- 1138 F. Rearrange any misplaced statutory material, incorporate any omitted statutory
1139 material as well as correct manifest errors in spelling, and manifest clerical or typographical
1140 errors, or errors by way of additions or omissions.
- 1141 G. Correct manifest errors in references, by chapter or section number, to other code.
- 1142 H. Correct manifest errors or omissions in numbering or renumbering sections of
1143 the code.

1144 I. Divide long sections into two or more sections, and rearrange the order of sections
1145 to conform to such logical arrangement of subject matter as may most generally be followed
1146 in the code when to do so will not change the meaning or effect of such sections.

1147 J. Change the wording of section captions, if any, and provide captions to new
1148 chapters and sections.

1149 K. Strike provisions manifestly obsolete.

1150 INTRODUCED AND READ for the first time this May 11, 1998.

1151 PASSED by a vote of 10 to 1 this 29th day of November, 1999.

1152 KING COUNTY COUNCIL
1153 KING COUNTY, WASHINGTON

1154 _____
1155 Chair

1156 ATTEST:

1157 _____
1158 Clerk of the Council

1159 APPROVED this _____ day of _____, 19__.

1160 _____
1161 King County Executive

1162 Attachments: None