

Appendix F
RWSP Water Reuse Policies

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

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

Water Reuse Policies	How Implemented in 2004–2006
<p>WRP-1: King County shall actively pursue the use of reclaimed water while protecting the public health and safety and the environment. The county shall facilitate the development of a water reuse program to help meet the goals of the county to preserve water supplies within the region and to ensure that any reclaimed water reintroduced into the environment will protect the water quality of the receiving water body and the aquatic environment.</p> <p><i>(Ordinance 15602 amended this policy—replacing the word “accelerate” with “facilitate” in the second sentence.)</i></p>	<p>The Wastewater Treatment Division (WTD) has been safely using reclaimed water since 1997 at its regional treatment plants in Seattle and Renton; some of the reclaimed water produced at the South plant is used off-site for irrigation during the summer months. WTD complies with all federal, state, and local regulations governing the application of reclaimed water.</p> <p>In November 2005, the King County Council approved appropriation for the Brightwater reclaimed water backbone, which will be able to provide up to 7 million gallons per day (mgd) of reclaimed water beginning in 2011. WTD has been working with local jurisdictions, water and sewer districts, businesses, and organizations to identify potential reclaimed water customers. Potential reclaimed water opportunities from this segment include uses for parks and businesses in Bothell, Woodinville, Redmond, and other cities in the area, as well as farms, parks, and businesses in the Sammamish Valley. In addition, the county has an agreement with Willows Run Golf Course to supply the golf course with reclaimed water from this portion of the backbone.</p> <p>Reclaimed water will be produced at the Carnation Treatment Plant to enhance a wetland in the Chinook Bend Natural Area.</p>
<p>WRP-2: By December 2007, the King County executive shall prepare for review by council a reclaimed water feasibility study as part of a regional water supply plan which will include a comprehensive financial business plan including tasks and schedule for the development of a water reuse program and a process to coordinate with affected tribal and local governments, the state and area citizens. The reclaimed water feasibility study shall be reviewed by the RWQC. At a minimum the feasibility study shall comply with chapter 90.46</p>	<p>Although a regional water supply plan has not been developed, WTD is committed to the deadline of December 2007 for the reclaimed water feasibility study. In November 2006, WTD began the process to hire consultants and develop a scope, schedule, and budget for the feasibility study based upon this policy.</p>

Appendix F. Water Reuse Policies and Implementation in 2004-2006

Water Reuse Policies	How Implemented in 2004–2006
<p>RCW and include:</p> <ol style="list-style-type: none"> 1. Review of new technologies for feasibility and cost effectiveness, that may be applicable for future wastewater planning; 2. Review of revenue sources other than the wastewater rate for distribution of reused water; 3. Detailed review and an update of a regional market analysis for reused water; 4. Review of possible environmental benefits of reused water; and 5. Review of regional benefits of reused water. <p><i>(Ordinance 15602 amended this policy—replacing the directive for a reclaimed water work program, which the executive submitted to the King County Council in December 2000—with the directive for a reclaimed water feasibility study as part of a regional water supply plan.)</i></p>	
<p>WRP-3: Recycling and reusing reclaimed water shall be investigated as a possible future significant new source of water to enhance or maintain fish runs, supply additional water for the region’s nonpotable uses, preserve environmental and aesthetic values and defer the need to develop new potable water supply projects.</p> <p><i>(Ordinance 15602 amended this policy by adding the word “future” before the words “significant new source of water...”)</i></p>	<p>Through adoption of the 2005 county budget ordinance, the Sammamish Valley Reclaimed Water Production Facility was cancelled in favor of the production of reclaimed water at Brightwater.</p> <p>Starting in 2011, the reclaimed water backbone will be able to convey Class A reclaimed water produced at the Brightwater Treatment Plant to the Sammamish Valley and to potential customers along the conveyance tunnel. Studies indicate that if self suppliers (those agricultural businesses currently taking water directly from the Sammamish River) were to use reclaimed water instead there would be a significant cooling effect of the river which contains a run of Chinook salmon.</p>
<p>WRP-4: King County’s water reuse program and projects shall be coordinated with the regional water supply plans and regional basin plans, in accordance with state and federal standards. The coordination shall be done with the affected water supply purveyors. Water reuse must be coordinated with water supply/resource purveyors to ensure that resources are developed in a manner complementary with each other to allow the most effective management of resources in the county.</p> <p><i>(Ordinance 15602 amended this policy to ensure coordination of reclaimed water projects with affected water supply purveyors.)</i></p>	<p>WTD has been meeting with water supply purveyors to discuss reclaimed water opportunities. Although a regional water supply plan has not been developed, the county remains committed to coordinating with water supply purveyors on reclaimed water projects and related issues.</p>
<p>WRP-5: King County shall implement</p>	<p>As noted in WRP-3, the King County Council</p>

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<p>nonpotable projects on a case-by-case basis. To evaluate nonpotable projects, King County shall develop criteria which will include, but are not limited to: capital, operation and maintenance costs; cost recovery; potential and proposed uses; rate and capacity charge impacts; environmental benefits; fisheries habitat maintenance and enhancement potential; community and social benefits and impacts; public education opportunities; risk and liability; demonstration of new technologies; and enhancing economic development. A detailed financial analysis of the overall costs and benefits of a water reuse project shall include cost estimates for the capital and operations associated with a project, the anticipated or existing contracts for purchases of reused water, including agricultural and other potential uses, anticipated costs for potable water when the project becomes operational; and estimates regarding recovery of capital costs from new reused water customers versus costs to be assumed by existing ratepayers and new customers paying the capacity charge. Water reuse projects that require major capital funding shall be reviewed by RWQC and approved by the council.</p> <p><i>(Ordinance 15602 amended this policy to further define the criteria to be used to evaluate nonpotable reuse project, the elements to be included in project financial analysis, and to require water reuse projects that require major capital funding be reviewed by RWQC and approved by the King County Council.)</i></p>	<p>cancelled the Sammamish Valley reclaimed water satellite production facility in favor of producing reclaimed water at Brightwater. In 2005, WTD staff briefed the King County Council, RWQC, MWPAAC, and other stakeholders about the plan to distribute reclaimed water to the Sammamish Valley from Brightwater. As a result, the Brightwater reclaimed water backbone was evaluated and approved by the King County Council in November 2005. To date, no other major reclaimed water projects have been proposed. Evaluation of any new major reclaimed water projects will be done in accordance with this policy.</p>
<p>WRP-6: King County shall work with local water purveyors, including when the local purveyors update their water comprehensive plans, to evaluate the opportunities for water reuse within their local service area.</p>	<p>WTD participates in discussions with individual water purveyors, jurisdictions, MWPAAC, and other entities concerning reclaimed water opportunities.</p> <p>The county’s Brightwater mitigation agreements with the City of Bothell, City of Kenmore, and the Cross Valley Water District include language about working together to pursue opportunities for using reclaimed water.</p> <p>King County Code 13.24.010 calls for water comprehensive plans to include an evaluation of reclaimed water opportunities as required by RCW 90.46.120 and calls for sewer comprehensive plans to discuss opportunities for reclaimed water as required under RCW 90.48.112. King County’s Utilities and Technical Review Committee (UTRC) serves as the technical review body for water and sewer utilities’ comprehensive plans.</p>

Appendix F. Water Reuse Policies and Implementation in 2004-2006

Water Reuse Policies	How Implemented in 2004–2006
<p>WRP-7: King County shall develop an active water reuse public education and involvement program to correspond with the development of the water reuse program and be coordinated with other water conservation education programs.</p>	<p>King County has developed an active water reuse public education and involvement program. The effort is coordinated with water conservation and other WTD educational programs.</p> <p>In 2004–2006, written materials on reclaimed water and water conservation were developed for a variety of audiences, from large water users to the general public. Information on reclaimed water is included in tours and open houses of the county’s regional treatment plants. Informational displays on reclaimed water are available for public meetings and events.</p> <p>WTD’s reclaimed water and water conservation Web sites are updated on a regular basis.</p>
<p>WRP-8: King County shall utilize a forum or multiple forums to provide opportunities for coordination and communication with the Washington state Departments of Health and Ecology, which have the principal state regulatory roles in the planning, design and construction of reuse facilities. The county shall involve other parties on these forums, including but not limited to, the Corps of Engineers, Washington state Department of Fish and Wildlife, National Marine Fisheries Service, United States Fish and Wildlife Service, regional water suppliers, tribal governments, local water and wastewater districts, cities, local health departments, watershed forums and environmental and community groups.</p>	<p>This process is an ongoing element of the county’s reclaimed water planning. Agencies cited in WRP-8 are regular participants, along with the county, in multiple processes and committees related to water supply and environmental and public health issues. In 2004–2006, efforts included participation in the Normative Flows Studies project, Puget Sound Partnership efforts, Central Puget Sound Water Suppliers Forum, the 2005 King County Climate Change Conference, the regional water supply planning process, and efforts and discussions related to the Brightwater permitting process.</p>
<p>WRP-9: King County shall work, on a case-by-case basis, with the Washington state Departments of Health and Ecology on water reuse projects including, but not limited to, those that are not specifically cited in the 1997 Department of Health and Ecology Water Reclamation and Reuse Standards.</p>	<p>King County works closely with the Washington State Departments of Health and Ecology on the county’s water reuse projects, including reclaimed water production associated with the future Brightwater and Carnation treatment plants. Ecology approved the facilities plan for the Brightwater Treatment Plant in June 2005 and for the Carnation Treatment Plant in October 2005. The <i>Brightwater Reclaimed Water Engineering Report</i> was approved by the Washington State Department of Health (DOH) on October 31, 2006 and by Ecology on November 8, 2006. WTD continues to work with DOH and Ecology to ensure the design and construction of the backbone complies with state standards</p>
<p>WRP-10: King County shall hold and maintain the exclusive right to any reclaimed water generated by the wastewater treatment plants of King County.</p> <p><i>(Ordinance 15602 amended this policy to correct grammatical error.)</i></p>	<p>This policy is in accordance with RCW 90.46.120, which states “The owner of a wastewater treatment facility that is reclaiming water with a permit issued under this chapter has the exclusive right to any reclaimed water generated by the wastewater treatment facility.”</p>
<p>WRP-11: King County’s water reuse program projects shall not impair any existing water</p>	<p>This policy is in accordance with RCW 90.46.130, which states “...facilities that reclaim water under this</p>

Water Reuse Policies	How Implemented in 2004–2006
rights unless compensation or mitigation for such impairment is agreed to by the holder of the affected water rights.	chapter shall not impair any existing water right downstream from any freshwater discharge points of such facilities unless compensation or mitigation for such impairment is agreed to by the holder of the affected water right.”
WRP-12: King County shall retain the flexibility to produce and distribute reclaimed water at all treatment plants including retaining options to add additional levels of treatment.	The county will consider additional reclaimed water opportunities associated with its two regional plants (South plant in Renton, and West Point plant in Seattle). The design and treatment technology at Brightwater and Carnation will provide flexibility for future reclaimed water opportunities.
WRP-13: King County shall continue to evaluate potential funding of pilot-scale and water reuse projects, in whole or in part, from the wastewater utility rate base. <i>(Ordinance 15602 amended this policy by replacing the word “fund” with “evaluate potential funding” and deleted the word “demonstration”, which preceded “water reuse projects”.)</i>	The water reuse technology pilot projects at the West Point plant were funded from the wastewater rate. The Brightwater reclaimed water backbone will be initially financed from the wastewater rate. The county is exploring other financing options for future reclaimed water opportunities, such as user fees, grants, and loans. The reclaimed water feasibility study called for in WRP-2 will include information on revenue sources other than the wastewater rate for distribution of reused water.
WRP-14: King County shall complete an economic and financial feasibility assessment, including environmental benefits, of its water reuse program. The assessment shall include the analysis of marginal costs including stranded costs and benefits to estimate equitable cost splits between participating governmental agencies and utilities. The assessment shall also include a review of existing and planned water and wastewater facilities in an approved plan to ensure that water reuse facilities are justified when any resulting redundant capacity as well as other factors are taken into account.	The feasibility study called for in WRP-2 aligns closely with this policy.
WRP-15: King County should pursue development of a water reuse program to discharge reclaimed water to reduce freshwater consumption used in the operation of the Ballard Locks as a priority water reuse project.	During the development of the water reuse program that was submitted in December 2000, it was determined to defer consideration of this policy for at least ten years. There haven’t been any changes to this assessment since that time.