

Report on the Status of the
Reclaimed Water Work Program

2009 Budget Proviso
Presentation to MWPAAC's
Engineering & Planning Committee
June 17, 2009

Presentation Outline

- Overview/context of budget proviso
- Presentation of Report contents
 - Part I & II (status of current program)
 - Part III (preliminary rates)
- Questions

Proviso report, motion

- On operating budget
- Has been transmitted; will be presented to Council (RWQC)
- Requires Council approval of report by motion

PROVISO REQUEST:

A status report by June 1, 2009 to Council on:



- 1) the work program related to reclaimed water and progress on the reclaimed water backbone project;
- 2) the division's efforts to market and establish contracts for the sale of reclaimed water produced at King County wastewater treatment facilities; and
- 3) analysis and development of preliminary rate structures and policies for the sale of reclaimed water from King County facilities

Overview of Report

- Comprehensive summary of existing activities relating to reclaimed water
- Primary focus is on existing program
 - Guided by RWSP reclaimed water policies
- Status report/no new policy direction
 - Summarizes and clarifies current activities, approaches

Section 1

Status of Existing Work Program

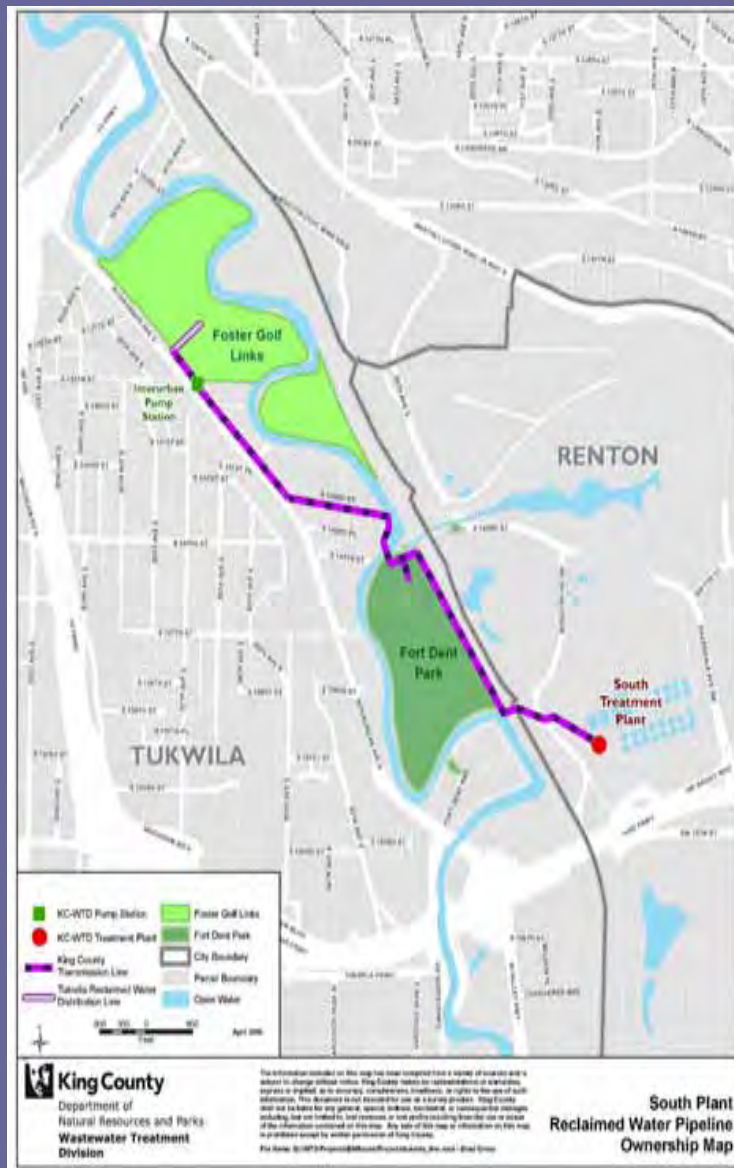
- Need to distinguish existing vs. future reclaimed water program
 - Existing: facilities that exist today, portion of facilities under construction
 - Future: depends on outcome of Reclaimed Water Comprehensive Plan

Section 1 Status of Existing Work Program

- **South Treatment Plant**
 - 90-100 MG/yr by sand filter
 - Design capacity of 1 MGD for sand filter
 - 95% used for process water and irrigation saving \$80,000-\$90,000/yr
 - 5-6 MG/yr used offsite by Tukwila ,King Conservation District nursery, and truck and haul program
 - RW permit renewal in process w/ Ecology
 - Engineering Assessment to increase sand filter operational reliability and efficiency

South Treatment Plant Reclaimed Water Use Areas





New pipeline to Foster Links Golf Course (3-5 MG/season)



King Conservation District Wetland Nursery at South Plant

West Point Treatment Plant

- 170-195 MG/yr by sand filter
 - Design capacity of 0.7 MGD
 - 100% used for most non-potable uses, saving \$450,000-\$575,000/yr
 - No offsite distribution
 - Future uses considered as part of reclaimed water comprehensive planning effort



Carnation Treatment Plant

- Design capacity of 0.37 MGD (2030)
- 100% Class A reclaimed water by MBR
- 0.1 MGD to wetland (3/09)
- Watereuse Assoc. and Green Globe awards



Brightwater Reclaimed Water System

- Consists of west and south transmission lines (“Brightwater backbone”)
 - Part of Brightwater Treatment System Project
- Seeking uses from south transmission line as part of existing program
- West transmission line part of future program (access will require future investment & infrastructure)

Brightwater Construction



South Transmission line substantially complete by late 2009

-West transmission line is underway

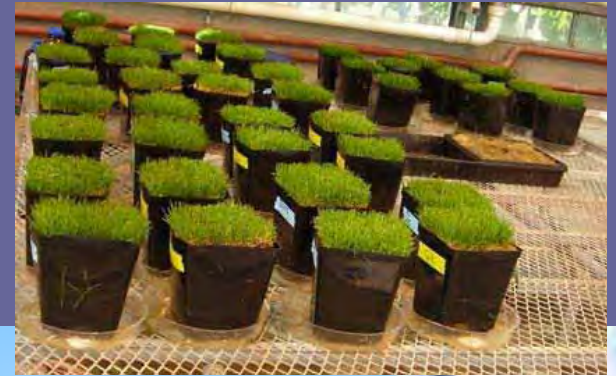
-RW permit submittal anticipated in 2010



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Other Current Program Activities: Research and Demonstration

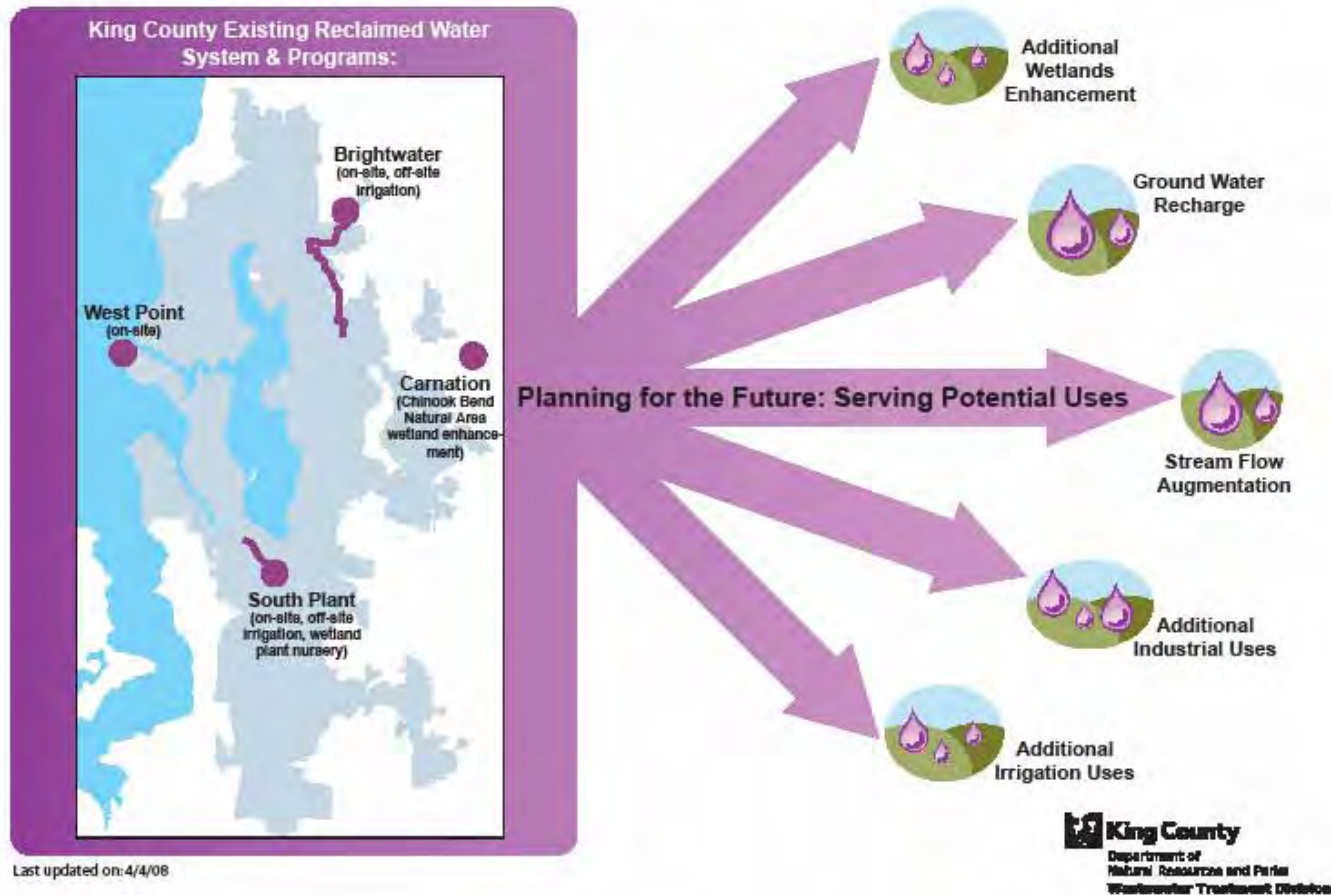
- Monitor national research efforts
- Conduct local research w/ University of Washington
- Fate and Transport of Pharmaceuticals and personal care products on turf grass irrigated with reclaimed water (2007-8)
- Food crop safety and horticultural plant growth response (2008-9)
- Sept 09 Watereuse conference presentations



Current Work Program includes Reclaimed Water Planning Efforts

Reclaimed Water: Where Do We Go From Here?

King County Wastewater Treatment Division's
Draft Reclaimed Water Comprehensive Planning Process



Reclaimed Water Comprehensive Planning Process

- Multi-year planning process
- If, how, where, and when the county's reclaimed water program should expand over the next 30 years
- Explore potential uses (consumptive and environmental enhancements)
- Analyze the costs and benefits of serving those uses
- Develop financial plan to cover the capital and operating costs of any new reclaimed water facilities recommended in the plan
- Develop financial policies to provide long-term guidance on pricing and cost allocation



Section II. Efforts to Market and Establish Contracts for the Sale of Reclaimed Water

- **Public education and outreach objectives**
 - Establish a foundation of support for reclaimed water.
 - Raise awareness that reclaimed water is safe and effective.
 - Involve the general public and specific user groups in shaping programs and implementation.
 - Earn trust and confidence from wastewater ratepayers, regulators, and customers.
 - Promote a cooperative regional approach.
 - Ensure there are “no surprises” by keeping the public informed of plans and changes.
 - Use a variety of tools and techniques.

Public Education and Outreach Activities

- **Signage**
- **Tours**
- **Surveys**
- **News releases**
- **Q&A sheets**
- **Speakers**
- **other**

Marketing Efforts

- Marketing goal to secure contracts and agreements with reclaimed water users.
- Voluntary, as opposed to mandatory program, highlights importance of marketing
- Strong preference to establish wholesale-retail relationships with local water purveyors that traditionally retail water to end users. Will consider becoming the retailer of last resort.
- Guided by and consistent with RWSP reclaimed water policies to actively pursue the use of reclaimed water (WRP-1) and work with water purveyors (WRP-6).

Marketing Efforts

- Identify markets and potential demand for reclaimed water
 - Uses, locations and volumes (customer database)
- Fully understand the products being marketed
- Product promotion (website, education, research, fact sheets)
- Technical assistance and customer support (existing & potential)

Partnering with Jurisdictions and Potential Reclaimed Water Users

- Tukwila
- Covington Water District
- Bothell
- Redmond



Section III. Preliminary Rate Structures and Policies for the Sale of Reclaimed Water

- No new policies – options will be developed as part of Reclaimed Water Comprehensive Plan
 - Will be many opportunities for input
- Section describes current approach (until Comprehensive Plan process is complete)
- Looking ahead, this section:
 - summarizes general approaches to pricing in other parts of the country
 - identifies key questions need to be addressed through the Comprehensive Plan

Current Approach-Background

- Past/current approach based on several considerations
 - Current RWSP Policies (promote use, pursue pilot projects, etc.)
 - Recommendations from Regional Stakeholder Process in 2000
 - SPU wholesale rate as regional benchmark
 - Reclaimed water should be discounted
 - Consistent preference to be wholesaler (retailer of last resort)

Current Approach

- If wholesaler (preferred case) - 80 % of SPU's wholesale rate for potable water.
 - Surveys in other jurisdictions suggest common discount of 75-90%
- If retailer (last resort), look at 80 % of the prevailing retail rate for potable water in the area the user is located.
 - Flexibility is warranted:
 - Consider cost of providing service (varies greatly)
 - Prevailing rate may not be relevant for self-suppliers
 - Great variability in prevailing retail water rates in the region
- WTD will seek to negotiate re-opener clauses in all future contracts for the existing reclaimed water program (wholesale or retail) for conformance with financing policies in the Reclaimed Water Comprehensive Plan

Looking Ahead – Financing and Policy Development

- Report summarizes general approaches to pricing across the country (cost of service, percentage of potable use, etc.)
- Report describes activities expected in the development of the Reclaimed Water Comprehensive Plan
 - Financial plan to cover the capital and operating costs
 - Financial policies to provide long-term guidance on pricing/rate development and cost allocation
 - King County Council legislative action to adopt the plan and make any modifications to existing county code.

Provides sample financing questions for the RW Comprehensive Planning Process

- **How should costs be distributed among wastewater ratepayers and reclaimed water ratepayers?**
- **If and how should costs be allocated and revenues recovered when benefits from the use of reclaimed water accrue to a larger group of people than just wastewater or reclaimed water ratepayers?**
- **What kinds of pricing policies should the county have in place for reclaimed water purveyors?**
- **How should capital costs be financed (e.g., pay-as-you go, or issue long-term bonds)?**
- **What costs may be attributed to the wholesaler of the reclaimed water versus the retailer?**

Next Steps

- Present report to County Council (RWQC)
- Seek approval of motion (merely accepts the report, does not make any policy changes)
- Seek input on policy issues to inform Reclaimed Water Comprehensive Planning Process