# Executive Summaries

# Executive Summary of Chapter 1

## Status of Reclaimed Water Rule Development

This interim report describes the Department of Ecology's progress toward rule development for reclaimed water. When completed, Chapter 173-219 of the Washington Administrative Code (WAC) will be the first regulation for reclaimed water use in the state of Washington.

### Assignment

In 2006, the Legislature directed the Department of Ecology (Ecology) to adopt final rules addressing all aspects of reclaimed water use by December 31, 2010. Additional legislation in 2007 expanded the scope of work for rule development and asked Ecology to recommend changes to state law that would encourage reclaimed water use for consideration during the 2009 legislative session.

### Key Messages

Ecology made good progress on rule development during the first year. In July 2007, Ecology modified the schedule of work to include the assignments from the 2007 legislation.

The requested recommendations will propose changes to state law for consideration during the 2009 legislative session. If the Legislature amends the reclaimed water statute in 2009, these amendments may also alter the final content of the rule under development.

Ecology is currently determining the best way to address these possibilities while still getting the needed framework for program administration (permits, submittals, standards) in place as quickly as possible. Ecology remains on schedule for rule adoption by December 31, 2010.

### Status

During the first year of rule development, Ecology, in coordination with the Department of Health (DOH):

- Completed the state requirements to initiate rule making.
- Convened the Reclaimed Water Rule Advisory Committee that meets monthly.
- Developed a scope of work with four major sections - permit process, technical standards, submittals and reports, and other topics of interest.
- Completed input on the permit process and began work on the technical standards.
- Established a website and list serve to communicate with the public.
- Invited out-of-state experts and co-sponsored a workshop attended by 250 people.
- Incorporated and began work on additional assignments from the 2007 legislation.

# Executive Summary of Chapter 2

## Status of Removing Barriers Subtask Force Activities

This is the first progress report on tasks assigned to Removing Barriers Subtask Force of the Reclaimed Water Rule Advisory Committee (RW-RAC). The subtask force continues through 2008.

### Assignment

The 2007 session law - Engrossed Second Substitute Senate Bill 6117 (E2SSB 6117) - Section 5 directed Ecology to establish and chair this subtask force to investigate and recommend ways to reduce barriers to reclaimed water use. Specific assigned tasks include evaluating state agency resources and organizational structure, considering other names to describe reclaimed water, addressing unresolved legal issues relevant to reclaimed water use and completing any additional tasks assigned by the RW- RAC. The subtask force received an additional assignment to address issues related to reclaimed water planning.

### Key Messages

This subtask force began in August 2007, met three times in the fall of 2007 and will continue working, on a monthly schedule, through 2008. Ecology and the Subtask Force prioritized the assigned tasks into a work plan for 2008.

The subtask force agreed to address the work most likely to include recommendations for legislative changes (planning and incentives) during the first half of 2008. Ecology will combine these recommendations with other proposed statutory changes for consideration during the 2009 legislative session.

The subtask force recommends keeping the generic name “reclaimed water.” Many other states use this term and most Washingtonians are now familiar with it. Using the term “reclaimed water” gives local utilities flexibility to create local brand names for their product.

### Status

Ecology and the subtask force completed the following tasks in 2007:

- Researched and evaluated a list of appropriate names for reclaimed water.
- Reviewed information on organizational structure, staffing, and the flow of project oversight between Ecology and DOH.
- Reviewed available information from previous efforts and agreed to review information included within these 2007 reports and appendices.
- Prepared a preliminary work plan to accomplish assignments during 2008.
- Agreed to coordinate and integrate solutions to reduce barriers with the work of other reclaimed water committees and subtask forces.

# Executive Summary of Chapter 3

## Recommendations for Long-Term Funding Program

This report provides recommendations from a long–term funding subtask force of the Reclaimed Water Rule Advisory Committee (RW-RAC). It fulfills the reporting requirement for January 1, 2008.

### Assignment

The 2007 session law - Engrossed Second Substitute Senate Bill 6117 (E2SSB 6117), Section 10 - directed Ecology to establish and chair a subtask force of the RW-RAC. The subtask force assignment is to recommend a dedicated competitive funding program for reclaimed water infrastructure. The program must include eligibility requirements, funding priorities, and grants for high priority areas. The statute directs the subtask force to coordinate the development of the long-term reclaimed water funding program with existing state funding programs for environmental and public health infrastructure.

Funding priorities must consider readiness to proceed, local support, local use ordinances or executed user contracts, and projects providing broader public benefits to environmental water quality or water resource needs such as Puget Sound restoration and promoting Columbia River water management strategies.

### Key Messages

Existing state and federal funding sources for wastewater treatment are insufficient. Conservatively low estimates of wastewater treatment and water reclamation funding needs in Washington identified in the 2004 Clean Watershed Needs Survey reported to Congress are $3.8 billion. Likewise, a recent Ecology survey showed a low estimate need projection of $365 million for reclaimed water facilities by 2010.

The subtask force recommends an initial funding program of $50 million dollars with phased increases. Reclaimed water funding should focus on post-treatment needs such as storage, distribution systems, and environmental benefits. Funding should not compete with existing wastewater needs. It should fill the funding gap required to integrate water and wastewater management toward the best solutions.

Potential revenue sources include a tax on bottled water or soft drinks, increasing the public utility tax or dedicating the existing tax to reclaimed water, and sales tax exemptions.

### Status

This report completes the funding subtask force assignment to develop recommendations for a dedicated long-term funding program to support reclaimed water use. The proposed program includes all required components including eligibility and provisions for grants and loans. The program considers the grant funding needs for financial hardship and for high priority areas.

The report provides a detailed evaluation system consistent with all criteria outlined in the legislative assignment. The funding subtask force notes that this is an initial program. It

recommends immediate implementation followed by additional review of effectiveness and need within 4-6 years.

The Legislature should consider the reclaimed water funding need as part of the broader evaluation of local government infrastructure financing by the Infrastructure Funding Study Committee formed by Section 6026 of Engrossed Substitute House Bill 1092 session law (State 07-09 Capital Budget appropriation).

# Executive Summary of Chapter 4

## Report – Reclaimed Water Implementation in Local Plans

This report provides information the 2007 legislature requested regarding the consideration of reclaimed water use within existing conservation and water reuse plans. It fulfills the reporting requirement for January 1, 2008.

### Assignment

In addition to the recommendations for a long-term funding program (Chapter 3), the 2007 session law - Engrossed Second Substitute Senate Bill 6117 (E2SSB 6117) - directed Ecology and the subtask force created under Section 10 to complete:

Task 1 - Review current existing conservation and water reuse plans or programs for cities, counties, and districts and provide a report to the appropriate legislative committees regarding the number, general nature, and extent of conservation and reclaimed water use proposed or included within the plans.

Task 2 - Recommend additional provisions for reclaimed water use requirements under water system planning, regional water plans, and conservation plans and ordinances.

### Key Messages

Beginning in August 2007, Ecology focused on completion of Task 1. Most local plans are in three major categories (general sewer plans, water supply plans, watershed management plans).

To gather additional information quickly, Ecology created a questionnaire for stakeholder input. Questionnaire results found that:

- Most city and local water plans and ordinances identify water conservation. However, reclaimed water is not a part of all local plans or ordinances.

- Ecology found a positive attitude and interest in reclaimed water use. Over 50% of facilities reviewed indicated that they are planning to use reclaimed water in the future.

- Several organizations requested additional options and resources to facilitate the use of reclaimed water.

### Status

With input from legislative staff and stakeholder advisors, Ecology assigned Task 2 to the Removing Barriers Subtask Force in conjunction with other planning related activities. The Removing Barriers Subtask Force will consolidate the information and report to the Legislature with recommendation for the 2009 legislative session.

# Executive Summary of Chapter 5

## Report on Implementation in Watershed Planning

This report provides an advance summary of the information the state legislature requested about the use of reclaimed water in watershed management plans. Ecology's Shorelands and Environmental Assistance program will include this information in their more comprehensive annual report on Watershed Planning.

### Assignment

The Legislature tasked the Department of Ecology (Ecology) to review watershed management plans and to report on:

1. The number of watershed management plans using reclaimed water as potential source or strategy to meet future needs.
2. Provisions in any watershed implementation plans that discuss barriers to implementation of the water reuse elements of those plans.
3. Potential costs of reclaimed water facilities.
4. Potential sources of funding for reclaimed water facilities

### Key Messages

Ecology found that the watershed management plans uniformly identify reclaimed water, water reuse, and water conservation. However, the depth of the discussion on those water topics varied widely from plan to plan.
Four of those seven implementation plans included references to reclaimed water use. Many implementation plans are now in production or have yet to be developed.

Costs for reclaimed water facilities vary widely. These costs are dependent on the class of water reclaimed, the size of the facility, and the complexity of the reclaimed water distribution system.

### Status

In January 2008, Ecology will provide a separate report on the status of watershed planning (as required under Ch 90.82 RCW. The annual Watershed Planning Report will include any additional information on reclaimed water use in watershed management plans.

# Executive Summary of Chapter 6

## Status Report - Harmonizing Statutory Planning Requirements

In 2007, amendments to the Reclaimed Water Use act (RCW 90.46.120) extended planning requirements to consider reclaimed water in regional watershed planning and land use statutes. This report provides the Department of Ecology's (Ecology) recommendations to harmonize these new planning requirements with the other state statutes referenced under the law.

### Assignment

In signing Engrossed Second Substitute Senate Bill 6117 (2007) into law, Governor Gregoire noted that the new Section 3 requirements for considering reclaimed water during watershed planning and land use decisions needed to be harmonized with other statutes to ensure effective implementation. She directed Ecology to work with legislative leadership to address reclaimed water planning and provide a report and recommendations to the Governor and appropriate standing committees of the legislature by December 31, 2007.

### Key Messages

Ecology requested legal support from the Office of the Attorney General (AG) to identify and recommend statutory changes to increase clarity.

The AG's office recommended:

- A combination of a simple amendment to each of the statutes referenced and minor revisions to the language in RCW 90.46.120.

- Because of other issues related to the Growth Management Act and other statutes, Ecology should get additional stakeholder input before proposing recommendations to amend these statutes.

### Status

Ecology assigned the task to review the AG recommendations to the Removing Barriers Subtask Force (Chapter 2). Ecology and the subtask force will complete this review and propose any recommendations for statutory changes in time for the 2009 legislative session.

# Executive Summary of Chapter 7

## Interim Report on Water Rights Impairment Issues

This interim report describes the Department of Ecology's (Ecology) progress in addressing key water right issues related to reclaimed water use. Ecology will deliver a final report late in 2008 for consideration during the 2009 legislative session.

### Assignment

In 2007, the Legislature proposed a change to the water right impairment standard in the Reclaimed Water Use Act, RCW 90.46.130. The Governor vetoed the legislative changes stating a concern for unintended consequences. She recognized the need for additional study and directed Ecology to work with legislative leadership to address water right impairment from water reuse projects. Impairment addresses the rights of reclaimed water facilities versus the rights of existing water right holders when water availability is limited.

### Key Messages

Ecology and stakeholder advisors reached agreement on the following:

- It will take additional time to provide useful recommendations for statutory changes. The issues are complex and it is important to consider the broad range of perspectives. Stakeholder advisors will look for consensus on as many aspects as possible. Where consensus is not reached, positions and perspectives of the stakeholders will be provided to the legislature in the 2008 report.
- Construction of any reclaimed water project currently discharging to the Puget Sound estuary or other marine waters would "automatically" not impair existing water rights. This includes approximately 90% of the existing wastewater flows in the Puget Sound area.
- Water right holders with out-of-stream uses and in-stream flows set by rule may be impacted by new consumptive uses of reclaimed water. Policy choices for both types of water rights will be important.

### Status

In July 2007, Ecology convened a stakeholder advisory committee (Reclaimed Water and Water Rights Advisory Committee) to help address impairment. Ecology and the committee met 5 times in 2007. The advisory committee:

- Reviewed other states' approaches to water rights impairment and reclaimed water.
- Examined case studies to understand the legal and physical differences across the state.

- Developed a list of priority questions needing resolution.

Ecology and the advisory committee will continue meeting during 2008 to address these issues and provide recommendations in time for the 2009 legislative session.

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# Executive Summary of Chapter 8

## Report from Department of Health on Related Public Health Issues

This report provides the information the 2007 legislature requested from the Department of Health (DOH) related to reclaimed water program implementation status and public health issues.

### Assignment

In 2007, session law, Engrossed Second Substitute Senate Bill 6117 (E2SSB 6117), Section 7, directed DOH to:

- Report the status of greywater standards and guidelines development.
- Report the status of commercial and industrial permit fee development for reclaimed water use.
- Report on DOH analysis of reclaimed water in water system planning.
- Identify potential public health risks associated reclaimed water.
- Identify public information and acceptance programs for reclaimed water.

### Key Messages

DOH is on schedule to adopt rules for greywater use by December 2010. DOH currently has guidance on greywater use available on their website. Local health and county agencies issue permits for greywater use.

DOH intends to consider permit fees in conjunction with the Department of Ecology. The goal is to work toward achieving one permit fee system regardless of which agency issues the permit.

Since 2003, 100% of the coordinated water system plans submitted to DOH and 78% of the individual systems required to do so in their water system plans addressed reclaimed water use. DOH has found that 30% of the water plans identified active and targeted reclaimed water projects.

Water systems consider reclaimed water from the consumer rather than the producer perspective since most do not have a wastewater facility. Most water systems identified barriers to reuse. The most frequently mentioned are the costs to treat and deliver to customers, the limited availability of reclaimed water supply, a lack of infrastructure to deliver it, low customer demand, and public acceptance.

DOH contracted with an international expert, Dr. James Crook to evaluate potential public health risks. If reclaimed water is properly treated, distributed and used, it poses no significant public health risk.

Public information and outreach are key ways to gain public acceptance of reclaimed water projects. Proponents must provide accurate information and response to public

concerns. The Environmental Protection Agency and others have assembled model programs. Most local agencies lack expertise in this area; support from state agencies is necessary.

# Executive Summary of Chapter 9

## Report on Capital Budget Provisions for Funding Puget Sound

The 2007-09 Biennium Capital Budget for the Department of Ecology (Ecology) provided
$5.4 million dollars for grants to complete reclaimed water projects in the Puget Sound area. This report describes Ecology's progress in administering these funds.

### Assignment

In 2007, Engrossed Substitute House Bill 1092, Section 3044, the budget directs Ecology to administer these funds solely for grants to local governments in Puget Sound to complete reclaimed water projects. The budget specifies that Ecology give funding priority to two types of projects where reclaimed water use will:

- Replace other water sources in water short areas.
- Restore important ecosystem functions in Puget Sound.

Ecology, with stakeholder assistance, defined water short areas as areas where available freshwater cannot meet demands of intended uses. Ecology developed a competitive, outcome-based application and evaluation process that also focused on these two criteria to evaluate projects.

### Key Messages

Although limited only to the Puget Sound area, the competition for the $5.4 million of funding was high. Local governments outside the Puget Sound also expressed the serious need for funding assistance to, for example, safely recharge aquifers and provide adequate stream flow.

Ecology received 23 applications with a combined grant request of $17.5 million. Total project costs were approximately $100 million. Evaluators are selecting highest priority construction projects and feasibility studies for proposed funding. Ecology will likely meet the program goal to fund 3-6 construction projects and 3-6 feasibility studies. Feasibility assessments are rated according to the same criteria as construction projects, but they are ranked on different lists.

Ecology anticipates that all of the funded projects will begin by mid 2008. Feasibility assessments will take about one year to complete. Construction projects should be operational within three years.

The success of this initial program demonstrates the value of continuing funding support for reclaimed water use projects throughout the state.

### Status

Beginning in June 2007, Ecology responded quickly to administer the new funds.

Ecology used two taskforces and the Water Quality Program's Financial Assistance Council to develop a competitive application and evaluation system. Ecology accepted applications through September 28, 2007 and completed evaluations in November 2007.

Ecology is currently preparing a draft offer and applicant list for posting to the website in December 2007. Before posting, Ecology will notify all applicants and provide a two-week comment period. Ecology will prepare a final offer and applicant list with offer letters by early January 2008.

Beginning in January 2008, Ecology's Project Management Team will use information from the funding proposal, including measurable objectives and budgets, to develop grant agreements.

# Executive Summary of Chapter 10

## Campus-wide Plan for Reclaimed Water Use on the State Capital Campus

This report summarizes a proposal to serve the State of Washington's Capitol Campus with reclaimed water. The project would demonstrate that the state's leadership in increasing the visibility of reclaimed water use.

### Assignment

In 2007, session law, Engrossed Second Substitute Senate Bill 6117 – Section 11, directs the Department of General Administration (GA) to coordinate with the City of Olympia (Olympia) and report on the infrastructure, cost, and potential funding sources required to use reclaimed water for irrigation and related outdoor uses at the state's Capitol Campus by December 2007.

### Key Messages

GA and Olympia began work on this proposal in September 2007. GA and Olympia evaluated three options to achieve their legislative task. The recommended approach will cost approximately $2.32 million. The proposal recommends using the existing irrigation system for distribution of reclaimed water to help reduce construction costs. Other infrastructure needed includes two pump stations, additional new distribution lines (and upgrades to existing lines), and severing the potable water lines from the irrigation system.

Since Olympia charges only 70% of potable water rates for the reclaimed water, this project would save both potable water supply and utility rate costs. The savings include:

- An additional 12 million gallons of potable water each year.
- Approximately $40,000 in annual water costs.

GA and Olympia identified the following potential funding sources. For 2009, Olympia has approximately $750,000 available for this project. GA has $100,000 available through the State Building Construction Account. GA received $450,000 for development of reclaimed water service on the Capitol Campus but that funding is not available for this biennium. GA has identified about $80,000 dollars would be eligible for performance-based contracting.

### Status

This report completes the preliminary planning requirement. Both GA and the Olympia recommend Option 2 described in Chapter 10. GA estimates the cost for this option to be $2.32 million. They are looking forward for the opportunity to serve the capitol campus with reclaimed water in such an environmentally sustainable way.