

1 – INTRODUCTION

This chapter gives a brief overview of Olympia’s Wastewater Utility – its purpose, responsibilities, service area and functions; the purpose of the Plan; process for developing the Plan and rate analysis; and how the Plan is organized.

CITY OF OLYMPIA WASTEWATER UTILITY

The purpose of Olympia’s Wastewater Utility is to protect public and environmental health by ensuring that wastewater is collected and conveyed to treatment and disposal facilities with minimal risk. The City plans and manages the wastewater system to accomplish its land use, environmental, economic development and growth management goals.

Wastewater treatment and disposal is managed by the regional LOTT Alliance, which includes the cities of Olympia, Lacey and Tumwater, and Thurston County. All wastewater collected by Olympia is conveyed to LOTT transmission mains and treatment facilities for treatment and disposal.

In cooperation with Thurston County, the Wastewater Utility oversees the use of onsite sewage systems, still a major form of sewage treatment and disposal in the City and its Urban Growth Area (UGA).

Olympia currently provides sewer service within the 17.5 square miles of the incorporated City limits and portions of its UGA, a total of about 26 square miles. This Plan assumes that the entire UGA will be served by public gravity sewers by 2035.

The Wastewater Utility currently has approximately 12,380 single-family residential accounts and 2,275 commercial, multifamily and public accounts. Single-family accounts are expected to increase at a rate of 300 to 500 connections per year for the next decade.

The Wastewater Utility currently has two primary services:

- ***Planning, policy and program management.*** Includes planning and, policy development; capital facilities planning, funding and construction monitoring; and administrative services including billing, customer service and information management. Development review, technical assistance and code enforcement, monitoring and public involvement services are being provided on a temporary basis by Storm and Surface Water Program staff.

- ***Operation and maintenance.*** Maintenance of pipes, pump stations, Septic Tank Effluent Pump (STEP) systems and community onsite systems.

With two employees assigned to planning, policy and program management, and nine assigned to operation and maintenance, the Wastewater Utility:

- Promotes progressive environmental policies and practices consistent with community expectations.
- Prepares and implements a capital facilities improvement program with a current average annual expenditure of approximately \$2 million.
- Operates about 166 miles of gravity sewer collection pipes and 27 pump stations with about eight miles of force mains that discharge to the gravity sewer system.
- Operates over 1,500 City-owned STEP systems and force mains and three community onsite sewage systems.
- Implements an illicit discharge elimination program in conjunction with the City's Storm and Surface Water Program.
- Serves on technical committees of the LOTT Alliance and coordinates Olympia ratepayer funding of \$7.5 million annually to LOTT.
- Reviews over 100 development projects a year for regulatory compliance.
- Supports the technical and data management needs of public and private users of the sewer infrastructure.
- Interacts with local and State agencies on long-term water quality improvement regulations, plans and actions.
- Sponsors public education information and events on sewer issues, especially onsite sewage system maintenance.
- Maintains records and billing information for 12,380 residential and 2,275 commercial, multifamily and public customers.

WASTEWATER MANAGEMENT PLAN

Wastewater Utility activities are guided by the Wastewater Management Plan, which was last updated in 1997. State regulations require municipal sewer plans to be updated at six-year intervals (WAC 173-240-050). This 2007 Plan will guide planning, design, operation and financing of Olympia's wastewater system until 2012.

Key elements of the Plan are:

- Capital projects to replace aging portions of the infrastructure and increase capacity where needed.
- Strategies for extending sewer service throughout the UGA and gradually replacing onsite sewage systems.
- Limiting the use of STEP systems and eventually replacing these systems.
- Implementing more proactive systems for program management, onsite system management and operations and maintenance.

To provide adequate financing, a rate study was undertaken in tandem with the Plan. The rate study carefully evaluated the current fiscal policies and finances of the Wastewater Utility, and the financial implications of the Plan. (See Chapter 18 for a summary of the rate analysis and Appendix A for details.)

Objectives for the Wastewater Management Plan

The City's Utilities Advisory Committee (UAC) supported the following objectives for this Plan:

- Update the City's computer-generated hydraulic model of the sewer system, linking model data with population data and the City's infrastructure database.
- Evaluate current operations and maintenance practices and data management system.
- Develop a process to prioritize capital facilities projects during the six-year planning period using a systematic condition-rating process, urban growth projections and planning goals.
- Propose comprehensive program services (e.g., development review, code enforcement, technical assistance) necessary for effective management of the Wastewater Utility.
- Review the current rate structure and general facilities charges (GFC) with consideration for long-term revenue needs.
- Develop the necessary documentation to meet State sewer planning and SEPA requirements.
- Update the Sewer section of the Olympia Comprehensive Plan chapter on Public Utilities and Services with updated policies on sewer extensions,

STEP systems, onsite sewage systems, sewer connection requirements, and level of service subsequent to Plan adoption

- Ensure adequate public and stakeholder involvement.

Plan Process

This Plan was prepared by the Public Works Water Resources staff with input from Public Works Technical Services, Finance, and Community Planning and Development (CP&D). Several consultants provided planning and technical assistance: HDR/EES, Brown & Caldwell, Financial Solutions Consulting Group, and Dorothy P. Craig & Associates.

The public had an opportunity to review and comment on the Draft Plan and potential rate implications and the accompanying SEPA checklist (see Appendix B). The Draft Plan was also reviewed by the City's Utility Advisory Committee (UAC), City Council Land Use and Environment Committee (LUEC), Thurston County Environmental Health Division, LOTT Alliance, Washington State Department of Ecology, Washington State Department of Health, and other interested parties.

Following this review and a public hearing, the Draft Plan was adopted by City Council, and submitted to the Washington State Department of Ecology for approval.

A 2008 amendment to the Olympia Comprehensive Plan will be prepared for consideration in 2007 to include the new wastewater policies.

Ongoing Plan Review

Under this Plan, the Wastewater Utility will be managed in accordance with the principles of adaptive management, which require routine review of effectiveness and course correction as needed. Bi-annual evaluations of Wastewater Utility performance will be provided to the Olympia community and elected officials. These will be used to complete a bi-annual review of the Plan, with opportunities for people to participate in considering the need for revised strategies or techniques. The Capital Facilities Program is updated annually and approved by City Council as part of the budget process.

ORGANIZATION OF PLAN

Part One gives the background for understanding the policies, projects and programs included in the 2007–2012 Wastewater Management Plan. Chapter 1 is an introduction to the Plan, Chapter 2 describes historical background, environmental conditions and population/land use trends affecting wastewater

management in Olympia, and the challenges and issues presented by those trends. Chapter 3 then describes the wastewater management system in Thurston County and the responsibilities of regional players, including Olympia and neighboring cities, Thurston County, and the special role of the LOTT Alliance as the regional wastewater treatment provider. Chapter 4 describes the legal and policy guidance upon which the Plan is based: federal and State statutes and regulations, intergovernmental agreements, and City policies and regulations.

Chapters 5–7 describe each of the three major components of Olympia’s wastewater system: gravity sewers and pump stations, STEP systems, and onsite sewage systems. Each chapter presents history, system description, and current challenges and issues. Chapter 8 describes the potential for using alternative wastewater collection and treatment technologies in Olympia. Chapter 9 describes current infrastructure and challenges for the City’s seven wastewater management basins. Chapter 10 describes how the Wastewater Utility is managed: the public works organization, involvement by other City departments, and program management and operational challenges and issues.

Part Two is the heart of the Plan, containing goals, strategies, policies and actions to manage the Wastewater Utility through 2012. The introductory Chapter 11 gives the City’s mandate for the Plan, describing how the Wastewater Utility contributes to Olympia’s sustainable community vision and the Wastewater Utility’s mission, and describes the analytical approach used to evaluate potential strategies.

Chapters 12–15 present the planned program for each of the three sewer system components and alternate technologies. Each chapter gives the long-range goal and six-year objectives for that component, and describes strategies and policies, programs and projects to meet the objectives. Chapter 16 presents the plans for developing the management and operational capacity of the Wastewater Utility. Chapter 17 summarizes the previous chapters, in the form of policies, programs and capital projects. This summary forms the basis for the annual operating budget and capital facilities program.

Chapter 18 summarizes the financial analysis performed for this Plan, including current and projected revenue and expenses, rate implications and other options for funding the Plan. See Appendix A for details.

WAC requirements for wastewater planning are listed in Attachment 1.

Detailed background information on all of the above is in the following Appendices, published separately on a compact disc:

- A. Financial Analysis
- B. SEPA Checklist
- C. System Information and Analysis
 - 1. Model Development and Capacity Analysis
 - 2. Pump Station Inventory and Analysis
 - 3. Wastewater Operations and Maintenance Planning
 - 4. Sanitary Sewer Overflow Emergency Management Plan
- D. Sewerage General Plan Implementing Agreement (1992)
- E. Maps
 - 1. Topography
 - 2. Surface Water
 - 3. Water Systems
 - 4. Existing and Planned Gravity Sewers, Pump Stations and Force Mains