

PART TWO

THE PLAN

11 – PLAN DIRECTION AND METHODOLOGY

Part Two is the Wastewater Management Plan, which has been developed based on the background information summarized in Part One (Chapters 1–10). Chapter 11 gives the overall policy context for the Plan – the City’s vision of a sustainable future, the mission of the Wastewater Program, long-term goals for development of wastewater infrastructure and programs; and the analytical approach used to develop the Plan. Chapters 12–16 describe the analysis, goals and strategies and actions for gravity sewers, STEPS, onsite systems, alternative systems and planning and program implementation. Chapter 17 summarizes the policies, programs and capital projects to be implemented in 2007–2012. Financial implications of the Plan are presented in Chapter 18.

VISION FOR THE FUTURE

When adopted, the Wastewater Master Plan will be one of several functional plans that implement the vision and policies established in Olympia’s 1996 Comprehensive Plan as amended. Aspects of the Comprehensive Plan vision most relevant to wastewater management are: becoming a sustainable community, accommodating projected growth in compact urban development, keeping the infrastructure cost-effective, and involving citizens in community decision-making. These are reflected in the following excerpts from the Comprehensive Plan vision (pp. 11-13).

“Growth and change in Olympia and its Growth Area will be accommodated in a sustainable manner. . . . Decades of commitment to the philosophy of sustainability will pay off by maintaining Olympia’s healthy environment, healthy economic base, and healthy social and cultural systems. . . . moving toward a pattern of living that can be sustained indefinitely.

“Our future city will be compact. . . . The compact development pattern will make it easy and cost effective to provide a high level of urban utilities and other services. . . . All development will incorporate appropriate measures to minimize environmental impacts. With environmental limitations directing our actions, new development also will be more cost-efficient than it otherwise would be. . . .

“Continual efforts to repair environmental damage from earlier development will also show great benefit. Improved stormwater management, improved sewage treatment, less-polluting vehicles, reduced garbage output per person, an ethic of resource conservation, and other advances will pay off. In spite of our increased population, Olympia’s air and water will be cleaner than they are today. . . .

“Olympia's capital facilities (parks, roads, sidewalks, schools, etc.) will be planned in advance and integrated with development and redevelopment throughout the City and its Growth Area. Capital facilities will be phased in along with new development. This way new growth will be accommodated without reducing the quality of service to existing residents. . . .

“We will work closely with our neighbors—Tumwater, Lacey, and others—in implementing solutions to common problems . . . ”

WASTEWATER UTILITY MISSION

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.

GOALS FOR WASTEWATER UTILITY

The City’s goals for the Wastewater Utility to be accomplished through this and subsequent Wastewater Management Plans are:

Goal 1. Maximize the gravity sewer system as efficiently as possible (i.e., using a minimum number of pump stations). The City and its growth area will ultimately be served entirely by a City-owned gravity sewer system that is designed to prevent leakage and overflows and to provide sufficient capacity for projected demand.

Goal 2. Replace STEP systems in Olympia and its growth area through extension of gravity sewers where feasible. The number of STEP systems will decline over time.

Goal 3. Replace onsite sewage systems in Olympia and its growth area through extension of gravity sewers. The number of onsite sewage systems will decline over time.

Goal 4. Facilitate adoption of new technology and management systems.

Goal 5. Ensure that the wastewater system is managed efficiently and effectively.

Goal 6. Ensure that the costs of building, maintaining and operating the wastewater system are shared equitably.

APPROACH TO DEVELOPING THE PLAN

Based on the challenges described in Part One (Chapters 2–10), Olympia wastewater utility staff and consultants identified a range of possible strategies for each challenge and then prioritized the strategies using the following criteria:

- Effectiveness
- Feasibility
- Cost
- Likelihood of success

The results of this analysis for each system component are presented in Chapters 12–14:

- Gravity sewers – see Table 12.1 for the evaluation of strategy options and Table 12.2 for the priority ranking of different types of projects (i.e. pipe replacements, pump stations and gravity sewer extensions).
- STEPS – see Table 13.1 for the evaluation of strategy options.
- Onsite Systems – See Table 14.1 for the evaluation of strategy options.

The next step in the analysis was to look more closely at the seven wastewater basins within Olympia’s service area. The results of this analysis are presented in Chapter 9. Basin characteristics and challenges were identified for each basin; for example infrastructure condition, capacity shortfalls, inflow and infiltration problems, number of STEPS and onsite systems. These needs were ranked (low, moderate, high), and an overall management priority for each basin was identified (see Table 9.2).

