15 – Alternative Systems Program

This chapter describes a process for incorporating alternative technologies as an element of the Olympia wastewater system. Strategies and objectives described here are in response to challenges and issues in Chapters 5–7 related to the City's long-term goals for gravity sewers, STEP systems and onsite sewage systems, and potential for such alternatives in Chapter 8. Implementation of the strategy will ensure these systems meet the City's goals for to protect environmental and public health, ensure cost equity and minimize life cycle costs. The planned program is summarized in Chapter 17.

GOAL

Facilitate cost effective adoption of new technology and management systems.

ANALYSIS

Three possible strategies were considered in preparing this Plan:

- Prohibit use of alternative systems for wastewater management.
- Allow conditional use of alternative systems.
- Allow installation of alternative systems based on property owner discretion.

STRATEGY AND PLANNED ACTIONS

Strategy 1: Allow conditional use of alternative systems in the Olympia wastewater collection system.

Olympia will continue to consider alternative technologies for sewer service on a case-by-case basis. This program is similar to what has been done with stormwater, drinking water and solid waste programs. Policy, administrative and technical programs will be needed to incorporate alternative technologies into an integrated system.

Permitting conditional use of these systems will be based on a full life-cycle cost analysis of each type of system to achieve a level of service equivalent to the conventional system. The analysis will account for capital costs for the alternative and supporting infrastructure, program administration costs, and operating and maintenance costs required to assure continued performance.

Based on this analysis the City will determine what additional cost or credit to assess to the property owner for sewer service. This is necessary to protect the City from assuming long-term liabilities and costs as these systems are implemented. For example, STEP system costs represent an additional monthly cost to the City of approximately $13/month/ERU (not including the energy costs to the property owner).

Programs

- Develop performance objectives for alternative technologies. As a minimum this will include targets for environmental and public health protection, service outages and overall cost of service.
- Establish policies outlining the City's roles and responsibilities for alternative systems, including:
    - Cost of installation.
    - Ownership of the physical devices (located on public and private property).
    - Operation and maintenance responsibility.
    - Basis for determining monthly rate and connection fee adjustments (Olympia and LOTT portions).
- Establish a structured process to evaluate alternative technologies and establish supporting activities (permits, maintenance, etc) to assure each type of system continues to meet performance goals. Reflect these in a full life cycle cost analysis and determine the impacts to connection fees and monthly rates for the owner. The City will develop these costs for systems as they are proposed by an applicant and not be responsible for ongoing independent research.
- Develop an organizational structure to support the program including administrative, operating and maintenance staff as necessary.
- Develop a public education and owner training program for each acceptable technology to ensure the system performs through changes in ownership and reflects best management practices. This will also include periodic inspections to verify system performance and operating condition.