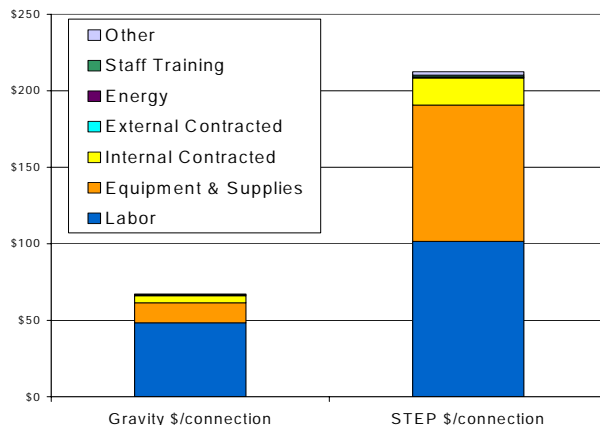


Wastewater Utility Operational Review



Earth Tech was retained to undertake an update to the City of Lacey's 1999 Wastewater Comprehensive Plan as a regulatory requirement. This included an extensive chapter on Operations and Maintenance (O&M). A key element of this chapter was a comparison of the City's existing wastewater collection system O&M program with both commercial contracted O&M services and comparable Canadian cities. The City's O&M program was also evaluated relative to pertinent existing federal, state and local regulatory requirements and policies. The chapter included sections on responsibility and authority, normal system operation, local factors, utility performance, levels of service, management of maintenance, system automation, safety, emergency response, staff training, staffing adequacy and asset management.

The City of Lacey's budgeted staffing levels for the wastewater collection system were analyzed and the City's per unit staffing levels were compared to data from comparable Canadian systems and the recommendations from the 1998 Wastewater Comprehensive Plan. Based on this analysis of current, benchmark and predicted staffing levels, recommendations were made for the City's future staffing levels.

A unique aspect of the City's wastewater collection systems is their high proportion of Septic Tank Effluent Pumping (STEP) systems, installed to encourage growth due to their low capital costs. The annual maintenance data for the STEP systems was analyzed and it was found that the STEP systems have issues such as odor, high failure rates and overall high maintenance costs. The per unit annual maintenance costs were compared for both STEP and gravity connections and recommendations were made to promote installation of gravity systems rather than STEP in the future to minimize the ongoing maintenance costs.

PROJECT DETAILS

CLIENT: City of Lacey
 LOCATION: Washington, USA

REFERENCE INFORMATION

NAME Terry Cargill
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PROBLEM

The City wanted to evaluate their wastewater collection system operations and maintenance program relative to commercial contracted O&M services.

CHALLENGES

The City has a number of Septic Tank Effluent Pumping (STEP) Systems that have higher maintenance requirements than gravity sewer connections. Commercial contracted O&M services have different levels of services to the City.

SOLUTION

The City's STEP systems were compared primarily to the City's gravity sewer connections. The City's performance data was compared to both contracted O&M services and comparable Canadian cities.

BENEFITS

The City has an understanding of the performance of their collection system relative to both commercial and other municipal operations. The City can plan future staffing levels based on a consideration of system performance and maintenance requirements.