OREGON WATER WONDERLAND II

WASTEWATER SYSTEM MASTER PLAN

EXECUTIVE SUMMARY

1.0 INTRODUCTION

Oregon Water Wonderland (OWW) is a large residential subdivision of 987 usable lots in Deschutes County, created in 1970. OWW includes lots of approximately one-half acre in size, and is located on nearly level land adjacent to and on both sides of the Deschutes River, south of Sunriver along South Century Drive. Oregon Water Wonderland Unit Two Sanitary District (OWWII) was formed in 1976, and its jurisdiction includes all of the existing lots. The subdivision is located in T20S R10 and 11E, approximately 16 miles South of Bend, Oregon.

The original OWWII subdivision included a small central wastewater system which was intended to serve lots with high groundwater, and the remainder of the lots were intended for onsite systems. Changes in county regulations were enacted by 2001, and the District began planning to develop a full community wastewater collection and treatment system to serve all of the property within the development. A Wastewater Facilities Plan was completed in May 2001, and a Wastewater Facilities Plan Amendment in August 2002, with proposed improvements that would allow the District to continue operation under a Water Pollution Control Facility (WPCF) permit in accordance with regulations of the Oregon Department of Environmental Quality. The Wastewater Facilities Plans (hereinafter referred to as Master Plan), were utilized for obtaining approvals for the District to maintain operations, and for receiving funding for construction.

2.0 POPULATION GROWTH AND FORECASTS

The current recession is undoubtedly slowing development on the remaining undeveloped lots. However, projections in the Master Plan assume that all lots will be utilized within the 20-year planning period, to 2030. Even with the current recession, the remaining 225 lots would be readily constructed on with less than a 1% growth rate. This growth is much less than the long-term historical growth rate for Deschutes County and in general for the State of Oregon.

3.0 LOTS REMAINING TO BE SERVED

OWWII has a limited service area with a total of 987 currently usable residential lots in the service area. Growth at a minimum rate of less than 1% annually will fill all of the vacant lots within the planning period. Zoning limits usage of the lots to single family residential purposes, so each current lot should be considered on an equal basis.

4.0 BACKGROUND

The availability of federal funding, coupled with resident concerns with costs for the existing wastewater system, limited the sizing and capacity for the system. Major wastewater system improvement financing was finalized in 2004, with monies to be collected over a 30-year amortization period for repayment of construction bonding.

5.0 PROJECT EXPENSES

Total bonded debt for the OWWII 2004 wastewater improvements was for $4,728,300, expressed in 2004 dollars. Wastewater Facilities planning cost $89,500, and the District purchased $82,800 in vacuum equipment, which was paid by budgeted funds, making a total cost of $4,900,600 for project expenses to date.

6.0 SYSTEMS DEVELOPMENT CHARGES

The entire cost of 2004 wastewater improvements was expended for service to the 987 residential lots in OWW. Total facilities planning, bond issue loan costs, and purchased equipment for the wastewater improvement project totaled $4,900,600. Planning and loan costs amounted to $4,881.26 per lot, based on costs in 2004. Purchased equipment cost $83.89 per lot, based on costs in 2006. Using the ENR index for inflation, the index was 7109 in June of 2004, 7911 in November of 2006, and 8836 in September of 2010. Actual Systems Development Charges in 2010 should be 8836/7109 ($4,881.26) plus 8836/7911 ($83.89) = $6,160.77 for each lot for reimbursement fees.

CAPITAL IMPROVEMENT PLAN (CIP)

Individual service laterals for lots existing on the East side of the Deschutes River were installed with the 2004 construction. Since funds were of limited availability, pressure pumping or vacuum systems were only installed for residents desiring service at that time. In addition, service to 7 existing lots that remain unserved on the West side of the Deschutes River will need to be provided in the future. An Engineer's report was prepared in 2007 that estimated the cost of the primary system to serve the 7 existing lots that remain unsewered on the West side of the river. The cost of installation for this system, in 2010 dollars, is estimated at $ 150,000.

Each pressure pumping or vacuum system is currently costing $ 4,500 to install (2010 costs), and the plan is to serve 1 or 2 houses with each vacuum system provided, and a single home with each pressure pumping system installed. Total costs of needed pressure pumping or vacuum systems remaining to be installed will require 54 installations for remaining unserved lots. Total costs of installing pressure pumping or vacuum systems for all remaining lots in the District amounts to $ 4,500 (54) = 243,000.00 in 2010 dollars. Overall, improvement costs for serving the remaining 225 unsewered lots in the District will cost $ 393,000 in 2010 dollars, or an additional $ 1,746.67 for each lot in the subdivision. It is intended that 100% of the costs of serving remaining unsewered lots will be paid by improvement fee SDC's.

The Board of Directors may modify the CIP and list of improvements at any time. If a system development charge will be increased by a proposed modification of the CIP to include a capacity increasing capital improvement, as referenced in Section 6(2) of the SDC ordinance, the District shall provide at least thirty (30) days notice of the proposed modified CIP.

Together, the reimbursement and improvement fees recover costs equal to growth's capacity requirements. The value of existing system capacity is added to the cost of future improvements for growth to determine the total SDC cost, based on an individual cost per lot served. The capital cost for wastewater system reimbursement and improvement fees needed for the wastewater system is $ 7,907.44 per lot, expressed in 2010 dollars. There are currently 225 individual undeveloped lots which are not currently served, and these are anticipated to be occupied during the planning period. The total Wastewater System SDC should be established at $ 7,907.00 per lot.

Inflation will continue to be a concern. We recommend that the District update the SDC charge utilizing the Engineering News Record Index on April 1 of each calendar year.