SIERRA LAKES COUNTY WATER DISTRICT

Operations & Maintenance Office
P.O. Box 826
7305 Short Road
Soda Springs, CA 95728-1039
(530) 426-7802
Facsimile (530) 426-1120

Administrative & Billing Office
P.O. Box 1039
7305 Short Road
Soda Springs, CA 95728 - 1039
(530) 426-7800
Facsimile (530) 426-1120

REVIEW OF WATER METERING FOR SLCWD

The District periodically receives letters asking why we do not have metered water rates in Serene Lakes. These inquiries usually stem from the perception that owners of second homes who visit Serene Lakes only occasionally are subsidizing water use by full-time residents because everyone pays the same fees for water and wastewater services. This memo addresses these concerns.

For a water district the size of Serene Lakes, State law requires that all connections be billed on the basis of metered water use starting in 2025. State law also requires that water meters be installed in all new houses constructed after 1992, and District Ordinance 69 requires the installation of a meter upon change of ownership of houses. At present about half of the existing approximately 810 houses in Serene Lakes as well as the two commercial facilities, Ice Lakes Lodge and the Royal Gorge Day Lodge, have water meters. Some of these meters are quite old and may be inoperable. In addition, none of the meters are equipped for remote reading, which will likely be required in the future due to the cost of manual readings and the lack of accessibility due to snow.

Potential Impacts of Metered Water Rates

At Serene Lakes the large majority of the costs of water and wastewater services are incurred in connection with the construction and maintenance of the District's infrastructure, and its operations. Through these efforts, water and sewer service is available upon demand to all connected facilities. These "fixed" costs far outweigh the incremental costs associated with the delivery of specific quantities of water and the treatment of associated wastewater.

A review of the District's operational costs based on the District's June 30, 2008 year-to-date financial statement and the 2007/08 Auditor's Report shows that the incremental costs of water use, primarily those for power and water treatment chemicals and tests, amounts to about six percent of the District's total water operating costs. All other costs of providing water service are essentially independent of actual water use. Thus, in an extreme example, a house using no water at all would save six percent of its water fee with a meter-based rate structure. And a house using three times the District's average water use would pay only 12 percent more than the

average fee. In relation to the current annual water charge of $470 per year, an annual bill might decline by as much as $30, or increase as much as $60 per year under a meter-based rate.

It is questionable whether a meter-based rate structure would also be applied to wastewater. While it appears logical that it would (because most of the water used by a house, except for water used for irrigation, ends up as wastewater), much of the District's wastewater flow, especially in winter and spring, originates from infiltration and inflow (I/I) into the wastewater collection system. Thus, although half of the costs for wastewater treatment charged by DSPUD is based on the District's measured wastewater flow volume, only a portion of this flow-related costs could reasonable be charged to homeowners based on metered water flow, because of irrigation and I/I. For want of any other method, the same six percent calculated for incremental water cost based on metered water flow is used also for the incremental wastewater cost due to flow.

Therefore, a homeowner who uses no water at all would save 6 percent off of the average wastewater fee, and a high user of water would pay 12 percent more than the average wastewater fee. Based on the present annual wastewater operations charge of $720, the annual billing changes for wastewater services might decline by as much as $40, or increase by as much as $90 a year.

Potential Costs of Using Metered Water Rates

Initial installation of remote-reading water meters in all houses not having water meters at present is estimated to cost about $1800 per house. This sum is composed of the costs of (1) constructing water meter pits, and (2) installing remote-reading meters. In addition, an initial cost of at least $30,000 would be incurred by the District for the centralized remote reading system. The District would also have to acquire a new billing system to utilize the flow information.

In addition, all houses with previously installed water meters would need new remote-reading water meters at a cost estimated to be about $500 each.

Operating the new system, including periodically reading the meters and preparing the use-based billings, would approximately cost an additional $50 per connection per year. Thus, the annual cost of operations appears to exceed any likely savings that a homeowner would achieve through implementation of a meter-based rate.

Conclusions

Changing the District to metered water billings would be complex and costly. The costs would have to be borne by the District's ratepayers. The Truckee-Donner PUD has adopted a "Water Metering Implementation Plan" dated 7/23/08 that outlines the many specific public outreach, planning, construction, and implementation steps to change that district over to water metering, which for them is required by 2012. That plan is an excellent outline of the required activities.

Any decision by the District on water metering will need to consider the high initial costs and relatively small resulting changes in the fees of individual ratepayers resulting from using a water and wastewater fee structure based on use. The Board will address these and other policy considerations as the State meter requirement approaches.