

Lake Chelan



Reclamation District

Volume 13, Issue 1

March 13, 2002

Cross Connection Control Reminder

Low hazard sites including single-family residences that use domestic water for their irrigation systems, swimming pools, spas, landscape ponds or boat lifts should begin thinking about installing a backflow prevention device. These type of uses have the potential to allow a contaminant to flow back from the customers lines into the drinking water system if a low pressure occurs in the water main. Low pressure in the water main can be caused by a line break or using a fire hydrant.

Those customers who filled out and returned our self-assessment questionnaire last summer have until December 31, 2002 to install a backflow device. Those customers who did not return the questionnaire should be working with the District now to comply. The type of backflow device needed will depend upon your individual circumstances. Come in and talk to us about the uses of domestic water at your site and we can help you determine what device is needed. Most devices need to also be tested by a certified backflow assembly tester after installation and then annually

IRRIGATION THROUGH DOMESTIC SYSTEM

Approximately two hundred fifty acres of irrigation water rights are delivered through the domestic system. The



allotment of three acre feet per acre is credited to the domestic meter only after all irrigation assessments are paid in full.

Your irrigation assessment was mailed to you by the District and is due in full in our office by march 15, 2002. The irrigation allotment is

Irrigation Assessments due March 15th-Not Late Until May 1st

The Board of Directors has decided that for the 2002 irrigation season, irrigation assessments will not be charged interest for being late if the

"The assessment must still be paid in full prior to

assessments are paid on or before, April 30, 2002. The 45 extra days of interest free use of money could be of value to water users who are experiencing a challenging year due to the weak local economy. The assessment must still be paid in full prior to receiving water. Payments are to be made at the District office in person or by mail. Payments are no longer



NORTHSHORE SEWER INTERCEPTOR REPLACEMENT PROJECT

WHAT WE HAVE LEARNED FROM THE COMMUNITY

A Public Hearing was held on February 28, 2002 at 7:00 p.m. at the City of Chelan City Council meeting. The purpose of the meeting was to explore options for safely and efficiently managing wastewater now and into the future. The offer was made to the public to learn about the options and to provide input about whether or not other concepts or alternatives should be considered.

Sound analysis and thoughtful decision making about the future of the North Shore Interceptor system is important. Just as important is learning what our community thinks about this project and the proposed improvements. To that end, in January and February we asked several people in the greater Manson area to advise us on issues, concerns and ideas that they felt were important to consider as we ready ourselves -- and the City of Chelan -- to make this decision. We have used this early advice to help guide our criteria for selecting an alternative, and to plan the meeting we had on February 28th, where even more people can advise us. Here is what we have learned so far:

COST IS CRUCIAL

The most important issue is cost: cost of service, cost of maintenance, cost to build the system. It may be OK to make a more expensive choice for improving the infrastructure *if* these improvements will save money and be a more responsible choice in the long run. People are very aware that many in the Valley are on fixed or limited incomes; any increase in rates will be difficult for some.

OUR AREA IS A TREASURE

The lake, the valley, and the proximity to the mountains are all treasures to those who live and work here. And these features are important to the economy as well. People want these treasures tended to, both to protect the resources themselves and to protect the economy. To this end, people want the Lake Chelan Reclamation District to make sure any improvements to the infrastructure protect water quality and reduce odor problems.

MAKE SURE ANY IMPROVEMENTS ARE JUSTIFIED

People understand that periodically the structures that support our public services must be replaced. However, they want to understand fully the reasons why any particular set of improvements is necessary. If public funds are to be expended, it must be justified.

COORDINATE, COORDINATE, COORDINATE

People in the area are very aware of other public improvements – both planned and hoped for. They would like the District to actively explore ways to coordinate with these projects, both to leverage funds and to combine construction schedules if at all possible. Similarly, people would like the District to be aware of harvest schedules, tourist needs, morning and evening traffic and school bus routes when planning construction.

NORTHSHORE INTERCEPTOR SELECTION CRITERIA

CRITICAL CRITERIA

Capital Costs – Lower costs mean lower rate increases.

Capacity – Provide adequate facilities to serve existing and future customers.

Reliability – Eliminate pumping of individual systems into high pressure force main. Limit pressure and velocity in force mains. Meet Department of Ecology requirements for emergency service. Downhill gravity lines are more reliable than lines pumping up hills because they are not dependent on pumps or electricity.

Odor - Reduce odors to acceptable limits. Odor control should be inexpensive, easy to use, and effectively control odors. Dual force mains allow using the smallest line possible to reduce detention times.

VERY IMPORTANT CRITERIA

Operation and Maintenance Costs – Include the cost of maintaining aged plant. New system should be accessible and easy to maintain. Downhill gravity lines are easier to maintain than lines pumping up hills.

Environmental Impacts – Decrease the likelihood of spills and leaks of sewage into Lake Chelan during and after construction.

Visual Aesthetics – The proposed system should blend into the neighborhood, and should be more attractive than the existing system.

IMPORTANT CRITERIA

Phasing – If the construction can be completed in phases, the costs can be spread out over a number of years.

Regulatory constraints – If the location or configuration of this project make permitting more difficult, it will take longer to build and be less likely to get funding.

Property acquisition – If it is difficult or time-consuming to acquire the property or easements necessary to construct this project, it will take longer to build and be less likely to get funding.

Construction Issues – Construction impacts (including traffic and noise) should affect residents and visitors as little as possible.

NORTHSHORE INTERCEPTOR ALTERNATIVES

- **ALTERNATIVE NO. 1: NO ACTION**

- **ALTERNATIVE NO. 2: MODIFY EXISTING SYSTEM**

Total Estimated Capital Cost: \$6,000,000 - \$7,300,000

In this alternative, components of the existing system, including pump stations and pipelines, would be replaced or rehabilitated as required to optimize the existing system for current and future wastewater flows. The system would continue to operate as currently configured where sewage is pumped from one lift station to the next, with the exception of Lift Station No. 3 which would be downsized and reconfigured to pump back to Lift Station No. 2. The existing force main would be replaced by a new dual force main system, which would be designed to better accommodate the seasonal wastewater flows that are indicative of the LCRD system. In addition, new low pressure force mains would be added parallel to the high pressure force mains to provide a reliable low pressure service connection for existing and future customers. Finally, the odor control systems at Lift Station Nos. 2 through 5 would be improved to better treat odors generated during sewage storage and transmission.

- **ALTERNATIVE NO. 3: HIGH PRESSURE ROUTE**

Total Estimated Capital Cost: \$5,500,000 - \$6,700,000

In the High Pressure System alternative, the existing system is reconfigured to improve pumping efficiency, meet capacity, and reduce odor problems. In this alternative, Lift Station No. 2 is upsized to pump the wastewater flow from Manson (which represents the majority of the total flow) directly to the final discharge point beyond Lift Station No. 5. Lift Station No. 3 will be downsized and reconfigured to pump back to Lift Station No. 2, and Lift Station Nos. 4 and 5 will be downsized and reconfigured to inject the locally collected sewage directly into the new dual force main system for Lift Station No. 2. As in Alternative 2, the existing force main would be replaced by a new dual force main system, which would be designed to better accommodate the seasonal wastewater flows that are indicative of the LCRD system. In addition, new low pressure force mains would be added parallel to the high pressure force mains to provide a reliable low pressure service connection for existing and future customers. Finally, the odor control systems at Lift Station Nos. 2 through 5 would be improved to better treat odors generated during sewage storage and transmission.

- **ALTERNATIVE NO. 4: IN LAKE ROUTE**

Total Estimated Capital Cost: \$7,000,000 - \$8,600,000

This alternative is similar to "Alternative 3, High Pressure System" in that the system is reconfigured to pump the majority of the sewage from Lift Station No. 2 to a discharge point beyond Lift Station No. 5. However, in this alternative the high pressure force main that will be running from Lift Station No. 2 will be installed along the shoreline in the lake. Lift Stations Nos. 3 and 4 will be reconfigured to inject the locally collected sewage directly into the force main; while Lift Station No. 5 will be configured to pump the locally collected sewage to the top of the hill beyond the lift station. In addition, new low pressure force mains would replace the existing force main to provide a reliable low pressure service connection for existing and future customers. Finally, the odor control systems at Lift Station Nos. 2 through 5 would be improved to better treat odors generated during sewage storage and transmission.

NORTHSHORE INTERCEPTOR ALTERNATIVES, Con't

- **ALTERNATIVE NO. 5: STEP SYSTEMS**

Total Estimated Capital Cost: \$7,700,000 - \$9,400,000

In this alternative STEP systems would be installed for major customers at gravity collection points and for all existing and future customers with pumped systems. The Department of Ecology "Criteria for Sewage Works Design" describes STEP systems as alternative systems and states that "Alternative systems are not normal or preferred systems, but instead are systems which may be used when special conditions warrant the usage of these non-standard systems." A STEP system consists of a septic tank and a pump. The septic tank is used to separate the solids for the liquid wastewater. The liquid is then pumped into the public sewage system. However since residential sewage is over 98% liquid by volume, the total volume of sewage in the system is not substantially reduced. Therefore in addition to installing the STEP systems, a number of improvements similar to those shown in "Alternative 2, Modify Existing System" will be required to meet existing and future capacity requirements and improve odor and reliability concerns.

- **ALTERNATIVE NO. 6: WASTEWATER TREATMENT PLANT**

Total Estimated Capital Cost: \$13,100,000 - \$16,000,000

This alternative calls for a new wastewater treatment plant (WWTP) near Rocky Point to treat sewage west of Rocky Point (flow to the east would still go to the City WWTP). Due to existing regulatory requirements, it is assumed that this plant will be a tertiary treatment system with additional treatment for nitrogen and phosphorus, and solids handling capability. Also included in this alternative is land acquisition for the plant site, and pumping and pipeline facilities to convey the sewage to the plant and to an outfall in the lake. It is assumed that the treatment plant would be sited away from the lakeshore, due to aesthetic and land cost considerations. In addition, improvements to the existing system would be required in order to collect and convey the sewage to the new WWTP. These improvements are similar to those found in Alternative 2: Modify Existing System up until Rocky Point. At Rocky Point (just before existing Lift Station No. 4) a new District-owned Lift Station No. 4 would be constructed to pump the sewage to the new WWTP. The existing City-owned Lift Stations Nos. 4 and 5 would be downsized and reconfigured to collect and convey the sewage within the City service area.

HOOK UP FEES TO INCREASE FOR SEWER ON JUNE 1

Water and sewer hookup fees for new connections will go up to \$2,840 and \$3,315 per equivalent residential unit (ERU) respectively effective June 1, 2002. This represents a total increase of \$280 for water and \$50 for sewer per ERU.

Hookup fees are calculated based upon two components. The first component is buying into a fair share of the existing system. The present worth of the system that was paid for by the users is divided by the current user base. This value equals each ERU's fair share of the present worth. This fair share component is deposited as revenue in general District water or sewer funds. The second component is a capital reserve fee. This fee is calculated by taking growth related capital improvements and dividing by the anticipated ERUs that the improvements could serve. These revenues are deposited in a separate account used only for growth related capital improvements. The District's existing customers are thus insulated from the related expenses of growth. The two components are then added together to make up the



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Irrigation Assessments due March 15th - Not late until May 1st.

SUE LESMEISTER TO RETIRE



After 19.5 years of service to the Lake Chelan Reclamation District, Sue Lesmeister has decided to call it a career. Drawn to the prospect of traveling, visiting children and grandchildren more often and gardening full-time, Sue decided it was time to leave behind her responsibilities at the District. Sue began work for LCRD in 1982 after being hired by then District Manager Marvin Jefferies. She replaced Irene Sargo who had been an institution at LCRD and had worked for the District for over 17 years. Sue's understanding of District operations, her knowledge of the history of ownerships and her ability to treat all of our customers like good neighbors and friends will be missed.

The District is planning an open house for Sue on Tuesday, March 26, 2002 from 1 p.m. to 4 p.m. for customers, friends and past Board Members and employees to come in, have a piece of cake and thank her for her years of service to the District and the community. Sue and her husband Bob have three grown children and five grandchildren as well as a small orchard that they have owned and operated since 1973. We wish Sue the best of times in her retirement and know that she will remain active in our community for many years to come. People like Sue only come around infrequently – we have been honored to know her and work with her for so many years. **Thank you Sue!**