

Our Lakes and a Sewer In Seeley Lake - Do we or Don't We?

By Bruce Riemen

Over the last few years considerable discussion and debate has occurred in and around our community regarding the need for a sewer system and the potential implications for our lakes if we do or don't build one. It's a difficult problem. A sewer will be expensive and the costs could impact some in the valley more than others. Traditionally much of the cost of building, connecting to and operating a sewer is born by the people who live in the sewer district. But, for all of us living in or even visiting the Clearwater Valley, the cost of not building a sewer can be very high as well. At some times the discussion and debate has focused on whether a sewer is needed. We think that is really a distraction when the real challenge we face is finding a way to fund and more equitably share the costs of a sewer that we can't afford not to build.

The Clearwater Resource Council has focused on natural resource issues and their implications for the benefits of our entire community in the Clearwater and neighboring valleys for the last 7 years. Part of our effort has been to educate ourselves, our members and the community about issues (like a sewer) and to provide objective information and a forum for discussion. In 2008 we began the "Adopt A Lake" program with more than 25 volunteers from throughout the Clearwater. Our volunteers have donated many hours to monitor conditions in all of our larger lakes for three years. We have also obtained additional funding and donations of equipment, supplies and time from State and Federal agencies, the University of Montana, the University of California, the University of Wisconsin and our members, to develop additional or more refined information. In addition to our work, the Sewer District and Water District have continued to collaborate on sampling and monitoring of test wells and Seeley Lake itself to trace contamination from septic systems in the area. So what have we learned?

Ground water pollution, failing septic systems and changes caused by poorly managed land use or development can influence lakes by increasing the amount of nutrients (like phosphorous nitrogen used in fertilizers) and other materials that make the lakes more "productive". A more productive lake isn't necessarily a bad thing, but as nutrients increase the lakes become less clear and nuisance growth of aquatic plants and algae increase. Highly productive lakes are less valuable from an aesthetic view, but can have other problems as well. As plant growth increases it means more organic material has to decompose in the lake and that can use up oxygen needed by fish. In a worst case the deep cold waters of lakes can be completely devoid of oxygen eliminating critical habitat for coldwater fishes like trout. The notorious "dead zone" in the Gulf of Mexico is an example of this effect on a major scale.

Our volunteer monitoring shows that lakes in the valley range from relatively unproductive at the highest elevations (i.e. Clearwater lake), to moderately productive (or even higher) at the lower elevations. There are notable declines in oxygen in Seeley and Salmon lakes. This last year the most southern basin in Salmon Lake was nearly devoid of oxygen in deep water by late summer.

In addition to our volunteer information, the sampling conducted by the Sewer/Water districts shows some troubling conditions in both the test wells and the lake. Their samples of pollutants (that includes different forms of nitrogen and other chemicals common in septic effluent) are now commonly above

State standards for ground water contamination and from 10s to 100s of times above the levels found in groundwater samples well away from any possible sources of contamination. For several years their samples never detected these pollutants in the lake or its outlet. Even if these substances were making it into the lake, detection would be extremely difficult because these are taken up very quickly by rooted plants and algae. In recent years, however, these pollutants have been detected from 30% to 50% of the time. Troubling levels of e-coli bacteria are also now found in the well samples and sometimes from those in the lake.

The information that is now available does not prove that septic systems have caused important, negative changes in our lakes. In the 1970s some work also pointed to sources of nutrients from extensive logging in some parts of the watershed. But, we do know that our lakes are sensitive to these kinds of effects and showing some important signs of stress. Forestry practices have changed dramatically in much of the watershed and new programs promise important funding for restoration of remaining problem areas. That's good news but it's only a start. We have talked with a number of water quality experts and lake scientists and even though they agree that we can't conclude that a sewer system will solve all our problems, they also believe it is a critical step toward conserving what we already have and improving that in the future.

From our perspective, we can't afford not to develop a sewer system that serves the town of Seeley Lake. It's a start that will probably have to be expanded to other existing development near our lakes and streams. It will have to work in concert with thoughtful land management and future development. A sewer is important for other reasons as well including the basic services needed for smart development and a vital downtown. But the condition of our lakes and streams defines much of the beauty and attraction of the valley that we can't afford to waste. A reputation as one of the largest unsewered communities in Montana doesn't play well either. All of us in Valley and those who visit stand to lose something crucial that is part of the reason we are here.

In recent days the discussion and debate about a sewer has taken a new turn. A number of citizens are actively looking for ways to defray the cost of a sewer and to share it more equitably among all who would benefit. We encourage our members and anyone interested in the natural beauty of this valley to become informed and consider the possibilities. Rather than debating the need for a sewer we should be looking for ways share its costs in light of protecting the benefits that we all gain.

You can learn more about the Clearwater Resource Council and the work on the lakes by visiting our website <http://www.crcmt.org/>, contacting us at 677-0069, or attending the meetings we sponsor on natural resources and our community.