

Newman Lake Water Treatment Alternative

Exploring solutions to water quality issues



The Washington Department of Ecology is collaborating with the Spokane Conservation District (SCD), Spokane County and local property owners to improve the health of Newman Lake by finding an alternative to failing septic systems.

This April, a pilot project will install small-scale enhanced treatment upgrades at up to three sites in Honeymoon Bay. This state-of-the-art technology has been shown to be far more effective at protecting public health and water quality than the systems currently in use.

What will the project accomplish?

Our work at Newman Lake has shown that septic systems contribute to high levels of phosphorus and nitrogen, causing frequent water quality issues such as excessive algae and aquatic plant growth. This project will allow monitoring of the wastewater when discharged from the enhanced treatment systems.

If discharged water meets or is cleaner than groundwater standards, the new technology will stay in place and serve as a model for other parcels. If not, they will be removed and each site must revert to an alternative system that protects water quality. Ecology and SCD would then need to review our regulatory options for ensuring an effective treatment system for residents.

What type of systems will be installed?

These systems use membrane bioreactor technology to separate coarse biodegradable material before pumping wastewater to an aeration section, where remaining organic matter breaks down. Treated wastewater then passes through microfiltration membranes to eliminate suspended material and bacteria, achieving treatment levels many times greater than a standard septic system.

Why is Ecology issuing a permit for this project and not the Department of Health?

While Spokane Regional Health District typically oversees on-site septic systems, they can only issue permits on systems designed for in-ground treatment. The pilot systems will instead treat waste before discharging cleaned water to existing drain fields. Ecology would therefore permit these systems with a state waste discharge permit, which can only be issued to public entities.

How much will this cost?

A May, 2018 agreement between Ecology and SCD includes about \$200,000 for the pilot project. Costs for installation, operation and maintenance are likely to vary from site to site, based on a variety of factors. Ecology on-site sewage system loans or grants could provide funding to land owners to install these systems.

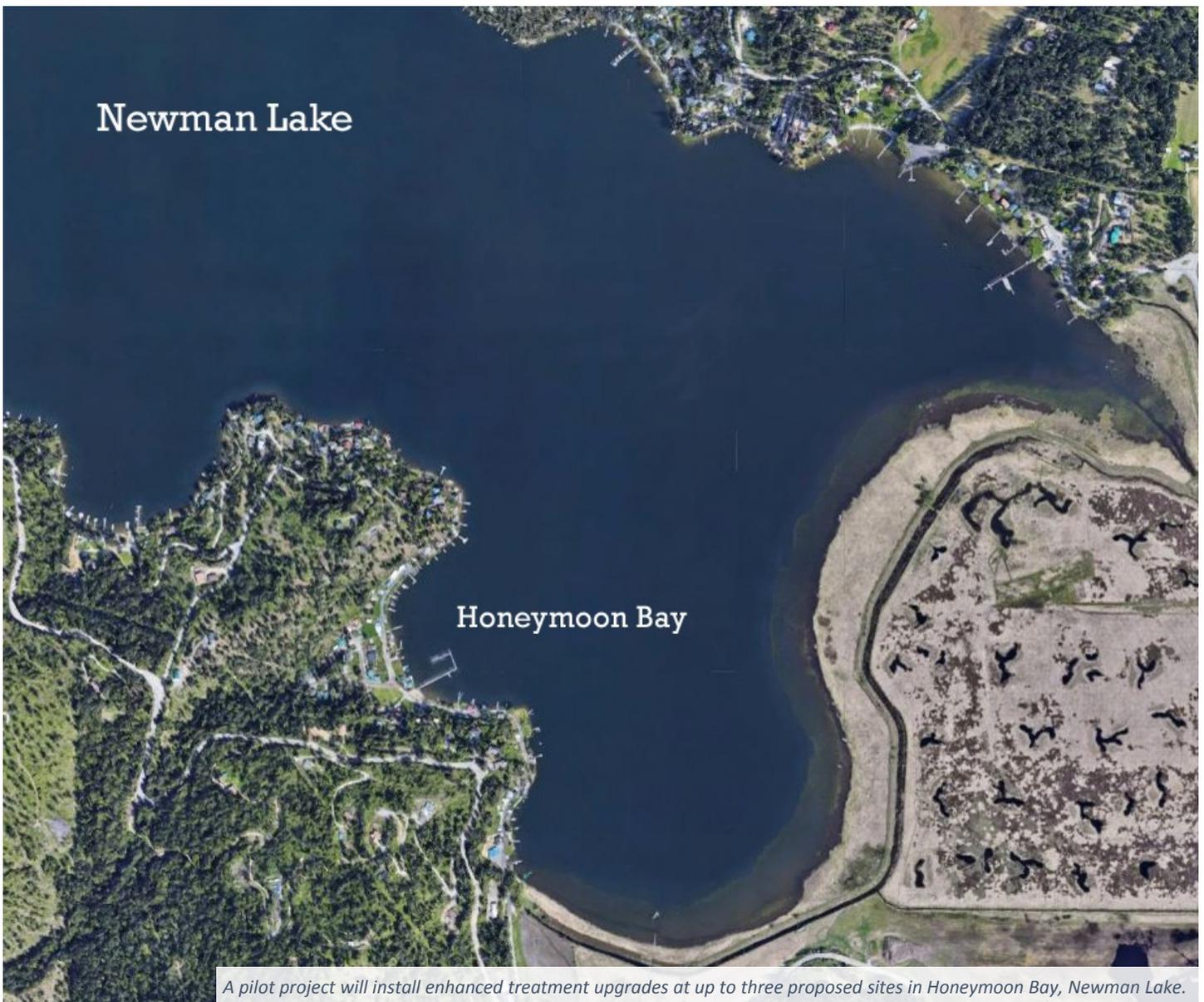
How does this affect me?

Poor water quality caused by septic systems has been a widespread, long-term issue impacting property owners around Newman Lake. While this project is in the early stages, if it proves successful and property owners agree, similar small-scale treatment systems could be installed on properties around the lake over several years.

Much remains to be done before additional steps are considered, and this meeting is the first step in that process. If the enhanced treatment upgrades work as expected, we will need to talk with homeowners again about what is needed to expand this project across a larger area.

Who can I contact for more information?

- Lindsay Chutas – Spokane Conservation District – Lindsay-chutas@sccd.org – 509-535-7274
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