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FOR IMMEDIATE RELEASE

### **Whitefish Lake Septic Leachate Study Released**

WHITEFISH, MT, 18 MARCH 2012 –The Whitefish Lake Institute recently released the results of the *Investigation of Septic Leachate to the Shoreline Area of Whitefish Lake*, a study sponsored by the Whitefish County Water District and funded by the Department of Natural Resources & Conservation to determine the spatial and temporal extent of leachate from septic systems to the shoreline area of Whitefish Lake. The study also provides a scientific basis for identifying ecological pressures to the lake, economic threats to the community of Whitefish, and potential public health risks resulting from decreased water quality. The full report is available online at <http://www.whitefishlake.org/download/>.

#### The Study

The study concluded with the development of a *Septic Leachate Contamination & Risk Assessment Map* which identifies confirmed sites of septic leachate contamination as well as areas of low, medium, and high potential risk for future contamination. Three confirmed areas of septic leachate contamination were identified including City Beach Bay, Viking Creek, and Lazy Bay. Two areas of high potential for septic leachate contamination, included Lazy Channel and Dog Bay State Park Seep. Four areas were identified as having medium potential for septic leachate contamination, including City Beach Seep, SE Monk's Bay, Brush Bay, and the East Lakeshore from Gaines Point south to north Monk's Bay, including Carver Bay and SE Houston Pt. The remaining shoreline areas are considered to have a low potential for contamination by septic leachate.

This investigation largely corroborates results from previous studies conducted in the early-to-mid 1980s which reported signs of chronic contamination from shoreline developments at several of these locations. The study results suggest that the three confirmed sites, along with the two sites with high potential and four sites with medium represent locations where action should be considered.

#### Septic Leachate

Septic "leachate" is the liquid that remains after wastewater drains through septic solids. The liquid contains elevated concentrations of bacteria and organic compounds from waste, detergents, and other household

materials. Properly placed, functioning, and maintained septic systems are designed to collect wastewater and neutralize these contaminants before they enter ground or surface water systems. However, septic systems have a limited life expectancy, and numerous systems around the lake have or will soon exceed their ability to function properly.

### Research

Research for the study was conducted between May and October of 2011, and included a toolbox of scientific investigation techniques. First level techniques included fluorometry, fluorometry/dissolved organic carbon ratio, *E. coli* enumeration, Human DNA biomarker testing, and GIS analysis. Secondary techniques included measurements of conductivity and total dissolved solids. Standard water body parameters were also collected, as well as study-specific details to enable future investigation.

### About Whitefish Lake Institute

Founded in 2005, the Whitefish Lake Institute is a 501 (3)(c) non-profit organization committed to acquiring scientific research, and to educating and engaging the local citizenry to protect the Whitefish area water resources of today, while providing a collective vision for tomorrow.

*Media Note:* A reduced file size pdf of the *Septic Leachate Contamination & Risk Assessment Map* has been provided for your convenience with this email. The full size map is also available online as a download at: <http://www.whitefishlake.org/download/>.

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