



# make a clear difference for Flathead Lake

## **Shallow Aquifer** - *A Shared Resource*

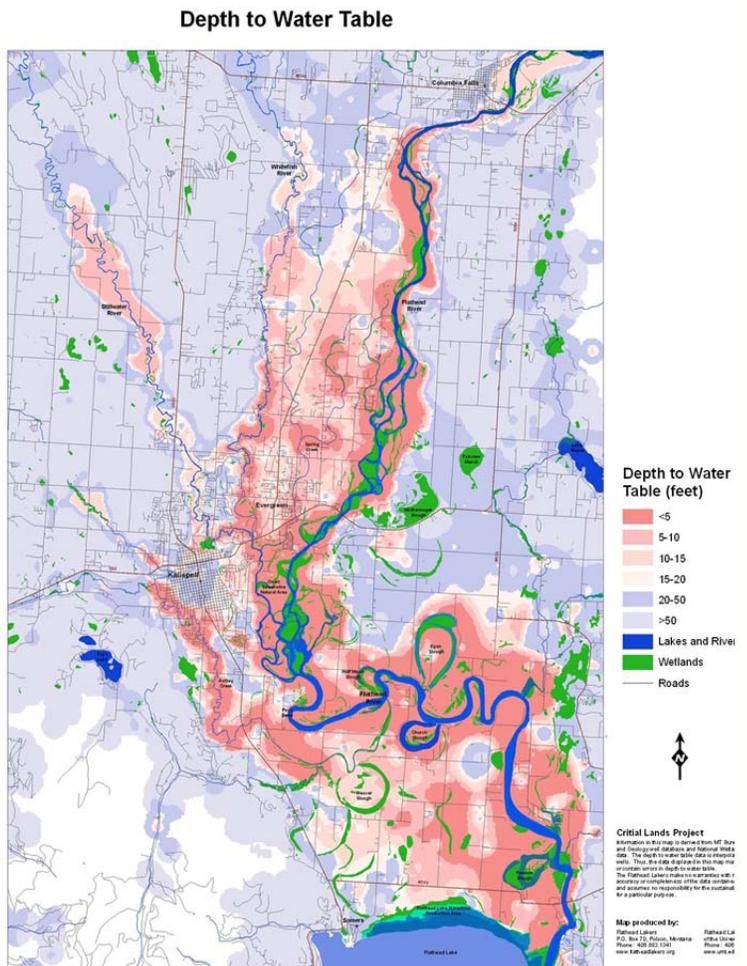
### WHY SHOULD WE CARE?

As glaciers receded ten thousand years ago, the meltwater became a river many times larger than the Flathead River of today. The glaciers and ancient river left behind a huge area of gravels permeated by water that forms a shallow alluvial aquifer, often referred to as the Evergreen Aquifer.

**We may not see it today, but water still moves underground between the Flathead River and the aquifer.**

This aquifer is located between the Flathead River to the east and Whitefish River to the west, and between Badrock Canyon to the north and the confluence of the Flathead and Whitefish rivers to the south.

**The depth to groundwater in this area is generally less than 50 feet and for much of the area less than five feet.**



### WHY IS THIS AQUIFER IMPORTANT?

#### **Water quality and the economy go hand in hand**

The shallow alluvial aquifer contains a complex network of organisms that naturally cleanse the waters. In a natural state, it provides a buffer that filters out pollutants before they reach the water.

The shallow aquifer can also help reduce flooding. During floods, water from the river can saturate the aquifer and cause surface flooding before the river overflows its banks.

# CLEAN WATER TOOL KIT: The Shallow Groundwater Aquifer

## WHAT CAN WE DO?

### The problem

- Pollution entering the alluvial aquifer, such as oil and gas, heavy metals, or nutrients from faulty septic systems or excessive fertilizer application, can contaminate the aquifer and damage or destroy its natural cleansing system, jeopardizing groundwater supplies.
- Polluted groundwater can also move into the Flathead River and flow down to Flathead Lake, one of the cleanest, large freshwater lakes in populated areas in the world.

### The solution

We can protect clean water by encouraging responsible development away from vulnerable areas, such as the shallow alluvial aquifer.

- Build in upland areas where the groundwater is not so shallow and limit the density of any development, including paved areas, over the aquifer.
- Maintain your septic system with annual checks, and pump your tank as needed.
- Protect wetlands and riparian habitat over the shallow aquifer.
- Apply fertilizers and pesticides sparingly. When use is necessary, do not exceed the recommended amounts.
- Dispose of household hazardous products, such as paints, pesticides, insecticides, and motor oil, at a collection facility. Don't pour them onto the ground or into storm drains, sinks or toilets. For small spills, sprinkle with sawdust or kitty litter, seal in a trash bag, and put in the trash. Do not wash into the gutter. For large spills call your County Emergency Services or 911.
- Share information about the shallow aquifer with your friends, neighbors, Flathead County Commissioners, and newcomers to help them be good stewards and help keep Flathead waters clean and beautiful.

---

## WHERE TO LEARN MORE?

Find out more about caring for the Shallow Aquifer and clean water at the Flathead Lakers website:

<http://www.flatheadlakers.org/index.php?page=Shallow-Groundwater>

For more information and maps contact:

Flathead County Planning and Zoning office in Kalispell (406) 751-8200.

Flathead County Health Department (406) 751-8100

Flathead Lakers (406) 883-1346, [www.flatheadlakers.org](http://www.flatheadlakers.org)

Together, we can keep Flathead Lake blue! Visit the Flathead Lake Clean Water Toolkit:

[www.flatheadlakers.org/toolkit](http://www.flatheadlakers.org/toolkit) or call 883-1341.

**FLATHEAD LAKERS** | P.O. Box 70 | Polson, MT 59860

406-883-1341 | [flatheadlakers.org](http://flatheadlakers.org)

