

AQUIFER:

Designated as a sole source aquifer in 1978, the Spokane Valley-Rathdrum Prairie Aquifer was the first aquifer in Idaho and the second in the nation to receive sole source designation. The aquifer originates at the southern end of Lake Pend Oreille in northern Idaho and extends west under the Rathdrum Prairie in Idaho and the Spokane Valley in Washington, underlying approximately 321 square miles of land.

The aquifer serves as the principal source of drinking water for more than 400,000 people. Because of this, the Spokane Valley-Rathdrum Prairie Aquifer is specially categorized by Idaho as a sensitive resource aquifer as well as being designated by the EPA as a sole source aquifer. Both of these designations afford the aquifer special protection. Through Idaho's sensitive resource designation, the aquifer cannot be degraded unless it is demonstrated that the change is a justifiable result of necessary economic or social development.

The aquifer is an unconfined, valley fill aquifer. This means no barrier limits or blocks the flow of water down into the aquifer from the surface. Because the rocks and sediments in the aquifer fit very loosely together, water moves relatively quickly through the aquifer. In some places, water has been estimated to move at a rate of 50 feet per day.

http://www.deq.idaho.gov/water/prog_issues/ground_water/aquifers_sole_source.cfm#spokane