Aquifer Recharge Millions of Gallons per day 200 500 600 31 mgd Recharge to the Aquifer from **Spokane** Spokane River streamflow loss occurs 23 mgd River in two losing reaches. Pend Oreille The nine lakes around the margin of the Aquifer boundary contribute Lakes recharge to the groundwater. 11 mgd Recharge 40 mgd Hauser This recharge has two elements: All Aquifer recharge originates as precipitation **Areal** Lake direct soil infiltration of precipitation - rain or snow - that falls in our region as Recharge and urban stormwater runoff. shown on the map below. The recharge is 13 mgd organized into seven main categories as provided in the chart above, and a further Newmar Runoff from the highland areas **Tributary** breakdown of the lake contribution is shown adjacent to the Aquifer contributes to the right. All numbers in these images Recharge recharge to the groundwater. are in million gallons per day. The pie chart (lower right) organizes the seven categories into four main groupings. Water applied to the land surface for 8 mgd Landscape 24 mgd irrigation infiltrates through the soil Irrigation and recharges the Aquifer. 3 mgd Fernan Liberty Deep percolation of treated waste-Coeur d'Alene Septic 15 water from septic system drainfields **Systems** contributes recharge to the Aquifer. **Spokane River Flows** Groundwater from Hoodoo and Subsurface 28 Blanchard Valleys contributes a In 2009 Avista agreed to release enough Inflow minor recharge to the Aquifer. water from the Post Falls Dam to maintain a minimum instream flow in the Spokane The recharge graphs on this page are adapted from Figure 11, River below the dam at 600 cubic feet per page 22, USGS Scientific Investigations Report 2007-5041. Hauser Lake recharges the Aquifer second (388 mgd). As a result, additional Aquifer recharge is anticipated during seasonal low river flow periods. **Average Annual Precipitation** Human in inches **Impacts** 16.0 - 18.0 18.1 - 20.0 Upland meadow that recharges our Aquifer

16.0 - 18.0 18.1 - 20.0 20.1 - 22.0 22.1 - 24.0 24.1 - 26.0 26.1 - 28.0 28.1 - 30.0 30.1 - 40.0

40.1 - 50.0

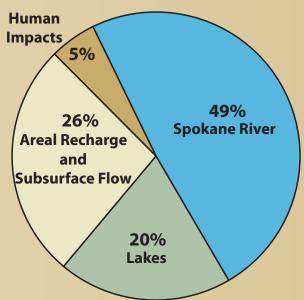
50.1 - 67.0

Spokane Troug

Spokane Airport

Aquifer Facts

The Spokane River is the largest contributor to the Aquifer, providing an average of 464 million gallons daily, about 49% of the total Aquifer inflow. The Spokane River is also the largest destination for Aquifer water, receiving an average of 556 million gallons per day (mgd), about 58% of the total outflow. The Little Spokane River is the second largest Aquifer recipient with 150 mgd.



Percentage of Recharge to the Aquifer