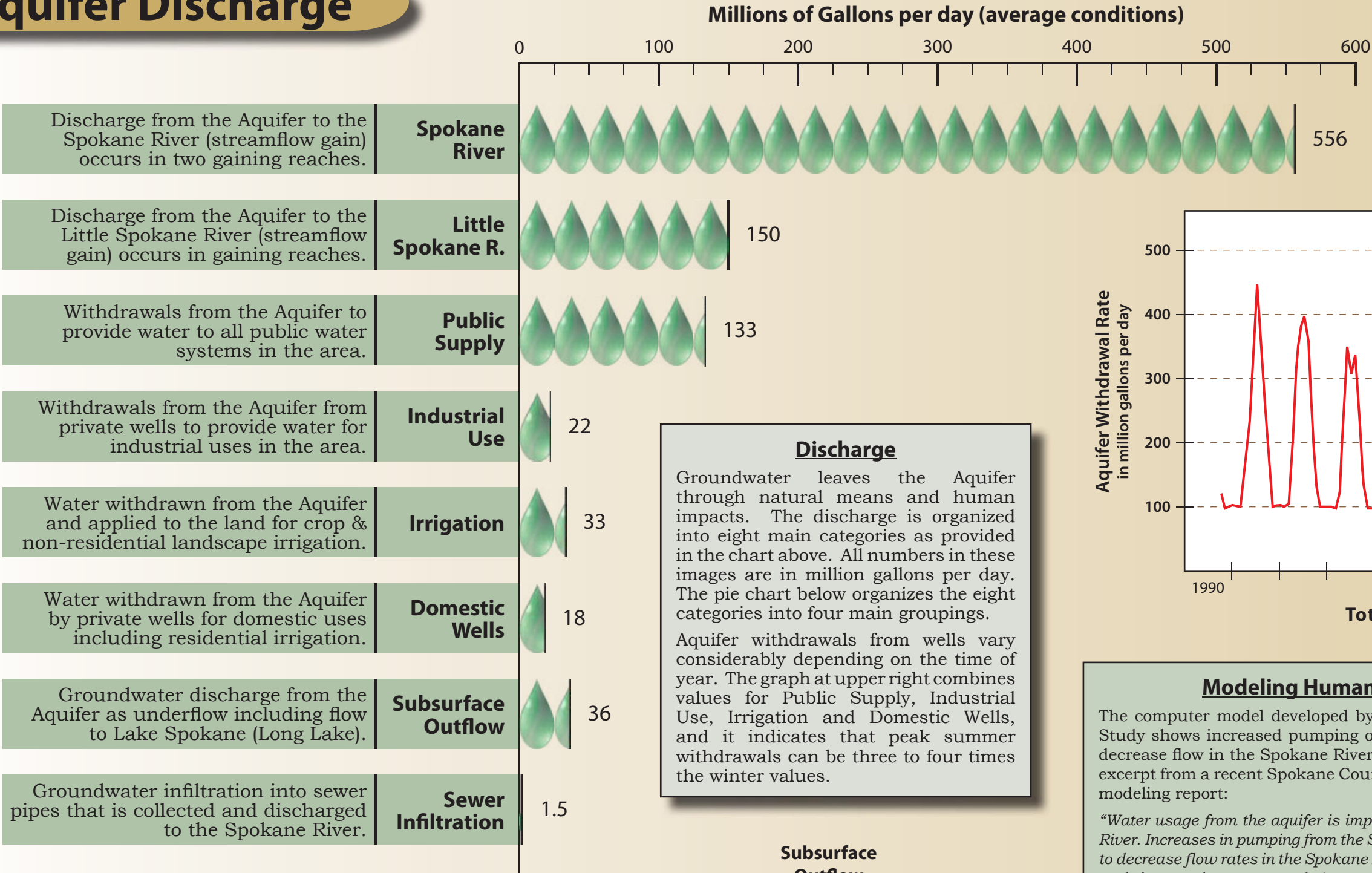
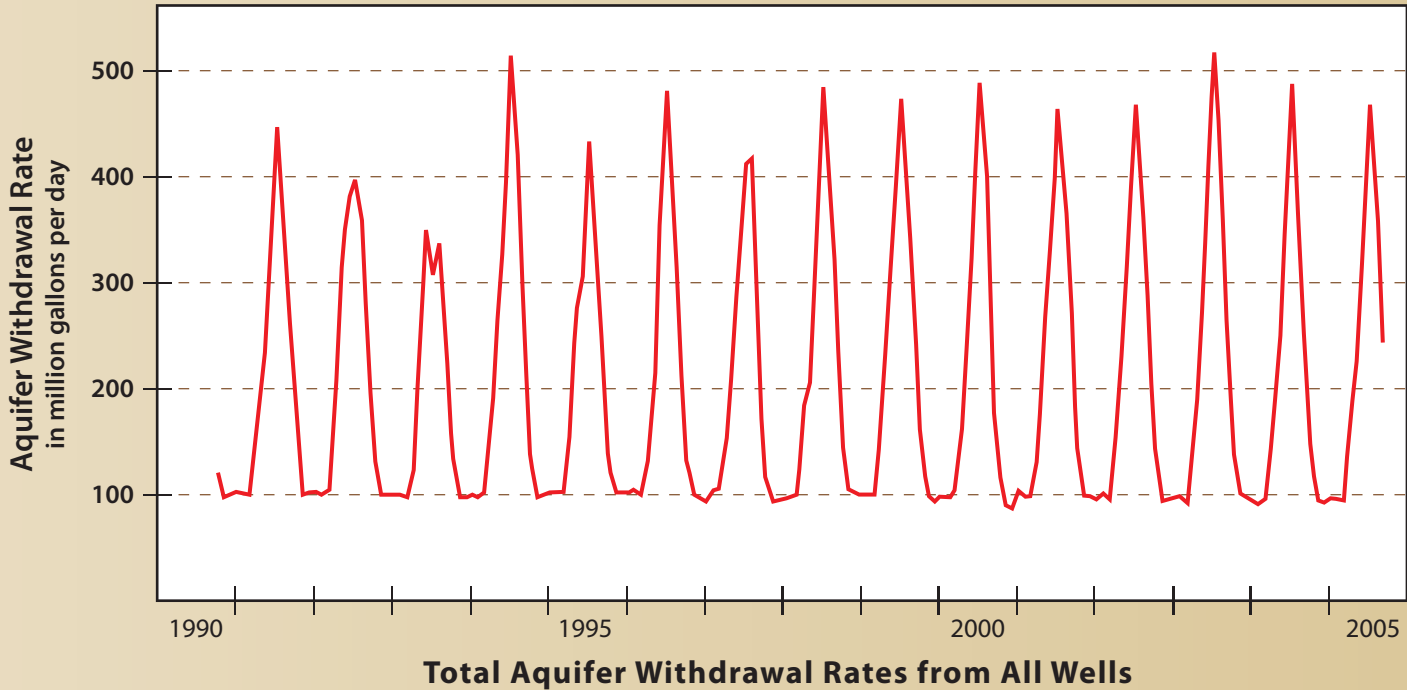


# Aquifer Discharge



**Notes:**

- 1. Residential landscape irrigation is included with the “Public Supply” category rather than the “Irrigation” category.
- 2. The information on this page is adapted from USGS Scientific Investigations Reports 2007-5041 and 2007-5044.



**Discharge**

Groundwater leaves the Aquifer through natural means and human impacts. The discharge is organized into eight main categories as provided in the chart above. All numbers in these images are in million gallons per day. The pie chart below organizes the eight categories into four main groupings.

Aquifer withdrawals from wells vary considerably depending on the time of year. The graph at upper right combines values for Public Supply, Industrial Use, Irrigation and Domestic Wells, and it indicates that peak summer withdrawals can be three to four times the winter values.

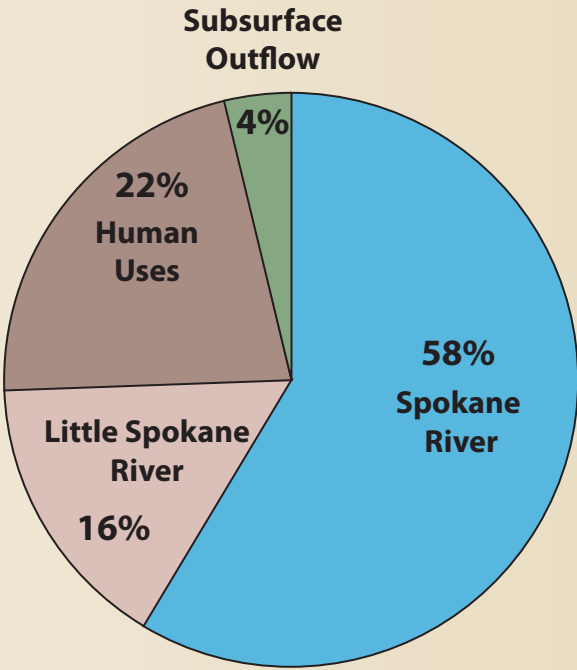
**Modeling Human Uses**

The computer model developed by the USGS Bi-State Study shows increased pumping of Aquifer water may decrease flow in the Spokane River. The following is an excerpt from a recent Spokane County Water Resources modeling report:

“Water usage from the aquifer is important to the Spokane River. Increases in pumping from the SVRP has the potential to decrease flow rates in the Spokane River since the aquifer and river are interconnected. A recent study indicates that the additional pumping due to a 57% projected increase in population in Kootenai County (1990 to 2025) would result in a decrease in Spokane River flows of about 1.8%. The study indicated that the additional pumping due to a 29% projected increase in population in Spokane County (1990 to 2025) would result in a decrease in Spokane River flows of about 7.0%.”



Gaining reach of the Spokane River



Percentage of Discharge from the Aquifer

## Aquifer Facts

The Spokane River and the Little Spokane River receive 74% of the average annual Aquifer discharge. Human use of the Aquifer, groundwater withdrawal by wells, comprise 22% of the average Aquifer discharge; however peak summer water withdrawal can be three to four times the winter values.



Griffith Spring near the Spokane Hatchery