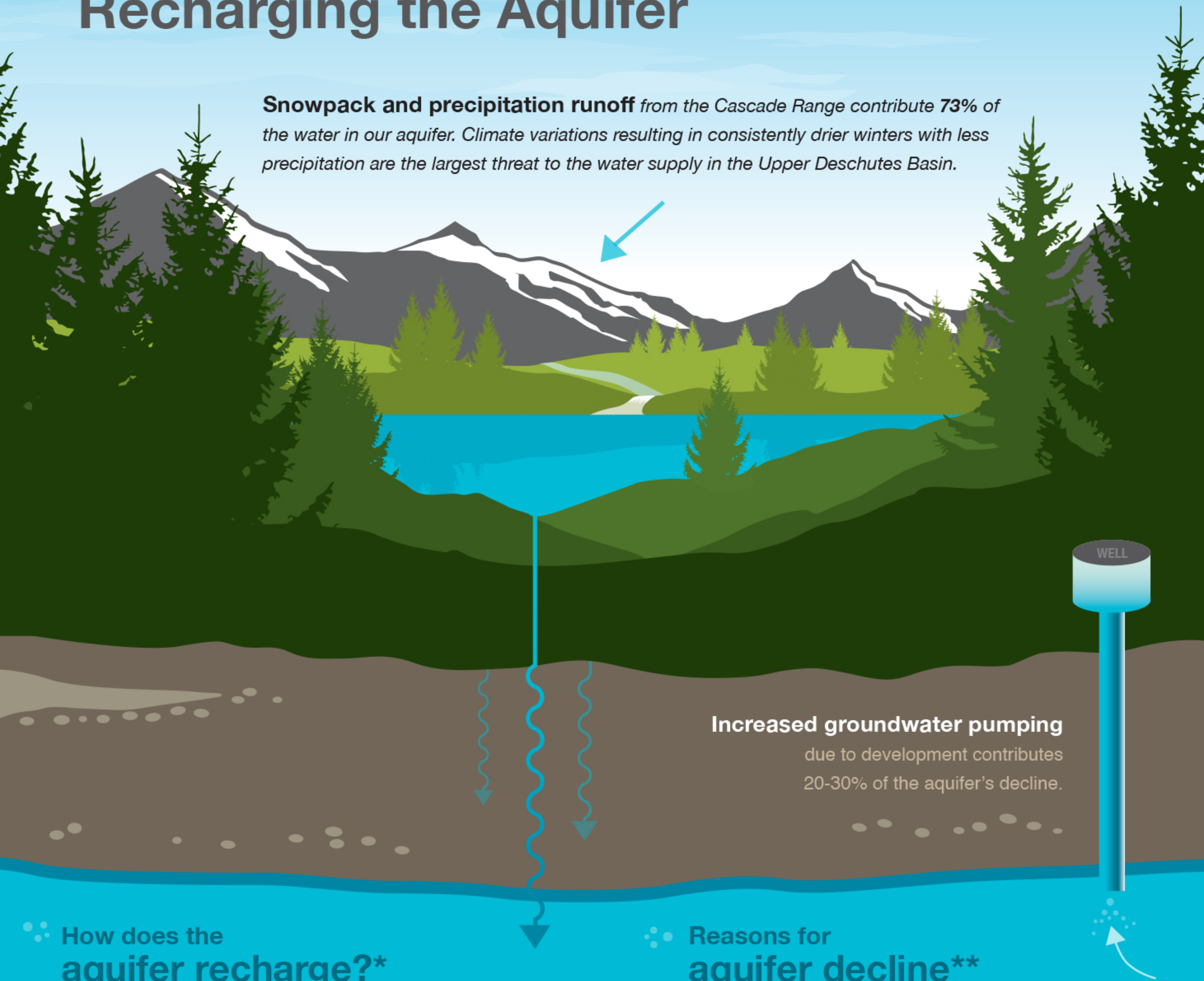


Recharging the Aquifer

Snowpack and precipitation runoff from the Cascade Range contribute **73%** of the water in our aquifer. Climate variations resulting in consistently drier winters with less precipitation are the largest threat to the water supply in the Upper Deschutes Basin.



Increased groundwater pumping
due to development contributes
20-30% of the aquifer's decline.

How does the aquifer recharge?*

73% Snow and rainfall
3500 CFS

18% Inflow from outside the
Upper Deschutes Basin
850 CFS

9% Canal leakage
411 CFS

Reasons for aquifer decline**

60-70% Climate
(drier conditions, lower precipitation)

20-30% Increased
groundwater
pumping

10% Canal piping and lining

Less than 10% of the aquifer recharge comes from leaky canals.*

Before canals were built, this water would have remained in the river. Piping canals allows for water conservation for future generations and restoration of the Deschutes River.

*Gannett et al. 2001, Gannett and Lite 2013, Oregon Water Resources Department

**United States Geological Survey between 1997-2008 investigated the influence of canal lining, groundwater pumping, and climate on water level trends in the region.