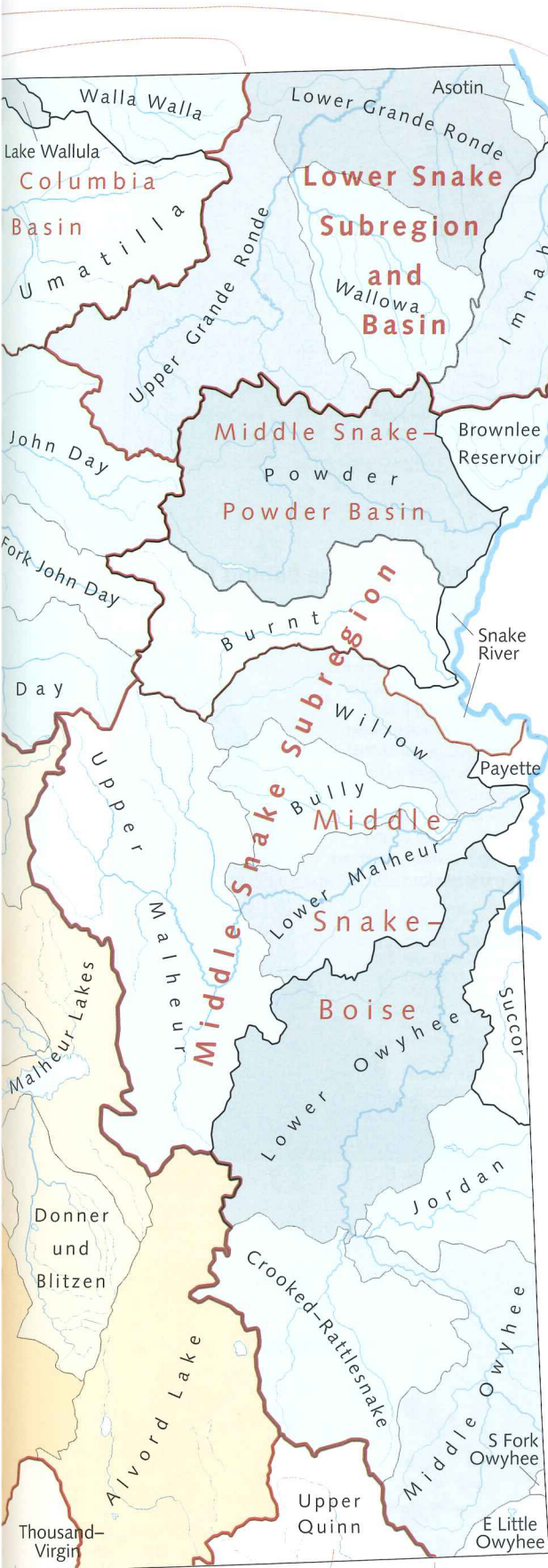


lowest point, where the water is lost to evaporation and to groundwater recharge. Large watersheds are subdivided into smaller watersheds, which are further subdivided at several levels. The smallest watersheds shown here are called "cataloging units," each identified by a code number. The large map shows major watershed boundaries as dark

brown and light brown lines; the boundaries of smaller watersheds within them are shown as black or light gray lines.

Each watershed is a unique area in which hillsides, soils, vegetation, runoff, river flow, water quality, fish and the aquatic ecosystem are connected. Any activity that affects the water quality, quantity or rate of movement at one location can influence water downstream. Watersheds therefore are important natural units for water quality, water supply, flood control and ecological planning.

In most cases political units which have traditionally defined boundaries for planning (for example, counties) do not match watershed boundaries. Increasingly, however, watersheds are being used as management and planning units. Watershed councils have been established across the state as part of the Oregon Plan for Salmon and Watersheds, supported by the Oregon Watershed Enhancement Board. Watershed councils provide a structure for local residents and land owners to identify environmental problems in their watershed and undertake river and watershed restoration projects. Most watershed councils correspond to one cataloging unit as shown on this map.



Black Rock Desert Subregion and Basin
BASIN REGION



Water Availability

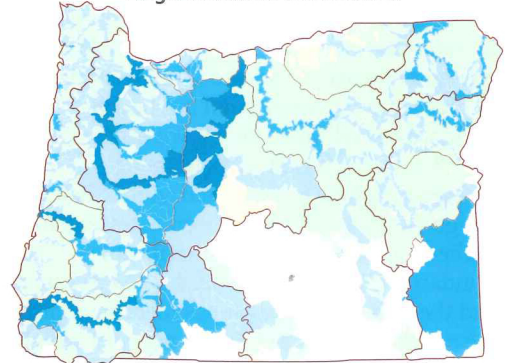
These three maps show how water availability varies across Oregon during the dry season. The lowest stream flows typically occur in August or September. August natural streamflow (right) shows the quantity of water that would be in the river without human intervention. The streamflows shown are technically known as August 80 percent exceedance levels (the level of natural streamflow that is equaled or exceeded 80 percent of the time in August). Natural streamflow is important as an indicator of the conditions to which the local aquatic ecosystem is adapted.

August expected streamflow (middle) is natural streamflow (the 80 percent exceedance flow) minus consumptive use by humans. Consumptive use includes agricultural, domestic and industrial uses that actually reduce streamflow. Most consumptive use in Oregon is for irrigated agriculture. The Williamson River, upper Deschutes and Crooked Rivers, Umatilla, Owyhee and parts of other Eastern Oregon rivers are strongly affected by consumptive use, as are some watersheds in Western Oregon, particularly those in agricultural areas.

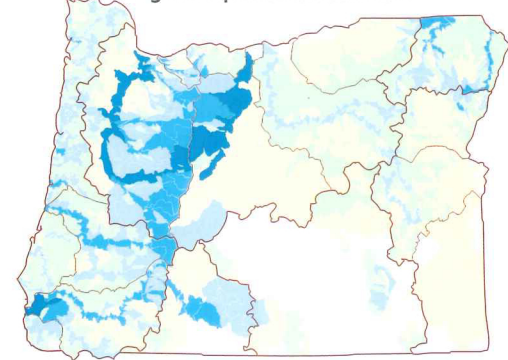
August water availability (bottom) is the quantity of water that could be appropriated for new out-of-stream consumptive water use. Natural streamflow minus existing use (in-stream water rights plus out-of-stream consumptive uses) determines the amount available. Oregon's water is essentially fully appropriated—there is no available water except in a few very limited areas. Newly identified ecological needs could further reduce the limited water availability shown on this map. Future human population growth will have to be accommodated by wiser use of existing water resources.

Water Availability

August Natural Streamflow



August Expected Streamflow



August Water Availability



Streamflow (cubic feet per second)

