

The Vocabulary of Water

By Sue Ann Nicely, OML Associate General Counsel

Like most multi-faceted issues, discussions about water can sound like conversations in a foreign language. However, these are terms that Oklahoma City and town officials must understand in order to participate in the political and judicial debates on the road forward toward the development of a statewide water plan.

Groundwater Rights. Current law states that groundwater is the private property of the owner of the land above the groundwater. However, state law regulates the rate of usage of groundwater to two acre feet unless the underground aquifer has been mapped by OWRB. Many Oklahoma municipalities particularly in Western Oklahoma have purchased land in order to obtain reliable groundwater rights for public water supply.

Streamwater Rights. Unlike groundwater, the people of the State of Oklahoma own the streamwater. The use of streamwater under current law is regulated via permits at the OWRB. The priority of streamwater rights is the "First in Time, First in Right" system. The first permit holder has priority over the second, who has priority over the third and so forth.

Surface Water Rights. This is also called "diffuse surface water". It is water occurring on the surface but outside the banks of a stream. It is unregulated and is the property of the owner of the surface.

Acre Feet is how large quantities of water are measured. For example, an Acre Foot is the amount of water it takes to cover an acre of land with one foot of water. So, if your municipality takes ten acre feet it means the amount of water it takes to cover ten acres to the depth of one foot.

Conjunctive Use is the idea that groundwater and streamwater are hydrologically linked. Studies show that groundwater flows underground and then can appear on the surface and become streamwater. Likewise, streamwater can absorb into the ground and become groundwater. In other words, each can feed the other at various places as the water runs its course through Oklahoma.

In-Stream Flows is a term heard more and more in water discussions. In-stream flows are the notion that water in a stream should be regulated so that a certain water level is maintained at all or at least specified times. If the water level drops so that it threatens the mandated in-stream flow level, then both *current* streamwater and groundwater users will be ordered to reduce their usage to maintain the required levels.

Priority has a long history in Oklahoma's water law. This is the idea that types of uses should be ranked as a matter of law with the result that the use deemed more valuable or beneficial gets priority for access to supply. The priority use may be agricultural, municipal, recreational or industrial. Or, the priority may be streamwater over groundwater or visa-versa.

Rate of Recharge is a term used to describe the rate at which ground water is replenished due to increased water accumulation in the underground aquifer from sources such as rain. Ground water use that exceeds the rate of recharge will result in increasingly lower groundwater levels.

Major Water Users include municipal, agricultural, public utilities and industrial. Even though each municipality may not think of itself individually as a major user, public water supply is a force to be reckoned with. In 2007 OWRB reports that public water supply uses almost 60% of the permitted streamwater in the state (including lakes and reservoirs) and 19 percent of groundwater. The total use for both streamwater and groundwater is 2.2 million acre feet - almost 37% of all water used in the State of Oklahoma!