Appendix E

Glossary

Alluvium: General term for sediments of gravel, sand, silt, clay, or other particulate rock material deposited by flowing water, usually in the beds of rivers and streams, on a flood plain, on a delta, or at the base of a mountain.

Aquifer sensitivity: Likelihood of aquifer contamination due to activities on the ground surface.

Bolson: An alluvium-floored basin, depression, or wide valley, mostly surrounded by mountains and drained by a system that has no surface outlet. Bolson fill is the alluvial detritus that fills a bolson--also commonly called bolson deposits.

Brackish water: Water that contains more than 1,000 milligrams per liter of dissolved solids. It generally is considered unsuitable for human consumption and less desirable for irrigation because of its high content of dissolved solids. Salinity generally is expressed as milligrams per liter (mg/L) of dissolved solids, with 35,000 mg/L defined as seawater. A general salinity scale is:

Salinity	Dissolved Solids (mg/L)
Slight	1,000 - 3,000
Moderate	3,000 – 10,000
Very	10,000 – 35,000
Brine	More than 35,000

Discharge: Rate of flow at a given instant in terms of volume per unit of time; pumping discharge equals pumping rate, usually given in gallons per minute (gal/min); stream discharge, usually given in cubic feet per second (ft^3/s). With respect to groundwater, the movement of water out of an aquifer. Discharge may be natural, as from springs, as by seepage, or it may be artificial as by constructed drains or from wells.

Drawdown: The depression or decline of the water level or potentiometric surface in a pumped well or in nearby wells caused by pumping. At the well, it is the vertical distance between the static and the pumping level.

Freshwater: Water that contains less than 1,000 mg/L (milligrams per liter) of dissolved solids; generally, more than 500 mg/L is considered undesirable for drinking and many industrial uses.

Hydraulic conductivity: Rate of water flow through a given formation (often horizontal and vertical flow rates are drastically different).

Hydraulic gradient: The gradient or slope of the water table or potentiometric surface in a specific direction.

Leaking underground storage tank (LUST): An underground tank used for storage of petroleum and other products, which has a “confirmed release” as defined by federal environmental laws.

Lens: A vertically non-continuous groundwater layer.

Maximum contaminant level (MCL): the maximum level of a contaminant allowed in water by federal law. Based on health effects and currently available treatment methods.

Mining: Removal of groundwater at a rate higher than recharge, thus causing depletion of the groundwater resource.

Recharge: The addition of water to an aquifer by infiltration, either directly into the aquifer or indirectly by way of another rock formation. Recharge may be natural, as when precipitation infiltrates to the water table, or artificial, as when water is injected through wells or spread over permeable surfaces for the purpose of recharging an aquifer. Amount of water flowing into a given aquifer. Natural recharge includes volumes due to infiltration, aquifer-aquifer interactions, surface water-groundwater interactions, etc. Induced recharge is due to increased flows driven by lowering water levels.

Recoverable groundwater: The amount of water that may be physically and economically withdrawn from the ground water reservoir.

Specific yield: The volume of water that drains from saturated soil pores as the water table drops.

Subsidence: sinking down of part of the earth's crust due to underground excavation, such as removal groundwater.

Total dissolved solids (TDS): An aggregate of carbonates, bicarbonates, chlorides, sulfates, phosphates, nitrates, etc., of calcium, magnesium, manganese, sodium, potassium, and other cations which form salts. High TDS concentrations exert varying degrees of osmotic pressures and often become lethal to the biological inhabitants of an aquatic environment. The common and synonymously used term for TDS is "salt".

Transmissivity: Rate of water flow through a vertical section of an aquifer. Equals hydraulic conductivity multiplied by the thickness of the formation.

Upconing: Vertically upward movement of water underneath a pumping well. Degree of upconing depends on aquifer properties, contrast in density between saline and freshwater, and well pumping rate.