

## GLOSSARY

- Acre foot** - The volume of water required to cover one acre of land to a depth of one foot. An acrefoot is equal to approximately 325,825 gallons. The capacity of Homestake Reservoir is 43,000 acrefeet, and Dillon Reservoir is approximately 250,000 acre-feet in size.
- Adjacent to** - Meaning land that shares a property boundary with the river or a tributary or includes said water feature within its boundaries, at the time of this plan adoption.
- Aquatic Habitat** - Habitat available for use by fish and other aquatic species. The area of usable habitat in a stream typically increases as stream flow increases, except when stream flow is very high and water velocity is greater than desirable.
- Aquifer** - A water bearing layer of rock, sand or gravel that will yield usable supplies of water.
- Assimilative Capacity** - The ability of a waterbody to incorporate a particular pollutant without significant water quality changes. Factors which influence assimilative capacity include physical mixing, dilution, biodegradation, and adsorption.
- Baseflow** - The period of the year in which stream flow in rivers and streams is the lowest, typically from August through April. During this period, stream flow primarily results from groundwater that is discharged to stream and rivers.
- Beneficial Use** - Putting water to some useful industry or to supply a well recognized want (Hammond v. Rose, 11 Colo. 524, 19p.466).
- Best Management Practices (BMPs)** - Recommended methods for preventing or reducing nonpoint source water pollution.
- BLM** - United States Bureau of Land Management
- Build-out Conditions** - The population that is projected to occur with complete development assuming a development density comparable to existing conditions on all planned and platted sites. Actual build-out could vary significantly, depending upon market conditions and land use approvals.
- Carrying Capacity** - The number (amount) and type of use an area can accommodate without altering either the environment or the user's experience beyond a degree of change deemed acceptable by the management objective.
- CDOT** - Colorado Department of Transportation

CDPHE - Colorado Department of Public Health and Environment

CDPS - Colorado Discharge Permit System

Classifications, Statewide Uses - These are defined in the State's Basic Standards and Methodologies for Surfacewaters [5CCR 1002-8 3.1.13] Appendix 6. The classified uses are: recreation; agriculture; aquatic life; domestic water supply; and wetlands.

Consumptive Water Use - That amount of water that is actually consumed by a given water use and does not return to the stream. For example, domestic water typically consumes about 5 to 10% of the total amount of water that is diverted.

Contaminant - Any physical, chemical, biological or radiological substance that degrades water quality.

Cubic Foot per Second (CFS) - A rate of flow equal to one cubic foot of water (7.5 gallons) every second. One cfs flowing for 24 hours results in a volume of water equal to approximately two acrefeet. The Eagle River near Gypsum typically flows about 100 to 200 cfs during the low flow winter months. During peak snowmelt, the flow of the Eagle River near Gypsum often exceeds 3,000 cfs. The flow of Gore Creek at Vail is usually about 10 to 15 cfs during the winter months. Peak snowmelt stream flow of Gore Creek is often 900 cfs or greater.

CRWCD - Colorado River Water Conservation District

CWCB - Colorado Water Conservation Board

CWQCD - Colorado Water Quality Control Division

Depletion - The use of water in a manner which makes it no longer available to other users in the same system. For example, immediately below a municipal diversion headgate, the stream depletion is equal to the amount of water diverted. Downstream of return flow from a municipal wastewater treatment plant, the depletion is equal to the amount of water actually consumed by the municipal use that is not returned to the stream.

DOI - Department of the Interior

Domestic Water Use - Water used for household purposes and for lawn and garden irrigation in residential areas.

DOW - Department of Wildlife

Ephemeral Stream - A stream which flows only seasonally or intermittently, as opposed to a perennial or year-round stream.

Eutrophication - The process by which water resources become enriched with nutrients, such as nitrogen and phosphorus, which may limit oxygen levels in the water and impact aquatic life uses and aesthetics of the resource.

Eutrophic - A waterbody rich in nutrients and biological activity.

GPD - Gallons per Day

Hydraulic Residence Time - The theoretical length of time that on average water molecules remain in a lake or reservoir. Can be calculated by: inflow (or outflow) divided by volume.

I/I - Infiltration and/or inflow

Instream Flow - The amount of stream flow in a stream or river that is recommended to maintain natural resource values such as fish habitat, recreation and water quality.

In-Basin Water Diversion - The diversion of water from a given river basin for use within the same river watershed.

Instream Flow Water Rights - A minimum flow standard established by the Colorado Water Conservation Board in consultation with the Division of Wildlife, Division of Parks and Outdoor Recreation, and/or agencies of the U.S. Department of Agriculture and Department of the Interior that is intended to preserve the natural environment to a reasonable degree. (CRS 37-92-102(3)).

Mesotrophic - A waterbody having a moderate amount of nutrients and biological activity or growth.

MGD - Million Gallons per Day

MOU - Memorandum of Understanding

Non-Point Source Pollution - A source of pollution that has a diffuse origin. For example, sediment erosion from a construction site or oil and grease washing off roads in a thunderstorm. Water contamination from diffuse sources.

Non-Structural Strategy - A water supply strategy, such as conservation, that does not involve the construction of a dam, reservoir or diversion facility.

NWCCOG - Northwest Colorado Council of Governments

Oligotrophic - A waterbody having few nutrients and low biological activity.  
Undisturbed, high mountain lakes are often oligotrophic.

Optimum Instream Flow - A flow amount which maximizes an instream flow value such as fish habitat, recreation, aesthetics, or water quality.

Out-of-Basin Diversion - The diversion of water from a given river basin for use allocations outside of the river watershed.

Point Source Pollution - Pollution that comes from a discrete or specified source such as industrial or municipal wastewater discharge.

Return Flow - Water returned to the stream after being diverted for some use such as irrigation or domestic purposes. Usually return flows occur downstream of the point of diversion.

Riparian - The banks and adjacent vegetation influenced by the high water table. Plant types associated with riparian zone include but are not limited to cottonwoods, willows, alders, aspens, and chokecherry. The presence or absence of these plants does not always indicate a riparian community. Past land use practices may have degraded the vegetation to the point where it does not appear to have riparian characteristics but because of the high water table in the area a change in the land use can quickly restore the riparian community. Conversely, a few characteristic plants may not indicate a true riparian community. For this reason, on-site analysis is needed to help make this determination. The agencies available to make these inspections include Colorado Division of Wildlife, Soil Conservation Service, Army Corps of Engineers, County Environmental Health, and other town or county staff with appropriate training. Challenges to the on-site studies shall be based on scientific analysis from expert source. This definition of riparian was comprehensively compiled from CDOW, SCS, USFS, USAC definitions of riparian zone.

SCS - Soil Conservation Service

Secchi Disk Depth - The depth in a lake at which a standard disk can no longer be seen. The greater the Secchi disk depth, the greater the transparency of the water and the better water quality as it relates to suspended sediment and algae.

Shoshone Demand and Cameo Call - The water demand associated with the Shoshone Hydroelectric Facility on the Colorado River in Glenwood Canyon and an

aggregate of irrigation rights in the Grand Valley. These are senior water rights that frequently limit upstream diversions in the Upper Colorado River basin.

Significant Degradation

TDS - Total dissolved solids is a measure of the amount of salinity in water.

TMDL - Total Maximum Daily Load

Trophic Status - The nutrient and biological activity present in a particular body of water.

ug/l - Micrograms per liter; equivalent to ppb.

umho/cm - A measurement of conductivity of electricity through water indicating the amount of dissolved solids in a water sample.

USFS - United States Forest Service

Water Right - The legal right to use a specified amount of water. Water rights in Colorado are administered according to priority (first in time, first in right). An absolute water right is a right that has been historically applied to a beneficial use. A conditional water right is a right that has not yet been developed or used, but that retains its historical priority. Conditional rights are usually associated with water projects that require years of planning and construction.

Water Right Augmentation - A means to allow diversion of water by a junior water right when this junior right would otherwise be out-of-priority and unable to divert water. An augmentation plan typically replaces (or augments) the amount of water consumed by a junior water right with water from a reservoir or with water previously used for another purpose such as irrigation. By replacing the amount of water consumed, the amount of water available to senior downstream water rights is not diminished.

"Wet" Water - Actual water supply as opposed to a water supply authorized by a water right or "paper water".

WQL Water Quality Limited - A designation by the Water Quality Control Division which indicates that the classified uses of a stream segment are not measurably impaired but that the potential for impairment of classified uses exists.

WQLA Water Quality Limited Allocated - A designation by the Water Quality Control Division which indicates that the classified uses of a stream segment are not measurably impaired; but the assimilative capacity of the segment has been

allocated through point source wasteload allocations, such as ammonia discharge permit limits.

#### Conversion Table

1 acre-foot of water	=	43,500 cubic feet
	=	325,581 gallons
1 cubic foot per second (cfs)	=	450 gallons per minute
	=	646,320 gallons per day
	=	1.983 acre-feet per 24 hours
	=	59.5 acre-feet per 30 days
	=	724 acre-feet per year