Definitions

www.colorado.gov/cdphe/animas-river-spill

This is a list of frequently used terms and their definitions, to provide clarity when discussing the Animas River spill incident. These terms are not exclusive to this incident, and are used broadly in the world of water quality.

Types of Water

Groundwater: Water that exists in the ground, below the surface. It can exist in soil, or in limited rock formations.

Aquifer: An underground rock formation that holds water. It acts as a natural water storage tank. The water can be extracted using a well and often provides the source for springs and streams.

Surface water: Water found on the surface of the earth such as rivers, lakes, streams and reservoirs. Water that is supplied by precipitation.

Stormwater runoff: The water from rain or snow that flows over the ground, including over paved surfaces. The water can gather contaminants and pollutants as it flows to streams, lakes or reservoirs.

Sources of drinking water

Public Water System: A system with at least 15 service connections or which which provides drinking water to an average of at least 25 people daily for at least 60 days out of the year.

Wells: Some wells get their water from a deep aquifer. Others get their water from a nearby stream or body of water that is filtered through the ground into a well.

Wells under the influence of surface water: These wells draw their water directly from a surface water source or from groundwater that is close to a stream, river or other body. They may be influenced by potential contaminants in surface water. Wells constructed from confined aquifers are usually less susceptible to the influence of nearby surface water.

Other important terms

Standard: A limit or quality level designed to protect the use of water bodies. Typically, standards limit the amount of hazardous chemicals permitted in the water body, and may also include physical or biological limitations, such as temperature and sediment size. Standards for different water bodies depend on their uses as described below. Standards protect both current and potential future water uses.

Acute standard: Protects against short term effects like serious illness or death.

Chronic standard: Protects against long term effects like cancer and organ damage.

Water Uses: Surface water has many beneficial uses. In Colorado, most identified uses fall into four categories: agriculture, aquatic life, recreation and water supply. Waters are classified into those categories to protect them from impairment.

Recreational: Water that is used for recreational activities where the ingestion of small quantities of water is likely to occur. Examples of activities include: swimming, rafting, kayaking, tubing, windsurfing, water-skiing, and water play by children.

Agricultural: These surface waters are used for irrigation of crops and which are not hazardous when used as drinking water for livestock.

Aquatic Life: These waters are can support aquatic life and the ecosystem. Aquatic life is life found in water, including bacteria, fish, rooted plants, insect larvae and other smaller organisms.

Water Supply: Surface waters that can be used for potable water supplies. After receiving standard treatment, these waters will meet Colorado drinking water regulations.