

76 **Glossary**

Term	Explanation
Adjudicated Areas	Where disputes over legal rights to groundwater have resulted in a court-issued ruling (known as an adjudication). Adjudications can cover an entire basin, a portion of a basin, or a group of basins.
Alluvial Fan	A gently sloping mass of sediment deposited by a stream that looks like an open fan when viewed from above. They often occur in arid or semiarid regions where a stream issues from a narrow canyon onto a plain or valley floor.
Alluvium	Clay, silt, sand, gravel, or other particulate material that have been deposited by a body of running water in a streambed, flood plain, delta, or at the base of a mountain.
Andesite	A fine-grained dark-colored igneous rock that has been erupted on the Earth's surface, and is more viscous or "sticky" compared to basalt. Cooled andesite lava flows typically consist of large, smooth-sided blocks up to several meters (~10 feet) in size. The edges of lava flow edges are steep and can be more than 100 m (300 ft) thick, consisting of piles of large angular blocks balancing precariously on one another.
Basalt	A dark-colored, fine-grained igneous rock that has been erupted on the Earth's surface, that typically form thin, extensive lava sheets that can travel long distances. Basalt is the least viscous or most "fluid" of the main lava types. It is considered the most primitive type of lava, with minimal alteration from the source mantle material beneath the tectonic plates.
Basin Prioritization	Classification of California's 515 groundwater basins and subbasins into priorities based primarily on the importance of groundwater to the area. The priority of basins and subbasins determines the schedule for completing GSPs and whether SGMA provisions apply in a given basin. Critical, High, and medium, priority basins must comply with SGMA.
Best Management Practices (BMPs)	Practices designed to help achieve sustainable groundwater management. BMPs are intended to be effective, practical, and based on best available science.
Block Faulting	A type of normal faulting where large normal faults break the Earth's crust into blocks as the region is pulled apart under extensional stress. Typically forms valleys, such as Death Valley in California.
Breccia	A coarse-grained rock of angular rock fragments that has been consolidated with mineral cement or fine-grained matrix.
Bulletin 118	A California Department of Water Resources (DWR) document outlining the locations and characteristics of groundwater basins in California.

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Term	Explanation
Confined Aquifer	A water bearing formation that is completely filled with groundwater and under pressure from overlying material that restricts movement of water.
Consolidated / Unconsolidated	Consolidation is any process where loose material becomes firm and coherent, such as cementation of sand into sandstone. Unconsolidated material is loose earth material such as volcanic ash or sand.
Critically Overdrafted	Basins and subbasins identified by DWR to be subject to conditions of critical overdraft. GSPs are due in 2020.
Dacite	A fine-grained light-colored igneous rock that has been erupted on the Earth's surface, with a mineral composition that makes dacite lava flows sluggish and thick. Typically, dacite lava flows are so viscous and thick that they form a dome over the eruption center at the end of an explosive eruption cycle. Eruptions of dacite magmas can be explosive.
Dune Sand	Sand piled up by the wind into a sand dune.
Eocene	An epoch within the Tertiary period that began 55.8 million years ago (Ma) and ended 33.8 Ma.
Glaciation	The formation of glaciers, a large mass of ice formed on land that can cause extensive erosion of surrounding rock. When glaciers melt, they can leave behind moraines or mounds of rock debris (glacial till). The last major period of glaciation in the western US was 18,000 years ago.
Graben	An elongate portion of the crust bound by faults on the long sides and displaced downward, such as rift valleys. They form in conditions where the Earth's crust is being pulled apart under extensional stress.
Groundwater Sustainability Agency (GSA)	One or more local agencies that implement the provisions of SGMA.
Groundwater Sustainability Plan (GSP)	A local plan proposed by a GSA and approved by the state.
Holocene	An epoch within the Quaternary that began 0.012 million years ago (Ma) and continues to the present.
Igneous	A rock that solidified from molten material such as lava or magma. One of the three major rock classes (igneous, sedimentary, metamorphic).
Measurable Objectives	Conditions linked to the sustainability goals of the GSP, to be achieved in the basin within 20 years.

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Term	Explanation
Metamorphic	A metamorphic rock formed from mineralogical, chemical, or structural changes of a pre-existing rock in response to changes in temperature, pressure or stress. This generally occurs if the rock has been moved deep into the Earth's crust, such as through long-term deposition of materials on top of the rock or faulting. One of the three major rock classes (igneous, sedimentary, metamorphic).
Miocene	An epoch within the Tertiary period that began 23 million years ago (Ma) and ended 5.3 Ma.
Normal Fault	A fracture in the Earth crust that forms when a region is under extensional stress (the region is being pulled apart). The fault dip is usually 45 to 90 degrees. Typically, one block or side of the fault is moving down relative to the other side.
Phytogenic Dune	Phytogenic dunes are common in modern day playas and form when wind-deposited silt and fine sand are trapped by scrub plants.
Playa	A playa is a dry, vegetation-free, flat area at the lowest part of an undrained desert basin.
Pleistocene	An epoch within the Quaternary that began 1.8 million years ago (Ma) and ended 0.012 Ma.
Pliocene	An epoch within the Tertiary period that began 5.3 million years ago (Ma) and ended 1.8 Ma.
Potentiometric Surface	The total head of groundwater, defined as the level at which groundwater would rise in a well. The water table is a type of potentiometric surface.
Pyroclastic Deposit/Rock	Pyroclastic rocks are composed of rock fragments from an explosive volcanic eruption or aerial expulsion from a volcanic vent, and may include ash, lapilli, bombs, blocks, and shattered country rock.
Quaternary	A period that starts after the end of the Tertiary that began 1.8 millions years ago (Ma) and continues in the present. Epochs or sub-periods within the Quaternary, from the oldest to most recent, includes the Pleistocene and Holocene.
Rhyolite (Tuff)	A light-colored igneous rock that has been erupted on the Earth's surface, with a mineral composition that typically erupts explosively and fragments into small pieces (pyroclasts). Consolidated rhyolite pyroclasts is called a rhyolite tuff. Rhyolite is typically pale colored and often light grey, tan, or pink.
Sedimentary	A sedimentary rock formed from the consolidation of sediment, such as sand (sandstone) or organic material (coal). One of the three major rock classes (igneous, sedimentary, metamorphic).
Sustainability Goals	Metrics established in the GSP planning process to ensure that a basin is operated within its sustainable yield.

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Term	Explanation
Sustainable Yield	The amount of water that can be extracted from a basin without causing problems to the groundwater basin.
Talus	A heap or mass of rock fragments lying at the base of a cliff or very steep, rocky slope, and formed by gravitational falling, rolling, or sliding.
Tertiary	A period in the geologic time scale that began 65.5 million years ago (Ma) and ended 1.8 Ma. The Tertiary includes several sub-periods or epochs, from the oldest to most recent: Paleocene, Eocene, Oligocene, Miocene, and Pliocene. The next period after the end of the Tertiary is the Quaternary.
Tuff	A rock of consolidated pyroclastic (fragmented rock erupted explosively) material.
Unconfined Aquifer	A water bearing formation partially filled with groundwater where the upper groundwater surface is free to fluctuate under atmospheric pressure.
Unconformity	A break in the geologic record, typically by erosion. Commonly recognized by a sudden jump or large gap in rock ages between deep older rocks and shallow young rocks.
Undesirable Results	The problems that SGMA strives to solve or prevent.
Volcanic Ash	Fine pyroclastic material (material ejected from a volcanic eruption) smaller than 2 mm in diameter. The term usually refers to unconsolidated material. Consolidated volcanic ash is called a tuff.
Water Budget	An estimated accounting of all the water (surface and groundwater) that flows into and out of a basin.

⁷⁷ Glossary references include King (1994); USGS (2009b); USGS (2009a); USGS (n.d.d); USGS
⁷⁸ (n.d.a); USGS (n.d.c); USGS (n.d.b); Bates and Jackson (1984); Francis and Oppenheimer (2004);
⁷⁹ USGS (2007); USGS (n.d.e).