Groundwater Dependent Ecosystems

Sustainable Groundwater Management Act (SGMA)

- SGMA requires local agencies to develop groundwater sustainability plans (GSPs) that consider the impacts of groundwater use on a variety of beneficial uses and users including people, businesses, and the environment.
- In addition to balancing these multiple benefits, SGMA includes specific requirements to identify and consider impacts to groundwater dependent ecosystems (GDEs).

Terrestrial Vegetation

Groundwater dependent plants require shallow groundwater so their roots can access water. If groundwater levels drop significantly, plants can lose access to groundwater and die. If groundwater levels become inaccessible to native vegetation, the new groundwater conditions may favor opportunistic invasive plants that displace and degrade natural habitats.

Springs & Seeps

Groundwater from springs and seeps can be colder than surface water providing unique habitat conditions for spawning salmon.

Rivers & Streams

Excessive groundwater pumping can drop groundwater levels below the elevation of the riverbed, pulling surface flows away from rivers into the ground, impacting aquatic ecosystems.

Groundwater Recharge

Groundwater recharge will be an important tool for GSAs like ours to use for achieving long term groundwater sustainability.

Recharging aquifers is important for domestic water use and providing water for Groundwater Dependent Ecosystems.

SMGWA Guiding Principles

- Beyond minimum sustainability thresholds and objectives described in the GSP, the Santa Margarita Groundwater Management Agency will examine possibilities to recover/restore the Basin's aquifers and restore tributary base flows to the best extent possible.

Nature Conservancy

Understanding and Managing Groundwater Dependent Ecosystems

For more information about Groundwater Dependent Ecosystems under the Sustainable Groundwater Management Act.

Groundwaterresourcehub.org