The Pajaro Valley Groundwater Basin is in long-term overdraft because of the over-pumping that occurs valley wide. The effects of overdrafting our groundwater basin are groundwater storage depletion, groundwater quality degradation – including seawater intrusion – and increased pumping costs. Seawater intrusion in the Pajaro Valley Basin has increased sevenfold since 1951 as an increase in agricultural acreage, a switch to more water-intensive crops and an urban population growth have driven the demand for water.

College Lake, about 1 mile northeast of the Watsonville city limits, is a naturally occurring seasonal lake fed by Green Valley, Casserly and Hughes Creeks, draining approximately 11,000 acres of range, rural residential and crop lands.

A new pipeline from the lake to the Coastal Distribution System (CDS) would redistribute water from College Lake for irrigation purposes, reducing groundwater pumping to balance the basin and reducing overdraft in-lieu recharge, while maintaining stream flow for productive fish habitat. The pipeline is recommended under the Basin Management Plan (BMP), developed by stakeholders of the Pajaro Valley.

Historically, the College Lake Reclamation District drains the lake in spring to allow row crops to be farmed on the lake bottom in the summer and the pumping continues intermittently until late fall to preserve crops. The lake outflows downstream to Salsipuedes Creek in the winter. A low flashboard dam, operated by the College Lake Reclamation District, on the south side of the lake causes the inundation of about 234 acres of basin. The storage capacity of the basin is about 1,400 acre-feet (AF) of water.

The lake is a valuable habitat resource for steelhead and abundant waterfowl. One of the creeks feeding the lake – Casserly Creek – as well as two of its tributaries, Bates Creek and Gaffey Creek, support south-central California Coast steelhead.
ABOUT THE INLAND PIPELINE TO COASTAL DISTRIBUTION SYSTEM

- Project will allow water to be captured, stored and delivered for irrigation in-lieu recharge
- During the summer, water will be sent through a new pipeline from College Lake to either the Recycled Water Facility storage tank to supply the CDS or directly into the CDS
- Annual water yield put to beneficial use will be approximately 2,400 AF, including the volume of the lake of 2,000 AF plus the estimated inflow of 700 AF during the irrigation season, minus 300 AF outflow for downstream steelhead habitat
- A new adjustable weir will be installed downstream of the existing low dam, raising the lake outlet elevation by 2.3 feet to 62.5 feet
- Lake storage capacity will be increased to approximately 2,000 AF of water, growing the total inundated area to 272 acres
- Project will include construction of a screen inlet structure, a filter supply pump station, a sand filtration and disinfection system and a booster pump station
- Improved foraging and rearing habitat for steelhead
- Opportunity for adaptive management for waterfowl habitat

ABOUT THE BASIN MANAGEMENT PLAN

Groundwater, the primary source for water in the Pajaro Valley, has been over-drafted from the aquifers beneath the valley during the past several decades, leading to falling groundwater levels and seawater intrusion within the Basin’s aquifers, threatening the long-term viability of the Pajaro Valley’s groundwater supply. The Basin Management Plan (BMP) was developed with the help of Pajaro Valley stakeholders to help ensure the future of local water resources and the agriculture economy. It includes three main components comprised of seven programs and projects, to address groundwater over-pumping issues in the Pajaro Valley.

ABOUT THE PAJARO VALLEY WATER MANAGEMENT AGENCY

The Pajaro Valley Water Management Agency (PV Water) is a state-chartered water management district formed to efficiently and economically manage existing and supplemental water supplies in order to prevent further increase in, and to accomplish continuing reduction of, long-term overdraft. The agency also works to provide and ensure sufficient water supplies for present and future anticipated needs within its boundaries, generally the greater coastal Pajaro Valley.

For more information, visit pvwater.org.