

Fillmore and Piru Basins GSA
Special Board of Directors Meeting Thursday
May 6, 2021
5:00 p.m.

- In addition to acknowledging GDEs in the Surface Water depletion sustainability indicator, the riparian vegetation along the Santa Clara River are also impacted by groundwater elevations and need consideration when establishing sustainable management criteria (minimum thresholds and measurable objectives) for the Groundwater Elevation sustainability indicator. Recent research out of UCSB has found that depth to groundwater needs to remain within 12 feet (4 meters) beneath riparian woodlands during drought periods. During the last 2012-2016 drought, when depth to groundwater exceeded 24 feet (8 meters), the riparian woodlands (e.g., cottonwoods, willows) experienced extensive mortality during the drought. **TNC recommends that these groundwater thresholds be considered when establishing Minimum Thresholds (MTs) and Measurable Objectives (MOs) for the Groundwater Elevation Sustainability Indicator.**
- Recovery efforts for the ~500 acres of riparian woodland die-off at Cienega/Fish Hatchery area (including Nature Conservancy property), which was caused by increased pumping in the basin during the 2012-2016 drought, depends upon depth-to-groundwater levels returning to 10 feet (2011) to support the recruitment and establishment of new seedlings once a flood event occurs. When groundwater levels are too deep to support native riparian woodlands, such as willows and cottonwoods, the ecosystem can shift to an Arundo-dominated system that has very little habitat value and results in excessive evapotranspiration water losses to the basin. Furthermore, habitat containing Arundo burns hotter than native habitat, leading to more intense and complete wildfires. Arundo-infested riparian habitat appears to act as a fire corridor with the potential to convey fire into upland areas. **TNC recommends that restoration efforts should seek to fully eradicate Arundo (multi-year treatments) and in addition to Arundo removal efforts that groundwater elevations be restored to ~10 feet below groundwater surface so that native habitat can reestablish.**
- Native riparian woodlands along the Santa Clara River support important threatened and endangered species, such as Least Bells Vireo and Southwestern Willow Flycatcher, that are protected under the federal and state Endangered Species Acts and actively undergoing recovery efforts by state and federal agencies such as the US Army Corps of Engineers, US Fish & Wildlife, and California Department of Fish & Wildlife. Failing to prevent groundwater conditions in the basin from causing adverse impacts to GDEs, such as widespread riparian woodland mortality that provides critical habitat for these listed species (as we witnessed at Cienega/Fish Hatchery), is not only a “significant and unreasonable” impact under SGMA, but also subject to other state and federal laws. **TNC recommends that special consideration be made to GDEs containing habitat for critical status and listed species.**