

## Bryan Bondy

---

**From:** Upper Ventura River Groundwater Agency <sward@uvrgroundwater.org>  
**Sent:** Friday, October 8, 2021 4:24 PM  
**To:** Summer Ward  
**Subject:** GSP Comment/Question

### GSP Comment/Question Form

**Last Name:** Pitterle  
**First Name:** Benjamin  
**Email Address:** ben@sbck.org  
**Confirm Email Address:** ben@sbck.org  
**Phone:**  
**Mailing Address:** Santa Barbara Channelkeeper  
**GSP Section for Comment/Question:** 4.4 Chronic Downning of Groundwater Levels

**GSP Comment/Question:** Chronic Lowering of Groundwater Levels The GSP used the lowest recorded historical groundwater level outlier as the groundwater level and storage minimum threshold. The stated purpose of establishing this threshold is to prevent significant and unreasonable effects that include causing municipal, domestic, or agricultural beneficial users to be unable to meet basic water supply needs with groundwater or alternative supplies, or permanent or prolonged impacts to riparian GDEs. We note that the ability to pump groundwater from the Robles reach is routinely disrupted during drought for many water rights holders in the basin including the existing municipal water districts. These purveyors rely significantly if not entirely during drought years on alternative supply from Lake Casitas. Lake Casitas is currently critically reduced in capacity. In light of these circumstances and the risk of increased frequency of drought due to climate change, we find the selection of the lowest recorded historical groundwater level in appropriate as a minimum threshold to prevent undesirable effects to water supplies related to chronic lowering of groundwater levels.

**Would you like to join the UVRGA Official Interested Parties List?:** Yes

**Beneficial Uses:**

This email was built and sent using [Visual Form Builder](#).

## Bryan Bondy

---

**From:** Upper Ventura River Groundwater Agency <sward@uvrgroundwater.org>  
**Sent:** Friday, October 8, 2021 4:21 PM  
**To:** Summer Ward  
**Subject:** GSP Comment/Question

### GSP Comment/Question Form

**Last Name:** Pitterle

**First Name:** Benjamin

**Email Address:** ben@sbck.org

**Confirm Email Address:** ben@sbck.org

**Phone:**

**Mailing Address:** Santa Barbara Channelkeeper  
714 Bond Avenue  
Santa Barbara, CA 93103

**GSP Section for  
Comment/Question:** 4.9 Depletions of Interconnected Service Water

**GSP Comment/Question:** Foster Park Flow Protocols The "Foster Park Flow Protocols" are not based on the best available science. Santa Barbara Channelkeeper negotiated the protocols with the City of Ventura as a means to provide "life support" for the lower reaches until a final outcome is reached with the Ventura River Watershed Adjudication. The State Water Board's groundwater and surface water model was not available when the protocols were developed. The California Department of Fish and Wildlife's instream flow recommendations for the Ventura River were not available when the protocols were developed. Based on current implementation of the protocols in 2021, extractions at Foster Park continued to take place even though river flows in the reach dropped below 2 CFS for prolonged periods of time. 2 CFS was identified by the City of Ventura's own 2013 Hydrology Study as a critical threshold below which is detrimental to critical habitat conditions. The "Foster Park Flow Protocols" do not have the endorsement of State and Federal resource agencies. For these reasons, the GSP should not rely on long-term implementation of the "Foster Park Flow Protocols" to ensure that undesirable results do not occur.

**Would you like to join the UVRGA  
Official Interested Parties List?:**

Yes

**Beneficial Uses:**

This email was built and sent using [Visual Form Builder](#).

## Bryan Bondy

---

**From:** Upper Ventura River Groundwater Agency <sward@uvrgroundwater.org>  
**Sent:** Friday, October 8, 2021 4:13 PM  
**To:** Summer Ward  
**Subject:** GSP Comment/Question

### GSP Comment/Question Form

**Last Name:** Pitterle

**First Name:** Benjamin

**Email Address:** ben@sbck.org

**Confirm Email Address:** ben@sbck.org

**Phone:**

**Mailing Address:** Santa Barbara Channelkeeper  
714 Bond Avenue  
Santa Barbara, CA 93103  
United States of America

**GSP Section for  
Comment/Question:** 4.9 Depletions of Interconnected Service Water

**GSP Comment/Question:** GDE Analysis The GSP has not adequately demonstrated that permanent and prolonged impacts to GDEs have not already occurred in the Robles reach due to historic groundwater extractions. Rather, the GSP essentially asserts that the Robles reach is not a GDE because certain riparian vegetation communities were not identified in the GSA's recent analysis. Significant groundwater extractions, however, have been occurring for many decades. Such extractions and any related depletions of surface water would likely have significant impact on any riparian vegetation that may have been present during the period analyzed during GSP development. Channelkeeper echoes comments submitted by the Surfrider Foundation, Ventura Chapter as they related to the GDE analysis included in the draft GSP. These comments are reiterated below: "The Riparian Groundwater Dependent Ecosystems Assessment Report characterizes the Robles reach as a "Losing reach with generally disconnected groundwater- surface water." This categorization eliminates the majority of this Groundwater Dependent Ecosystem from consideration under SGMA by assuming that it is

“disconnected” and thus has too great a depth to groundwater to support riparian habitat. Other reaches are similarly dismissed. The analysis presented relies heavily on the Nature Conservancy “Natural Communities (NC) Dataset,” using vegetation communities to eliminate GDE polygons from the Upper Ventura River Groundwater Basin. The NC dataset is a statewide geographic computer database that maps vegetation types in all potential GDEs throughout the State of California. The large geographic scope of this map does not accurately represent current on-the-ground conditions, and more robust ground truthing should be undertaken. Even the aerial photos presented tell a different story than is acknowledged in the narrative. Unfortunately, the UVRGSA analysis does not fully implement the Best Practices for using the NC Dataset guidance provided by the Nature Conservancy, which presents six best practices for using local groundwater data to confirm whether mapped features in the NC dataset are supported by groundwater. (Best Practices for using the NC Dataset, TNC July 2019) According to this guidance: While depth-to-groundwater levels within 30 feet of the land surface are generally accepted as being a proxy for confirming that polygons in the NC dataset are supported by groundwater, it is highly advised that fluctuations in the groundwater regime be characterized to understand the seasonal and interannual groundwater variability in GDEs. (see Best Practice #2.) one of the key factors to consider when mapping GDEs is to contour depth-to-groundwater in the aquifer that is supporting the ecosystem (see Best Practice #5). The GIS Spatial Analysis of Maximum Rooting Depth and Groundwater Level presented in the Riparian GDE document does not present such contour depth-to-groundwater mapping or account for temporal variability. Furthermore, TNC guidance acknowledges that; In many situations, the hydrologic connection of NC dataset polygons will not initially be clearly understood if site-specific groundwater monitoring data are not available. If sufficient data are not available in time for the 2020/2022 plan, The Nature Conservancy strongly advises that questionable polygons from the NC dataset be included in the GSP until data gaps are reconciled in the monitoring network. Erring on the side of caution will help minimize inadvertent impacts to GDEs as a result of groundwater use and management actions during SGMA implementation. Many of California’s GDEs have adapted to dealing with intermittent periods of water stress, however if these groundwater conditions are prolonged, adverse impacts to GDEs can result. Therefore, it is likely that the NC vegetation mapping is representative of conditions in which groundwater levels have been frequently and repeatedly pumped beyond the reach of riparian tree roots. Meanwhile, field observations over the past few wetter years show that the riparian vegetation has rebounded, illustrating how the ecosystem responds with the variation in water years. Receding groundwater levels and corresponding loss of surface flows due to pumping during the current drought will likely reverse this recent trend, with the potential loss of the many young sycamores and other riparian vegetation. Determining Groundwater/Surface water interactions TNC guidance for determining GDEs recognizes the importance of surface flows; In addition, SGMA requires that significant and undesirable adverse impacts to beneficial users of surface water be avoided. Beneficial users of surface water include environmental users such as plants or animals, which therefore must be considered when developing minimum thresholds for depletions of interconnected surface water. The Model Results and SMC Implications Presentation (March 25, 2021) reaches the conclusion that: • Basin water budget is dominated by streamflow percolation into the Basin and groundwater discharge to Ventura River • GW pumping averages only ~10% of the GW Budget As low as 4% in wet years<sup>[SEP]</sup> Up to 31% in dry years • Basin GW levels will be lower in dry seasons, but Basin will still re-fill in normal to wet years The conclusion that there is no impact from pumping based on the fact that the basin rapidly refills in the wet season points to the likelihood that the surface water is in fact “connected” to groundwater during these periods. Moreover, the fact that pumping represents up to 31% of

the budget in critical dry years raises the question of how groundwater extractions impact surface flows and groundwater levels. The Model Results identify four areas of concentrated pumping, three of which directly impact groundwater levels in the “Robles Reach.” This reach is the area with the most storage in the basin, and should be considered as the “primary sub-basin” for water supply. The three areas of concentrated pumping in this reach are likely to affect conditions throughout the basin. The analyses and graphs presented in the Model Results do not provide information on the spatial and temporal surface flow conditions as they relate to groundwater levels. Because the downstream reaches are largely dependent on surface and groundwater flows out of this sub-basin, further analysis is needed to more clearly define the relationship between groundwater levels and surface flows. The analyses should, at a minimum, determine threshold groundwater levels at which surface flows are diminished or eliminated, both in the reach being monitored and downstream. This relationship was established decades ago in the Ventura River Conjunctive Use Report (1978) which states that; Flows in the live stretch are affected by both the rate of recharge of the upper part of the Ventura River groundwater basin and by the rate of groundwater extraction from wells in the river. Investigations published in the Conjunctive Use Report identified groundwater elevation thresholds in the upper basin at which flows in the live reach will cease; when the water level in well 4N23W16C4 falls below Elevation 495, surface flow in much of the live stretch stops although some pools remain. A flow of 1 cfs or more in the live stretch corresponds with a water level in this well of greater than about Elevation 507. Groundwater levels also affect surface flows in the Robles Reach, which frequently dries up despite constant inflows. Unfortunately, the Aquatic GDE Impact Analysis is quick to dismiss the effect of groundwater elevation on surface flows; No monitoring is recommended at either of the critical riffle aquatic GDEs or the Robles Habitat Area, as impacts from pumping in these areas were determined to be minimal or non-existent. This conclusion is inconsistent with the guidance provided in Monitoring Networks and Identification of Data Gaps BMP (DWR 2016) which states: 23 CCR §354.34(c)(6): Depletions of Interconnected Surface Water. Monitor surface water and groundwater, where interconnected surface water conditions exist, to characterize the spatial and temporal exchanges between surface water and groundwater, and to calibrate and apply the tools and methods necessary to calculate depletions of surface water caused by groundwater extractions. The monitoring network shall be able to characterize the following: (A) Flow conditions including surface water discharge, surface water head, and baseflow contribution. (B) Identifying the approximate date and location where ephemeral or intermittent flowing streams and rivers cease to flow, if applicable. (C) Temporal change in conditions due to variations in stream discharge and regional groundwater extraction. (D) Other factors that may be necessary to identify adverse impacts on beneficial uses of the surface water. DWR guidance provides detailed information on developing a monitoring network to accurately assess these concerns.” Confluence Area GDE The Draft GSP accurately identifies the Confluence Area as a GDE. The GSP, however, falls short in its determination that more years of study are necessary to determine if surface flow depletions caused by upstream pumping are significant and unreasonable. The confluence area is critical habitat for federally endangered Southern California steelhead trout. Steelhead have been observed over-summering in pools within this reach by state and local resource agencies. Surface water habitat and water quality conditions degrade significantly (to the point of complete dewatering) in this reach due to depletions of interconnected groundwater in the Robles reaches. The numeric model utilized to determine the effect of pumping on surface flows in the Confluence Area is not based on the best available science, which includes the State Water Resource Control Board’s Groundwater and Surface Water model, currently well under development. “Direct” Depletions of Surface Water The GSP defines the

terms “direct” and “indirect” depletion with regard to depletion of interconnected surface waters. Direct depletion is defined as surface water depletion caused by a cone of depression from pumping wells near the Ventura River. The GSP, however, then continues to identify only the Foster Park Well field as a facility causing direct depletion. Multiple, major water extraction facilities are located in the Robles reach of the Upper Ventura River Basin. These facilities utilize wells located in direct proximity of the Ventura River. Pumping from these wells has the potential to create a cone of depression that could deplete surface flows. The Robles Reach historically receives perennial inflows from the upper Ventura River and its Matilija Creek and North Fork Matilija Creek tributaries. These inflows persist even during prolonged periods of drought. The GSP has not provided adequate evidence to support its assertion that most groundwater in the basin “naturally” drains out of the basin at a rate greater than inflows. In any case, pumping from wells located within the basin and within immediate proximity of the Ventura River clearly have the capacity to produce cone of depression effects that can reduce and eliminate surface flows earlier than may naturally occur absent pumping. Such reduction in flows could have significant effects on riparian habitat and aquatic communities within the Robles Reach and downstream.

**Would you like to join the UVRGA  
Official Interested Parties List?:** Yes

**Beneficial Uses:**

This email was built and sent using [Visual Form Builder](#).