Owens Valley Groundwater Sustainability Plan: Response to Comments on Public Review Draft

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OWENS VALLEY GROUNDWATER AUTHORITY

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The Draft OVGA Groundwater Sustainability Plan was published on September 23, 2021 and circulated for review and comment by the public and interested parties, agencies, and organizations until November 8, 2021. Verbal comments received at public videoconference meetings held on October 6, October 13 hosted by the OVGA and October 20 hosted by Tri-Valley Groundwater Management District during the public comment period were recorded and written responses to those comments are included in this Appendix. Comments were reviewed and discussed by the OVGA Board of Directors on November 18, 2021 and draft response to comments were included in the Final GSP considered by the OVGA on December 9, 2021.

Written comments were received from seven government agencies or environmental groups and from 11 individuals. General comments and responses were prepared to address similar concerns or comments submitted by multiple commenters. The general comments aggregate and paraphrase concepts from individual comments. Individual responses to each comment were prepared including reference to the general comments where appropriate and inserted into each of the submitted letters or email. Comments received are organized in this appendix alphabetically by author.

The OVGA allowed for several formats to submit comments including written comments, email, and submissions via the OVGA website. As a result the format of the comments varied widely. To facilitate preparing responses to each individual comment, the letters or emails were converted to word processing software and in the process slight changes to the original formatting of the document occurred. All text and comments were preserved, however, and only the formatting varied. Scanned versions of the comments in their original format as received are included at the end of this appendix. Responses to comments are in red text.

Appendix 6: Table of Contents

Responses to General Comments

General Comment #1: Several commenters provided typographical, grammar, spelling corrections, or suggested minor wording changes to improve sentence clarity. Suggested changes were incorporated into the GSP where appropriate.

General Comment #2: Multiple comments related to the presence of large areas not subject to SGMA within the Basin and coordination of the GSP implementation with Los Angeles Department of Water and Power (LADWP).

For the GSP to succeed in managing the Basin sustainably, it is important that the GSP work in coordination with the Inyo/Los Angeles Long-Term Water Agreement (LTWA). SGMA expressly exempts lands and pumping managed under the LTWA. Any groundwater basin or portion of a groundwater basin in Inyo County managed pursuant to the terms of the stipulated judgment in City of Los Angeles v. Board of Supervisors of the County of Inyo, et al. (Inyo County Case No. 12908) shall be treated as an adjudicated area pursuant to this section CWC §10720.8 (c).

The OVGA is not party to the LTWA and cannot manage or enforce its provisions but can coordinate with the parties to evaluate the effects of LADWP pumping and ensure the lands subject to the GSP are not adversely affected by LADWP activities. The level of coordination will be determined on a case by case basis. This GSP contemplates that the OVGA will coordinate with Inyo County and LADWP in avoiding or mitigating any such effects on GSP lands, and/or with the LTWA parties to help enforce relevant LTWA provisions that protect the environment and private well owners in a manner consistent with this GSP.

Two provisions of the LTWA may apply to the GSP area. The overall goal of the LTWA is:

> *The overall goal of managing the water resources within Inyo County is to avoid certain described decreases and changes in vegetation and to cause no significant effect on the environment which cannot be acceptably mitigated while providing a reliable supply of water for export to Los Angeles and for use in Inyo County.*

The provision to cause no significant effect on the environment which cannot be acceptably mitigated (as defined by CEQA) could apply to GDE on GSP lands or to private wells. With regard to private wells, Section III.G of the LTWA provides:

> *New* [LADWP] *wells will be sited and groundwater pumping shall be managed to avoid causing significant adverse effects on water quality or water levels in non-Department-owned wells in the Owens Valley that are attributable to groundwater pumping by the Department. Any such significant adverse effects shall be promptly mitigated by the Department* [LADWP].

This LTWA provision does not preclude private well owners from pursuing other legal remedies, including appealing to the OVGA to investigate if basin sustainability is being affected.

Additional text contained in this response describing these applications of LTWA provisions to lands subject to SGMA was added to the GSP (Section 2.1.3.1.6)

Finally, the properties owned by Los Angeles within the Basin are not subject to SGMA only to the extent that Los Angeles and its Department of Water and Power conform to the LTWA (See Wat. Code, §10720.8(a)). If Los Angeles' or LADWP's management of such properties is found not to be in conformance with the LTWA, then those properties may be subject to SGMA.

General Comment #3: Adjudicated vs nonadjudicated terminology

The GSP used the term adjudicated lands in the Basin for lands owned by LADWP in Inyo County and managed pursuant to the Water Agreement. Similarly, DWR resource maps depict LADWP lands as "adjudicated" (https://sgma.water.ca.gov/webgis/index.jsp?appid=adjbasin). The GSP is required to address the adjudicated lands if they are relevant to land use in the n the Basin (Section 2.1.3.1.6). These lands are referred to adjudicated for the purposes of this GSP consistent with SGMA. This does not imply that the entire Owens Valley Groundwater Basin has been fully adjudicated, and text in the Final GSP (Section 2.1) was added to make that clear. Because approximately 7000 acres is owned by LADWP in Mono County are not managed according to the LTWA, simply referring to LADWP lands is not equivalent to the lands in the Basin treated as adjudicated. All other lands within the Basin were referenced by DWR as nonadjudicated in the draft GSP. However, Federal and State-owned lands, and Tribal Reservation land are also exempt from SGMA. Clarifying text was added and references have been revised throughout the Final GSP to refer to the GSP area (lands subject to SGMA or potentially subject to SGMA) adjudicated lands (LADWP lands in Inyo County) or LADWP lands (all LADWP owned lands in Inyo and Mono Counties).

General Comment #4: Fish Slough Northeast Spring criteria explanation and thresholds to protect endangered species dependent on the springs.

The values for the spring flow Minimum Threshold and Management Objective were provided by the California Department of Fish and Wildlife staff and scientists based on direct field experience managing the spring outflow for the benefit of endangered species. The rationale is based on first-hand experience and observation that flows approximately at the Management Objective value were sufficient in the past to supply uses downstream. When flows approach the Minimum Threshold, field scientists had difficulty in managing the flow effectively for the benefit of endangered species habitat.

General Comment #5: Data gaps in Tri-Valley Management Area and adequacy of available data to characterize groundwater conditions or pumping effects.

Sufficient data exits to establish that a regional, long-term decline in groundwater levels exists in the Tri-Valley management Area. Additional data is necessary to determine the local effects of these declines and to guide potential management actions if these declines create undesirable results. Specific data gaps are discussed in Appendix 3. The identification of data gaps alone does not invalidate the general conclusions about groundwater conditions and processes within the Tri-Valley Management Area.

The OVGA made repeated public requests for water level and groundwater extraction data for the Tri-Valley and Fish Slough area. Ultimately, reliable, long-term data from four monitoring wells in the Benton area, two wells in Hammil Valley, seven wells in Chalfant Valley, and four wells in Fish Slough (a total of 17 monitoring wells) were obtained from publicly available sources, LADWP, or private land owners. These wells are widely separated geographically, and all show similar and remarkably consistent trends of declining water levels over several decade regardless of seasonal or wet/dry cycles (see the linear regression results in Figure 2-18 of the GSP). The water level declines are consistent with spring flow measurements in Fish Slough that also exhibit steady declines in discharge. Collectively, the data suggest a similar overriding factor(s) is/are affecting water levels over a large region. The observed, chronic declines in groundwater levels mean that outflows consistently exceed inflows. Pumping and reduced recharge due to wet-dry precipitation patterns or longer-term climate change are the most probable primary regional drivers of the aquifer system that could cause the observed declines.

The GSP relied on satellite imagery to estimate irrigated acreage in Tri-Valley (about 3,500 acres), most in Hammil Valley. Based on alfalfa duty of 3-5 acre-feet/year (AFY), approximately 10.5-17.5 thousand AFY of pumping for agriculture is estimated. The Well Vulnerability Analysis (Appendix 11) identified approximately 175 domestic wells in the management area. Assuming *de minimis* use is about 2 AFY, nonagricultural pumping is approximately 350 AFY. Even though these values are approximate, groundwater pumping in Tri-Valley for agriculture comprises more than 97% of total pumping or approximately 33-50 times greater than domestic or household use. The uncertainty in the pumping estimates represents a data gap, but the uncertainty is not large enough to alter the fundamental conclusion.

Six of the 17 wells which were chosen as representative monitoring locations for the GSP (Figure 2-16). The data record includes 20 years of data from the Fish Slough, Benton, and Hammil wells and 30 years of data from the Chalfant wells. Water levels in all representative wells in the Tri-Valley Management Area exhibit steadily declining water levels over several decades through repeated wet and dry periods (Figures 2-18a and b). Since 2000, measured water level declines in Benton are approximately 10 feet, approximately 35-45 feet in Hammil, 9 feet in Chalfant, and 1-4 feet in Fish Slough. The recorded water-level decline diminishes with distance from Hammil Valley consistent with the expected development of a cone of depression centered on the area with the heaviest agricultural pumping.

Other potential causes of groundwater level declines were considered during GSP preparation. If LADWP pumping in northern Owens Valley near Laws was the primary cause of the declines in the Tri-Valley area, then the groundwater levels in Chalfant would respond in a similar fashion. Groundwater levels in Laws fluctuate significantly with wet/dry cycles, managed recharge, and local pumping. Chalfant water levels instead show chronic declines without recovery similar to Fish Slough, Hammil Valley and Benton Valley(Figures 2-18 to 2-20). If significant regional climate change was the primary factor, similar stress of consistently lowering groundwater levels on top of wet/dry cycles would be measured in the other portions of the Basin. This is not the case; trends in most wells in the remainder of the basin are stable. Climate change resulting in reduced recharge could manifest as a declining water level trend, but the

effects of climate change would not be expected to exceed year to year weather variability, and cause nearly perfectly linear water level declines exhibited by wells in Tri-Valley. A continuous pumping overdraft however could cause the observed water level trends.

The existing water level monitoring data in the Tri-Valley do not fully characterize every location in each of the valleys which prevents the construction of accurate groundwater contour maps for this portion of the Basin. Additional water level data are needed to better assess the variability of water levels spatially are more accurate pumping amounts to refine the estimates in the GSP. These data gaps are evaluated and discussed fully in Appendix 3. The Tri-Valley Groundwater Management District is charged with monitoring groundwater levels within their boundary. No groundwater level or pumping information was provided to assist with preparing the GSP. The OVGA welcomes any data the District may possess. Text clarifying the state of the hydrologic data, knowledge about the Tri-Valley area, and existing data gaps was added to the Final GSP in Section 2.2.2.1.

General Comment #6: Several commenters raised questions about the hydrologic connection between Tri-Valley area (Benton, Hammil and Chalfant valleys) and Fish Slough.

Multiple lines of evidence indicate a hydrogeologic connection exists between Tri-Valley and Fish-Slough. The surface drainage area of Fish Slough is far too small to generate observed spring discharge and runoff volumes given annual precipitation rates in the area (Jayko and Fatooh, 2010). Therefore, water discharging from Fish Slough must be sourced from other locations. Due to the physics of groundwater flow, groundwater elevations in the source area must be greater than groundwater elevations in Fish Slough, which excludes areas to the south of Fish Slough as potential sources. Although observed groundwater elevations in Round Valley to the west are sufficiently high to be a potential source of Fish Slough discharge, groundwater elevation trends in that portion of the basin do not show similar chronic declines as would be expected if it was a significant source and north-south trending fault zones likely intercept and limit groundwater flow from the west. Therefore, the primary source area for Fish Slough is most likely located to the north and/or the east, which coincides with Tri-Valley.

Geologic conditions indicate a hydrogeologic connection between Fish Slough and Tri-Valley. Tri-Valley is a sedimentary basin filled with alluvial deposits that readily stores and transmits water due to interconnected pore spaces. The axis of this deep sedimentary basin runs from the northwest in the Hammil Valley area to the southeast towards Fish Slough. Bishop Tuff was deposited on top of alluvial sediments that were present at the surface at the time of the eruption (Stevens et al., 2013) providing a likely groundwater conduit from Tri-Valley to Fish Slough. The lithology surrounding Fish Slough within the potential source area (and outside of Tri-Valley) is primarily welded volcanic ash flow deposits (Bishop Tuff), which have a small percentage of interconnected pore space. As a result, these volcanic ash deposits do not store and transmit water as readily. Tectonic activity such as faulting can create localized zones with increased permeability that allow for groundwater flow. The Fish Slough fault system extends north from Fish Slough and into Hammil Valley, potentially creating a preferential pathway along and roughly parallel to the faults for groundwater to flow from Tri-Valley into Fish

Slough. Finally, a bedrock block in the southwest portion of the management area beneath Chalfant Valley and Laws is present at relatively shallow depth and probably acts as a barrier to regional north-south groundwater flow (Hollett, 1991). The geologic structures of porous alluvium under tuff, north-south trending faults, and shallow bedrock act in concert to direct regional groundwater flow from Tri-Valley to Fish Slough.

Studies of groundwater geochemistry also indicate a Tri-Valley connection to Fish Slough. Zdon et al. (2019) concluded that water discharged in Fish slough is a mixture sourced from the northeast (Tri-Valley), north (Benton Hot Springs and Adobe Valley) and northwest (Volcanic Tablelands) based on geochemical data. Adobe Valley is a less likely source area because of intervening bedrock between the valley and Fish Slough, but a connection cannot be ruled out. The authors note that the Fish Slough Northeast Spring shows the strongest geochemical signature for Tri-Valley area waters, whereas the other springs were more of a mixture of all sources. The source areas identified are consistent with those expected from hydrogeologic conditions present in the basin.

Finally, groundwater level data also support the Tri-Valley connection to Fish Slough. Groundwater information is sparse for Adobe Valley to the north but the available data indicate long-term water level declines on the order of 0 - 0.3 ft/yr (SGMA data viewer). These rates are lower than the 0.5 - 1.9 ft/yr declines observed in the Tri-Valley area and indicate that water level declines in Tri-Valley are a more significant contributor to the water level declines observed in Fish Slough. The differences in rates of decline between Fish Slough and Tri-Valley can be explained by 1) change in aquifer conditions and 2) distance from pumping centers. The Tri-Valley aquifer system is primarily unconfined and driven by elevation gradients, whereas the Fish Slough Aquifer system is primarily confined and driven by pressure gradients. Since drawdown is a function of time and distance from pumping, the fact that Fish Slough is located further from the pumping centered in Tri-Valley means that drawdown is expected to be lower for the same time period compared to wells located within Tri-Valley.

Explanation contained in this response was added to the GSP Section 2.2.1.6, Hydrologeologic Framework for clarification.

Additional Reference:

Stevens, C. H., Stone, P., & Blakely, R. J. (2013). Structural Evolution of the East Sierra Valley System (Owens Valley and Vicinity), California: A Geologic and Geophysical Synthesis. *Geosciences*, *3*(2), 176-15.

Dr. Holly Alpert

OVGA Public Review Draft Comments

Note: Dr. Alpert submitted comments inserted into the pdf of the Public Review Draft GSP. For brevity, the entire draft GSP is not reproduced here. Comments were extracted from the submitted pdf.

Many of the comments included typographical or grammatical corrections.

Response: See General Comment #1.

ES1: An overall comment is that it's sometimes unclear where the non-adjudicated portion of the basin is being discussed vs. the entire basin. I might suggest qualifying all mentions of the non-adjudicated portion as GSP, just so it's very clear.

Response: see General Comment # 2: The GSP only applies to a portion of the Basin but the hydrogeological conceptual model and water balance included the entire basin. Clarifying text was added at several locations in the Final GSP.

ES 1.3: RE estimated cost of $436,665. Seems awfully low, even after seeing the breakdown.

Response: This is the best estimate based on staff/contractor hours and current rates to complete the Management Actions and administrative tasks included in the plan and the estimated cost of groundwater model development (approximately $310,775).

ES 2.1 But will LA work with OVGA??

Response: See General Comment # 2

ES 2.2.3: This section is clearly written by a different author from the previous sections and in general is not as clear. Suggest giving a heavy edit.

Response: See General Comment #1.

Best practices would suggest using more than one climate model – an ensemble.

Response: This scenario was recommended by DWR and since it assumes no actions will be implemented to alter CO_2 emissions, it is the most conservative or approximately worst case scenario.

E S 3.4.1 The January 1, 2015 water level was chosen as Management Objective. Why this date? Seems arbitrary. Should be based on some hydrologic milestone rather than a political milestone.

Response: The clarifying text below was added to the referenced paragraph:

> *If undesirable results before 2015 are present (e.g. water levels in Tri-Valley declining since the 1980's), the GSP must set measurable objectives to maintain or improve upon conditions occurring in 2015 (DWR, 2017). The GSP may, but is not required, to address undesirable conditions that occurred before January 1, 2015 (SGMA § 10727.2(b4)).*

ES 3.4.3: Maybe it's mentioned elsewhere, but it seems like a discussion of LADWP's desire to pump from under the lakebed is warranted.

Response: This is discussed at greater length in the body of the GSP (e.g. Section 2.1.3.1.7), but LADWP has not completed their analyses to design the project and no final project description or monitoring program has been made public to fully consider in the GSP.

ES 3.4.3: This is alluded to elsewhere, but there are real water quality concerns on the east side of the lakebed, which is seen in the well that supplies Keeler.

Response: The referenced sentence was clarified in the Final GSP that water quality is primarily good on the north, south, and west sides of the lake.

> *Groundwater quality in and under the Owens Lake is generally poor due to evaporative concentration of solutes; however, water quality north, south, and west of the perimeter of the lakebed is generally good due to recharge from the Sierra Nevada.*

PHILIP ANAYA

OVGA Public Review Draft Comments

Aaron Steinwald
Director
Owens Valley Groundwater Authority

Philip E Anaya
2348 Longview Dr
Bishop , Ca. 93514
Novemebr 8, 2021

Dear Dr. Steinwald ,

As one of many initial longtime public participants in the Owens Valley Groundwater

Authority (OVGA) please consider these comments regarding the Draft Groundwater Sustainability Plan (GSP) . Without a doubt there has been considerable efforts made, there has been considerable dollars and hours spent to arrive at the formation of the GSP but we need a more robust Plan. SGMA in the Owens Basin was envisioned to provide sustainability to the groundwater operations and infrastructure in the Basin. A large portion of the Basin has been treated "as Adjudicated" in SGMA even though it is technically not Adjudicated as many other Basins in California are. The Basin has been divided into a so called Adjudicated / Non Adjudicated areas which is at the core of difficulty of achieving sustainability in the Basin. The Adjudicated portion of the Basin is owned by the DWP and subject to the Long Term Water Agreement (LTWA) management with Inyo County. There are also other entities referred to as the MOU parties who have standing in the LTWA. The Draft GSP fails to adequately address the issues of a divided Basin. The Boundary is an immense issue for sustainability of the Basin as it is a line drawn on the map yet it is a boundary that is hydrologically linked. The Non Adjudicated portion of the Basin is and has been subjected to undesirable results and the emphasis of the GSP should be focused on operational management of the boundary. In the Draft GSP however that management is left to the failed aspects of the LTWA. In the drought years of 2013 and 2014 we have had the events and the lessons in West Bishop of the loss of more than 3 dozen domestic wells. This was due to a number of reasons . Drought, DWP Production wells on the north side of Barlow Lane, (the Boundary of a Adjudicated / Non Adjudicated portion of the Basin) the operational mismanagement of the surface flow recharge system of the Bishop Creek Water Association Ditch system (BCWA) that allowed the Ditches to go dry. This was later studied by Dr. Harrington, the past head of the Inyo County Water Department and affirmed by the State of California DWR as the source of local aquifer

(water table) that was diminished by the operations of the DWP in 2013 and then repeated in 2014 all not addressed by the LTWA. That the Draft GSP relies on the LTWA to manage the Boundary is inexplicable. Not only does the Draft GSP fail to mention these events and find a resolution of a cooperative management with an uncooperative LADWP there is nothing mentioned of a Plan in the future to seek an agreement with DWP to adequately manage sustainable Groundwater across the "Boundary". Also there is a failing to formally seek additional future projects for surface flow recharge in the Draft document. These issues are at the core of sustainability for the Owens Basin and until there is a management of the Boundary, beneficial surface flow management for recharge there is not a lot of hope for SGMA in the Owens Basin. The LADWP historically has made difficulties worse in the Basin. There is little oversight of their responsibilities. The positive steps towards sustainability made in the Basin have all been accomplished in the Courts and stymied by political considerations. The DWR was

correct in its initial Medium Priority in the Basin and was correct in an initial Draft High Priority. Through some political call at the State level to reduce it back to the current Low Priority the Basin has been abandoned by DWR, The State's generous grant to fund the GSP which the OVGA decided to voluntarily go forward with, is money down the drain without sustainable management of the "Boundary". While seeking a agreement with the DWP is a formidable task non the less under the future Projects section it should be included along with projects for surface flow recharge of Non Adjudicated local aquifers.

Thank You for your consideration , Philip Anaya

Response: The hydrologic changes and management that occurred in West Bishop in 2013 were widely reported. The suggestion to include in the GSP a project to acquire and manage surface water in West Bishop in the area managed by the Bishop Creek Water Association has been offered at several meetings of the OVGA, but the Board has not directed staff to include such projects in the GSP. The feasibility of acquiring surface water rights for recharge, reservoir storage costs, and acquiring staff to manage surface water (and asking the Basin residents to fund) would be considerable obstacles. The Owens Valley and Owens Lake Management Areas are not in overdraft and all surface water recharge is used in Tri-Valley Management Area. Regarding the remainder of the comment see General Response #2.

GERI BASSETT

OVGA Public Review Draft Comments

Comments on OVGA GSP Public Review Draft

Pg. 22 - ES 3.2.1 Tri-Valley Management Area, middle of second paragraph

"Based on available geologic, hydrologic, and geochemical evidence, pumping in the management area is the cause of declining water levels and spring flow in Fish Slough."

What data is this statement based on?

Response: See General Comment #6

'The magnitude of overdraft and the pumping effect on spring flow, however, are poorly quantified."

The comment is made repeatedly in this document that there is insufficient data for an accurate water model in the Tri-Valley/Fish Slough area, yet the OVGA/GSP continues to make assumptions based on the inadequate data and then management plans based on their assumptions.

Response: See General Comments #5 and #6. There is sufficient data to identify a problem exists but not enough to implement a solution.

P. 38 - ES 4.4 Project #4, second paragraph, second line

"Insufficient information exists for the OVGA (or another agency) to design a program to manage pumping to ensure the SMC for water levels in the valleys and spring flow are achieved. It is not feasible or reasonable for the residents and agricultural producers in the Tri-Valley communities to make immediate or drastic reductions in pumping without economic and social hardship or without potentially impacting air quality. "

How do these statements correlate to the proposed management action of developing a pumping program, as mentioned in section 4.5.3, page 288?

Response: The referenced management action to develop a pumping program is contingent upon and would occur after the implementation of Management Action #3 to increase the monitoring program to characterize water levels at more locations in the Tri-Valley and after Management Action #4 to develop a groundwater model for the Tri-Valley Management Area. Management Actions #3 and #4 are necessary to make informed management decisions to address the chronically declining water levels throughout the Management Area. This stepwise process is deemed a more prudent approach than implementing management immediately.

P. 50 and various places in document and appendices -

Tri-Valley Groundwater Management District is labeled as Tri-Valley Water Management District or Tri-Valley Groundwater Management. The correct name or abbreviation should be used throughout the document.

See General Comment #1. The District is abbreviated TVGMD throughout the Final GSP.

P. 74 - last paragraph

"LTWA and each agency shall make any data or information pertaining to conditions in the Basin available."

According to the OVGA at numerous meetings, LADWP is not providing requested data. If that is so, LADWP is in violation of the LTWA. Is this being pursued by ICWD?

Response: LADWP regularly provides extensive monitoring datasets to Inyo County. LADWP has not provided numerical groundwater models developed by their consultants for portions of the Basin. The ICWD continues discussions with LADWP staff regarding sharing the groundwater models.

P. 99 - table 2-5, Stakeholder Workshops - says there is a meeting scheduled on December 16, 2021.

Is that a typo?

P. 132 - last comment date is listed as 3/11/12.

Response: These typos were corrected in the Final GSP.

P. 144 - last 3 lines of first paragraph

512 surveys mailed and 41 responses received.

I don't consider an 8% response to be a successful outreach. Even though there is limited internet access in the Tri-Valley area, a zoom meeting, as was done in the other 2 management areas could have been done.

Response: The Tri-Valley area was provided a higher level of outreach than the other management areas through a survey mailed directly to every resident with return postage and a presentation specific to the management area during the GSP comment period on October 20, 2021. In contrast, the other stakeholder workshops to discuss Management Actions on October 6 and October 13, 2021, were not specific for geographic regions of the Basin and no direct mailers were sent to other valley residents where internet connectivity exists. At the general stakeholder meetings, the Undesirable Results and Sustainable Management Criteria for specific geographic areas were presented. For the Tri-Valley area, these proposed standards were discussed at the TVGMD public meeting on December 16, 2020. Finally, the OVGA cannot force Tri-Valley residents to participate or return the surveys, and the return rate should not be used as a measurement of success. The OVGA's commitment was to ensure multiple methods of participation were available, especially for disadvantaged populations, which is why the cost and expense of mailers with return postage was undertaken.

Section 2.1.9.3 discusses the difficulty in outreach in Tri-Valley and Sections 2.1.9.5 and 4.4 include another possible OVGA project:

Tri-Valley Survey: Add a groundwater management public education campaign concurrent with groundwater model development in the Tri-Valley to help Tri-Valley residents understand the situation and become more directly involved in groundwater management decisions that will affect their livelihoods.

P. 210 - last paragraph, third to last line

"identified the Tri-Valley area as one of the potential water sources for Fish Slough, which was supported by geochemical analysis by Zdon et al. (2019)."

> What are the other water sources for Fish Slough and what percentage comes from each of them?

Response: See General Comment #6: Zdon et al., (2019) did not determine the percentage of spring water arising from various recharge sources. Pertinent conclusions from Zdon et al., (2019) were:

> *"Northeast Spring is from a regional water source, deriving part of its water from the alluvial Tri-Valley groundwater system."*
>
> *"Northwest and BLM Springs are regionally derived and are a possible mixture of more sodic sources to the north (Adobe Valley and Benton Hot Springs area) and northwest (Volcanic Tablelands), mixing with Fish Slough Northeast Spring/Tri-Valley water."*
>
> *"These results have identified additional source areas contributing to spring flow in the Fish Slough area, including connections to the regional aquifer systems. The connections to the regional aquifer systems explain how regional water withdrawals in the area have resulted in the decline of spring flow in the Fish Slough area over time."*

The only source water area for the springs and the regional aquifer system upgradient from Fish Slough with significant pumping and similar water level trends as wells near the sampled springs was also recognized by Zdon et al., (2019):

> *"Future groundwater development and management in the region should be cognizant of the potential hydraulic connection between the basin-fill aquifer in the southern Hammil–northern Chalfant valleys and Fish Slough."*

P. 218 - second paragraph

"The Tri-Valley Management Area was determined to have low ecological value because:

(1) it supports a relatively small number of special-status species and ecological communities, (2) contains no designated critical habitat for federally listed species, (3) supports few species that are directly dependent on groundwater (two mollusks), and (4) includes few species or ecological communities that are vulnerable to changes in groundwater conditions. Additional groundwater and vegetation mapping and monitoring is necessary to assess the susceptibility of the GDE in Tri-Valley to pumping management."

Again, more justification for developing a groundwater model for the Tri-Valley.

Response: That is correct. Additional revisions to the GDE map may accompany groundwater model development or may be a future project of the OVGA (see Sections 2.1.9.5 and 4.5.3)

P. 223, table 2-10 - the 4th column, second row Is 84,00 supposed to be 8,400 or 84,000?

Response: Typographical error corrected to read $84,000

P. 227 - last paragraph of 2.2.3.3

"However, based on monitoring well data and a comparison of recharge and discharge, the Tri Valley management area appears to be in overdraft. A groundwater model is needed before making action plans.

This statement should be added to many of the triggers or notes sections of the Tri- Valley Management Areas action plans in Table 4.1.

Response: comment noted. The statement applies to proposed actions in the Tri-Valley Management Area.

P. 230 - section 2.2.4.1, last sentence of first paragraph

"While the amounts of groundwater discharging into Fish Slough are poorly quantified, existing evidence suggests a large portion comes from the Tri-Valley area (Jayko & Fatooh, 2010; Zdon et al., 2019)."

Define "large".

Response: Unfortunately, neither cited study quantified the relative sources for the discharge in Fish Slough (which is difficult to quantify without a groundwater or geochemistry model) but relied on the multiple lines of evidence (geology, hydrology, and geochemistry) that suggest most or a significant portion of the recharge arises in Tri-Valley. Also see General Comment #5.

P. 237 - section 3.2.1, middle of second paragraph

"Based on available geologic, hydrologic, and geochemical evidence, pumping in management area in excess of recharge is the cause of lowering water levels."

How can this be said until a groundwater model is completed?

Response: See General Comment # 5. The evidence is sufficient to develop a conceptual model of the groundwater system, e.g. water balance, aquifer properties (thickness, conductivity) and arrangement (depth, lateral extent). The conceptual model would form the basis of the design of a numerical groundwater model which would collect all available data and be calibrated to measured water levels and discharges. A numerical model can run alternate pumping/recharge scenarios to assess how the aquifer system functions under differing management scenarios.

P. 238 - first sentence of second paragraph

"Severe pumping overdraft (which does not presently exist) could cause land subsidence"

Define "severe". It has already been stated that the Tri-Valley is in overdraft and that pumping is the cause. How "severe" does overdraft need to be to warrant OVGA imposing a pumping plan on the Tri-Valley?

Response: This sentence was reworded in the Final GSP for clarity:

Severe pumping overdraft resulting in land subsidence (which does not presently exist) could cause general infrastructure damage or migration of lower quality deeper groundwater requiring treatment or loss of potable water, but these are unlikely to occur at the current rate of groundwater level decline.

P. 251 - second paragraph, third line

"Since there have been no reported significant and undesirable results directly related to decreased water levels in Benton, Hammil, or Chalfant valleys of the date of this Plan,"

How can this statement be made when this report also says that decreased water levels from too much pumping are causing problems in Fish Slough?

Response: The sentence specifically is referring to effects in the three valleys. Spring declines have been noted but have not exceeded the threshold chosen (0.1 cfs) to represent significant and undesirable results at the time the GSP was prepared.

Third paragraph

"Achieving the 20-year measurable objective will require either increasing recharge into the aquifer or decreasing pumping."

Why, when there are "no reported significant and undesirable results... " as stated above and in other areas of this document?

Response: Significant and unreasonable results are represented by the Minimum Threshold values. The Management Objective was set to the water level on January 1, 2015. Water levels are currently below the Objective and declining. The sentence was revised for clarity:

Achieving the 20-year measurable objective to correct the observed long-term decline will require either increasing recharge into the aquifer or decreasing pumping.

Uncertainty in the water budget and the lack of a numerical groundwater flow model for the area prevents an accurate assessment of how much groundwater pumping in Tri-Valley would need to be reduced to achieve the measurable objectives.

The Tri-Valley groundwater model needs to be done before other actions are taken.

Response: Some actions like Management Actions #1: Well Registration, #2: Well permit review, and #3: Increase Monitoring can and should occur before completion of a groundwater model. Developing a specific pumping plan to correct chronic lowering of water levels should be informed by and rely on a groundwater model.

P. 275 section 4., first paragraph, seventh line

"An additional consideration in developing this list of Management Actions and Projects was to not place an undue financial or regulatory burden on local residents recognizing that compliance with SGMA is voluntary for the OVGA."

How does "undue financial or regulatory burden" correlate with the proposed pumping plan for Tri-Valley?

Response: The Basin is low priority and the OVGA committed in Section 1.2, Fund 1: The OVGA recognizes its duty to Basin residents, and future generations to ensure that financial resources are used effectively and responsibly to promote sustainable groundwater conditions. The OVGA is committed to carefully and prudently use funds to fully comply with SGMA and to avoid expanding beyond the scope of SGMA in a manner that might create undue costs to Beneficial Users.

P. 278, section 4.2, first paragraph, last sentence

"Permits for such wells will be reviewed primarily to acquire information to update the database and ensure the use and production of the well is correctly cataloged as *de minimis*."

How is a well going to be determined as being de minimis in the case of wells used only for domestic use but on property over 1 or 2 acres? Will the property owner need to install a water meter to show that they are a de minimis user?

Response: That can be estimated on a case-by-case basis from remote sensing to detect if the green acreage or landscaping is unusually large.

P. 299, section 5.1, first sentence

"Implementation of all or parts of this GSP are at the discretion of the OVGA as long as the Basin remains ranked as low priority."

If the basin is still low, OVGA shouldn't be able to implement any of this plan.

Response: Comment noted. The Legislature encourages and authorizes low priority basins to be managed under a GSP, but it is voluntary. The OVGA can implement the GSP once adopted (CWC §10725(a)) within the GSA jurisdiction.

Management Plans - if the basin is re-rated to medium or high priority and there are no grants to pay for any of the management plans/actions, who pays for them? Does each management area have to pay for the plans/actions in their area?

Response: The OVGA is responsible for covering costs of implementing the GSP and has several options to do so: 1) member contributions similar to the current funding mechanism, 2) assessing fixed fees or fees based on extraction quantity on local pumpers in the GSP area, 3) assessing property related fees or taxes, 4) issue general obligation bonds, or 5) some combination of the above. It is assumed the OVGA will attempt to acquire grants when possible for projects in the Basin, but such funding is not secure. The budget to July 2022 has been adopted, and the OVGA will rely on existing funds (Section 1.3.2). The Joint Powers Agreement contains a provision that one or more members of the OVGA may choose to be designated as the member that bears all costs of implementing the GSP in a particular management area above the typical baseline (e.g. administration) costs to implement the GSP.

BIG PINE PAIUTE TRIBE OF THE OWENS VALLEY

OVGA Public Review Draft Comments

Big Pine Paiute Tribe of the Owens Valley

Big Pine Paiute Reservation

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L'eaux
Stewart Tribal
Chairperson

November 5, 2021

Owens Valley Groundwater
Authority c/o Inyo County Water
Department 135 S. Jackson Street
Independence, CA 93526
[submitted electronically]

Dear Owens Valley Groundwater Authority Board:

Subject: Comments on draft Groundwater Sustainability Plan

The Big Pine Paiute Tribe of the Owens Valley ("Tribe") is committed to the protection of water and the environment in the eastern Sierra. The Tribe has been following California's efforts to sustainably manage its groundwater resources since before the state legislature approved the Sustainable Groundwater Management Act ("SGMA") in 2014. The Owens Valley Groundwater Authority was created to guide the development of plans to ensure the sustainability of Owens Valley groundwater as informed by local people. On September 23, 2021, the draft Owens Valley Groundwater Basin Groundwater Sustainability Plan Public Review Draft ("draft GSP") was released for public comment. In the Tribe's view, the draft GSP is not reflective of the needs and concerns of the valley's residents, and it will not protect the environment.

SGMA offered hope for the Owens Valley Groundwater Basin: It offered hope that local people, including tribes, might work together to take a serious look at our water situation and plan the appropriate steps to protect the water now and for future generations. Our valley has been subject to more than a century of dewatering by the City of Los Angeles Department of Water and Power ("LADWP"). Once-flourishing meadows, springs, and wetlands have been sucked dry by groundwater pumping which LADWP has been pursuing relentlessly for more than 50 years. With its control of water and land, LADWP has controlled the socio-economics of the valley. LADWP makes decisions about the Owens Valley environment for the purpose of protecting its interests while serving utility customers: Los Angeles decision -makers are not accountable to citizens of Owens Valley. LADWP has prevailed due to lack of state laws prohibiting such gross exploitation.

SGMA, though long overdue, is an opportunity to right some of the oppressive wrongs in Owens Valley.

Overall Comment

The Tribe has reviewed the draft GSP, and in the Tribe's view, this plan should not be submitted to the state of California as the GSP for the Owens Valley Groundwater Basin. The Owens Valley Groundwater Authority ("OVGA") is not required to submit a GSP, because the state has classified the Owens Valley Groundwater Basin as a low Priority basin. It would be better for people of Owens Valley to take more time to develop a protective plan that truly considers current conditions and future needs as opposed to hurrying to submit a plan that, if implemented, allows continued, unregulated water gathering by LADWP but harms our citizens, environment and economy. If the draft GSP is adopted by the OVGA and submitted, it will: set a low bar for

groundwater sustainability which is not protective of our precious water resources; cost money to implement; impose new regulations on a handful of people in our rural area; potentially adversely affect the valley's economy by stifling development; not be proactive in terms of finding solutions when groundwater becomes unavailable (as is likely given current LADWP pumping coupled with the changing climate); and overall be a waste of time and resources which truly should be applied to dealing with Inyo/LA Water Agreement issues. If the OVGA believes that by not adopting the GSP we lose the opportunity to more fully monitor conditions in the groundwater basin, then the OVGA is being fooled. There is ample financial assistance currently provided to Inyo County (by LADWP) to do this work for parts of the basin in Inyo County. There is no harm in the OVGA acknowledging that staff and the consultants (paid mostly by state grant funding) fulfilled the need to draft a plan; however, OVGA must recognize the size of as well as the issues unique to our complicated groundwater basin, then regard this draft GSP as a starting point for working toward better planning and management for the basin.

Response: The OVGA intends to comply with SGMA deadlines for submitting the GSP and also to comply with Proposition 1 grant agreement requirements. As the primary deliverable for the grant, DWR expects the OVGA to adopt and submit a Final GSP to DWR before the date specified by SGMA. However, submitting the GSP by the deadline does not preclude further development or refinement of the GSP to address issues of concern, and the GSP must be reviewed every five years.

One important reason the draft GSP fails us is because Inyo County and LADWP worked together to lobby state lawmakers into exempting from SGMA the lands within the Owens Valley Groundwater Basin that are subject to the Inyo/LA Water Agreement[1] This questionable act, which was performed outside of public scrutiny, crippled our ability as locals to develop a meaningful groundwater management plan.[2] SGMA grants local Groundwater Sustainability Agencies ("GSAs ") the authority to regulate pumping. However, due to the exemption in SGMA for Inyo County in which the LADWP lands subject to the Water Agreement are treated as adjudicated, the OVGA cannot regulate LADWP pumping. LADWP pumping accounts for the vast majority of groundwater pumping in the groundwater basin and is in need of regulation. At this time, there is no point in focusing on the non LADWP pumping in Owens Valley. The OVGA should take the time to change the law and assert the authority to which we California citizens in the eastern Sierra would be entitled under SGMA.

Response: See General Comment #2. Changing the statue that define LADWP lands as adjudicated and regulating pumping on lands under the Long-Term Water Agreement (LTWA) are outside the scope of this GSP even though the Tribe disagrees. The Tribe's disagreement is acknowledged, but outside the requirements for the GSP. We agree that non-LADWP pumping in much of the Owens Valley is not making the Basin unsustainable.

Specific Comments should OVGA proceed with this draft GSP

<u>There is no Goal</u>. Note that the draft GSP does not have a clearly-stated goal. There is a section for the goal, but it is presented as a list of things to do. After reading the draft GSP, it would appear a goal is to keep things as they are now. What this means is to allow continuation of conditions in the basin that have been degraded due to LADWP activities and permit no further development in the future. Should there be some local undertaking which might benefit the local people, environment, and economy, such as to create or restore a wetland, expand local agriculture, or even build a golf course, this GSP would impose significant constraints. According to SGMA, the local people were supposed to develop the goal, but there is no agreed- upon, locally-generated groundwater management goal in the draft GSP.

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1 referred to in the draft GSP as the Long-Term Water Agreement, LTWA.

2 See Inyo County Board of Supervisors materials for their August 19, 2014, meeting. Tribal staff can provide documentation upon request.

Response: SGMA (CWC §10721) requires the GSP include a sustainability goal defined as "*..the existence and implementation of one or more groundwater sustainability plans that achieve sustainable groundwater management by identifying and causing the implementation of measures targeted to ensure that the applicable basin is operated within its sustainable yield.*"

The stated goal of the GSP is provided in Section 1.2: *The sustainability goal of the OVGA is to monitor and manage the Basin by implementing a groundwater monitoring network and database and by adopting management actions that fairly consider the needs of and protect the groundwater resources for all beneficial users in the Basin.*

With regard to comments concerning impacts to the Basin caused by LADWP, see General Comment #2

No Local's Definition of Sustainability. The draft GSP is misleading when it says that the Owens Valley Groundwater Basin is being managed "sustainably." Similar to the above comment, local people are supposed to define sustainability for the groundwater basin, but that did not happen here. In places, the draft GSP uses the bare minimum definition of sustainability as described by the state in SGMA. In other places it rationalizes that the basin is sustainable based on the basin being classified as Low Priority (due to omission of LADWP activities) and on the draft GSP's presentation of recharge and discharge values. SGMA presented a list of rather extreme conditions that must be avoided in order for a basin to qualify as minimally sustainable. Certainly, we do not want those things to happen in Owens Valley, but the draft GSP misses the opportunity to raise the bar and protect groundwater dependent ecosystems, Fish Slough, Owens Lake, local agriculture, and more.

Response: The Basin Ranking includes criteria related to groundwater conditions and trends, but also criteria related to basin size, groundwater reliance, population, well density etc. that are related to the geography of the Basin. The wording in the GSP was revised to remove inferences between sustainability and basin ranking (e.g. see Section 1.2 and elsewhere).

None of Owens Valley is Adjudicated and this is Unfair to the Tribe . The draft GSP must systematically alter its use of the word "adjudicated" when it refers to LADWP areas managed according to the Water Agreement. There is no adjudication in the Owens Valley Groundwater Basin! The entire basin is "non-adjudicated," but this term is used to apply to the non-LADWP lands; that is, the areas for which the OVGA is responsible. With SGMA as written, the LADWP lands are "treated as adjudicated," so the language must be changed throughout the document to reflect this. In fact, it would be better to change it to "Water Agreement area" or "Exempt from SGMA area." Unfortunately, that still leaves the problem of the term, "non-adjudicated" which is used throughout the draft GSP to refer to non LADWP areas. The term non-adjudicated applies to the

entire basin, not just the areas over which the OVGA has jurisdiction. Language is important. A reader reading on nearly every page of the draft GSP that LADWP lands are adjudicated may soon believe they are. The Tribe in particular suffers the consequences of this unfair language. When a watershed is adjudicated, water rights are supposed to be settled, and that absolutely has not happened for the tribes in the groundwater basin. Please do not characterize the Owens Valley Groundwater Basin as adjudicated,

Response: General Comment #3.

There Must be a Plan to Coordinate with LADWP. The draft GSP needs to clearly present a plan for the OVGA coordination with LADWP because LADWP activities directly affect a majority of the region to which the draft GSP applies. The draft GSP is set up to cast as the problem valley citizens or communities that use water when LADWP is the problem. The GSP must include the steps the OVGA will take to accomplish this coordination and list what must be mutually understood, if not managed. This would include wellfield pumping, surface water conveyances, irrigation, and other LADWP operations. At nearly every opportunity during the years leading to the draft GSP, the Tribe and members of the public brought up this important problem, and now that the draft GSP is released, it is realized that the problem was not adequately addressed. The OVGA cannot ignore that the Owens Valley Groundwater Basin is one interconnected groundwater basin. Failure to coordinate with LADWP places undue burden on water users within the GSP area. When something goes awry, such as a local person's well goes dry or there is subsidence, the OVGA as the regulatory authority can hold the local person, Community Service District, City of Bishop, etc., responsible and not the true culprit. It is unfortunate to see that the draft GSP appears to rely on Inyo County and LADWP to make things right according to terms of the Water Agreement when an incident occurs, and incidents will occur. For decades, the Tribe and public have seen significant struggles between the county and LADWP when an issue is raised, because the process outlined in the Water Agreement for resolving disputes is not effective. It allows: an impasse to persist, involvement by lawyers, no punitive actions (because no fault is found), and final outcomes in which the victim still loses at least part of the case.

Response: Coordination with LADWP cannot include mutual management (with the OVGA) of wellfield pumping, surface water conveyances, irrigation, or other LADWP operations. Those activities on LADWP lands are subject to provisions of the LTWA and thus exempt from SGMA. This GSP contemplates its monitoring program will detect cross-boundary impacts on the GSP area from LADWP's pumping activities and will allow the OVGA to coordinate with LADWP in mitigating any such effects, and/or with the LTWA parties to help enforce relevant LTWA provisions that protect the environment and private well owners in a manner consistent with this GSP. Also refer to General Comment #2.

Degradation Caused by LADWP Must Not be Condoned. The Tribe finds it unacceptable that the draft GSP as written condones, or "grandfathers-in" damage to the hydrology, environment and economy caused by LADWP pumping. To remedy this, the GSP should truly explain the reasons for groundwater fluctuations in the basin (it's not just "drought"), then adjust thresholds and management objectives to manage for shallower conditions throughout the basin. Managing this way will of course take coordination with LADWP so see the above comment. The Water Agreement calls for water management to maintain conditions that existed in the mid 1980s; that period is the baseline for the Water Agreement. Heavy pumping occurred 1987-1990 by LADWP, and water tables and vegetation conditions in some parts of the valley never fully recovered from that pumping, yet LADWP continues to pump. The hydrograph shown for V016B on p. 185 of the draft GSP is a good example of the effects of this pumping then subsequent lack of full recovery of the water table. In Owens Valley, we see depressed water levels and degraded vegetation conditions characterized by less meadow, fewer trees, more shrubs, and more weeds than during the baseline period. The draft GSP ignores this reality and uses the 2012-2016 period as a new baseline. It is unfair for the preparers of the draft GSP to turn a blind eye on Water Agreement goals--goals the local people demanded as a *minimum--and* interject a new baseline with lower water-levels and degraded vegetation conditions, then hide behind SGMA to condone it in the draft GSP. The draft GSP sets "minimum thresholds" and "measureable *[sic]* objectives" that hold the future to no better than these now-less-than-acceptable conditions. Some of the proposed water table management depths are clearly too deep to support groundwater dependent grasses as noted for monitoring wells located in or near what used to be meadows. The OVGA should not be sending this message to LADWP or the state of California that the damage done to date is acceptable; clearly it is not acceptable to some locals, including the Tribe.

Below are some specific examples showing how the basin is not protected by criteria in the draft GSP. Proposed GSP monitoring well T574 is a good example of grandfathering-in LADWP's depletion of groundwater and degraded vegetation conditions to define a new baseline. This monitoring well is located on LADWP land in the Laws area, near permanent monitoring site Laws 3, which is a place where the subsurface is capable of a high degree of capillarity (upward movement of groundwater to the plant root zone). The depth to groundwater in the mid 1980s for TS74 was about 10 feet, which is shallow enough to support meadow in the vicinity, and occasionally since the mid 1980s, the water table has risen to the 10- foot range. The draft GSP sets the TS74 minimum threshold at 20 feet, which is the bottom of this monitoring well. The water table cannot be accurately measured if it drops below 20 feet: no one will know where it is if this happens. The draft GSP sets the measurable objective at 16 feet. This is too deep for meadow, but it is something LADWP could probably maintain with status quo pumping in Laws. To maintain baseline vegetation conditions over the long term, the measurable objective should be no deeper than the 10-foot depth, but the draft GSP sets it at 16 feet! Choosing this deeper level accepts LADWP degradation of the Laws area and sends a message that this not only is acceptable but also

is consistent with a definition of sustainability. This is not fair to those of us who depend on Inyo County and LADWP to manage according to Water Agreement goals. The draft GSP management approach would permanently compromise ecological conditions in Laws and be in conflict with the Water Agreement.

Proposed monitoring well T809, located near permanent monitoring site Independence Oak 1, north of Independence Creek and the town, is another example of grandfathering-in conditions degraded by LADWP since the start of the Water Agreement. T809 was installed after the mid 1980s baseline, but it was placed in what was an alkali meadow. To reasonably support meadow, the groundwater should be managed to stay within 8 feet of the surface. The draft GSP sets the minimum threshold for this monitoring well at 19 feet and the measurable objective is 13 feet. This is too deep to sustain Water Agreement baseline ecological conditions.

Response: The monitoring wells and vegetation discussed in this comment are located on LADWP lands which are exempt from SGMA. The wells are included as the monitoring point nearest to lands subject to the GSP in that portion of the Basin. The Management Objective is to maintain average water levels of 2001-2010 and not drop below the Minimum Thresholds. Vegetation near T809 and T574 is monitored annually by the Inyo/Los Angeles Technical Group and presented in the ICWD annual reports (www.inyowater.org/reports). Since 2001, perennial vegetation cover has been at or above the LTWA baseline levels in 14 of 20 years near T809 and in 19 years near T574 (the area near T574 burned in 2002). Near 809T, cover fluctuates above and below baseline but the trend over time is stable. Perennial grass cover has been at or above baseline in all years near T809 and 17 years near T574. Vegetation declines during the 2012-2016 drought coinciding with period that Minimum Thresholds for water levels were derived were small and temporary.

Proposed monitoring well V299, which is located on the Big Pine Paiute Reservation, is another example of grandfathering-in groundwater levels depressed by LADWP pumping. This LADWP well is located on a Tribal member's assignment which is not a meadow. The water table beneath the Reservation is deep, and it is kept depressed by LADWP pumping in the Big Pine area . The draft GSP sets the minimum threshold for V299 at a depth deeper than the well can measure! According to data on the ovga.us website, V299 is dry at about 97 feet, but the draft GSP sets the minimum threshold at 109 feet. The management objective is set at 96 feet. Normally a well selected for long-term monitoring should be capable of providing good data over a range of conditions, but to set monitoring criteria at the extreme end of a monitoring well is questionable if not outrageous. V299 was installed in the late 1920s and when installed the water table was much shallower, in the 40-foot range. By the time the Reservation was established, water levels had dropped to the 60-foot range, and with LADWP pumping in the 1970s, levels dropped further to 80- to 90- foot

depths. This significant decline without noteworthy recovery anywhere near where water levels were historically is the result of LADWP pumping in Big Pine.

Response: There was an error in the database for a dry well read in V299. The Minimum Threshold for this well in Table 3-5 has been revised to 3909' (101' depth from r.p.) consistent with the procedure to set thresholds in other representative monitoring wells.

Insist on Zero Subsidence. The OVGA should absolutely not allow any land subsidence due to groundwater pumping. Language in the draft GSP should set the target at zero for subsidence due to pumping. In addition to damaging infrastructure, subsidence indicates that aquifers have shrunk and thus are unable to store as much water should a big runoff year occur, and this condition is often permanent. We do not need to subject the Owens Valley Groundwater Basin to this risk; this is something the OVGA and GSP can manage to completely avoid. Setting an arbitrary allowable change (as the draft GSP does) is disingenuous because it is unlikely anyone can stop subsidence at some arbitrary change, and we know it is practically impossible to reverse subsidence.

Response: It is a common misperception that aquifer storage is impacted by small levels of subsidence. The effects generally occur in the fine-textured layers separating aquifers at depth and aquifer storage is unaffected.

The measurable objective for land subsidence has been set to less than 0.07 ft (0.84 inches), the vertical resolution of the remotely sensed inteferometric synthetic-aperture radar (InSAR) data provided by DWR (TRE Altamira, 2021; Towill, 2021). This value represents maximum instrument sensitivity. This value for the objective was chosen because no subsidence has been observed in Basin and the goal is to maintain those conditions.

The minimum threshold of 0.3 ft (3.6 inches) of subsidence measured by InSAR has been proposed as less than significant and reasonable. The minimum thresholds for subsidence are based on the variability in repeat measurements at permanent GSP stations reflecting elevation changes caused by factors other than subsidence (approximately 1.6 inches). If this amount of subsidence is observed, it is approximately the smallest value likely not due to noise or some other cause (see Appendix 8)

No LADWP Pumping at Owens Lake. The OVGA should not permit pumping under or near Owens Lake, as has been proposed by LADWP to control dust. Owens Lake is not the property of LADWP, and they have already done the lake and thus southern valley excessive ecological harm. There is no amount of pumping LADWP could do which would not be a threat to springs and seeps in the area, private wells, subsidence, and vegetation on dunes. The threat of LADWP pumping at the lake may be remedied by the OVGA insisting on no pumping and incorporating this objective into the GSP.

Response: The Owens Lake is owned and managed by the State Lands Commission (SLC), and LADWP operations on state lands is conducted under a lease with the SLC. SGMA "*...does not authorize a local agency to impose any requirement on the state or any agency, department, or officer of the state. State*

agencies and departments shall work cooperatively with a local agency on a voluntary basis" (CWC §10726.8(d)). The OVGA cannot simply forbid pumping on state owned lands as requested. State agencies, however, are required to "*…consider the policies of* [SGMA], *and any groundwater sustainability plans adopted pursuant to* [SGMA], *when revising or adopting policies, regulations, or criteria, or when issuing orders or determinations, where pertinent*" (CWC §10720.9). This GSP sets sustainable management criteria in test wells surrounding the lake and proposes that the OVGA actively participate in the working group and coordinate with state and local agencies with land management responsibilities to ensure this management area is managed sustainably to avoid undesirable results (GSP Section 4.5.1).

Too Few Management Areas. The draft GSP oversimplifies the groundwater basin by splitting it into three management areas. There are volumes of data on the basin with enough information to permit management on a finer scale, especially in the Owens Valley Management Area. Lumping Round Valley with Bishop, Big Pine, and also Lone Pine is simply not reasonable.

Response: The spatial distribution of the varying geologic, hydrologic, and groundwater quality conditions was used to divide the basin into separate management areas to allow for development of SMCs that take into account varying hydrogeologic conditions. Further subdivision of the basin into smaller units is not warranted based on hydrogeologic criteria or necessary to facilitate implementation of the GSP to maintain conditions or improve conditions where necessary.

The GSP Must Work to Manage Groundwater Recharge. The Tribe questions why the draft GSP does not propose a plan to work with others in the basin to manage aquifer recharge. To truly manage groundwater, it is obviously useful to manage not just what is taken out, but also what goes in, the recharge. There is nothing in the plan talking about how OVGA will work with the other land management agencies to direct flows in canals or ditches or perform water-spreading in order to help meet the needs of the OVGA area (the non LADWP area) of the basin. If the OVGA fails to address management of recharge in the GSP, then LADWP will continue to control recharge and make it work to LADWP's advantage which could deprive or harm other parts of the basin.

Response: This comment has been offered at several meetings of the OVGA, but the Board has not directed staff to include such projects in the GSP. The feasibility of acquiring surface water rights for recharge, reservoir storage costs, and acquiring staff to manage surface water (and asking the Basin residents to fund) would be considerable obstacles. Overdraft conditions do not exist in the Owens Valley or Owens Lake Management Areas and all surface runoff is used within Tri-Valley.

OVGA Needs Independent Staff. The Tribe views it as a conflict for Inyo County Water Department staff members to also serve as staff to the OVGA. Already there are conflicts in which it confuses the public and perhaps the staff itself as to which "hat" a staff person is wearing at a meeting. Should the OVGA proceed with the GSP, the OVGA needs to recruit its own workers so it can function without

having staff that also is supposed to work on different goals and objectives as called for in the Water Agreement or on other water- related projects.

Response: This comment is not germane to the contents of the GSP.

Errors in draft GSP. The draft GSP (including appendices) has typos, redundancies, and a few more significant mistakes. It is an unnecessarily cumbersome document. For example, information on the three management areas is presented in a leap-frog manner throughout the document. Should someone care to read about the plans, for example, for Tri-Valley only, the person must skip here and there and read redundant fill material. Section headings are not always helpful.

Response: See General Comment #1.

ovga.us website. The OVGA should work to ensure that data on the ovga.us website is up to date and then it should continue to work to improve this information and keep these data publicly accessible.

Response: Section 2.1.2 states:

The Inyo County Water Department plans to use OVGA database as a repository for LADWP data for their daily operations in the future, and therefore it is anticipated to be updated regularly as additional data are collected and become available for import. The OVGA will determine the timing of the acquisition of data to update the database from other sources as funding and the scope of the GSP implementation in a low priority basin requires. The OVGA will also determine whether to require reporting of missing data collected by pumpers or to implement additional monitoring programs to fill identified data gaps (see Section 4, below).

In conclusion, the Tribe respectfully requests the OVGA hold onto the draft GSP and continue to work on preparing a more protective plan for the Owens Valley Groundwater Basin. The draft GSP is not capable of managing the Owens Valley Groundwater Basin in a truly sustainable manner that protects our water now and into the future. Please consider the Tribe's comments.

Sincerely,

ORIGINAL pdf signed by L'eaux Stewart

L'eaux Stewart, Tribal Chairperson

Note: The Tribe's Environmental Director, Sara J. Manning, Ph.D., contributed to these comments. Dr. Manning is an expert on Owens Valley ecology, groundwater pumping, and water issues

California Department of Fish and Wildlife

OVGA Public Review Draft Comments

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State of California – Natural Resources Agency
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GAVIN NEWSOM, Governor
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November 1, 2021

Sent via email

Dr. Aaron Steinwand
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Subject: California Department of Fish and Wildlife Comments on the Draft Owens Valley Groundwater Authority Groundwater Sustainability Plan

Dear Dr. Steinwand:

The California Department of Fish and Wildlife (CDFW) appreciates the opportunity to comment on the Owens Valley Groundwater Authority (OVGA) Draft Groundwater Sustainability Plan (GSP) prepared in accordance with the Sustainable Groundwater Management Act (SGMA) statutory and regulatory requirements. The Draft GSP describes the Owens Valley groundwater basin which includes the Owens Valley, Owens Lake and the Fish Slough and Tri-Valley Management Area (Basin), develops quantifiable management objectives that account for the interests of beneficial groundwater uses and users, and identifies a group of management actions that will maintain sustainable conditions in the Basin for 20 years after GSP adoption. The Draft GSP also contains steps a Groundwater Sustainability Agency (GSA) could undertake to manage groundwater pumping in the Basin to address declining water levels in a portion of the Basin.

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species (Fish & G. Code, §§ 711.7 and 1802). CDFW has an interest in the sustainable management of groundwater, as many sensitive ecosystems, species, and public trust resources depend on groundwater and interconnected surface waters, including ecosystems on CDFW-owned and managed lands.

COMMENTS AND RECOMMENDATIONS

Pursuant to 23 CCR §354.16, GSPs are required to provide a description of current and historical groundwater conditions within the Basin. As part of that requirement (23 CCR

§354.16 (a)(1 & 2), the GSP must provide groundwater level elevation contour maps depicting the groundwater table or potentiometric surface associated with current seasonal highs and seasonal lows and hydrographs depicting hydraulic gradients within or between

principal aquifers. The Draft GSP does not provide groundwater elevation contour maps for recent and current groundwater conditions or hydrographs depicting hydraulic gradients between aquifers for the management areas discussed within the Draft GSP.

Response. Although the current network of monitoring wells is sufficient to characterize large-scale, basin-wide trends, the network does not contain enough wells to produce groundwater contours at smaller scales in the Tri-Valley/Fish Slough management area. This lack of spatial coverage is identified as a data gap in the GSP with proposed management actions to close the gap. Hydrographs for monitoring wells in Tri-Valley were included in Appendix 3.

General groundwater contour maps for the Owens Valley Management Area will be added in Appendix 7. Hydrographs from selected multiple completion wells or clusters showing the generally upward gradient in the Basin from deeper to shallower aquifers are provided in Appendix 7, and the GSP will be revised to direct the reader to these data. Please note that many of the wells in Table 3-6, water levels and management objectives are given as height above ground surface reflecting the generally upward gradients and artesian conditions in the southern part of the basin. Section 2.2.2.1 was revised to convey the information in this response.

CDFW acknowledges that the GSP indicates (Chapter 4) that it will develop and implement projects within the designated management areas to address these data gaps and will update the plan as additional groundwater level data sets are obtained. As part of this process, CDFW recommends that the OVGA develop a more robust groundwater elevation monitoring network which includes the construction of dedicated multiple completion monitoring wells capable of better characterizing groundwater trends and gradients (vertical gradients) within or between principal aquifer units located in each of respective management area described in the GSP document.

As briefly discussed above, the Draft GSP provides a good discussion in Chapter 4 regarding proposed projects and management actions needed to better characterize groundwater conditions within management areas. More specifically, CDFW agrees that the actions listed regarding the Tri-Valley Management Area are needed and warranted. Additionally, CDFW agrees that a Tri-Valley Management Area groundwater model is needed to better characterize groundwater conditions and their connection to Fish Slough. CDFW believes that utilizing existing well structures within the Tri-Valley Management Area is beneficial in developing a better understanding of groundwater conditions where wells are located within the Basin; however, there is a discernable data gap in existing well coverage where additional information is needed to define the connection between Fish Slough and the Tri-Valley aquifer system.

CDFW believes that strategically placed, depth-specific, multi-completion monitoring wells are needed to adequately define the connection between Fish Slough and the Tri-Valley aquifer system. CDFW recently completed a hydrogeological characterization of Fish Slough and the Tri-Valley area and prepared a Groundwater Monitoring Plan that provides recommendations for additional monitoring well structures and locations to assist in characterizing the interaction between Fish Slough and the Tri-Valley aquifer system.

This document can be provided upon request to assist the GSA if needed. CDFW acknowledges that the Draft GSP identifies, within Chapter 4, the need for additional monitoring wells within the management area to assist in characterizing groundwater conditions; however, the Draft GSP does not provide a discussion regarding potential locations and depths of these monitoring structures or the benefits of their installation.

CDFW recommends that the Final GSP include a discussion regarding the benefits of multiple completion monitoring wells, the types of data sets they can provide (e.g., depth, specific water level/water quality data, characterization of vertical gradients, etc.), and identify proposed locations within the Tri-Valley management area where these structures would provide the most beneficial information (i.e., the connection between Fish Slough and the Tri-Valley aquifer system).

Response: The OVGA may consider the need to install multiple completion or other monitoring wells after the proposed management action to increase monitoring relying on voluntary monitoring using private wells is implemented. The OVGA recognizes the potential benefit of information from the proposed locations and may seek funding for additional monitoring wells if Management Action #3 is insufficient to address this data gap. .

CDFW also offers the following corrections and requests for clarification.

<u>Page 22, ES 3.2.1</u>

- "*The steady water table decline is concerning, but it is unlikely that the undesirable results related to sustainable yield or available groundwater storage will be exceeded or that a decreased ability to maintain status quo pumping during droughts based on storage constraints will occur during the GSP implementation*."

  CDFW does not agree that status quo pumping is compatible with protection of groundwater dependent ecosystems

Response: The sentence in question does not pertain to status quo pumping effects on GDEs. The sentence states that status quo pumping wouldn't be impacted by a depletion of storage, i.e. the Basin storage is adequate to allow for that continued beneficial use. Whether status quo pumping can continue without affecting GDEs is a separate Sustainability Indicator addressed elsewhere in the GSP.

- *"Severe pumping overdraft (which does not presently exist) could cause land subsidence resulting in general infrastructure damage or migration of lower quality deeper groundwater requiring treatment or loss of potable water, but these are*

unlikely to occur at the current rate of groundwater level decline."

CDFW does not agree with the conclusion that pumping overdraft does not exist in the Basin.

Response: This sentence in this section and elsewhere in the GSP was reworded as shown below:

"*Severe pumping overdraft resulting in land subsidence (which does not presently exist) could cause general infrastructure damage or migration of lower quality deeper groundwater requiring treatment or loss of potable water, but these are unlikely to occur at the current rate of groundwater level decline.*"

Page 25, ES 3.3.1

- "*The CDFW monitor and manage the spring flow for the benefit of the listed species and habitat*".

  CDFW presently does not monitor any spring flow. All gauges are operated by the City of Los Angeles. Inyo County maintains pressure transducers in the monitoring wells and provides data to CDFW upon request.

Response: This correction was made in this section and elsewhere in the GSP with the sentence below.

LADWP monitors and CDFW manages the flow downstream of the spring for the benefit of the listed species and habitat"

- "*The minimum threshold represents the minimum flow rate that is necessary to allow management of flows to maintain current habitat conditions according to the CDFW*".

  CDFW recommends that the methodology to arrive at the threshold is noted, or a citation provided so that the source can be tracked down more specifically in the future.

Response: See General Comment #4

Page 30 ES 3.4.3

- "*As long as groundwater demand does not significantly increase or groundwater inflows do not significantly decrease, maintaining current groundwater levels will keep the management area in a sustainable condition*."

  CDFW requests clarification on whether this statement considered the Los Angeles Department of Water and Power test well pumping for dust mitigation.

Response; LADWP has not proposed a final pumping project description or monitoring plan, but the GSP statement is accurate as long as the conditional clause "as long as groundwater

demand does not significantly increase…" remains true. This pertains to any future LADWP project that could result in failure to maintain measurable objectives. The GSP recommends the OVGA remain engaged with the Owens Lake Groundwater Development Program stakeholder process to ensure a possible pumping project is consistent with the GSP (Section 4.5.1).

CDFW appreciates the opportunity to provide comments on the OVGA Draft GSP. Questions regarding this letter or further coordination should be directed to Rose Banks, Environmental Scientist, at (760) 218-0022 or Rose.Banks@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Alisa Ellsworth
84FBB8273E4C480...

Alisa Ellsworth
Environmental Program Manager

cc: California Department of Fish and Wildlife
Trisha Moyer
Habitat Conservation Supervisor
Inland Deserts Region North
Patricia.Moyer@wildlife.ca.gov

Bryan Demucha
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Inyo County Water Department
Laura Piper
Administrative Analyst
lpiper@inyocounty.us

California Native Plant Society, Bristlecone Chapter

OVGA Public Review Draft Comments

Bristlecone Chapter of the California Native Plant Society
PO Box 364, Bishop, CA 93515

November 8, 2021

Owens Valley Groundwater Authority Board
Via email: lpiper@inyocounty.us

Re: OVGA Groundwater Sustainability Plan

Dear Board Members,

The Bristlecone Chapter of California Native Plant Society appreciates the opportunity to comment on the draft Groundwater Sustainability Plan (GSP) for the Owens Valley Groundwater Basin (Basin). We recognize the Division of Water Resources (DWR) has designated the Owens Valley as a low priority basin under the Sustainable Groundwater Management Act (SGMA). Under SGMA, the Owens Valley Groundwater Authority (OVGA) is therefore not required to develop a GSP. We are therefore very grateful that the OVGA chose to go through the demanding process of developing the GSP.

The California Native Plant Society (CNPS) is a non-profit organization working to protect California's native plant heritage and preserve it for future generations. Our nearly 10,000 members are professionals and volunteers who work to promote native plant conservation through 33 chapters statewide. Our local CNPS Bristlecone Chapter has members from Inyo and Mono counties, as well as throughout California.

Our organization is concerned with the conservation of California native plants and their habitats, and we have interest in the goals set forth in the OVGA mission statement: *The Owens Valley Groundwater Authority safeguards the sustainability of the Owens Valley Groundwater Basin through locally tailored management of groundwater resources to protect and sustain the environment, local residents and communities, agriculture, and the economy.* Below is our assessment of portions of the GSP that bearing on native plant species and their habitats.

I. Sensitive plant species and natural communities

Our chapter was pleased to see the attention given to sensitive plant species and natural communities within the Basin detailed in the draft GSP. These are documented in Appendix 9, Owens Valley GDE Assessment authored by Stillwater Sciences and summarized in Tables 3.1-3 and 3.1-4 of Appendix 9. We caution that while CNDDB data may represent a portion of the best information available for special status species, other sources and future research may reveal new occurrences, which unfortunately are often subject to multi-year CNDDB backlogs.

Bristlecone Chapter of the California Native Plant Society
PO Box 364, Bishop, CA 93515

We intend to reach out to ICWD and local CDFW staff to inquire about a process for our chapter to report new sensitive species occurrences for inclusion in relevant map updates. We appreciate the incorporation of local expertise and ground-truthing provided by ICWD in regards to phreatophytic species. We support additional remote sensing efforts, especially when informed by an appropriate level of field verifications. Overall, the information in the draft GSP provides an encouraging view of the Basin outside of the lands and groundwater resources covered by the Long Term Water Agreement (LTWA). Many springs and groundwater-dependent ecosystems (GDEs) appear to thrive within the Basin.

II. Groundwater Declines in Tri Valley and Fish Slough

Although the Basin has been classified as low priority by DWR, the northern part of the Basin within the management areas of Tri-Valley and Fish Slough have seen declines in groundwater levels. Of real concern is the Fish Slough area, with its populations of special status species, including eight plant species (Appendix 9). Hydrologists believe Tri Valley groundwater feeds into Fish Slough based on water chemistry, but that there is no hydrological connection between Tri Valley and the Laws area within the LTWA. However, there is uncertainty about the interconnectedness of these aquifers.

Response: There is evidence for hydrologic connection between Fish Slough and the western Laws/Five Bridges area. Spring water exiting Fish Slough is a recharge source in Laws. Also, similar aquifer materials are found below the Bishop tuff, but the presence of faults and leaky confining layers limits the effect of Laws or Bishop pumping extending into Fish Slough. Variations in LADWP pumping through history are not strongly reflected in water level trends in Fish Slough which more closely resemble water level trends in Tri-Valley. It is possible for an effect from LADWP pumping to propagate north into Fish Slough, however. Any pumping impacts from LADWP wells are subject to the LTWA overall goal to avoid "other significant effects" (See General Comment #2) and must be managed to avoid affecting Fish Slough.

The Owens Valley has lost many springs and seeps within the area covered by the LTWA. In arid landscapes like the Eastern Sierra, the springs once lost or degraded are very difficult to recover. The Bristlecone Chapter recognizes the value placed on Fish Slough by OVGA Board Members and by Inyo and Mono County citizens.

The Bristlecone Chapter endorses:

- The recommendations in ES 4.4 to pursue funding for and development of a Tri Valley Model to understand the hydrology as it impacts Fish Slough.
- The recommendations to develop a pumping plan for Tri Valley in cooperation with private well owners and agricultural interests.

Bristlecone Chapter of the California Native Plant Society
PO Box 364, Bishop, CA 93515

The Bristlecone Chapter recommends:

- Consultation with US Fish and Wildlife Service (USFWS) and California Division of Fish and Wildlife (CDFW) about impacts of groundwater use on special status species.

Response: The OVGA will consider this request. OVGA staff will continue to consult with CDFW to provide hydrologic information as requested and make the OVGA water level database publicly accessible.

III. Owens Lake Groundwater Development Program (OLGDP)

The lakebed of Owen Lake presents several unique challenges that makes it different from the other management areas in the Basin. The lands are mostly owned and managed by the California State Lands Commission (CSLC). CSLC therefore has authority over leases for management of the lakebed. It might or might not be subject to the LTWA but is included in this GSP as a management area. It is presently managed by Los Angeles Department of Water and Power (LADWP) to control dust so is a highly manipulated environment. Despite its barren and managed areas, it has the most GDEs of any of the management areas in the GSP. These occur along the margins of the lakebed where seeps and springs emerge on to the playas. The GDEs contain special status plants (i.e. Owens Valley checkerbloom) and sensitive natural communities.

The CSLC expressed interest in participating as a partner in the development of the Basin GSP. However, OVGA board members decided that a later participation in the in OLGDP would be more productive. The OLGDP's purpose is to replace the use of high-quality water with more saline water pumped from beneath the lake bed. However, it is unclear whether this will create another wellfield that leads to more export from the Owens Valley.

Response: This recommendation is not a necessary component or question for the GSP to address. At this time, there is no final proposed OLGDP project description or monitoring plan. With regard to the last point, SGMA Implementation and Sustainability Criteria #14 (Section 1.2) states:

> *The OVGA opposes groundwater export from the Eastern Sierra that would result in negative consequences to groundwater sustainability, the environment, local economy, and residents.*

There has been a long-running Advisory Committee assisting with the evaluating the potential of groundwater pumping on Owens Lake. Represented were the CSLC, county representatives including ICWD, tribal representatives, CDFW, environmental groups, Great Basin Unified Air Pollution Control District (GBUAPCD), and private well owners and industries such as Rio Tinto and Crystal Geyser. A subcommittee of this advisory group developed monitoring protocols to

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measure changes in vegetation. Areas of high-quality bird habitat have been developed. These are in addition Wildlife Management Areas managed by CDFW. However, recently the Advisory Group has met only twice in the past two years.

The Bristlecone Chapter endorses:

- Participation of OVGA in the OLWDP. These meetings should include members of the Advisory Committee who have invested many hours and much expertise.

The Bristlecone Chapter recommends:

- OVGA should consult closely with CSLC in the development of lease terms for protection of vegetative resources and depth to groundwater. Lease terms can be made binding in lease terms, conditions and possibilities of suspension of the leases for non-compliance.

Response: Section 4.5.1 of the GSP proposes that the OVGA actively participate in the OLGDP working group and coordinate with state and local agencies with land management responsibilities to ensure this management area is managed sustainably to avoid undesirable results.

- As with Fish Slough, OVGA should consult with CDFW and USFWS regarding impacts of groundwater use on special status species and natural communities

Response: see response to comment above regarding consultation with CDFW which would also apply to consultation with USFWS.

- OVGA should develop a position on how groundwater pumping affects not just groundwater levels, GDEs, and subsidence, but also if it leads to more net export of water from Owens Valley

Response; SGMA Implementation and Sustainability Criteria #14 in Section 1.2 of the GSP states:

> *The OVGA opposes groundwater export from the Eastern Sierra that would result in negative consequences to groundwater sustainability, the environment, local economy, and residents.*

IV. Coordination with LTWA

We share concerns with other organizations and community members regarding the separate management plans, the GSP and the LTWA, which govern groundwater resources in the Owens Valley Groundwater Basin area. Ideally, these ecologically connected areas would be managed under a single plan, but we understand these are treated as adjudicated areas under SGMA. We hope the OVGA will leverage opportunities to coordinate with LADWP in mitigating environmental impacts associated with groundwater extraction occurring with the Basin. Under SGMA, the OVGA has jurisdiction over groundwater resources adjacent to adjudicated areas, which certainly will be affected by water management by LADWP, including

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diversion of surface water resources, artesian wells, and pumping of 50,000-95,000 acre-feet each year.

We would like to call DWR's attention to the history of damaged GDEs in the adjudicated areas which have not been mitigated as promised, and springs and seeps which have disappeared or are seriously diminished in flow and associated vegetation. The LTWA provides insufficient enforcement for mitigation projects and effectively no control over annual pumping plans. LADWP owns a significant portion of the groundwater resources in the Owens Valley and is a politically and economically powerful agency which appears to have ignored obligations it has committed to. Examples of these include Five Bridges, Hines Springs, Little Black Rock Springs and many mitigation projects[1]. LADWP routinely disregards recommendations by Inyo County Water Department (ICWD) on pumping levels, even in times of drought. In addition, LADWP has approved the deepening of several wells over a period of years to access deeper aquifers. To the knowledge of the Bristlecone Chapter, no meaningful environmental assessment has evaluated the cumulative impacts of these "replacement" wells.

The Bristlecone Chapter recommends:

- The GSP should reflect that the LTWA is an MOU, not a court-ordered adjudication[2].
- In current or future iterations of the GSP, OVGA should advocate for legislative and regulatory language that includes LTWA areas within the Basin governed under SGMA.
- OVGA encourage the City of Los Angeles and LADWP to include OVGA, tribal leaders, community members and other in important planning efforts such as Operation NEXT and the five-year cycle of the Urban Water Management Plan.
-

Response: These suggestions are outside the requirements for the GSP. See General comment #3.

- Well registration, reporting and permit review as recommended in ES 4.1 and ES 4.2 should be applied to all proposed wells in the Owens Valley, including those considered as replacement wells. Applications for new or replacement wells should be available to the public in an easy-to-use form.

Response: This comment refers Management Actions 1 (Section 4.1) and 2 (Section 4.2). Text in italics added in response to this comment:

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[1] Read an article mourning of the loss of Little Black Rock Springs in the Bristlecone Newsletter July 1989 Vol 8 No 4 by botanist Mary DeDecker

Bristlecone Chapter of the California Native Plant Society
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The OVGA shall determine the timing of when to consider a Well Registration and Reporting Ordinance and Well Permit Review Ordinance following adoption of the GSP. These programs will be necessary to complete and maintain a current database of pumping locations and amounts as required by SGMA. Pumpers in the Basin will be given ample opportunity and time to prepare the requested well and pumping information. Ongoing reporting of pumping would only be required for agricultural, commercial, or municipal pumpers, and CSD/mutual water companies but not *de minimis* users. Section 4.1 states:

> *The ordinance may include a one-time voluntary report to acquire information on well location, well construction characteristics, water levels, and approximate production amounts for the database.*

The proposed Well Permit Review Ordinance could require well construction permit applications submitted to Inyo or Mono Counties be provided to the OVGA for review including permits for replacement wells. Construction permits for small capacity wells for *de minimis* extractors would be reviewed to maintain a database of private wells but are exempt from most SGMA provisions including regulation of pumping."

- Monitoring of depth to groundwater as recommended in in ES 4.3 should include data and modeling obtained from LADWP.

Response: LADWP regularly provides extensive monitoring datasets to Inyo County. LADWP has not provided numerical groundwater models developed by their consultants for portions of the Basin. The ICWD continues discussions with LADWP staff regarding sharing the groundwater models and output files.

V. Minor Comments

- Page 140 of draft GSP. Response to public comment #109 says, "See response to #92," but comment #92 appears to be about a different topic. Please clarify the response to #109.

Response: There is an obvious typo in the GSP; response #92 is not germane to the question asked during the meeting. A response to the question is provided here and in Table 2-6.

Management Objectives and Minimum Thresholds are defined for the six sustainability indicators. Populations of endangered species are not a sustainability indicator. Impacts to species dependent on groundwater can be included as an undesirable result. Impacts to surface water discharge where endangered species occur will be accompanied or preceded in by changes in water level measurements upon which the Objectives and Thresholds were based.

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Again, thank you for the opportunity to participate in the development of the GSP. The OVGA has done a great job of assessing current conditions, identifying data gaps, and making recommendations. There is much more work to be done, but thank you for your commitment to the inhabitants of the Owens Valley Groundwater Basin.

Best regards,

Maria Jesus
Conservation Chair
CNPS Bristlecone Chapter

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[2] SB 1168: 10720.8 (c) Any groundwater basin or portion of a groundwater basin in Inyo County managed pursuant to the terms of the stipulated judgment in City of Los Angeles v. Board of Supervisors of the County of Inyo, et al. (Inyo County Case No. 12908) shall be treated as an adjudicated area pursuant to this section

JOYCE GEISSINGER

OVGA Public Review Draft Comments

ovga, I'm going to get right to the point here, it seems as though we are running out of time. You know and I know this whole drought epidemic is uncalled for. Geoengineering , Weather Modification ; Chemtrails to be more specific are the root cause of this terrible drought we've been experiencing in the western states for too long. You have no authority to come after us citizens with rules and regulations to control our water use. But you do have the duty to go to the actual people who are responsible for making the Chemtrails which have pushed damn near every good rain and snow storm away from this area. It must stop !!! In the last 2 weeks alone I witnessed 2 or 3 good storms Chemtrailed away. We The People want Justice now ! Fairness now ! Not NWO

I'll be waiting for a positive reply thank you,

Joyce Geissinger
P.O. Box 991
Bishop, CA 93515
760-937-2732
joycegeissinger@gmail.com

Response: Comments are not germane to the contents of the GSP. SGMA grants the OVGA authority to regulate groundwater pumping. Regulation of the alleged causes of drought stated in the letter are outside the scope of the GSP and SGMA.

FRANK AND PATRICIA HERNANDEZ

OVGA Public Review Draft Comments

Ways to comment on the Owens Valley Groundwater Sustainability Plan

COMMENT DEADLINE IS NOVEMBER 8, 2021

Computer: Go to ovga.us/gsa-plan/. You may leave your comment at the bottom of the page. You may also upload your comment in a word document into the web page.

Mail: Send your comments to the Owens Valley Groundwater Authority:

Street Address
135 Jackson Street
Independence, CA 93526
Mailing Address
P.O. Box 337
Independence, CA 93526

RECEIVED
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Inyo County Water Dept.

Email: You may email your comments to: ovga.us/contact-us/

USE THIS COMMENT FORM:

NAME Frank and Patricia Hernandez DATE 10-26-21

ADDRESS: 582 Dawson Ranchrd Hammil Valley CA. 93514

YOUR COMMENT ON OVGA PLAN: Please Respect our Rights as Property Owners!
We moved Here From The City To Enjoy The Beauty, Peace And Quite-And Privacy That This Valley Offers. We Have Purchased And maintained our own private Well With No Restrictions. Property was Declared a Floodzone a few years ago - This was not so when We Purchased Property. So Now it is Difficult For A person To get A Loan, And if Financed Flood Insurance is Very Expensive. Monitering our Wells, and Eventually telling us How much Water We can use - This After it has been Pumped. Would Not make This Property Worth Anything!
We Do not Want Anyone on Our Property! We Have Locked Gates For A Reason. Please Leave us And Our Valleys Alone. Sell our Water! NO! NO!
Thank and
Patricia Hernandez

Response: Comments are not germane to the contents of the GSP. Domestic well owners (*de minimis*) are not subject to regulation under SGMA. Any monitoring conducted by the OVGA in privately owned wells is strictly voluntary. The OVGA will not sell Tri-Valley water.

SUSAN JOHNSON

OVGA Public Review Draft Comments

Ways to comment on the Owens Valley Groundwater Sustainability Plan

COMMENT DEADLINE IS NOVEMBER 8, 2021

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Independence, CA 93526

RECEIVED
NOV - 1 2021
Inyo County Water Dept.

Email: You may email your comments to: ovga.us/contact-us/

USE THIS COMMENT FORM:

NAME Susan Johnson DATE 10-28-2021

ADDRESS: 57451 Hwy 120, Benton, CA 93512

YOUR COMMENT ON OVGA PLAN:

I strongly believe it would be in the best interest of the residents and Farmers of the Tri-Valley Groundwater Management District here in Mono County that we withdraw from the OVGA in Inyo County...

On December 15, 2020 - Mono Board of Supervisors Meeting minutes show that they already voted to remove themselves from OVGA at plan completion!

We need to keep our own Entity here in Mono County...

Susan Johnson

Response: Comments are not germane to the contents of the GSP. Recommendations regarding membership in the OVGA is not part of the GSP adoption process. Any comments about Mono County's membership in the OVGA should be directed to the Mono County Board of Supervisors, c/o Mono County Clerk, PO Box 237, 74 School Street Annex I, Bridgeport, CA 93517.

RICK KATTLEMANN

OVGA Public Review Draft Comments

Name Rick Kattleman
Date 11/08/2021
Email rick@inyo-monowater.org
Phone (760) 935-4088
Address
143 Jeffrey Pine Road
Crowley Lake, CA 93546
United States

Leave a Comment

Overall, the plan appears to be very sound and thorough. The work of the OVGA board, staff, and consultants in developing this plan is greatly appreciated. The GSP seems to be as good as could be expected with the massive constraint of being unable to address much of the groundwater basin. Although the legislatively determined limits of the OVGA and GSP are a legal reality, these boundaries are hydrologic nonsense. Nevertheless, the GSP dealt with that reality in a sensible manner.

I recommend that the GSP be slightly revised to include some mention of project work that has been done or is the planning stage by the Inyo-Mono Regional Water Management Group (e.g., in Big Pine and Keeler). Unfortunately, at a statewide level, SGMA was not sufficiently integrated with the Integrated Regional Water Management Program. In the Owens Valley, there should be some opportunities going forward to coordinate these efforts, especially where disadvantaged communities and small community water systems could benefit. The Inyo-Mono RWMG may also be able to help with future outreach activities of the OVGA, especially to the tribes of the Owens Valley and disadvantaged communities. In the draft plan, the few mentions of the Inyo-Mono RWMG should be made consistent: IMRWMG (e.g., page 40 and 288) IRWMG (page 105), and IMIRWMP (e.g., pages 284, 290, 295) are used.

Response: Additional information about IRWMP projects was included in Sections ES 4.5 and 4.5.2. The interest and offer of future integration of the IRWMP and the OVGA outreach is appreciated. See Section 2.1.9.3 which discusses the difficulty in outreach in Tri-Valley and Section 4.4 which includes another possible OVGA groundwater management public education campaign concurrent with groundwater model development in the Tri-Valley.

A few comments about details of the draft Executive Summary of the GSP:

ES-1 suggest mentioning in the first paragraph that the GSP does not pertain to the adjudicated portion of the basin; get that point across immediately

Response: The following text was added to Section ES-1:

Preparation and implementation of the GSP by the OVGA is discretionary as long as the Basin remains very low or low priority. This GSP does not pertain to lands in the Basin that are exempt from SGMA, e.g. Federal and state owned lands, Tribal Reservations, and Los Angeles Department of Water and Power (LADWP) lands managed pursuant to the Long Term Water Agreement (LTWA). LADWP lands in Inyo County are referred to as adjudicated; other lands in the Basin are referred to as GSP lands in this document. Los Angeles-owned lands in the Basin in Mono County are not exempt from SGMA.

ES-3 suggest rounding off the estimated costs. That level of precision doesn't mean much.

Response: No costs are provided in ES-3. Values in ES 1 and ES 5 are rounded to the nearest $5.

ES-6 the paragraph about "external" influences is a good summary as far as it goes, but should include at least one sentence about potentials involving IWVGSA
Response: Section ES-6 does not exist but presumably the comment pertains to ES-1, p.6. The following summary explanation was added to the GSP:

> *The Indian Wells Valley Groundwater Sustainability Plan includes a potential project to exchange approximately 7,650 acre-feet per year (AFY) water with LADWP. The IWVGA does not currently have access to any water supply from outside of their basin.*

ES-15 middle of bottom paragraph: suggest change to "Water levels under alluvial fans are typically 10s or 100s of feet..." might search for unnecessary apostrophes elsewhere

Response: . The cited text is in ES 2.2.2. and Section 2.2.2.5, and the suggested grammatical correction was made.

ES-24 end of first full paragraph: fix "...CSLC to affect (or lower ..." ES somewhere duplicating a map or two within the Executive Summary could be helpful

Response: The cited text is in ES 3.2.3. .The suggested correction was made.

CEAL KLINGLER

OVGA Public Review Draft Comments

C. Klingler
940 Starlite Dr.
Bishop, CA 93514

Owens Valley Groundwater Authority
c/o Inyo County Water Department
135 S. Jackson St.
Independence, CA 93526

To whom it may concern,

Thanks very much for the opportunity to comment on the Draft Groundwater Sustainability Plan. A few comments and concerns follow.

I. The standards for "undesirable conditions" are set too low.

A. Conditions are not "overall sustainable" in a basin when one or more species are being pushed significantly towards extinction due to groundwater conditions somewhere in the basin. Criteria for undesirable conditions should be changed in the GSP.

Authors of the report observe on p. 236 that "There are currently no documented undesirable results for the indicators throughout the Basin reflecting the overall sustainable conditions." Given that
1) extremely undesirable results are occurring in the basin—e.g., loss of groundwater-dependent marshes in northeast Fish Slough, corresponding losses in populations of Owens Valley speckled dace and Owens pupfish, and, presumably loss of any remaining springsnails dependent on the Northeast Springs of Fish Slough, and 2) the standards *already* exclude a large portion of the basin, i.e., lands that are treated as adjudicated and excluded from consideration for the GSP, 3) the failure to rate such conditions as undesirable results for the Basin as a whole suggests that standards for undesirable conditions are flawed, not that conditions are sustainable.

Significant population losses for species that are already close to extinction *due to changes in groundwater conditions* should register as unsustainable for the Basin as a whole. If a species has become so rare within a basin that a change in groundwater conditions in one portion of the basin can significantly affect the species' future chances of existence *in the universe at large*—not just in the basin—that should be rated as an undesirable indicator for the whole basin. **When conditions are so dire that a change in one portion of the basin pushes an entire species—or several—significantly closer to extinction, GSP monitoring standards should not indicate that conditions are "overall sustainable."**

Response: The Basin Ranking included criteria related to groundwater conditions and trends, but also criteria related to groundwater reliance, population, well density, etc. that are related to the geography of the Basin. The wording in the GSP was revised to remove inferences between sustainability and basin ranking (e.g. see Section 1.2 and elsewhere).

B. Thresholds for subsidence should be set at zero or close to zero, not 3.6".

1) Setting subsidence standards at unrealistic levels for the Owens Valley is a warning signal that planners are setting thresholds that will never be triggered. Given that subsidence appears to be extremely rare, is mostly unrecorded, and has only been recorded at Owens Lake at 0.43" (see GSP appendix 8), a subsidence of even one-half inch should be regarded as an indicator that something has gone wrong.

2) Subsidence should not be regarded with equanimity in any portion of the basin, particularly at the Owens Lake. Even if the "majority of subsidence" there is elastic in terms of the ability of compressed layers to recover, subterranean species (e.g., spadefoot toads, Western toads, any one of the Owens Valley's endemic tiger beetle subspecies, etc.) are not elastic when trapped beneath dry, compressed soil or clay. Furthermore, groundwater pumping enough to produce subsidence may affect spring flow, which would affect other special status species such as springsnails. The GSP should neither create special status species by pushing stable species into less stable conditions nor push already rare species closer to extinction.

Response: Groundwater-caused subsidence occurs in the fine-textured layers separating aquifers at depth resulting in a drop in ground surface elevation. It is a distinctly different process than compaction of surface soils that would directly impact the species mentioned. It is highly unlikely that subsidence would result in surface compaction especially if limited as described below.

The measurable objective (goal) for land subsidence has been set to less than 0.07 ft (0.84 inches), the vertical resolution of the remotely sensed inteferometric synthetic-aperture radar (InSAR) data provided by DWR (TRE Altamira, 2021; Towill, 2021). This value represents maximum instrument sensitivity. This value for the objective was chosen because no subsidence has been observed in Basin and the goal is to maintain those conditions.

The minimum threshold of 0.3 ft (3.6 inches) of subsidence measured by InSAR has been proposed as less than significant and reasonable. The minimum thresholds for subsidence are based on the variability in repeat measurements at permanent GSP stations reflecting elevation changes caused by factors other than subsidence (approximately 1.6 inches, see Appendix 8). If this amount of subsidence is observed, it is approximately the smallest value likely not due to noise or some other cause.

C. GSP authors should avoid misleading language with regard to current conditions. Instead, the OVGA should 1) acknowledge real-world conditions, including that even if LADWP has not joined the OVGA, Los Angeles' practices in the Owens Valley will affect sustainability and 2) adopt language that indicates that the 1991 LTWA and 1997 MOU will be strictly enforced to protect OVGA stakeholders.

The authors of the report postulate that "the Basin is currently ranked by DWR as a low priority basin suggesting that as a whole, groundwater in the basin is managed sustainably with respect to SGMA." (p. 233) That is not what the DWR ranking reflects. If DWR had included the entire basin in its calculations, rather than being petitioned to exclude LADWP groundwater pumping and exports and to treat the basin as adjudicated, the basin would not appear to be managed sustainably. The basin also does not appear to be managed sustainably in light of Appendix 12 hydrographs, some of which indicated that monitoring wells occasionally run dry and groundwater tables sometimes drop well below rooting zones. Such hydrographs don't indicate resilient groundwater tables. In addition, groundwater doesn't respect DWR boundaries. The GSP should, at the very least, include commitments to enforce agreements within the treated-as-adjudicated lands and set firm standards that prevent LADWP from adopting significant new groundwater pumping plans or harming lands and stakeholders outside the borders of land treated as adjudicated, especially at the Owens Lake.

Response: The Basin Ranking includes criteria related to groundwater conditions and trends, but also criteria related to groundwater reliance, population, well density that are related to the geography of the Basin. The wording in the GSP was revised to remove inferences between sustainability from basin ranking (e.g. see Section 1.2).

DWR prioritization included the Basin as a whole. DWR prioritized basins based on a consideration of the components specified in Water Code Section §10933(b) and described in the GSP Section 3.1, including LADWP lands. Hydrographs in the Basin in Inyo County are resilient and resemble a dynamic steady state condition, fluctuating but not chronically declining requiring correction under SGMA (see Figures 2-18 and 2-20).

With regard to LADWP See General response #2.The OVGA cannot enforce commitments to agreements in the adjudicated lands contrary to SGMA. Also, the Owens Lakebed is owned and managed by the State Lands Commission. SGMA "…*does not authorize a local agency to impose any requirement on the state or any agency, department, or officer of the state. State agencies and departments shall work cooperatively with a local agency on a voluntary basis*" (CWC §10726.8(d)). The OVGA cannot simply forbid pumping on state-owned lands. State agencies, however, are required to "…*consider the policies of* [SGMA], *and any groundwater sustainability plans adopted pursuant to* [SGMA], *when revising or adopting policies, regulations, or criteria, or when issuing orders or determinations, where pertinent"* (CWC §10720.9). This GSP sets sustainable management criteria in test wells surrounding the lake and proposes that the OVGA actively participate in the working group and coordinate with state and local agencies with land management responsibilities to ensure this management area is managed sustainably to avoid undesirable results (GSP Section 4.5.1.).

D. At a general level, the GSP should strive for resiliency rather than chronic illness. The GSP does not call for improving conditions; instead, standards are set to respond to dire emergencies and allow current conditions—which would ordinarily not be regarded as low-priority by state standards—to either remain the same or get worse (i.e., be maintained at levels" at or above those during the 2012-2016 drought" (p. 26). Even if OVGA stakeholders are reluctant to commit to on-the-ground improvement, why not include aspirational components in the GSP mission statement? Healthy groundwater-dependent ecosystems are more resilient in emergencies and are more sustainable than drought-stressed vegetation that is subjected to outdated pumping strategies and climate-change-driven increases in temperatures and evaporation rates that would be difficult to adapt to even without groundwater table depletions. Sustainability at the least should include the goal to *first, try to do no harm. S*earching for opportunities to improve conditions should not be excluded from the GSP.

Response: Generally it is true that healthy GDEs are more resilient resistant to perturbation but not necessarily so. Springs, for example, are highly susceptible to groundwater pumping impacts even if previously undisturbed. Setting standards as desired by this comment also requires the GSP include management actions to attain those standards. Given that in most of the Basin where GDEs exist, the GSP would only apply to non-LADWP pumpers, and therefore place the entire burden upon those users to raise water levels to the desired depth. Also refer to General Comment #4.

Sincerely,
Ceal
Klingler

LOS ANGELES DEPARTMENT OF WATER AND POWER

OVGA Public Review Draft Comments

Los Angeles Department of Water & Power
BUILDING A STRONGER L. A.

Eric Garcettl, Mayor

Board of Commissioners
Cynthia McClain-Hill, President
Susana Reyes. Vrce Presrdent
JillBanks Barad-Hopkins
Mia Lehrer Nicole Neeman Brady
Yvette L.Furr. Actin g Secretary

MartinL Adams, General Manager and Chref Engineer

November 4, 2021

Board of Directors
Owens Valley Groundwater Authority
P.O. Box 337
Independence, California 93526

Dear Owens Valley Groundwater Authority Board Members:

Subject: Comments on the Owens Valley Groundwater Basin - Groundwater Sustainability Plan - Public Review Draft (September 23, 2021)

The Los Angeles Department of Water and Power (LADWP) greatly appreciates the opportunity to comment on the public review draft of the Groundwater Sustainability Plan (GSP) for the Owens Valley Basin. We recognize the significant work effort by the Groundwater Sustainability Agency (GSA) members and consultants represented by this document. The document is well written and illustrated.

The attached table (Attachment A) lists LADWP comments on the GSP, referenced to the text and page numbers of the document. Of this list of comments, our main concern is with the minimum thresholds for the Owens Valley and Owens Lake management areas, which are inconsistent with the Sustainable Groundwater Management Act (SGMA), under which the document was prepared. While minimum thresholds as defined by the SGMA are to represent significant and unreasonable, unsustainable conditions, the GSA has defined the minimum thresholds as represented in temporary drought conditions that did not cause unsustainable conditions, and from which the basin fully recovered afterward.

The GSP contains no technical information to support minimum thresholds based on the 2012-2016 drought in either the Owens Valley or Owens Lake Management areas. As noted throughout the document, significant and unreasonable undesirable conditions were not observed during this time period. GSP Regulations §354.28(b)(1) states that "The justification for the minimum threshold shall be supported by information provided in the basin setting, and other data or models as appropriate, and qualified by uncertainty in the understanding of the basin setting." Such justification is not provided in the GSP.

As noted by the Department of Water Resources in Best Management Practices for Sustainable Management Criteria (2017), undesirable results occur when conditions related to any of the six sustainability indicators become significant and unreasonable. It also states that GSA must consider and document the conditions at which each of the six sustainability indicators become significant and unreasonable. The GSP has not demonstrated how the proposed minimum thresholds in the Owens Valley and Owens Lake Management areas constitute significant and unreasonable conditions.

In addition, the California Water Code §10721(x)(1) states that: "Undesirable result" means the effects caused by groundwater conditions throughout the basin, including: "chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. Overdraft during a period of drought is not sufficient to establish a chronic lowering of groundwater levels if extractions and groundwater recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods."

Thus, the minimum threshold must account for long-term chronic lowering throughout the basin or management area, and not just one or several localized wells or monitoring locations, and temporary drought conditions which later recover from recharge (as occurred in both the Owens Valley and Owens Lake Management areas in 2017) are not sufficient to establish a chronic lowering of groundwater levels or a significant or unreasonable, undesirable result.

While the GSP does not define minimum thresholds in terms of occurrence of basin- wide (or management area-wide) undesirable results, the LADWP has developed a monitoring network at Owens Lake specifically designed to monitor and protect groundwater-dependent resources. LADWP has also developed resource protection protocols (analogous to minimum thresholds) conservatively linked to undesirable results. We invite the GSP to incorporate this work, which is fully aligned with the SGMA and is publicly available.

LADWP supports the sustainable management of groundwater in the Owens Valley and throughout the state and appreciates the work of the Owens Valley Groundwater Authority (OVGA) in these efforts. The LADWP would be happy to provide further information or assist the OVGA in modifying the draft document to align with the intent and requirements of the SGMA.

For any questions or more clarification on LADWP comments, feel free contact Saeed Jorat, Waterworks Engineer , at (213) 367-1119.

ORIGINAL SIGNED BY ADAM PEREZ

Adam Perez
Manager of Aqueduct

SMJ:mt
c: Dr. Aaron Steinwand, Inyo Valley Water Department
Dr. Saeed M. Jorat

Attachment A

LADWP's Comments on the *Draft Groundwater Sustainability Plan for the Owens Valley Groundwater Basin* Dated September 23, 2021

No.	Page(s)	GSP Text or Figure Number	Comment
1	6	"These [meaning LADWP's] activities may affect the ability of the OVGA to maintain sustainable groundwater management in the basin."	There is no evidence to support this statement. Based on extensive studies by the USGS and others in the 1980s and 1990s, the Long-Term Water Agreement (LTWA, included as Appendix 2 to the Groundwater Sustainability Plan (GSP) states: "Each well field area has been included in a designated management area [now referred to as the adjudicated area]. The boundaries of each management area have been established so as to contain all vegetation that could be impacted as a result of groundwater pumping from the well field area during "worst case" conditions (multiple dry years along with heavy pumping)". If the Owens Valley Groundwater Authority (OVGA) has evidence of current or future unsustainable conditions in the Owens Valley Management Area as a result of LADWP's activities, it should be noted in the GSP. If undesirable results have not been noted in the 30-year history of the LTWA over numerous different climatic conditions, they are unlikely to occur in the future, and this should be noted in the GSP. Response: LADWP has sufficient pumping capacity to cause water levels to decline within the GSP area of the Owens Valley and possibly the southernmost reaches of Chalfant Valley. LADWP pumps considerably less than capacity due to the management and vegetation protection provisions of the LWTA. The GSP recognizes that water levels in most of the Owens Valley and Owens Lake Management Areas are presently in a dynamic steady state, fluctuating but not chronically declining. The statement in the GSP referred to in this comment is precautionary and recognizes the simple reality that in the future, LADWP's operations may change.

2	6	“The Inyo/Los Angeles LTWA contains provision to protect private wells and to prevent other significant impacts on the environment that cannot be acceptably mitigated, including in the non-adjudicated portion of the Basin.”	As noted in the LTWA, “adverse effects [on private wells] shall be promptly mitigated by the Department.” In the history of the LTWA, the Los Angeles Department of Water & Power (LADWP) has abided by this provision of the LTWA and will continue in the future. Response: It is encouraging that LADWP intends to continue to comply with the LTWA.
3	17	"In Owens Valley and Owens Lake Management Areas, long-term recharge and discharge are approximately in equilibrium based on analysis of both water balance components and long-term monitoring showing stable groundwater levels.”	This is true. As noted in several portions of the GSP, there is ample evidence that the LTWA adjudicated area as a whole has been sustainably managed by the LADWP.
4	21	“There are currently no documented undesirable results for the indicators throughout the Basin reflecting the overall sustainable conditions.”	This is true. The key word is “throughout”. Although there are indications of undesirable results in the Tri-Valley Management Area, there is no evidence of basin-wide undesirable results in the Owens Valley or Owens Lake Management Areas or the Owens Valley basin as a whole.
5	22	“Based on available geologic, hydrologic, and geochemical evidence, pumping in the [Tri-Valley] management area is the cause of declining water levels and spring flow in Fish Slough.”	This is an important point. Recent testing of LADWP well W385 (the closest LADWP production well to Fish Slough) showed no impact to the upper reaches of Fish Slough where spring flow originates, indicating declines in Fish Slough flows are not the result of LADWP’s groundwater management. Response: This is true as the test was short-lived (only 2 months) from one well conducted according to a plan with extensive monitoring and drawdown triggers to stop pumping if effects greater than expected occurred. No trigger was hit. The conclusion that W385 cannot cause changes in Fish Slough discharge should not be extrapolated to greater pumping amounts or other nearby wells.
6	24	“Presently water levels are stable in the non-adjudicated portion of the [Owens Lake] management area. …Groundwater levels at present are stable and not concerning, and it is unlikely that undesirable results related to sustainable yields or available groundwater storage will occur absent increased pumping related to LADWPs OLGDP…The primary subsidence threat is future LADWP pumping under the lakebed from deeper aquifers.”	This statement implies that the Owens Lake Groundwater Development Plan (OLGDP) will cause undesirable results, whereas other activities such as increased private pumping will not. In fact, the OLGDP has proposed extensive monitoring and conservative minimum thresholds to ensure sustainability (including prevention of subsidence), whereas there are no such discussions regarding other groundwater users. Other groundwater users may also cause a subsidence threat, but there are no monitoring facilities proposed to evaluate this as there are with the OLGDP. Response: The OLGDP is the only large proposed pumping project in the Management Area. The GSP is

			required to recognize anticipated projects but does not have to include all possible unknown projects. Other projects subject to the GSP will be evaluated against the sustainable management criteria like any LADWP groundwater pumping project not managed pursuant to the LTWA.
7	25	"A well vulnerability assessment was performed for 189 domestic wells in the management area….. this number of wells being negatively affected by declining water levels is considered significant and unreasonable. Water levels in monitoring wells and Fish Slough spring flows are highly correlated. Because the water levels in Fish Slough and Tri-Valley have similar long-term declining trends (albeit at different rates), a similar extrapolation to estimate 2030 water levels based on the rate of water table decline was used to set minimum thresholds in representative monitoring wells in Fish Slough. The minimum thresholds for wells in Fish Slough represent less than 1.5 feet of additional decline. …An	This is an important analysis because the determination of an appropriate minimum threshold for the Tri-Valley Management Area is based on potential or estimated impacts to beneficial uses such as domestic wells and spring flow in Fish Slough. As noted in the later text regarding the Owens Valley and Owens Lake Management Areas, an analysis of impacts on beneficial uses was not attempted in these management areas. Instead, minimum thresholds were derived arbitrarily from hydrograph information without analysis of effects (or lack thereof) on beneficial uses. Conversely, for the Owens Lake Management Area, an analysis of impacts to beneficial uses has been performed for the OLGDP. The OLGDP information and analysis are readily available to the public on LADWP's website (http://www.LADWP.com/olg) and can be included in the GSP. Additional information is available from the Groundwater Working Group meetings in which ICWD was a co-sponsor and has access to all working group products.

		average flow rate of 0.1 cubic feet per second from the Fish Slough Northeast Spring was chosen as the minimum threshold for the interconnected surface-water depletion sustainability indicator. The minimum threshold represents the minimum flow rate that is necessary to allow management of flows to maintain current habitat conditions according to the CDFS."	Although the use of different minimum thresholds in separate management areas is consistent with SGMA regulations, the OVGA is required to explain the entirely inconsistent hydrologic and geologic rationale used in the Tri-Valley area and the two other management areas in the Owens Valley Groundwater Basin. Response: See summary response #1 below
8	26, 235, 245, 249	"Minimum groundwater elevations observed during the 2012-2016 drought were used to establish the minimum thresholds for groundwater level declines, groundwater storage reductions and surface water depletions [in the Owens Valley Management Area]. If no data were available in a representative monitoring well during this time, the minimum groundwater elevation observed since January 1st, 2000 was used. Impacts to GDEs are preceded by declines in water levels and maintaining water levels at or above those during the 2012-2016 drought should prevent impairment of GDE caused by pumping in the non-adjudicated area."	There is no technical information to support minimum thresholds based on the 2012-2016 drought in either the Owens Valley or Owens Lake Management Areas. As noted elsewhere in the document, significant and unreasonable undesirable conditions were not observed during this time period. GSP Regulations §354.28(b)(1) states that "The justification for the minimum threshold shall be supported by information provided in the basin setting, and other data or models as appropriate, and qualified by uncertainty in the understanding of the basin setting." This justification is not provided in GSP. As noted by the Department of Water Resources in Best Management Practices for Sustainable Management Criteria (2017), undesirable results occur when conditions related to any of the six sustainability indicators become significant and unreasonable. It also states that GSA must consider and document the conditions at which each of the six sustainability indicators become significant and unreasonable. The GSP has not demonstrated how the minimum thresholds in the Owens Valley and Owens Lake Management Areas constitute significant and unreasonable conditions. In fact, it is stated that unsustainable conditions did not occur. In addition, the California Water Code §10721 x(1) states that and "undesirable result" is a groundwater condition throughout the basin that includes: "Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. Overdraft during a period of drought is not sufficient to establish a chronic lowering of groundwater levels if extractions and groundwater recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by

			increases in groundwater levels or storage during other periods." Thus, the minimum threshold must account for chronic lowering throughout the basin, and not just one or several localized wells or monitoring locations, and temporary drought conditions which later recover from recharge (as occurred in both the Owens Valley and Owens Lake Management Areas in 2017) are not sufficient to establish a chronic lowering of groundwater levels or a significant or unreasonable undesirable result. Finally, GSP Regulation §354.28(b)(4) states that a description of minimum thresholds shall include "How minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests". As a user of groundwater with property interests in both the Owens Valley and Owens Lake Management Areas, LADWP is interested in groundwater banking or aquifer storage and recovery. As noted in the LTWA §VIII "It is recognized that development of new groundwater storage, and the implementation and operation of feasible groundwater banking and recharge facilities in the Owens Valley and in Rose Valley that will not cause significant effects on the environment may be beneficial". Groundwater banking and storage is common beneficial use in groundwater basins that would be prohibited by arbitrary minimum groundwater elevations that prohibit temporary and localized lowering of groundwater elevations during the recovery phase of groundwater banking. This was not considered as required by §354.28(b)(4), nor was LADWP's interest in the beneficial use of conserving high-quality potable water from the Owens Valley by sustainably using saline water from deep aquifers at Owens Lake to supplement high water demand for dust mitigation. Response: See summary response #1 below
9	27	"Given that water levels in this [Owens Lake] management area fluctuate but no long-term declining trends are present that pumping stress is currently low, minimum groundwater elevations observed during the 2012-2016 drought were used to establish the minimum thresholds for groundwater level declines and groundwater storage reductions. If no data were available in a	See the comment above regarding the lack of technical justification to establish minimum thresholds. A key beneficial use of groundwater in the Owens Lake Management Area is interconnected surface water (springs and seeps). GSP regulations §354.28 c(6) states that: "The minimum threshold establish for depletion of interconnected surface water shall be supported by the following: (A) The location, quantity, and timing of depletions of interconnected surface water.

		representative monitoring well during this time, the minimum groundwater elevation observed since January 1st, 2000 was used. Maintaining water level elevation at or above historical levels is not anticipated to result in significant and unreasonable impacts in the future"	(B) A description of the groundwater and surface water model used to quantify surface water depletion. If a numerical groundwater and surface water model is not used to quantify surface water depletion, the Plan shall identify and describe an equally effective method, tool, or analytical model to accomplish the requirements of this paragraph." No numerical model or equally effective method is provided in the GSP and the model results published by LADWP in the management area are not considered. Numerical model results and analysis for the Owens Lake Management Area are publicly available on LADWP's website. Response: See summary response #1 below
10	39, 286	"The Owens Lake Groundwater Development Program [OLGDP] has identified the sensitive resources potentially affected by the project, most of which overlap with SGMA sustainability indicators. Details of the potential pumping project including the monitoring methods and location or management triggers are not yet finalized. A fundamental principal of the OLGDP, however, is to include an adaptive management strategy to evaluate monitoring results, and based on the observations, adjust pumping, monitoring, or management triggers, or take other actions to avoid impacts to sensitive resources."	All of the sensitive resources identified in the OLGEP overlap with SGMA sustainability indicators. In fact, the proposed monitoring methods, and sustainability indicators for OLGDP are more comprehensive than the GSP because they are based on detailed evaluation of potential undesirable results supported by detailed hydrogeologic analysis and numerical modeling. Information related to the proposed OLGDP sustainability criteria is publicly available on LADWP's website and/or through the groundwater working group. The GSP text is correct in noting that the OLGDP includes an adaptive management strategy using aquifer testing, starting with conservative low pumping rates, and detailed management triggers (minimum thresholds) to protect beneficial uses. It is important to note that the minimum thresholds proposed in the GSP based on the 2012 to 2016 drought will prevent the adaptive management strategy because necessary temporary testing may not be possible if minimum thresholds are based on the 2012 to 2016 drought which had little effect on deep aquifers. Response: see summary responses #1 and #2 below

11	39	"Given the various sources of uncertainty regarding oversight for the OLGDP, this GSP was prepared assuming it could apply to the lakebed and be amended in the future."	It is unclear how and when the GSP should be amended, or why it would need to be amended if the GSP were properly applied to the Owens Lake Management Area during initial development.
12	75, 221	"The LADWP chose not to provide groundwater models of the valley nor information contained in the models pertaining to water balance and related requirements of the GSP."	This is a misrepresentation. The water balance from the OLGEP study of Owens Lake is cited in the GSP (page 223). A complete listing of information about the OLGEP model (Owens Lake Management Area) is publicly available on LADWP's website. The Inyo County Water Department (ICWD) participated in the development of the Owens Lake model through the Blue Ribbon panel (The OVGA did not exist at the time). LADWP is currently working cooperatively with ICWD on improvements to the Bishop Wellfield model and anticipates doing so in future Owens Valley Management Area model updates. Danskin's 1998 USGS work provides more than enough information for a water balance evaluation for the Owens Valley Management Area. Response: See summary response #3 below.
13	77	"When this flow reaches the Owens (dry) Lake delta, it is either used for dust control or pumped back to the Los Angeles Aqueduct."	Flow is also released onto the Owens Lake delta by LADWP for habitat preservation. Response: Delta habitat use for mitigation was added to this sentence in the Final GSP.
14	86	"The OVGA may evaluate whether these resource protection criteria [referring to OLGDP resource protection protocols] are suitable for inclusion in the GSP as sustainability criteria for resource at Owens Lake."	The resource protection criteria from the OLGEP is currently suitable for the GSP because they are based on a more technically sound basis and supported by numerical modeling. The LADWP will continue to work with stakeholders in Owens Valley (including the OVGA) as OLGDP is being developed and will provide additional information for resource protection protocols for the GSP if requested. Response: No final project description or monitoring or mitigation plan with resource protection criteria have been released by LADWP.

15	89	"Los Angeles exports approximately 100,000 – 500,000 AFY from Owens Valley for municipal use in Los Angeles, and extracts approximately 50,000-95,000 AFY of groundwater, with annual amounts of varying with runoff conditions. These activities may affect the ability of the Owens Valley Groundwater Authority to achieve sustainable groundwater management in the basin."	It should be noted that the entirety of water extracted (or pumped) by LADWP is used to supply (directly or indirectly) in-valley demands including irrigated lands, town water systems, Enhancement/Mitigation projects, and Owens Lake dust mitigation project…and not for export. Much of this water percolates back to the aquifer, supporting sustainable groundwater management and the economy of the valley. As noted in the GSP document, there is ample evidence that the Owens Valley Management Area has been and currently is sustainably managed. Response: See summary response #4 below
16	90	"Depending on the terms of such an agreement, Los Angeles may be motivated to increase water transfers from the Owens Valley to maximize water diversions to Indian Wells Valley."	LADWP has no agreement with Indian Wells, however, exchanging Los Angeles Aqueduct water for State Water Project water is a potential example of efficient water management in California that could save the State's crucial public funds and other resources. Such a project also may increase reliability and reduce export from Inyo County by providing storage in wet and very wet years for use in drought periods. Response: See summary response #4 below
17	90	"Groundwater production in the Owens Basin for export and use in the Indian Wells Basin would be subject to SGMA."	All of the groundwater production by LADWP in Owens Valley are used directly or indirectly in Owens Valley Basin. Exported water from Owens Valley is primarily surface water from Eastern Sierra runoff. Response: See summary response #4 below
18	219	"Potential pumping effects on GDEs are the subject of LADWP's ongoing studies"	These studies (which are necessary to establish a technical basis for minimum thresholds) have been completed (with the exception of vegetated dune areas east and south of Owens Lake which will be completed in the near future). The GSP should pattern minimum thresholds after the OLGDP approach as it did for the Tri- Valley area, namely, linking minimum thresholds to significant and unreasonable undesirable results. The approach utilized in the OLGDP is an example of this approach and should be adopted in the GSP. Response:; See summary response #1 below

19	236	"There are currently no documented undesirable results for the indicators throughout the Basin reflecting the overall sustainable conditions."	This was true for the 2012 to 2016 drought period, meaning there is no technical basis for use of this period to develop minimum thresholds. Response: See summary response #1 below
20	242	"A Minimum Threshold is defined as "a numeric value for each sustainability indicator used to define undesirable results (Reg. 351 (t)). A value for each sustainability indicator denoting undesirable results (Section 3.2) must be include in the GSP and consider the beneficial uses and users of groundwater and other interests within the Basin."	The OVGA should utilize the procedures described in the SGMA regulation to set the minimum threshold (i.e. conditions representing significant and unreasonable undesirable results). The temporary conditions of the 2012- 2016 drought during which unsustainable conditions were not observed are not appropriate for minimum thresholds. The GSP should describe the actions the OVGA will take if a minimum threshold is encountered. Response: See summary response #1 below
21	247	"These [minimum groundwater threshold] values are presented in Table 3-6."	Table 3-6 is labeled measurable objectives instead of minimum thresholds. Response: See summary response #1 below
22	247	"No significant and unreasonable impacts within the management area were reported during this [2012-2016 drought] period."	According to the SGMA, this indicates the 2012-2016 drought period is not appropriate for minimum thresholds. Minimum thresholds are defined by significant and unreasonable impacts occurring, yet the GSP specifically states no such conditions occurred. Response: See summary response #1 below
23	248	Table 3-6	California Water Code §10721 x (1) states that: "Undesirable result" means effects caused by groundwater conditions *throughout* the basin. There is no clear rationale for a minimum threshold at a single well as suggested by Table 3-6. In addition, the rationale for selection of representative monitoring wells is unclear. For example, well T908 is screened at a depth of 1,360 to 1,400 feet below ground surface (fbgs), with significant low- permeability strata above the screen from 300 to 500 fbgs. It is unclear how this well is representative of beneficial uses such as private wells and GDEs, which typically depend on shallow groundwater, particularly when the
			minimum threshold still maintains an artesian head of 43 feet above ground surface in T908. This is true of all deep wells (in aquifers 2 through 5) in Table 3-6. Response: See summary response #1 below

24	248	Table 3-6	Approximately 1/3 of the monitoring wells have a minimum threshold which is above the land surface. These artesian conditions mean there is still an upward gradient toward shallow groundwater-dependent resources and the shallow water table is not affected. Again, there is no demonstrated link of minimum thresholds to undesirable results or unsustainability in the GSP as required by SGMA. Response: See summary response #1 below
25	249	"Minimum thresholds based on a reduction in head gradient measured near springs and flowing artesian wells both vertically and horizontally may be included in a future GSP update. Further analysis and data collection are required to develop these thresholds which are part of the ongoing collaborative LADWP OLGDP"	LADWP has installed piezometers and monitoring wells to measure the head gradient near springs and flowing artesian wells, and thresholds have been developed. They should be utilized in the GSP as suggested in OLGDP resource protection protocols. The next logical further analysis and data collection is operational testing of wells, which could be prohibited by the minimum thresholds suggested in the draft GSP. Response: See summary response #1 below
26	268	"The relationship between interconnected surface water and groundwater discharge can be effectively monitored by comparing changes in groundwater head in a nearby monitoring well to spring discharge in a surface water gauge. The historical relationship between groundwater levels and spring flow in Fish Slough is evident. Similar relationships are expected to be developed in the Owens Lake area as more data are collected as part of the ongoing Owens Lake Groundwater Development Project and incorporated into the OVGA database."	There are already several years of head and gradient measurements surrounding Owens Lake that have been developed and presented in public meetings and are publicly available on LADWP's website. This data should be presented in the GSP and utilized for future monitoring of spring flow around Owens Lake.

27	269	"Chronic lowering of groundwater levels in the Owens Valley and Owens Lake management areas have not been observed and are unlikely."	This is further evidence that the Owens Valley Management Area is sustainably managed, and if the OLGDP protocols are adopted, so will the Owens Lake Management Area. Response: See summary response #1 below
28	270	"As part of the OLGDP, LADWP has proposed to monitor surveyed ground surface locations and install two extensometer locations. As a participant in the Owens Lake Groundwater Working Group the OVGA could insist that survey points extensometer or tiltmeter monitoring be instituted and could add these new locations to the GSP."	As noted, LADWP proposed survey points and install extensometers as part of the OLGDP as the best technical method to monitor subsidence, there is no reason for the to "insist" this monitoring be instituted. Response: comment noted

29	270, 271	"In addition, where groundwater discharge to the surface is primarily related to the amount of upward groundwater gradient, groundwater elevation measurements are an effective proxy for determining impacts to interconnected surface/ groundwater….Examining hydraulic head differences in well clusters consisting of adjacent monitoring wells with differing vertical screen intervals is an additional way to monitor groundwater and surface water connections and to asses changes in vertical hydraulic gradient…By comparing historical and future hydraulic vertical gradient using cluster wells, the monitoring network will detect decreasing in upward groundwater flow that could lead to decreases in groundwater discharge to surface waters."	The measurement of upward groundwater gradient is made possible by cluster monitoring wells on the margins of the Owens Lake installed by LADWP. These facilities should be utilized to monitor upward gradients as suggested in the GSP. Response: Agreed, these are necessary monitoring locations and data.

30	271	"In areas of GDE, evapotranspiration and vegetation cover are related to water table depth and groundwater elevation monitoring (Elmore et al., 2003 & 2006). Monitoring water levels is a sufficient proxy to indicate a potential for reduction in groundwater discharge caused by groundwater management."	It is true that vegetation cover is related to water table depth on a macro scale. For example, vegetation cover will differ greatly in desert areas with a 100-foot depth to groundwater and a desert area with a 3-foot depth to groundwater. However, studies in the Owens Valley have shown that there is no simple relationship between depth to water and vegetation cover on a finer scale (i.e. depth to groundwater < 30 feet). Instead, vegetation cover is believed to be a function not only of depth to groundwater, but more complex relationships involving vegetation type, run-on or applied surface water, precipitation, and soil type. The dune areas around Owens Lake with vegetation cover is a good example of these complex relationships. Response: Agreed, it is not a simple and uniform response to change in pumping, however, vegetation characteristics often integrate the history of water table depth and fluctuations. Pumping effects on vegetation are almost always the result of a change in that existing water table regime.
31	287	"This GSP proposes that the OVGA actively participate in the working group and coordinate with state and local agencies with land management responsibilities to ensure this management area is managed sustainably to avoid undesirable results."	The OVGA has been and is welcome in the working group, which was created before the OVGA existed.
32	289	Table 4.1	It would be helpful in this table or an accompanying text to identify what management actions will be taken if a minimum threshold is encountered.
33	296	"Acquire or develop groundwater model for the Owens Lake management area"	A groundwater model has already been developed for the Owens Lake Management Area and all data and results of the model are publicly available on LADWP's website at http://www.LADWP.com/olg. LADWP is currently conducting studies to further improve the conceptual and computer model of the Owens Lake area. Response: See summary comment #3 below.

Response to LADWP comments are included in this section and organized by the main comments gleaned from the table.

Summary Comment 1: Lack of rationale for minimum thresholds included in the GSP for the Owens Lake Management Area.

The Sustainable Groundwater Management Act emphasizes local management of groundwater resources (e.g. Chapter 1, § 10729.1 Legislative Intent). SGMA grants individual GSAs significant latitude to determine and define what constitutes a significant and unreasonable result based on local public input and conditions. The OVGA divided the Owens Basin into three separate management areas based on hydrologic differences between the geographic regions of the Basin consistent with DWR's Best Management Practices for Sustainable Management Criteria (DWR, BMP#6). In the Draft GSP, Section 2.2.4 describes the rationale the OVGA used to establish the three management areas in the Basin. SMCs in each management area were specifically designed to avoid undesirable results to sensitive resources particular to each area.

> *"Management areas may have different minimum thresholds and measurable objectives than the basin at large and may be monitored to a different level. However, GSAs in the basin must provide descriptions of why those differences are appropriate for the management area, relative to the rest of the basin." (BMP#6 Sustainable Management Criteria, DWR, 2017, pg. 6)*

The Owens Lake is a hydrologic discharge area for the groundwater Basin. Although there is substantial confinement between shallow and deep aquifer zones, an upward hydraulic gradient from deeper aquifer zones provides groundwater discharge to the shallow-most aquifer, especially at springs and seeps and at historic artesian wells which provide GDEs and wildlife habitat. The amount of discharge is proportional to the upward gradient. In the Owens Lake Management Area, pumping stress is relatively low compared to the other management areas (Draft GSP Table 2-10), and vegetation, springs and seeps, and other beneficial uses have adjusted to the relatively low constant pumping stress of recent decades.

The GSP describes rationale and metrics used to set minimum thresholds and objectives (Sections 3.1- 3.4). In recent history, fluctuation in water levels and GDE vigor were primarily associated with drought. Severe changes in GDEs and other hydrologic resources during the 1999-2005 and 2012-2016 droughts were largely avoided due to the transitory nature of water level declines. Elsewhere in the Owens Valley, before the second aqueduct, pumping stress in the Basin was relatively low and short lived during drought periods. Anecdotal reports of rapid changes to the beneficial uses, GDEs, and surface water capture (springs) arose soon after the initiation of persistent pumping to supply the second Los Angeles Aqueduct in the early 1970's. It is conceivable that additional pumping stress in the Owens Lake area would exacerbate changes due to drought and could result in undesirable results (Draft GSP Table 3-3). Setting minimum thresholds at previously observed low water levels caused by drought is consistent with maintaining the sustainable conditions of recent decades and should avoid undesirable results. Similarly, GSP minimum thresholds were set in deeper wells to preserve existing upward gradients within historic ranges in order to avoid reduced discharge and potential surface water capture at springs and seeps. Measurable objectives were set above these minimum thresholds recognizing the desire to maintain water levels at approximately historic

values that support current beneficial uses and GDEs. This principle of setting criteria to avoid undesirable results is consistent with DWR guidance:

> *Avoidance of the defined undesirable results must be achieved within 20 years of GSP implementation (20-year period). Some basins may experience undesirable results within the 20-year period, particularly if the basin has existing undesirable results as of January 1, 2015. The occurrence of one or more undesirable results within the initial 20-year period does not, by itself, necessarily indicate that a basin is not being managed sustainably, or that it will not achieve sustainability within the 20-year period. However, GSPs must clearly define a planned pathway to reach sustainability in the form of interim milestones, and show actual progress in annual reporting (BMP #6 Sustainable Management Criteria. DWR, 2017, pg. 21).*

In the Owens Lake Management Area, the GSP pathway to comply with SGMA is to prevent undesirable results before they occur. This is consistent with SGMA and the OVGA desire to remain a low priority basin.

The GSP recognizes that the LADWP Owens Lake Groundwater Development program and associated Master Plan have been in development for several years. At the time the GSP was prepared, no official project description or monitoring and management plan have been released. As noted in the GSP, the OVGA appreciates LADWP's offer to participate in the various Owens Lake working groups and discussions. The OVGA Board of Directors could consider additional criteria or methods to modify SMCs for this management area in the future, but avoidance of undesirable results should continue to be a fundamental principle.

Summary Comment 2: What actions will occur if minimum thresholds are exceeded.

A range of actions can be initiated if minimum thresholds are reached. In general, these can include additional monitoring and analysis to investigate the likely cause(s) of declining water levels, additional trend analysis, modeling to predict future groundwater levels and the potential for undesirable results to occur, and temporary or long-term actions to reduce hydrologic stress including reduction or relocation of pumping. It should be noted that implementation of the GSP will be consistent with guidance provided by DWR:

> *"All undesirable results will be based on minimum thresholds exceedances. Undesirable results will be defined by minimum threshold exceedances at a single monitoring site, multiple monitoring sites, a portion of a basin, a management area, or an entire basin. Exceeding a minimum threshold at a single monitoring site is not necessarily an undesirable result, but it could signal the need for modifying one or more management actions, or implementing a project to benefit an area before the issue becomes more widespread throughout the basin." (BMP #6 Sustainable Management Criteria, DWR, 2017, pg. 20).*

Additional text has been added to Section 3.1 of the GSP to elaborate on the range of potential actions the OVGA could consider if minimum thresholds are exceeded in a given management area.

Summary Comment 3: Data sharing related to existing and current groundwater models.

To prepare the GSP, the OVGA utilized numerous reports and data produced by LADWP and appreciates the availability of this information. During the GSP development process, the OVGA made requests related specifically to LADWP's existing numerical MODFLOW groundwater models covering the Owens Valley and Owens Lake management areas. The LADWP models synthesize the most current hydrologic information for the basin as compared to older reports or models. After the initial discussions and request regarding executable model files, the OVGA requested basic water balance information that is automatically provided as a data output file of the LADWP groundwater models. Although the GSP process is nearing completion, the OVGA is still interested in obtaining the data files detailed in email correspondence between DBS&A and LADWP in July 2020 for the purpose of better understanding the basin's water balance components.

Summary Comment 4: Comparison of extraction and uses and potential water banking or water wheeling activities.

The OVGA supports effective surface water management by LADWP including potential water banking provided the projects do not result in exceedance or failure to attain SMCs or cause undesirable results in the Basin. The OVGA opposes groundwater export from the Eastern Sierra that would result in negative consequences to groundwater sustainability, the environment, local economy, and residents (Sustainable Principle #14, Section 1.2). Please provide the analysis supporting the statement that all LADWP pumped groundwater is used to supply projects in the Owens Valley, i.e. that uses downstream of the wells exceeds pumping.

Carol Ann Mitchell

OVGA Public Review Draft Comments

Carol Ann Mitchell
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Chalfant, California 93514
(760) 873-8648

November 1, 2021

Aaron Steinwand
Inyo County Water Dept./OVGA
P.O. Box 337
Independence, CA. 93526
Via email and Website

RE: OVGA Draft Groundwater Sustainability Plan

Dear Mr. Steinwand:

I offer the following comments on the OVGA Draft plan as a resident of Chalfant Valley since 1982 and member of the Mono County Tri-Valley Groundwater Management District (TVGMD) since 1990.

- The Tri-Valley area and Fish Slough management areas need to be separated. TVGMD has requested that these management areas be separated due to geographical, and jurisdictional issues. The agencies involved are Inyo and Mono counties, districts and the State. No attempt was made by OVGA to address how management issues would be addressed in the future. Concerns were made in public comment at meetings our representatives drove to between 20 and 40 miles to attend. No detailed answer has ever been given to our request except that OVGA has made the assumption that Tri-Valley and Fish Slough are hydrologically connected. No consistent data has been given to date. It is because our concerns were never addressed TVGMD left the OVGA Joint Powers Agreement.

Response: See General Response #6. Available geologic, hydrologic, and geochemical studies suggest that Fish Slough is a primary discharge point for the Tri-Valley groundwater aquifer system. The technical information supporting that assessment were discussed at length by the OVGA and referenced in the GSP and available on the OVGA.us website, in particular Harrington, R.H. (2016), Hydrogeologic Conceptual Model for the Owners Valley Groundwater Basin (6-12), Inyo and Mono Counties. Other published studies include Zdon et al. (2019), Jayko and Fatooh (2010), Hollett et al. (1991). These references are included in the GSP.

- The Tri-Valley is a stakeholder in this process. The OVGA never held a meeting with local residents during the development of the draft plan. Their own "Communication and Engagement Plan" was never followed. Tri-Valley residents were never given opportunity to "engage" with the OVGA Board and staff or consultants on specific components of the plan which will affect their lives tremendously. The OVGA never held meetings during hours that did not impede work schedules. Their meetings were held at 2:00 – 5:00 p.m. excluding a good portion of Tri-Valley residents. The OVGA **never** came to Tri-Valley to explain the Groundwater

Sustainability Plan process. It was developed in a biased, exclusionary manner so that the goal of grabbing water and power for the OVGA board and Inyo County was accomplished.

Response: Staff from the OVGA attended a meeting of the TVGMD meeting in January 2020 in person to discuss the District's consideration of a request to withdraw from the OVGA. Tri-Valley Groundwater Management District was a member of the OVGA until February 2020. Meetings of the OVGA were conducted in person during the initial development of the GSP until May of 2020, when meetings were converted to an online format, and all meetings were open to the public. As recognized in the GSP (Section 2.1.9.3), the outreach efforts in Tri-Valley during the COVID pandemic were hindered by the lack of internet connectivity and health orders regarding public gatherings. Four additional presentations were provided by the OVGA staff during evening meetings of the TVGMD, and every resident in the Tri-Valley Management Area was contacted via a direct mailer. The mailer provided information regarding SGMA and the GSP process, a survey, and requested feedback regarding the proposed undesirable results and sustainable management criteria. Two evening public workshops to discuss the draft GSP were provided In October 2021 during the public comment period. Staff from Mono County representing the OVGA attended numerous meetings of the TVGMD. Recognizing the challenges of outreach in Tri-Valley, Sections 2.1.9.5 and 4.4 of the draft GSP includes another possible OVGA project:

Tri-Valley Survey: Add a groundwater management public education campaign concurrent with groundwater model development in the Tri-Valley to help Tri-Valley residents understand the situation and become more directly involved in groundwater management decisions that will affect their livelihoods.

- The OVGA never listened to or engaged local agricultural interests or local business owners who have a financial share in the Groundwater Sustainability Plan proposed "actions" such as a pumping plan, fines or fees, so widely encouraged by OVGA.

Response: Concerns of the local agricultural interests were discussed at several meetings of the OVGA before and after the TVGMD departed from the OVGA Board. Agriculture and economy are specifically included for protection in the OVGA Mission Statement (Section 1.2). See response to previous comment regarding outreach in Tri-Valley Management Area.

The GSP does not contain any fines or pumping fees. A proposed pumping plan may be necessary to address chronically lowering water levels in the Tri-Valley Management Area but only after development of additional monitoring and groundwater modelling capability.

- De Minimis users will be required by OVGA to register their wells although this group is exempt from SGMA. I believe this is just administrative overreach and shows the callous disregard OVGA has for the law (SGMA) which created it.

Response: Section 4.1 of the GSP states, "Registration of *de minimis* pumpers is permitted by SGMA, and the ordinance may include a one-time voluntary report to acquire information on well location, well construction characteristics, water levels, and approximate production amounts. This basic information is already required by local and State regulations as part of well permitting and well completion reports. The ordinance will contain procedures, timing, and methods to register a well and submit needed information which will be reviewed for quality control and entered in the OVGA database." Further

Section 4.2 states, "Small capacity wells for *de minimis* extractors are exempt from most SGMA provisions including regulation of pumping. Permits for such wells will be reviewed primarily to acquire information to update the database and ensure the use and production of the well is correctly cataloged as *de minimis*." In other words, for *de minimis* users, well registration is voluntary and they are exempt from regulation of pumping. .

- OVGA wishes to assume administrative authority for well permit review from Mono County. This is again an example of administrative overreach by the OVGA board and staff.

Response: The stated purpose of proposed Management Action #2 (GSP, Section 4.2) is to acquire information necessary to maintain an up-to-date database of pumping wells in the Basin. The proposed ordinance will ask that well construction permit applications or the permits submitted to Inyo or Mono Counties be provided to the OVGA for review. These are public documents. The ordinance would allow the OVGA to maintain an up-to-date list of wells and pumping in the Basin as required by SGMA and if the OVGA deems necessary to include in the ordinance, procedures to determine if regulation of new wells under SGMA is applicable and necessary to ensure sustainable conditions are maintained.

A sentence was added to the GSP Section 4.2 clarifying that the authority to approve well construction permits remains with Inyo and Mono County.

- This letter supports the comments on file by Mono County Board of Supervisors and the Mono County Tri-Valley Groundwater Management District (TVGMD) heretofore submitted.

Response: See response to Mono County and TVGMD letters.

- The draft OVGA plan does little to address the continuing "exceptional" drought conditions which the Eastern Sierra and Tri-Valley have experienced during the time this plan was being considered. The drought should be addressed in the plan as well as what OVGA will do if it continues for the unforeseeable future.

Response: SGMA pertains to basin wide management over a 20-year planning horizon and conditions are compared against Sustainability Indicators including chronic lowering of water levels that persist through drought and wetter periods. SGMA does not require management to correct the effects of drought unless the drought prevents continued beneficial use due to change in storage which is unlikely (see Section 3.2.1). The GSP does evaluate the effects of long term climate change in Section 2.2.3.4.

- The Tri-Valley area of Mono County is rural in nature. We have an expansive view of the Sierras and beauty in the White Mountains. The Los Angeles Department of Water and Power, who is exempt from the OVGA GSA, are the ones historically responsible for so much damage and destruction to the Owens Valley. The LADWP absence from the OVGA plan renders much of the assumption about injurious conditions to Fish Slough mute if the LADWP operations in Inyo County and Fish Slough are not addressed in the Groundwater Sustainability Plan.

Response: Multiple lines of geologic, hydrologic, and geochemical evidence suggest Tri-Valley effects on Fish Slough are greater than LADWP management under the LTWA. There is a hydrologic connection between Fish Slough and the Laws area and similar aquifer materials are found below the Bishop tuff, but the presence of faults and leaky confining layers and pumping managed under the LTWA limits the effect from Laws or Bishop pumping extending into Fish Slough. Variations in LADWP pumping through history are not strongly reflected in water levels in Fish Slough. It is possible for an

effect to propagate north into Fish Slough, however, and any pumping impacts from LADWP wells are subject to the LTWA provisions to avoid other significant effects (See General Comment #2).

- Finally, the GSP should note TVGMD's request of February 2021 that OVGA amend its boundaries to exclude lands within TVGMD's jurisdiction. OVGA has refused to take any action on Tri-Valley's request. A meeting held with Inyo County and DWR has resulted in the proverbial drag your feet and do nothing by OVGA, its board, and staff.

Response: The OVGA and DWR are aware of this request, but the requested information is not required to be included in the GSP. The OVGA is operating under the latest guidance from the DWR contained in its letter of May 27, 2021. The OVGA is the exclusive GSA for the Basin with the authorities granted by SGMA. The OVGA may consider the request in 2022.

Respectfully submitted,

CA Mitchell

Carol Ann Mitchell
Chalfant Valley resident
Chairman, TVGMD

MONO COUNTY BOARD OF SUPERVISORS

OVGA Public Review Draft Comments

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BOARD OF SUPERVISORS
COUNTY OF MONO

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Scheereen Dedman, Clerk of the Board

Owens Valley Groundwater Agency

P.O. Box 337
Independence, CA
93526

Board Members and Staff of the OVGA:

Thank you for providing the Mono County Board of Supervisors with an opportunity to comment on the draft Groundwater Sustainability Plan (GSP) for the Owens Valley Groundwater Basin (Basin), released on September 23, 2021. In reviewing the document, it is clear that significant effort and resources were devoted to its development. The document is generally thorough, well-organized, and comprehensive.

Accordingly, Mono County's comments, provided below, focus on those items of particular concern and relevance to Mono County and its constituents. As a preface to those comments, the Board notes that Mono County, through this Board, is the only member of the Owens Valley Groundwater Authority (OVGA) Joint Powers Authority (JPA) which represents the citizens of Mono County – and that as such, its voice on matters affecting those areas should be given great weight.

Recognition of Lack of Data Regarding the Tri-Valley Area

The GSP recognizes, and it is widely understood, that there is a lack of data regarding groundwater conditions in the Tri-Valley area. A discrete section should be inserted into the GSP explaining what data is available and recognizing that additional information is needed before firm conclusions can be drawn regarding groundwater conditions in the Tri-Valley.

Throughout the report, wherever statements or conclusions regarding groundwater levels in Tri- Valley are mentioned, the above section should be referenced and, if the conclusion that levels are declining is stated, it should be clearly identified as a tentative conclusion pending development of additional data.

Examples of locations where data limitations should be referenced include, but are not limited to:

- Section 2.2.2 (Historical Groundwater Conditions)

- Page 28 – "Benton and Chalfant show similar rates of decline". In this location, the GSP should describe the data sources for the conclusion, indicate that the conclusion is tentative pending development of more robust information and reference back to section explaining that data is incomplete/lacking.

Response: See response to General Comment #5. Sufficient data exits (both spatially and temporally) to establish that a regional, long-term decline in groundwater levels can be detected in the Tri-Valley management Area. See Section 2.2.2.1 in the Final GSP for hydrographs and an explanation of the data supporting the assessment of conditions regarding water levels and pumping in Tri-Valley. The Final GSP recognizes that there is sufficient data to identify a problem exists but not enough to implement a solution .Data gaps are discussed at length in Appendix 3: Monitoring Plan and Data Gaps Analysis. Additional data are necessary to assess the local conditions within the valleys and assess if the declines create undesirable results. Acquiring the additional information is necessary before implementing pumping or land management action (See Section 4.5.4).

Choice of Words

In several locations, a groundwater model for Tri-Valley is described as necessary because it is "a prerequisite to regulating pumping." This message places the focus on regulating pumping and is not the message that should be sent. Please modify this language by emphasizing the need to acquire more data and information about groundwater conditions in Tri-Valley to determine appropriate management actions, rather than implying that regulating pumping will be the presumed management outcome.

Do not use term "overdraft" to describe conditions in Tri-Valley. This term infers/assumes that conditions are caused by agricultural pumping (rather than by other conditions, such as drought). Causes of suggested decline is not definitively known and the data is incomplete. Again, the section explaining data gaps should be referenced rather than conclusions drawn without complete data.

Response: Conditions of long-term overdraft exist when annual groundwater extraction exceeds replenishment, generally over 10-years or more (DWR Best Management Practices #5, Modeling). In the types of unconfined aquifer materials underlying Tri-Valley, overdraft would manifest as chronic water level decline. SGMA recognizes this basic hydrologic principle and associates overdraft with the definition of chronic lowering of groundwater levels (CWC § 10721). As defined by SGMA, chronic lowering of groundwater levels are persistent declines that continue both during and outside of drought periods. This information was added to Sections ES 2.2.3 and Section 2.2.2.2 of the GSP for clarification.

See General Response #5 regarding an explanation of water level data and trends, pumping, and data gaps in Tri-Valley that support the identification of overdraft and presence of a cone of

depression due to pumping. A discussion of the number of wells with long term data and interpretation of water levels was added to Section 2.2.2.1 of the Final GSP.

1. Potential Management Actions

Section 3.4.1.1 lists potential management actions in the Tri-Valley Area. These should be deleted since all assume that groundwater is declining and that agricultural pumping is the cause, despite incomplete data. If another cause is identified, then these management actions would not be appropriate. More data and information are needed to suggest appropriate potential management actions.

Response: The presence of overdraft is discussed in the previous comment. The likely cause of the water level declines is discussed in General Comment #5 and in Section 2.2.2.1 of the Final GSP. The strategies listed in Section 3.4.1.1 are not management actions of this GSP which are described in Section 4. The requested deletion contains a list of strategies to reduce demand that could correct long-term overdraft and achieve the measureable objective for water levels and groundwater storage (set at January 15, 2021 water levels). Clarification was added to this section in the GSP to generalize the discussion and avoid implying these are land management prescriptions for Tri-Valley. The topic sentence of the paragraph referred to in this comment now states:

Current water levels are below the management objective. Achieving the 20-year measurable objective to correct declining water levels requires either increasing recharge into the aquifer or decreasing pumping.

2. *D*efining Unreasonable Risk

Section 3.3.1.1 characterizes a risk of impact to three-to-eight of 189 domestic wells as "significant and unreasonable." Three wells out of 189 is only 1.5% of all wells. Also, no information is provided regarding the quality of the potentially impacted wells (i.e., what is their depth, age, etc.?), which potentially affects their longevity. If potential impact to 1.5% of wells is significant and unreasonable, even without considering the quality of those wells, what is not significant?

Response: Three undesirable results to pumpers caused by lowering of water levels were included in the GSP for the Tri-Valley Management Area: increased pumping costs, drying out shallow domestic wells, and loss of existing monitoring wells. The analysis of the threat to domestic wells was based on the limited information available about the construction of domestic wells in the Basin. Reasonable assumptions about how those wells were likely built was developed based on staff's knowledge of well drilling and construction procedures in the region gained by several local monitoring campaigns in these types of wells. The "quality of the well" is not a germane issue in SGMA. If the wells are likely to fail due to age or poor maintenance practices, for example, the OVGA is not obligated to analyze this variable. SGMA requires that the OVGA consider the impacts its groundwater management actions could have,

for example, on water levels. It also requires a trend analysis to be performed that considers the impact that declining/rising water levels have on the beneficial users and uses of groundwater. The analysis only considered the factors required by SGMA: could the wells that exist fail due to water level declines.

Of the three undesirable results in the GSP, the well vulnerability analysis was based on the most severe possible outcome and a conservative (low) estimate of the number of potentially impacted wells. The metric of 30 feet of available water column in a domestic well was chosen in the well vulnerability analysis to represent the potential for complete loss of well operability. This event would entail the maximum expense to the well owner with costs typically of tens of thousands of dollars. The report's findings showed that 6% of wells could become inoperable by 2025 and 8% by 2040. Given the present water level trends, the number of vulnerable wells increases within the planning horizon if the declines are not stopped. The GSP recognized the uncertainty in the analysis and concluded that the number of wells at immediate risk of going dry is low. The Minimum Threshold was set at water levels anticipated to occur in 2007 assuming the present rate of decline continues. After 2007, the number of vulnerable wells increases and impacts to domestic well owners could be significant and unreasonable. Similarly if a less strict metric was used associated with less costly well repairs instead of well failure (e.g. pump replaced or lowered caused by the water column falling to less than 45'), the number of vulnerable wells in 2025 is approximately 11% and 19% during the 20-year GSP implementation period. The undesirable result of declining water levels that increases the annual electrical cost to pump water was not included in the analysis, but all wells in the management area are probably experiencing this undesirable result to varying degrees. Sections ES 3.3.1 and 3.3.1.1 were revised to better explain the reasoning behind the selection and evaluation of significant and unreasonable effects with regard to domestic wells.

3. Recommendation for Well Permitting Ordinance

The GSP includes a management recommendation for a well permitting ordinance which would apply throughout the Basin. Mono County is not interested in adopting an ordinance and/or enforcing such an ordinance adopted by OVGA through Mono County well permits. Mono County is willing to share well permitting data for monitoring and data collection, but unless more complete data is available concluding that water levels are declining and pumping is the cause, consideration of regulatory measures is highly premature and gives the impression of a predetermined outcome.

Response: The conclusion of declining water levels is sound for the reasons described above and the likely cause is identified in General Comment #5, but the GSP recognizes that information characterizing pumping and the variability of water level changes within and across the valleys and Fish Slough should be increased. To effectively monitor how much groundwater is being extracted from the basin (a key OVGA responsibility), the OVGA needs to have a method by which it is notified of new wells, their prospective groundwater extraction rates, and who to contact to collect groundwater extraction data going forward into the future. It is not

necessary for Mono County to adopt an ordinance regarding this issue. Mono County as the well permit issuing entity can provide the application and the approved permit to the OVGA for review. The application and permit are public documents. The Final GSP was revised to state that final approval authority of the well construction permit remains with Mono County.

With the exception of *de minimis* or domestic wells, the OVGA has the authority, should it elect to exercise that authority, to specify where a well can be drilled, how much water can be extracted, depth of the well screen, the timing of the extractions, and reporting requirements to the OVGA to ensure basin sustainability. The OVGA can, if it elects to, place conditions on the construction of a well e.g., include a sounding port on all new wells to permit water level measurement. The proposed ordinance could but is not required to include such measures as a separate procedure using the authority under SGMA. It would not be part of the well construction permit approval by Mono County. The OVGA has not drafted an ordinance, and the GSP prescribes several steps in data and technology development that should occur before regulation of pumping in the Tri-Valley.

4. Jurisdictional Issues

Unresolved jurisdictional issues remain. Even if Mono elects to remain a member of OVGA, there is uncertainty regarding OVGA's authority to regulate groundwater in Tri-Valley given the overlapping jurisdiction of the Tri-Valley Groundwater Management District (TVGMD).

Because TVGMD is statutorily authorized to regulate groundwater within its boundaries (including extraction, recharge, permitting and other matters), how would a conflict of regulations between OVGA and TVGMD be resolved? Whether TVGMD's authority pre-empts OVGA's, and other related questions, must be resolved.

Response: The OVGA is operating under the latest guidance from the DWR contained in its letter of May 27, 2021. The OVGA is the exclusive GSA for the Basin with the authorities granted by SGMA.

5. TVGMD Request for GSA Boundary Change:

The GSP should note TVGMD's request that OVGA amend its boundaries to exclude lands within TVGMD's jurisdiction. The GSP should also recognize that TVGMD has asserted its status as the Groundwater Sustainability Agency (GSA) for lands within its jurisdiction.

Response: The OVGA is aware of the TVGMD request, and may consider it in 2022; however, the requested addition is not required to be included in the GSP.

6. Wheeler Crest

There is very little discussion of the Wheeler Crest Area, which is part of the Owens Valley Management Area and covered by the Plan. This is undoubtedly due to the lack of conditions of concern and the robust monitoring system that is already in place in the region, but these conclusions should be specifically stated rather than inferred by omission. Please add

language explaining that Wheeler Crest is within the Owens Valley Management Area and noting existing data monitoring points. This information should be included in the minimum thresholds and measurable objectives tables as well (see Section 3.2 – Basin Areas and Settings – add Swall Meadows and Wheeler Crest).

Response: The OVGA is grateful for monitoring data provided by the Wheeler Crest CSD. The monitoring data record is relatively short for the few wells, but was deemed sufficient given that if fills a spatial data gap and the uses in this portion of the Basin are solely for domestic purposes. Additional discussion of Wheeler Crest was included in Section 2.2.2.1. (Section 3.2 discusses Undesirable Results. Section 2.2 discusses Basin setting and groundwater water levels). The Wheeler Crest wells were included as representative monitoring wells and are included in tables in Section 3.3 Minimum Thresholds and Section 3.4 Measurable Objectives.

7. Mono County Land Ownership

Section 2.1.3 – the land ownership data for Mono County is incorrect. Only approximately 6% of the Mono County land base is privately owned, as opposed to the 17% cited in the GSP. Please revise the data in Section 2.1.3 accordingly and modify Table 2-2 as follows:

Response: The acreages in the table below appear to be for the entire County. Table 2-2 in the Final GSP presents ownership just within portion of the Basin that occurs in Mono County.

Owner	Acres	Percent total Acres
BLM	529347.79	26.33%
Private	130414.49	6.49%
LADWP	62735.742	3.12%
USFS	1192636.4	59.32%
State Lands Commission	53638.77	2.67%
Bureau of Indian Affairs (and Tribal lands)	841.4	0.04%
CA Dept of Fish and Wildlife	62.5	0.00%
County	1584.3434	0.08%
TOTAL	1971261.4	98.05%

8. Adjudicated Lands

The GSP should evaluate whether actions in the adjudicated areas are causing undesirable effects, preventing progress toward measurable objectives or triggering minimum thresholds. If so, then the OVGA should make a management recommendation to remediate those issues

through the existing Long Term Water Agreement or other means in order to address the impacts specifically caused within the GSP boundary.

Response: See General Comment #2.

Thank you again for providing this opportunity to comment on the GSP. If you have any questions regarding this letter, please contact Mono County Community Development Director Wendy Sugimura at wsugimura@mono.ca.gov (760) 924-1814 or Mono County Counsel Stacey Simon at ssimon@mono.ca.gov (760) 924-1704.

Sincerely,

Jennifer Kreitz

Chair, Mono County Board of Supervisors

Cc Tri-Valley Groundwater Management District

EDWIN PISTER

OVGA Public Review Draft Comments

437 East South Street
Bishop. CA 93514

760 784 9466

Hi!
Good luck on this. We're with you all the way
Flo

Owens Valley Groundwater Authority
C/0 Laura Piper
Inyo County Offices Independence,
CA93526

Folks:

First off let me express my gratitude to both the Owens Valley Groundwater Authority and the Inyo Register for their coverage concerning groundwater and its status in the Owens Valley for their recent articles (October 5) . "Groundwater" - a simple term with huge ramifications in the future of our county and throughout the Southwest.

I am a retired aquatic biologist (California Department of Fish and Wildlife) who has lived in Bishop since 1952. It was my job to watch out for the many species of fish, wildlife and plants (and their habitats} that live here along with us in the Eastern Sierra. A threatened area is Fish Slough, a few miles north of Bishop. About 1950 two esteemed ichthyologists (Robert Rush Miller from the University of Michigan and his colleague Carl L. Hubbs from the University of California's Scripps institution near San Diego worked throughout this area of the Owens Valley and described many of the native species as part of Miller's doctoral dissertation. One of them was the now famous Owens pupfish (*Cyprinodon radiosus*) which was still hanging on in a good habitat called BLM Spring. This was one of the key areas upon which we built our recovery effort. Fish and Wildlife employees have been watching BLM Spring almost on a daily basis to make sure it remains OK.

During the past couple of years we have noted a decreased flow from BLM Spring, and a general drying of the marsh areas that supply the best fish and wildlife habitat. Fish Slough is one of the very few wetland areas remaining in the Owens Valley. It is mentioned in the federal listing of endangered species. Another endangered species in Fish Slough is the Fish Slough milkvetch *Astragalus lentiginosus*. In a similar situation in New Mexico, where water flow in a spring area was threatened by nearby pumping by alfalfa farmers, the entire area was closed to any water extraction until and if the groundwater levels returned and were stabilized.

We have a similar situation just over the White Mountains in Fish Lake Valley, Nevada, where a seriously threatened fish species (name of the fish) is threatened by groundwater extraction. This is still in litigation under the Endangered Species Act, but the smart money favors the fish.

It is our hope that groundwater extraction limits may be adopted for the Owens Valley that may be sufficient to protect the endangered species while allowing for continued agricultural (alfalfa) production. Nevada law allows only so much water to be removed from an aquifer that will be replenished in a given year. A similar law would do much to resolve Owens Valley problems. Owens Valley citizens have long expressed their concern over the export of local streams into the Los Angeles Aqueduct. The production and export of countless bales of

alfalfa (a highly water-consumptive plant) does essentially the same thing and increases local concerns when much of this alfalfa is sold to interests in Asia. It is our hope that the Owens Valley Groundwater Authority may address and resolve these perplexing issues. Adding to this is drying of aquifers that supply water to homes and wells in Chalfant Valley.

Sincerely., Edwin (Phil) Pister

Response: SGMA allows GSAs to regulate pumping to prevent significant and undesirable results including chronically lowering water levels and capture of surface water (e.g., springs). Monitoring data and several studies suggest unsustainable conditions for both of these sustainability indicators may be experienced during the planning horizon of the GSP without management. See General Comments #5 and #6 regarding conditions in Tri-Valley and the connection to Fish Slough. The GSP recognizes, however, that while the existing understanding is sufficient to diagnose a problem, additional data is necessary to implement management regulations without causing potential impacts to soil and air quality and economic hardship. The GSP includes Management Actions to address data gaps identified through the GSP development and to acquire outside funding to develop needed numerical groundwater models to carefully design effective groundwater management

TERRY PLUM

OVGA Public Review Draft Comments

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Sent via Electronic & Regular Mail

November 8, 2021

Owens Valley Groundwater Authority Board of Directors
Aaron Steinwand, OVGA Executive Director
c/o Inyo County Water Department
P.O. Box 337
Independence, CA 93526
asteinwand@inyocounty.us

SUBJECT: OWENS VALLEY GROUNDWATER BASIN GROUNDWATER SUSTAINABILITY PLAN PUBLIC REVIEW DRAFT

Honorable Members of the Board and Dr. Steinwand:

I want to preface my comments by recognizing and commending the tremendous leadership the Owens Valley Groundwater Authority Board of Directors and staff have exhibited in persevering to prepare and adopt a Groundwater Sustainability Plan for the Owens Valley Groundwater Basin even though the Basin is currently ranked "low priority," and the preparation of a GSP is not required at this time. I believe and hope that being proactive in this respect, and preparing the GSP absent the specter of an emergency and State mandates, will ultimately result in a more thoughtful, practical and effective plan to protect and maintain the sustainability of our groundwater basin. It is in this spirit that I offer the following comments regarding the Draft GSP:

Comment #1: Future projects and management actions, including the imposition of fees, should only be implemented if absolutely necessary and must not unduly burden or threaten the viability of existing residences.

I appreciate the GSP's sustainability goal *"to monitor and manage the Basin by [first] implementing a groundwater monitoring network and database and [then] adopting management actions that fairly consider the needs of and protect the groundwater resources for all beneficial users in the Basin"* and recognize that the adoption of any future management actions will be undertaken through a public process. However, given the Basin's current low priority ranking, the GSP should emphasize the possible adoption of management actions in the future – including but not limited to commenting, regulating or issuing well drilling permits; regulating domestic groundwater pumping; and, the imposition of fees related thereto – will only be considered or undertaken after the groundwater monitoring network and database are fully established and the resulting data demonstrates a negative change in existing conditions that are independent of, or unrelated to the City of Los Angeles Department of Water and Power's groundwater pumping in the adjudicated portions of the Basin.

Response: See General Comment #2. The primary purpose for some Management Actions in the GSP is to complete the characterization of extraction and water levels in the Basin and to maintain an up-to-date database, which can then lead to a better understanding of LADWP's effects on the water table before implementing any management measures.

The GSP does not currently propose any fees but in the future, the OVGA Board will determine what management actions to implement and the administrative activities and fees to implement the GSP (Section 5).

Decisions of the OVGA will be guided by the general principles regarding Funding #2 and #3. These principles were adopted by the OVGA and are included in the GSP in Section 1.2

I support the need to manage the Basin in a manner that fairly considers the needs of and protects the groundwater resources for all beneficial users in the Basin, and avoids negative consequences to groundwater sustainability, the environment, local economy, and residents; AND, I believe that the needs of current residences and their human population needs to be prioritized as a first among equals.

Response: Please refer to the OVGA Mission Statement and guiding principles (Section 1.2).

I am an owner of Pine Creek Village (formerly known as Rovana) in Round Valley in the northwest portion of the Basin. Pine Creek Village is comprised of 85 single-family detached homes providing non-subsidized low-income rental housing to Inyo County. Our domestic water system is served by three existing groundwater wells with varying functional capacities. It is entirely possible that these wells may need to be replaced or even relocated in the future. In response to the current drought, Pine Creek Village has cut its groundwater pumping for the domestic water system by-more-than half by limiting and now prohibiting the use of water for landscape irrigation. Doing the right thing, however, has come at the expense of our established residential landscaping, particularly trees and shrubs, and decreased property values and diminished aesthetic appeal. Future management actions contemplated in the GSP should not impact the ability of established communities, such as Pine Creek Village which has existed since 1947, to access and utilize historical groundwater amounts.

Response: See response to Comment #7 in this letter below.

Comment #2. Privately-owned, public water systems such as Pine Creek Village seem to have been omitted from identification among *"the main agencies or programs conducting groundwater monitoring in the Basin."*

Response: The draft GSP recognizes local water providers such as mutual water companies, community service districts or the City of Bishop. The list in the GSP referred to in this comment will be revised to include privately-owned public water systems among the agencies conducting monitoring. OVGA staff will contact Pine Creek Village to explore opportunities to share information.

Comment #3: The GSP should firmly acknowledge that possible future management actions contemplated in the GSP recognize, account for, and be scaled in proportion to the amount of groundwater pumped in the non-adjudicated portion of the Basin relative to the LADWP's significantly greater groundwater pumping in the adjudicated portion of the Basin and its associated impacts on the non-adjudicated portion of the Basin.

Pine Creek Village is located upgradient, and on the northwest boundary of the Basin, and is neighbored (with minor buffers of land managed by the Bureau of Land Management and California Department of Wildlife) by City of Los Angeles-owned land to the north, east and southwest. Similar to remarks made by other commenters, private property like Pine Creek Village should not be unduly penalized by potential future management actions for impacts created by the LADWP's pumping, or potential to pump groundwater on nearby adjudicated portions of the Basin.

Response: See General Response #2.

Comment #4. The groundwater dependent ecosystems (GDE) identified State Department of Water Resources indicators of GDE database (iGDE) are often inaccurate and should not be relied upon.

The iGDE database for the area around Pine Creek Village does not accurately reflect actual conditions and should be removed by the Inyo County Water Department.

Response: The iGDE database is a state prepared product that was the initial basis for the final GDE map in the Basin (excluding LADWP and Tribal lands). OVGA consultants and the Inyo County Water Department staff and prepared a final map by revising the iGDE map based on local experience and knowledge, but were not able to visit each polygon to confirm or revise the iGDE map. A future project to field check and correct the final GDE map has been added as a potential activity in the final version of the GSP (Section 2.1.9.5 and 4.5.3):

Comment #5. The existing groundwater monitoring network for Round Valley appears inadequate for basing future management decisions.

Representative monitoring locations identified in the GSP for which historical water hydrographs are available (T750 and T751) are located, in relation to Pine Creek Village, miles away and down-gradient and, ironically, managed by the LADWP. Similar to the lack of historical hydrograph data from wells nearer to Pine Creek Village, the location of these LADWP wells for which historical data is available is inadequate for informing or triggering future management decisions which could adversely impact Pine Creek Village.

I understand from conversations with OVGA staff that the inadequacy of the current monitoring network in this portion of the Basin is acknowledged as needing to be improved, but also understand that doing so is not a high priority relative to monitoring network needs in other parts of the Basin. When appropriate, Pine Creek Village welcomes the opportunity to work with the OVGA to explore the feasibility of using its groundwater wells as additional monitoring locations.

Response: Management Action #3 recognizes the need for additional monitoring in Round Valley as in other parts of the Basin. We appreciate the opportunity to cooperate and improve the monitoring network in Round Valley.

Comment #6. The GSP properly distinguishes and opposes groundwater export from the Eastern Sierra that would result in negative consequences to groundwater sustainability, the environment, local economy, and residents.

Response: No response required.

Comment #7. The GSP should affirmatively state that future management actions will in no manner serve to further impede the development of housing on private lands in the Basin.

The need for additional housing within the Basin is well documented in, among other places, planning documents and policies promulgated by the City of Bishop, and Inyo and Mono counties. In our region, the scarcity of opportunity to develop additional housing is a reflection of land tenure patterns that result in less than two-percent (2%) of land in Inyo County being privately-owned, with slightly more in Mono County. Furthermore, most of the undeveloped, privately-owned land in Inyo County is located in the southwest portion of the county, miles from the Owens Valley Groundwater Basin. Assuming that housing could be developed on existing,

privately-owned, undeveloped land within the Basin – that the numerous existing barriers and challenges to building homes could be overcome and economic incentives identified – the net gain in new residences and associated water needs would be relatively minor compared to existing residences, and especially relative to the groundwater pumped from adjudicated portions of the Basin by LADWP.

As an owner of property in Inyo and Mono counties, separate from Pine Creek Village, I am concerned about any possible future management actions stemming from the GSP that could impede the already challenging and acknowledged slim likelihood of being able to develop additional housing for the community; especially when any such development would be miniscule relative to existing housing and water needs, and the amount of groundwater pumped by LADWP. One example of a significant amount of privately-owned, undeveloped (but developable) land that could be negatively impacted by future water management actions insensitive to the region's housing needs is located on Mustang Mesa, across the highway from Pine Creek Village. These concerns can be lessened by incorporating an affirmative statement or statements in the GSP that it recognizes (1) The region's critical need for additional housing; (2) the limited amount of land available to build housing; and, (3) the reality that any new housing construction will be limited in scale and impact; and then (4) that future management actions identified or contemplated in the GSP will not limit future housing development.

Response: OVGA is committed to maintaining sustainability of groundwater conditions in the Basin but recognizes the need to manage resources for all beneficial users. Refer to the guiding principles developed by the OVGA (Section 1.2), in particular Strategy 6, and Gen #1 and #2. The OVGA is committed to adhering to the SGMA definitions and protections for *de minimis* users (Sus #10, Section 1.2).

SGMA allows for regulation of pumping and GSAs could place conditions on well construction or operation. Purposes for implementing any regulation of future pumping is discussed in Management Action #2 Well Permit Review Ordinance which may include measures for regulation of future pumping projects:

> *"The Ordinance will include criteria the OVGA will apply to determine the need to regulate pumping from a new, reactivated, or replacement well. The scope of the permit review will be tailored as necessary to determine the need for groundwater management based on the potential for a well described in a permit to exceed a minimum threshold, prevent attaining a measurable objective, or to create other significant and unreasonable effects (e.g. well interference, surface water depletion). The Ordinance will describe the conditions the OVGA may place on well construction, location, capacity, or extraction to ensure sustainable groundwater conditions are maintained in the Basin."*

Furthermore, DWR guidance will be adhered to if evaluating whether future projects could cause undesirable results:

> *"All undesirable results will be based on minimum thresholds exceedances. Undesirable results will be defined by minimum threshold exceedances at a single monitoring site, multiple monitoring sites, a portion of a basin, a management area, or an entire basin. Exceeding a minimum threshold at a single monitoring site is not necessarily an undesirable result, but it could signal the need for modifying one or more management actions, or implementing a project to benefit an area before the issue becomes more widespread throughout the basin." (BMP #6 Sustainable Management Criteria, DWR, 2017, pg. 20).*

Thank you for your consideration of these comments, and good luck!

Sincerely,
ORIGINAL SIGNED BY TERRY PLUM

Terry Plum

SIERRA CLUB, RANGE OF LIGHT GROUP

OVGA Public Review Draft Comments

Range of Light Group
Toiyabe Chapter, Sierra Club
Counties of Inyo and Mono, California
P.O. Box 1973, Mammoth Lakes, CA, 93546
RangeofLight.sc@gmail.com

November 8, 2021

Owens Valley Groundwater Authority Board
Via email: lpiper@inyocounty.us

Re: OVGA Groundwater Sustainability Plan

Dear Board Members,

The Range of Light Group thanks the OVGA Board for inviting the public into the process and for adding a conservation board seat. We appreciate how the public was allowed to ask questions and make suggestions throughout the process as well as to comment on the final product.

We also appreciate that the Board decided to continue with a Groundwater Sustainability Plan (GSP) after the Owens Basin was downgraded to a low priority basin even though a GSP was no longer required. We hope it gives the OVGA better tools for monitoring the groundwater levels in the area covered by the Long-Term Water Agreement (LTWA) as well as monitoring the lands around them. We hope that the OVGA uses the data to put a spotlight on the problems that can occur under the LTWA even though the OVGA has no authority over the Los Angeles Department of Water and Power (LADWP) to correct them.

In 2014 when SGMA legislation was being finalized, Inyo County and LADWP requested the following statement be added, which prevents the OVGA from having authority over the entire Owens Basin.

However, the LTWA was a court stipulation and order; not an adjudication. A judge did not dictate the terms of the LTWA. If it had been adjudicated, the LTWA might have been very different; possibly restoring and protecting the environment more. It is misleading to distinguish the two portions of the Owens Basin as "adjudicated and non-adjudicated" lands. We would like to see that corrected in the GSP.

Response: See General Comment #3.

Under the LTWA, any wellfield on the LADWP side of the Owens Basin can be over-pumped in a given year, so having the OVGA's oversight is important and worth having developed the GSP. Over-pumping a wellfield can cause damage to the surface vegetation on both sides of the boundary and can impact groundwater levels on the OVGA side. The Inyo County Water Department sometimes recommends lower pumping amounts than LADWP has planned for the year, but LADWP doesn't have to follow those recommendations. We think it is safe to say in the GSP, "These activities ~~may~~ will

affect the ability of the OVGA to maintain sustainable groundwater management in the basin. (pg. 5). It is worth pointing this out in the GSP and to the state's Department of Water Resources (DWR). It would have been better for the environment, if the whole basin were under the OVGA.

If any over-pumping spills over into the OVGA-managed areas of the Owens Basin, then we hope the OVGA takes strong measures against Los Angeles Department of Water and Power (LADWP). It is not fair to request that the small users, pumping a fraction of the groundwater that LADWP does, must cut back for over-pumping caused by LADWP. (What is the percent of the total water pumped in the Owens Basin that comes from the OVGA part of the Owens Valley Management Area? Page 158 shows that 13% is non-LADWP pumping (10,000/78,000 AFY), but some of that is within the LTWA side.) However, the GSP doesn't explain what actions could or will be taken should that happen.

Response: See General Comment #2. The OVGA agrees that small pumpers subject to the GSP should not be responsible for correcting groundwater conditions caused by actions within the lands under the LTWA. Approximately 11% (10K/88K) of the Owens Valley Management Area pumping is by non LADWP pumpers.

We suggest adding to the reference to the 2020 LADWP Urban Water Management Plan that the plan does not provide any relief to the Eastern Sierra. It is worth driving home this point at every opportunity. The UWMP indicates that the LAA water supply will decrease by only 7,800 AFY over the next 25 years (from 192,000 AFY to 184,200 AFY) due to the expected shrinkage of the Sierra runoff. (2020 LADWP UMWP pg. ES-21 *"Los Angeles Aqueduct supply is estimated to decrease 0.1652% per year due to climate impacts.")* So basically, the LAA exports will continue at the same level as they are today.

Response: The LADWP UWMP is discussed in Section 2.1.7. This comment is consistent with the summary in that section.

<u>OVGA GSP basic concerns</u>

1. This GSP should have strong language about keeping the Fish Slough sub-basin attached to the Tri-Valley groundwater basin and thresholds that protect it.

   If Mono County withdraws from the OVGA and Tri-Valley forms their own groundwater authority, Fish Slough must go with the Tri-Valley basin as they are hydrologically connected. If the Tri-Valley/Fish Slough Basin is managed under a separate GA, it might be rated as a medium priority basin; not low priority like the OVGA. The description of the groundwater situation indicates there is cause for concern during droughts for the private wells and for Fish Slough. The GSP says that despite the ever-increasing declines in the groundwater table in the Tri-Valley basin, pumping can continue as is "…during GSP implementation." (pg. 19). We assume that after implementation, the minimum thresholds will apply. It would be helpful to clarify that.

Response: See General Comments #6. The priority ranking is for the Basin, not individual GSAs. The Minimum Thresholds for the Tri-Valley Management Area apply if the OVGA GSP is used to manage that area. The GSP proposes to develop monitoring and modeling capability need to manage groundwater in Tri-Valley. If Mono County terminates their membership, the OVGA will not have a member with jurisdiction to implement the GSP in that portion of the Basin in Mono County. As long as the Basin remains low priority, no GSP would be applicable unless Mono and/or TVGMD acquire GSA status and prepare a plan. If another GSA is established in the Basin, that agency could adopt the Final OVGA GSP or prepare another separate plan included different objectives and thresholds. A Basin with two GSAs and GSPs, must include a coordination agreement.

However, if Fish Slough is already impacted, then pumping should not continue "as is" in the Tri-Valley. Minimum thresholds are usually the bare minimum for a species to survive and are insufficient for a species to thrive and grow. What spring flow would CDFW and USFWS recommend for the Pupfish to be a stable, healthy population? Maybe the threshold should be higher than 0.1 cfs for the springs and maybe no further decline should be allowed in the monitoring wells instead of allowing an additional 1.5 feet of decline. What groundwater flow is really needed to protect the endangered species at Fish Slough?

Response: See General Comment #4.

2. The OVGA GSP sets the minimum thresholds to the low point during the 2012-2016 drought. There weren't dry wells during that period, but a future drought could last even longer. There should be a time-criterion that if the water table is below the objective threshold for a given number of months, then the OVGA will act. This would provide better protection of the surface vegetation.

Response: The Minimum Thresholds are defined in terms of water table depth and the time criterion is currently set at the most conservative value of 1 year, the time step of annual evaluation and reporting. Also note that "*exceeding a minimum threshold at a single monitoring site is not necessarily an undesirable result, but it could signal the need for modifying one or more management actions, or implementing a project to benefit an area before the issue becomes more widespread throughout the basin"* and *"Avoidance of the defined undesirable results must be achieved within 20 years of GSP implementation (20-year period). Some basins may experience undesirable results within the 20-year period, particularly if the basin has existing undesirable results as of January 1, 2015. The occurrence of one or more undesirable results within the initial 20-year period does not, by itself, necessarily indicate that a basin is not being managed sustainably, or that it will not achieve sustainability within the 20-year period." (DWR 2017, BMP 6).*

3. What will the OVGA do if LADWP is over-pumping in a wellfield to the point that it affects the OVGA side? What action(s) will the OVGA take? There is a statement in the GSP, *"OVGA may inspect permits submitted to Inyo and Mono Counties to update its database and determine if new or replacement wells could cause changes in pumping in the Basin that may affect the sustainability of groundwater conditions*." Could the OVGA stop a well going in the "treated as adjudicated" i.e., LTWA portion of the basin if there might be groundwater

impacts in the OVGA side of the basin?

See General Response #2. OVGA cannot deny well construction permits and cannot regulate LADWP activities on LADWP-owned land.

4. As LADWP replaces wells with wells that go deeper, it is well worth the investment for the OVGA to develop and refine hydrologic models for the whole Owens Basin that will show the cone of depression for each well and pinpoint a specific well that is causing degradation on the surface to vegetation or springs, should that happen. The OVGA should plan for a new future world of LADWP pumping only deep aquifers and address any monitoring gaps related to that scenario. If the deeper aquifers are recharged by snowmelt on the alluvial fans, then that is the BLM's or USFS' water that LADWP will be pumping out of the deep aquifers and it will end up in the LA Aqueduct. How will shallow aquifers be affected if the deeper aquifers don't have enough pressure to push water closer to the surface?

Response: LADWP has not provided numerical groundwater models developed by their consultants for portions of the Basin. The ICWD continues discussions with LADWP staff regarding sharing the groundwater models.

5. The OVGA should encourage the State Lands Commission (SLC) to not allow pumping under the Owens Lake bed for dust control or, should it be allowed, then to insist on thorough pump tests and an environmental review to look at the impacts. The water under the lake bed may have a different chemistry than the ponds on the lake that now support brine shrimp, fish, and migratory birds. There could be subsidence. There are areas of groundwater dependent vegetation around the lake and, as the GSP states, special-status species vulnerable to changes in groundwater conditions. The OVGA should push for replacement water for pumping state water either through a reduction in pumping elsewhere in the Owens Valley or in surface water diversions that would benefit the local environment.

Response: The Owens Lake is owned and managed by the State Lands Commission. SGMA "*…does not authorize a local agency to impose any requirement on the state or any agency, department, or officer of the state. State agencies and departments shall work cooperatively with a local agency on a voluntary basis*" (CWC §10726.8(d)). The OVGA cannot simply forbid pumping on state owned lands. State agencies, however, are required to "*…consider the policies of* [SGMA], *and any groundwater sustainability plans adopted pursuant to* [SGMA], *when revising or adopting policies, regulations, or criteria, or when issuing orders or determinations, where pertinent*" (CWC §10720.9). This GSP sets sustainable management criteria in test wells surrounding the lake and proposes that the OVGA actively participate in the working group and coordinate with state and local agencies with land management responsibilities to ensure this management area is managed sustainably to avoid undesirable results. (GSP Section 4.5.1)

6. The OVGA should be part of the planning for Operation NEXT and the next Urban Water Management Plan update. The 2020 version of the UWMP shows that Los Angeles can be self-sustaining water-wise and that it plans to reduce water purchases from the Metropolitan Water District with the water saved by conservation, recycled water, and the many ways the City of Los Angeles plans to reduce its water usage. The plan does not pass on any of those savings to the Eastern Sierra. On the contrary, it is part of LADWP's plan to continue taking as

much water as possible from here. The OVGA should be part of those conversations and advocate for reduced exports via the Los Angeles Aqueduct. The OVGA might also consider an annual meeting with the Mayor of Los Angeles and City Council members. They should know how the water exports affects the Eastern Sierra environment and economy.

Response: This request is not germane to the components of the GSP, but the OVGA will continue to monitor LADWP Urban Water Planning Actives.

Weaknesses of the LTWA

While the LTWA imposes restraints on LADWP groundwater pumping, it didn't restore vegetation to pre-1970 levels and it doesn't fully protect vegetation. It is important to note that the LTWA did not require LADWP to restore the groundwater levels to where they were before the 20 years of heavy pumping. Damage to the vegetation became permanent i.e., "it was grandfathered in." Since then, vegetation has declined even further in places under the LTWA.

The LTWA is divided into wellfield units. Each wellfield can be "temporarily" over-pumped as long as it is within a rolling 20-year average of recharge and pumping. The over-pumping causes sudden drops in the water table. The surface vegetation is stressed or dies from these unnatural swings in the water table when the groundwater drops below the root zone. There has been a loss of alkali meadows that have been converting to shrub habitat. LADWP's over-pumping can

spill over into the OVGA managed part of the Owens Basin. Stronger language should emphasize LADWP's pumping impacts—unnatural hydrographs, DTW levels below GDE root zones, big fluctuations—as unhealthy management for the environment. Page 20 says, "Impacts from LADWP wells in the adjudicated area would be required to be mitigated by the LTWA." However, the LTWA is not effective in preventing damage or slow degradation to the vegetation.

The On/Off well system helps, but isn't perfect. On/Off wells only protect the vegetation to the degree that a well is hydrologically connected to its monitoring well, which isn't always the case. For example, one monitoring well is on the other side of the Owens River from its On/Off well. Not all wells are tied to a soil monitoring well. The On/Off wells are only in areas where the vegetation had been severely damaged during the 1970s-1980s. LADWP can pump non-On/Off i.e., the Exempt wells, which can affect the vegetation around those wells.

The On/Off doesn't stop the amount of pumping in the basin—just where it happens. For example, Blackrock 094 is a parcel that was impacted by over-pumping an exempt well under the LTWA. The vegetation changed from a dominant alkali meadow to a dominant shrub habitat, sparsely interspersed with alkali grass. The alkali meadow was lost under the LTWA. The LTWA specifies that the vegetation should not convert to a drier habitat. However, LADWP refused to accept the overwhelming amount of evidence and the conflict went to arbitration. Pumping in the area was reduced, but the vegetation was not restored or mitigated. Inyo County has to take LADWP to court or arbitration if LADWP violates the terms of the LTWA. The incomplete mitigation projects are another example of LADWP's disregard for the LTWA. There are many

mitigation projects that still have not met the vegetation goals that were court ordered in 1997 and 2004. Impacts to the vegetation take years of wrangling with LADWP and lawsuits to correct.

The LTWA imposes some limits on LADWP's pumping and offers some control over the impact to vegetation in mitigation areas, but it isn't strong enough to bring back springs or meadows lost by the over-pumping of the 1970s-1980s. It isn't strong enough to prevent slow decline in

vegetation. It doesn't stop LADWP from mining the deeper aquifers. While tapping the deeper aquifer may shrink the cone of depression in the short-term, there could be impacts in the long-term e.g., subsidence, loss of springs, artesian wells, and wetlands, or dry shallow wells. Keep in mind that mitigations to repair the damage turn into long battles with mixed results.

DWR needs to understand that while there is a lot of monitoring and reporting by LADWP and the Inyo County Water Department, the LTWA is not adequate to protect the environment from over-pumping, which is the whole purpose of SGMA. To change the SGMA legislation so that the OVGA could have authority over the entire Owens Basin, both LADWP and Inyo County would need to agree to the change. This is not likely to happen. Regardless, it should be documented in the GSP and the OVGA should be prepared to take steps to bring problems to the attention of the Inyo County Supervisors, the LADWP Commissioners, the Mayor of Los Angeles, and the public.

Response: See general Comment #2

<u>OVGA GLA Database suggestions</u>

The OVGA GLA map of the Owens Basin is a good tool for the public. I have used it and would like to see a few changes to make it more user friendly:

1. Please rename "Zoom to…" to "Search for a well/monitoring point".
2. Please show the whole Monitoring Point field in the "Zoom to…" box when the GLA is opened. It is truncated and it isn't clear that one can scroll down to see the whole Monitoring Point box. Only the first data point, an unintelligible number, shows. It isn't clear there's a list or

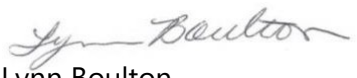
   that one can enter a well id. It's hard to click on the field with only half of it showing.

3. Please add a legend explaining what blue dots, red squares, and orange circles are.
4. Please indicate if a well is no longer in operation—maybe an "x" in the red square or use a different color.

5. Please update the information about the wells. Hydrographs seem to stop at 2016 or 2017 and newer wells aren't showing.

Response: These suggestions will be addressed by OVGA staff and consultants if the technology/format allows for these modifications.

Thank you for your attention to these important issues. Sincerely,



Lynn Boulton
Chair, Range of Light Group
Toiyabe Chapter, Sierra Club

TRI-VALLEY GROUNDWATER MANAGEMENT DISTRICT

OVGA Public Review Draft Comments

MONO COUNTY TRI-VALLEY GROUNDWATER MANAGEMENT DISTRICT

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November 3, 2021

Owens Valley Groundwater Authority
c/o Aaron Steinwand
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To the Board of Directors for the Owens Valley Groundwater Authority:

The Board of Directors of the Tri-Valley Groundwater Management District (the "Board") writes to provide its comments on the Draft Groundwater Sustainability Plan ("GSP") released for public comment on September 23, 2021 by the Owens Valley Groundwater Authority ("OVGA").

I. Lack of consistency or a clear statement about the data gap in the Tri-Valley Management Area and its implications for the GSP's management actions

The draft GSP lacks critical clarity about the nature of the insufficiency of the data for the Tri-Valley Management Area and what its implications are for the firmness of the conclusions drawn by the GSP are. Throughout, there are acknowledgements of the uncertainties in the data, but no definitive explanation of what that means for the strength of the conclusions and management proposals the GSP contemplates, despite often also drawing what appear to be firm conclusions.

For example, early on, the GSP states that "***The Fish Slough and Tri-Valley Management Area is the least understood portion of the basin***. There have been few hydrogeologic studies conducted in the area and monitoring networks are limited." (Section ES 2.2.4 at page 19). Nonetheless, in adjoining sections, the GSP states that "pumping in the [Tri-Valley] management area ***is the cause*** of declining water levels and spring flow in Fish Slough," though the "overdraft and the pumping effect on spring flow, however, ***are poorly quantified***." (Section ES 3.2.1 at page 22). These whipsaw contradictions with conclusions and uncertainty appear throughout:

- "In the Tri-Valley Management Area, a ***chronic decline in groundwater levels has been detected*** by the existing monitoring network, ***but the spatial coverage of monitoring wells in the management area is deemed insufficient***." (Section ES 3.5 at page 34).

- "***Historical data collection, hydrologic studies, and modeling efforts are limited*** in the Tri-Valley management area and the lack of quantification of inflow/outflow components is identified as a data gap in the GSP. ***However, the Tri-Valley area is likely in overdraft*** based on the current water budget using best available information and observed steady groundwater level declines over several decades that suggest outflows exceed inflows." (Section ES 2.2.3 at page 17).
- "Declining water levels in the Tri-Valley Management Area have been documented as discussed above (Section 2 and Appendix 3). For a largely unconfined aquifer system, this ***suggests*** overdraft is occurring, but the presence or amount of overdraft is not readily apparent in the water balance (Section 2.2.3). The ambiguity is partially due ***large data gaps*** in the management area....." (Section 4.5.3 at page 288).

The GSP would benefit from a clear, uniform statement about the nature of the data gaps and uncertainties, and what those gaps mean for the confidence of conclusions and the strength of proposed management actions. Such a section should then be referenced in each area of the GSP where the uncertainty or data gaps are implicated. In its current form, the GSP creates an overall impression that though there is not a significant confidence level about groundwater conditions, the OVGA intends to proceed with an undefined pumping program on such limited data.

As such, the Board would like to express its agreement with the way the relationship of the data uncertainty to management actions is expressed in other sections of the GSP, such as 2.2.3.3. at page 226:

> "Analysis prepared by this GSP narrowed the range of estimates of the water balance for Tri-Valley, but lack of agreement among the various methods to assess the water balance reflects a significant data and knowledge gap that must be addressed. ***Identifying an overdraft exists (e.g. chronically lowering water levels) is insufficient information to begin managing pumping to correct the overdraft***. Future projects to better quantify the overdraft and develop models are necessary to inform any groundwater management plan developed for that portion of the Basin."

The Board believes that clearer statements like these built into a single section in the GSP and referenced throughout would provide needed clarity.

Response: See General Comment #5. Relevant portions of General Comment #5 were added to the GSP in Section 2.2.2.1.

Lack of clarity regarding data gaps in and assumptions about the Fish Slough Subbasin. Similarly, throughout the GSP, there are embedded uncertainties and assumptions about the relationship between the Tri-Valley Management Area and the Fish Slough subbasin without a clear statement of the implications of those uncertainties and assumptions. The GSP must be clearer about the limitations on the knowledge about the relationship between Fish Slough and the Tri-Valley Management Area, as well as the other potential groundwater sources.

The GSP contains contradictory language with respect to the need for a better understanding of Fish Slough and the conclusions drawn about connectivity that the GSP summarily repeats necessitate a pumping program in the Tri-Valley Management Area. As with the Tri-Valley Management Area generally, a number of statements seem to suggest there are significant assumptions and uncertainties, while simultaneously drawing conclusions:

- "While the proportions of groundwater discharging into Fish ***Slough are currently unknown***, a large portion is believed to come from the Tri-Valley area." (Section ES 2.2.1 at page 10; *see also* Section 2.2.1.6 at page 173).
- "This stratigraphy combined with preferential flow along faults/fractures that extend from Hammil Valley south to Fish Slough ***are believed*** to result in hydrogeologic connection between Tri-Valley and Fish Slough." (Section ES 2.2.4 at page 19).
- "***Greater understanding*** of the regional hydrogeologic flow system ***is vital to determine causality and to develop solutions*** to arrest or reverse the declines in water levels and spring flow discharge observed within Fish Slough." (Section ES 4.4. at page 38).
- "Based on surface topography, faulting, and inferred subsurface geology, Hollett et al. (1991) identified the Tri-Valley area as ***one of the potential water sources for Fish Slough***, which was supported by geochemical analysis by Zdon et al. (2019)." (Section 2.2.2.5 at page 210).

Response: See General Comment #6. Relevant portions of General Comment #6 was added to the GSP in Section 2.2.1.6.

Similarly, the GSP repeatedly cites to a limited modeling effort that showed an extremely wide "estimated conductivities in the range of 0.01 to 125 ft/day," which is "atypical of course alluvial materials and much lower than those from Owens Valley and Owens Lake." (*See* Section ES 2.2.1 at page 12). The GSP acknowledges that these "unusually low values" suggest that "a significant data gap exists." (*See id.*). This atypical and vast range in values is repeated in Section 2.2.1.6. The GSP seems to base a significant proportion of its conclusions on this conductivity to set the basis for implementation of a pumping program.

Response: The range of conductivities values is taken out of context. The entire sentence is:

> *A modeling effort in the Tri Valley and Fish Slough region estimated hydraulic conductivities in the range of 0.01 to 125 ft/day, with most of the values falling in the 1 to 20 ft/day range. These values are atypical of coarse alluvial materials and much lower than those from the Owens Valley and Owens Lake. The unusually low values may be due to model calibration artifacts suggesting a significant data gap exists.*

Uncertainty in alluvial aquifer conductivity was not a basis in the GSP for the development of a pumping plan for the Tri-Valley. The purpose for such a plan is included in the heading of the section where this additional OVGA activity is discussed: *Section 4.5.3 Develop a pumping program to stabilize water levels in Tri-Valley*. The evidence concluding chronically declining water levels exist in the Tri-Valley Management Area caused by pumping is discussed in General Comment #5.

Similarly, in section ES2.2.2 at page 12, the GSP concludes that the sparsely documented -0.5 ft/yr declines in Benton and Chalfant Valleys and the -1.8 ft/yr declines in Hammil Valley are consistent with the much lower -0.15 ft/yr decline in Fish Slough. (*See* Section 2.2.2.1 at page 177, where the conclusions are repeated again). Nowhere does the GSP acknowledge any cause or explanation for the differential rates in documented declines.

Response: See General Comment #5 for an explanation why water level declines vary between the three valleys and Fish Slough.

Finally, in only one paragraph of the entire GSP are the other potential sources of groundwater connectivity to the Fish Slough Subbasin mentioned. Towards the very end of the GSP on page 284, the plan states:

> "Based on general geochemistry, stable isotopes, and tritium, Zdon et al., (2019) concluded Fish Slough springs were sourced by a combination of water from Tri-Valley to the east, ***or the shared recharge areas for Adobe Valley and the Volcanic Tablelands to the north and northwest***. The geochemistry of source water varied spatially within Fish Slough, suggesting it is located at a convergence of regional groundwater flow paths. The ***authors did not quantify the proportion each source area contributed*** to a particular spring or seep discharge." (Section 4.4 at page 284).

It is unclear why this acknowledgement about the multiple sources of groundwater inflow is only included at the end of the GSP, when the multiple sources and lack of information about the contributing proportion of each potential source has significant implications for the pumping programs repeatedly suggested throughout the GSP for the Tri-Valley Management Area supposedly designed to benefit Fish Slough. This information seems to contradict the strength of the management action to recommend a pumping program in Section 4.5.3. The Board feels strongly that this information should be included in the GSP more prominently and throughout in a way that informs both the confidence of recommended management actions and the need for more data regarding Fish Slough prior to implementing a pumping program.

As in Section I of this letter, the Board wishes to express its approval and agreement for the way the relationship of the data uncertainty to proposed management actions is expressed later in the GSP. For example, in Section 3.1.1 at page 236, the GSP states:

> "The Tri-Valley Management Area exhibits declining water levels and spring flow in Fish Slough; however, ***lack of a groundwater model to evaluate and assess pumping effects prevents immediate measures to alter pumping or land management***. This GSP includes a plan for additional studies predicated on acquiring outside funding to prepare a numerical groundwater model."

Such statements about the relationship between the unknown data points and the management proposals should be made clearer either in one section of the GSP or referenced throughout.

Response: See General Comment #6. Additionally, the GSP suggests development of a pumping plan for the Tri-Valley Management Area (including Fish Slough) to address declining water levels, including Fish Slough and to ameliorate surface water capture from the springs. The identification of multiple

spring water sources in geochemical studies is not surprising. Pertinent conclusions from Zdon et al. (2019) were:

> *"Northeast Spring is from a regional water source, deriving part of its water from the alluvial Tri-Valley groundwater system."*
>
> *"Northwest and BLM Springs are regionally derived and are a possible mixture of more sodic sources to the north (Adobe Valley and Benton Hot Springs area) and northwest (Volcanic Tablelands), mixing with Fish Slough Northeast Spring/Tri-Valley water."*
>
> *"These results have identified additional source areas contributing to spring flow in the Fish Slough area, including connections to the regional aquifer systems. The connections to the regional aquifer systems explain how regional water withdrawals in the area have resulted in the decline of spring flow in the Fish Slough area over time."*

The only source water area for the springs and the regional aquifer system upgradient from Fish Slough with significant pumping and similar water level trends as wells near the sampled springs was also recognized by Zdon et al. (2019):

> *"Future groundwater development and management in the region should be cognizant of the potential hydraulic connection between the basin-fill aquifer in the southern Hammil–northern Chalfant valleys and Fish Slough."*

The suggestion to develop a pumping program following increasing the monitoring and groundwater water model capability in Tri-Valley is prudent and consistent with the recommendations of Zdon et al. (2019) and several other lines of geologic and hydrologic evidence (e.g. summarized by Harrington, 2016) connecting groundwater pumping, declining water levels, and declining spring flows.

II. Contradictory language about insufficient data and conclusions about significant and unreasonable results for domestic wells

While several portions of the draft GSP acknowledge the difficulty of relying on the well vulnerability assessment for the Tri-Valley Management Area, several other portions of the draft GSP go on to make firm conclusions about the likelihood of "significant and unreasonable" outcomes.

For example, on page 37 of the draft GSP in section 4.3, the GSP acknowledges that "***Without reasonable estimates of the groundwater elevations across the valleys***, a domestic well vulnerability assessment is difficult and reliant on several (though reasonable) assumptions. ***It is not certain the average rate of decline*** based on the available data is consistent across each valley." Similarly, later in the GSP in section 3.2.1 on page 238, the GSP states that "[t]he assumptions, though reasonable, limit the confidence in the conclusions beyond determining that whether the number of vulnerable wells is few or many and whether significant and unreasonable effects are eminent or possible much later in the planning horizon of this GSP."

Nonetheless, repeatedly throughout the GSP the OVGA abandons these caveats to make definitive conclusions about the significant and unreasonable outcomes for domestic wells. For example, on page 25 of the draft GSP in section 3.3.1, the GSP states that based on "the limited

amount and types of publically [*sic*] available data," the vulnerability assessment of 189 domestic wells in the Tri-Valley Management Area, it is predicted that between 3 and 8 wells may be at risk of refurbishment or replacement, and that "this number of wells being negatively affected by declining water levels ***is considered significant and unreasonable***." (*See also* Section 3.3.1.1 at page 243).

The Board would like to raise several issues with this conclusion and its repetition throughout the GSP: first, there is no or very limited discussion about the quality of the wells in the vulnerability assessment such as age, depth, and active use of wells. (*See* Section 3.3.1.1 at page 243, "Because no wells in the Tri-Valley area have been reported going dry, it is possible that these older wells are no longer the primary water supply for the property.). Such factors are highly relevant to determining significant and unreasonable outcomes, as are reliable estimates of the groundwater elevation throughout the Tri-Valley area, which the GSP repeatedly acknowledges are not yet available absent a groundwater model.

Second, the GSP is not clear on how significant and unreasonable are defined. 3 to 8 domestic wells of the 189 amounts to between 1.6% and 4.2% of the *assessment* wells, not the *total amount of wells*, which the GSP acknowledges is unknown (see Section 3.3.1.1 at page 243, "…the total number of domestic wells in the three valleys is not accurately known."). The GSP should explain significance as defined in setting these standards, particularly when the analysis to generate these "significant and unreasonable" results "relied on several assumptions due to the lack of information." (*See* Section 3.2.1 at page 238).

Response: Three undesirable results to pumpers caused by lowering of water levels were included in the GSP for the Tri-Valley Management Area: increased pumping costs, drying out shallow domestic wells, and loss of existing monitoring wells. The analysis of the threat to domestic wells was based on the limited information available about the construction of domestic wells in the Basin. Reasonable assumptions about how those wells were likely built was developed based on staff's knowledge of well drilling and construction procedures in the region gained by several local monitoring campaigns in these types of wells. The "quality of the well" is not a germane issue in SGMA. If the wells are likely to fail due to age or poor maintenance practices, for example, the OVGA is not obligated to analyze this variable. SGMA requires that the OVGA consider the impacts its groundwater management actions could have, for example, on water levels. It also requires a trend analysis to be performed that considers the impact that declining/rising water levels have on the beneficial users and uses of groundwater. The analysis only considered the factors required by SGMA: could the wells that exist fail due to water level declines.

Of the three undesirable results in the GSP, the well vulnerability analysis was based on the most severe possible outcome and a conservative (low) estimate of the number of potentially impacted wells. The metric of 30 feet of available water column in a domestic well was chosen in the well vulnerability analysis to represent the potential for complete loss of well operability. This event would entail the maximum expense to the well owner with costs typically of tens of thousands of dollars. The report's findings showed that 6% of wells could become inoperable by 2025 and 8% by 2040. Given the present water level trends, the number of vulnerable wells increases within the planning horizon if the declines are not stopped. The GSP recognized the uncertainty in the analysis and concluded that the number of wells at immediate risk of going dry is low. The Minimum Threshold was set at water levels anticipated to occur in 2007 assuming the present rate of decline continues. After 2007, the number of vulnerable

wells increases and impacts to domestic well owners could be significant and unreasonable. Similarly if a less strict metric was used associated with less costly well repairs instead of well failure (e.g. pump replaced or lowered caused by the water column falling to less than 45'), the number of vulnerable wells in 2025 is approximately 11% and 19% during the 20-year GSP implementation period. The undesirable result of declining water levels that increases the annual electrical cost to pump water was not included in the analysis, but all wells in the management area are probably experiencing this undesirable result to varying degrees. Sections ES 3.3.1 and 3.3.1.1 were revised to better explain the reasoning behind the selection and evaluation of significant and unreasonable effects with regard to domestic wells.

III. Inconsistent separation of Fish Slough from the Tri-Valley Management Area

Though the Fish Slough subbasin was incorporated in the Tri-Valley Management Area despite repeated protests from this Board, there are repeated areas within the GSP where the Fish Slough subbasin is treated distinctly from the Tri-Valley Management Area in a way that obscures the management relationship between the areas that OVGA and the GSP propose.

For example, in section ES 2.2.2 on page 16 of the draft GSP, in the assessment of ecological values are oddly separated out: "Based on the assessment completed for this GSP, the Tri-Valley Management Area was determined to have low ecological value. The Fish Slough subbasin, the Owens Valley Management Area, and the Owens Lake Management Area were determined to have high ecological value." (*See also* Section 2.2.2.5 at page 218, where the Tri- Valley Management Area is again analyzed as separate from the Fish Slough Subbasin). No other management area in the GSP has a component area analyzed separately. Doing so confuses and obscures the intention in the GSP of managing the Tri-Valley Management Area for the benefit of the ecological values in the Fish Slough subbasin. (*See*, *e.g.* Section 3.4.1.3 at page 253, "Therefore, achieving the measurable objective for spring flow will likely require increasing the flow gradient from Tri-Valley into Fish Slough, which translates to increasing water levels in the valleys. Potential management actions for achieving this are discussed above in Section 3.2.1.1 and in Section 4.").

Response: Unique to the Basin, Fish Slough is a federally-designated Area of Critical Environmental Concern due to the presence of rare plants and animals. It is recognized as a subbasin within the Owens Valley Groundwater Basin. Fish Slough has substantially different ecology and land use than the primarily agricultural areas Benton, Hammil, and Chalfant valleys, and the ecology was evaluated separately from those valleys for that reason. It is more informative to characterize special status areas separately within the GSP. Lumping the biological assessment of Fish Slough with Tri-Valley would elevate the environmental susceptibility analysis of the Tri-Valley Management Area as a whole when in actuality the most unique and sensitive ecological resources only occur in a portion of the Management Area. See General Comment #6 regarding the hydrologic connection between Tri-Valleys and Fish Slough.

IV. Continuing questions about jurisdiction and legal authority to implement proposed management actions

The Board remains concerned, as it has expressed in previous comments to the OVGA, that jurisdictional issues regarding authority to implement some of the management actions proposed by OVGA in the draft GSP appear to remain unresolved. The OVGA under the Joint Powers Authority, as stated in the GSP, has the authority to act in the stead of its member organizations. Assuming Mono County remains a member organization, it is still unclear whether the OVGA, using Mono

County's authority, would have the ability and jurisdiction to implement well registration and permitting ordinances, when the Tri-Valley Groundwater Management District has specific statutory authority to conduct such management activities.

Response: The OVGA is operating according to the latest guidance from DWR contained in its letter of May 27, 2021 explaining that the OVGA is the exclusive GSA for the Basin with the authorities granted by SGMA.

V. Lack of detail regarding timeline for implementation and conditionality of certain actions on the development of a groundwater model

The Board also requests that the final GSP provide more clarity in the detail regarding the timing and ordering of management actions proposed following adoption of the GSP. In several instances, the GSP references a vague timeline for reaching 20-year milestones that seems to suggest there will be 5 years without management action. (*See, e.g.* Section 3.4.1.1 at page 250 "Following the initial five years of decline, this GSP anticipates five years of stabilizing groundwater levels as projects and management actions begin to come online . . .").

Similarly, the order and timing of the proposed management actions in Section 4 are confusing, particularly in that it is unclear what management actions will be treated as conditional upon the completion of a groundwater model for the Tri-Valley Management Area. Language sprinkled throughout the GSP simultaneously seems to suggest an immediate need for management through a pumping reduction program, while also stating that without a groundwater model development of such a pumping program is infeasible. For example, in section ES 4.4 at page 38, it states "It is not feasible or reasonable for the residents and agricultural producers in the Tri-Valley communities to make immediate or drastic reductions in pumping without economic and social hardship or without potentially impacting air quality. The capability to manage groundwater pumping is dependent on an ability to predict the impacts of recharge and pumping on the aquifer system." This statement presupposes both that immediate action would be necessary to reduce pumping and that more information is needed. The GSP should be clear about what management actions depend on developing a groundwater model.

Otherwise, inconsistent statements that the GSP "is not proposing immediate projects or management actions that would alter the operations of well owners in the basin" do not create any sense of when or under what conditions such management actions will be taken. (*See, e.g.* Section 2.1.4 at page 87).

Response: The referenced management action to develop a pumping program is contingent upon and would occur after the implementation of Management Action #3 to increase the monitoring program to characterize water levels at more locations in the Tri-Valley area and Management Action #4 to develop a groundwater model for the Tri-Valley Management Area. Management Actions #3 and #4 are necessary to make informed management decisions to address the chronically declining water levels throughout the Management Area. This is deemed a more prudent approach than implementing management immediately. The text quoted in this comment makes clear that the GSP deems it infeasible to immediately regulate pumping without additional monitoring information and completion of a groundwater model. Implementation of these measures will take time and given the potential economic and possible environmental impact to air quality, implementing regulations

before the additional information is acquired would not be prudent. Failure to make progress on these steps or continued water level and spring declines, however, would be factors considered by DWR when the GSP is evaluated in 2027 and/or if the Basin priority is re-ranked.

Drastic management actions are proposed on limited reliable data and without reference to authority for implementation

The Board disagrees with the presentation of proposed management actions for the Tri- Valley Management Area. In Section 3.4.1.1 at page 251, the GSP proposes a number of drastic management actions while acknowledging that insufficient data exists to support the need for such drastic actions:

> "Reducing demand is the most likely course for arresting the chronic groundwater declines and groundwater storage reductions. This can take many forms such as improving irrigation efficiencies, ***retiring less productive agricultural lands***, changing crop types, or deficit irrigation. Development of any of these strategies necessarily follows steps in this GSP to address data gaps in this management area and probably acquisition of funding. ***Uncertainty in the water budget and the lack of a numerical groundwater flow model for the area prevents an accurate assessment of how much groundwater pumping in Tri-Valley would need to be reduced*** to achieve the measureable [*sic*] objectives."

Moreover, there is no statement in the GSP of what authority exists or would be used to achieve such measures like forcing the retirement of agricultural lands in the hands of private owners, nor about how the relative productivity of agricultural lands would be measured when the OVGA is making decisions about forcing them out of production. The GSP in its current form ignores cooperative measures to reduce groundwater demand that could be achieved through partnership with landowners or through education.

Response: The presence of overdraft is discussed in the previous comment. The likely cause of the water level declines is discussed in General Comment #5 and in Section 2.2.2.1 of the Final GSP. The strategies listed in Section 3.4.1.1 are not management actions of this GSP which are described in Section 4. The requested deletion contains a list of strategies to reduce demand that could correct long-term overdraft and achieve the measureable objective for water levels and groundwater storage (set at January 15, 2021 water levels). Clarification was added to this section in the GSP to generalize the discussion and avoid implying these are land management prescriptions for Tri-Valley. The topic sentence of the paragraph referred to in this comment now states:

> *Current water levels are below the management objective. Achieving the 20-year measurable objective to correct declining water levels requires either increasing recharge into the aquifer or decreasing pumping.*

SGMA (CWC §10726(b)) specifically grants the following authority to GSAs: Provide for a program of voluntary fallowing of agricultural lands or validate an existing program. Clearly, involuntary retirement of agricultural lands by the OVGA is not permitted nor is it contemplated in the Final GSP.

VI. Missing detail from proposed management actions regarding well registration and well permitting ordinances

There is unclear information in the GSP about the scope and applicability of the well registration ordinance. In Section 4.1 at page 276, the GSP suggests but does not clearly state that the ordinance will apply to all wells, including residential: "Registration of *de minimis* pumpers is permitted by SGMA, and the ordinance may include a one-time voluntary report to acquire information on well location, well construction characteristics, water levels, and approximate production amounts." Stating that something is permitted is quite different than stating that something is planned or intended. Further, the same Section 4.1 states that information to be collected by the proposed ordinance "is already required by local and State regulations as part of well permitting and well completion reports." If the information is already collected, why is the OVGA ordinance necessary? Will this ordinance apply retroactively to all existing wells? These fundamental details about the proposed ordinance are missing from the GSP. Further, there is confusion in the GSP about which wells will be registered under a proposed ordinance. In Section ES 4.1 at page 36, it states that "if it becomes necessary for the OVGA to regulate pumping amounts or well spacing to prevent well interference or other undesirable results, a more complete registration of non-de minimis pumpers is necessary." This seems to suggest that only domestic wells will be registered at first.

Response: The OVGA will have the discretion whether to proceed with an ordinance. The proposed Well Registration Ordinance description is clear regarding the voluntary registration of wells of *de minimis* users. It is not certain whether or not the OVGA will choose to include even voluntary registration in a final ordinance, though the primary benefit to the well owner is that potential impacts to their well could be included in any future analysis of new pumping projects.

Relatedly, other statements make unclear to whom the well permit review ordinance will be applied. In section ES 4.2 at page 36, it states that "[t]he ordinance will describe the conditions the OVGA may place on well construction, location, capacity, or extraction to ensure sustainable groundwater conditions are maintained in the Basin. *De minimis* extractors are exempt from most SGMA provisions including regulation of pumping." This seems to suggest that residential well permits will not be reviewed under the proposed ordinance, but this is not clear.

Response: To effectively monitor how much groundwater is being extracted from the basin (a key OVGA responsibility), the OVGA needs to have a method by which it is notified of new wells, their prospective groundwater extraction rates, and who to contact to collect groundwater extraction data going forward into the future. All well permits will be reviewed to keep the OVGA data base up-to-date. Authority to approve permits remains with Inyo and Mono Counties. Pumping by *de minimis* users for domestic uses cannot be regulated under SGMA.

VII. Managing Tri-Valley for the benefit of other management areas in the basin

The Board is deeply concerned that it appears the GSP contemplates imposing management actions on the Tri-Valley Management Area for the benefit of the Owens Valley Management Area. On page 28 of the draft GSP at section 3.4, the GSP contemplates that "Stabilizing water levels and spring flow declines in the Tri-Valley Management Area, as proposed by this GSP, would stabilize groundwater flow and spring discharge into the Owens Valley Management Area and ***not contribute to undesirable results in the Owens Valley Management Area.***" No other management area in the plan is

similarly suggested to be managed for the benefit of another. The Board feels it is inappropriate to set objectives and standards for one management area because of potential impacts to another management area, particularly if only one management area in the basin is so burdened and constrained.

The Board is also concerned that a reference to the Owens Valley Management Area appears in the Measurable Objectives for the Tri-Valley Management Area. On page 29 of the draft GSP in section ES 3.4.1, the minimum threshold for subsidence is set with reference to what is reasonable for the Owens Valley. While the Board assumes this is a typographical error, because of the reference to managing Tri-Valley for the benefit of the Owens Valley Management Area's undesirable results, the Board wishes to raise the issue.

Response: Stabilizing water levels in the Tri-Valley area would stabilize groundwater levels and/or Fish Slough discharge into the Owens Valley Management Area. This is a simple statement of fact. The impetus for potentially implementing a pumping program would be to correct chronically declining water levels in the Tri-Valley Management Area (Section 4.5.3) and avoid undesirable results (Section 3.2). The Final GSP proposes OVGA exercise its authority to increase monitoring and seek outside funding for development of a groundwater model. These are the necessary steps before developing a pumping program. The subsidence reference in this comment is a typographical error and was corrected in the Final GSP.

The draft GSP should be clear about the circumstances under which the OVGA would implement management fees

Finally, the Board wishes to raise that the GSP should be clearer about under what circumstances fees would be imposed on groundwater users in the basin. In several instances, the GSP mentions that there could be circumstances that "may require the OVGA to consider fees for analyses and groundwater management activities" or that the OVGA could consider "assessing fixed fees or fees based on extraction quantity on local pumpers in the non adjudicated areas." (*See* Section ES 1.3 at page 4, Section ES 4.5 at page 41). These cursory statements do not suggest under what circumstances residents of the basin will be charged and for what management objectives, or whether fees will be basin-wide or specific to management area.

Response: Implementation of any Management Action is at the discretion of the OVGA in the future. At the time this GSP was prepared, it was not possible to anticipate future the composition of the OVGA Board of Directors or their decisions regarding which projects to implement. With regard to management actions, the Final GSP states in Section 4:

> *The OVGA has chosen to develop this GSP to ensure groundwater conditions in the Basin are maintained or improved where applicable. An additional consideration in developing this list of Management Actions and Projects was to not place an undue financial or regulatory burden on local residents recognizing that compliance with SGMA is voluntary for the OVGA (See Fund1 in guiding principles, Section 1.2).*

* * *

In closing, the Board has identified a number of fundamental issues that impact the clarity of the draft GSP and create confusion about the implications of the GSP for residents of the Tri-Valley. The Board urges the OVGA to make significant changes to the GSP to address these issues ahead of adoption.

Sincerely,

Emily Fox
On Behalf of the Tri-Valley Groundwater Management District Board of Directors

October 6, 2021 SGMA GSP Stakeholder Outreach

OVGA Public Review Draft Comments

October 6, 2021
SGMA GSP Stakeholder Outreach
Public Workshop
Transcribed Public Comment

Q & A – Stanleya Pinnata – Can you please share with us how many are in attendance for this evening

Q & A – Philip Anaya – Will the public comments be posted

Response: yes.

Edie Trimmer – I do wonder how much the Owens Valley Groundwater Association can protect groundwater resources in the Owens Valley given that LADWP controls so much of the water resources in this basin. How much can we protect this basin through the OVGA.

Response: See general comment #2.

Lynn Boulton - I would hope that the GSP and the data you've collected would help you to realize when any part of the basin is in decline, could you distinguish whether LADWP's pumping is impacting the OVGA part of the basin vs some pumping that's done on the alluvial fans or OVGA part.

Response: See general comment #2. The GSP Section 2.1.2 and elsewhere states:

> *The monitoring program in this GSP will aid detection of cross-boundary impacts on the GSP area from LADWP's pumping activities and will alert the OVGA to coordinate with LADWP and/or Inyo County in mitigating any such effects.*

Sally Manning – I haven't been able to read it yet but certainly the tribe will be submitting comments, Big Pine Paiute Tribe of the Owens Valley. I do want to get an answer on the website and how the database will be maintained because I think it is a valuable resource and I see it has data up to about 2017 then stops and I'm wondering if that will be maintained and kept up to date.

Response: Section 2.1.2 states:

> *The Inyo County Water Department plans to use OVGA database as a repository for LADWP data for their daily operations in the future, and therefore it is anticipated to be updated regularly as additional data are collected and become available for import. The OVGA will determine the timing of the acquisition of data to update the database from other sources as funding and the scope of the GSP implementation in a low priority basin requires. The OVGA will also determine whether to require reporting of missing data collected by pumpers or to implement additional monitoring programs to fill identified data gaps (see Section 4, below).*

Nancy Masters – I have a follow up comment to Sally Manning's comment about data and its collection. It was my understanding that SGMA was going to provide for a statewide database that's going to be robust and inform decision making in all the various basins. I guess my question is through the GSP will OVGA be able to insure that all pumpers in the Owens Valley basin supply all the data to the statewide database. I guess my comment was really whether all pumpers will be contributing to that database in a transparent manner.

Response: Management Actions #1 and #2 (Section 4.1 and 4.2) describe possible actions to complete the data gaps in pumping within the basin and to keep the OVGA database management system up to date. Implementation of the measures will be at the discretion of the OVGA.

Lynn Boulton – I wanted to suggest you post next week's presentation on either the OVGA or inyowater, I look for it there and I lost my email and couldn't find it. People might go there to look if they didn't get a notice from Laura, the information to access the meeting.

Response: comment noted.

Philip Anaya – So I'm going to harp again on the biggest problem to sustainability in the non-adjudicated portion of the basin is going to be what LADWP does in the adjudicated portion of the basin. The more they pump, the more water they are going to drain across the adjudicated non-adjudicated boundary so I'm looking for something, I think there's a vast improvement in the draft GSP vs the administrative draft in terms of some language about the management across that boundary. I still want to see under additional activities in the projects, the OVGA making a formal statement to the State of California that we are pursuing a management agreement across the adjudicated non-adjudicated boundary and we are willing but so far DWP is not willing. I think that will pay dividends towards maybe them coming to the table to begin to talk about issues like what happened in 2013/14 where right across Barlow Ave., south Barlow Ave in west Bishop, you had w407 pumping away, w408 pumping away down there in the cone, t389 lost 17 feet and subsequently by August, August/September of both those years, we had no water in the ditches. So a combination of all those things caused three dozen domestic wells to go dry. Those people were not reimbursed, it was a violation of the LTWA, and the County didn't do anything so we need to put teeth into the GSP. We have an existing infrastructure for surface flow recharge in west Bishop to prevent that kind of thing and we need to have an ambitious statement in the GSP that speaks to that. I still don't see it in the GSP. What I would like to see also if it's possible I would like to get a hydrograph of this year's t389 measurements. I would like to know what's going on this year because the ditches are looking really slow and I'm thinking that we may have a repeat of 13/14 here in 2021. I would like the data so I can post an appropriate comment if that's possible. I would like to see it myself so that I can write a succinct letter, a succinct public comment regarding the issue and I really want to see under additional projects a statement that we are pursuing a management agreement with the DWP regarding the flow of groundwater across the adjudicated non-adjudicated boundary. That is the greatest threat to

sustainability in the non-adjudicated portion of the basin and there is nothing in the current draft that is vigorous enough to alert the SGMA that this is an issue and an issue we are pursuing.

Response: The hydrologic changes and management that occurred in West Bishop in 2013 were widely reported. The suggestion to include in the GSP a project to acquire and manage surface water in West Bishop in the area managed by the Bishop Creek Water Association has been offered at several meetings of the OVGA, but the Board has not directed staff to include such projects in the GSP. The feasibility of acquiring surface water rights for recharge, reservoir storage costs, and acquiring staff to manage surface water (and asking the Basin residents to fund) would considerable obstacles. The Owens Valley and Owens Lake Management Areas are not in overdraft and all surface water recharge is used in Tri-Valley Management Area. Regarding the remainder of the comment see General Response #2.

Edie Trimmer – I'm concerned about our local participation, are we not getting the voices of our local citizens. All of us know about water issues in the Owens Valley but it seems there is only a few of us that speak up. What can we do the few people that speak up? I wonder if the public feel the OVGA is really only acting in their own best interest and so they are not concerned. But our concern is the big lands controlled by LADWP. I just wonder if that's part of the lack of response.

Response: The summary of outreach efforts is discussed in Section 2.1.9.

Nancy Masters – You are absolutely right Holly I have not had time to review this document extensively so this may indeed be covered in the document. I would like to see the GSP have some control or authority or directional activity over water spreading on the forest service lands that rim the basin of the Owens Valley including diversions from those creeks and how that water spreading is done. I know those are federal lands but some private lands are effected by that and I think that's recharging the basin and it's important that that activity is at least overseen to a certain extent. It may be a matter of coordinating with the federal agencies for work on diversions and water spreading and construction of berms, that kind of thing. So a coordination effort.

Response: Those activities are conducted by LADWP as part of aqueduct operations and might be considered activities pursuant to the LTWA.

Philip Anaya - Going back to the public participation, I don't want to slam the process but I do want to say I think that the COVID has really had an impact on the process. Zoom meetings have been ok but are not like having the get together like the real public meetings we were having previous to COVID. I would say that public participation has been welcomed at the OVGA. When we were at the meetings you could get to the diocese and talk, we were given a lot of latitude. Maybe one thing that could have helped with public participation would be for instance if the interested parties had been brought on board at a much earlier period of like before the consultant was hired. That's all water under the bridge but I definitely think that zoom meetings have been an impediment to public participation. It's not as easy to express yourself over the computer. One last thing I do want to say is the GSP we end up with is

a GSP that anybody who's going to comment on it, is going to comment on it in a favorable way. We don't want to have a lot of public comments criticizing the GSP at the state level when it goes there. So it's real important now up to November 8 to try and reach out even more so and double the efforts to get some public input so that we don't have people that are going to be complaining about it later.

Response: The summary of outreach efforts is discussed in Section 2.1.9.

Jerry Gabriel – I've been staying quiet for a couple of reasons and it's not a lack of interest. I have a lot of interest especially historical interest about water in the valley; the early diversions into the power plants; and the water is supposed to come back out. I'm in the Dixon Ln area and I think I have coverage of surface water by the Chandler Decree, I could be wrong about that but anyway I have ditch water. I think I have noticed when the ditches stay dry for a while it effects my domestic well. My domestic well is very low volume and one of the concerns I have is if you ask me how much I'm pumping that well and how much water I'm getting from the ground, I couldn't tell you, I have no idea, so that concerns me. Mainly I've kept my mouth shut because of lack of knowledge not a lack of interest but because many of the things you're talking about, the agencies you've mentioned, I know we use acronyms a lot and I don't know what those letters mean so I didn't want to display my ignorance but I'm doing it.

Response: Thank you for the comment but it is not directly related to the GSP.

Q & A – Lynn Boulton – I'll submit comments later

Q & A – Sally Manning – The website and notice should also state the comment deadline of November 8.

Response: The schedule was placed on the website

Q & A – Lynn Boulton – Thank you for having this meeting to reach out to the public

Q & A – Sally Manning – Gabriel, you should talk to Philip Anaya. Interesting that low ditch flows on Dixon seem to affect depth to groundwater. Feel free to reach out to me too. Sally Manning s.manning@bigpinepaiute.org

Mary Roper – So I have a question and I really should know this since I go to the OVGA meetings for months. So after all the public comment and the GSP in its final form is submitted to DWR and they accept it, how easy is it in the future if things change to amend the plan.

Response: The procedure to amend the GSP is described in CWC § 10728.4. The GSP is also subject to review by DWR every five years.

Jerry Gabriel – Our water comes from what was originally Birch Creek and at one time we contemplated and tried to get started on a Birch Creek Water Association but it never went anywhere so we are pretty much on our own out here but thank you, you've pretty much said what my belief is that we do have some water rights because of riparian on Birch Creek that used to go through here so thanks for that. Many years ago there was a very large ranch that was irrigated in this area and it's been divided, and divided, and divided and it gets complicated.

Response: Thank you for the comment but it is not directly related to the GSP.

October 13, 2021 SGMA GSP Stakeholder Outreach

OVGA Public Review Draft Comments

October 13, 2021
SGMA GSP Stakeholder Outreach
Public Workshop
Transcribed Public Comment

Q & A – Kevin Carunchio – Just Curious, how many people are participating tonight?

Q & A – Kevin Carunchio – How's that compare to last week?

Kevin Carunchio – Thanks for providing the forum tonight, I'm still making my way through the document, got through the Executive Summary and sort of jumping around. The most salient comment and I don't know if it reappears outside the Executive Summary but on page 4 in the description of the plan area, Los Angeles is the largest land owner in Inyo County about 53% of the land I think, that should be in the ground water basin or in the Owens Valley. They certainly don't own 5,000 square miles in Inyo County.

Response: The acreage value was corrected. The % ownership values in Table 2-1 represent values for the Basin, not the entire Inyo County.

I have some more general questions to inform more comments so if other people are raising their hands and want to jump on with specific comments I'm happy to circle back later. I appreciate the vastness of the basin and the management areas that were identified and it seem to make perfect sense to me. My interest is more in the Owens Valley Management area which is still immense. With a little bit of non-adjudicated lands in there and stuff so I'm understanding and probably won't use the correct hydrologic terms but the Owens Valley Management area is considered to be in a pretty good place of (astasis)???, dynamica, sustainability, I forget the exact terms used. A lot of that is due to the LTWA being implemented but for private land owners in the non-adjudicated area, you know, and some of this is a little bit of forecasting I guess the future because you haven't even drafted an ordinance yet but I'm trying to envision how it plays out. What would qualify, just in general terms, as a large pumping project on non-adjudicated land given that, tremendous impact identifying the plan that LADWP pumping and the basin is just so large, does that make sense.

So on the database is well specific criteria set to the GSP or is it really just extrapolating back from that drought year. So if I'm looking at the representative monitoring locations in the management area, I can go to that database and just pick some of the wells identified on these figures and see what's what.

Response: This is correct. The functionality of the database was subsequently discussed and demonstrated for Mr. Carunchio.

One other database question I have is I was having trouble reading the GDE figures in the plan. I did go to the IGDE site so I could blow those up a little better through DWR. The amount of work in this is tremendous. Do I understand the Water Departments cold version of the map is also on the same database you just showed me? I don't want to go too far down the rabbit hole but I guess my concern was, I'll look at that first and I understand that throughout the document the connection between the interconnected surface water and groundwater is really unlikely especially higher up on the fans. The reason I'm asking about it is because when I looked at the

IGDE database and saw the lay of the land out there it seemed to contain some fairly obvious errors or misconstructions that have been well debated in the valley for years.

Response: The functionality of the database was subsequently discussed and demonstrated for Mr. Carunchio including the vegetation database. The GSP recognizes that improvements to the GDE map are needed in some areas of the Basin which were included as a potential Management Action (Section 4.5.3)

> *Several improvements to the final GDE map in Figure 2-25 should be completed during implementation of this GSP before the five year assessment or if there is a change in prioritization of the Basin. Funds were not available to conduct fieldwork to ground truth all parts the iGDE map or the final GDE map (after ICWD staff review). The GDE map refinement should include updates to reflect more accurate mapping of springs and seeps and vegetated dune areas near Owens Lake.* :

I'll look at the database first and see what the revised maps show. So sort of a hypothetical at this point I kind of went into the plan looking for is if you have a public water system that's pumped pretty significant for people over the years but in light of the current drought situation has reduced it's pumping by half. I'm thinking down the road is there going to be a problem increasing that pumping, hypothetically. When I'm reading the plan it's like if they were pumping at the higher level during the 2012-2016 drought barring external factors, resuming to that level shouldn't really necessarily cause a trigger or anything, under the current plan. What I was concerned about is maybe a baseline being set to low based on current pumping levels which have really been influenced by the current drought conditions where eight years ago it was full bore. I just want to be sure on how the plan is being interpreted rather then tied to specific historic pumping levels. I appreciate the free ranging conversation tonight to help me formulate better comments. One thing I wasn't clear on is are some of the monitoring wells are those necessarily water wells or water quality wells associated with like waste water treatment plants , are those water quality wells for a specific purpose but could influence groundwater. Using the landfill monitoring as sort of an example, what I was curious about is a landfill monitoring well type situation for water quality, sometimes those wells go dry when water levels drop then are no longer a good monitoring well. Are those also being used in the GSP as water level monitoring wells even though they are installed for water quality purposes?

Response: Some landfill wells are being used for water quality and water level representative monitoring sites.

I think the service this plan is going to do to all de minimis users, kind of protecting their smaller wells is of tremendous value just as a talking point. I'm curious on the well permit review process, as I understand it the OVGA would act just like inter county departments in terms of reviewing well permits before they are issued offering comments but kind of playing that out if it needs to have a little more teeth, has there been some discussion because I think in both Inyo and Mono well permits are currently ministerial actions. I'm sorry you've been losing Board Members. The whole structure was set up to provide as many seats at the table to give people voices. To jump ship at this point doesn't seem necessarily one of self-interest. Thank you for the ability to chit chat and get a little more informed on there.

Philip Anaya – Just wanted to comment, that was a great discussion with Kevin and I'm glad that I was able to hear it. I'm making my way through the GSP and I wish more people were in tune to the whole thing but it is what it is. Thank you again for this public comment period.

Kevin Carunchio – I have more of a ticky tac question to see whether it would be helpful or not but I noticed in some of the reading there's some discussion of disadvantaged communities. My take is that it was relative to the Communication and Engagement Outreach plan and some of the challenges and extra challenges presented by the pandemic but if we are aware of other communities that should be considered for that should we point that out in comments. I haven't seen any other real tie-in's I know it does to some of the funding, funding opportunities and stuff, now would that be worthwhile. Everything I've seen so far addresses it up in the Tri-Valley area for communication and outreach. I think it's great the OVGA decided to pursue the GSP because I think it's easier to craft a document like this when you're not under the pressure of a medium or high priority basin and there seems to be a lot of flexibility and adaptability built into this with the wisdom of future Boards.

Q & A – Jen Roeser – That was a great discussion! I learned quite a bit. Thank you Aaron and Holly – you've gone above and beyond to outreach and obtain public engagement and comment.

Q & A – Kevin Carunchio – Thank you!

October 20, 2021 Tri-Valley Groundwater Management District

OVGA Public Review Draft Comments

TVGMD

Special meeting 10.20.21

OVGA presentation by Aaron Steinwand: Note the Responses are paraphrased and simplified from the recording of the videoconference meeting by TVGMD . The TVGMD did not have a quorum to take action at an official meeting but continued as a community meeting.

1. If this goes through, would they [residents of Tri Valley] be required to put meters on their wells, and would they be charged for the water they use?

   Response by Aaron during meeting: Not automatically, no. For domestic users, no, absolutely no… It has not been discussed by the OVGA as requiring that.

2. If she gives you permission to monitor her well and then sells the property, is the buy obligated to continue with the agreement?

   Response by Aaron during meeting: No, the agreement is with the individual.

3. If a well has the equipment on it for monitoring and it needs to be re-drilled, is OVGA going to take off the equipment so the driller can work on the well?

   Response by Aaron during meeting: We don't need continuous information, just periodic/annual measurements taken when the owner is home.

4. Why did the Basin get re-rated?
5. Since the groundwater is declining 6" – 2' a year, why would it make sense to pump out water from the TV?

   Response by Aaron during meeting: SGMA was designed to try and stop that pumping.

6. Been drilling in the county for 40 yrs, I've done 12,000' of drilling in one year. Yes or No, our water right today, we can pump all the water we want from our wells as long as we don't interfere with a neighbor intentionally? Your intent is to take the water right away from us so you can regulate it in the future. Will you regulate it in the future, limiting our ability to pump water from our pumps?

   Response by Aaron during meeting: No, SGMA does not affect any existing water right, but it allows regulation of the water right.

   Your organization has more than one lawyer representing it

   Response by Aaron during meeting: Yes, Inyo and Mono Counsels

   I, Russell Kyle, oppose any regulation of private water wells for the entire future of California. I oppose the State of CA, the TVGMD, the OVGA, taking away the water rights we have today.

7. It's been stated that you probably would not start management actions for 5 yrs or until re-rated to medium. (approximately, the trigger is the groundwater model, if re-ranked we would have to do something).

At the August meeting, the Board approved a 2022-23 budget for TV of $xxx which includes well registration and reporting ordinance of $xxx, well permit review permit of $xxx, increasing groundwater monitoring network of $xxx, and a groundwater model of $xxx, and any grant assistance of $xxx. (xxx=amount reported in draft budget) If actions don't start until later, why did the Board approve a budget?

I don't understand if this is going to be next year or 5-years.

Response by Aaron during meeting: The OVGA did not adopt a GSP budget in August. That was a presentation of information regarding costs required to be included in a GSP. The OVGA is operating under the 2021-2021 FY budget adopted in June, 2021. It will adopt another annual budget in May 2022.

8. Follow up, if you can't get grant funding, how would $365,000… would it be a fee or something that goes onto the residents?

   Response: Implementation management actions in the GSP are at the discretion of the OVGA. Currently, the OVGA has directed staff to pursue outside grant funding for the groundwater model project, the largest component of the quoted value.

9. Question – if the TVGMD withdraws from the OVGA do they risk being re-ranked as a med or high priority area due to dropping water levels?

   Response by Aaron during meeting: They have withdrawn and have requested to be their own GSA. Basin re-ranking is done for the entire basin

10. What is the real interest behind monitoring the water wells of private people? Because I have heard the answer earlier but I don't understand because we know that LA is taking a lot of our water, the power today to monitor the water through other way so I don't understand how by monitoring wells of people that have been doing it for years, how is that gonna raise the water of the wells?

    Response by Aaron during meeting: It's allowing us to describe the basin more adequately.

    Why do you have to do that?

    Response by Aaron during meeting: The rate of decline may vary within the basin. It's something you should do, elsewhere in the valley there are a ton of monitoring wells but in the TV it is sparse. Information would help guide what pumping should be.

    Want to understand what the benefit to Benton residences is to monitor all the wells, do we monitor LA? Do we know how much water they take from us?

    Response by Aaron during meeting: They [LADWP] don't pump north of Laws.

    How are they gonna implement that? I don't own my own land, how do you implement what you are going to do? Knock on their door and ask them to give you their water rights?

    Response by Aaron during meeting: Monitoring is voluntary.

    What about the agriculture?

Response by Aaron during meeting: They are large enough to be regulated under SGMA, and by the OVGA.

What is the risk of refusing, if I have ag land in Benton, what do I risk if I do not want you to monitor my pumping?

Response by Aaron during meeting: None for households or de minimis users. SGMA could conduct investigations, but we [OVGA] haven't talked or considered that far ahead for other pumpers.

For household they can still refuse, exist, and manage as they are doing now.

Response by Aaron during meeting: Yes, this is getting hypothetical. A GSA can enforce compliance with a GSP. We have not discussed that heavy-handed regulation.

Yes, but we need to know what could happen in 10 yrs. Who could they allow to own the water? Who is in charge of that?

Response by Aaron during meeting: That gets into water rights questions. If you buy the property you can sink a well and put it to a use, securing the water right. SGMA will not affect a water right but it can regulate it. That will be a large legal question to figure out what that means.

I need simple explanations, that was fine.

11. What would happen if fish slough is completely dry, no more water, and 5-10 springs around here are zero water., how long would it take for DWR, state organization, to start applying rights to say, if you don't have a well on your property, you can't drill one.

Response by Aaron during meeting: There are several steps. Before DWR gets involved, the OVGA or GSA would have to be re-ranked, requiring a plan, and …. If all fails then the State has the authority to regulate pumping amounts, well installation and reactivation.

What if in 5 years we have drought condition, fish slough is gone and springs are gone, how long would it take for them to up-date us to a high priority?

Response by Aaron during meeting: The state cannot intervene until re-ranking occurs. I don't think they can re-rank as soon as something like that happens.