



May 21, 2019

Jim Bennett, Water Resources Manager  
Borrego Valley Groundwater Sustainability Agency  
5510 Overland Avenue, Suite 310  
San Diego, California 92123  
Sent via electronic mail to PDS.LUEGGroundwater@sdcounty.ca.gov

**Re: Comments on Draft Groundwater Sustainability Plan for Borrego Groundwater Basin**

Dear Mr. Bennett,

On behalf of Clean Water Action, I am pleased to provide the following comments on the draft Borrego Groundwater Sustainability Plan. Our organization has been working on the implementation of the Sustainable Groundwater Management Act (SGMA) since its inception, and has an interest in its successful implementation throughout the state. We have been engaged in groundwater protection efforts since our program opened in California in 1990, and have specific expertise in drinking water and stakeholder engagement. As part of our interest in the successful implementation of SGMA, our organization has commented on SGMA activities at the state level and on several plans submitted in 2016 as alternatives to Groundwater Sustainability Plans. Our organization co-authored a report on stakeholder engagement in SGMA<sup>1</sup> and were able to participate remotely in 2 meetings of the Ad Hoc Stakeholder Outreach Committee for this Plan.

Our review of this draft is admittedly cursory; we did not review models or the data used to run them, nor did we comprehensively review undesirable results and management actions. However, we're indebted to the Local Government Commission for its more thorough review of the plans and have attached their memo to supplement our questions.

We also understand that this is a draft document and welcome the opportunity to request additional information and clarification. Our questions are limited to governance and management actions, stakeholder engagement and drinking water.

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<sup>1</sup> *"Collaborating for Success: Stakeholder Engagement for Sustainable Groundwater Management Act implementation"* Community Water Center, Clean Water Fund and Union of Concerned Scientists, 2015

## Notice and Communication (Appendices C, C1)

We appreciated the strong commitment to stakeholder outreach and engagement expressed by the members of the Ad Hoc committee on the calls in which we participated. It would be helpful if more information about those efforts were provided in this plan. For instance, how successful were efforts to reach all classes of beneficial users? Where is more effort – or a different approach – needed? In this area, we are specifically interested in your success in reaching domestic well users. We have the same question about public engagement – how successful were your efforts to encourage the “active involvement” of the general public<sup>2</sup>?. Specifically, how successful were your outreach efforts to Spanish-speaking residents in the basin?

It would also be helpful if the plan could identify how input received was incorporated. Can you provide more specifics about how the plan was amended in response to public input?

We are also interested in how outreach and communications continue through the plan’s implementation, as required in statute. Unfortunately, we found the communications plan in Appendix F-2 woefully lacking in detail and hope that that can be amended in the final plan. A few suggestions;

- While the MOU in Appendix B-4 clearly states that the Advisory Committee will provide input on plan implementation, the plan itself states that the terms of those committee members extends only through plan development and completion<sup>3</sup>. Can you please clarify the permanent nature of the AC in the final plan?
- What are the goals, strategies and tactics for stakeholder outreach and communications?
- At a minimum, a key goal of the plan should be to educate residents and beneficial users about the need to raise funds for plan implementation.

Table 5-2 identifies an annual budget (in 2020 dollars) of \$6,000 for outreach. What activities will be funded with this budget? Is it sufficient to accomplish your objectives?

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<sup>2</sup> Water Code 10727.8 “The groundwater sustainability agency shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the groundwater basin prior to and during the development and implementation of the groundwater sustainability plan.”

<sup>3</sup> Draft Plan, Page 1-4

## **Drinking Water**

As we reviewed the information in the report, we were unable to identify clearly which wells were potentially compromised due to water quality issues or the lowering of the groundwater table. Specifically, which domestic wells will potentially be impacted by increasing groundwater contamination and lowering groundwater levels? How does the plan identify those impacts and when and how would mitigation efforts be triggered? Also, the plan seems to confuse mitigation with additional plan actions. Our interpretation is that mitigation requires the impacted party to be directly assisted.

We also recommend that the plan reference the Irrigated Lands Regulatory Program<sup>4</sup>. While it has not yet been implemented in Borrego Valley, the State Board in 2018 adopted final amendments to the East San Joaquin River Program, with some parts of that revised order identified as precedential. Specifically, the State Board required that all domestic wells located on land covered by the Program be tested for nitrates and that all agricultural operations should develop and implement irrigation and nutrient management plans to limit their discharge of nitrates to groundwater.

## **Projects and Management Actions**

We appreciate the breadth of actions being considered, but have some questions. First, how are these actions being prioritized? If the plan is to reach the Sustainability Goal by 2040 in a linear fashion, do all of these measures need to be implemented simultaneously? Can they be prioritized according to cost and perhaps public receptiveness?

Water trading is an action being considered in basins around the state, but to date, only Ventura County has implemented a market and it is still in pilot form. Yet this plan states definitively that this is something that it definitely will do. Is the timeline for implementing this plan too ambitious

We appreciate that the Water Conservation action provides explicit savings. In the final plan, it would be helpful to quantify expected conservation for each identified measures, along with costs for each. All conservation is not alike and it may be more appropriate to implement some measures over time.

We agree with the metering requirement for the pumping reduction program and look forward to proposals to ensure that any program to track metered water use is effectively enforced.

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<sup>4</sup> [https://www.waterboards.ca.gov/water\\_issues/programs/agriculture/](https://www.waterboards.ca.gov/water_issues/programs/agriculture/)

We agree that some agricultural fallowing will be necessary to meet the 2040 Sustainability Goal and measurable objectives. We hope that this effort will be informed by an analysis of the impact of fallowing on farm workers and how that impact might be mitigated.

Can you clarify the intent of the Water Quality Optimization Program? It seems as though this is looking at expensive options for treatment or intrabasin transfers in response to water quality degradation. Instead, could you consider accelerating other efforts, such as pumping reduction? For instance, if your monitoring plan indicates that the middle and lower aquifers in the Northern Management do contain significant levels of arsenic, you may want to accelerate efforts to reach the sustainability goal in that area and protect the upper aquifer. For nitrate, working with the board to implement the Irrigated Lands Regulatory Program could help reduce excess nitrate being discharged to the vadose zone? In short a cost comparison looking at source protection efforts rather than the mitigation efforts in this program seems like an appropriate action.

Thank you for allowing us the opportunity to comment. Please feel free to contact me if you have any questions

Sincerely,

A handwritten signature in black ink, appearing to read "Jennifer Clary". The signature is fluid and cursive, with the first name being more prominent.

Jennifer Clary  
Water Program Manager

***DRAFT Summary Memorandum***

**Independent Review of the Borrego Valley GSP**

**Gaps and Opportunities**

***Presented by***

**Local Government Commission**

***to***

**Borrego Valley Endowment Fund  
&  
Borrego Valley Stewardship Council  
&  
Borrego Water District**

Friday, May 17, 2019

## I. IMPETUS FOR REVIEW

The Borrego Valley Endowment Fund (BVEF) retained the services of Local Government Commission (LGC), on behalf of the Borrego Valley Stewardship Council (BVSC), to conduct an independent review of the draft Groundwater Sustainability Plan (GSP) for the Borrego Valley Groundwater Basin, as released by the Borrego Valley Groundwater Sustainability Agency (BV GSA) on March 21, 2019.

According to Task I of the BVEF/LGC Contract, “LGC will review GSP documents produced to date, past meeting agendas and notes; and interview advisory committee members and other relevant stakeholders. LGC’s review of the existing GSP development process will identify both gaps in the current status and opportunities to enhance the GSP so as to help BWD ensure regulatory compliance while also enhancing the positive impact of the GSP for the entire Borrego Springs community. LGC will produce a summary findings memo outlining identified gaps and opportunities, with special attention to the needs of severely disadvantaged community members and the long-term vision for Borrego Springs.”

LGC entered into contract with BVEF on May 7, 2019. As such, LGC had 8 business days to review the draft GSP for gaps and opportunities, with the goal of informing the Borrego Valley Stewardship Council and other interested parties for their own public comment to the GSA. To maximize use of available time, LGC determined to focus our review of the draft GSP on the two most important sections: Chapter 2, Plan Area & Basin Setting; and Chapter 3, Sustainable Management Criteria.

This document, submitted to BVEF on Friday May 17, 2019, represents the Draft Deliverable, “Summary Memo of Gap Analysis and Recommendations.” The Final Deliverable will be submitted at a later date, no later than 60 days following submittal of the Borrego Valley GSP to the California Department of Water Resources or by December 31, 2019, whichever occurs first. LGC has used 40 of the estimated 80 hours personnel time to complete this task. LGC will use any remaining funds allocated to this task for completion of the Final Summary Memo.

## II. CONTEXT OF REVIEW

LGC has coordinated closely with members of the Borrego Valley Stewardship Council, Borrego Springs Community Sponsor Group, Borrego Valley GSA Advisory Committee and other interested parties in its review of the Draft GSP. The goal of our review is to support long-term goals of aligning the Final Borrego Subbasin GSP with the existing BVSC Geotourism Charter and integrated watershed master plan to be developed at a later date, with specific attention to ensuring robust and meaningful representation of

historically underrepresented Borrego community members whom potentially face disadvantages (i.e., “disadvantaged communities” and “severely disadvantaged communities” under SGMA).

The BVSC Geotourism Charter aims to promote, sustain and enhance the geographical character of Borrego Springs—its environment, culture, aesthetics, heritage, and the well-being of its residents and visitors. The following principles of the BVSC Charter aligned with the goals of the Sustainable Groundwater Management Act:

- Principle VI. Community Involvement
- Principle VIII. Protection and enhancement of destination appeal
- Principle IX. Land Use
- Principle X. Conservation of Resources
- Principle XI. Planning

The key concepts of the future integrated watershed master plan, as outlined in the April BVSC Workshop, include: [6 break-out groups]

- Planning within a Water Budget / Integrated Planning Framework
- Sustainable Destination Management / Hospitality
- Sustainable Community Development Needs Assessment
- Cultural Landscape Survey
- Economic Innovation & Transition Zones
- GSP / CEQA Compliance & Community Plan Integration

In the context of these key principles, LGC reviewed the Draft Borrego Subbasin GSP on the following topics:

- Stakeholder Engagement
- Disadvantaged Communities
- Drinking Water Safety
- Climate Change
- Groundwater Dependent Ecosystems
- Land Use / Groundwater Recharge

A summary of our review on each of these topics is provided in the following section. Attached to this document are excel file evaluation tools with detailed analysis of the GSP for each topic.

### III. SUMMARY FINDINGS OF GAPS AND OPPORTUNITIES

The Borrego Valley GSA is the first real form of collaborative local governance for the Borrego Springs community, which provides a significant opportunity for Borrego Springs to achieve its vision for a sustainable future. SGMA provides ample flexibility

for the GSP to include broad goals that will support land use and economic development shifts necessary to achieve this vision (without overstepping jurisdictional authority of San Diego County. Local Government Commission strongly urges the BVGSA and its stakeholders to use this opportunity to the greatest extent possible – to establish necessary land use, water management, and community governance policies that will accelerate achievement of a sustainable Borrego Springs.

#### IV. RECOMMENDATIONS TO THE BVSC & OTHER INTERESTED PARTIES

- LGC strongly encourages the Borrego Valley Stewardship Council, its members, and all other interested parties to submit public comment letters to the Borrego Subbasin GSA. This can easily be done using this document and the attached excel spreadsheets. LGC recommends the following protocol for creating comment letters:
  - Select between 1 and 3 key issues of most interest to each BVSC member / constituent group.
  - Structure your letter as follows:
    - i. Your constituency & interest in the GSP
    - ii. Commendations to the GSA for their hard work & dedication
    - iii. Recognition of the overarching goals of SGMA, as they relate to your topic of interest/concern
    - iv. Then, for each interest/concern
      - 1. [Code/Regulation citation] requires that [quoted text]...
      - 2. [section / page number of GSP] addresses / fulfills this requirement by...
      - 3. GSP fails to meet the requirement because...
      - 4. I/We urge the GSA to remedy this shortcoming / address this concern by... [recommendation; inverse of the concern]
    - v. Thank you for your consideration; please do not hesitate to contact me/us to further discuss our concerns/recommendations.
  - Populate the content of your letter by:
    - Copying summary language for each of your topics of concern from this memo.
    - Pull the specific code or regulation reference (citation) and text (quoted) from the attached excel spreadsheets.
  - Letters should be submitted via email (preferred) or postal mail in accordance with the draft GSP public comment guidelines.
    - *Note:* more letters citing the same concerns and recommendations, sent from multiple individuals and/or organizations will have a greater impact than fewer letters with multiple parties “signing on”



to a single letter. However, following both models will be the most impactful.

- LGC strongly encourages BVSC, its members, and all other interested parties to request that the GSA include all work products and reports developed to date by ENSI, LeSar, Dudek, or other consultants should be included in the body of the GSP and considered for adoption, and not included solely as an attachment, appendix, addendum or support document to the GSP.
- LGC strongly encourages Borrego Valley Stewardship Council, its members, and all other interested parties to attend all upcoming public meetings regarding the GSP, and voice their concerns regarding these gaps in the current draft, as well as their recommendations, especially with regard to:
  - Proportional reductions across all sectors;
    - LGC strongly recommends no water use reductions for the municipal sector. Proportional reductions are completely inappropriate and unnecessary based on current and historic pumping levels. Municipal users account for a fraction of that pumped by agriculture, and half what is pumped by golf. Neither of these industries are sustainable in the valley at high percentages. The Community needs to transition to lower water-use industries that will support the long-term economic sustainability of the region.
  - Accelerated Pumping Reductions
    - LGC recommends front-loading water use reductions in order to preserve more water in the subbasin and safeguard against potential drought and unforeseen impacts. Using a fixed percentage of the Baseline Pumping Allocations to calculate yearly reductions, rather than a fixed volume of water, will preserve as much groundwater as reducing the cut-back period from 20 years to 15 years under the current methodology.
  - Groundwater Dependent Ecosystems
    - LGC strongly encourages the GSA to reconsider its evaluation of groundwater dependent ecosystems. Existing data and anecdotal evidence illustrates that groundwater dependent ecosystems within the subbasin, especially within the Anza Borrego Desert State Park, continue to experience undesirable results. The current draft GSP does not acknowledge these impacts, as the analysis referred to uses the false assumption that groundwater dependent ecosystems were irreparably harmed prior to the January 2015 baseline.
  - Stakeholder engagement, communication, and disadvantaged community considerations

- LGC finds the current Draft GSP’s treatment of stakeholder engagement and DAC considerations to be woefully inadequate. We strongly urge the GSA to significantly enhance their stakeholder engagement efforts, especially to disadvantaged communities, and document this engagement within the GSP.
- Land use changes and groundwater recharge potential.
  - LGC encourages the GSA to more adequately evaluate land use changes and groundwater recharge potential as a project and management action for the sustainability goal. Land use zoning and decisions have a tremendous impact on groundwater quality and recharge potential. The GSA should work closely with the Community Sponsor Group and the County to update all land use planning documents to maximize recharge potential while also maximizing opportunity for economic development in Borrego Springs.
- LGC strongly encourages the Borrego Valley Stewardship Council, its members, and all other interested parties to organize in-person meetings with the GSA Advisory Committee to discuss these concerns and recommendations in detail.
- Draft Comment Letter

## V. DETAILED REVIEW OF THE GSP BY CHAPTER

### ■ Chapter 1: Introduction

#### ■ 1.2 Sustainability Goal

The Sustainability Goal should be based on climate change impacts and future conditions, and should acknowledge that maximizing groundwater recharge will be a necessary component of achieving sustainability. The current draft GSP makes no reference to climate change impacts on achieving the sustainability goal; nor does it reference soil conditions, recharge rates, or land use change impacts on achieving that sustainability goal. In fact, the sustainability goal as stated in the draft GSP is not a goal at all – but simply a restatement of the intent of SGMA. It is extremely vague and not quantified in this section. This is completely inadequate and must be resolved.

#### ■ 1.3.1 Organization and Management Structure

The GSA should include personnel with a focus on climate change effects on groundwater conditions and recharge rates. There is no clear identification that any of the staff on the GSA “Core Team” or Advisory Committee (AC) have background or expertise in either soil science or considering the impacts of land use on groundwater conditions. However, the organizational structure does include broad representation

from relevant sectors. Personnel from the state park may be equipped to address climate change, but this is unclear. Similarly, the BVSC representative should uphold climate change concerns, but it is unclear whether they have the necessary expertise. The GSA should seek to ensure the Core Team and AC is populated with adequate expertise on both climate science, soil science, and hydrology. The GSP should be updated to include a thorough description of the requisite background of Core Team and AC members.

### ■ 1.3.3 Implementation Costs

Estimated costs to implement the GSP, and the GSA's approach to meeting those costs should include costs related to climate change impacts and adaptation, as well as costs to implement groundwater recharge. The current draft GSP includes no reference to soil conditions, recharge, or land use impacts or changing conditions as a result of climate change, and how these changing conditions could affect GSP implementation costs. The GSP implementation cost estimate does include a 10% contingency, but this is drastically insufficient, given the lack of detail in the current projects and management actions and implementation budget. The GSP implementation cost estimates need to be re-evaluated in conjunction with more detail being provided to the projects and management actions.

Further, a thorough analysis of projected costs, and how the GSA will raise those funds, needs to be conducted to determine the potential impacts to vulnerable communities, and how to mitigate those impacts.

## ■ Chapter 2: Plan Area & Basin Setting

### ■ Plan Area

#### a) 2.1.1 Summary of Jurisdictional Areas and Other Features

#### **Disadvantaged Communities**

This section should include specific reference to disadvantaged communities. The current draft includes no specific reference to where most vulnerable community members (e.g., specific neighborhoods or population groups) within the subbasin are located.

This section should include locations and extent of communities dependent upon groundwater and noting where community wells are located near higher production wells, such as irrigation wells, that could potentially impact domestic well users' groundwater supply or quality. The current draft includes a map with density of wells per square mile, but does not include a map of the 52 "de minimis extractors," such as the 49 domestic wells in the subbasin and small water systems. Despite the requirement of SGMA not extending to de minimis users, the Borrego Subbasin GSP *should* include

these users, because the overall water budget for the entire basin is relatively small, thus “de minimis” users actually make up a recognizable percentage of total extractors.

This section should represent various portions of the basin dependent upon groundwater for beneficial uses, including communities dependent upon groundwater for domestic uses. While the draft plan does map existing land use designations and zoning, it does not include specific data by land use on groundwater dependent users; all of the Borrego community and all users are groundwater dependent. This should be explicitly stated and mapped.

*b) 2.1.2 Water Resources Monitoring and Management Programs*

**Monitoring & Regulatory Alignment**

This section should note where monitoring programs are located and where there may be gaps in monitoring. Components of the monitoring plan should include:

1) if stakeholders have requested additional monitoring; 2) either when additional monitoring will be implemented or why the request will not be approved at this time; and 3) water-relevant climate, land use and recharge variables (such as land use, soil conditions, precipitation, temperature, and evapotranspiration).

The current draft GSP highlights BWD’s existing tiered rate structure, but does not indicate how this relates to water affordability for lower income groups. The draft provides a clear description of plan area geographic bounds, contributing watersheds, and land use designations with size and percent land cover. However, monitoring only lists the groundwater elevation monitoring wells included in CASGEM. No reference is made to soil conditions, precipitation, temperature, or evapotranspiration. Demand Offset Mitigation Water Credits Policy is the only management program in the section that adequately describes how this will impact or aligns with the GSP. All other programs included should follow this model, and this level of detail. These components need to be incorporated into the monitoring plan.

The current draft GSP references that the County Groundwater Ordinance will need to be evaluated and possibly revised to ensure consistency with GSP sustainability goals, but provides no guidance on what that would look like. There is also no information on metrics measured, past impacts, or anticipated future impacts.

The current draft GSP does a sufficient job explaining the impact of wells to the GSP, but still includes no metrics and no real information on how this information will be incorporated into the GSP.

This section raises a number of questions:

- How does BWD's Conservation Management Program (including tiered rates) determine water affordability for low-income communities?
- How does the Draft GSP integrate with the 2009 Anza-Borrego Desert IRWM Plan?
- How will the GSP integrate into the Region 7 Water Quality Control Plan for the Colorado River Basin?
- Why is there a discrepancy between BWD and the County's Water Credits Policy? As such, which water credits will be validated under the GSP's Baseline Pumping allocations?
- How many wells have been applied for vs. approved since passage of SB 252 and release of this plan?
- How will domestic wells and small water systems be protected from negative impacts of the baseline pumping allocation?

Each of these questions must be answered favorably for this section to adequately fulfil the requirements of the regulation.

The current draft of this section only describes the applicable laws and regulations present in the basin; it needs to be augmented to describe how monitoring of each of those programs will be incorporated into the GSP, how those existing programs will limit operational flexibility, and how the GSA will adapt to those limits.

*c) 2.1.3 Land Use Elements of Topic Categories of Applicable General Plans*

This section of the plan should identify:

- disadvantaged and severely disadvantaged unincorporated communities;
- where water agency consolidations or service extensions are being considered;
- potential sources of contamination from current land use practices;
- expected land use changes due to climate change impacts or development and socio-economic conditions, that may affect water supply and water demands, as well as groundwater recharge rates;
- projected water demand as a result of climate change or population growth, and its impact on achieving the sustainability goal; and
- how climate, land use and soil conditions impact groundwater recharge, and the affect this may have on water supply and demands how the GSP addresses those effects.

This current draft of this section does a very good job of identifying all the policies that are relevant and in alignment with the GSP, but need to greater specificity on how the GSP will uphold or implement these various policies.

According to the San Diego County Groundwater Ordinance: "One of the purposes of the ordinance is to ensure that development is not approved in groundwater dependent areas of the County unless a project applicant can demonstrate that there are adequate supplies available to serve both existing and proposed uses." The existing Community Plan and General Plan land use policies are listed in the draft GSP, but the degree of integration is included only as a yes/no factor. This raises the questions,

*1) How will the GSP affect the pre-existing San Diego County Groundwater Ordinance? and*

*2) How will this impact pumping allocations?*

These questions should be answered in this section of the GSP, as well as providing detail on how the integration requirement is met, and identifying in which section of both the GSP and the General Plan (GP)/ Community Plan (CP) this is discussed.

This section also fails to answer the following questions, necessary for meeting the regulatory requirements:

- Do current well permitting practices protect vulnerable water supply sources, such as shallow wells (for all beneficial uses)?
- Are there documented instances of stakeholder concerns regarding current land use or well ordinances impacting other beneficial uses?
- Which current ordinances need to be amended in order for the basin to meet its sustainability goals?
- Are the policies considered to implement the GSP actual policies that are currently in existence, or policies that would need to be established?

Each of these questions must be sufficiently answered for this section to adequately fulfil the requirements of the regulation.

### **Recharge**

The San Diego County General Plan (GP) and Borrego Valley Community Plan (CP) include positive policies to protect the basin from continued overdraft and to minimize the impact of stormwater runoff (e.g., Goal LU-8; COS-5.2), yet include no mention what so ever of recharge. The current draft GSP should be augmented to include this information, and future GP / CP updates should do the same.

The current draft GSP includes positive language regarding future GP and CP needing to consider the sustainability goals of the GSP. The draft language also does an excellent job acknowledging the misalignment between agricultural preservation goals in the General Plan and groundwater sustainability in the Borrego subbasin. However, additional detail needs to be provided on how that consideration and GP / CP updates will occur, as well as how the agricultural preservation and groundwater sustainability goals will be reconciled.

It is unclear whether GP Conservation and Open Space Element, Goal COS-4: Water Management, and/or COS-4.3 - "Maximize stormwater filtration and/or infiltration" will promote groundwater recharge, or if it only refers to stormwater mitigation where groundwater is not shallow. This policy should be clarified, and potentially reevaluated to maximize groundwater recharge potential.

The discussion in this section of estimated buildout and impacts on the GSP is inconsistent. The draft GSP states that Borrego could not meet the water needs if all allowable lots were built out, yet also states that implementation of existing land use will not affect sustainable management. The draft does, however, acknowledge that updated buildout estimates should be considered in conjunction with the GSP.

### **Climate**

The GP includes a "climate change and land use" goal (LU-5) (e.g., "sustainability"), but there is absolutely no discussion of potential climate change impacts on development patterns in the plan area. This section of the GSP needs to address this gap in existing policy by identifying potential impacts of increasing drought and evapotranspiration rates potentially making agriculture unsuitable for the subbasin, and therefore potentially causing major change in land use patterns. Further, current policy nor the draft GSP includes no discussion what so ever of climate change impacts to water supply and demand, or how the GSP will address those affects.

#### *d) 2.1.4 Beneficial Uses and Users*

This section of the plan should include a description of the beneficial uses and users of groundwater in the basin, including potential climate impacts to beneficial uses and users, the land uses and property interests potentially affected by the use of groundwater in the basin, the types of parties representing those interests, and the nature of consultation with those parties. This section should also identify whether groundwater recharge is a designated beneficial use in the appropriate Basin Plan (per Regional Water Quality Control Board), and discuss potential locations for groundwater recharge.

The current draft GSP states that the "beneficial uses" evaluated in this GSP are not strictly synonymous with those analyzed in the Basin Plan. It is of no benefit to the GSA or the community for the GSP "beneficial uses" to be different from the Basin Plan "Beneficial uses;" these should be consistent.

Groundwater recharge nor habitat preservation / restoration are currently not included as beneficial uses in the GSP, even though they are included in the Colorado River Basin Plan. Is this because there is no active recharge currently exists in the subbasin?

The GSA should: a) consider including groundwater recharge and habitat preservation/restoration (especially in the washes/creeks & the Anza Borrego Desert State Park) as a beneficial use in the GSP, and b) seek modification at the Regional Water Board to the existing Beneficial Use Designations to ensure consistency between the Basin Plan and the GSP.

The current draft GSP lists de minimus users as a beneficial user in this section, but then includes them with municipal users in the water budget. This is misleading and affects proper analysis. This section should be augmented to include a narrative description of issues affecting the supply and beneficial uses of groundwater. Additionally, the GSP should distinguish between domestic well owners and small water systems independent of the municipal water supply in the water budget.

*e) 2.1.5 Notice and Communication*

The notice and communication section is required to include the following:

- An explanation of the Agency's (GSAs) decision-making process.
- Identification of opportunities for public engagement and a discussion of how public input and response will be used.
- A description of how the Agency (GSA) encourages the active involvement of diverse social, cultural, and economic elements of the population within the basin.
- The method the Agency (GSA) shall follow to inform the public about progress implementing the Plan, including the status of projects and actions.

Essentially, this section does not include a true communication strategy. Rather, this section merely describes how the GSA communicated with the public (essentially just fulfilling minimum brown act requirements); no real communication strategy, just explaining how they met brown act violation; no explanation of decision-making, just how they engaged with the AC.

This section should also describe how climate change and related uncertainties, available adaptation strategies, groundwater recharge potential and available optimization strategies (including potential land use changes) are integrated into the GSA's communication strategy. The current draft GSP includes absolutely no mention of climate impacts, nor is there any mention of groundwater recharge opportunities.

The current draft GSP states that there is currently no program to actively replenish the aquifer, and that aquifer storage and recovery are not being considered as an option at this time because using imported water to recharge the basin was determined to be



economically infeasible. However, the GSP should consider other forms of managed aquifer recharge, such as stormwater capture and agricultural runoff management.

The communication section should adequately outline the types of outreach performed throughout the GSP process and how outreach will continue moving forward. The current draft GSP includes little mention of how diverse groups were engaged; nor does it include future plans to share progress with these groups. Disadvantaged Communities (“DAC”) and Severely Disadvantaged Communities (“SDAC”) are not mentioned even once in the Stakeholder Engagement Plan, despite the entire Borrego Subbasin being designated a SDAC.

GSP meetings should always be held at times and places that enable all stakeholders to participate in at least some of the meetings. All Borrego Subbasin GSA Advisory Committee Meetings were held during work hours, thus precluding many community members from attending.

Meetings, outreach, and education materials should always be translated into appropriate languages spoken in the community. Meetings should provide services such as meals and/or childcare to enable working families to attend. While the current draft GSP does refer to translated materials, these materials are not included in the stakeholder engagement plan, nor are translation services in general mentioned in the stakeholder engagement plan.

Public comment should be taken during all meetings, and written comments should be accepted throughout the process. The current Draft GSP references targeted “SDAC engagement” via a Proposition 1 Stakeholder Engagement grant. Yet, outcomes from that engagement is not included in the draft GSP. This lack of information raises the following questions:

- What was the feedback from outreach to “Domestic water users” and “Disadvantaged and Severely Disadvantaged Communities?”
- How are these interests represented in the sustainability goals?
- How will they be included moving forward?

A list of all meetings, including times and locations, should be included in the communication section of the GSP. A sufficient number of meetings should be held to ensure stakeholders have adequate opportunities to learn about the GSP creation process and provide public comment. One public meeting, “Ad Hoc Committee on Severely Disadvantaged Community (SDAC) Involvement,” occurred on 4/27/2018. Yet attendance is listed as “unknown.” Meeting minutes and meeting agenda for this convening are not listed on the website. The two most public meetings (“Community Meetings” on 3/16/18 and 9/19/18) also lack meeting minutes and agendas on the GSA

website, despite the GSP referencing that these materials are on the website. for either of the 2 most public meetings.

The Notice and Communication section, as well as the Stakeholder Engagement Plan for the draft GSP is woefully lacking. This raises the following concerns: has there been adequate stakeholder surveying and mapping? How were stakeholders informed of the process? How are the interests of small businesses, the tourism industry, and residents represented in the GSP? What were the key messages shared?

To remedy these shortcomings, the GSA should:

- Provide responses to the questions above in the Notice and Communications section of the GSP;
- Identify the outreach plan moving forward through GSP implementation, especially in development and implementation of Projects and Management Actions;
- Describe how public comments and feedback are incorporated into the GSP;
- Provide more opportunities for public input (e.g., more Community Meetings with agendas and minutes posted online) with special effort to ensure these meetings are accommodating of all community members;
- Determine how the stakeholder engagement plan will be evaluated and adapted moving forward, and share that methodology with all stakeholders.

The Borrego Subbasin GSA must augment its stakeholder engagement plan and communication section of the GSP to incorporate the following changes:

- Post meeting minutes and agendas from all community meetings;
- Identify specifically which/where vulnerable community groups are;
- Explain how vulnerable communities have been (and should be) engaged;
- Describe the major concerns of community members as identified by community members;
- Establish a process for incorporating public input into GSP revisions;
- Determine how the Stakeholder Engagement Plan will be evaluated and regularly updated.

#### *f) 2.1.6 Additional GSP Elements*

According to CWC Section 10727.4, the GSP must describe the "processes to review land use plans and efforts to coordinate with land use planning agencies to assess activities that potentially create risks to groundwater quality or quantity." While the current draft GSP does indeed list the relevant land use planning documents, there is no description of the process followed, or that will continue to be used, for reviewing and coordinating

with other land use planning activities. This section of the GSP must be augmented to fully meet the regulatory requirement.

This section of the GSP should describe how soil conditions and land use may further impact groundwater dependent ecosystems and how to mitigate such impacts. It should also consider an increase on water storage losses due to higher climate change temperatures. The current draft GSP includes no mention what so ever of potential impacts to groundwater dependent ecosystems, nor of water storage loss from higher temperatures; it merely mentions loss of storage in the context of potential intra-basin transfers. The GSP should be augmented to address these inadequacies.

#### ■ Basin Setting

##### *a) 2.2.1 Hydrological Conceptual Model*

#### **Drinking Water**

The Hydrological Conceptual Model (HCM) should specify which aquifers are the main source of water for drinking water purposes, as well as for DACs, households relying on private wells, small community water systems, and school districts. The current draft GSP identifies the upper aquifer as the main source of water in the subbasin historically. Yet, this section does not explicitly state whether it is also the shallow aquifer that serves as the main source of water for DACs, households relying on private wells, small community water systems, and school districts. This must be rectified by including more information on the upper aquifer as it pertains to community drinking water.

For aquifers of interest for drinking water wells, the HCM should specify the overall water bearing characteristics of the aquifer (e.g., overall water quality, overall water production capacity, vertical and lateral extent, hydraulic conductivity, and storativity).

The HCM should specify how much recharge can be accomplished in different hydrogeologic environments/aquifers, and particularly provide a brief description of potential benefits and concerns of the potential recharge areas.

The HCM should be attentive to information provided for shallow aquifers and water quality concerns.

##### *b) 2.2.2 Current and Historic Groundwater Conditions*

#### **Groundwater Elevation**

The HCM should clearly state specific groundwater levels in relation to various land uses. In particular, the HCM should note where first-encountered groundwater is relatively deep; where groundwater users reliant upon shallower wells; and where users

may not have the resources to drill new, deeper wells. Special notice should be given to drinking water uses. The current draft GSP provides no information regarding dewatering of wells, rehabilitation costs, rehabilitation data, or any other information about the impacts to DACs. The GSP should, but does not currently include a map identifying the locations of all drinking water systems, DACs, and areas of critical lowering of GW levels. The GSP should use monitoring wells screened for a specific aquifer, not combining aquifers, so as to indicate whether, and if so where, dewatering of wells is occurring.

### **Groundwater Quality**

This section of the plan should include a map of known groundwater conditions, including sensitive uses and users of groundwater that may be impacted or threatened to be impacted.

According to the GSP, "The lateral distribution of the wells in the monitoring network that measure groundwater quality is limited, and does not extend to the outer portions of each management area." The GSP also notes that "high salinity, poor-quality connate water is thought to occur in deeper formational materials in select areas of the aquifer as well as shallow groundwater in the vicinity of the Borrego Sink in the southern portion of the Plan Area." The GSA needs more monitoring data for "di minimus" domestic well users and small water systems, especially regarding the potential impacts to disadvantaged community members and cost projections for remediation. The GSP should also indicate which wells are being considered to be taken out of production or drilled deeper to mitigate water quality concerns. Increasing contamination trends are noted in the GSP, but there is little discussion of how these issues will be addressed under the sustainability goal and management actions.

### **Drinking Water**

This section should also include information regarding contamination of wells, treatment costs, water quality data, or any other information regarding the impacts to disadvantaged communities. This should also include a map noting the locations of all drinking water systems, DACs, and areas of critical water quality contamination. The current draft of the GSP does not include this information. However, meeting minutes posted on the GSA website note that community members are concerned about elevated nitrate levels in some drinking water wells. This is referenced in the GSP, but not adequately.

#### *c) 2.2.3 Water Budget Information*

The water budget should include historical use of groundwater for all types of uses and users, in particular the uses of small drinking water systems, regardless of whether they will be subject to pumping restrictions. Future use for drinking water needs must utilize

data from sources such as county general plans and LAFCo documents (e.g., population projections and water demand forecasts).

The historic groundwater use percentages in the Borrego Subbasin (i.e., 70% agriculture, 20% golf course, 10% municipal) is not sustainable. This section should include a description of how historical conditions have impacted the ability of BWD and the County of San Diego to manage the basin within sustainable yield. Further, including domestic/di minimus users with the overall municipal users water budget and municipal pumping reductions is both inappropriate and inaccurate. These uses must be separated and accounted for independently in the water budget.

Data used to develop the water budget is out dated and inaccurately represents the groundwater conditions in the subbasin. The GSP must use the most recent data, and exclude data sets producing a biased result. For example, the hydrological modeling projections currently used in the draft GSP include time periods extending far back in time, prior to when pumping began, and do not take into account shifts in the hydrologic regime which have occurred as a result of climate change. The water budget currently does not (and must) consider projected recharge reductions due to land fallowing and water conservation.

These inadequacies must be addressed in order for the water budget to accurately represent present groundwater conditions and support the sustainability goal.

#### *d) 2.2.4 Management Areas*

The purpose of this section is to ensure that management areas are designed in a way to protect, rather than harm, particular uses and users of groundwater. Management areas should be designed to set stricter requirements near vulnerable drinking water sources. The current draft GSP provides no indication of where potentially vulnerable drinking water source are within the management areas. The GSP should include a map identifying the location of all drinking water systems, DACs, and areas of particular threat from lowering of groundwater levels.

## Chapter 3: Sustainable Management Criteria

### *a) 3.1 Sustainability Goal*

According to 23 CCR § 354.24, the GSP must include a sustainability goal using information from the basin setting to establish measures that will ensure sustainable yield, and describe a realistic path to achieving the goal over a 20-year period. The sustainability goal should also consider all beneficial uses and users susceptible to harm from changing groundwater conditions over the 20-year time frame.

The GSP's primary sustainability goal, and five sub-goals, are brief and overly broad. As previously stated, utilizing the BVHM modeling from 1945-2010 that cites groundwater conditions from a time period before major agricultural development began, does not accurately reflect the current hydrogeological make-up of the basin, nor does it consider future impacts from climate change. The GSP should use the most recent data and hydrogeologic modeling that includes potential impacts from climate change, and exclude data sets producing a biased result.

Of the five sub-goals, only two of them explicitly consider domestic well owners (chronic lowering of groundwater levels and water quality concerns), however, the goals aren't tied back to the basin setting, nor do they identify specific vulnerable areas or how these goals impacts the sustainable yield.

It is unclear whether the sustainability goal intends is to address pre-SGMA impacts, or maintain current conditions.

The sustainability goal explains how land use and groundwater recharge was considered towards achieving the sustainability goal within 20 years of Plan implementation

local determination of the sustainable management criteria (sustainability goal, undesirable results, minimum thresholds, and measurable objectives).

a) *3.2 Undesirable Results*

The GSP only considers 3 of the 6 possible sustainability indicators: Only considering 3 of the 6 possible sustainability indicators:

1. Chronic Lowering of Groundwater Levels
2. Reduction of Groundwater Storage
3. Degraded Water Quality Makes sense to not consider seawater intrusion, but land subsidence & connected surface waters should be included!

**Chronic Lowering of Groundwater Levels**

The GSP accurately identifies domestic users as one of the groups most vulnerable to lowering groundwater levels, and cites the technical, financial and geographic constraints these users face when compared to better resourced pumpers like BWD or larger agricultural users. While this is notable, it is unclear how outreach was conducted to help better understand the negative impacts different stakeholders are experiencing due to declining groundwater levels. Some alternative means of obtaining water for domestic and domestic pumpers who can no longer pump are mentioned in the plan, however these alternatives lack further discussion in the minimum thresholds, measurable objectives, or projects and management actions.

It's noted that the some di minimus wells may currently lack access to adequate water, and may be close to the BWD water distribution system, however the project management actions fail to discuss how consolidation is being considered for these di minimus users. The GSP includes figures (i.e. Figure 3.2-4) with average domestic well depths, however this map should include specific well data to better identify the most vulnerable areas.

The GSP also reports, “The exact number of agricultural and domestic wells that have been abandoned and re-drilled deeper and/or relocated due to production rate loss from declining groundwater levels is not known. However, anecdotal information and field observations have confirmed that inactive wells exist throughout the Plan Area” (Section 3.2.1, Page 3-10). Similar to well consolidation, the GSP fails to address the data gap of abandoned wells, and the steps being taken to follow up on anecdotal concerns.

The GSP fails to consider pre-SGMA impacts to groundwater levels, instead opting to set the highest bar as maintaining current conditions, or levels at a lower than current state.

**Minimum Threshold for Chronic Lowering of Groundwater Levels:**

The minimum threshold for chronic lowering of groundwater levels is based principally on the documented screen intervals of key municipal water wells and domestic/de-minimis wells located in the basin, however, not all of the de-minimis wells have accurate data to identify where at-risk wells may be located. The GSP should indicate how the GSA's intend to improve well monitoring data for di minimus users as part of the interim milestones

**Measurable Objective for Chronic Lowering of Groundwater Levels:**

The GSP proposes linear pumping cuts for agricultural, municipal, and recreational users, however there is no description of how different uses and users of groundwater were considered and whether the measurable objectives and interim milestones will help achieve the sustainability goal as it pertains to the most vulnerable uses of groundwater, namely di minimus users and small water systems. It is unclear how the margin of safety protects di minimus users. In addition, the outlined 5-year evaluation of the interim milestones and measurable objectives does not indicate how stakeholders will be engaged throughout these interim evaluations

**Lowering of Groundwater Storage**

Lowering groundwater levels are intrinsically linked with decreased groundwater storage, however the , and begins to address how the sustainability goals will impact the San Diego County General Plan and Borrego Spring Community Plan.

### Degraded Water Quality

Must include how stakeholders will be engaged throughout these interim evaluations, specifically how to set MT's for growers in the region to meet ag needs.

Increased need for monitoring water quality in domestic wells. Indicate how the GSP will integrate with the RQCB 'Basin Plan' groundwater quality objectives.

### Minimum Threshold/Measurable Objectives

The GSP fails to indicate how these will be determined or met.

#### *b) 3.5 Monitoring Network*

Data gap in 3.5.4.2 - Well screened in multiple aquifers

- Screen can be slots or other measure that allows water through and keeps solids out
- Water comes from the aquifer into the well
- When you're using a monitoring well that is screened in different aquifers, you're getting a combined result - not really seeing what the impacts on a given aquifer are
- Need to use monitoring wells screened for a specific aquifer, not combining aquifers

### Chapter 4: Projects and Management Actions

However it is unclear how the top priority PMA's (land fallowing and pumping reductions) will impact domestic/small water system users

Expected benefits and metrics for evaluation for each PMA do a poor job of mentioning how PMA's will impact groundwater-dependent vulnerable groups

PMA's were not put before stakeholders (see feedback in Section 4.0), therefore stakeholders are not aware of project goals, timelines, benefits, and risks

Prior to adoption, the GSA should hold public meetings to gather input on the PMA's via publicly available meetings (appropriate meeting times, translation and childcare services, etc.).

Notes: According to public meetings posted on the GSA website, there was no 'Community Meeting' held to discuss the projects and management actions - the most recent Advisory Committee meeting (Jan 2019) includes slides on the PMA's and how to provide input, however, minutes from the meeting aren't posted (incorrect minutes are posted from Aug 2018); AND as seen from the previous schedule of Adis Committee meetings, these meetings tend to take place beginning at 10:00 am during workdays



- TBD ■ Chapter 5: Plan Implementation
- Excel Review Templates (attached)
  - Stakeholder Engagement & DACs
  - Climate
  - Recharge

DRAFT