

Draft IWVGA GSP Section Release Schedule

Ver. 2

4/2/2019

GSP Section	POAM Line Number [1]	Tentative Release Date
<i>Section 1: Introduction</i>	98	12/14/2018
<i>Section 1: Introduction (Redraft)</i>	98	3/15/2019
Section 2: Plan Area	99	4/17/2019
Section 3: Basin Setting	99	4/26/2019
Section 4: Project and Management Actions [2]	100	6/28/2019
Section 5: Sustainable Criteria [2]	101	6/28/2019
Section 6: Implementation [2]	104	7/26/2019
Section 7: References [2]	105	7/26/2019
Review Draft (Compiled Draft with Figures, Appendices, etc.) [2]	109	8/26/2019
Public Review Draft (Submitted to DWR for 90 day review period) [2]	113	9/20/2019

[1] The next version of the POAM will be updated with the section release dates shown here.

[2] As reported to the IWVGA Board on 3/21/2019, based on the status of the allocation discussions, the TAC is not on schedule to discuss critical GSP materials. Accordingly, the tentative release dates for certain GSP Sections have been delayed by approximately one month.

Imported Water Update

IWVGA PAC: 04/04/2019

At the January 17, 2019 IWVGA Board Meeting, multiple water marketers made presentations to the Board regarding their water procurement services and proposals for the IWVGA. The Board directed Staff and the Water Resources Manager to develop a committee to include the TAC and PAC chairs, staff, the WRM, and member(s) of the Board (the Committee to Evaluate Water Marketing Consultants).

The Committee to Evaluate Water Marketing Consultants (11 members) unanimously selected Capitol Core Group to proceed with Consultant Agreement discussions with the IWVGA. The Ad Hoc Sub-Committee, (5 members), met with Capitol Core Group on February 13, 2019, and reviewed draft Key Principles of an Agreement with Capitol Core.

At the February 21, 2019 IWVGA Board Meeting, the ad-hoc committee recommended that the proposal received from Capitol Core Group was the best fitting for the IWVGA's needs for water procurement services. The IWVGA Board approved staff's recommendation and directed Staff to provide a draft Consultant Agreement for approval at the March IWVGA Board Meeting. IWVGA approved agreement with Capitol Core Group on March 21, 2019 at the regular board meeting. The agreement between Capitol Core Group and the IWVGA was executed on March 21, 2019.

Capitol Core Group will commence with their scope of work. The first priority is to determine and secure an imported water supply. A preliminary market assessment of potential water supplies will be conducted to determine what type of water supplies are available, the potential costs of these water supplies, physical opportunities and constraints, and other potential hurdles. Subsequent to conducting the preliminary market assessment and identifying specific imported water opportunities, Capitol Core Group will negotiate transfer and wheeling agreements and will identify and secure potential funding sources.

Capitol Core Group will provide monthly progress reports to the IWVGA General Manager and the Water Resources Manager. The PAC and TAC committees will have opportunity to review the progress reports.

DRAFT

**PRELIMINARY IMPACTED SHALLOW WELLS MITIGATION PLAN AND FUNDING
PLAN APPROACH**

The Indian Well Valley (IWV) groundwater basin has been over pumped (over drafted) for many decades. This has resulted in a significant lowering of the regional and local groundwater elevations, and a significant reduction in the amount of useable water in groundwater storage. In addition, the basin has hydrogeologic areas with poor water quality (high total dissolved solids), that can, and has, migrated to areas that previously had higher quality groundwater, resulting in water quality impacts to some wells. Most of the impacted wells are “shallow” wells, constructed to serve rural domestic/mutual water companies, small agricultural, and livestock water supply needs.

Under the Sustainable Groundwater Management Act (SGMA) adopted in 2014, the IWV groundwater basin must achieve “sustainability” by year 2040 and eliminate undesirable basin results. It is expected that, during development of the IWV groundwater basin Groundwater Sustainability Plan (GSP) (2015 to January 2020), over pumping will continue and groundwater levels will continue to lower, impacting additional shallow wells. Shallow well impacts (both water level and water quality) are “undesirable results” that must be addressed in the GSP development and implementation. It is anticipated the IWV groundwater basin GSP will be adopted in January 2020 and approved by DWR by January 2021.

This memorandum provides a draft preliminary approach for the development of an Impacted Shallow Wells Mitigation Plan and Funding Plan. for the IWV groundwater basin. This draft approach would be refined and implemented after the GSP is adopted. (Note that some steps described below could be performed concurrently.) A preliminary

analysis of shallow well impacts is currently being conducted to support the initial GSP development.

GSP Implementation: 2021 through 2025

1. Identification of Impacted Shallow Wells
 - a. Conduct studies/verification for full identification of shallow wells
 - i. 872 potential shallow wells currently identified
 - b. Develop Impact Criteria and Evaluate Wells
 - i. Evaluate loss of efficiency/Performance reduction
 - ii. Evaluate appropriateness of original well design and construction (for at least 50 years, based on WLs)
 - iii. Evaluate water level and water quality impacts
 - iv. Evaluate owner's mitigation responsibility (from 0% to 100%)
2. Characterization of Impacted Shallow Wells
 - a. Prepare individual well impact evaluation report (1 page) based on evaluation/criteria
 - b. Review individual shallow well impact evaluations for completeness and consistency (WL and WQ)
 - c. Evaluate spatial causes of impacts (pumping centers, etc.)
 - d. Organize impacted shallow wells into specific areas/zones for effective mitigation options
 - e. Identify wells to be abandoned (not mitigated) based on evaluation of impacts, owner responsibility, etc.
3. Development of Impacted Shallow Wells Mitigation Plan and Priority List
 - a. For each mitigation area/zone, identify initial new deeper well locations and potential new connections
 - b. Identify individual wells to be improved and specify improvements
 - c. Identify other new service connections to existing water systems (water district or mutual water companies)
 - d. Prepare the Draft Initial Impacted Shallow Well Mitigation Plan

4. Funding of Impacted Shallow Well Mitigation Plan and Priority List
 - a. Investigate Funding Options
 - i. Navy-Coso Royalty Funding
 - ii. IWVGA Pump Fees
 - iii. DWR grants/loans
 - iv. DAC grants/loans
 - v. Federal grants/loans
 - b. Develop/implement funding plan for impacted shallow wells
5. Shallow Wells Mitigation Plan Cost Estimate and Allocation
 - a. Prepare detailed cost estimate for the Mitigation Plan
 - b. Prepare Draft Cost Allocation Plan, using the owner's mitigation responsibility percentage (above)
6. IWVGA Board Approval for Implementation of Impacted Shallow Wells Mitigation Plan and Priority List and Cost Allocation Plan

GSP Implementation: 2026 through 2040

1. Prepare Impacted Shallow Well Mitigation Plan updates at each GSP 5-year Review period (2026 through 2040).

INDIAN WELLS VALLEY GROUNDWATER BASIN

GROUNDWATER SUSTAINABILITY PLAN

SECTION 1 – INTRODUCTION CHAPTER

FINAL DRAFT

March 15, 2019

Table of Contents

Section 1: Introduction	1-1
1.1 Purpose of the Groundwater Sustainability Plan.....	1-1
1.2 Sustainability Goal.....	1-2
1.3 Agency Information.....	1-3
1.3.1 Organization and Management Structure of the IWVGA.....	1-4
1.3.2 Legal Authority.....	1-6
1.3.2.1 Policy Advisory Committee (PAC).....	1-7
1.3.2.2 Technical Advisory Committee (TAC)	1-8
1.3.2.3 Interested Agencies and Roles.....	1-9
1.3.3 Estimated Implementation and Costs	1-10
1.4 Notice and Communication	1-10
1.4.1 Public Outreach.....	1-12
1.5 GSP Organization	1-12
1.5.1 Checklist for GSP Submittal	1-13

SECTION 1: INTRODUCTION

1.1 PURPOSE OF THE GROUNDWATER SUSTAINABILITY PLAN

The purpose of the Sustainable Groundwater Management Act (SGMA), as set forth in the California Water Code (CWC) Section 10720.1, is to provide for the sustainable management of groundwater basins; enhance local management of groundwater consistent with rights to use or to store groundwater; establish minimum standards for sustainable groundwater management; provide local groundwater management agencies with the legal authority along with the technical and financial assistance necessary to sustainably manage groundwater; to avoid or to minimize subsidence problems; improve the collection of data and the understanding of groundwater; increase groundwater storage and remove impediments to recharge; manage groundwater basins through the actions of local governmental agencies to the greatest extent possible while minimizing state intervention; and, where applicable, provide for the most efficient and cost-effective allocation procedures that protect water rights and ensure due process.

SGMA defines sustainable groundwater management¹ as the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results. The Indian Wells Valley Groundwater Basin (IWVGB) resources are currently not sustainably managed. Noticeable overdraft conditions have existed for decades as a result of groundwater pumping exceeding the natural basin yield. The results of overdraft have manifested themselves through various undesirable results, primarily the chronic lowering of groundwater levels, the degradation of water quality, and the reduction of groundwater storage throughout the IWVGB.

Historically, water producers in the IWVGB have mined the basin to meet water demands. If left unmanaged, such practice will seriously impact groundwater producers' abilities to supply reliable and quality potable water at a reasonable price. Disadvantaged Communities (DACs), Severely Disadvantaged Communities (SDACs), Economically Distressed Areas (EDAs), mutual water companies, cooperative water systems, and domestic well owners overlying the IWVGB are particularly susceptible to adverse effects resulting from the chronic lowering of groundwater levels because their wells are typically shallow, and furthermore, they lack the resources to compensate for the continued overdraft. Development of a GSP should therefore consider the need to supply water for the health and safety of all residents and

¹ Per CWC Section 10721(v).

businesses along with (as stated in CWC Section 106.3) the human right to safe, clean, affordable, and accessible water for human consumption, cooking, and sanitary purposes.

In compliance with SGMA, this Groundwater Sustainability Plan (GSP) discusses basin management strategies that will culminate in the absence of undesirable and unsustainable groundwater conditions in the IWWGB. The GSP recommends these management strategies and provides measurable sustainability objectives and milestones that intend to achieve basin sustainability while considering the unique geologic and hydrogeologic conditions of the IWWGB. The recommendations of this GSP will provide for long-term sustainable groundwater management in the IWWGB within 20 years of GSP implementation.

1.2 SUSTAINABILITY GOAL

As defined in CWC Section 10721, the term “sustainability goal” refers to the existence and the implementation of one or more GSPs that achieve sustainable groundwater management by identifying and causing the implementation of measures targeted to ensure the basin is operated within its sustainable yield. The sustainability goal is not a quantitative measure; it is a statement of a GSP’s objectives and desired conditions, how the basin will reach the desired conditions, and why the measures recommended in the GSP will achieve these objectives and desired conditions. The sustainability goal is in part defined by the locally-defined minimum thresholds and undesirable results. (These terms are defined and described in detail in Section 5).

In general, the IWWGA sustainability goal is to manage the IWWGB within its sustainable yield such that undesirable results do not occur over the planning and implementation horizon (the 50-year time period over which the IWWGA determines that plans and measures will be implemented to ensure the basin is operated within its sustainable yield). The detailed sustainability goal, including a description of the development of the goal and an explanation of how the goal is intended to be achieved, is provided in Section 5.

1.3 AGENCY INFORMATION

In its 2016 Bulletin 118 interim update, the California Department of Water Resources (DWR) identified the IWWGB as a critically overdrafted basin of medium priority². As such, in compliance with SGMA, the associated groundwater sustainability agency (GSA) must submit a GSP by January 31, 2020 to enhance the local and sustainable management of groundwater resources. The Indian Wells Valley Groundwater Authority (IWWGA) Board of Directors adopted Resolution No. 02-16 on December 8, 2016, to establish the IWWGA as the exclusive GSA for the entirety of the IWWGB.

The IWWGB underlies portions of the counties of Kern, Inyo, and San Bernardino and is unique in that it is isolated from the urban centers of these three counties. The majority of the basin's area is set in northeastern Kern County with smaller portions located in northwestern San Bernardino County and southern Inyo County. The City of Ridgecrest is located in the extreme northeastern portion of Kern County (within the east-central portion of the basin) and is the only incorporated city in the basin. The Indian Wells Valley Water District serves potable water to the City of Ridgecrest and certain areas outside of the City of Ridgecrest's jurisdiction.

The five aforementioned agencies (Kern County, Inyo County, San Bernardino County, the City of Ridgecrest, and the Indian Wells Valley Water District) entered into a joint exercise of powers agreement to form the IWWGA. The agreement is attached to this GSP as Appendix _____. These five agencies serve as General Members on the IWWGA Board of Directors, which governs the IWWGA as a whole.

The land overlying the northeastern IWWGB is home to the China Lake Naval Air Weapons Station (NAWS), a weapons research, development, acquisition, testing, and evaluation facility operated by the United States Navy (Navy). In addition, a significant amount of land overlying the southwestern IWWGB is largely undeveloped and managed by the United States Bureau of Land Management (BLM). As such, these two federal agencies serve a role in the development efforts of the GSP. However, due to their federal status, the Navy and BLM serve as Associate Members (non-voting) on the IWWGA Board of Directors.

² The IWWGB has since been identified as a critically overdrafted basin of **high** priority as of the *Sustainable Groundwater Management Act 2018 Basin Prioritization: Process and Results*, published by DWR in January 2019.

1.3.1 Organization and Management Structure of the IWVGA³

Indian Wells Valley Groundwater Authority

500 W. Ridgecrest Boulevard
Ridgecrest, CA 93555

Main Contact:

Donald Zdeba

don.zdeba@iwwvd.com

(760) 384-5555

Alternate Contact:

Lauren Duffy—Clerk of the Board of Directors of the IWVGA

lduffy@iwwvd.com

(760) 384-5511

Indian Wells Valley Groundwater Authority: General Members

Indian Wells Valley Water District (Chair)

Kern County (Vice-chair)

City of Ridgecrest

Inyo County

San Bernardino County

Indian Wells Valley Groundwater Authority: Associate Members

United States Navy (Non-voting)

United States Bureau of Land Management (Non-voting)

³ The IWVGA has a unique rotating management structure. Names, positions, and contacts are current and valid as of January 1, 2019.

Staff

Acting General Manager

Stetson Engineers Inc.—Water Resources Manager⁴

Board Counsel

Clerk of the Board of Directors

The IWVGA is governed and administered by the aforementioned Board of Directors (Board), which is composed of one voting seat per General Member. Approval of any Board action requires the affirmative vote of a majority of the Board. In addition, the Board members representing the County of Kern, the City of Ridgecrest, and the Indian Wells Valley Water District are considered principal voters. That is, no Board action may be approved by the Board unless it receives the affirmative vote from no less than two (2) of the Board members representing the County of Kern, the City of Ridgecrest, and/or the Indian Wells Valley Water District. The United States Navy and the Bureau of Land Management hold two Associate Member positions that have a representative non-voting seat on the Board. Although they do not have the power to vote on any Board action or proposal, the Associate Members' position entitles them to full participation in Board meetings and discussions.

The Board consists of a Chairperson and Vice-Chairperson that preside at all Board meetings and exercise and perform other powers and duties as may be assigned by the Board. The Chairperson and Vice-Chairperson hold office for a term of one year commencing on January 1st of each and every calendar year. The positions of Chairperson and Vice-Chairperson rotate annually between the Board members representing the County of Kern, the City of Ridgecrest, and the Indian Wells Valley Water District. For example, in calendar year 2017, the Board member representing the County of Kern held the position of Chairperson, followed in order by the Board member representing the City of Ridgecrest and then the member representing the Indian Wells Valley Water District. The Board member representing the City of Ridgecrest held the position of Vice-Chairperson in 2017, followed in order by the Board members representing the Indian Wells Valley Water District and then the member representing the County of Kern.

The joint exercise of power agreement that formed the IWVGA also established the By-Laws under which the IWVGA operates. Under section 8.05 of the agreement, the Board adopted the By-Laws which govern

⁴ Per IWVGA Agreement No. 02-17, the Water Resources Manager was appointed on August 17, 2017, to prepare, develop, and implement the GSP for the IWVGB.

the conduct of meetings and the day-to-day operations of the IWVGA. On March 17, 2017, the By-Laws became effective under IWVGA Resolution No. 03-17. [The By-Laws are attached to this GSP as Appendix ____.](#)

All IWVGA Board meetings are held in accordance with the Ralph M. Brown Act, set forth in the California Government Code sections 54950, et seq. The IWVGA Board meetings are held on the third (3rd) Thursday of each month at Ridgecrest City Chambers, located at 100 West California Avenue, Ridgecrest, CA.

Under Article 3.8 of the IWVGA By-Laws, the IWVGA sought to hire a Water Resources Manager (WRM) with sufficient technical background, expertise, and experience to prepare and implement a GSP for the IWVGB. On August 17, 2017, the IWVGA entered into Agreement No. 02-17 to retain Stetson Engineers Inc. as the WRM responsible for preparing and implementing this GSP. The WRM regularly reports to and coordinates with the IWVGA in relation to GSP preparation and collaborates with the IWVGA's standing committees in relation to the policy and technical aspects of the IWVGB and GSP. In addition, the WRM presents all technical information and reports to the IWVGA.

1.3.2 Legal Authority

As the sole GSA for the IWVGB, the IWVGA has the legal authority to manage local groundwater through SGMA. As such, SGMA grants the IWVGA the legal authority to enter into agreements with private parties that assist or facilitate the implementation of GSPs; impose the requirements of its GSP on other state agencies; oversee the incorporation of its GSP's requirements into a regional water management plan; etc. The general legal authority of GSAs (including the IWVGA) are stated in CWC Sections 10725, 10726, 10730, and 10731, all of which are [attached to this GSP as Appendix ____.](#)

In addition, the legal authority and powers of the IWVGA are published in Article 4 of the joint exercise of power agreement that formed the IWVGA. These powers include (but are not limited to) the following:

- To collect and monitor all data related and beneficial to the development, adoption, and implementation of the GSP
- To levy assessments, charges, and fees as provided in SGMA
- To regulate and monitor groundwater extractions as permitted by SGMA
- To establish and administer various programs for the benefit of the basin such as water banking, water recycling, recapture/purification efforts, etc.

- To apply for and accept grants, contributions, donations, and loans under any federal, state, or local programs for assistance in developing or implementing any of its projects or programs in connection with the GSP
- To acquire by negotiation or condemnation, lease, purchase, construct, hold, manage, maintain, operate, and dispose of any buildings, property, water rights, works, or improvements within and without the respective boundaries of the General Members necessary to accomplish the purposes of the IWVGA
- To cooperate, act in conjunction, and contract with the United States, the State of California or any agency thereof, counties, municipalities, public and private corporations of any kind, and/or individuals for the purposes necessary or convenient for the full exercise of the Authority's powers

1.3.2.1 Policy Advisory Committee (PAC)

Article 5.1 of the IWVGA By-laws provides that the Board may establish standing committees for the purpose of making recommendations to the Board on the various activities of the IWVGA. The Board established an eleven person, voting-member Policy Advisory Committee (PAC) to advise the Board on all policy-related matters of the Board and to develop non-binding proposals on policy matters pertaining to the GSP. The Board may appoint individuals to the PAC through an adopted resolution.

The PAC is comprised of voting members from the following constituent groups:

- 2 representatives from Large Agriculture
- 1 representative of Small Agriculture
- 2 representatives from Business Interests
- 2 representatives from Domestic Well Owners
- 2 representatives from residential customers of a public water agency supplier
- 1 representative from the Eastern Kern County Resource Conservation District
- 1 representative from Wholesaler and Industrial User

The IWVGA By-Laws require that at least one of the appointed voting PAC members shall also represent Disadvantaged Communities (DACs). On July 20, 2017, the Board approved Resolution No. 08-17 to add Tim Carroll of the Inyokern Community Services District as a DAC-representative voting member to the PAC. The PAC also includes non-voting Associate Members that represent the Navy, the Indian Wells

Valley Water District, the Kern County Planning and Natural Resources Department, and the BLM. To provide for more comprehensive groundwater management planning, these Associate Members provide needed expertise to help the PAC understand the policies of their respective jurisdictions and the impact of proposed basin management strategies on their agencies' missions.

To assist the Authority in considering the interest of all beneficial uses and users in the IWVGB, as set forth in CWC Section 10723.2, the PAC's objectives are to (1) provide all water users in the Basin with a meaningful voice and representation on policy matters of the Board associated with SGMA; (2) work collaboratively for the benefit of the IWVGB as a whole; (3) provide input and recommendations to the Board, in collaboration with the WRM, and other committees of the Board, in support of actions that facilitate bringing the IWVGB into compliance with SGMA; and (4) work in good faith to achieve consensus and make unified recommendations to develop a GSP and for management actions to achieve groundwater sustainability in accordance with the requirements of SGMA.

All PAC meetings are held in accordance with the Ralph M. Brown Act, set forth in the California Government Code sections 54950, et seq. The By-Laws of the IWVGA provide that the Board shall set regular meeting dates for the PAC by resolution. The PAC meetings are held on the first (1st) Thursday of each month at the office of the Indian Wells Valley Water District, located at 500 West Ridgecrest Boulevard, Ridgecrest, CA.

1.3.2.2 Technical Advisory Committee (TAC)

The Board also established a Technical Advisory Committee (TAC) for the express purpose of giving interested parties a reasonable opportunity to review and conduct a thorough evaluation of each technical element of the GSP prior to its finalization by the WRM. As stated in Article 5.12 of the IWVGA By-Laws, TAC members must have a formal education and experience in a groundwater-related field while also maintaining an understanding of the technical aspects of the IWVGB or similar basins in California. The TAC is comprised of individuals representing PAC members, PAC membership categories, and the general interests of landowners and water users in the IWVGB. Each member of the PAC may nominate one member of the TAC for review and possible approval by the Board. To ensure proper stakeholder representation, the Board may also appoint TAC members that are not affiliated with any PAC members.

The TAC is comprised of members from the following constituent groups:

- Large Agriculture
- Business Interests
- Residential Customers of a Public Water Agency
- Domestic Well Owners
- Eastern Kern County Resource Conservation District
- Wholesale and Industrial User
- Indian Wells Valley Water District
- United States Navy
- Kern County Water Agency

In the course of evaluating each draft technical element of the GSP, the TAC strives for consensus in preparing written recommendations to the WRM. These recommendations (along with all related comments) are submitted to the WRM to document all TAC members' input for consideration in the final preparation of each GSP element.

All TAC meetings are held in accordance with the Ralph M. Brown Act, set forth in the California Government Code sections 54950, et seq. The TAC meetings are held on the first (1st) Thursday of each month at the office of the Indian Wells Valley Water District, located at 500 West Ridgecrest Boulevard, Ridgecrest, CA. The WRM sets the agenda of each TAC meeting so that each technical element of the GSP is presented to the TAC, in draft, to afford the TAC a reasonable opportunity to review and conduct a thorough evaluation of each element.

1.3.2.3 Interested Agencies and Roles

During the formation of the IWVGA, a comprehensive listing of interested parties (including name, email, and phone number) was developed. The listing includes local community residents (including Disadvantaged Communities, Severely Disadvantaged Communities, and Economically Distressed Areas), businesses, large and small-scale agriculture, domestic well owners, academic institutions, relevant state and local agencies, federal agencies, non-profit organizations, and community organizations. This listing of over 150 stakeholders includes representatives from all types of water users within the IWVGB and was used during the 17-month long GSA formation process for notification of public meetings, notifications, and updates related to discussions on the SGMA.

An interested party that wishes to be added to the listing is encouraged to contact the IWVGA staff and provide appropriate contact information. The IWVGA will then add the party to the listing for receipt of notifications. No party will be dropped from the listing unless mailings are returned as undeliverable or the party specifically asks for removal from the listing.

The listing is attached to this GSP as Appendix ____.

1.3.3 Estimated Implementation and Costs

Pursuant to CWC section 10730, the IWVGA is authorized to fund the costs of groundwater management by imposing fees on the extraction of groundwater from the basin. On July 19 2018, the IWVGA Board adopted Resolution No. 02-18 to establish a Groundwater Extraction Fee of three dollars (\$3.00) per tenth (0.10) of an acre-foot for all groundwater extracted from the IWVGB, with the exception of groundwater extracted by de minimis⁵ extractors and federal entities. The Groundwater Extraction Fee is determined and paid on a monthly basis by all producers with registered groundwater extraction facilities in the IWVGB. Unregistered groundwater extraction facilities that are subject to the groundwater extraction fee are prohibited from extracting groundwater from the basin until the facility is registered to the satisfaction of the WRM, which oversees the registration of groundwater extraction facilities and reviews producers' self-reported measurements of groundwater extractions.

This section will include an estimate of the cost of implementing the GSP and a general description of how the IWVGA plans to fund those costs, to be determined based on annual reporting requirements, planned projects, and planned fees and assessments.

1.4 NOTICE AND COMMUNICATION

As stated in California Water Code Sections 10723.2 and 10728, a GSA shall not only consider the interests of all beneficial uses and users of groundwater but also make available to the public and DWR a written statement describing the manner in which interested parties may participate in the development and implementation of the GSP. The IWVGA subsequently adopted Resolution No. 02-18 on April 19, 2018, to

⁵ As defined in CWC Section 10721(e), a De Minimis extractor refers to a person who extracts, for domestic purposes two acre-feet or less of groundwater per year.

adopt a Communication and Engagement Plan (C&E Plan) intended to encourage public and agency participation in GSP development and implementation. The C&E Plan allows each stakeholder and agency in the IWVGB to understand the magnitude of the groundwater overdraft problem, how overdraft will affect stakeholders, and the process for participation in developing a GSP to solve the overdraft problem.

The C&E Plan was developed by the PAC with the intent of providing for open communications and inclusivity between the IWVGA and all interested parties, agencies, and stakeholders in the IWVGB. The C&E Plan's objectives include the following:

- Enhance public understanding about water, groundwater resources, uses, and water balance in the IWVGB by providing accurate and current information
- Provide stakeholders with opportunities to assist in GSP development and learn how the GSP will affect all uses and users of groundwater in the IWVGB
- Promote informed community feedback throughout the GSP preparation and implementation process
- Employ a variety of outreach methods that make public participation easy and accessible while efficiently using the resources of the GSA and local agencies

The C&E Plan is attached to this GSP as Appendix _____.

To allow for ongoing public engagement, DWR will establish a 60-day comment period following acceptance of this GSP for evaluation, during which any person may provide comments to DWR and the IWVGA regarding this GSP. Interested parties may review this GSP and submit comments (along with the party's name, address, and email) to DWR and the IWVGA during this 60-day comment period. DWR is not required to respond to comments but will consider comments during its evaluation of this GSP. DWR will post all received comments on its website.

For additional information, DWR may be contacted at the mailing address below:

California Department of Water Resources

P.O. Box 942836

Sacramento, CA 94236

(916) 653-5791

1.4.1 Public Outreach

The regular meetings of the Board, PAC, and TAC are open to members of the public, including representatives of all types of water users. At each meeting, members of the public are allowed time to address the respective committee regarding topics listed and not listed on the meeting agenda. IWVGA documents (such as meeting agendas, minutes, resolutions, ordinances, presentations, meeting packages, etc.) are made available to the public at the following website: <https://iwvga.org/>

In addition, as part of DWR's requirements for SGMA and the GSP, a publicly-accessible database has been developed to store and present specific supporting elements of the GSP, including monitoring, reporting, management criteria, a water budget, hydrogeologic conceptual model, and other supporting documentation. The database additionally allows the public to review data and other reports related to IWVGB water resources. The database may be reached at the following link: <https://www.iwvgsp.com>

1.5 GSP ORGANIZATION

This GSP is organized into the following sections, which generally follow DWR's GSP guidelines and suggested elements as applicable to the IWVGA and IWVGB:

- Section 1 – Introduction Chapter
 - Provides information on the purpose of the GSP along with regulatory and agency background
- Section 2 – Plan Area
 - Presents background information on the IWVGB area with respect to overlying water management agencies, land use, basin beneficial uses, water quality objectives, production wells, and other planning efforts undertaken in the IWVGB
- Section 3 – Basin Setting
 - Presents a summary description of basin geology, hydrogeology, groundwater conditions, groundwater quality, groundwater-dependent ecosystems, water budget, and management areas
- Section 4 – Projects and Management Actions
 - Describes the potential projects and water management strategies intended to achieve the goals and objectives of the GSP

- Section 5 – Sustainable Management Criteria
 - Summarizes the basin’s existing undesirable results due to overdraft and the basin management objectives, milestones, and monitoring network that will track the overall progress toward basin-wide sustainability
- Section 6 – Plan Implementation
 - Discusses the work plan, schedule, and costs for implementation of the GSP as well as the requirements for annual reporting to DWR
- Section 7 – References and Technical Studies
 - Lists all of the technical reports, studies, and other documents used in the preparation of the GSP

1.5.1 Checklist for GSP Submittal

DWR has prepared a number of guidance documents for the sustainable management of groundwater, including a *Preparation Checklist for GSP Submittal* dated December 2016. The Preparation Checklist suggests general GSP content requirements for the purpose of verifying that a GSP is complete and ready for submission to DWR. In particular, the Preparation Checklist serves as a guide so that the reader of this GSP may find the relevant sections and page numbers that discuss specific groundwater management topics. **The Preparation Checklist is attached to this GSP as Appendix ____.**

INDIAN WELLS VALLEY GROUNDWATER BASIN

GROUNDWATER SUSTAINABILITY PLAN

SECTION 1 – INTRODUCTION CHAPTER

~~DRAFT~~

~~December 14, 2018~~

FINAL DRAFT

March 15, 2019

Table of Contents

Formatted: Centered

Section 1: Introduction.....	1-1
1.1 Purpose of the Groundwater Sustainability Plan.....	1-1
1.2 Sustainability Goal.....	1-2
1.3 Agency Information.....	1-3
1.3.1 Organization and Management Structure of the IWVGA.....	1-4
1.3.2 Legal Authority.....	1-7
1.3.2.1 Policy Advisory Committee (PAC).....	1-8
1.3.2.2 Technical Advisory Committee (TAC).....	1-9
1.3.2.3 Interested Agencies and Roles.....	1-11
1.3.3 Estimated Implementation and Costs.....	1-11
1.4 Notice and Communication.....	1-12
1.4.1 PAC Stakeholder/Public Outreach.....	1-12
1.5 GSP Organization.....	1-14
1.5.1 Checklist for GSP Submittal.....	1-15
Section 1: Introduction.....	1-1
1.1 Purpose of the Groundwater Sustainability Plan.....	1-1
1.2 Sustainability Goal.....	1-2
1.3 Agency Information.....	1-3
1.3.1 Organization and Management Structure of the IWVGA.....	1-4
1.3.2 Legal Authority.....	1-7
1.3.2.1 Policy Advisory Committee (PAC).....	1-8
1.3.2.2 Technical Advisory Committee (TAC).....	1-9
1.3.2.3 Interested Agencies and Roles.....	1-11
1.3.3 Estimated Implementation and Costs.....	1-11

<u>1.4</u>	<u>Notice and Communication</u>	<u>1-12</u>
<u>1.4.1</u>	<u>Public Outreach</u>	<u>1-13</u>
<u>1.5</u>	<u>GSP Organization</u>	<u>1-14</u>
<u>1.5.1</u>	<u>Checklist for GSP Submittal</u>	<u>1-15</u>

SECTION 1: INTRODUCTION

1.1 PURPOSE OF THE GROUNDWATER SUSTAINABILITY PLAN

The ~~stated~~ purpose of the Sustainable Groundwater Management Act (SGMA), as set forth in the California Water Code (CWC) Section 10720.1, is to provide for the sustainable management of groundwater basins; enhance local management of groundwater consistent with ~~the protected~~ rights to use or to store groundwater; establish minimum standards for sustainable groundwater management; provide local groundwater management agencies with the legal authority along with the technical and financial assistance necessary to sustainably manage groundwater; to avoid or to minimize subsidence problems; improve the collection of data and the understanding of groundwater; increase groundwater storage and remove impediments to recharge; manage groundwater basins through the actions of local governmental agencies to the greatest extent possible ~~without~~ while minimizing state intervention; and, where ~~seemingly irreconcilable conflicts exist~~ applicable, provide for the most efficient and cost-effective allocation procedures that ~~ensure~~ protect water rights and ensure due process.

~~It is the intent of SGMA to preserve the security of water rights in the state to the greatest extent possible, consistent with the sustainable management of groundwater. Additionally, SGMA establishes minimum standards for sustainable groundwater management along with providing local groundwater management agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater.~~

~~The local management of groundwater is one of the essential tenets of SGMA, rather than having a one-size-fits-all set of regulations and laws. It is the philosophy of SGMA that, to the greatest extent feasible, groundwater basins are best managed by local agencies, with minimal state intervention only to ensure that the local agencies are managing the groundwater in a sustainable manner. The culmination of the SGMA effort provides for a more efficient and cost-effective groundwater management process that protects water rights, ensures due process, prevents unnecessary delays, and furthers the objectives of the intent of the legislature to sustainably use California's water resources.~~

SGMA defines sustainable groundwater management¹ as the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing

¹ Per CWC Section 10721(v).

undesirable results. The Indian Wells Valley Groundwater Basin (IWVGB) resources are currently not sustainably managed. Noticeable overdraft conditions have existed ~~since the 1960s~~ for decades as a result of groundwater pumping exceeding the natural basin yield. The results of overdraft have manifested themselves through various undesirable results, primarily the chronic lowering of groundwater levels, the degradation of water quality, and the reduction of groundwater ~~in~~ storage throughout the IWVGB.

Historically, water producers in the ~~basin~~ IWVGB have ~~been able to mine~~ mined the basin to meet water demands; ~~however, this practice is resulting in the lowering of groundwater levels and a reduction of storage.~~ If left unmanaged, such practice will seriously impact groundwater producers' abilities to supply reliable and ~~quality-reliable~~ potable water at a reasonable price. Disadvantaged Communities (DACs), Severely Disadvantaged Communities (SDACs), ~~and~~ Economically Distressed Areas (EDAs), mutual water companies, cooperative water systems, and domestic well owners overlying the IWVGB are particularly susceptible to adverse effects resulting from the chronic lowering of groundwater levels because their wells are typically shallow, and furthermore, they lack the resources to compensate for the continued overdraft. Development of a GSP should therefore consider the need to supply water for the health and safety of all residents and businesses along with (as stated in CWC Section 106.3) the human right to safe, clean, affordable, and accessible water for human consumption, cooking, and sanitary purposes.

In compliance with SGMA, this Groundwater Sustainability Plan (GSP) discusses basin management strategies that will culminate in the absence of undesirable and unsustainable groundwater conditions in the IWVGB. The GSP recommends these management strategies and provides measurable sustainability objectives and milestones that intend to achieve basin sustainability while considering the unique geologic and hydrogeologic conditions of the IWVGB. The recommendations of this GSP will provide for long-term sustainable groundwater management in the IWVGB within 20 years of GSP implementation.

1.2 SUSTAINABILITY GOAL

As defined in ~~California Water Code~~ CWC Section 10721, the term "sustainability goal" refers to the existence and the implementation of one or more ~~groundwater sustainability plans~~ GSPs that achieve sustainable groundwater management by identifying and causing the implementation of ~~the~~ measures targeted to ensure the ~~applicable~~ basin is operated within its sustainable yield ~~(balanced levels of pumping and recharge).~~ The sustainability goal is not a quantitative measure; it is a statement of a GSP's objectives and desired conditions, how the basin will reach the desired conditions, and why the measures

recommended in ~~the~~ GSP will ~~lead to success in achieving~~ achieve these objectives and desired conditions. The sustainability goal is in part defined by the locally-defined minimum thresholds and undesirable results. (These terms are defined and described in detail in Section ~~45~~).

In general, the IWVGA sustainability goal is to manage the IWVGB within its sustainable yield such that undesirable results do not occur over the planning and implementation horizon (~~50 years after GSP adoption~~) the 50-year time period over which the IWVGA determines that plans and measures will be implemented to ensure the basin is operated within its sustainable yield). The detailed sustainability goal, including a description of the development of the goal and an explanation of how the goal is intended to be achieved, is provided in Section ~~45~~.

1.3 AGENCY INFORMATION

In its 2016 Bulletin 118 interim update, the California Department of Water Resources (DWR) identified the IWVGB as a critically overdrafted basin of medium priority². As such, in compliance with SGMA, the associated groundwater sustainability agency (GSA) must submit a GSP by January 31, 2020 to enhance the local and sustainable management of groundwater resources. The Indian Wells Valley Groundwater Authority (IWVGA) Board of Directors adopted Resolution No. 02-16 on December 8, 2016, to ~~elect~~ ~~for establish~~ the IWVGA ~~to become~~ as the exclusive GSA for the entirety of the IWVGB.

The IWVGB underlies portions of the counties of Kern, Inyo, and San Bernardino and is unique in that it is isolated from the ~~populated areas~~ urban centers of these three counties. The majority of the ~~valley's basin's~~ area is set in northeastern Kern County with smaller portions located in northwestern San Bernardino County and southern Inyo County. The ~~city~~ City of Ridgecrest is located in the extreme northeastern portion of Kern County ~~and (within the east-central portion of the valley basin) and is the only incorporated city in the basin.~~ The Indian Wells Valley Water District serves potable water to the ~~city~~ City of Ridgecrest and ~~a large area~~ certain areas outside of the ~~city~~ City of Ridgecrest's jurisdiction.

~~The land overlying the northeastern IWVGB is home to the China Lake Naval Air Weapons Station, a weapons testing center operated by the United States Navy. In addition, a significant amount of land overlying the southwestern IWVGB is largely undeveloped and managed by the United States Bureau of~~

² The IWVGB has since been identified as a critically overdrafted basin of **high** priority as of the *Sustainable Groundwater Management Act 2018 Basin Prioritization: Process and Results*, published by DWR in January 2019.

~~Land Management (BLM). For such reasons, these two federal agencies serve a role in the development efforts of the GSP.~~

The five aforementioned agencies (Kern County, Inyo County, San Bernardino County, the ~~city~~City of Ridgecrest, and the Indian Wells Valley Water District) entered into a joint exercise of powers agreement to form the IWVGA. ~~The agreement is attached to this GSP as Appendix _____.~~ These five agencies serve as General Members on the IWVGA Board of Directors, which governs the IWVGA as a whole.

~~The land overlying the northeastern IWVGB is home to the China Lake Naval Air Weapons Station (NAWS), a weapons research, development, acquisition, testing, and evaluation facility operated by the United States Navy (Navy). In addition, a significant amount of land overlying the southwestern IWVGB is largely undeveloped and managed by the United States Bureau of Land Management (BLM). Due~~As such, these two federal agencies serve a role in the development efforts of the GSP. However, due to their federal status, the Navy and BLM serve as Associate Members (non-voting) on the IWVGA Board of Directors.

1.3.1 Organization and Management Structure of the IWVGA³

Indian Wells Valley Groundwater Authority

~~100500 W. California Avenue, Ridgecrest Boulevard~~

Ridgecrest, CA ~~93556~~93555

Main Contact:

Donald Zdeba

don.zdeba@iwwvd.com

(760) 384-5555

Alternate Contact:

Lauren Duffy—Clerk of the Board of Directors of the IWVGA

lduffy@iwwvd.com

³ The IWVGA has a unique rotating management structure. Names, positions, and contacts are current and valid as of January 1, 2019.

(760) 384-5511

~~The~~ Indian Wells Valley Groundwater Authority ~~Board of Directors~~ (General Members)

~~Chairman Ron Kicinski~~—Indian Wells Valley Water District (Chair)

~~Vice chairman Mick Gleason~~—Kern County (Vice-chair)

~~Director Scott Hayman~~—City of Ridgecrest

~~Director Matt Kingsley~~—Inyo County

~~Director Luther Snoke~~—San Bernardino County

~~The~~ Indian Wells Valley Groundwater Authority: Associate Members

~~Commander Peter Benson~~—United States Navy (Non-voting)

~~Ryan Klausch~~—United States Bureau of Land Management (Non-voting)

Staff

~~Donald Zdeba~~—Acting General Manager

~~Steve Johnson~~—Stetson Engineers Inc.—Water Resources Manager⁴

~~James Worth~~—Board Counsel

~~Ricca Charlon~~—City of Ridgecrest

~~Lauren Duffy~~—Clerk of the Board of Directors

The IWVGA is governed and administered by the aforementioned Board of Directors (Board~~), which is composed of one voting seat per General Member.~~ Approval of any Board action requires the affirmative vote of a majority of the Board, ~~which is composed of one voting seat per Board member.~~ In addition, the Board members representing the County of Kern, the ~~city~~City of Ridgecrest, and the Indian Wells Valley Water District are considered principal voters. That is, no Board action may be approved by the Board unless it receives the affirmative vote from no less than two (2) of the Board members representing the County of Kern, the ~~city~~City of Ridgecrest, and/or the Indian Wells Valley Water District. The United

⁴ Per IWVGA Agreement No. 02-17, the Water Resources Manager was appointed on August 17, 2017, to prepare, develop, and implement the GSP for the IWVGB.

States Navy and the Bureau of Land Management hold two Associate Member positions that have a representative non-voting seat on the Board. Although they do not have the power to vote on any Board action or proposal, the Associate Members' position entitles them to full participation in Board meetings and discussions.

The Board consists of a Chairperson and Vice-Chairperson that preside at all Board meetings and exercise and perform other powers and duties as may be assigned by the Board. The Chairperson and Vice-Chairperson hold office for a term of one year commencing on January 1st of each and every calendar year. The positions of Chairperson and Vice-Chairperson rotate annually between the Board members representing the County of Kern, the ~~city~~City of Ridgecrest, and the Indian Wells Valley Water District. For example, in calendar year 2017, the Board member representing the County of Kern held the position of Chairperson, followed in order by the Board member representing the ~~city~~City of Ridgecrest and then the member representing the Indian Wells Valley Water District. The Board member representing the ~~city~~City of Ridgecrest held the position of Vice-Chairperson in 2017, followed in order by the Board members representing the Indian Wells Valley Water District and then the member representing the County of Kern.

The joint exercise of power agreement that formed the IWVGA also ~~constructed~~established the By-Laws under which the IWVGA operates. Under section 8.05 of the agreement, the Board adopted the By-Laws which govern the conduct of meetings and the day-to-day operations of the IWVGA. On March 17, 2017, the By-Laws became effective under IWVGA Resolution No. 03-17. **The By-Laws are attached to this GSP as Appendix ____.**

All IWVGA Board meetings are held in accordance with the Ralph M. Brown Act, set forth in the California Government Code sections 54950, et seq. The IWVGA Board meetings are held on the third (3rd) Thursday of each month at Ridgecrest City Chambers, located at 100 West California Avenue, Ridgecrest, CA.

Under Article 3.8 of the IWVGA By-Laws, the IWVGA sought to hire a Water Resources Manager (WRM) with sufficient technical background, expertise, and experience to prepare and implement a GSP for the IWVGB. On August 17, 2017, the IWVGA entered into Agreement No. 02-17 to retain ~~Steve Johnson~~Stetson Engineers Inc. as the WRM responsible for preparing and implementing this GSP. The WRM regularly reports to and coordinates with the IWVGA in relation to GSP preparation and collaborates with the IWVGA's standing committees in relation to the ~~political~~policy and technical aspects of the IWVGB and GSP. In addition, the WRM presents all technical information and reports to the IWVGA.

1.3.2 Legal Authority

On September 16, 2014, Governor Jerry Brown signed into law a three-bill package (AB 1739—Dickinson, SB 1168—Pavley, and SB 1349—Pavley) that became collectively known as SGMA. Each of the three aforementioned bills amended various aspects of the California Water Code (namely Title 23, Division 6, Part 2.74, commencing at Section 10720) to allow sole GSA for the management of IWVGB, the IWVGA has the legal authority to manage local groundwater through a locally formed GSA. The general powers and authorities of GSAs are listed in Chapter 5 (California Water Code Sections 10725 and 10726) of SGMA. As such, SGMA. To clarify and unify many of the concepts in grants the three-bill package, AB 617 was introduced by Assembly Member Henry T. Perea (D-Fresno) and was signed into law on October 9, 2015. AB 617 amended Sections 10540, 10721, 10727.4, 10727.8, and 10733.4 of IWVGA the California Water Code and also added Sections 10726.5 and 10732.2 to the California Water Code. Specifically, AB 617 grants additional legal authority to GSAs such that a GSA may legal authority to enter into agreements with private parties that assist in or facilitate the implementation of GSPs; impose the requirements of its GSP on other state agencies; oversee the incorporation of its GSP's requirements into a regional water management plan, etc.; etc. The general legal authority of GSAs (including the IWVGA) are stated in CWC Sections 10725, 10726, 10730, and 10731, all of which are attached to this GSP as Appendix _____.

AB 617 and SGMA are attached to this GSP as Appendix _____.

The IWVGA has the legal authority to manage local groundwater through SGMA. It should be noted that **the IWVGA is the sole GSA for the IWVGB.**

In general addition, the legal authority and powers of the IWVGA are published in Article 4 of the joint exercise of power agreement that formed the IWVGA. These powers include (but are not limited to) the following:

- To collect and monitor all data related and beneficial to the development, adoption, and implementation of the GSP
- To levy assessments, charges, and fees as provided in SGMA
- To regulate and monitor groundwater extractions as permitted by SGMA
- To establish and administer various programs for the benefit of the basin such as water banking, water recycling, recapture/purification efforts, etc.

- To apply for and accept grants, contributions, donations, and loans under any federal, state, or local programs for assistance in developing or implementing any of its projects or programs in connection with the GSP
- To acquire by negotiation or condemnation, lease, purchase, construct, hold, manage, maintain, operate, and dispose of any buildings, property, water rights, works, or improvements within and without the respective boundaries of the General Members necessary to accomplish the purposes of the IWVGA
- To cooperate, act in conjunction, and contract with the United States, the State of California or any agency thereof, counties, municipalities, public and private corporations of any kind, and/or individuals for the purposes necessary or convenient for the full exercise of the Authority's powers

1.3.2.1 Policy Advisory Committee (PAC)

Article 5.1 of the IWVGA By-laws provides that the Board may establish standing committees for the purpose of making recommendations to the Board on the various activities of the IWVGA. The Board established an eleven person, voting-member ~~policy advisory committee~~ Policy Advisory Committee (PAC) to advise the Board on all policy-related matters of the Board and to develop non-binding proposals on policy matters pertaining to the GSP. ~~The PAC is comprised of the following voting members:~~ The Board may appoint individuals to the PAC through an adopted resolution.

The PAC is comprised of voting members from the following constituent groups:

- 2 representatives from Large Agriculture ~~—Joshua Nugent and Edward Imsand~~
- 1 representative of Small Agriculture ~~—Patricia Quist~~
- 2 representatives from Business Interests ~~—David Janiec and James Mower~~
- 2 representatives from Domestic Well Owners ~~—West Katzenstein and Lyle Fisher~~
- 2 representatives from residential customers of a public water agency supplier ~~—Nick Panzer and Renee Westa-lusk~~
- 1 representative from the Eastern Kern County Resource Conservation District ~~—Judie Decker~~
- 1 representative from Wholesaler and Industrial User ~~—Rajanikant Jonnalagadda~~

The IWVGA By-Laws require that at least one of the appointed voting PAC members shall also represent Disadvantaged Communities (DACs). On July 20, 2017, the Board approved Resolution No. 08-17 to add

Tim Carroll of the Inyokern Community Services District as a DAC-representative voting member to the PAC. The PAC also includes non-voting Associate Members that represent the Navy ~~(John Kersey)~~, the Indian Wells Valley Water District ~~(Don Zdeba)~~, the Kern County Planning and Natural Resources Department ~~(Lorelai Oviatt)~~, and the ~~U.S. Bureau of Land Management (Ryan Klausch)~~. ~~These~~ BLM. To provide for more comprehensive groundwater management planning, these Associate Members provide needed expertise to help the PAC understand the policies of their respective jurisdictions and the impact of proposed basin management strategies on their agencies' missions.

~~As required by California Water Code Section 10723.2, the IWVGA must consider~~ To assist the Authority in considering the interest of all beneficial uses and users ~~within~~ the Basin. ~~To assist the Authority in meeting this objective~~ IWVGB, as set forth in CWC Section 10723.2, the PAC's objectives are to (1) provide all water users in the Basin with a meaningful voice and representation on policy matters of the Board associated with SGMA; (2) work collaboratively for the benefit of the IWVGB as a whole; (3) provide input and recommendations to the Board, in collaboration with the ~~Water Resources Manager~~ WRM, and other committees of the Board, in support of actions that facilitate bringing the IWVGB into compliance with SGMA; and (4) work in good faith to achieve consensus and make unified recommendations to develop a GSP and for management actions to achieve groundwater sustainability in accordance with the requirements of SGMA.

All PAC meetings are held in accordance with the Ralph M. Brown Act, set forth in the California Government Code sections 54950, et seq. The By-Laws of the IWVGA provide that the Board shall set regular meeting dates for the PAC by resolution. The PAC meetings are held on the first (1st) Thursday of each month at the office of the Indian Wells Valley Water District, located at 500 West Ridgecrest Boulevard, Ridgecrest, CA.

1.3.2.2 Technical Advisory Committee (TAC)

The Board also established a Technical Advisory Committee (TAC) for the express purpose of giving interested parties a reasonable opportunity to review and conduct a thorough evaluation of each technical element of the GSP prior to its finalization by the WRM. As stated in Article 5.12 of the IWVGA By-Laws, TAC members must have a formal education and experience in a groundwater-related field while also maintaining an understanding of the technical aspects of the IWVGB or similar basins in California. The TAC is comprised of individuals representing PAC members, PAC membership categories, and the

general interests of landowners and water users in the IWVGB. Each member of the PAC may nominate one member of the TAC for review and possible approval by the Board. To ensure proper stakeholder representation, the Board may also appoint TAC members that are not affiliated with any PAC members.

~~As of January 1, 2019, the~~The TAC ~~consists of~~ is comprised of members from the following ~~water use representatives~~constituent groups:

- Large Agriculture—~~Eddy Teasedale~~
- ~~Large Agriculture—Wade Major~~
- Business Interests—~~Scott O'Neil~~
- Residential Customers of a Public Water Agency—~~Stayed~~⁵
- Domestic Well Owners—~~Don Decker~~
- Eastern Kern County Resource Conservation District—~~Earl Wilson~~
- Wholesale and Industrial User—~~Adam Bingham~~
- Indian Wells Valley Water District—~~Tim Parker~~
- ~~Department of the Navy—Stephan Bork (ex-officio/staff member)~~
- United States Navy
- Kern County Water Agency—~~Michelle Anderson (ex-officio/staff member)~~

In the course of evaluating each draft technical element of the GSP, the TAC strives for consensus in preparing written recommendations to the WRM. These recommendations (along with all related comments) are submitted to the WRM to document all TAC members' input for consideration in the final preparation of each GSP element.

All TAC meetings are held in accordance with the Ralph M. Brown Act, set forth in the California Government Code sections 54950, et seq. The TAC meetings are held on the first (1st) Thursday of each month at the office of the Indian Wells Valley Water District, located at 500 West Ridgecrest Boulevard, Ridgecrest, CA. The WRM sets the agenda of each TAC meeting so that each technical element of the GSP is presented to the TAC, in draft, to afford the TAC a reasonable opportunity to review and conduct a thorough evaluation of each element.

⁵~~Position formerly held by Michael Powell.~~

1.3.2.3 Interested Agencies and Roles

During the formation of the IWVGA, a comprehensive listing of interested parties (including name, email, and phone number) was developed. The listing includes local community residents (including Disadvantaged Communities, Severely Disadvantaged Communities, and Economically Distressed Areas), businesses, large and small-scale agriculture, domestic well owners, academic institutions, relevant state and local agencies, federal agencies, non-profit organizations, and community organizations. This listing of over 150 stakeholders includes representatives from all types of water users within the IWVGB and was used during the 17-month long GSA formation process for notification of public meetings, notifications, and updates related to discussions on the SGMA. ~~The listing is attached to this GSP as Appendix _____.~~

An interested party that wishes to be added to the listing is encouraged to contact the IWVGA staff and provide appropriate contact information. The IWVGA will then add the party to the listing for receipt of notifications. No party will be dropped from the listing unless mailings are returned as undeliverable or the party specifically asks for removal from the listing.

The listing is attached to this GSP as Appendix _____.

1.3.3 Estimated Implementation and Costs

Pursuant to CWC section 10730, the IWVGA is authorized to fund the costs of groundwater management by imposing fees on the extraction of groundwater from the basin. On July 19 2018, the IWVGA Board adopted Resolution No. 02-18 to establish a Groundwater Extraction Fee of three dollars (\$3.00) per tenth (0.10) of an acre-foot for all groundwater extracted from the IWVGB, with the exception of groundwater extracted by de minimis⁶ extractors and federal entities. The Groundwater Extraction Fee is determined and paid on a monthly basis by all producers with registered groundwater extraction facilities in the IWVGB. Unregistered groundwater extraction facilities that are subject to the groundwater extraction fee are prohibited from extracting groundwater from the basin until the facility is registered to the satisfaction of the WRM, which oversees the registration of groundwater extraction facilities and reviews producers' self-reported measurements of groundwater extractions.

⁶ As defined in CWC Section 10721(e), a De Minimis extractor refers to a person who extracts, for domestic purposes two acre-feet or less of groundwater per year.

This section will include an estimate of the cost of implementing the GSP and a general description of how the IWVGA plans to fund those costs, to be determined based on annual reporting requirements, planned projects, and planned fees and assessments.

1.4 NOTICE AND COMMUNICATION

As stated in California Water Code Sections 10723.2 and 10728, a ~~groundwater sustainability agency~~GSA shall not only consider the interests of all beneficial uses and users of groundwater but also make available to the public and DWR a written statement describing the manner in which interested parties may participate in the development and implementation of the GSP. The IWVGA subsequently adopted Resolution No. 02-18 on April 19, 2018, to adopt a Communication and Engagement Plan (C&E Plan) intended to encourage public and agency participation in GSP development and implementation. The C&E Plan allows each stakeholder and agency in the IWVGB to understand the magnitude of the groundwater overdraft problem, how overdraft will affect stakeholders, and the process for participation in developing a GSP to solve the overdraft problem. ~~The C&E Plan is attached to this GSP as Appendix _____.~~

Formatted: Font color: Auto

~~PAC Stakeholder~~The C&E Plan was developed by the PAC with the intent of providing for open communications and inclusivity between the IWVGA and all interested parties, agencies, and stakeholders in the IWVGB. The C&E Plan's objectives include the following:

- Enhance public understanding about water, groundwater resources, uses, and water balance in the IWVGB by providing accurate and current information
- Provide stakeholders with opportunities to assist in GSP development and learn how the GSP will affect all uses and users of groundwater in the IWVGB
- Promote informed community feedback throughout the GSP preparation and implementation process
- Employ a variety of outreach methods that make public participation easy and accessible while efficiently using the resources of the GSA and local agencies

The C&E Plan is attached to this GSP as Appendix _____.

To allow for ongoing public engagement, DWR will establish a 60-day comment period following acceptance of this GSP for evaluation, during which any person may provide comments to DWR and the IWVGA regarding this GSP. Interested parties may review this GSP and submit comments (along with the party's name, address, and email) to DWR and the IWVGA during this 60-day comment period. DWR is not required to respond to comments but will consider comments during its evaluation of this GSP. DWR will post all received comments on its website.

For additional information, DWR may be contacted at the mailing address below:

California Department of Water Resources

P.O. Box 942836

Sacramento, CA 94236

(916) 653-5791

1.4.1 Public Outreach

The regular meetings of the Board, PAC, and TAC are open to members of the public, including representatives of all types of water users. At each meeting, members of the public are allowed time to address the respective committee regarding topics listed and not listed on the meeting agenda. All IWVGA documents (such as meeting agendas, minutes, resolutions, ordinances, presentations, meeting packages, etc.) are made available to the public at the following IWVGA website: <https://iwvga.org/>

<https://iwvga.org/>

In addition, as part of the Department of Water Resources' DWR's requirements for SGMA and the GSP, a publicly-accessible database has been developed to store and present specific supporting elements of the GSP, including monitoring, reporting, management criteria, a water budget, hydrogeologic conceptual model, and other supporting documentation. The database additionally allows the public to review data and other reports related to IWVGB water resources. The database may be reached at the following link:

<https://www.iwvgsp.com>

Formatted: Font color: Auto

Formatted: Centered, Line spacing: single

1.5 GSP ORGANIZATION

This GSP is organized into the following sections, which generally follow DWR's GSP guidelines and suggested elements as applicable to the IWVGA and IWVGB:

- Section 1 – Introduction Chapter
 - Provides information on the purpose of the GSP along with regulatory and agency background
- Section 2 – Plan Area
 - Presents background information on the IWVGB area with respect to overlying water management agencies, land use, basin beneficial uses, water quality objectives, production wells, and other planning efforts undertaken in the IWVGB
- Section 3 – Basin Setting
 - Presents a summary description of basin geology, hydrogeology, groundwater conditions, groundwater quality, groundwater-dependent ecosystems, water budget, and management areas
- Section 4 – Projects and Management Actions
 - Describes the potential projects and water management strategies intended to achieve the goals and objectives of the GSP
- Section 5 – Sustainable Management Criteria
 - Summarizes the basin's existing undesirable results due to overdraft and the basin management objectives, milestones, and monitoring network that will track the overall progress toward basin-wide sustainability
- ~~Section 5 – Projects and Management Actions~~
 - ~~Describes the potential projects and water management strategies intended to achieve the goals and objectives of the GSP~~
- Section 6 – Plan Implementation
 - Discusses the work plan, schedule, and costs for implementation of the GSP as well as the requirements for annual reporting to DWR
- Section 7 – References and Technical Studies
 - Lists all of the technical reports, studies, and other documents used in the preparation of the GSP

1.5.1 Checklist for GSP Submittal

DWR has prepared a number of guidance documents for the sustainable management of groundwater, including a *Preparation Checklist for GSP Submittal* dated December 2016. The Preparation Checklist suggests general GSP content requirements for the purpose of verifying that a GSP is complete and ready for submission to DWR. In particular, the Preparation Checklist serves as a guide so that the reader of this GSP may find the relevant sections and page numbers that discuss specific groundwater management topics. The Preparation Checklist is attached to this GSP as Appendix ____.