

2015.³⁹ An estimated 51 groundwater production wells support municipal use and accounted for 33 percent of water use in the Basin in 2015.⁴⁰ The Plan states there are an estimated 38 groundwater production wells (18 for large and 20 for small entities) in the Basin and the Authority estimates that agriculture water use accounted for 52 percent of total water use in 2015. Industrial water use accounted for 10 percent of 2015 water use, supported by an estimated 5 groundwater production wells in the Basin. The Plan attributes the remaining 6 production wells to dust control and landscape irrigation. In addition to two local water agencies that rely on the Basin as a water supply source, groundwater is exported from the Basin to Searles Valley (located outside of the Basin) to support the Searles Valley Minerals Inc. industrial operations and the domestic needs of four unincorporated communities. Four other water agencies have service areas and/or spheres of influence extending into the Basin but have no water supply infrastructure or water supply services.⁴¹

The Plan describes existing monitoring programs operating in the Basin. There are four regional entities with water supply, management, planning, and/or regulatory authority within the Basin.⁴² The Plan states that multiple entities have been measuring depth-to-groundwater in the Basin since the 1920s, including the United States Geological Survey, the United States Bureau of Reclamation, the NAWS China Lake, and local agencies.⁴³ A subset of groundwater level measurements are included in the Department's California Statewide Groundwater Elevation Monitoring (CASGEM) Program. The Plan states that conservation and water use efficiency efforts have been ongoing in the Basin, in addition to the use of recycled water for irrigation.⁴⁴

4.1.4 Notice and Communication

The Plan provides information about the Authority's notice and communication efforts during Plan development and provides a copy of the Communication and Engagement Plan in an Appendix.⁴⁵ This Communication and Engagement Plan was developed by the Policy Advisory Committee, which included members from sectors including large and small agriculture, business interests, residential customers of public water agency, domestic well owners, wholesaler industrial user, and a community service district. In addition to interested parties such as local community residents (including Disadvantaged Communities, Severely Disadvantaged Communities, and Economically Distressed Areas), the Communication and Engagement Plan includes a Notification List of interested parties that includes Service Organizations, Business and Advocacy Groups, Schools and Religious Organizations, Tribal Representation, Utilities, and Government (Local, State, and Federal).

³⁹ Indian Wells Valley Groundwater Basin GSP, Section 2.2.4, p. 90.

⁴⁰ Indian Wells Valley Groundwater Basin GSP, Section 3.2, p. 139.

⁴¹ Indian Wells Valley Groundwater Basin GSP, Section ES 2.4, p. 33.

⁴² Indian Wells Valley Groundwater Basin GSP, Sections 2.3 and 2.4, p. 91-98.

⁴³ Indian Wells Valley Groundwater Basin GSP, Section 2.6, p. 109-111.

⁴⁴ Indian Wells Valley Groundwater Basin GSP, Section 2.7.3, p. 113-121.

⁴⁵ Indian Wells Valley Groundwater Basin GSP, Appendix 1-E, p. 482-495.

The Authority provided opportunities for public engagement and public input into the development of the Plan. The Authority received several public comments regarding its draft GSP and responded to those comments as “noted”, “addressed”, or that it would provide clarification or an explanation in the final draft of the Plan.⁴⁶ There are several suggestions for public engagement from the Communication and Engagement Plan, but it is not clear whether the Authority adopted those suggestions for use in GSP development or whether the Authority intends to incorporate them during Plan implementation. Project and management action outreach sections in the Plan have general language for the public notification process, including, “public and relevant entities will be given the opportunity and time to participate in and provide feedback on [the Project] through the project’s environmental review processes.”⁴⁷ The engagement of stakeholders; transparency in GSP development, the Authority’s consideration of advisory committee feedback, and development of the Numerical Model; and consideration/incorporation of draft GSP comments were points of interest in multiple public comment letters received for the Plan.

Department staff believe the Authority acted in accordance with SGMA and the GSP Regulations with respect to Notice and Communication requirements for developing its Plan. However, the Plan contains few details related to how the Authority will solicit public input and involvement of diverse stakeholders during Plan implementation. Department staff encourage the Authority to update the Communication and Engagement Plan during plan implementation and to coordinate with all stakeholders in the Basin as it implements the Plan (see Recommended Corrective Action 1).

4.2 BASIN SETTING

GSP Regulations require information about the physical setting and characteristics of the basin and current conditions of the basin, including a hydrogeologic conceptual model; a description of historical and current groundwater conditions; and a water budget accounting for total annual volume of groundwater and surface water entering and leaving the basin, including historical, current, and projected water budget conditions.⁴⁸

4.2.1 Evaluation Summary

The Plan provides a detailed description of the physical characteristics of the Basin supported by maps, cross-sections, and tables that adequately convey information and data. Detailed explanations of data and information sources and how the Authority evaluated those data in the Plan indicate the assessment of Basin conditions relied on best available science and information. The Authority demonstrates an understanding of the basin setting through the hydrogeologic conceptual model and documentation of historic and current groundwater conditions in the Basin that appears adequate to develop and implement a GSP for sustainable groundwater management.

⁴⁶ Indian Wells Valley Groundwater Basin GSP, Appendix 1-F, p. 496-1286.

⁴⁷ Indian Wells Valley Groundwater Basin GSP, Sections 5.3.1.6, p. 254 and 5.3.2.6, p. 265.

⁴⁸ 23 CCR § 354.12 *et seq.*

5 STAFF RECOMMENDATION

Department staff's recommendation is to approve the Indian Wells Valley Groundwater Basin GSP with the recommended corrective actions listed below. The Plan conforms with the requirements of Sections 10727.2 and 10727.4 of SGMA and substantially complies, but does not fully satisfy, the requirements of the GSP Regulations. However, Department staff conclude that the current Plan is designed to achieve near-term progress towards groundwater sustainability, especially by reducing basin overdraft, whereas the deficiencies affect long-term conditions in the Basin. Department staff further conclude that the Authority should be able to address Plan deficiencies before they would affect the ability of the Basin to achieve sustainability. The Authority has identified several other areas for improvement of its Plan and Department staff concur that those items are important and should be addressed as soon as possible. Department staff have also identified additional recommended corrective actions that should be considered by the Authority for the first five-year assessment of the GSP. Addressing these recommended corrective actions will be important to demonstrate that implementation of the Plan is likely to achieve the sustainability goal. The recommended corrective actions include:

Recommended Corrective Action 1

Provide additional information on the required, ongoing communications elements required in the GSP Regulations,¹⁶³ and describe how those required elements fit into the Authority's Communication and Engagement Plan, including how it will continue to allow an open collaborative process with active diverse stakeholder engagement (such as those identified in the Communication and Engagement Plan's Notification List, see Section 4.1.4) during Plan implementation.

Recommended Corrective Action 2

Investigate the hydraulic connectivity of the vertical and lateral relationships between the three hydrogeologic zones within the shallow and deep principal aquifers to improve the understanding of potential migration of impaired water. Provide a timeline and discuss the steps that will be taken to fill the data gap identified in the Plan related to groundwater monitoring. During Plan implementation and in filling data gaps, the Authority should reassess the groundwater level and groundwater quality monitoring networks to include information about the amount of current and projected groundwater use and aquifer characteristics, including confined or unconfined aquifer conditions, or other physical characteristics that affect groundwater flow and how that flow could exacerbate groundwater quality challenges.

Recommended Corrective Action 3

Explain water budget elements and values as they are updated to include information obtained during GSP implementation, such as implementing groundwater allocations and finalizing imported water volumes. Tabular values, especially, should be explained and should not include mathematical errors (see Section 4.2.4). Describe how much of the

¹⁶³ 23 CCR § 354.10(d).