

IWVGA ADMINISTRATIVE OFFICE

STAFF REPORT

TO: IWVGA Board Members **DATE:** February 2025

FROM: IWVGA Staff

SUBJECT: **Agenda Item 10 - Board Review and Potential Action on 2025 Periodic Evaluation**

EXECUTIVE SUMMARY

Staff has prepared the attached 2025 Periodic Evaluation of the Indian Wells Valley Groundwater Sustainability Plan (GSP) for the Board's consideration and subsequent submission to the California Department of Water Resources (DWR). The Evaluation concludes that no amendments to the GSP are necessary at this time. The detailed assessment indicates that no new evidence has emerged since the GSP's adoption to suggest that the basin can achieve sustainability without the primary sustainability project—an imported water project.

Staff intended to include an analysis of the Indian Wells Valley Water District's (Water District) position and any proposed alternative sustainability projects in this Evaluation. However, the Water District has not shared such information, citing litigation concerns related to ongoing legal proceedings. The Groundwater Authority learned in court on February 11, 2025, that the water District's analysis had not in fact been completed and was not in a state to be shared despite a court order, calling into question whether this material would ever be shared with the Groundwater Authority and the public.

GROUNDWATER SUSTAINABILITY PLAN OVERVIEW

The Indian Wells Valley Groundwater Authority (Authority) developed the Groundwater Sustainability Plan (GSP) through a comprehensive, multi-year process that included significant public and technical input from community stakeholders and groundwater pumpers. Central to the GSP is a detailed groundwater model created by the Desert Research Institute (DRI) for the United States Navy. DRI, a globally recognized research institution affiliated with the University of Nevada, was engaged by the Navy to develop a groundwater model to assess mission readiness and the potential impacts of continued overdraft and insufficient local water management in the basin.

The model, known as the Navy Model, was developed without preconceived conclusions and incorporated input from the Technical Advisory Committee, ensuring transparency and public involvement throughout its creation. The model's depth and precision benefit from access to sensitive information protected for national security purposes, which is not available to other groundwater models. The Navy has retained this model for future operational readiness and potential use in Base Realignment and Closure (BRAC) evaluations. Importantly, the model's purpose was to achieve the most accurate assessment possible, with no inherent bias toward a particular outcome.

There was no incentive for the model to report a safe yield lower than the basin's actual sustainable capacity. At present, there is no competing groundwater model that has been validated to challenge the findings of the Navy Model.

The foundation of any Groundwater Sustainability Plan (GSP) is the water budget. This budget accounts for both the inflows—commonly referred to as Native Recharge (net of native plant losses) or Sustainable/Safe Yield in basins without non-native augmentation—and the outflows, typically characterized as pumping demands. Sustainability is achieved when these inflows and outflows are in equilibrium. In essence, this represents a straightforward mathematical equation:

Safe Yield = Demands = Balanced

If this equation is unbalanced, achieving sustainability necessitates either a reduction in pumping (i.e., a decrease in demands) or the introduction of an augmented supply to offset the excess demand until equilibrium is restored:

Safe Yield = Demands + Imported Supply = Balanced

Given this framework, the allocation chart serves as the cornerstone of any sustainability plan. Without a clear and transparent allocation structure, a sustainability plan cannot effectively function. The Water District's refusal to provide such an allocation chart is deeply concerning and indicates a lack of commitment to addressing the severe overdraft issues in this basin.

In this basin, the GSP identifies the Sustainable Yield at 7,650 acre-feet per year. However, based on sworn court filings, conservative estimates of shallow well demands included in the GSP, and data from the Indian Wells Valley Water District's 2022 Urban Water Management Plan, the basin's pumping demands total 35,833 acre-feet per year—4.6 times greater than the Sustainable Yield. This significant imbalance underscores the urgent need for a comprehensive and actionable sustainability strategy.

To address the basin's overdraft and determine the actual demand for imported water, the Authority implemented a Replenishment Fee applied to all pumpers in the basin, except for de minimis well owners (exempt under SGMA rules) and the United States Navy (exempt due to constitutional protections). The rationale for this fee structure is outlined in the Sustainable Yield Report, adopted unanimously in Resolution 06-20, with the fee calculation detailed in Ordinance 03-20.

In response to concerns regarding the affordability of imported water, the Authority introduced the Transient Pool and Fallowing Program, adopted unanimously under Resolution 05-20. This program allocated 51,000 acre-feet of water to pumpers who would cease extraction upon exhausting their allotments—a volume approximately equal to the estimated overdraft from those expected to transition to imported water after project completion. While the Indian Wells Valley Water District voted in favor of this program's adoption, it ultimately did not participate, leading to amendments in Resolution 05-21.

The Authority also recognized the potential of recycled water to reduce the need for imported supplies. To this end, it secured rights to recycled water from the City and established a Recycled Water Program under Resolution 08-20. This program exempted participants from replenishment

fees while they worked collaboratively to develop cost-effective and practical applications for recycled water. The Water District, however, declined to participate in this initiative.

Upon conclusion of the SGMA-mandated review period, the California Department of Water Resources (DWR) approved the GSP on January 13, 2022, affirming that sustainability could only be achieved through water importation.

Following DWR's approval, the Authority concentrated its grant efforts on advancing the import project. In February 2022, the Water District joined other Authority Board members in unanimously adopting Resolution 01-22, which authorized a \$7.6 million grant request for the design and environmental review of the import project. The Authority subsequently secured an additional \$2.9 million federal grant, bringing total grant funding for project development to over \$10 million.

Recently, the Authority received a \$50 million federal funding authorization for the project's construction. Additional funding requests are anticipated as the pipeline progresses, and the likelihood of further federal support remains high given the basin's strategic importance and its role in supporting national defense operations.

SUMMARY OF THE PERIODIC FIVE-YEAR EVALUATION

The Periodic Evaluation highlights significant developments since the adoption of the GSP, including the collection of new data, project progress, and outreach efforts. While no amendments to the GSP are currently recommended, the report acknowledges ongoing data evaluation, particularly regarding groundwater conditions and management actions. It also notes a significant shift in the Water District's role, as the District filed a comprehensive groundwater adjudication, impacting collaborative efforts and data sharing.

Section 1: New Information Collected details significant new data acquired since the adoption of the 2020 GSP. The IWVGA established Sustainable Management Criteria (SMCs) for water quality, focusing on total dissolved solids (TDS) as the primary constituent of concern. The *Title XVI Feasibility Study* explored the potential for a recycled water project and was approved by the U.S. Bureau of Reclamation as operationally feasible but ultimately deemed economically unviable due to high costs. The IWVGA also collected substantial new hydrogeologic data, including updates from the Technical Modeling Group, the El Paso Technical Memorandum, and results from the Surface Percolation Replenishment Study, which concluded that surface percolation was not feasible. Airborne electromagnetic (AEM) geophysical data and groundwater-dependent ecosystem (GDE) data were also integrated into the Basin's Hydrogeologic Conceptual Model (HCM), enhancing the understanding of subsurface conditions.

Section 2: Groundwater Conditions evaluates changes in groundwater storage, groundwater levels, water quality, land subsidence, and depletion of interconnected surface waters. The section highlights that groundwater production continues to exceed the Basin's sustainable yield, resulting in overdraft conditions. The reduction in groundwater storage was calculated using the Modified Thiessen Polygon Method and updated Basin Model, both showing significant cumulative losses. Although the IWVGA has initiated various projects, such as the Transient Pool Program and the Shallow Well Mitigation Program, continued overdraft is anticipated until full project implementation, particularly the importation of supplemental water. Monitoring has shown fluctuations in

groundwater levels, with some areas experiencing temporary recovery. Water quality data, especially regarding TDS concentrations, have been collected to establish baselines and refine SMCs. While some shallow wells have experienced impacts due to declining groundwater levels, mitigation efforts are underway, and overall, no undesirable results have been reported during this evaluation period.

Section 3: Projects and Management Actions reviews the implementation of various initiatives outlined in the GSP. Management Action No. 1 includes the Pumping Allocation Plan and Transient Pool and Fallowing Program, designed to reduce future demands and support sustainability. Project No. 1, the Imported Water Project, has made significant progress, with millions in grant funding secured for environmental review and design, and a recent \$50 million federal authorization for construction. The IWVGA is collaborating with the U.S. Army Corps of Engineers for the project's execution. Project No. 2, the Recycled Water Project, was suspended due to economic infeasibility, despite initial feasibility approval. Other projects include the Basin-Wide Conservation Program (Project No. 3), which focuses on reducing water use through conservation measures, and the Shallow Well Mitigation Program (Project No. 4), which addresses impacts to shallow wells caused by declining groundwater levels. Additional projects, such as dust control and pumping optimization, are also discussed, with evaluations of their relevance, feasibility, costs, and expected benefits.

Section 4: Basin Setting provides updates to the Hydrogeologic Conceptual Model (HCM) and the Basin Model based on new data collected since the GSP's adoption. The El Paso Subarea, located in the southwest part of the Basin, has been evaluated for potential designation as a separate management area due to distinct hydrogeologic characteristics, including differences in groundwater geochemistry and relatively stable groundwater elevations. The section also addresses data gaps identified in the 2020 GSP, such as groundwater level monitoring, groundwater extraction data, and groundwater quality monitoring. Updates to the Basin Model include new modeling scenarios that consider climate change impacts and projected water budgets, allowing for a more refined understanding of the Basin's conditions and future management needs.

Section 5: Monitoring Networks focuses on the refinement and expansion of monitoring systems to track groundwater conditions and evaluate the effectiveness of management actions. The IWVGA updated its network of Representative Monitoring Sites for groundwater levels, water quality, and GDEs, ensuring comprehensive spatial coverage and data accuracy. The section outlines changes in the monitoring network, including the addition and removal of specific wells due to logistical challenges or poor conditions. Data gaps are identified, and potential improvements are suggested to enhance the monitoring network's functionality. The section also addresses Sustainable Management Criteria (SMCs) for various indicators, such as chronic lowering of groundwater levels, reduction of groundwater in storage, degraded water quality, land subsidence, and depletion of interconnected surface waters.

Section 6: GSA Authorities and Enforcement Actions describes the regulatory framework and enforcement mechanisms established by the IWVGA to ensure compliance with the GSP. The section outlines programs such as the Transient Pool and Fallowing Program and the Recycled Water Program, along with fee structures like the Groundwater Extraction Fee and Basin Replenishment Fee. Enforcement actions, including reporting policies and penalties for violations, are detailed. The section also addresses legal challenges, particularly the litigation initiated by the IWWWD, which has influenced the Basin's groundwater management and data-sharing practices.

Section 7: Outreach, Engagement, and Coordination reviews the IWVGA's efforts to engage stakeholders and the public in the GSP's implementation. The IWVGA has maintained transparency through public meetings, mailers, press releases, and a dedicated website. A Communication and Engagement (C&E) Plan guides outreach activities, and a public relations firm was hired to address misinformation. The Technical Advisory Committee, once a key platform for stakeholder input, has seen reduced participation due to the IWWWD's adjudication filing and subsequent withdrawal from the group. The section also summarizes public comments received on annual reports, published documents, and the Imported Water Project's CEQA process, with detailed responses provided in Section 7.

Section 8: Summary of Proposed or Completed Revisions to Plan Elements outlines any updates to the GSP based on new data and evaluation findings. While the IWVGA has made significant progress toward sustainability and continues to refine its management approach, no formal amendments to the GSP are recommended currently. The IWVGA remains committed to ongoing data collection and evaluation, with the flexibility to amend the GSP as necessary in the future.

Overall, the Periodic Evaluation demonstrates substantial progress in implementing the GSP and advancing toward groundwater sustainability in the Indian Wells Valley Basin. Continued efforts, particularly the development of the Imported Water Project and ongoing stakeholder engagement, are essential for achieving the long-term sustainability goals outlined in the GSP.

TIMELINESS OF THIS EVALUATION

On September 4, 2024, the Water District published and served a report titled *Assessment of Safe Yield for the Indian Wells Valley Groundwater Basin* prepared by their Technical Working Group. That report states that it used a new groundwater flow model being constructed by Ramboll in its analysis of the Basin's safe yield.

At the December Board meeting, concerns were raised regarding this report on the basin's safe yield, which lacked sufficient data to be incorporated into the Evaluation. The conclusions presented in the report significantly diverge from prior studies conducted over the past fifty years, including the Water District's own 2009 Brown and Caldwell report, which estimated an annual recharge rate of 7,940 acre-feet—approximately half of the figure asserted in the District's new report. Moreover, even assuming the safe yield analysis in the Water District's report is based on accurate data, the District has failed to provide any information demonstrating how the Basin can be sustainably managed under its new higher yield figure, particularly given that this figure is much less than the reported pumping. To aid sustainable management, the Water District would need to present an allocation table showing total pumping levels below the proposed safe yield something it has refused to do presumably, again, due to strategic concerns in the litigation.

Considering these considerations, it was suggested during the December meeting that the Periodic Evaluation be postponed until the Water District could provide a complete groundwater model to substantiate its safe yield claims. The Water District's General Manager concluded that delaying the Evaluation would be preferable, allowing the District to submit its groundwater model.

In a September 26, 2024, Joint Status Conference Statement the Water District proposed, and the court adopted, a schedule for the Phase 2 safe yield phase of trial that would have required their groundwater model be produced to the IWVGA no later than February 18, 2025. On Friday February 7, the Water District revealed for the first time that they did not have a model that was suitable for review by the IWVGA. Attorneys for Meadowbrook represented to the court that the model remained incomplete as of this date. In a filing made to the court the Water District estimated that the model would not be ready for several more months. It now does not appear that this model will be presented in time for the Periodic Evaluation, if ever.

LITIGATION INTERFERENCE WITH GSP IMPLEMENTATION

The delay in providing this periodic evaluation illustrates the way the litigation continues to interfere with the implementation of the GSP. Rather than simply present evidence that the Water district claims show errors in the GSP analysis, the water district has continued to hide this information to gain tactical advantage in the context of the litigation. The Water District has represented to the court that its intention is to use a judgment in the litigation as a method of rewriting the GSP. Therefore, it has no incentive to participate through the SGMA process even though it sits on board and is charged with doing so. Accordingly, the District has withdrawn from collaborative forums such as the Technical Advisory Committee and has not contributed to this evaluation. This dual role—participating in regulatory decisions while withholding critical information—complicates the Board’s ability to manage the basin effectively. The Department of Water Resources (DWR) has explicitly advised the Water District to engage with the SGMA process rather than relying on litigation. However, the District continues to withhold data necessary for transparent decision-making.

In summary, the Water District’s current approach—withholding critical information while participating in regulatory decisions—poses a governance challenge for the Board. The District’s actions are at odds with the collaborative, transparent processes required under SGMA and hinder the basin’s progress toward sustainability.

STAFF RECOMMENDATION

Consider and approved the 2025 Periodic Evaluation.