

INDIAN WELLS VALLEY GROUNDWATER AUTHORITY POLICY ADVISORY COMMITTEE

Indian Wells Valley Water District 500 W. Ridgecrest Blvd. Ridgecrest, CA 93555

A G E N D A

Thursday, August 3, 2017, 6:00 p.m.

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact Alan Christensen at (661) 868-3183. Requests must be made as early as possible and at least one full business day before the start of the meeting. Documents and material relating to an open session agenda items that are provided to the IWVGA PAC Committee prior to a regular meeting will be available for public inspection and copying at Indian Wells Valley Water District, 500 Ridgecrest Blvd, Ridgecrest, CA 93555, or online at www.co.kern.ca.us/groundwater/.

Statements from the Public

The public will be allowed to address the Committee during Public Comments about subjects within the jurisdiction of the IWVGA Committee and that are NOT on the agenda. No action may be taken on off-agenda items unless authorized by law. Questions posed to the Committee may be answered after the meeting or at future meeting. Dialog or extended discussion between the public and the Committee or staff will be limited in accordance with the Brown Act. The Public Comments portion of the meeting shall be limited to three (3) minutes per speaker. Each person is limited to one comment during Public Comments.

All remarks and questions should be addressed to the Committee as a whole and not to any individual member or staff. There will be time after each action item on the agenda to receive comments from the public. Again each speaker will be limited to three (3) minutes. Speakers should be brief and limit their comments to the specific subject being discussed. Persons will be limited to one comment per person unless directed by the Chair.

1. CALL TO ORDER/ROLL CALL

2. PUBLIC COMMENTS

This time is reserved for the public to address the Committee about matters NOT on the agenda. No action will be taken on non-agenda items unless authorized by law. Comments are limited to three minutes per person.

3. APPROVAL OF MINUTES

4. DISCUSSION OF POLICY RECOMMENDATIONS BASED ON QUESTIONS FROM NICK PANZER :

- A. BY WHAT DATE SHOULD WE OPERATE WITHIN SUSTAINABLE YIELD?
- B. ON WHAT SCHEDULE SHOULD WE MITIGATE OVERDRAFT ACCRUED SINCE 2014?
- C. HOW SHOULD OUR WATER BUDGET PRIORITIZE WATER USE BY USERS AND USES?
- D. HOW SHOULD WE ENFORCE WATER USE PRIORITIES?
- E. HOW AGGRESSIVELY SHOULD WE INVESTIGATE NEW WATER SOURCES?

5. PRESENTATION FROM KENNEDY/ JENKS CONSULTANTS ON OPPORTUNITIES AND DEADLINES FOR GRANT FUNDING FOR GSP PROJECTS AND PLANNING.

- 6. PROPOSED 2017 PAC SCHEDULE FOR REFERRAL TO GSA FOR ADOPTION.**
- 7. DISCUSSION AND RECOMMENDATIONS FOR A STRATEGY FOR OUTREACH TO PUBLIC, TRIBES AND PROPERTY OWNERS.**
- 8. FUTURE AGENDA ITEMS DISCUSSION**
- 9. COMMITTEE MEMBER ANNOUNCEMENTS OR COMMENTS**
- 10. ADJOURN**

Agenda Request for Third and Fourth PAC Meetings
Submitted by Nick Panzer 7/20/17

Nick Panzer
7-20-17

____?. Discuss these GSP Element questions, and frame answers as Policy Proposals in accord with Bylaw 5.9:

1. By what date should we operate within sustainable yield?
2. On what schedule should we mitigate overdraft accrued since 2014?
3. How should our water budget prioritize water use by users and uses?
4. How should we enforce water use priorities?
5. How aggressively should we investigate new water sources?

Comments on Proposition 1 Grant Requests
From Nick Panzer To fellow PAC Members 7/20/17

I have three key take-aways from the Grant Program Guidelines and the companion Draft Proposal Solicitation Package (PSP).

First take-away. DWR scores grant requests competitively based on applicant responses to eight specific questions set forth at page 23 of the PSP. Questions 1, 3, and 6 account for over half of all possible points. Taken together, these questions get at how well our draft GSP accords with the GSP Regulations, how our proposed project will measurably increase the effectiveness of our GSP for the entire basin, how we would complete the project without grant funding, and how our detailed Work Plan will lead to a complete GSP that complies with all GSP Regulations.

Conclusion, without a draft GSP driven by GSP Regulations, we cannot write a competitive grant proposal. Dealing with Proposition 1 before dealing with key GSP policy issues puts the cart before the horse.

Second take-away. Grant awards are paid in arrears, meaning we pay all project costs as we go along, and then ask DWR to reimburse us for its half share. No advance funds will be provided, except for qualifying DAC projects. We must demonstrate up front our ability to carry this financial load before DWR will award the grant or reimburse costs. In other words, grants are not seed money or short-term working capital. They are a delayed reimbursement for a portion of the project costs that we have already paid.

Third take-away. This PAC is not suited to prepare a Proposition 1 grant request under anyone's supervision. It is simply too complex and too big a job to do as a committee. It will require professional expertise. I do believe that we can give high-level GSP policy advice that embraces the GSP Regulations. This advice may help our GSA and our WRM craft a competitive draft GSP that supports a Proposition 1 grant request. See next page for my first attempt at policy advice.

Fellow PAC Members: Here, in the form of policy proposals, is my first attempt to answer for myself GSP policy questions raised at our 6/29/17 meeting (see p 8/8). Nick panzer 7/20/17

Sustainability Goal: Live within recharge before 2020 and restore post-2014 overdraft to the water table by 2040.

Policy Proposals to Achieve Sustainability Goal:

1. Extract less than recharge before the 2020 GSP deadline.
2. Restore post-2014 overdraft to the water table before 2040 on a frontloaded basis.
3. Include import water in budget when it actually enhances recharge or directly serves users.
4. Prioritize extraction budget as follows:
 - a. Personal Health and Safety (e.g., drink, cook, cool, and sanitize) at home and work.
 - b. Item 2 overdraft restoration.
 - c. Remainder, if any, to all other users and uses (e.g., residential outdoor, ag, industry, City, County, Navy base) in proportion to average use in the ten years prior to 2015, as adjusted for conservation reductions.
5. Meter all wells and tier price extraction fees to target the results specified in Items 1, 2, and 4, and to subsidize the disadvantaged.
6. Conduct a public education campaign to manage water user expectations.
7. Investigate new water sources (e.g., import, reuse, recycle, desalination, condemnation, "rights" sales), but not at the risk of filing a GSP unacceptable to the state.

DISCUSSION

Item 1

Extract less than recharge before the 2020 GSP deadline.

Currently, we extract roughly four times recharge. We should quickly eliminate this overdraft lest we a) further burden private well owners and, b) compound our overdraft mitigation problem (see Item 2).

Item 2

Restore post-2014 overdraft to the water table before 2040 on a frontloaded basis.

SGMA and related DWR regulations mandate that we mitigate post-2014 overdraft. Sustainability means that by 2040 we restore our water table to its 2015 level. Since roughly 30% of private well owners currently operate at the margin of the water table (Desert Research Institute Report, December 2016), this restoration should occur sooner rather than later (frontloaded).

Item 3

Include import water in budget when it actually enhances recharge or directly serves users.

The sole source of water that we might feasibly "import" is water that flows through the L. A. aqueduct on the west side of IWV. We would take water from that aqueduct in exchange for water that we buy from sellers linked to L.A.'s water supply network. To make the exchange, we must clear seven hurdles.

Agreement with L.A.- L.A. owns the aqueduct crossing IWV, and water flowing through that aqueduct. Hence, it enjoys monopoly power over the sole source of water importable to IWV. L.A. has no incentive to exchange that water with us except on monopoly-pricing terms.

Exchange Costs- Likely, we would buy "exchange" water in California's Central Valley. Such water contains substantially more contaminants than L.A. aqueduct water. To compensate L.A. for added treatment costs, L.A. might reasonably demand several gallons of Central Valley water in exchange for every gallon of aqueduct water. Moreover, L.A. aqueduct water generates power as it descends into L.A., whereas Central Valley water consumes power as it crosses the Tehachapi Mountains in route to L.A. We would bear the cost of both power forgone and power consumed in an L.A. aqueduct-Central Valley exchange.

Supply and Price of Water for Sale- All western U.S. water resources have long been identified and claimed, with much of that water subject to export restriction. No saying if, when, or how much exchangeable water might come up for sale in a given year. The downward trend in southwest precipitation dramatically drives up the competition for and the price of water that does come up for sale. Even if more water comes up for sale in wet years, other water agencies will aggressively compete for it to replenish water drawn down in dry years.

Costs to Bank Purchased Water- In hoped-for wet years when we might find exchange water to buy, L.A. will not need the water at that time. Hence the bought water must be stored in the ground (banked) for later use by L.A. in dry years. In addition to the costs of creating or buying into a bank are transport costs to and from the bank, and costs to "deposit" and "withdraw" from the bank. We would bear all such costs.

Uncertainty of Withdrawal from Aqueduct- L.A. has binding agreements to partially restore Mono Lake, its feeder streams, the lower Owens River, and Owens Lake. These

agreements govern the amount of stream water that L.A. can put into the aqueduct under various conditions, and, therefore, the amount of aqueduct water, if any, that might be available for exchange in a given year. Thus, even if we bank water on L.A.'s behalf, nothing assures sufficient flow in the aqueduct to reliably support an IWV import plan. Moreover, L.A. likely would not allow us to make withdrawals from its aqueduct until we first bank sufficient water to cover the agreed-upon exchange.

IWV Infrastructure Costs- Before we take water out of L.A.'s aqueduct, we must decide how to use the water. Most likely, we would add the water to our aquifer via either percolation, or treat and inject. Either method requires lengthy feasibility tests. A less likely third alternative, not affecting recharge, would have us treat and store water above ground. To spread the costs of this third alternative over all users, we would need to construct a costly distribution system linking our broadly scattered users. No saying that our largest water user, ag, can afford to pay its share of import costs under any of these three alternatives and still stay in business. If any of these three methods prove feasible, we would construct a turn-out from the aqueduct, and acquire easements upon which to build a conveyance to holding basins or treatment/storage facilities.

Legal and Regulatory Costs- Depending upon the import plan sought, we can expect over a dozen federal, state, and local agencies to demand a say in the plan. See attached ADDENDUM for examples.

IMPORT WATER CONCLUSION

GSP Reg. 354.44 (b) (6) says that if a GSP relies upon import water, "an explanation of the source and reliability of that water shall be included." Due to the challenge of overcoming the seven hurdles to importing discussed above, import water should become part of our GSP budget when it actually enhances recharge or directly serves users.

Item 4

Prioritize extraction budget as follows:

- a. Personal Health and Safety (e.g., drink, cook, cool, and sanitize) at home and work.
- b. Item 2 overdraft restoration.
- c. Remainder, if any, to all other users and uses (e.g., residential outdoor, ag, industry, City, County, Navy base) in proportion to average use in the ten years prior to 2015, as adjusted for conservation reductions.

The 2010 U. S. Census shows this for IWV:

Inyokern	1,099
China Lake Acres	1.876

Other unincorporated areas	3,300
Ridgecrest	<u>27,616</u>
	<u>33,891</u>

Adding Searles Valley residents brings the number to roughly 35,000. Every one of these individuals depends entirely upon IWW groundwater for his health and safety. He demands about 100 gallons of water per day for health and safety (defined above). For 35,000 individuals, this translates to about 4,000 afy, against annual recharge of about 7,700 afy (Desert Research Institute Report, December 2016).

Based upon a) California Water Code Section 106.3 (a) which reads, "It is hereby declared to be the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes," and b) based upon GSP Reg. 350.4(g) which requires a GSA to consider this "human right to water" when implementing its GSP, and c) based upon a California court holding "that groundwater regulation is within a county's police powers and is not otherwise preempted by general State law" (Sawyers, Esq., A Primer on California Water Rights, P.4), it seems reasonable that Personal Health and Safety take the first 4,000afy of recharge, leaving the 3,700afy Remainder for overdraft restoration and all other uses, such as those exemplified above.

How might we prioritize this Remaining 3,700afy among such other uses? For example, are city and county parks, ballfields and medians more important than industrial use? Is ag irrigation more important than residential irrigation? Is Navy use more important than private industry use such as Searles Valley Minerals? No good answers to these kinds of questions likely exist, and reasonable people will disagree about the answers in any case. Therefore, policy might treat all such other uses as equally beneficial, and call for proportionate extraction reductions based upon ten-year, pre-2015 average use. How big a reduction are we talking about?

If pre-2015 extractions average about 28,000afy, and health and safety account for 4,000afy of that, then, absent enhanced recharge, the remaining 24,000afy must shrink to 3,700afy to sustain our aquifer, an 85% reduction. And that is before a reserve to restore our post-2014 overdraft to the water table (Item 2 above). Hence, we are talking about a 90% plus reduction in all groundwater uses except Personal Health and Safety. This is the stark reality that drives some to say that "we cannot conserve our way out of our water shortage, we must import." Unfortunately, as discussed at Item 3 above, that is easier said than done for seven reasons. We can count on our groundwater if we cut extractions to natural recharge; we cannot count on enhanced recharge anytime soon, if ever. Hence, sustainability forces us to live within our 7,700afy natural recharge until such time, if ever, as imports or other new water sources actually enhance recharge.

Item 5

Meter all wells and tier price extraction fees to target the results specified in Items 1, 2, and 4, and to subsidize the disadvantaged

Only through 100% metering (relying on city and county police powers affirmed in SB 1168 §1(b)(5)) can we adequately monitor our water budget and ensure affordable Personal Health and Safety water for all. Only through steeply progressive fees for the Remainder of water extraction can we live sustainably within our means. Progressive fees can be set to fund subsidies for the disadvantaged.

Item 6

Conduct a public education campaign to manage water user expectations.

Through 60 years of over drafting, we have created an unsustainable, artificial oasis. Absent new water sources, sustainability means that we return to a more natural, desert-like setting. We all require advance understanding of the changes afoot to timely inform our lifestyle planning choices. The campaign should begin *after* the GSA approves key GSP Elements (GSA Bylaws, 5.9) so we have something meaningful to share with the public.

Item 7

Investigate new water sources (e.g., import, reuse, recycle, desalination, condemnation, "rights" sales), but not at the risk of filing a GSP unacceptable to the state.

Potential new water sources merit investigation because natural groundwater recharge falls far short of current water demand. Potential new water sources raise these types of questions: Who owns the source? Is the source available for purchase or use? Is the source large enough to justify the time and cost to investigate it? Who will benefit from the source? Will the source actually enhance recharge? If not, how will we distribute the source, and to whom? Who will pay to develop the source? What outside agencies (see ADDENDUM) have a public mandate to "due process" development plans?

These questions typically take years to answer, with no assurance of a favorable outcome. Therefore, we cannot count on new water sources being part of our GSP due January, 2020. As new water sources do prove their viability in operation, we can update our GSP accordingly. However, trying to incorporate them before 2020 threatens the timely submission of a GSP acceptable to the state.

ADDENDUM

Developing new sources of water necessarily involves outside agents that monitor compliance with legal, environmental, and health and safety standards. For example, in the case of a project to IMPORT WATER to the IWW, some of these outside agents may choose to "due process" the project for compliance with their own policies.

1. California Department of Water Resources (DWR) operates the State Water Project (SWP) on behalf of twenty nine water contractors (Contractors). Based on estimated water supplies, DWR

determines each year the percentage of Contractor entitlements that it will fulfill with real water.

2. SWP Contractors. Two of those Contractors, namely, Metropolitan Water District of Southern California (Met) and Kern County Water Agency, hold seventy five percent of all SWP Contractor entitlements.
3. SWP Contractor Member Units. L.A. is one of twenty six Member Units of Met. A Member Unit indirectly owns an allocable share of its Contractor's SWP entitlements. Met is the only SWP Contractor through which Member Unit L.A. can receive water that IWV buys back up the line under an import plan. IWV likely would buy exchange water from a Member Unit of an SWP Contractor other than Met. Thus, at least two SWP Contractors likely would become involved, plus the Member Unit that actually sells water rights to IWV. County of Kern (unrelated to Kern County Water Agency) is neither a SWP Contractor nor a Member Unit, hence owns no SWP entitlements directly or indirectly.
4. U. S. Bureau of Reclamation operates the Central Valley Project (CVP) on behalf of its 270 contractees. The CVP physically interconnects with and shares some facilities with the SWP. Thus, exchange water bought through the CVP system necessarily involves the SWP and MET.
5. Water banks linked to the SWP through SWP Contractors, Member Units, and CVP contractees.
6. California State Water Resources Control Board and nine Regional Water Quality Control Boards enforce maximum contaminant loads of banked water put into the SWP.
7. Lahonton Regional Water Quality Control Board regulates the impact of imported water on native groundwater.
8. U. S. Bureau of Land Management to extent that pipelines, recharge ponds, etc. would encroach its property.
9. Utilities, such a SCE and PG&E, to the extent water conveyance facilities would encroach its easements.
10. Cal Trans if water conveyance facilities cross Highway 395.
11. U. S. Fish and Wildlife Service if a project affects land with protected species.
12. California Department of Fish and Game for same reason as 11, though it typically coordinates with 11.
13. California Department of Health Services as enforcer of water facility standards.
14. Parties to agreements reached in 1994 and 2013 with L.A. concerning water export conditions to protect Mono Lake and restore its feeder streams, such as:
 - Mono Lake Committee
 - California Department of Fish and Game
 - National Audubon Society, Inc.
 - California Trout, Inc.
 - Mono Basin National Forest Scenic Area (under U.S. Forest Service)
 - Great Basin Unified Air Pollution Control District
15. Parties to agreements with L.A. concerning environmental protections along the lower Owens River and Owens Lake.

**Indian Wells Valley Groundwater Basin
Bringing the Basin into Compliance with the Sustainable Groundwater Management Act
Key Policy Advisory Questions Raised
by the**

**CALIFORNIA CODE OF REGULATIONS
TITLE 23. WATERS
DIVISION 2. DEPARTMENT OF WATER RESOURCES
CHAPTER 1.5. GROUNDWATER MANAGEMENT
SUBCHAPTER 2. GROUNDWATER SUSTAINABILITY PLANS**

- 1. By what date should we “operate within sustainable yield?”**
§ 354.24 Sustainability Goal (p 19)
- 2. On what schedule should we “mitigate overdraft” accrued since 2014?**
§ 354.44 (b)(2) (p 28)
§ 355.4 (b)(6) (p 32)
§ 356.2 (b)(5)(B) (p 36)
- 3. How should our “water budget” prioritize water use by “users and uses”?**
§ 354.18 (b)(3) (p 16)
§ 355.4 (b)(4) (p 32)
- 4. How should we enforce our “water use” priorities?**
§ 356.2 (b)(4) (p 35)
- 5. How aggressively should we investigate new water sources?**
§ 354.44 (b)(6) (p 28 re importing)

INDIAN WELLS VALLEY GROUNDWATER AUTHORITY POLICY ADVISORY COMMITTEE

Indian Wells Valley Water District 500 W. Ridgecrest Blvd. Ridgecrest, CA 93555
(Meeting place may vary)

2017 Meeting Schedule

June 2017

- Thursday, June 29, 2017 @ 10AM

July 2017

- Thursday, July 20, 2017 @ 8AM

August 2017

- Thursday, August 3, 2017 @ 6PM
- Thursday, August 24, 2017 @ 6PM

September 2017

- Wednesday, September 13, 2017 @ 6PM
- Thursday, September 21, 2017 @ 6PM

October 2017

- Thursday, October 12, 2017 @ 6PM
- Wednesday, October 18, 2017 @ 6PM

November 2017

- Thursday, November 2, 2017 @ 6PM

December 2017

- Wednesday, December 6, 2017 @ 6PM
- Wednesday, December 20, 2017 @ 6PM