

INDIAN WELLS VALLEY GROUNDWATER AUTHORITY POLICY ADVISORY COMMITTEE

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

MINUTES

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

The meeting was called to order by Chair Thomas at 6:05 pm.

Policy Advisory Committee – ROLL CALL

7 Present: 4 absent – Rodney Stiefvater, Edward Imsand, Scott O’Neil, Renee Westa-Lusk

Non- Voting Members

3 Present: 1 absent – Ryan Klaush

2. PUBLIC COMMENTS

Mr. Nugent announced that Mr. Stiefvater was absent due to harvest and asked if the Board had taken action on allowing alternatives.

3. APPROVAL OF MINUTES

Motion by Mr. Panzer and second by Mr. Fisher

Passed – 7 Ayes – Quist, O’Neil, Wilson, Panzer, Katzenstein, Fisher, Thomas, Godard

No – none , 4 absent

IWVGA PAC COMMITTEE
Meeting of August 3, 2107

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?

Mr. Panzer made a presentation of the submitted agenda request and handout. Recommended that results be created and submitted to TAC, GAS and Water Resources Manager by end of September. He reported that the TAC today adopted the number of priority of importing water. Other materials (attached) were handed out and discussed.

Ms. Oviatt suggested a matrix with the various policy recommendations submitted and discussed be created for the next meeting and this matter be continued to next meeting.

PUBLIC COMMENTS –

Mr. Nugent suggested we add a F-funding, G-outreach

Ms. Decker believes that enforcement policies need to be discussed. Mr. Kelso thinks the PAC is on track and the TAC is off track. Ms. Merk wants the handouts available to the public.

Ms. Oviatt requested that materials that are brought by PAC members will be provided to the public and included in minutes if PAC member bring at least 15 copies. The agenda and minutes which include the materials, will be posted online. And two public copies of the PAC notebook materials will be placed on the back table each meeting for review.

Motion by Mr. Godard and second by Ms. Quist to put this on the agenda for next meeting with a matrix for discussions and to use to organize discussion.

Passed – 7 Ayes – Quist, O’Neil, Wilson, Panzer, Katzenstein, Fisher, Thomas, Godard

No – none , 4 absent

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

Kennedy/Jenks Consultants made a powerpoint presentation which is attached. They recommended they be retained to assist with the application. And recommended the Board have an annual funding plan and prioritized plans. Ms. Thomas discussed here handout on EKCRD ideas for potential projects.

6. PROPOSED 2017 PAC SCHEDULE FOR REFERRAL TO GSA FOR ADOPTION.

Motion by Mr. Godard and second by Ms. Quist to approve the proposed schedule and refer to the GSA for adoption.

Passed – 7 Ayes – Quist, O’Neil, Wilson, Panzer, Katzenstein, Fisher, Thomas, Godard

No – none , 4 absent

7. DISCUSSION AND RECOMMENDATIONS FOR A STRATEGY FOR OUTREACH TO PUBLIC, TRIBES AND PROPERTY OWNERS.

Ms. Wilson reported as a non-voting member of Board of Realtors to update them on PAC Activities. Mr. Katzenstein and Mr. Fisher is working with the domestic well owners. Mr. Godard will be meeting with Trona to bring recommendations to GSA board. Ms. Thomas is doing outreach to Inyokern CSD. Ms. Quist has a small agricultural group with horse ranchers. Suggestions for outreach included Facebook page for water and dedicated to the GSA, quarterly newspaper column or email newsletter, contact Farm Bureau for outreach, surveys to determine level of understanding, mailers to guarantee that at least every person gets one mailer to educate them on what this means and how to get information, paying for ads on facebook, keep the Inyo mono IRWMP apprised. Funding for the efforts should focus on what grants we need for outreach and disadvantaged communities. The gaps that were identified: City of Ridgecrest residents, small business owners, Trona Municipal Advisory Council (MAC). Chair Thomas thanked the newspaper for attending and writing articles.

PUBLIC COMMENTS –

Mr. Nugent offered \$1500 for website development

Ms. Decker asked how does a disadvantaged community grant benefit the sustainability of the groundwater basin?

Ms. Mead acknowledged the amount of outreach and public involvement being done at the PAC meetings.

Motion by Mr. Godard and second by Ms. Quist to continue the item to the next agenda

Passed – 7 Ayes – Quist, O’Neil, Wilson, Panzer, Katzenstein, Fisher, Thomas, Godard

No – none , 4 absent

8. FUTURE AGENDA ITEMS DISCUSSION

Danish Study report presentation

Disadvantaged community report on Trona and recommendation to Board.

9. COMMITTEE MEMBER ANNOUNCEMENTS OR COMMENTS

None

10. ADJOURN to next scheduled meeting – August 24, 2017 6 pm

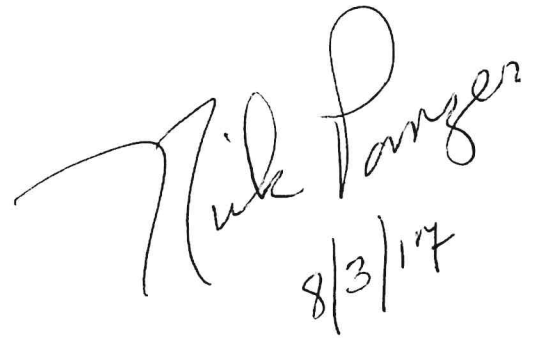
Motion by Ms. Quist and second by Ms. Wilson

IWVGA PAC COMMITTEE

Meeting of August 3, 2107

11. Passed – 7 Ayes – Quist, O’Neil, Wilson, Panzer, Katzenstein, Fisher, Thomas, Godard
12. No – none , 4 absent Adjourned at 8:15 pm.

Comments on PAC Agenda Items for August 3, 2017 Meeting
From Nick Panzer to Fellow PAC Members



Nick Panzer
8/3/17

AGENDA ITEM 4- GSP POLICY QUESTIONS

BACKGROUND

- GSA would like our GSP policy proposals before it approves final GSP Elements (Bylaws 5.9).
- After GSA approves final GSP Elements, it will a) direct the WRM to prepare a draft GSP in accord with such approval (Bylaw 5.9, last paragraph), and b) direct the TAC to draft Prop 1 grant requests that target approved GSP Elements.

QUESTION

Can we deliver GSP policy proposals to the GSA this month or next at latest? If not, then when?

RECOMMENDATION

Lest we bottleneck GSA efforts to comply with SGMA, let us ***today*** give GSA, WRM, and TAC a date by which they can expect our policy proposals.

AGENDA ITEM 5- GRANT FUNDING FOR GSP PROJECTS

BACKGROUND

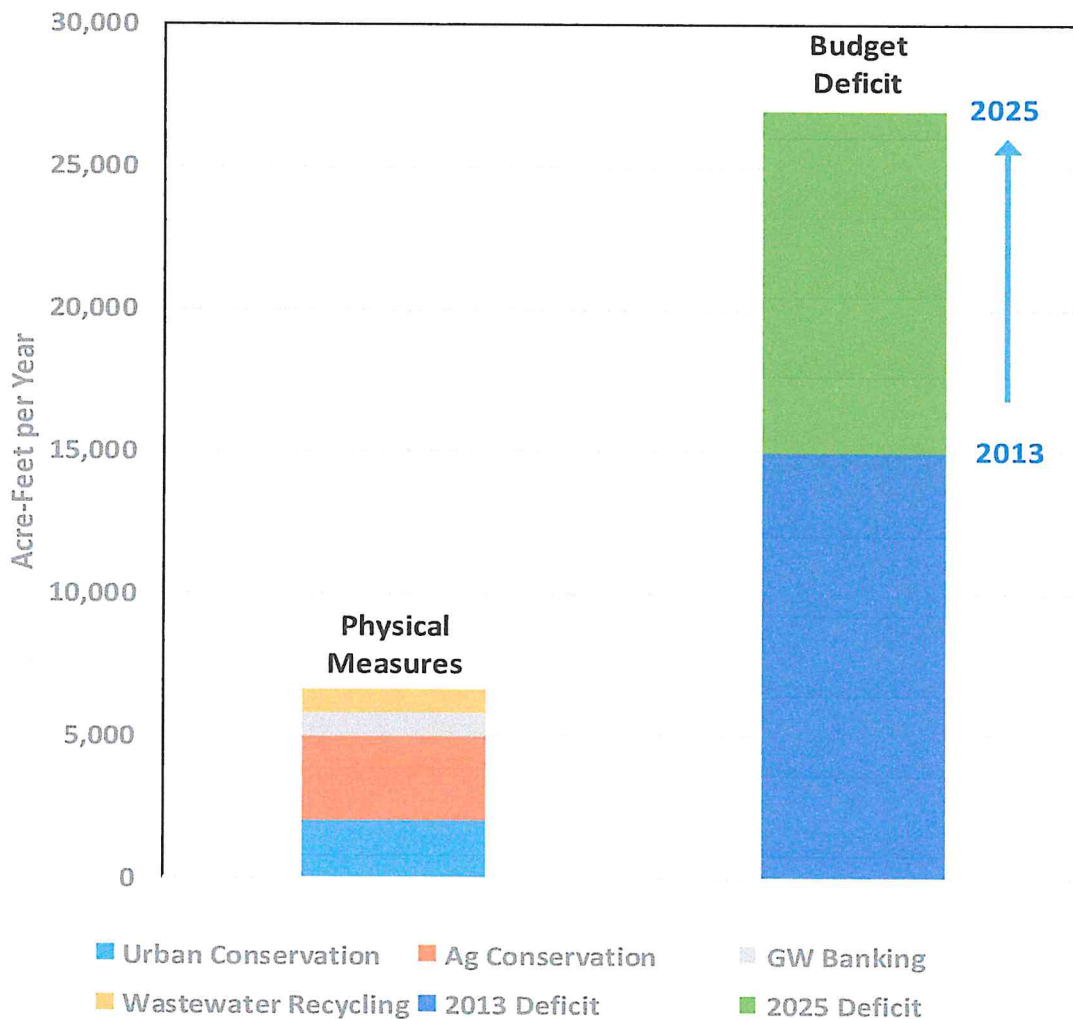
DWR will competitively score our Prop 1 grant request based on a) how completely our draft GSP complies with GSP Regulations, and b) how convincingly we show that we have the financial resources to complete the proposed grant project without Prop 1 funds. In short, Prop 1 means to reward those GSAs that most convincingly prove their will to completely comply with GSP Regulations without help from Prop 1.

RECOMMENDATION

Since our GSA cannot prepare a compelling Prop1 grant request until it first approves well-coordinated GSP Elements that comply with GSP Regulations, PAC should tightly focus on policy proposals and a delivery deadline.

The following bar chart, titled, “How are we doing so far?” was originally presented by Gus Yates of Todd Engineers on February 12, 2014 at the Inyokern Senior Center. This meeting was the first public presentation of the results of the Todd Engineers Report on the status of the Indian Wells Valley (IWV) groundwater. This bar chart clearly depicts the magnitude of the water budget deficit. The water budget deficit is defined as the difference between the IWV Basin recharge and the known pumping totals. The physical measures are those elements that could offset some of the deficits. The Ag conservation component also includes an estimate of the amount of irrigation water that is returned to the aquifer through percolation. The Groundwater Banking feasibility project was originally investigated by the IWV Water District with Los Angeles DWP some years ago, but no agreement was reached. Wastewater recycling could have the potential of adding the small amount indicated, but would require significant infrastructure costs to implement.

How are we doing so far?



Other measures have been discussed like use of treated brackish water. It is very important to realize that brackish water does not add to the supply side of the IWW Basin water budget, since it has already been included. The brackish water in the IWW basin is not a “new” water source and pumping this water simply extends the Basin over-pumping that we are trying to reverse. Furthermore, pumping of brackish water in the IWW Basin has a number of potentially very serious negative consequences including land subsidence in pumped areas.

There are only two basic options to bring the water budget into balance:

1. Reduce the demand or
2. Increase the supply

The bar graph clearly shows the physical measures available that do help, but fall significantly short of the required amounts to attain the water balance that has been directed by SGMA. **The only viable solution to increasing the supply in the amounts that will be required to bring our aquifer into balance will be through imported water from sources outside of the Indian Wells Valley.**

#5

Board approval at EKCRC Board meeting 8/02/17
Ideas for Potential Projects for Prop. 1 Category 2 Tier 1 funding and other funding opportunities
IWVGA / PAC

- 1) Seriously explore how to acquire imported water to augment gw resources, including the number of acre feet to be obtained, the cost and the method of delivery to the IWV.
- 2) Conduct a survey of all wells in IWV.
- 3) Wastewater reclamation/reuse proposal (See attached more detailed information)
- 4) Brackish Water Study Group proposal

Separate proposal from DACS for DAC Prop 1 Category 1 funding
Check list on page 8 of PSP for Groundwater Sustainability Plans and Projects
EKCRC recommends establishing a scientific process of well monitoring for DACs to be included in overall well monitoring program for IWV perhaps including use of instrumentation and pressure transducers.

It is important that the IWVGA Water Resources Manager, or others involved in preparation of the Prop.1 Category 1 application for DAC funding, be in direct contact with DACs to solicit their ideas for the DAC Prop 1 Category 1 proposal

Other ideas for other grants for funding.

Make use of partnering opportunities with California Rural Water Association for training workshops for small water systems and DACs.

Check out use of State Revolving Loan Grants and Programs and USDA Rural Development Grants and Programs for wastewater funding and also for Household Water Well System Grants in California Program 101 (see attached). Mojave Water Agency, California Rural Water Association and Mojave Desert RCD currently have a program underway for the Newberry Springs area and could supply more details. (See attachments.)

Recommendations from EKCRC Water Resources Committee Meeting 7.17.17
Reviewed, amended and approved at EKCRC Board meeting 8.02.17

Donna,

Effluent flow in 2015 was 2.2 MGD
Equivalent to 2,464 AF

Notes / Information
From
Sam Ratjara

IF YOU HAVE SPECIFIC QUESTIONS, I WOULD BE GLAD TO ANSWER THEM.

The city at one time was producing about 2 million gallons of wastewater effluent per day. That is more than 2,200 acre-feet per year although the number has gone down a little do to conservation. That water is currently being disposed of via evaporation ponds, a small alfalfa field, and a limited amount used on the golf course. This approach actually costs the city thousands of dollars per year, and there is little beneficial use of the treated wastewater.

Even with conservation there are probably 1,500 acre-feet of wastewater effluent that could be recycled for a beneficial use. The cost of constructing a tertiary treatment facility is cheaper than the cost of constructing a secondary treatment facility. The State Revolving Fund interest rate for the secondary treatment is about 1.8%. The interest rate on tertiary treatment is 1.0%, and the state provides a 50% grant for most aspects of wastewater recycling and distribution.

A tertiary treatment capability should, if done properly, reduce the cost of the facility by replacing higher cost tertiary components with less expensive tertiary components. There are at least two good examples of how tertiary treatment will decrease the overall cost of our new wastewater treatment plant.

First, the current plan for a new secondary treatment plant calls for a new force main to transfer effluent from the NAWS site to the city site at the cost of five million dollars. The plan assumes the new force main is needed because the existing force main will be needed to transfer secondary effluent from the city site to the NAWS site for evaporation. If we perform tertiary treatment, the second force main is not needed, and we will save five million dollars.

Secondly, existing secondary treatment plan calls for the construction of additional evaporation ponds at the cost of four million dollars. Those additional evaporation ponds should not be needed if we perform tertiary treatment. In total, we could save nine million dollars by going to tertiary treatment. The tertiary treatment cost is estimated to be eight million dollars.

The one critical factor regarding the tertiary treatment is that the 1% loan and the 50% grant require we establish a market for the tertiary treated water prior to the loan application. The Ridgecrest consultant has advised the city that we are behind the power curve if we want to get in line for the loan and the grant, but the city has yet to take the consultant's advise seriously.

One issue with the tertiary water market is that many of the uses are for the summer months only for parks or farmland. In order for the market to be affordable, it is probably going to require a year around market. Mayor Breeden has discussed this a little with Searle's Valley Minerals, and they may be a year round market. They can apparently use tertiary water for some operational need. I'm not sure of the details.

The state of California has be recently doing some technology work regarding Direct Potable Reuse, which treats the wastewater to the level such that it can be directly injected into the water system. This would give a

year round market, but the approach has only been implemented in a few locations. A backup option, Indirect Potable Reuse, would require a storage or holding capability, and is therefore less desirable.

A second recycling effort associated with the wastewater is recycling the bio solids. This can be recycled into heat energy, biofuels, or a number of other products. California will be forcing us into this type of thing in the near future. One of the negatives of tertiary treatment is the energy consumed by the process. Bio solids recycling is one possibility of generating the energy to implement the tertiary treatment affordably.

Sam and I will be talking to BLM in the near future to see if there might be some synergism between the disposal of their burro waste and the recycling of our bio solids.



**United States Department of Agriculture
Rural Development**

Household Water Well System Grants in California Program 101

Program Status: CLOSED

Application Deadline: February 6, 2017

Notice of Solicitation of Applications (.PDF)

What does this program do?

This program helps qualified nonprofits and tribes create a revolving loan fund to increase access to clean, reliable water for households in eligible rural areas.

Who may apply for these grants?

Nonprofits that have:

*California Rural Water Association
is a nonprofit organization*

- Expertise and experience promoting the safe, productive use of individually-owned household water wells systems
- Legal authority to act as a lender
- Sufficient expertise and experience in lending activities
- Financial, technical and managerial capacity to comply with relevant federal and state laws and regulations

How may grant funds be used?

Grant funds may be used to help a nonprofit create a revolving loan fund for eligible individuals who own and occupy a home in an eligible rural area. The fund may be used to construct, refurbish, or service individually-owned household water well systems. Terms for the loans include one percent fixed interest rate, 20-year maximum term, and an \$11,000 maximum loan per household.

NOTE: Loans may **not** be used for home sewer or septic systems.

What is an eligible area?

- Rural areas and towns with populations of 50,000 or less - check eligible addresses
- Tribal lands in rural areas
- Colonias

Are matching funds required for the grant?

Yes: The nonprofit must contribute at least 10 percent.

- Matching funds may be from the non-profit applicant or a third party.
- Matching funds may **not** be in-kind.

Note: Homeowners seeking a loan should contact RD for details on nonprofits participating in this program.

How do we get started?

- Electronic applications are accepted through www.grants.gov.
- Paper applications may be sent to Water Programs Division, Rural Utilities Service, Stop: 1570, Room 2234-S, 1400 Independence Avenue SW., Washington, DC 20250-1570.

Who can answer questions?

- Contact your local RD office
- Derek Jones, Water & Environmental Programs office - (202) 720-9640

What governs this program?

- Code of Federal Regulations 7 CFR 1776
- Section 306E of the Consolidated Farm and Rural Development Act

Why does USDA Rural Development do this?

This program helps communities improve access to safe, reliable drinking water for households in rural areas.

Forms & Resources

NOTE: Please select your state in the dropdown menu above to find the state office contact information for this program and speak to a program specialist before attempting to fill out any forms or applications. This will save you time in completing your application. Please also refer to the application materials listed below.

FY 2017 Household Water Well System Guide

Contacts

This program is administered centrally in California.

State Office:

Main Phone Number: (530) 792-5800

USDA Rural Development
Attn: Water Programs
430 G St, Agency 4169
Davis, CA 95616

Pete Yribarren, California Water Programs Director
(805) 928-9269 ext. 107

Dave Hartwell, CP Specialist
(530) 792-5817

#4

3 August, 2017

To:

Indian Wells Valley Groundwater Authority
Policy Advisory Committee (PAC)

From:

West E. Katzenstein
C. Lyle Fisher
Domestic Well Owners (DWO) Representatives on PAC

Subject:

DOMESTIC WELL OWNERS OBJECTIVES AND RECOMMENDATIONS

Fellow members of the PAC:

As representatives of the IWW domestic well owners (DWO), we would like to share high-level objectives and requirements of domestic well owners regarding management of groundwater in the Indian Wells Valley Basin. Additionally, we offer our recommendations on agenda items and on other topics of recent interest in the proceedings of the PAC.

1. **Domestic Well Owners Objectives**

Groundwater levels continue to drop in Basin wells including domestic wells, and this decline in water levels has accelerated greatly in areas where pumping has increased. Groundwater is the distribution system for domestic wells. This groundwater distribution system services major areas of the IWW groundwater Basin where no other distribution system exists. It would be a major expense to the GSA to replace the natural groundwater distribution system with man-made infrastructure, in the event that the GSA fails to manage groundwater levels and quality to protect domestic wells.

A description of the DWO objectives is contained in the attached document, titled: ***'IWW Domestic Well Owners Association Position Summary'***.

The DWO representatives recommend the following **URGENT** near-term goals:

- Stabilize groundwater levels and quality in areas used for domestic wells, at levels that protect domestic wells.
- Restore groundwater in areas used for domestic wells to levels that existed in 2015, to rectify the low margin that many domestic wells now experience.
- Begin the task to obtain imported water, even before the GSP is completed.
- Begin the task to define and design the infrastructure for storage and distribution of imported water, even before the GSP is completed.

2. Summary of Groundwater Balance in the Indian Wells Valley

The attached document, '*DWO POINT PAPER #11 – IWV Water Budget Deficit*', summarizes the groundwater situation in the IWV. This document, originally presented by Gus Yates of Todd Engineers on February 12, 2014 at the Inyokern Senior Center, shows the importance of importing water to the future of the IWV. It also shows that wastewater treatment could only be a small contribution to the solution of the IWV water supply shortfall.

Although it has been talked about for years, it is important to realize that the brackish water “reserves” in the vicinity of the China Lake Playa and under Brown Rd to the West are not new water sources. These components of the Basin aquifer are hydraulically connected to the higher quality water we are already utilizing. This water is already accounted for in our water balance. The utilization of treated brackish water is not a useful component of a long- term sustainability plan.

3. Questions to be Addressed by the PAC.

Documents provided by the DWR provide specific guidance for the preparation of the Groundwater Sustainability Plan (GSP). These documents include:

- 'Guidance Document for the Sustainable Management of Groundwater - Groundwater Sustainability Plan (GSP) Annotated Outline'
- 'Guidance Document for the Sustainable Management of Groundwater - Preparation Checklist for GSP Submittal'
- 'Sustainable Groundwater Management Program - Groundwater Sustainability Plan (GSP) Emergency Regulations Guide'
- California Code of Regulations; Title 23. Waters; Division 2. Department of Water Resources; Chapter 1.5. Groundwater Management; Subchapter 2. Groundwater Sustainability Plans

Much of the technical foundation required in the GSP has already been developed. However, the 'Sustainable Management Criteria' required in sub-article 3 of article 5 of the California Code of Regulations have yet to be developed, and will be critical drivers for the GSP. **The regulations mandate that the 'Sustainable Management Criteria' include:**

- Sustainability goals (indicators)
- Criteria to define undesirable results for each sustainability indicator
- Minimum thresholds for each sustainability indicator
- Measurable objectives for each sustainability indicator
 - Milestones at 5, 10, 15, and 20 years

In order to satisfy the 'Sustainable Management Criteria' listed above, **the GSA will need to provide definitive guidance for the following key parameters of the GSP:**

- Schedule to stabilize groundwater levels
- Minimum thresholds for groundwater levels
- Schedule to provide imported and/or reclaimed water
- Schedule to restore groundwater levels to 2015 levels

- Minimum thresholds for groundwater quality
- Pumping allotments to stabilize wells
- Pumping allotments to restore groundwater levels
- Milestones to evaluate progress and update allotments
- Infrastructure goals for storage and distribution of imported and/or reclaimed water

The PAC should provide alternatives and tradeoffs to the GSA for the above parameters. The final decisions on these parameters must come from the GSA.

The DWO representatives of the PAC recommend that the key parameters listed above be addressed by the proceedings of the PAC. Note that these parameters are closely related to the agenda items proposed by Mr. Panzer.

4. **'PAC SGMA Funding Working Group'.**

The concept of a 'PAC SGMA Funding Working Group' was proposed by Mr. Imsand at the PAC meeting of 20 June, 2017. The Domestic Well Owner (DWO) representatives concur that such a working group is urgently needed. However, we do not agree with the proposed PAC membership of this working group. The proposed membership has no DWO representation. All constituents groups should be represented equally. We request that at least one DWO representative be appointed to any working group that is established to address the details of the grant proposals, and that all PAC constituents be represented equally.

IWV Domestic Well Owners Association Position Summary

Preamble

The IWV Domestic Well Owners Association (DWOA) Representatives have read and carefully studied the Todd Report and many of the existing published technical reports concerning the groundwater overdraft in the Indian Wells Valley groundwater Basin 6-54. **1)** We find the Todd Report to be an accurate summary of the conditions of the critical groundwater overdraft that exists in this Valley. Since we have no other existing source of supply this shortfall is unsustainable. **2)** We further find that the recommendations made in this report provide valuable guidance for the resolution of this economic disaster that is unfolding. **3)** We specifically find the Todd conclusion that imported water will be required to maintain existing water uses is accurate. **4)** We request the County of Kern provide technical and legal support to the citizens of the IWV to put in place the State mandated Groundwater Sustainability Agency (GSA) as soon as possible. **5)** The Agency, in turn, will develop a timely, effective and equitable plan and organization to ensure a future water supply for the IWV. **6)** The Todd Report recommendations should be closely followed in most aspects. *We cannot afford to wait any longer.*

Objectives

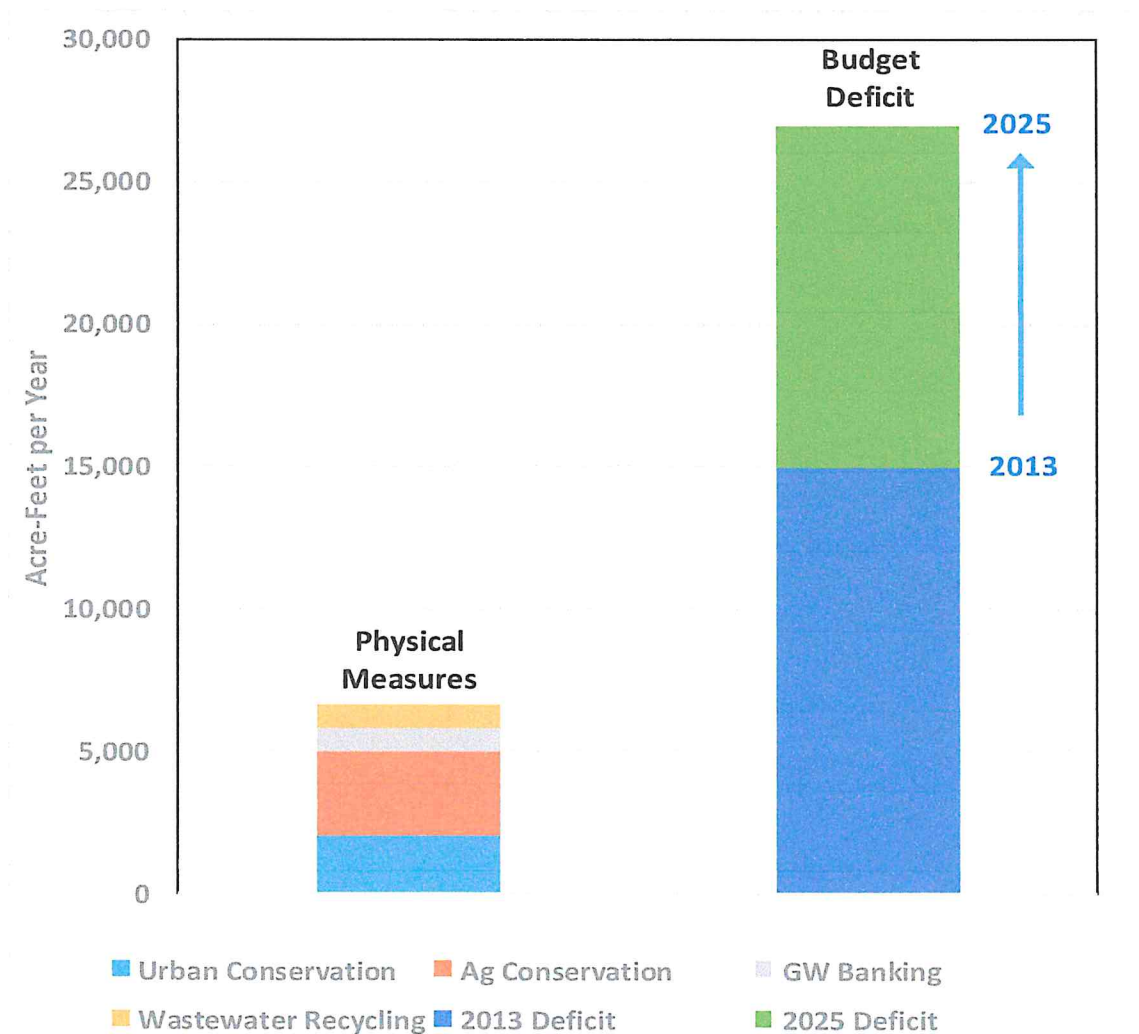
- 1) Ensure the citizens of the IWV with a sustainable water supply and economy.**
- 2) Manage the water supply in the IWV so that all Basin wells, including domestic wells, remain viable both in quantity and quality**
- 3) In the event that vulnerable shallower domestic wells do fail due to overdraft or water quality deterioration, the necessary infrastructure to supply water to those citizens shall be put in place and the costs borne by all water users in the IWV.**

To wit, the positions:

- 1) Given the Basin critical overdraft and the rapidly deteriorating condition brought about by new groundwater production demands, a moratorium on new well permits in the IWV basin should be executed by the County immediately. This moratorium would exclude repair or redrilling of existing wells that have failed. This moratorium would continue until the overdraft has been stabilized.*
- 2) The IWV Groundwater Sustainability Agency (GSA) must be formed immediately and must provide equitable representation for all water users. The County would provide staff services initially.*
- 3) When the moratorium is lifted, a water supply assessment will be required for all proposed new wells excluding de minimis users.*
- 4) The GSA Board would function as a body independent from any and all existing IWV or County organizations. Citizen advisory committees would include representatives from the mutual water companies, domestic well owners, ag interests, SVM, the Navy, and public water purveyors.*
- 5) A realistic schedule will be developed, maintained, and faithfully followed. All milestones in this Plan would be set using objective criteria coming from best available science. An accurate Basin groundwater model based on the USGS Modflow will provide essential guidance.*
- 6) It would be the specific responsibility of this Agency to manage and regulate the future groundwater supply and in so doing stabilize the existing declining water levels and quality in accord with a publicly developed, State approved Plan. This plan will confirm that the highest priority use of basin groundwater is for health and safety of all residents.*
- 7) The GSA would also specifically be charged with the responsibility and authority to negotiate, and bring imported water into the basin for direct use, recharge or storage. This effort would be directly incorporated into the Plan. This is an urgent need coming from the observed severe Basin overdraft..*
- 8) All IWV water users would benefit by the additional water made available and costs would be shared equitably across all users.*
- 9) Establish minimum thresholds for groundwater status and a hard schedule for imported water delivery. A violation shall lead to restrictions on pumping, such that total pumping equals recharge.*
- 10) The positions offered here are essential to the future well being to **all** IWV citizens- not just domestic well owners. The urgency of the associated management activities cannot be over emphasized.*

The following bar chart, titled, “How are we doing so far?” was originally presented by Gus Yates of Todd Engineers on February 12, 2014 at the Inyokern Senior Center. This meeting was the first public presentation of the results of the Todd Engineers Report on the status of the Indian Wells Valley (IWV) groundwater. This bar chart clearly depicts the magnitude of the water budget deficit. The water budget deficit is defined as the difference between the IWV Basin recharge and the known pumping totals. The physical measures are those elements that could offset some of the deficits. The Ag conservation component also includes an estimate of the amount of irrigation water that is returned to the aquifer through percolation. The Groundwater Banking feasibility project was originally investigated by the IWV Water District with Los Angeles DWP some years ago, but no agreement was reached. Wastewater recycling could have the potential of adding the small amount indicated, but would require significant infrastructure costs to implement.

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1. Reduce the demand or
2. Increase the supply

The bar graph clearly shows the physical measures available that do help, but fall significantly short of the required amounts to attain the water balance that has been directed by SGMA. **The only viable solution to increasing the supply in the amounts that will be required to bring our aquifer into balance will be through imported water from sources outside of the Indian Wells Valley.**

Announcements

Status of Action items for IWVGA PAC

June 29, 2017 First meeting of PAC

#7 on meeting agenda – Action items assigned to PAC by IWVGA Board (see IWVGA Bylaws Section 5.4 p. 6 Standing Committee Direction)

- a. How do we bring various interests, needs and dollars to allow for continued growth and additional growth?
- b. Funding options to address solutions.
- c. Outreach study and program Federal, State, and Local.
- d. Become experts on Proposition 1 funding.
- e. Coordinate Proposition funding priorities.

Items b and c addressed on PAC agenda for August 3, 2017 meeting.

July 20, 2017 Second meeting of PAC

Actions taken and reported to IWVGA Board. Handout presented to IWVGA Board members regarding 13 Questions/Clarifications needed by PAC that had been discussed and reviewed at the 8 AM PAC meeting on July 20, 2017.

- 1) Recommend the GSA initiate the procedure to add the Inyokern Community Services District (ICSD) as the Disadvantaged Community representative voting member on the PAC and have the ICSD be allowed to make an appointment to the IWVGA TAC.
Have the GSA consider adding a second Disadvantaged Community voting member for Trona giving them the ability to make an appointment to the IWVGA TAC. This second recommendation to be implemented after receiving information from the Trona community and Searles Valley Minerals at a later GSA Board meeting.
- 2) Action taken by PAC to accept the offer of services of Eddy Teasdale and Kennedy-Jenks, at no cost to PAC, to assist with list of grant opportunities including Proposition 1 and deadlines.
- 3) Recommendation that the IWVGA Board consider a request for appointing Alternates for the PAC committee members.

Regarding the question of establishing of quorum for PAC. See IWVGA Bylaws Section 5.2 p. 6 which states that "A quorum of a committee shall be a majority of the appointed committee members that hold a vote."

Presented for review and input of PAC for the August 3, 2017 meeting

Dorine Thomas

**Item 5. Presentation by Kennedy/Jenks Consultants
Funding Opportunities/Deadlines For GSP
and Planning**

**Indian Wells Valley Groundwater Authority
Policy Advisory Committee**

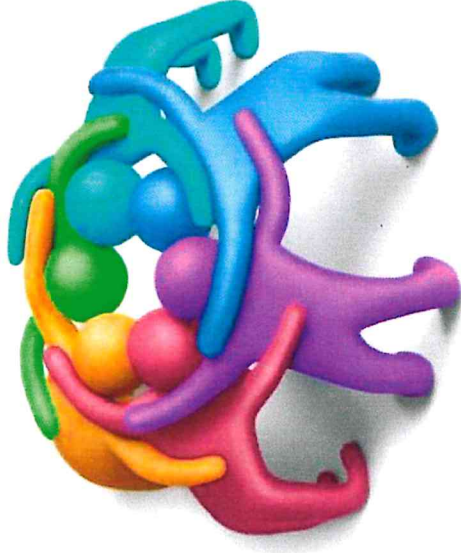
**Eddy Teasdale and Jacques DeBra
Kennedy/Jenks Consultants**

**August 3, 2017 @ 6:00 p.m.
Indian Wells Valley Water District**

Kennedy/Jenks Consultants – 98 Years Young

Client Services Review

Part of the Team



Planning

Design

Construction

Construction Management

Condition Assessments

Regulatory Compliance

Resource Planning: UWMPs, IRWMPs, Watershed

Special Studies

FUNDING!

■ \$500M in grants/loans and counting...

IWVGWA: PAC Meeting Presentation

Presentation Outline

Funding Background

Current Funding

Keys To Success

Next Steps



August 3, 2017 PAC Meeting

FUNDING BACKGROUND



Funding Programs Stimulate Project Activity

Why We Care!



= No Project

ASCE Report Card Water Infrastructure (Reiterates Funding Need)



- **National Drinking Water GRADE = D (2013)**
- **California Water GRADE = C (2012)**
- **California Water Investments = 44.5B (2035)**
- **Importance: Funding availability facilitates delivery of water infrastructure improvements**
 - CA started getting serious in 2000 (Prop. 13)

Especially important for areas with disadvantaged communities (DAC) – Inyo County qualifies as a DAC.

Traditional Funding Sources Many Programs Available

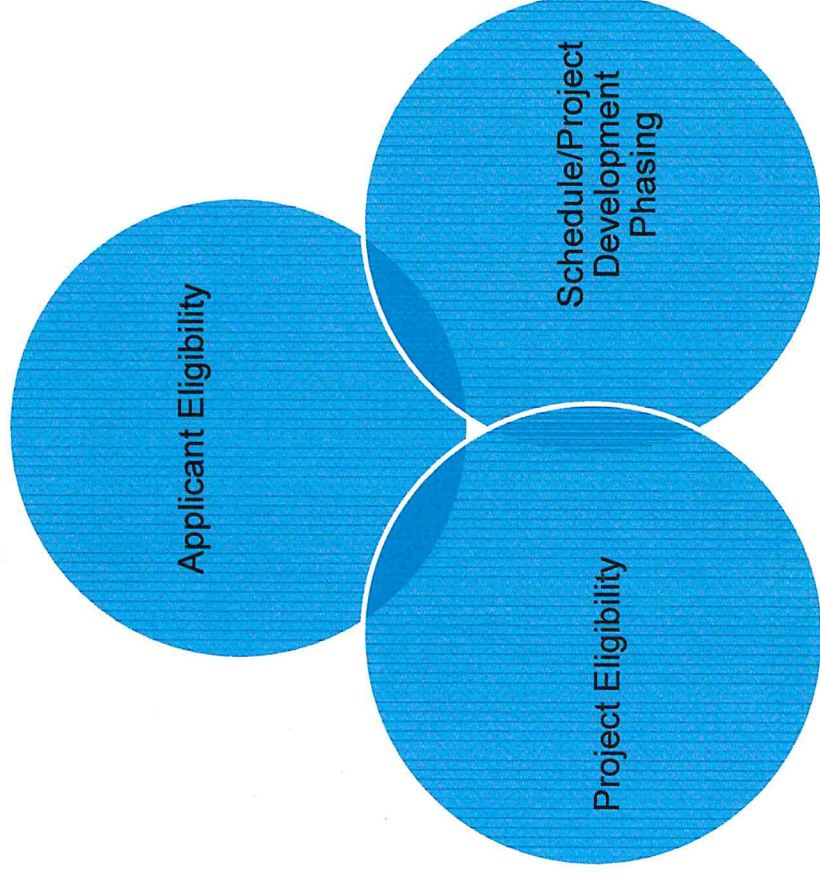
- **US Department of Agriculture and Rural Development (USDA)**
- **California Infrastructure and Economic Development Bank (IBANK)**
- **California Dept. of Housing and Community Development (HCD)**
- **California Dept. of Resources Recycling and Recovery (Cal Recycle)**
- **California State Water Resources Control Board (SWRCB)**
- **US Bureau of Reclamation (USBR)**
- **California Department of Water Resources (DWR)**

All funding programs have different applicant, project and schedule eligibility and criteria

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- **California Department of Water Resources (DWR)**

Having a Plan and Strategy maximizes returns...

When three conditions align...



Market Timing

- High Interest Rates
- Low Grant Availability

- High Interest Rates
- High Grant Availability

- Low Interest Rates
- Low Grant Availability

- Low Interest Rates
- High Grant Availability

1st



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CURRENT FUNDING



CA Water Bond Summary

Part of State's Overall Water Infrastructure Funding Strategy

<u>Bond Measure</u>	<u>Year</u>	<u>Amount (*)</u>
• Proposition 82	1988	\$ 0.006
• Proposition 204	1996	\$ 0.995
• Proposition 13	2000	\$ 1.970
• Proposition 50	2002	\$ 3.440
• Proposition 84	2006	\$ 5.400
• Proposition 1	2014	<u>\$ 7.545</u> ←
• Future (coming)	?	\$?

(*) = *billions*

California – Prop. 1 Funding

California Funding Needs - Next 10 Years = \$200 billion

California Funding Needs – Next 20 Years = \$500 billion

Purposes: reduce flood risk, provide safe reliable water supplies, and protect ecosystems.



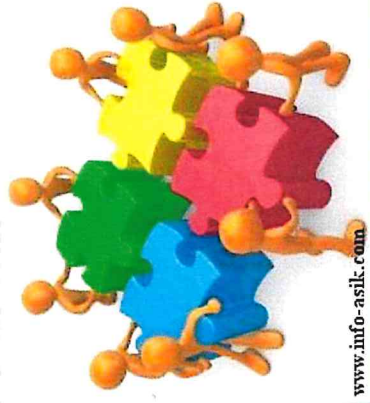
CA Water Infrastructure Plan – 3 R's

Prop. 1 Fund Investments

- **Restoration**
 - To restore the state's ecosystems and watersheds
- **Resilience**
 - To increase the state's ability to respond to variable hydrologic conditions (a.k.a. climate change)
- **Reliability**
 - To strengthen water supply reliability with an emphasis on water use efficiency and integrated strategies (e.g. storage, groundwater sustainability, safe drinking water, regional water management projects)

State IRWM-Related Grants (2003-2014)

- **Number of Projects Funded:** = 562
- **Total Funding Allocated:** = \$743M
- **Project Grant Maximum:** = 50%
- **Disadvantaged Communities** = 10% min.
- **Prop. 1: allocates \$510M IRWM grants (2016-18)**



2014 CA Water Bond

Figure IFP-02 CA (CA 2015 Five Year CIP Plan)

<u>Bond Category</u>	<u>Bond Allocation</u>
• Water Storage	\$ 2.700
• Watershed Protection/Restoration	\$ 1.495
• Groundwater Sustainability	\$ 0.900 ←
• Regional Water Reliability	\$ 0.810 ←
• Water Recycling	\$ 0.725
• Safe Drinking Water	\$ 0.520
• Flood Management	<u>\$ 0.395</u>
• Total	\$ 7.545

Prop. 1 was delayed from the 2010 and 2012 elections, and passed in 2014 with a 67% approval rating!

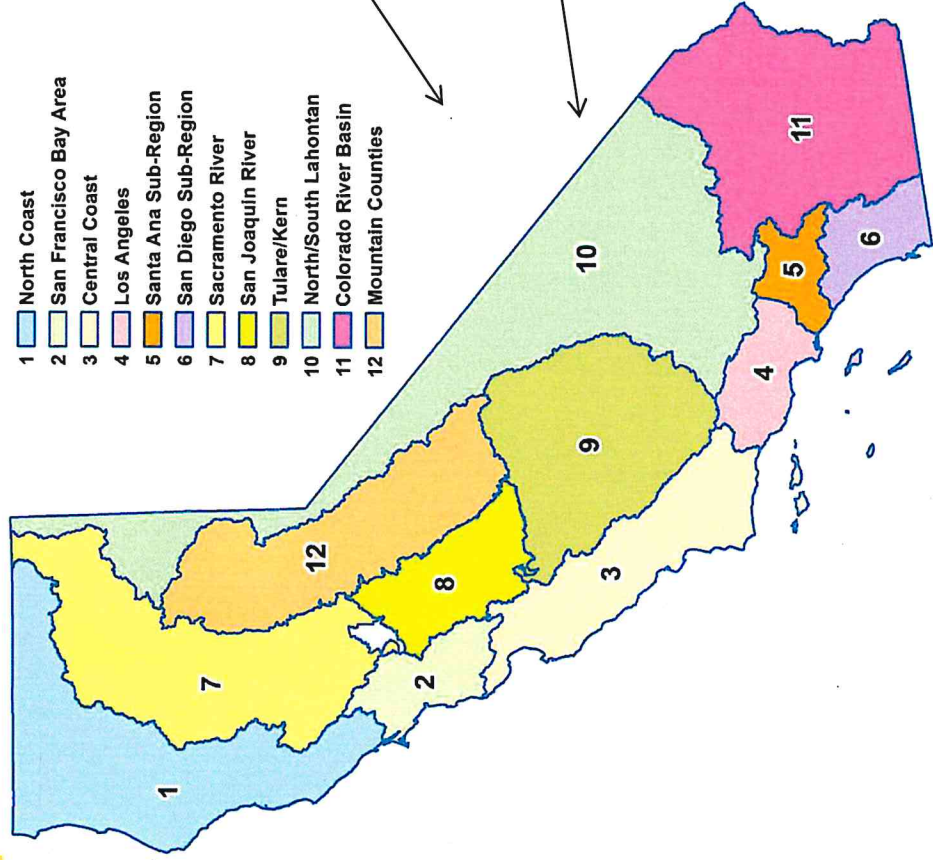
Prop. 1 Funding Purposes

Amount (billions)	Purpose	Ex.	Comments
\$ 0.52B	Drinking water contaminants & water quality	Cr6 Treatment Many constituents	Split between DWSRF/CWSRF
\$ 1.495B	Ecosystem restoration	Fish habitat Wetlands	Endangered Species Act
\$ 0.81B	IRWMP projects	Multi-beneficial projects	\$200M storm water projects
\$ 2.7B	Water Storage	Water storage projects, dams and reservoirs	Surface or groundwater
\$ 0.725B	Water recycling projects	Traditional Advanced Treatment	Also 1% water recycling loans
\$ 0.900B	Groundwater cleanup	Focus on man-made constituents	Larger scale
\$ 0.395	<u>State-wide flood protection</u>	<u>Flood Management State Flood Projects</u>	Split between <u>State/Local</u>

\$ 7.44B Most of the 2.5 B is covered by the federal Discretionary funds

Prop. 1 IRWM Funding

- 1 North Coast
- 2 San Francisco Bay Area
- 3 Central Coast
- 4 Los Angeles
- 5 Santa Ana Sub-Region
- 6 San Diego Sub-Region
- 7 Sacramento River
- 8 San Joaquin River
- 9 Tulare/Kern
- 10 North/South Lahontan
- 11 Colorado River Basin
- 12 Mountain Counties



Prop. 1 DAC Involvement
Lahontan Funding
Region = \$2.4M

Prop. 1 IRWM Funding
Lahontan Funding
Region = \$24.5M

Prop. 1 IRWM Funding Status

- **Most Recent Activity**

Funding Program	Funding Window	Status
Prop. 1 DAC Involvement	Sept. 2016-Mar. 2017 (IRWM Group Coord.)	Agreement in process CRWA Lead
Prop. 1 IRWM Implementation	Feb.- Apr. 2018 (IRWM Group Coord.)	TBD – based on IRWMP priority projects
Prop. 1 – Phase 2 Storm Implementation	Sept.-Nov. 2018 (IRWM Group Coord.)	TBD – based on Prop. 1 compliant IRWMPs

Prop. 1 Groundwater Sustainability Funding

- **Funding Information for 2017 SGWP Grant Solicitation**
- | <u>Funding Category</u> | <u>Total Funding \$*</u> | <u>Maximum Grant</u> |
|--------------------------------|---------------------------------|-----------------------------|
| • Category 1 - SDAC | > \$10M | \$1M per project |
| • Category 2 - Tier 1 | > \$15M-30M | \$1.5M per basin |
| • Category 2 - Tier 2 | > 46.3M-\$61.3M | \$ 1.0M per basin |
- *Minimum grant amount that can be requested is \$50,000.

Prop. 1 Groundwater Funding Eligible Applicant

- Category 1 proposals: public agencies, non-profit organizations, public utilities, federally recognized Indian tribes, California Native American Tribes, and mutual water companies (Water Code Section 79712.(a-b)). See Appendix B of the Guidelines for definition of these terms. Applicants must be severely disadvantaged (< 60% State-wide MHI).
- Category 2 proposals: GSAs for the respective basin for which the application is submitted. Only one application will be accepted per basin. However, an applicant with jurisdiction over multiple basins must submit one consolidated application and may request up to \$500,000 for additional basins, in addition to the maximum grant amount identified in Table 1.

Category 1 – Must Serve SDACs

Eligible Projects may include, but not limited to:

- Vulnerability assessments
- Feasibility studies to evaluate sustainable GW Mgmt. projects
- Design & Env't. planning of sustainable GW Mgmt. projects
- Technical assistance that facilitates GW planning participation
- Evaluate GW management needs that foster engagement of SDACs in sustainable GW planning activities
- Install and instrument a GW groundwater production well
- Connect communities on degraded GW to municipal supplies
- Retrofit existing GW wells to have water treatment capabilities
- Installation of meters on GW production wells
- Instrumentation of monitoring GW wells with pressure transducers

Category 2 – Groundwater Sustainability Plans

- Eligible project types include those activities associated with the planning, development, or preparation of GSP(s) that will comply with and meet the requirements of the GSP Regulations. <See SGMA code references>

Prop. 1 SGWP Funding Status

- **Most Recent Activity**

Funding Program	Funding Window	Status
Prop. 1 SGWP Category 1: SDAC Proj.	Aug. 2017- Oct. 2017 (IWVGWA Coord.)	Go/No-Go Decision Application Prep. ?
Prop. 1 SGWP Category 2: GSA	Aug.2017 - Oct. 2017 (IWVGWA Coord.)	Go – SGMA GSP Code Application Prep. ?



August 3, 2017 PAC Meeting

KEYS TO SUCCESS



Planning For Funding Success

Project Phases:

- **Planning**
 - **Pre-Design**
 - **Preliminary Design**
 - **Final Design**
 - **Construction**
 - **Construction Management**
 - **Start-up**
- 
- ```
graph LR; P[Planning] --- B[]; PD[Pre-Design] --- B; PD2[Preliminary Design] --- B; B --- Box[Develop/Incorporate Funding Plan Early];
```
- **Develop/Incorporate Funding Plan Early**

# Matching Your Project With Best Available Funding Options

## Funding Program Criteria:

- Eligible Applicant
- Eligible Project
- Alignment With Preferences
- Timing
- Project Stage
- Project Implementation Schedule
- Governance – lead agency, fiscal agent, other
- Local Support/Legal Action/Governance

**Deal Killers: CEQA, Land Acquisition, Prop. 218, Governance**

# Funding Strategy/Plan – Ongoing Journey

- **Updated Planning yields best funding results**



## Next Steps

- **Final decisions on 2017 SGWP funding cycle pursuits**
  - Go/No-Go on SGWP DAC and GSP funding applications
  - Support services to prepare/submit funding application(s)
- **Resources to prepare and submit funding application**
  - Recommendation is to secure funding support services
- **Governance delivery expectations if funding approved**
  - PAC and TAC coordination – prioritization/funding need/funding plan
  - PAC and TAC funding application review
  - Board approval of funding plan (FY17-18)

# Questions?

## Contact Information:

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**Kennedy/Jenks Consultants**  
**Engineers & Scientists**