

# Draft Environmental Impact Report for the Indian Wells Valley Water District Water Supply Improvement Project

#### **Draft EIR COMMENTS**

Public Meetings
November 8, 2011, Inyokern Senior Center
November 9, 2011, Ridgecrest City Hall Council Chambers

Please use this page to submit your comments on the Draft Environmental Impact Report (EIR) prepared for the District's Water Supply Improvement Project. Your comments are an important part of creating a comprehensive Final EIR. When making your comments, please be as specific as possible.

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	ragger Valley Water District 29/500 W. Ridgecrest Blvd. CA 93555
Email: iwvw	d@iwvwd.com
All comment	s must be postmarked by December 9, 2011.
Commen	nts
Please provi Thank you.	de your comments below. If you need additional space, please use the reverse side of this sheet.
	ATTachad

7 December 2011

Board of Directors Indian Wells Valley Water District PO Box 1329 Ridgecrest, California 93555

#### Dear Board Members:

I am writing in reference to the Indian Wells Valley Water District, Draft Environmental Impact Report (EIR) for Water Supply Improvement Project (WSIP).

I request the following questions, issues, and comments submitted here, be addressed in the Final EIR:

- 1. Peak Pumping Day. Using the 2004 peak pumping day numbers for the 20% redundancy factor calculation is NOT representative of the current pumping requirements and should be eliminated. The 2004 numbers do not reflect the current downward trend. The inclusion of the 2004 number merely causes the peak pumping day requirement to be artificially high and unrealistic. Each year since 2004 the peak pumping day for the year has been steadily decreasing. For 2011 the peak pumping day was 12.865 million/gals which is well below the peak day of 2004 at 15.434 million/gal and strangely, to match the peak value this year, one would have to go back to 2006. The peak pumping days between 2006 and 2010 are significantly below the 12.865 value this year. More strangely, the pumping, one day before, and one day after this peak pumping day of 2011 were only 9.5 and 9.9 million/gal. Something seems to be strangely amiss with these numbers. Why was there about 3 million/gal per day less required the day before and the day after the peak day? Were storage tanks being refilled whose levels had been allowed lower to far?
- a. In August of 2011 Well 18 failed the day after the peak pumping day occurred. Well 18 was pumped very little on the peak day and Well 13 was not pumped at all. The WD had on the peak day a redundancy of nearly 30% for that day. Why is the scheduled time-line for the WSIP artificially compressed when there is no current requirement for any additional pumping? The claim that the WSIP is Urgently needed is a serious exaggeration. The demand numbers simply do not demonstrate a requirement for any additional capacity. If the WD believes that there will be any growth in the Indian Wells Valley (IWV) in the foreseeable future to justify this project, even the most optimistic 1% growth predicted by Kern Council of Governments (COG), someone has not been monitoring current events or watching any local, national, or world news. Further cuts in the Defense Budget are highly likely, which will not be good news for any possible growth potential at NAWS. One would think that the last thing that the WD needs to have is additional new debt at a time that this state and the federal government are in such a financial untenable situation. At least that is the recommendations that

have been heard many times from notable and knowledgeable economists. This entire WSIP just does not make any prudent sense.

- b. A subtle but more obvious intent of this project is to pump the cheaper better quality water from the SW field and reduce pumping in the intermediate field where the more costly arsenic treatment has to be done.
- c. What does nearly doubling the pumping capacity of an existing well do to the life expectancy of that well? Has any risk assessments been performed to predict the impact on the well from the greatly increased capacity? What will be the impact to adjacent WD wells that are in close proximity? Apparently, the WD has had experience with this problem in the past when the pumping capacity was doubled on an existing well. In essence the well was destroyed from being pumped to hard (well casing perforation failure?). One would think that some detailed analysis would be a requirement prior to undertaking this project to determine the potential risks to damaging the well.
- 2. Mutual Assistants Interconnection. The Water District has mutual assistant water interconnection agreements with the Navy and Searles' Valley Mineral. These water agreements have been in place for more than 20 years for the purpose of supplying water in an emergency. Water can be supplied to the Water District or from the Water District to one of the other agencies. The interconnection with the Navy was originally tested at a capacity of 3000 gal/min, which is more than the capacity of two currently equipped WD wells. The original intended purpose of the water interconnections as stated in the (Searles' Valley) agreement was specifically for equipment failures during peak pumping times and to meet the maximum day pumping requirements (While the interconnection agreement with the Navy has not been sited, it is very logical that the agreements would be similar). Isn't this precisely the stated purpose for the WSIP? The Draft EIR incorrectly states these facts related to the interconnection agreements. Therefore, the WSIP as described in the Draft EIR is totally unnecessary, and is a misguided and misdirected project that would be a significant waste of the rate-payer's money.
- a. If these interconnections have not been exercised on a regular basis, the question is, why haven't they been? The Water District completes an annual emergency preparedness exercise, which should be an ideal time for testing the interconnections on a regular basis. Why has the Water District apparently ignored the existence these valuable interconnections?
- 3. AB303 Report. Why was the 2008 Randy Basset (AB303) report excluded from the discussions of the hydrology of the IWV since the WD was a participant in the AB303 study? (It was noted that between the meeting at the Inyokern Senior Center on 8 November 2011 when this question was first raised and the meeting at the City Council Chambers in Ridgecrest on 9 November 2011 the AB303 report had been

9-1 Continued

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quickly added to the presentation material. Obviously, in that brief time no real review or analysis of that document was possible.) The AB303 report is the latest comprehensive IWV groundwater report. The Randy Basset report contains much valuable information concerning the aquifer recharge, or lack thereof. The Carbon-14 date testing of water samples from several locations that was performed for the report revealed that not only was the water that is being pumped today remnants of the last ice age (Pleistocene) but also the differences in the age of the water samples taken from two sites separated by only a few miles differed in age by many thousands of years. This should indicate even to the laymen (such as this writer) the extreme slow movement of the water in the aquifer. This extremely slow movement of water in the aquifer should have been the wake-up-call of the precarious condition of our ground water resource. The analogy would be that water from a wet winter and a good snow-pack in the Sierras should reach the IWV floor in a few thousands years.

9-3 Continued

a. Why is there only one single mention, in the Introduction, of the word "overdraft", in the entire Draft EIR? The IWV has been in a state of critical overdraft for more than 50 years. (The IWV basin fits the California State's definition of critical-overdraft - multiple years in overdraft with no recovery.) It has been noted in the past that the WD very carefully avoids using the word "Overdraft" in any forum or written material when the IWV water is being discussed or presented. Why is that?

9-4

4. WD Committee Meeting. After the General Manager announced to the public at the August 2011 Plant and Equipment Committee meeting that the proposed well 36 was being eliminated from the WSIP, an "off-the-cuff" statement was made by the General Manager. The statement was a most revealing view and clearly defines the goals of this entire project when it was stated, "I just wanted to get as much as I could before I leave". What does that statement have to do with a 20% redundancy factor? Is the actual purpose and goal of the WSIP to acquire additional prescriptive water rights? How does that statement support the published requirements for the WSIP as defined in the Draft EIR?

9-5

5. California Water Laws. Even though California Water Laws are not a part of the CEQA process the facts remain that Water District pumping that accelerates the decline of the water table in the southwest area of the valley is in violation of the California Water Laws. The water appropriator (Water District) has the right to remove only the surplus water. The overlying water users (cooperative's and private well owners) have the superior rights to the water beneath their property. If the water appropriator is removing water at a rate that is causing the levels to decline faster than the recognized norm, as defined in the Draft EIR, that water appropriator is in violation of the law.

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#### 6. Summary.

- The peak summer pumping day has been steadily declining each year since 2004
- On the peak pumping day in 2011 the WD had a redundancy factor of nearly 30%
- The interconnection agreements with the Navy and Searles' Valley Minerals
  are in place for the <u>specific purpose</u> of providing additional capacity for the
  summer peak pumping day or should an equipment failure occur.
- Another new rate increase for WD customers in 2012 has the significant potential to further reduce water use (more lawns will be removed), thereby further reducing pumping requirements.
- Conservation measures and a large rate increase has resulted in a 17% reduction in water usage in the last year.
- Aggressive conservation measures by the Water District could further reduce water use and completely negate any perceived requirement for the WSIP.
- Any growth potential for the IWV including NAWS in the foreseeable future is highly unlikely.
- Conservation measures onboard the NAWS has reduced water usage by approximately 40% in the last few years (The Navy has a surplus of pumping capacity).

Based only on these summary facts, it is abundantly obvious that there is no requirement, much less a pressing requirement for any additional pumping capacity or any requirement to pursue this expedited schedule.

- 7. Recommendations. The following recommendations are provided as a course of action that the WD should pursue:
  - The WSIP needs to be terminated at the soonest possible time.
  - The WD needs to proceed with the revitalization of the interconnection agreements with the Navy and Searle's Valley Mineral to ensure the systems are fully operational and could be used as necessary and as designed for.
  - The WD should greatly increase its efforts to promote water conservation and promote public awareness of the critical nature of our water supply.

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Use the funding that would have been used for the WSIP to pursue projects
that would actually enhance the water supply. Projects like solar
distillation of brackish water could have a great potential for our area and
should be fully explored. Solar desalinization has been effectively employed
in the mid-east for years.

The future of the IWV depends on our stewardship today of our precious water resource since the actual amount of good quality water that remains in storage in the valley is unknown. All that can be done, should be done to extend our water resource for our future generations. The failure to protect our most precious resource could be disastrous for us all.

It is therefore most emphatically recommended that the Board of Directors fully reject this WSIP as a totally unnecessary, un-warranted and a significant waste of the rate payers funds.

I respectfully request that this letter be entered into the official comment record of the Final Environmental Impact Report.

Respectfully,

C. Lyle Fisher 354 N. Strecker St.

Ridgecrest, California 93555 (Ph. (760)377-4613)

CC: Mr. Jon McQuiston, Kern County District 1 Supervisor
Ms. Lorelei H. Oviatte, AICP, Director, Kern County Planning and Community
Development

9-8 Continued

Response to Comment 9-1: This comment states that the Proposed Project is not needed because peak demand was able to be met in 2011, even with certain wells out of service. Maximum Day Demand for the WSIP evaluated in the EIR was computed by applying a peaking factor to the Average Daily Demand as projected in the 2010 Urban Water Management Plan. This peaking factor was conservative, so that the worst-case scenario could be modeled and evaluated in the EIR. It should also be kept in mind that the District only produces groundwater in response to actual water demands from its customers. It does not have the ability to store large quantities of water for which there is no demand. Should the actual Maximum Day Demand values in the future be less than the estimate, similar to the demand in 2011, the new facilities would only be operated as needed to satisfy the actual demand. Master Response 7 provides more information on this issue.

This comment also states that doubling the capacity of wells 18 and 34 would damage the wells, causing more repairs to be required for the wells; therefore, the project is too risky. The increase in capacity of wells 18 and 34 would not affect the function of these wells.

**Response to Comment 9-2:** This comment states that existing interconnection agreements should be used to provide redundant capacity. Alternative 3, obtaining water from existing Navy wells, is analyzed as an alternative to the Proposed Project in the EIR. The District's Board could choose to adopt this alternative, although the Navy has indicated that adoption of this alternative could take several years with no guarantee of approval and would require the completion of a National Environmental Policy Act document by the Navy. Additional information is provided in Master Response 9.

**Response to Comment 9-3:** The comment states that the 2008 Randy Basset report was excluded from the hydrology analysis in the EIR. This report, *Installation and Implementation of a Comprehensive Groundwater Monitoring Program for the Indian Wells Valley, California* authored by M.D. Stoner and R.L. Bassett and prepared for the Indian Wells Valley Cooperative Groundwater Management Group, was reviewed for the EIR along with many other data sources from the Kern County Water Agency, California Department of Water Resources, US Bureau of Reclamation, USGS, NAWS China Lake, Regional Water Quality Control Board, and others. The document was inadvertently omitted from the reference section in the EIR.

This report confirms that the water pumped from the aquifer by all users exceeds the recharge. This information does not conflict with the information presented in the Draft EIR, and the analysis of impacts in the EIR is based on this condition. Master Response 3 further addresses this issue.

**Response to Comment 9-4:** This comment states that the EIR does not discuss that the groundwater basin is currently in overdraft. The discussion of pumping and recharge in the basin is presented in Section 3.8 of the Draft EIR. The EIR clearly states that the current amount of pumping by all users exceeds recharge. Master Response 1 further addresses this issue.

**Response to Comment 9-5:** This comment states that the purpose of the Proposed Project is to acquire prescriptive water rights. As stated in the Draft EIR, Section 2.3, the Proposed Project's purpose is to provide system redundancy to meet maximum day demand with a 20 percent safety factor in the case of a mechanical failure or water quality issue in one or more of

their existing wells as required by the 1997 Water General Plan and the 2010 Urban Water Management Plan. Phase 2 of the project would also provide for a modest population increase of 1 percent per year. It should be kept in mind that the District only produces groundwater in response to actual water demands from its customers. It does not have the ability to store large quantities of water for which there is no demand. Should actual demand be lower than the demand predicted in the EIR, the new facilities would only be operated as needed to satisfy the actual demand. Master Response 7 provides additional information on this issue.

Response to Comment 9-6: This comment states that removing water at a rate that is causing the levels to decline faster than the baseline is in violation of the overlying water users' superior rights to the water beneath their property. The Draft EIR discusses the impacts of the Proposed Project to nearby private and cooperative wells. The Draft EIR provides mitigation to ensure that land uses in place at the time of EIR preparation would have sufficient water to continue. Master Responses 1 through 5 further address this issue. In addition, as discussed in Master Response 12, water rights are not environmental issues covered by CEQA. Notwithstanding this, the priority and/or water rights of the various pumpers in the basin have not been established/adjudicated.

**Response to Comment 9-7:** This comment states that the Proposed Project is not needed because water use has been declining in recent years. Master Responses 7 and 8 address this issue.

The comment further states that other alternatives, including water purchase from the Navy and additional conservation should be adopted. Master Responses 9 and 10 address this issue.

**Response to Comment 9-8:** The comment states that other alternatives, including water purchase from the Navy, brackish water treatment, and additional conservation should be adopted. Master Responses 9 and 10 address this issue.



# Draft Environmental Impact Report for the Indian Wells Valley Water District Water Supply Improvement Project

#### **Draft EIR COMMENTS**

Public Meetings
November 8, 2011, Inyokern Senior Center
November 9, 2011, Ridgecrest City Hall Council Chambers

Please use this page to submit your comments on the Draft Environmental Impact Report (EIR) prepared for the District's Water Supply Improvement Project. Your comments are an important part of creating a comprehensive Final EIR. When making your comments, please be as specific as possible.

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7 December 2011

Board of Directors Indian Wells Valley Water District PO Box 1329 Ridgecrest, California 93555

#### Dear Board Members:

I am writing in reference to the Indian Wells Valley Water District, Draft Environmental Impact Report (EIR) for Water Supply Improvement Project (WSIP).

I request the following questions, issues, and comments submitted here, be addressed in the Final EIR:

- 1. Water Level Measurements. The water table level in our well was measured by Kern County Water Agency (KCWA) in November 2008 and again in November 2009. No one has been able to explain why the level in our well declined by 8 feet in that one year. The approach now appears to be to discredit the measurements. The problem with that tactic is that Kirschenman's water level measurements of our well over the same period thoroughly substantiates the KCWA measurements. The large drop in our well's level was coincident with the production start of WD Well 34 in the Southwest Well Field and is probably, or in reality a cumulative pumping depression of Water District (WD) Wells 18, 30, 31, 33, and 34. Perhaps there exists a conduit like structure of more porous material that would allow water to move more freely between the Southwest Well Field and our area. The answer to this conjecture is unknown.
- a. Further, an additional data point has been identified. A private well that is approximately 6 to 700 feet from our well was drilled in 2004 with a water level at completion of 308 feet. KCWA measured this well in October 2011 at 322 feet. The water level had declined by 14 feet in 7 years or two feet per year average over the period. Perhaps there was a one year decline of far greater than two feet, but this cannot be substantiated. However, a decline of two feet per year exceeds the base values used in the Draft EIR.
- 2. Mitigation. The offer to monitor the decline of our well by the WD is NOT mitigation at all. In the Mitigation Section (Para 3.8.4 H-1: (third sub-para)) states that; "The rate of decline must also be <u>clearly</u> correlated with activity related with the proposed project". The question is, in cases of dispute, who will provide arbitrations between the Water District and the private well owner? Case-in-point; the paragraph 1 above related to our eight foot decline in a one year period. The KCWA does not appear to be an acceptable alternative for arbitration. Who in fact would be legally empowered

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10-2

to determine which private well owners were damaged and by how much? Since the WD is proposing alternately to hook up various private well owners to the WD when their wells become unusable, there would be an incredibly expensive hopscotch of new lines and reservoirs to fund and construct. Will the WD pay for all of that?

10-2 Continued

3. Peak Pumping. The larger question here is; Why is the WD so urgently pursuing the WSIP and the 20% redundancy? Pumping last year decreased by 17% due to conservation measures and a significant rate increase. Another rate increase will be coming in 2012, which has the high potential to further decrease pumping requirements, just as the 2011 rate increase did. On the peak pumping day for the summer of 2011, the WD had a redundancy of nearly 30% as shown by their daily pumping records. The question remains, why is the WD pursuing the WSIP?

10-3

It is therefore strongly recommended that the Board of Directors fully reject this WSIP as a totally unnecessary, un-warranted and a significant waste of the rate payers funds.

I respectfully request that this letter be entered into the official comment record of the Final Environmental Impact Report.

Respectfully,

Sylvia Fisher 354 N. Strecker St.

Ridgecrest, California 93555 (Ph. (760)377-4613)

CC: Mr. Jon McQuiston, Kern County District 1 Supervisor

Ms. Lorelei Oviatte, AICP, Director, Kern County Planning and Community

Development

Response to Comment 10-1: This comment states that the water levels in the commentor's well and a nearby well have been declining since 2008 and 2004, respectively. The rate of decline is approximately two feet per year on average, and a potential one-year change of eight feet, which is greater than the baseline used in the Draft EIR. As discussed in Section 3.8.1.3 of the Draft EIR, and Master Response 1, to examine trends for groundwater levels in the Indian Wells Valley, long-term data from the US Geological Survey, California Department of Water Resources, and Kern County Water Agency (KCWA) were reviewed. To support the analysis conducted in the Draft EIR, data were requested and received from KCWA for wells within the northeast corner of Kern County in the 324-square-mile area encompassed by Townships 25 South through 27 South and Ranges 38 East through 40 East (see Figure 3.8-3 in the Draft EIR). KCWA provided 5,042 individual water records from approximately 200 wells, which are provided in Appendix F of the Draft EIR. A detailed analysis of the approximately 135 wells with a 10-year record or longer was conducted as part of the evaluation of existing, or baseline, conditions for the Draft EIR.

The KCWA water-level data show that short-term fluctuations may occur that are both greater than and less than the long-term average. Close examination of Figure 3.8-5 of the Draft EIR demonstrates the range of short-term fluctuations that may occur. In some years, the water level may decrease by four to five feet, while in other years, the water level may increase. Short-term fluctuations may be caused by the variations in water usage in existing wells due to varying weather conditions from year to year, variations in household size or overall water usage, installation of new wells (both private and public) in the vicinity, and variations in pumping patterns throughout the area. In new wells, short-term fluctuations may be due to incomplete well development or other factors.

The baseline for CEQA analysis is typically established at the time the Notice of Preparation (NOP) is issued. For this Project, the NOP was issued in June 2011. Detailed review of the KCWA database demonstrates that in the first half of 2011, water levels in many of the wells in the intermediate well field and southwest well field area were stable or even slightly increasing, and that this trend had been occurring for three to eight years. Due to the long history of declining water levels in the basin, however, it was decided that a more appropriate baseline should be based on the water-level data from approximately 1980 into the early part of the last decade. Considering a longer-term time period for definition of baseline is appropriate based on recent court decisions that found that the choice of baseline is a discretionary decision of how existing physical conditions without the Project can most realistically be measured (Cherry Valley Pass Acres and Neighbors v. City of Beaumont (Nov. 22, 2010) 190 Cal. App. 4th 316). Existing conditions are not always the baseline. The baseline selected in the Draft EIR is based on the long-term history of water-level measurement in the basin, is based on thousands of water-level records from hundreds of wells, and the data have been collected by an impartial government agency (KCWA). Given these conditions, it would not be appropriate to define baseline for the Project based on a limited record of short-term fluctuations from only a few wells.

**Response to Comment 10-2:** The comment states that the mitigation proposed for decline in water levels in wells near proposed Well 35 is inadequate because the mitigation is tied to activity related to the Proposed Project. CEQA requires that feasible mitigation be required for Project impacts, therefore, it is necessary to determine if the water level decline is related to

the Proposed Project, or if it is part of the existing condition. The cost of the mitigation program will be borne by the District. Master Response 4 provides additional information on this issue.

**Response to Comment 10-3:** This comment states that the WSIP is unnecessary because existing conservation measures and rate increases have decreased demand in 2011. The comment states that the No Project Alternative should be adopted. Master Responses 7, 8, and 9 discuss these issues.



Tom Mulvihill, General Manager Indian Wells Valley Water District P.O. Box 1329 Ridgecrest, CA 93555 (760) 375-5086 12/5/2011

Subject: IWVWD proposed project

As has been noted by others the "Redundancy" need is in error when the existing interties are available. Further, increased pumping of water from an aquifer that is already in acknowledged overdraft demonstrates a severe lack of appreciation of simple physics as well as the lack of appropriate stewardship of a disappearing resource. To say that I disapprove of the IWVWD proposed project is an strong understatement.

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11-1

Stuart Fields private well owner P.O. Box 1585 Inyokern CA 93527 (760) 377 4478

2008-132

Response to Comment 11-1: This comment states that existing interties should be used to provide redundancy in capacity and that increased pumping from the aquifer should not be conducted. Alternative 3, obtaining water from existing Navy wells, is analyzed as an alternative to the Proposed Project in the EIR. The District's Board could choose to adopt this alternative, although the Navy has indicated that adoption of this alternative could take several years with no guarantee of approval and would require the completion of a National Environmental Policy Act document by the Navy. It should also be noted that purchasing water from the Navy and transferring it to the District using the existing intertie agreement would involve the same amount of pumping from the aquifer. Additional information is provided in Master Response 9.



**IWV Water District Supply Improvement Project 2011** 

#### DEIR 45 DAY COMMENT PERIOD FROM October 25th to December 9th,

The DEIR projection growth of 1% is very much open to question in this Valley since there has been no new population growth, but rather a substantial decline in such growth according to the presentation at the public meeting of Oct. 24<sup>th</sup>. Further implication of decline is the new cuts proposed in the Defense (Navy) budget which will most certainly affect this area. It is also likely that additional conservation savings will come with higher water rates and improved public awareness that will result in an overall reduction in demand.

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The main argument for WSIP is that it will provide a "redundancy" to meet peak day demands in an emergency (especially in the summer usage demand). However, the WD is easily meeting its peak day and season demands now and has done so in the past when the demand was higher. Therefore, a) past demands comfortably met; b) less present day demands needed; c) even less future demands to be made the, WD stated "redundancy" need is simply not there.

12-2

There was no mention of water storage tanks or alternative water sources that could be considered that would benefit not only Ridgecrest but the entire area. In the October presentation it was said that storage tanks would produce unsafe drinking water, however, other desert communities have storage tanks one as close as Rosemond. A serious comprehensive study of this would be appropriate before the proposed project of additional well drilling, especially in an already unprotected water basin in the valley which would lower the aquifer for the entire Valley. Two more valuable projects would be: First, how to enhance our water supply such as desalinization or treatment of non-potable water and Second, how to bring outside water into our Valley from the surrounding mountain areas and other sources.

. . .

The IWVWD General Manager Tom Mulvihill made no mention of the private and mutual well owners and how they would be affected by additional drilling of wells. His only concern by his own admission at the 7/13/11 Scoping Meeting was for the IWVWD water customers only in Ridgecrest. Unfortunately any additional deep well drilling will have a negative affect on EVERYONE in the Valley including the IWVWD in the long run.

Since IWVWD began drilling wells in the private well owner's area the water has decreased substantially. So much so that a godinany private & mutual well owners have had to recently redrill their wells to a deeper depth to maintain pumping their water and some have even dried up. Prior to IWVWD drilling these wells it was stated that they were drilling so deep that private & mutual well owners would not be affected. This has not been the case. Two of my neighbors are examples of this. The private & mutual well owners have first water rights in the Valley, according to the Kern County Planning and Environmental Deport letter to the IWVWD. However, this appears to be of no concern and is being ignored by the WD by continuing to drill new wells for their own benefit and or agenda.

It is clear that the WD has full intention to pump the SW Valley hard in order to establish new (prescriptive) water rights and to reduce water costs by reducing water pumped from wells in the Intermediate area that require arsenic treatment. The project in the long haul will seriously impact all wells in the SW and W (including WD wells) and does nothing to address our overdraft. The project is a repeat of the WD moves made in the past to pull out of an area and move into a new one as the old fields were drained. Eventually one runs out of water sources and since there is no known high quality water area within the Valley after the SW to turn to---guess what, there is no more water for anyone—the IWVWD nor private or mutual well owners.

12-4

Patricia L. Davis

landed to water office Die 8th 1430 N Indian Wells Rd Ridgecrest, CA 93555

cc: McQuiston

cc: L.Oviatt

Response to Comment 12-1: This comment states that the projected population growth of 1 percent, which was used in the EIR to project future demand, is not accurate and that a population decline will actually occur. Additionally, this comment states that a 20 percent redundancy is not needed because the District has met demand in the past. Population projections were provided by Kern COG, and fall within the range of projections used by the City of Ridgecrest in its General Plan (1 to 3 percent) and Kern County in its General Plan (2 percent). It should be noted that the District only produces groundwater in response to actual water demands from its customers. It does not have the ability to store large quantities of water for which there is no demand. If population increases do not occur, or if demand is low because of conservation or cooler weather, then the new facilities would only be operated as needed to satisfy the actual demand. Master Responses 7 and 8 further address this issue.

Response to Comment 12-2: This comment states that alternatives to the Proposed Project should be adopted, including additional storage tanks, desalinization, and import of water from outside the Indian Wells Valley. These alternatives were considered for the Proposed Project, but were rejected because they could not be implemented in the time frame of the Proposed Project and/or because they would not be cost-effective. It should be emphasized that these alternatives were only rejected as alternatives to the Proposed Project. These alternatives could still be considered for future projects, although separate environmental analysis would need to be conducted. It should also be noted that one of the reasons Phase 3 (construction of new well 36 at Victor and Las Flores) was eliminated was that some of these alternatives may become feasible in the future and could be implemented. Master Response 10 further addresses this comment.

**Response to Comment 12-3:** This comment states that the Proposed Project would affect nearby wells and that deeper wells may be required if the water levels decrease because of the Proposed Project. This impact has been discussed in Section 3.8.3.3 of the Draft EIR, and mitigation has been provided for the impacts. Master Responses 1 and 4 address this issue.

Response to Comment 12-4: This comment states that the purpose of the Proposed Project is to acquire prescriptive water rights. As stated in the Draft EIR, Section 2.3, the Proposed Project's purpose is to provide system redundancy to meet maximum day demand with a 20 percent safety factor in the case of a mechanical failure or water quality issue in one or more of their existing wells as required by the 1997 Water General Plan and the 2010 Urban Water Management Plan. Phase 2 of the project would also provide for a modest population increase of 1 percent per year. It should be kept in mind that the District only produces groundwater in response to actual water demands from its customers. It does not have the ability to store large quantities of water for which there is no demand. Should actual demand be lower than the demand predicted in the EIR, the new facilities would only be operated as needed to satisfy the actual demand. Master Response 7 provides additional information on this issue.

December 8, 2011



Indian Wells Valley Water District 500 W. Ridgecrest Blvd P.O. Box 1329 Ridgecrest Ca 93555

Re: Draft Environmental Impact Report (Draft EIR)(October 2011) to the Water Supply Improvement Project (WSIP)

To: IWVWD Board (the Board)

In response to the Board's invitation for comments on the Draft EIR, I would like to submit the following comments into record. I'll refer to the page or section that my comments refer to.

The basic purpose of the WSIP is to provide the IWVWD with 20% redundant capacity as is required. This would accommodate equipment/system failure and/or scheduled maintenance to enable the IWVWD customers to maintain water supply during peak demands.

Reference	Comment				
ES.3.1.3 Parag 2	It says that "alternative" water resources may become available after 2015. Other than the water resource of our valley aquifer, what other alternative resource might there be? Considering the small resources of our local community and the IWVWD, it seems we have no economically viable other alternative water resource. Installing another well into the existing resource is not providing a new source.				
ES.4 Parag 3	<ol> <li>The Draft EIR says the WSIP project provides the 3 objectives.</li> <li>Cost effective and reliable source – both these are relatively vague. Cost effective and reliable in perpetuity? Drilling new wells in a finite resource that has been confirmed to being used at a rate 2.5-5 times its replenish rate is neither cost effective nor reliable (in the long term).</li> <li>Provide 20% system redundancy – this is only a short term fix at best.</li> <li>Meet current/future water production requirements – again new wells in an existing dwindling resource will not sustain future needs.</li> </ol>				
ES.5.3.2	This seems to imply that water used in well development will percolate back into the ground. Most typically water tends to sit on our caliche clay and evaporate more so than percolate into the ground.				
ES.5.4	"Existing water conservation efforts would be continued"—The IWVWD recently terminated conservation staff so IWVWD has no longer has significant "educational services".  The conservation figures stated in the Draft EIR amount to 9.67% savings in an 11 year period. This amounts to only 0.88% annual savings. NAWS China Lake has achieved roughly a 12% decrease annually for the last 4 years. IWVWD performance doesn't seem very significant.  I'm not sure what is meant in the 3 <sup>rd</sup> bullet about "cooperation with the City of Ridgecrest." The meaning of this should be provided. The City of Ridgecrest is one of the larger water wasters as evidenced by their parks irrigation that is in poor condition.  The new service ordinances focus only on new construction which is a small fraction of the total built environment in the IWVWD. The ordinance is good and necessary. However, with construction down significantly, this doesn't make much of an impact and only impacts new services that in fact increase demand on the IWVWD system.				
ES.5.4 Last parag	This paragraph doesn't describe the Water Shortage Contingency Plan in much detail which leaves the reader guessing how this is intended to actually be implemented.  Maybe the Plan is flawed and the Draft EIR should comment about how it could be improved.  ES.5.4 — seems brief to do justice to what role conservation could play in contributing to WSIP project goals for system capacity to accommodate objectives in ES.4. I've done some basic research and feel that conservation could and should play a very significant role in the overall management of the IWVWD resources now and in the future. An assertive conservation strategy could easily reduce current average water consumption by 30-50% and a more aggressive strategy could yield in excess of 50% savings. Conservation could easily meet the goals of the WSIP and support a sustainable water management attitude for IWVWD, its customers, and others throughout the valley. I feel the EIR should evaluate this				
ES.5.4	in greater detail.  Re: the rate schedule: The EIR states a fact about recent rate schedule modifications, but no comment as to whether these modifications are significant or not. Simply stating that the highest tier rate is 582% more than the lowest rate has little meaning other than to imply that 'everything is OK'. How does our				

(cont)	rates compare with other districts? The highest tier allows a whopping 750 gal/day/account or 33% higher than our current average use per day for an entire year. This really doesn't place our rates in the proper perspective to answer the question of whether our rates are appropriate or not to encourage conservation. While clearly, the rate schedule supports this end, is it enough to really make a difference? I'd venture to say that the current rate schedule is not aggressive enough to incentivize reasonable daily water use in one of the driest locations in the U.S.
	I own a house in the Pacific NW within a short distance of one of the world's largest watersheds and my water bill here in Ridgecrest is lower. I'd venture to say that our rates are artificially low here. My rate in Oregon is \$2.85/Kgal for anything over 100gal/day/account. IWVWD has a rate of only \$1.34/Kgal for anything over 125 gal/day/account. IWVWD doesn't go over \$2.85 until you reach an average daily use of over 800 gal/day/account. By comparison, I feel the rates here do not really promote much conservation at all.
ES.6.2	I feel rate schedules could also support rebate incentives to further encourage conservation.  I disagree that significant impacts to "Hydrology and Water Quality" would be reduced to "levels below significant." What is defined as "significant"?
ES.6.3	I'm a little confused by this section. It seems that the statement is similar to having people in a sinking boat and saying that the impact of making yet another [small] hole in the boat will not affect the sinking of the boat when compared to all the other holes in the boat. I'd venture to say that if we were on a sinking boat that ANY intentional additional damage to our resource (the boat), would not be viewed as acceptable action to take, "miniscule" or not.  IWVWD consumes about 28% of the water resource in the valley. An additional well that can pump 20% of that 28% seems not to be a "miniscule" or immeasurable value. In fact, it is 5.6% of the total water consumption of the valley according to records of the major water users. While 5.6 % isn't a huge number, it is, in my opinion, significant enough to warrant attention.
ES.7	Again, the EIR eludes to alternative water sources that MAY (emphasis mine) become available, yet
2 <sup>nd</sup> bullet ES.8	doesn't provide some indication of what such alternatives might be.  Water conservation is listed as one of the project alternatives that was rejected because it could not meet
2 <sup>nd</sup> bullet	project objectives.  I strongly disagree with this statement and feel that conservation could be the simplest and most economically viable option to not only meet the short term objectives, but also support long term water management for IWVWD. Failing to consider conservation as a significant part of our water management efforts ignores the concept of good stewardship of our finite water resource and supporting more sustainable attitudes toward this resource.
ES.8 3 <sup>rd</sup> bullet	You should either provide examples of other water supplies or refer directly to the section that discusses them (or both).
Table ES-3 Hydrology and Water Quality	The table says that the project would not increase the drawdown on the aquifer. Maybe we should be considering the <u>decrease</u> of drawdown as an environmentally positive goal of the project (to be achieved through conservation).
3.2.1.2	This seems to be missing one of the key items of weather that significantly impacts our water use in the valley: the evapotranspiration rate which is one of the primary drivers of the majority of the water use in the valley. The average is around 100 inches annually, I believe.
4.6	I think the seven alternatives should be listed here for reference or at minimum provide a specific reference to where they can be found. Page ES-12 lists only 5.
4.6.2	As stated above, IWVWD has significantly curtailed it's water conservation efforts (as referenced in
Parag 1	recent budget cuts that eliminated 72% of their conservation budget.  Seems to me that required conservation theoretically would meet the WSIP goals without increased well capacity as this paragraph implies.
1.6.2	What waivers were applied for that were considered 'not feasible' BMPs? I'd like to see them listed.
Parag 3	I feel IWVWD could far exceed the BMPs with an aggressive conservation program. I think this would be a reasonable goal to set and strive for. I also think it would be as economically viable as increasing well production capability.
1.6.2	Says that the cumulative impact to the water quality in the valley would be unchanged in IWVWD
Parag 5	eliminated all of their pumping. IWVWD consumes an estimated 28% of the water in the valley. How could eliminating this not produce some significant cumulative affect on the water resource in the Valley?  Additional [long term] Storage – this is a fairly absurd strategy. I'm surprised the Draft EIR provides
7.0.3.1	details on this while ignoring other possible alternatives.  It seems obvious the 'other alternative water sources' that MAY become available as previously stated,
	simply are either not available or as implied, would be quite expensive.

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#### Additional general comments:

• In a desert environment, I feel it is imperative to better manage what is obviously a finite (and dwindling) resource. We live in the sunniest place in the world and one of the hottest and driest places in the U.S. The EIR conspicuously leaves out conservation as a significant if not the most cost effective strategy to provide the 20% redundancy sought while supporting a more sustainable approach to resource management. Benefits include minimizing expensive infrastructure, maintenance, and operational costs while supporting good stewardship of the water resource. It also supports better management of our water resource in more of a sustainable manner. Water is much like energy and can and should be managed in a similar way. It has been proven that conservation is more viable than increasing capacity and provides more jobs.

13-14

- The Draft EIR does not suggest the potential benefit of adjudication of the valley water resource as a viable water management strategy that would contribute to the goals of the WSIP and long term sustainable water management of the valley water resource in general. While this doesn't affect the WSIP directly in the short term, it is as viable (if not more so) than consideration of agreements to share the LA viaduct as a resource. Adjudication may be inevitable. It may be better sooner than later.
- It seemed to me that there was a lot of repetition of the same material rather than summarizing it in one location
  and providing more detail in the other (with references).
- There is a typo in the Table of Contents: 2.2.1

The Draft EIR assumes the WSIP is based on sound assumptions, but part of the purpose of the Draft EIR is to comment on viable options that might be identified in lieu of the WSIP as indicated in the three items listed in ES.1

I would encourage the EIR to make considerations of options that do not simply support the proposed plan of expanding pumping capacity. All users of our resource should support better overall management of the life blood of this valley. Without a sustainable water resource, Ridgecrest will be in dire straits.

Respectfully submitted,

Mark Williams - IWVWD Customer and local resident

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Response to Comment 13-1: This comment asks what alternative water resources may become available after 2015, as stated in Section ES.3.1.3 of the Draft EIR. This section of the Draft EIR refers to other water supply alternatives, including aggressive conservation, blending, saline water recovery, water reclamation, and water importation. These alternatives were considered for the Proposed Project, but were rejected because they could not be implemented in the time frame of the Proposed Project and/or because they would not be cost-effective. It should be emphasized that these alternatives were only rejected as alternatives to the Proposed Project. These alternatives could still be considered for future projects, although separate environmental analysis would need to be conducted. It should also be noted that one of the reasons Phase 3 (construction of new well 36 at Victor and Las Flores) was eliminated was that some of these alternatives may become feasible in the future and could be implemented. Master Response 10 further addresses this comment.

**Response to Comment 13-2:** This comment states that the WSIP does not meet the project objectives stated in Section ES.4 of the Draft EIR because it would not supply a reliable source of water production requirements in perpetuity. The Proposed Project would meet the objectives as stated in the EIR by providing a cost-effective and reliable source of water to meet current and future maximum day demand with a 20 percent system redundancy. The future maximum day demand with a 20 percent redundancy is calculated using a 1 percent population growth factor, and the proposed Project is anticipated to meet this demand through 2015 if this growth occurs. After 2015, additional alternatives may be implemented if warranted by demand, although future projects would require separate CEQA analysis.

**Response to Comment 13-3:** This comment states that Section ES.5.3.2 of the Draft EIR implies that water used in well development will percolate back into the ground when it will actually evaporate. Some water used in well development would evaporate from the discharge pond; however, some water may percolate back into the ground. In evaluating the impact of the Proposed Project to water resources, it was important to assume some percolation of well discharge water back into the ground.

Response to Comment 13-4: This comment states that the District should implement aggressive conservation methods such as increases in water rates to reduce demand. An alternative that would rely on aggressive conservation was considered and rejected in the Draft EIR. It should be kept in mind that the District only produces groundwater in response to actual water demands from its customers. It does not have the ability to store large quantities of water for which there is no demand. Should actual demand be lower than the demand predicted in the EIR through effective conservation, the new facilities would only be operated as needed to satisfy the actual demand. Master Response 10 further addresses this issue.

Response to Comment 13-5: This comment states that the Proposed Project would pump 20 percent more water, resulting in a significant impact. The additional well capacity included in Phase 1 of the Proposed Project would allow the District to provide a 20 percent redundancy in pumping rate for the maximum day demand. This does not equate in any way to the ability or need to pump an additional quantity of water equal to 20 percent of the District's current annual production. Phase 1 of the Proposed Project would not result in any additional volume of water being produced from the basin. Phase 2 of the Proposed Project includes installation of an additional well, Well 35, to provide additional capacity to meet the one percent per year growth projections, if necessary. Because the District only produces groundwater in response

to actual water demands from its customers, and has limited storage capacity, Phase 2 would only be implemented, and additional production would only occur, if those growth projections are met and are reflected in the demand. Thus, the increase would only be in the range of one percent, not 20 percent, of the District's current annual production, or about 0.3 percent of the total pumping basinwide. This small volume of additional pumping would only affect for wells within a two-mile radius of the Proposed Project, as discussed in the Draft EIR. Appropriate and effective mitigation measures have been identified to address the potential impact to wells within this area.

**Response to Comment 13-6:** This comment states that the District should implement aggressive conservation methods to reduce demand. An alternative that would rely on aggressive conservation was considered and rejected in the Draft EIR. Master Response 10 further addresses this issue.

**Response to Comment 13-7:** This comment states that the District should implement aggressive conservation methods to reduce drawdown in the aquifer. An alternative that would rely on aggressive conservation was considered and rejected in the Draft EIR. It should be noted that, even if all of the existing District pumping were to cease, substantially more water would still be pumped from the aquifer than is being recharged. Master Response 10 further addresses this issue.

**Response to Comment 13-8:** This comment states that evapotransporation rate should be discussed in the Air Quality Section 3.2.1.2 to provide context on water use in the Indian Wells Valley. This section of the Draft EIR is meant to provide background on regional climate as it relates to the air quality in the Indian Wells Valley.

**Response to Comment 13-9:** This comment states that the seven alternative scenarios evaluated and modeled for the WSIP planning process should be listed. These scenarios are listed in Table 4.2-1.

**Response to Comment 13-10:** This comment states that the District should implement aggressive conservation methods to reduce demand. An alternative that would rely on aggressive conservation was considered and rejected in the Draft EIR. Master Response 10 further addresses this issue.

**Response to Comment 13-11:** This comment states that the District should implement aggressive conservation methods to reduce demand, including additional Best Management Practices. An alternative that would rely on aggressive conservation was considered and rejected in the Draft EIR. Master Response 10 further addresses this issue.

Response to Comment 13-12: This comment states that the elimination of all District pumping would be a positive effect on the groundwater decline and that the EIR is incorrect when stating that the cumulative impact to water levels would continue even if the District were to cease pumping. Non IWVWD-pumping has averaged 18,000 acre-feet per year, while the annual recharge is between 8,000 and 11,000 acre-feet per year. Therefore, the non-IWVWD pumping exceeds the recharge rate by 7,000 acre-feet to 10,000 acre-feet per year, and groundwater levels would continue to decline even if all District pumping were to be discontinued.

Response to Comment 13-13: This comment states that alternative water sources may become available in the future but are either not available now or would be expensive to implement. The commentor is correct. Other alternatives, including aggressive conservation, blending, saline water recovery, water reclamation, and water importation were considered for the Proposed Project, but were rejected because they could not be implemented in the time frame of the Proposed Project and/or because they would not be cost-effective. It should be emphasized that these alternatives were only rejected as alternatives to the Proposed Project. These alternatives could still be considered for future projects, although separate environmental analysis would need to be conducted. It should also be noted that one of the reasons Phase 3 (construction of new well 36 at Victor and Las Flores) was eliminated was that some of these alternatives may become feasible in the future and could be implemented. Master Response 10 further addresses this comment.

**Response to Comment 13-14:** This comment states that additional and more aggressive conservation should be the preferred alternative. An alternative that would rely on aggressive conservation was considered and rejected in the Draft EIR. Master Response 10 further addresses this issue.

Response to Comment 13-15: This comment letter states that the EIR does not include adjudication as a viable water management strategy that would meet the goals of the WSIP. Adjudication would affect every well owner and water user in the basin, including not only IWVWD, but also the private and mutual well owners, the Navy, Searles Valley Minerals, and the agricultural users. The purpose and effect of adjudication are wide ranging and extend well beyond the scope and objectives of the Proposed Project. Adjudication addresses and affects, at least in part, water rights, whereas these rights are not environmental issues covered by CEQA, as discussed in Master Response 12. Therefore, adjudication is not addressed in the Draft EIR.