

**INDIAN WELLS VALLEY COOPERATIVE GROUNDWATER
MANAGEMENT WORKING GROUP
DISCUSSION NOTES**

March 18, 2009 – 1:00 p.m.

Chairman Don Zdeba called the meeting to order at 1:01 p.m.

Approval of Discussion Notes: Motion was made by Glenn Harris and seconded by LeRoy Marquardt to accept the February 18, 2010 Discussion Notes as presented. The Motion was carried, unanimously.

Public Comment for Items on the Agenda: None.

Brackish Water Treatment Project: Renée Morquecho distributed handouts for presentation on Brackish Water Treatment. Tom Mulvihill introduced Tim Parker, new consulting hydrogeologist for Layne GeoScience. Ms. Morquecho proceeded with a presentation that was originally given at an AWWA conference in Las Vegas on water at the northwest well field being considered brackish water. The treatment train that was chosen for the pilot scale, after the feasibility study, was reverse osmosis (RO) followed by electrodialysis reversal (EDR). Those are the two technologies that were tested during the pilot study. There were objectives to demonstrate the feasibility of the treatment train; demonstrate that on that particular water, the RO and EDR will work for the recovery that the IWVWD needs and also a reversible RO configuration to see if that could be helpful in lengthening the life of the membranes for the reverse osmosis. The presentation showed results from the pilot study during the 4,000 + hours spent during the time the RO unit had operated, the results that were obtained with the reversible RO configuration and the results with the 1,600 + hours with the EDR. The full-scale project cost estimates are capital costs of \$46.0 million, annual O&M of \$3.04 million, the annual cost of \$7.05 million and the unit costs (based on 3,000 AFY) \$2,350/AF or \$7.21/1,000 gal. Ms. Morquecho took questions after the presentation. LeRoy Marquardt asked how this compared to the Navy's plants, but she wasn't aware. Don Zdeba asked the current cost per acre foot (AF); Ms. Morquecho answered \$200 - \$300 per AF. Pat Quist asked what the final destination of salts would be and Ms. Morquecho answered that it could be dried out and disposed of at a regular land fill. Tom Mulvihill stated that the next step is to do a study to find out where the brackish water resources are, which would be a very expensive undertaking (several hundred thousand dollars), and the District is looking for partners to participate.

Integrated Regional Water Management Program: Leroy Corlett reported that three and a half hours were spent on how the IRWMP could be governed. Inyo County and LADWP are pushing for a system where the planning group, which Mr. Corlett is a member of, has ultimate decision of what Planning Committee decides. The group as a whole said that what the Planning Committee decides will be final and they'll use the steering committee as a reference group that will do the research and bring back results to the Planning Committee. The group will meet again and discuss it more next month. If everything goes perfectly, we will have our plans ready for submittal by the end of May and move forward quickly. DWR has just come out with guidelines to borrow against the money. They said the first apportionment will be June and the

second apportionment will be in September. There's still hope that we would be ready to go by the second apportionment, but we'll see how we make out on governance and get past that. Don Zdeba asked how the members of the planning committee were selected. Mr. Corlett responded that anybody that's involved with water could send a representative. The committee is comprised of about 20 – 30 people.

Mr. Corlett stated that the Indian tribes are getting a lot more involved and are starting to express opinions, but he doesn't know where that will lead.

Solar Millennium Project Update: Glenn Harris reported that he received a preliminary draft (EIS type of information) and had 10 days to review it. He sent copies of some of the water parts to some members of the TAC and had them take a look at sections of it. They put together a package and sent it to the California Energy Commission (CEC). They are going to assemble a review copy of the document and at that point would be open to public comment. Solar Millennium has come out with a plan for offsets and water. Their proposal is to use between 140 – 160 acre feet of water and they also had a need for 600 acre feet of water for the first couple of years during the construction phase, for dust control and those types of things on site. Their proposal is to offset about 212 acre feet a year of water and they've put it into a plan that still has to be approved. It's premature to say where the project is going to go at this point. Based on the wild life issues there's a possibility that the project won't make it at all. It will probably be next fall when decisions are made.

One thing that was found on site was an old windmill. LeRoy Marquardt thought that it was used by sheep herders. This well site sits in the middle of the Solar Millennium project area. Mr. Harris suggested they have it maintained as a monitoring well on site, if they can do it.

Don Zdeba asked if the comments from the TAC made to the CEC were forwarded as representing the Group. Mr. Harris told them that they were incorporated, not sent in as separate comments. He stated that the comments were initially done on the Application for Certification (AFC) and then what he got back from Mike Stoner and Tom Haslebacher were that the comments still held. Mr. Zdeba asked that the comments be forwarded for distribution to the Group.

Mr. Mulvihill announced to the Group that the information is available on the CEC website under the same place you would go for all the other emails that have been forwarded.

Sophie Murk, public attendee, asked if they were moving the date around and what date the BLM submitted the paperwork. Mr. Harris told her it was in on March 10th. Solar Millennium has to break ground by a certain date or they won't get their tax breaks.

2009 Water Production Data Update: Water production information has been received from the Meadowbrook Dairy. Don Zdeba asked to have a copy sent out to Group.

2009 In-Kind Service Update: Agencies who have not reported their 2009 In-Kind Services include Kern County and Kern County Water Agency.

2010 In-Kind Service Commitment Update: Agencies who have not reported their 2010 In-Kind Service Commitments include Kern County and Kern County Water Agency.

Don Zdeba asked that we target the next meeting to get the 2009 In-kind Service update and 2010 In-kind Service Commitment update complete.

Project Review Report: None

Technical Advisory Committee Report: The Technical Advisory Committee met at 9:00am this morning.

RAWS Update: Glenn Harris reported that all five Remote Automated Weather Stations (RAWS); Five-Mile Canyon, Indian Wells Canyon (2), Walker Pass, and El Paso Peak are functioning. Mr. Harris stated that everything is up and running and they are seeing documentation. Several rain gauges picked up about 47 hundredths or 48 hundredths of an inch; up on the pass level and higher RAWS we're getting over an inch. The recent storms seem to be dropping a lot of water at Freeman Canyon and Indian Wells. LeRoy Marquardt stated that we need to give feedback to well owners. Mr. Harris said that would be possible.

Watershed Coordinator Job Description Review: Not discussed.

Future Water Situation in the Valley: Adam Bingham was asked to give update on the data. Mr. Bingham stated that the data is there, but the problem is matching the data to the wells. He said that members of TAC want to get together and decide on what they're going to do, either name them or number them. Once named, Mr. Bingham is going to get graphs put together. The wells were selected by Tom Haslebacher and Mike Stoner.

In some cases you have a state well number and in some cases they have names. The problem isn't location; the problem is many different records with different names, per Mr. Bingham. Mr. Marquardt stated that he has a shelf at the Resource Conservation District that has well driller logs that all have the same numbering system. It isn't digital, but everybody is welcome.

Compliance with Indian Wells Valley Groundwater Monitoring Program with SBX7-6: Nothing new to report. State is still trying to figure out who they are going to contract with. Tim Parker offered his assistance since he worked there in the past. Don Zdeba suggested that they could be behind because according to the Action Register, Tom Haslebacher and Michele Casterline are working on it and they haven't been there. Mr. Parker also stated that ACWA Groundwater Committee has a meeting on March 29th and should know more at that time.

Review Action Register: The Action Register was reviewed and changes made. An updated version of the Action Register will be sent to the Group with the April meeting agenda.

Items for the April Agenda: Items for the April Agenda include: 1) Integrated Regional Water Management Program, 2) Solar Millennium Project Update, 3) 2009 In-Kind Service Update, 4) 2010 In-Kind Service Commitment Update, 5) Project Review Report, 6) TAC Report, 7) Compliance with Indian Wells Valley Groundwater Monitoring Program with SBX7-6.

LeRoy Marquardt inquired about the discussion of banking of water with L.A. Department of Water & Power (DWP). He stated that he was asked by somebody high up at the Navy base. Mr. Mulvihill stated that recommendations of a study was done through Chuck Krieger's office, brought in here and presented to both the TAC and the big group. Mr. Zdeba said that there was an extensive power point presentation about the study, how they considered the areas, what factors went into consideration, and how they selected the areas that were tested. Mr. Mulvihill stated that nothing new has come up since then. The District is doing conservation, Brackish Water Treatment, pursuing all local avenues of planning for the future, but some day at some point in time, we're going to have to bring water into the valley. Mr. Marquardt stated that years ago Arden Wallum would go and meet with Navy personnel. Mr. Mulvihill has offered to make contact with Navy personnel to make sure they are aware of what is going on.

The following Agency Reports were made:

Quist Farms: Pat Quist reported that they are cleaning lines, pipe and hose checks.

BLM: Glenn Harris talked again about Solar Millennium and geothermal leasing in the Rose Valley. They are currently reviewing a power line from the Cantil area down into the LA basin and we're looking at some applications in the Rose valley north of Coso Junction. We don't currently have that listed as a geothermal area and so we're in the process of developing an EIS to study that as a potential geothermal leasing area. There are a series of issues to look at in that area since there are a lot of ground squirrels. There are about 20,000 + acres in that geothermal area that we're looking at. Mr. Marquardt said that he has a map and overview of the wells in that area and will make a copy available.

Eastern Kern County Resource Conservation District: LeRoy Marquardt mentioned the meeting on the SEEP program.

Kern County Water Agency: Terry Rogers spoke to the Group about the Kern River issues and reported that in order to have an application to protect lower river interest; it would cost \$450,000.00 to submit the application. Pat Quist mentioned that she had heard people from an LA water district are promoting all of it. Mr. Rogers informed the Group that the interested parties were the City of Bakersfield, Kern County Water Agency, Rosedale and water storage districts. Each of them are trying to get more water and everybody just assumed it was settled but found out it wasn't. The State Board just took on 25 new people and they're looking at the water use reports. If you don't file these reports timely, they're fining large numbers per day for not having it filed right. The average flow of Kern River is 400,000 acre feet a year; the minimum is around 370,000 with the maximum flow at 1.7 million.

Indian Wells Valley Water District: Tom Mulvihill announced the XERIC© seminar of March 27th at the Home & Leisure Show from 1:00 pm to 3:30 pm. The District has drafted a mirror ordinance to the City's Water Efficient Landscape Ordinance, and it's been sent over to the City for comment. The District is planning on taking it to the Board of Directors at the regular board meeting in April. The arsenic treatment facilities are currently under construction and will have completed the underground piece soon and will then start construction above

ground. IWVWD is beginning work on Sunland and replacing the water lines between Ridgecrest Blvd. and Church Street. Bids for permanent patch close March 19th. Mr. Mulvihill stated they were hoping to get seven bids returned.

Searles Valley Minerals: Don Zdeba congratulated the Water District for the bill calculator on the District's web site. Marmac Field Services, an engineering company that's managing the potable water line replacement project for Searles Valley Minerals, had a bid meeting last Thursday and had three contractors attend, all from outside the area. The bids are due Tuesday March 23rd. One issue is the potential conflict with Sunland. Our lines are supposed to go down Sunland but may be in conflict with the Water District. SVM's lines should be in by July.

General Public Comment: Public asking questions and making comments was Sophie Murk, Judie Decker and Tim Parker.

With no further comments or discussion to come before the Group, Motion was made by Glenn Harris and seconded by Peggy Breeden to adjourn the meeting at 3:13 p.m.

Respectfully submitted,



Patty Montenegro
Recording Secretary

The next meeting is scheduled for April 15, 2010.

**I.W.V. COOPERATIVE GROUNDWATER
MANAGEMENT WORKING GROUP
March 18, 2010**

<u>ATTENDEE</u>	<u>ADDRESS</u>	<u>PHONE NUMBER</u>	<u>E-MAIL</u>
<u>[Signature]</u>	<u>500 W R/S BLVD</u>	<u>3845535</u>	<u>timehills@iwvwp.com</u>
<u>[Signature]</u>	<u>WYCKERN</u>	<u>760 377 4532</u>	<u>countrygardens@verizon.net</u>
<u>Don Zdeba</u>	<u>SVM</u>	<u>760-372-2542</u>	<u>zdeba@svminerals.com</u>
<u>TERRY ROGERS</u>	<u>KCWA</u>		
<u>CRAIG PETERSON</u>	<u>KERN CO.</u>		
<u>DENNIS STEER</u>	<u>COIZ</u>	<u>492 5045</u>	<u>dsteer@rcrcus</u>
<u>ADAM BINKHIM</u>	<u>SVM</u>	<u>700-322-2515</u>	<u>abinkham@svminerals.com</u>
<u>TIM PARKER</u>	<u>LAYNE</u>	<u>916-833-5800</u>	<u>tim@withmanhydro.com</u>
<u>Glenn HARRIS</u>	<u>Blm</u>	<u>760 384 5431</u>	<u>glenn_harris@ca.blm.gov</u>
<u>[Signature]</u>	<u>self</u>	<u>760 446 4447</u>	<u>doecker@ridgeret.net</u>
<u>[Signature]</u>	<u>DUNWAD</u>	<u>375-5400</u>	<u>brocker@iwvwp.com</u>
<u>Rence Morquecho</u>	<u>IWVWD</u>	<u>384-5520</u>	<u>rancem@iwvwd.com</u>
<u>[Signature]</u>	<u>Deerfield Farms</u>		