From: Scott Maloni [mailto:SMaloni@poseidon1.com]
Sent: Tuesday, June 09, 2015 2:31 PM
To: Kennedy, John
Subject: RE: PDFs of IRWD's Analysis

John – Per your request, below in this email are bullet points with a number of comments and questions that you may want to consider raising regarding the IRWD analysis.
Before you get embroiled in a detailed response to the IRWD analysis I think the District needs to make it clear to IRWD and the Producers that OCWD's interest in the HB Desalination project in being driven by policies adopted by the Board of Directors. Specifically, on May 15, 2013, the Board unanimously resolved that it is the policy of the District to consider and develop a variety of local water resources – including seawater desalination - to ensure sufficient water supplies are always available to the residents and businesses in the service territory. The Board resolution states, "*without the development of additional new local water resources the Groundwater Producers will be forced to significantly increase the amount of imported water they require."*
IRWD's scheme to import more water during wet years and over pump the basin during dry years is not sustainable or responsible management of the basin. Equally as important, it's not a water supply alternative to the HB project that is consistent with the Board's policy to develop new, localwater supplies. I think you can quickly dismiss this alternative if you reinforce this point. In this regard you might want to consider talking about the HB project (and the local projects you are developing) in the context of water independence, not just water reliability which is a more nebulous and hard to quantify concept. Does Project X make Orange County more or less water independent? That should be the screening criteria for all alternatives.
Also, in the context of concerns over the cost of desalinated water the District might want to draw comparisons between the HB project and GWRS. I know Mike cringes at this but Cathy does it all the time (there's no stopping her). At some point is might be helpful to know what the original cost delta was between GWRS and MWD water. It may be less than desal water but I bet it's not too far off. GWRS turned out to be a wise investment of Orange County and so will desalination.
Here are our IRWD comments:

- The entire financial analysis is predicated on no growth in water demand. This skews the analysis, specifically in regard to the application of the MWD LRP Subsidy, and is inconsistent with the District's LTFP and the findings supporting the policy I cited above.

- The analysis should be based on the 50 purchase agreement, not 30 years. This affects the assumptions about the future cost of desal water as the price re-openers in the term sheet are likely to result in greater savings to OCWD over time.

- The MWD LRP Subsidy should be calculated over 15 years, not 25 years.

- It's premature for IRWD to conduct its analysis because the decision that OCWD makes on the distribution of water (direct sales, sales to S. Orange County, injecting water into the basin) will have a significant effect on the cost analysis.

- The characterization of the MWD LRP and its impact on OCWD's imported water in the second to last paragraph on page 2 is flawed and skews the entire analysis. OCWD's purchase of desalinated water will not have any effect on the amount of untreated water it purchases from MWD. The desalinated water will offset the demand placed on MWD for treated water by groundwater producers and retailers. This should be true under all delivery scenarios because even if OCWD puts all the water into the groundwater basin, the BPP will go up and Producers will be able to purchase less expensive imported water. This erroneous assumption is stated throughout the report.

- The analysis doesn't take into account that the BPP will go up if any/all desalinated water goes into the groundwater basin.

- On page 4, the explanation of the MWD LRP Subsidy ignores that the MWD guidelines state that "*projects must replace an existing demand or <u>prevent a new demand</u> on Metropolitan's imported water deliveries…"* Again, the analysis ignores any concept of growth and future water demand and the fact that the desalinated water doesn't have to offset existing demand, but existing and/or new demand.

- You should have Karl Seckel closely scrutinize the report's characterization of the MWD LRP program and its guidelines.

- On page 6 in the first full paragraph, the analysis acknowledges that during a MWD allocation the desalination plant would provide increased water reliability benefits … "*that would occur as a result of the project providing water that would not be available from Metropolitan during an allocation <u>without having to pay significant penalty charges</u>*." One way to quantify the reliability benefit of water from the HB project is to look at the cost that would be avoided by not exceeding the allocation and having to pay "significant penalties" that range from $1,500-3,000 per acre foot depending on how much water you use above the MWD allocation. If the current cost of MWD water is $1,000/AF then the value of HB project's water supply reliability ranges between $500-$2,000 an acre foot.

- The $200/AF cost for distribution seems high. Based on our previous work we think the cost will be below $150/AF and potentially much lower if you receive any state and federal funds.

- In figure #4 on page 8 IRWD assigns a $1,000/AF unit cost to the In-Basin Storage Management. It's not clear how this cost was derived and it never escalates compared to the desalinated water.

- As noted above and we have discussed, at a 6% compounded growth rate in MWD pricing, after the 15th year of our deal, there will likely be a reduction in the cost of desalinated water. This is not reflected in the IRWD analysis.

- In your response OCWD should emphasize how many years it has received less water from MWD than requested (this speaks to goal of water independence).

- In Exhibit A (modeling assumptions) – They assume 52,400 AF per year of Santa Ana Base Flows, well above the District's entitlement. Storm flows and incidental recharge estimates appear to be based on normal hydrology.

- The report lists the target overdraft of -300,000 acre feet. Doesn't the Board have a policy of maintaining a smaller overdraft, roughly 150,000 AF?

Finally, we would request that the author of the report provide the calculations and backup of the analysis for external review.

Thanks.

From: Kennedy, John [mailto:JKennedy@ocwd.com]
Sent: Wednesday, May 20, 2015 1:00 PM
To: Scott Maloni
Subject: PDFs of IRWD's Analysis

Per your request

John Kennedy
Executive Director Engineering and Local Resources
Orange County Water District
18700 Ward Street, Fountain Valley, CA 92708
tel: (714) 378-3304
email: jkennedy@ocwd.com

www.ocwd.com www.gwrsystem.com Follow OCWD on Twitter