

MINUTES OF REGULAR MEETING – SEPTEMBER 12, 2016

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:05 p.m. by President Matheis on September 12, 2016 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: LaMar, Swan, Matheis, Reinhart and Withers.

Directors Absent: None.

Also Present: General Manager Cook, Executive Director of Finance Clary, Executive Director of Water Policy Weghorst, Executive Director of Operations Sheilds, Director of Treasury and Risk Management Jacobson, Director of Water Resources Sanchez, Director of Human Resources Roney, Assistant Director of Maintenance Drake, Assistant Director of Recycling Operations Zepeda, Government Relations Officer Compton, Legal Counsel Arneson via teleconference, Assistant Secretary Savedra, Principle Engineer Akiyoshi, Mr. Allen Shinbashi, Mr. Matthew Veeh, Mr. Barkov Meserlian, Mr. Ian Swift, Mr. Alex Munoz, Mr. Jim Reed, Mr. Bruce Newell, and other members of the public and staff.

ORAL COMMUNICATIONS: None

WRITTEN COMMUNICATIONS: None.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED - None

WORKSHOP

SEWER COLLECTION SYSTEM MASTER PLAN PROGRESS REPORT

General Manager Cook reported that staff will provide a progress report on IRWD's Sewer Collection System Master Plan (SCSMP) and provide a presentation focusing on the existing system hydraulic analysis and the Criticality Based Replacement Planning analysis.

Mr. Meserlian reported the SCSMP is a way to evaluate our current and future system and identify critical facilities and improvements all in support of capital improvement programs and system management and operations. He said the 2016 SCSMP, updated by AKM Consulting Engineers, quantifies existing and projects future sewage flows for IRWD's service area, develops calibrated hydraulic models for the existing and build-out condition systems, identifies infrastructure needed to support existing and future development, and develops "Criticality-Based Replacement Planning" to prioritize operations and maintenance activities, and repair and replacement projects.

Using a PowerPoint presentation, Mr. Meserlian said that staff presented the sewer monitoring program, sewer generation factor calibration, and the sewer flow projections to the Engineering and Operations Committee on March 15, 2016, and the Board on May 23. Build-out condition flows for Michelson Water Recycling Plant and Los Alisos Water Recycling Plant are anticipated at 32.6 million gallons per day (MGD) and 5.0 MGD, respectively. These projections support the remainder of the SCSMP and a multitude of other IRWD planning and policy level analyses.

He said that AKM Consulting Engineers is developing calibrated hydraulic models of the existing and build-out condition sewer collection systems. These models will be used to analyze the impacts of existing and future development. Multiple iterations of the existing system model have been reviewed since September 2015. The latest version (dated August 2016) of existing system model includes a full analysis of average and peak dry weather conditions. The build-out condition model was received in late August and is currently being reviewed by staff.

Mr. Meserlian said that a comprehensive criticality-based replacement planning tool has been developed utilizing InfoMaster software. InfoMaster combines Closed-Circuit Television (CCTV) data, geographic information system data, and hydraulic model results under a single platform that analyzes the criticality of each sewer facility. The analysis is performed based on agreed-upon criteria, and is customized to IRWD's procedures, operations, and staff input. Several IRWD groups participated in the development of this analysis through various workshops and field visits. The results of the analysis were presented to sewer collections, maintenance, and engineering departments in two workshops held in June.

He said that both the existing and build-out condition hydraulic models are being analyzed to support current operations and future growth. Preliminary recommendations for capital improvement projects are anticipated as a result of the analysis. Additional studies (CCTV, flow monitoring, alignment studies, etc.) will be required to confirm the SCSMP recommended improvements.

CONSENT CALENDAR

On MOTION by Withers, seconded and unanimously carried, CONSENT CALENDAR ITEMS 4 THROUGH 7 WERE APPROVED AS FOLLOWS:

4. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Peer Swan and John Withers as described.

5. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the August 22, 2016 Regular Board meeting be approved as presented.

6. 2016 LEGISLATIVE UPDATE

Recommendation: Receive and file.

7. ELECTION OF THE INDEPENDENT SPECIAL DISTRICTS OF ORANGE COUNTY 2017-2018 OFFICERS

Recommendation: That the Board authorize IRWD to cast its ballot in favor of Mike Scheafer (Costa Mesa Sanitary District) for President, Saundra Jacobs (Santa Margarita Water District) for 1st Vice President, Mark Monin (El Toro Water District) for 2nd Vice President, and Mary Aileen Matheis (IRWD) for 3rd Vice President, and authorize the District to submit its ballot to ISDOC no later than the September 27, 2016, deadline.

ACTION CALENDAR

SAN JOAQUIN MARSH IMPROVEMENTS CONSTRUCTION AWARD

The San Joaquin Marsh Improvements project will mitigate the effects of reduced San Diego Creek flows due to the Peters Canyon Channel Water Capture and Reuse Pipeline project as well as improve overall San Joaquin Marsh operations.

On Motion by Swan, seconded and unanimously carried, THE BOARD AUTHORIZED A BUDGET INCREASE IN THE AMOUNT OF \$256,200, FROM \$1,776,700 TO \$2,032,900, FOR PROJECT 6168; AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH OLSSON CONSTRUCTION, INC. IN THE AMOUNT OF \$1,494,775 FOR THE SAN JOAQUIN MARSH IMPROVEMENTS, PROJECT 6168.

PROPOSED POLICY PRINCIPLES ON INCREASING WATER LEVELS IN THE ORANGE COUNTY GROUNDWATER BASIN

General Manager Cook reported that based on the current extreme overdraft conditions in the Orange County Groundwater Basin (Basin), IRWD is proposing policy principles for increasing water levels in the Basin that will provide improved water supply reliability and minimize impacts to the Groundwater Producer Agencies.

Executive Director of Water Policy Weghorst reported that Orange County Water District (OCWD) has recently been managing the Basin inconsistent with its own Groundwater Management Plan and policies. The Basin is now being operated in a sustained state of overdraft, with numerous negative effects being inflicted on the Basin and on the Producers' ability to extract water from the ground. OCWD has indicated that it may be considering taking action to improve overdraft conditions through traditional programs such as increasing untreated water purchases from Metropolitan Water District of Southern California and through an "In-lieu Recharge" program. He said that staff has prepared a Policy Principles Paper on Increasing Water Levels in the Orange County Groundwater Basin for the purpose of initiating the development and implementation of programs and practices through which Orange County Water District, in its role as the manager of the Basin, can increase groundwater levels in the Basin.

Mr. Weghorst said that the OCWD operates the Orange County Groundwater Basin within a narrow band of 0 AF to 500,000 AF of accumulated overdraft to avoid serious adverse impacts to the Groundwater Producer Agencies and the Basin. OCWD has developed plans and policies to prevent the Basin from becoming adversely over-drafted. Currently, OCWD is maintaining the Basin at

approximately 370,000 AF of accumulated overdraft. At this level, the OCWD Groundwater Management Plan (updated in 2015) lists the following adverse impacts as being in effect: Reduced supply of water in storage available for dry years; Increased pumping costs; Increased risk of seawater intrusion; Some production wells inoperable because of low water surface elevations; Increased risk of land subsidence; Potential risk of vertical migration of poor quality water; Need to increase purchases of imported water; and Difficulty in maintaining a stable Basin Pump Percentage (BPP).

He said that these adverse impacts can be mitigated if OCWD took steps to manage the Basin consistent with its own plans and policies. This paper has been prepared to help guide IRWD in advocating for OCWD to take actions to increase groundwater levels and to implement programs that will result in more water stored in the Basin.

Mr. Weghorst said that in 2013, the OCWD Board of Directors adopted a policy to establish a stable BPP with the goal of achieving and maintaining a 75% BPP. At the current accumulated overdraft of approximately 370,000 AF, the OCWD Groundwater Management Plan stipulates that OCWD should be preparing to purchase additional imported water supplies and should lower the BPP. By following its own guidelines, OCWD could substantially improve Basin conditions and reduce accumulated overdraft to within 100,000 AF and 300,000 AF.

He said that in 2015, OCWD signed a purchase order to buy a minimum of 650,000 AF of imported water from the Municipal Water District of Orange County (MWDOC) over a ten-year period. In making this commitment, OCWD intended to use this water to recharge the Basin consistent with the storage management actions described. The Groundwater Management Plan states that the water purchases will help OCWD maintain the BPP and assist with managing the Basin within a safe operating range. OCWD should pursue the purchase of at least the 650,000 AF of imported water during the time the purchase order is in effect. The first step in this process is for OCWD to financially budget for at least 65,000 AF per year of imported water supplies and to augment its Water Reserve Fund. Each year, OCWD should review progress in the reduction of accumulated overdraft and budget for increased purchases above 65,000 AF as may be necessary when accumulated overdraft is forecasted to exceed 150,000 AF. OCWD should set its Replenishment Assessment (RA) to accomplish these purchases and to augment its Water Reserve Fund accordingly. Accumulated overdraft conditions in the Basin will improve quickly if OCWD, in combination with other prudent basin management practices, purchases at least 650,000 AF of imported water over the next 10 years.

Mr. Weghorst said that OCWD should maintain a sufficient Water Reserve Fund to purchase imported water from MWDOC on an annual basis. Accumulating and maintaining appropriate funding levels for future water purchases is critical to the sustainable management of the Basin. Every year OCWD should budget for: The purchase of at least 65,000 AF of imported water through MWDOC; Additional purchases of imported water as may be necessary to improve conditions when accumulated overdraft exceeds 150,000 AF; and Increasing OCWD's Water Reserve Fund to purchase water when it is available. Any funds not used to purchase water in any fiscal year due to Metropolitan Water District of Southern California (MWD) implementing its Water Supply Allocation Plan should be carried over into the next year in the Water Reserve Fund to purchase greater amounts of water. Funds budgeted for the purchase of water from MWDOC should not be re-purposed for other reasons.

Mr. Weghorst said to ensure the ability to recharge a minimum of 65,000 AF of imported water into the Basin every year and to take full advantage of existing imported supplies, OCWD should resume offering a voluntary multi-year in-lieu recharge program that reimburses participating Groundwater Producers to make the cost of participation equivalent to the cost of producing groundwater. Under such a program, the participating Groundwater Producers would use imported water from MWD in-lieu of producing groundwater. This would increase the amount of groundwater available in the Basin. OCWD has historically offered water to the Groundwater Producers through an in-lieu recharge program. OCWD should offer an in-lieu program to interested Producers and budget accordingly.

Basin Recharge through Other Programs:

- *Indirect Potable Reuse Programs:* OCWD is considering the implementation of the Final Expansion of the Groundwater Replenishment System (GWRS). This project will result in an additional 30,000 AF per year (AFY) of cost effective water available for recharging the Basin. OCWD also is evaluating participation in the indirect potable reuse project proposed by MWD in partnership with the Sanitation Districts of Los Angeles County. The project would involve the construction of advanced water recycling treatment facilities in Carson and a pipeline to deliver product water to OCWD's recharge basins. The first phase of the project would deliver approximately 65,000 AFY of uninterrupted water to OCWD for recharge in the Basin. IRWD supports OCWD analysis and implementation of the GWRS Final Expansion Project. IRWD also supports OCWD entering into a cost-effective long-term agreement for the purchase of advanced treated water from the Carson project, priced at MWD's melded cost of Tier-1 untreated water rate.
- *In-lieu Exchange Program:* OCWD should pursue other new programs that will increase water levels in the Basin while reducing the adverse effects of accumulated overdraft conditions. One such concept is to implement an In-lieu Exchange Program in a way that is cost neutral to OCWD while benefitting the Producers. Under such a program, interested Groundwater Producers could voluntarily purchase Tier-1 treated water from MWD in-lieu of pumping groundwater. The reduction in pumping by the participating agencies would result in additional water being stored in the Basin. The Producer agencies that participate in this program would receive credits for the stored water in exchange for the reduced pumping. Producer agencies participating in the program would also pre-pay OCWD the RA at the time the In-lieu exchange occurs, thereby compensating OCWD for the resulting lost sale of water. The credits would allow the participating agencies to recover the stored water in the future, having already pre-paid the RA. Through the In-Lieu Exchange Program, Producer agencies would choose to invest in storing water that can be recovered at a later date, while also avoiding future increases in the RA. Under such an exchange program, OCWD would be cost-neutral.
- *Green Acres Project Supply Source:* IRWD is interested in pursuing discussions with OCWD to establish a program whereby IRWD could provide a high-quality and reliable supply of water to OCWD's Green Acres Project throughout the year. This would subsequently increase the amount of water available to OCWD for treatment in the GWRS and subsequent recharge into the Basin.

- *Seawater Desalination Programs*: IRWD's support for projects that propose to use desalinated seawater for recharge in the Basin (either directly or through in-lieu methods) should be provided only when consistent with IRWD's Policy Position on Desalination Projects.

Mr. Weghorst said that based on the background information provided, the following principles define IRWD's policy for supporting methods to increase the amount of water available within the Orange County Groundwater Basin:

1. OCWD should follow its own policies and Groundwater Management Plan for advanced overdraft conditions by reducing the BPP and taking the necessary steps to purchase additional imported supplies from MWD;
2. Every year, OCWD should adjust its purchases of imported water and the BPP accordingly as may be necessary to improve conditions when accumulated overdraft exceeds -150,000 AF while maintaining a Basin operating range of between 100,000 AF and 300,000 AF of accumulated overdraft;
3. OCWD should follow through on its commitment to MWDOC to purchase at least the 650,000 AF of imported water over the next 10 years. As a first step in this process, OCWD should financially budget for at least 65,000 AFY of imported water supplies, increased purchases above 65,000 AF as may be necessary when accumulated overdraft is forecasted to exceed -150,000 AF, and to augment its Water Reserve Fund. OCWD should then set the Replenishment Assessment accordingly;
4. Any funds budgeted by OCWD for imported water purchases that are not used in any fiscal year due to unavailability of water should be dedicated within OCWD's Water Reserve Fund for use in future years when additional import water is available and should not be re-purposed for some other use;
5. OCWD should resume offering a voluntary multi-year in-lieu recharge program where Groundwater Producers could use treated imported water from MWD in-lieu of pumping groundwater. The program should be implemented whereby participating Groundwater Producers pay a net cost equivalent to the cost of producing groundwater;
6. OCWD should implement creative new programs that would increase water levels in the Basin while reducing the adverse impacts of accumulated overdraft conditions. Once such concept would be to implement a voluntary in-lieu exchange program that is cost neutral to OCWD;
7. IRWD supports OCWD evaluation and cost-effective implementation of the GWRS Final Expansion which will increase recharge and reduce accumulated overdraft in the Basin;
8. IRWD supports OCWD pursuing participation in MWD's proposed indirect potable reuse project at Carson through a cost effective long-term agreement for the purchase of advanced treated recycled water from the project at MWD's melded cost of Tier-1 untreated water;
9. IRWD is interested in partnering with OCWD in developing a program through which water from the IRWD recycled water system can be provided to OCWD as a source for the Green Acres Project, thereby increasing available supplies for GWRS for recharge purposes; and
10. IRWD's support for projects that propose to use desalinated seawater for recharge in the Basin (either directly or through in-lieu methods) may be provided subject to consistency

with IRWD's Policy Position on Desalination Projects and demonstration that the project will not result in adverse impacts to IRWD or the Basin.

On further discussion, it was suggested by Director Reinhart that staff and the Board incorporate their recommendations to the Policy Principles Paper for discussion at the WRP Committee. Director Swan amended that suggestion and requested this item be brought back to the OCWD Ad Hoc Committee for further discussion. On Motion by Swan, and seconded **THE BOARD AGREED TO BRING BACK THE POLICY PRINCIPLES PAPER ON INCREASING WATER LEVELS IN THE ORANGE COUNTY GROUNDWATER BASIN TO THE OCWD AD HOC COMMITTEE.**

GENERAL MANAGER'S REPORT

General Manager Cook reported on the emergency pipe break at Turtle Ridge Drive which was resolved a few ago but he said that it's the District purchasing policy direction that he report out at this Board meeting that the emergency contract with G.M. Sager of \$162,792 was awarded and completed. He said that this was our first job with G.M. Sanger and that the job went really well.

Mr. Cook reported that Executive Director Clary was notified today from Fitch Rating Agency that the District received a AAA rating by Fitch on its upcoming General Obligation bonds. He said that the District was still waiting to hear from Standard & Poor Rating Agency.

DIRECTORS' COMMENTS

Director LaMar reported that he along with Directors Swan and Withers attended the Orange County Taxpayers Association Roses and Radishes Awards event. He also attended a WACO meeting and said he will attend the 20th Anniversary of the Orange County Central and Costal NCCP/HCP on Thursday.

Director Swan reported that he attended the Urban Water Institute's annual conference, Newport Chamber meeting, a Santa Ana Watershed meeting, a WACO Meeting and MWDOC/MWD meeting.

Director Reinhart reported he attended a WACO Meeting and a MWDOC Planning meeting.

Director Matheis reported that she attended an El Toro Restoration Advisory Board meeting and a memorial for former Orange County Supervisor Marian Bergeson.

CLOSED SESSION

President Matheis said that the following Closed Session would be held this evening:

CLOSED SESSION CONFERENCE WITH LEGAL COUNSEL RELATIVE TO EXISTING LITIGATION - Government Code Section 54956.9(d)(1) IRWD v. OCWD (Case No.30-2016-00858584-CU-WM-CJC).

CLOSED SESSION CONFERENCE RELATIVE TO PUBLIC EMPLOYEE APPOINTMENT-
Pursuant to Government Code Section 54957(b)
Title: Legal Counsel

OPEN SESSION

Following the Closed Session, the meeting was reconvened with Directors Matheis, LaMar, Reinhart Swan, and Withers present. No action was reported.

ADJOURNMENT

There being no further business, President Matheis adjourned the meeting.

APPROVED and SIGNED this 12th day of September 2016.

President, IRVINE RANCH WATER DISTRICT

Assistant Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

Legal Counsel - Bowie, Arneson, Wiles & Giannone