

## IRVINE RANCH WATER DISTRICT POLICY POSITION WATER BANKING, TRANSFERS AND WHEELING

Revised: September 25, 2017

### Issue Summary:

The Irvine Ranch Water District is further diversifying its water supply portfolio by developing water banking facilities located in the southern San Joaquin Valley in Kern County. Water supplies continue to be stressed in California due to potential shortages from the Colorado River, supply limitations from the Sacramento-San Joaquin Delta (Delta), potential climate change and reoccurring droughts. Under such conditions, water banking recharge, storage and recovery programs will continue to provide a cost effective and reliable supplemental source of water that can be relied upon during major droughts and periods of supply interruptions. The development of and participation in water banking programs by retail water agencies should be encouraged throughout the State. This policy position paper provides Policy Principles for the implementation of the IRWD water banking program.

### IRWD Supply Diversity Requirements:

IRWD's primary mission is to provide a safe and reliable water supply to its customers. IRWD's water supply reliability is directly related to supply diversity. Along with the implementation of numerous water use efficiency programs, IRWD has developed and continues to develop a diverse mix of local and non-local supplies including high quality groundwater, impaired groundwater, and recycled water – all of which reducing IRWD's dependence on imported water.

IRWD has completed a Water Supply Reliability Evaluation that affirmed the importance of IRWD's water banking programs to meet District demands during future droughts and major supply interruptions. Current demand projections indicate that IRWD has a long-term need to store supplemental water that could be called upon during drought conditions or major supply interruptions. In the event of a major supply interruption, such as an earthquake that significantly damages the levees in the Delta, this stored water would be available to fulfill IRWD's estimated needs for imported water over extended periods of time. IRWD's water banking program is a cost effective and environmentally sound method to store and recover supplemental water to meet such long-term supply reliability requirements.

### Key Elements of IRWD's Water Banking Program:

Since 2005, IRWD has made significant progress in the development of its water banking program and in securing associated supplemental supplies. IRWD has purchased land, constructed facilities, and is now operating the Strand and Stockdale Integrated Banking Projects through a long-term partnership with Rosedale-Rio Bravo Water Storage District. IRWD retains equity ownership of these water banking projects. IRWD is also partnering with Rosedale and Castaic Lake Water Agency in the construction of wells that will allow IRWD to ensure the ability to recover water for itself and its partners during peak demand periods.

*Securing Water Supplies:*

So far, IRWD has secured water supplies for its water banking projects through unbalanced exchange partnerships with other agencies. These partnerships allow agencies with surplus water to store water in IRWD's water banking projects in return for transferring 50 percent of the water to IRWD. Such exchanges are called unbalanced exchanges because only half of the water that is delivered into storage is returned to the originating agency.

*Wheeling and Exchange Agreements:*

In 2011, IRWD, Metropolitan Water District of Southern California (MWD) and Municipal Water District of Orange County (MWDOC) executed a long-term Coordinated Operating, Exchange and Delivery Agreement (Coordinated Agreement) that facilitates the delivery of State Water Project (SWP) supplies from IRWD's water banking projects to IRWD's service area. The agreement allows IRWD to secure SWP supplies with the concurrence of MWD, with MWD maintaining control of the introduction of these supplies into its service area. In 2014, IRWD, MWD and MWDOC developed and executed a template Wheeling Agreement that facilitated the delivery of non-SWP water into IRWD's service area. Water delivered to IRWD's service area, through the use of either of these agreements, is considered "Extraordinary Supply" by MWD during water supply allocation periods. It is IRWD's position, that the Coordinated Agreement and the template Wheeling Agreement will be used by IRWD in the future to facilitate the delivery of water that is recovered from IRWD's water banking projects to IRWD's service area.

Sharing Reliability Benefits:

The acquisition of supplemental supplies for IRWD's water banking projects is likely to require the use of unbalanced exchange concepts whereby IRWD stores water on behalf of another party in return for 50 percent of the water being transferred to IRWD. The storage and recovery of water for IRWD's exchange partners will take up capacity in IRWD's water banking projects that might otherwise be available for IRWD's use.

Recently, other agencies have expressed an interest in securing shared reliability from IRWD's water banking programs. It is IRWD's intent, after taking into consideration IRWD's reliability needs as well as hydrologic and regional water supply conditions, that IRWD will be able to enter into shared reliability program agreements that will allow other retail water agencies to receive reliability benefits from IRWD's water banking program. In exchange for receiving these benefits, the agencies would reimburse IRWD for its costs along with a proportional share of IRWD's capital investment in its water banking facilities.

The implementation of future unbalanced exchanges and sharing of reliability benefits from IRWD's water banking projects will result in the need to expand IRWD's water banking capacities. In addition, potential climate change impacts could further increase the need to expand IRWD's water banking projects. Such expansions will ensure that IRWD can meet its water supply reliability requirements while meeting the requirements of its partners. IRWD and Rosedale are currently planning to expand their respective water banking projects and are

working together to secure grant funds from the California Water Commission through the Water Storage Investment Program, that would be used to develop the proposed Kern Fan Groundwater Storage Project. IRWD and Rosedale would each retain equity ownership in half of the project.

Objectives for Acquiring Supplemental Water Supplies:

IRWD's objectives for acquiring both short and long-term supplemental water supplies through water transfers, exchanges and other market transactions, that would be available to IRWD's water banking projects and other water supply reliability programs, excluding supplies needed to fulfill local operations (including irrigation), are as follows:

1. IRWD seeks to acquire low-cost and diverse supplemental sources of water such as high flow Kern River water, State Water Project supplies, water associated with pre-1914 rights, CVP supplies and water from other available sources depending on annual availability and conveyance capacity availability.
2. Generally, IRWD seeks to acquire up to 67% of its supplemental supplies during wet hydrologic periods subject to the conditions established by the water supplier and availability. IRWD does not intend to compete for supplemental supplies during dry years.
3. IRWD plans to acquire up to 33% of its supplemental supplies through smaller sustained, controllable and schedulable supply sources. Such supplies are expected to be acquired through the purchases of farm land that have water supply entitled to it. IRWD intends to preserve existing agricultural uses when possible, and will schedule excess water for direct or exchange delivery to its water banking and other water supply reliability programs through rotational fallowing or onsite conservation using methods that are implemented in coordination with the local community with the intent to minimize significant third-party impacts to local economies.

Policy Principles:

Based on the information provided above, the following IRWD policy principles have been developed:

1. The State's water supplies are being impacted by reoccurring droughts, problems in the Delta, a growing population, increasing regulatory pressure, potential climate change impacts, and an imbalance between available water supplies and available storage. As a result, IRWD needs supplemental supplies and storage facilities to bank the supplemental water supplies for use during dry periods.
2. Based on economic and environmental criteria, water banking programs involving storage in groundwater aquifers are preferred, having demonstrated that they are less expensive and preferable to surface storage.

3. A primary mission of IRWD is to provide a highly reliable supply of water. Reliability is enhanced by having multiple redundant sources of supply. To address this need, IRWD will develop diverse supplemental water supply sources and water banking capacities that will be sufficient to meet changes in IRWD's reliability needs in the future.
4. IRWD seeks to secure low-cost and diverse supplemental sources of water including high flow Kern River, State Water Project supplies, water with pre-1914 rights, CVP supplies and water from other available sources depending on annual availability and conveyance and/or exchange capacity that will allow IRWD to achieve its water supply reliability goals through the implementation its water banking program.
5. Because of the District's obligation to its customers, long-term equity ownership of water banking capacity as well as lands that have water supplies entitled to them is strongly preferred over contract or lease arrangements. Equity partnerships that provide benefits to both the District and to local entities are preferred.
6. The District's water banking partners will benefit from the sharing of recharge, storage and recovery capacity through unbalanced exchanges and shared reliability benefit programs. In addition, due to potential climate change, the future intervals between wet years could become longer with increases in the rate of runoff. These issues may make it necessary for IRWD in the future to consider increasing recharge, storage and recovery capacities in its water banking program.
7. Expansion of water banking capacities may be considered through equity purchases of capacities available in existing water banking programs or development of partnerships for capacity expansion.
8. IRWD will support wheeling policies and rates adopted by MWD and other agencies to the extent they reflect cost of service approach. Any wheeling or exchange of water through MWD's conveyance facilities should be consistent with MWD's Administrative Code, must not financially impact MWD or its Member Agencies and should protect MWD's rights including its SWP contract.
9. IRWD will put all available supplemental water supplies to beneficial use using methods that are implemented in coordination with the communities that are local to the source waters and where necessary attempt to minimize significant third-party impacts while preserving the agricultural benefits of the contributing lands through temporary fallowing arrangements and / or water conservation efforts.
10. IRWD will seek partnerships that result in mutually beneficial exchange opportunities including the ability to enhance direct and in-lieu recharge or recovery operations associated with IRWD's water banking program.
11. IRWD will support and actively work with the State and the Federal governments and available legislative processes to streamline procedures for the implementation of short

and long-term water transfers and exchanges as well as the formation of local, regional and statewide water marketing systems.

12. IRWD will support the development of water marketing systems in the State of California that are consistent with and do not expand existing lawful authorities, provide local and regional oversight of markets, encourage regional and statewide cooperation, protect existing land, water and capacity rights, attempt to protect communities from unreasonable third party and / or environmental impacts, do not interfere with contract rights and that result in streamlined abilities to effectuate water transfers, exchanges and wheeling of supplies among voluntary market participants.
13. IRWD will support sharing water supply reliability benefits from its water banking program after considering its own water supply reliability needs as well as hydrologic and regional water supply conditions. In providing such benefits, IRWD will ensure that it is kept financially whole and that IRWD recovers a proportional share of its capital investments in a way that avoids impacts to its customers.