

**WATER PLANNING COMMITTEE**

AGENDA FOR

**MARCH 25, 2010**

Javier Saunders – Chair  
Rua Petty – Vice Chair  
Betty Ferguson – Vice Chair  
Jim Barrett  
Marilyn Dailey  
Keith Lewinger  
Bud Lewis

John Linden  
Barry Martin  
Dan McMillan  
Mark Muir  
Joseph Parker  
Fern Steiner  
Mark Watton

1. Roll call – determination of quorum.
2. Additions to agenda (Government Code Section 54954.2(b)).
3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.
4. Chair’s report.  
4-A Directors’ comments.

**I. CONSENT CALENDAR**

1. Agreement with the city of San Diego for use of reservoir storage capacity. Paul Gebert  
Staff recommendation: Authorize the General Manager to sign an agreement for reservoir storage capacity with the city of San Diego. This agreement allows the Water Authority to maintain regional carryover storage in City reservoirs until the San Vicente Dam Raise is complete. (Action)

**II. ACTION/DISCUSSION**

1. Drought Management Plan. Dave Fogerson  
1-A Approve revised M&I allocation targets.  
Staff recommendation: Approve revised M&I allocation targets for remainder of fiscal year 2010 due to opt-outs from Interim Agricultural Water Program and Special Agricultural Water Rates. (Action) (pickup packet)

- 1-B Water Supply conditions. (Information) Lesley Dobalian
  
- 1-C Make determination to proceed with short-term pilot water transfer for up to 1,250 acre-feet between San Juan Water District, Santa Clara Valley Water District and the San Diego County Water Authority. Debbie Espe  
Staff recommendation: Authorize the General Manager to enter into an agreement with Santa Clara Valley Water District and San Juan Water District to purchase up to 1,250 acre-feet for an amount not to exceed \$753,000 under a pilot water transfer. (Action)
  
- 1-D Authorize the General Manager to not exercise the Water Authority’s call rights to the 2010 dry-year transfer with the South Feather Water and Power Agency. Meena Westford  
Staff recommendation: Authorize the General Manager to not exercise the Water Authority’s call rights to the 2010 dry-year transfer with the South Feather Water and Power Agency. (Action)
  
- 2. Coordination of Regional Surface Water Storage Reservoirs. (Discussion) Ken Weinberg

**III. INFORMATION**

- 1. Fiscal Year 2010 Water Supply Allocations monitoring. (pickup packet) Dave Fogerson
  
- 2. Water Resources report. Ken Weinberg

**IV. CLOSED SESSION**

**V. ADJOURNMENT**

Doria F. Lore  
Clerk of the Board

**NOTE:** This meeting is called as an Water Planning Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Recodified). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.



March 17, 2010

**Attention: Water Planning Committee**

**Agreement with the city of San Diego for use of reservoir storage capacity (Action)**

**Staff recommendation**

Authorize the General Manager to sign an agreement for reservoir storage capacity with the city of San Diego (City). This agreement allows the Water Authority to maintain regional carryover storage in City reservoirs until the San Vicente Dam Raise is complete.

**Alternatives**

Do not authorize the General Manager to execute the agreement, and instead direct staff to negotiate new terms for an agreement with the City.

**Fiscal Impact**

There are sufficient funds in the fiscal years 2010 and 2011 Adopted Budget for water purchases. Funding beyond fiscal year 2011 is contingent upon Board approval of future water purchase budgets. This agreement pays the City on an annual basis the operation and maintenance cost for storing Water Authority-owned water in various City reservoirs. The annual payment at the current storage level of 34,012 acre feet (AF) would be approximately \$596,000. In addition, the agreement will reimburse the City the actual cost of pumping Water Authority-owned water when it is delivered from Lower Otay reservoir to the City's Otay water treatment plant. The related rate category is supply.

**Background**

Due to continued drought and water supply challenges in the State Water Project (SWP), MWD implemented Water Supply Allocation Plan Level 2 on July 1, 2009. As such, carryover storage can play an important role in supply reliability. Prior to the completion of the San Vicente Dam raise project the Water Authority must store its regional carryover supplies in member agency owned reservoirs. With the drawdown of San Vicente Reservoir in preparation for the dam raise as well as the prolonged drought conditions and delta export restrictions, the Water Authority has been working with its member agencies to optimize local storage opportunities. Working collaboratively, the Water Authority and member agencies have cooperated to move supplies into local storage for potential use if shortages continue.

In September 2008, the Board authorized the General Manager to enter into an agreement with Sweetwater Authority to store regional carryover supplies in Sweetwater reservoir. To date, total carryover storage placed by the Water Authority in the region is approximately 41,000 AF. The approximately 34,012 AF already placed in City reservoirs was under the current Emergency Storage Agreement (ESP) with the city of San Diego. Under the terms of that agreement the Water Authority's rights for storage capacity expire upon award of the construction contract for the San Vicente Dam raise project. This agreement would allow for storage in City reservoirs during this interim construction and fill period until the San Vicente dam raise is complete, at which point Water Authority storage in San Vicente will be governed by the ESP agreement.

**Discussion**

As part of the ongoing effort to enhance local carryover storage for use during current water supply challenges, staff negotiated a new storage agreement with the City that allows the Water Authority to store up to 60,000AF of carryover storage supplies in City reservoirs. In addition to the regional benefit of enhanced drought supply, storing water in City reservoirs also helps to address a conveyance capacity constraint that currently exists with the untreated water aqueduct system that supplies areas of the county south of Lake Murray such as the City's Otay Water Treatment Plant. Having this storage provides a means to manage the aqueduct system until several new capital facility projects, including the Mission Trails group of projects, are completed.

The storage agreement provides payment to the City for a proportionate share of the cost for operation and maintenance of the City's reservoirs. The rate to store water is \$17.53 per AF, which is comparable to the Water Authority's costs of operation and maintenance for Olivenhain Reservoir. The Water Authority will also reimburse the City \$13.76 per AF for pumping Water Authority-owned water from Lower Otay Reservoir to the City's Otay Water Treatment Plant. The pumping cost only applies to water that otherwise would have been delivered directly from the aqueduct without pumping. The Water Authority's share of reservoir operations and maintenance costs are paid on an annual basis based on the maximum amount of Water Authority-owned water held in storage each year. Pumping costs will be reimbursed monthly based on the amount of Water Authority owned water that is pumped from Lower Otay Reservoir to the treatment plant.

Other pertinent terms of the agreement include development of an operating plan to determine annual storage amounts and anticipated withdrawal rates, proportionate sharing of evaporation losses, and Water Authority responsibility for spill losses prior to the City incurring such losses.

As requested by the City, this agreement term is until the San Vicente Dam Raise is complete or July 1, 2013, which provides the City with reasonable storage planning definition. This agreement can be extended by mutual agreement.

Prepared by: Paul Gebert, Senior Water Resources Specialist  
Reviewed by: Ken Weinberg, Director of Water Resources  
Approved by: Sandra L. Kerl, Deputy General Manager



March 17, 2010

**Attention: Water Planning Committee**

**Water Supply Conditions (Information)**

**Purpose**

To provide a status report on water supply conditions.

**Background**

*Drought Management Plan: Stage 3 “Mandatory Cutbacks”*

*Drought Response Level: Level 2 “Drought Alert”*

A moderate-to-strong El Niño condition continued during February 2010. The National Weather Service continues to predict that El Niño conditions will last into the spring 2010, bringing with it above average precipitation for the lower half of California, and an equal chance of above or below average precipitation for the upper half of the State.

**Discussion**

State Water Project

The California Department of Water Resources’ (DWR) initial Table A allocation for water delivery to the State Water Project (SWP) contractors in calendar year 2010 was increased from 5 to 15 percent on February 26<sup>th</sup>. This remains a historically low allocation, due to three prior years of drought conditions, combined with restrictions on SWP pumping to protect Delta fish species. Assuming average precipitation continues through the spring, DWR estimates the final calendar year allocation will likely be increased to 35 to 45 percent, depending on how the biological opinions to protect fish species are applied and how much flexibility DWR has to pump water. The final calendar year 2009 Table A allocation was 40 percent of the contractors’ requested amounts.

DWR conducted its third snow survey of the season on March 3, 2010. Snow water content statewide was 107 percent of normal. Snow water equivalents based on electronic sensor readings are shown in Table 1 through March 15, 2010.

Precipitation based on the Northern Sierra 8-Station Index was at 101 percent of average for water year 2010 on March 15, 2010.

**Table 1. Snow Water Equivalents**

Region	% Average
Northern Sierra	129
Central Sierra	96
Southern Sierra	113
Statewide	111

Source: DWR CDEC. 3/15/2010

Reservoir storage levels across the State have increased compared to last year due to the improved hydrologic conditions (Table 2). According to DWR, the majority of the supply in the San Luis reservoir is unavailable for use during calendar year 2010. Individual water contractors, including the Metropolitan Water District of Southern California (MWD), have already earmarked the supply as unused carryover from previous years’ allocations. The amount of carryover storage held in San Luis by MWD is estimated to be approximately 130,000 acre-feet (AF).

**Table 2. Storage Levels in Select Reservoirs**

Reservoir	March 11, 2010		March 11, 2009	
	% Average	% Capacity	% Average	% Capacity
<b>Shasta<sup>1</sup></b>	104	80	71	54
<b>Lake Oroville</b>	57	42	65	48
<b>San Luis</b>	87	77	50	44

Note 1. Shasta reservoir is part of the Central Valley Project, not the State Water Project.

Colorado River

The Lower Colorado’s water supply conditions on March 15, 2010, are as follows:

- Lower Colorado River water year precipitation to date: 84 percent of normal
- Current Basin snowpack: 84 percent of normal
- Lake Powell inflow forecast for March 2010: 68 percent of normal

Metropolitan Water District of Southern California Water Surplus and Drought Management Planning  
 MWD updated its latest Water Surplus and Drought Management (WSDM) report on March 2, 2010, following the increase in the SWP allocation to 15 percent. According to the report, the current trend estimate including wheeling obligations and system losses for calendar year 2010 is 2.249 million acre-feet. The estimated demand projections contain actual member agency deliveries to date and assume continuation of a Level 2 WSAP implementation through June 2010, and an estimate of demand without an allocation for July through December.

The increase in the SWP Table A allocation amounts to a gain of approximately 210 thousand acre-feet (TAF) in supply. Even with this increase, MWD would have to use 820 TAF, or nearly 80 percent of its total WSDM storage, in order to meet the projected trend demand. It is highly likely that the final SWP allocation will increase if hydrologic conditions continue to remain near average. MWD staff plan to update its allocation recommendation and storage considerations in April, based on DWR’s expected final Table A deliveries and the latest storage conditions.

Local Conditions

According to the National Weather Service, cumulative precipitation from July 1, 2009, through March 15, 2010, is as follows:

- San Diego at Lindbergh Field: 8.7 inches, or 102 percent of normal
- Ramona at Ramona Airport: 15.2 inches, or 117 percent of normal

The Water Authority has the following in storage through February 28, 2010:

- Water Authority Local carryover storage: 40,965 AF
- Water Authority Semitropic groundwater storage bank: 16,117 AF

Local reservoir storage is at approximately 114 percent of average for this time of year compared with storage from 2001 to 2010. Storage increased by approximately 61,000 acre-feet, or 24 percent from to January 1, 2010, to March 9, 2010. This reflects increases due to runoff and imported water deliveries into storage, along with withdrawals that occurred during this period.

March 17, 2010

**Attention: Water Planning Committee**

**Make determination to proceed with short-term pilot water transfer for up to 1,250 acre-feet between San Juan Water District, Santa Clara Valley Water District and the San Diego County Water Authority. (Action)**

**Staff recommendation**

Authorize the General Manager to enter into an agreement with Santa Clara Valley Water District and San Juan Water District to purchase up to 1,250 acre-feet for an amount not to exceed \$753,000 under a pilot water transfer.

**Alternatives**

Do not authorize the agreement or revise the amount of water purchase and authorize funds for the agreement.

**Fiscal impact**

The fiscal impact associated with this action includes \$200 per acre-foot of one-year water transfer water, \$444 per acre-foot to move the water through the State Water Project and Metropolitan Water District facilities, \$30 per acre-foot for Department of Water Resources' estimated administrative costs and \$67,500 in other costs. Assuming the standard losses for water transfers, the effective cost for the water would be approximately \$775 per acre-foot delivered to the Water Authority. The total cost of the transfer is not to exceed \$753,000. The rate category for this project is supply.

**Background**

In 2007, the Board directed staff to develop one or more short-term water transfer agreements to help ensure adequate water supplies for 2008, consistent with the Water Authority's Drought Management Plan (DMP). In response to ongoing dry conditions and regulatory restrictions, in 2008, the Board authorized staff to proceed with negotiations to augment its water supplies for 2009. As a result, on December 12, 2008, Santa Clara Valley Water District (Santa Clara), San Juan Water District (San Juan) and the Water Authority executed a Statement of Cooperation and Intent. The Statement memorialized the agencies' intent to develop a pilot one-year groundwater substitution program to determine the feasibility of complying with the dry-year water supply provisions of the Sacramento Water Forum Agreement (WFA). The WFA is an agreement which provided environmental benefits for the Lower American River, in a manner that also helped meet California's water supply needs. However, by April 2009, San Juan was noticed that 2009 was not a "Water Forum year" requiring releases to assist the Bureau of Reclamation's (Reclamation) habitat management programs. As a result, staff of all participating agencies agreed to pursue rolling the program over to Calendar Year 2010.

**Discussion**

The proposed action is a three-party, short-term water transfer between San Juan, Santa Clara and the Water Authority. Under the WFA, San Juan may transfer its foregone Central Valley Project

(CVP) water supplies for use by other agencies downstream of the confluence of the American river and the Sacramento River after that water has served its environmental and recreational purposes in the Lower American River. The terms of the transfer dictate that the transferred water would be used entirely within Santa Clara's service area and the CVP place of use. The State Water Project (SWP) water provided to the Water Authority by Santa Clara in exchange for the transferred water will be used entirely within the service area of the Water Authority, a member of the Metropolitan Water District (MWD), a SWP contractor. The transfer will require a wheeling agreement with MWD, as well as MWD's consent to the delivery of another entities' SWP contract water into MWD's service territory.

San Juan seeks to reduce its diversions of CVP surface water from Folsom Reservoir in certain dry years. By foregoing part of its CVP diversions, San Juan supports an improved pattern of fishery flow releases from Folsom Reservoir, and helps Reclamation better manage habitat on the lower American River. Revenues from the water transfer could assist San Juan in implementing its conjunctive use program and other actions to meet its WFA obligations. The 2010 water transfer would serve as a model for future water transfers under the WFA.

By participating in this transfer, Santa Clara seeks to enhance its supplies by securing options to purchase water in dry years. Santa Clara is also interested in pursuing cost-effective conjunctive use, storage and recovery, exchange and transfer opportunities to help counteract the effects of dry years. Santa Clara is also an Original Banking Partner in Semitropic Water District's Banking Program possessing water storage and recovery rights.

Employing a groundwater conjunctive use program, San Juan – through agreements with its member agencies – would pump up to 2,500 acre-feet of groundwater within its service area. San Juan would then make available an equal amount of its contracted CVP surface water for transfer to Santa Clara, also a CVP and SWP contractor. Santa Clara, in turn, would take delivery and pay for 1,250 acre-feet (before losses) and deliver 1,250 acre-feet (before losses) to the Water Authority, so that Santa Clara and the Water Authority equally share the water supply made available by San Juan under this project. The agreement would provide about 1,250 acre-feet of supplies prior to providing for Delta carriage losses, estimated at 20 percent, and conveyance losses, estimated at three percent.

San Juan is responsible for obtaining regulatory, environmental or other state or federal agency approvals required to accomplish delivery of the transfer water to Santa Clara's delivery point. While Santa Clara and the Water Authority are jointly responsible for obtaining approvals required for delivery of the water from Santa Clara's delivery point to Harvey O. Banks Pumping Plant, or the Delta-Mendota Canal at Jones Pumping Plant, or to the Semitropic Water Bank. The Water Authority is then responsible for obtaining approvals to the Water Authority service area. The final draft of the environmental compliance documentation for the pilot water transfer program is complete.

In the Water Authority's 2008 and 2009 short-term water transfer transactions, DWR recommended collaborating with MWD and other SWP contractors to facilitate the transfer of Northern California water. MWD and Water Authority staff have been in communication on water transfer discussions. In order to facilitate delivery of north of the Delta water supplies



through the Delta, the Water Authority will seek MWD’s wheeling services consistent with its Administrative Code. Under the MWD Administrative Code, upon payment of applicable charges, a member agency is allowed to use MWD’s facilities to transport water not owned or controlled by MWD on a space-available basis. MWD has contract rights to use SWP facilities to transport water, which it allow its member agencies to use.

Although transfers of water through the Delta is subject to curtailments due to environmental restrictions placed on delta pump operations, DWR’s modeling runs indicate that if weather and runoff conditions are drier than normal, there could be windows of opportunity to move water transfer supplies. In February, due to precipitation in January, DWR increased the Table A allocation from 5 percent to 15 percent. Table A identifies the annual amount of SWP deliveries to its contractors. Short-term transfer water could only be moved if there is space available at SWP’s Banks Pumping Plant. MWD staff reported this month that there is potential pumping capacity available at Banks Pumping Plant under moderate Delta restrictions if the SWP allocation is less than 50 percent. The following summarizes MWD’s estimate on potential SWP Banks Pumping Plant capacity:

<b>DWR’s SWP Allocation</b>	<b>Estimate of Potential Capacity for Banks Pumping Plant July – Sept.</b>
15 %	Approximately 935 TAF
25 %	Approximately 625 TAF
35 %	Approximately 350 TAF
45 %	Approximately 100 TAF
50 %	Approximately 0 TAF

There remain risks in the water transfer. These include:

- Continued restrictions on Delta pumping capacity as a result of Judge Wanger’s order to curtail pumping at state and federal water projects to protect the threatened Delta smelt;
- Further water pumping restrictions could result from additional threatened or endangered species;
- Increased Table A allocation reduces potential capacity at Banks Pumping Plant;
- Increased short-term transfers also reduces available capacity, for example, MWD anticipates receiving up to 118,000 acre-feet from Sacramento Valley sellers and the Delta Wetlands; and
- Inability to obtain consent of MWD to receive the delivery of another entities’ SWP contract water into MWD’s service area.

***Pilot Transfer Advances Key Policy Objectives.***

Since July 2009, MWD has implemented a Regional Shortage Level 2 in accordance with its Water Supply Allocation Plan (WSAP), which has resulted in significant reduction in demands throughout the region. Currently staff is projecting that the Water Authority’s FY10 water sales will be approximately 100,000 acre-feet below the amount of available water allocated to member agencies. If the board determines not to proceed with this transfer and the need arises for additional water supplies, the Water Authority could obtain it from MWD and remain within

its MWD allocation. However, this pilot transfer advances other key policy objectives, including:

- Strengthens important strategic partners for the Water Authority.
- Meets California's objective to develop multi-agency, inter-regional water agreements.
- Establishes the foundation for groundwater substitution under the WFA, which could develop into a longer-termed and larger dry-year transfer program.
- Establishes opportunity to participate in an MWD program under development involving Municipal Water District of Orange County/Irvine Ranch Water District (IRWD) purchase of SWP supplies from a SWP contractor other than MWD. By completing this transfer, the Water Authority and IRWD would be implementing similar transfers under similar circumstances at MWD (both agencies have invested in water transfers and Central Valley groundwater storage).

The San Juan, Santa Clara, and Water Authority one-year pilot transfer provides larger, and potentially longer-term dry-year transfers. Additionally, if the water is not needed in 2010 within the Water Authority's service area, there is opportunity to store the water in the Water Authority's Semitropic Water Bank Program through exchange with Santa Clara. Currently, staff continues to coordinate with San Juan, Santa Clara, Reclamation, MWD and DWR on facilitating the transfer.

Prepared by: Debbie Discar-Espe, Senior Water Resources Specialist  
Approved by: Dennis A. Cushman, Assistant General Manager

March 17, 2010

**Attention: Water Planning Committee**

**Authorize the General Manager to not exercise the Water Authority's call rights to the 2010 dry-year transfer with the South Feather Water and Power Agency. (Action)**

**Staff recommendation**

Authorize the General Manager to not exercise the Water Authority's call rights to the 2010 dry-year transfer with the South Feather Water and Power Agency.

**Alternative**

Direct the General Manager to continue efforts to purchase 10,000 acre-feet of dry-year transfer water supplies from South Feather Water and Power Agency for an amount not-to-exceed \$6.65 million.

**Fiscal impact**

The purchase of 10,000 acre-feet of dry year transfer water supplies was included in the fiscal year 2010/2011 multi-year adopted budget. The fiscal impact of staff's recommendation is \$101,000, the amount of the Water Authority's non-refundable option payment to South Feather Water and Power Agency. On a net water sales basis, the staff recommendation will result in a savings of approximately \$1.7 million.

The fiscal impact associated with the alternative action would include the \$101,000 option payment, \$240 per acre-foot of one-year water transfer water, up to \$50 per acre-foot for a PG&E accommodation fee, \$444 per acre-foot to move the water through the State Water Project and Metropolitan Water District facilities, and \$30 per acre-foot for Department of Water Resources' (DWR) estimated administrative costs. Assuming the standard losses for water transfers, the effective cost for the water would be approximately \$869 per acre-foot delivered to the Water Authority. The rate category for this project is supply.

**Background**

South Feather Water and Power Agency (South Feather) is an irrigation district located in the City of Oroville, upstream of the Oroville Reservoir. South Feather owns senior water rights on South Feather River and stores water in Little Grass Valley and Sly Creek reservoirs, which are also power generation facilities licensed to PG&E. In 2008, South Feather sold and transferred 10,000 acre-feet of water to the State Water Project Contractors' Buyers group through a reservoir release program. As part of that transaction, South Feather and DWR entered into a Refill Agreement, which required South Feather to fulfill the refill criteria subsequent to the transfer to ensure that there was no adverse impact on Oroville storage or junior water rights holders, notably the State Water Project Contractors.

On November 26, 2008, the Board authorized the General Manger to execute a one-year agreement with South Feather Water and Power Agency for the purchase of 10,000 acre-feet dry year water supplies. Upon execution of the agreement, the Water Authority submitted a one-time, non-

refundable option payment of \$10 per acre-foot. A condition of that agreement that needed to be met before a transfer would be effectuated was that South Feather would obtain DWR's approval of reservoir refill requirements and obtain the necessary environmental and regulatory permits that are required by the State. A petition for temporary transfer of the associated water rights permits was filed on behalf of this transfer in December 2008 and four protest letters were received. Each of the letters cited the refill criteria issue as the primary reason for the protest. Due to the complexity of the issues, South Feather and the Water Authority board agreed to extend the original call date from April 15, 2009, to May 1, 2009.

On April 23, 2009, the Water Authority board authorized the General Manager to not exercise the right to purchase the water and to negotiate amendments to convert the original agreement into a 2010 transfer. An agreement was executed in July 2009, and the Water Authority agreed to a one-time \$1,000 option payment to secure the 2010 option call date of May 1, 2010.

### **Discussion**

Water Authority staff has had recent discussions with DWR staff regarding this transfer. DWR indicated that while South Feather had met its requirements for the 2008 Refill Agreement, it would impose a more onerous refill obligation on South Feather in order to allow a 2010 water transfer to occur. South Feather has stated that this requirement would not enable them to make the water available for sale. While South Feather and the Water Authority may be able to negotiate satisfactory refill criteria, the administrative expense necessary to do so could be significant, with no assurance of success. DWR has indicated that it intends to directly charge potential buyers an administrative fee for any effort its staff expends in facilitating short-term water transfers.

In addition to the execution of a satisfactory Refill Agreement between the two parties, South Feather is responsible for obtaining all regulatory and environmental approvals. South Feather has not yet fulfilled these obligations. However, on March 13, 2010, a notice for publication of this transfer was released to the public.

An additional risk that pertains to all short-term water transfers is the ability to convey water through the SWP's Banks Pumping Plant. Last month, DWR increased the SWP Table A allocation from five percent to 15 percent. It is anticipated that due to the recent snowpack and rainfall, the SWP Table A allocation will be increased. According to DWR's staff, if the allocation increases to 45 percent or more, capacity to move the South Feather's water may not be available at SWP's Banks Pumping Plant.

Since July 2009, MWD has implemented a Regional Shortage Level 2 in accordance with its Water Supply Allocation Plan (WSAP), which has resulted in significant reduction in demands throughout the region. Currently staff is projecting that the Water Authority's fiscal year 2010 water sales will be approximately 100,000 acre-feet below the amount of available water allocated to member agencies. If the need arises for additional water supplies, the Water Authority could obtain it from MWD and remain within its allocation.

Due to the changed conditions of the Water Authority's water demands, which have significantly dropped since MWD enacted Level 2 of its Water Supply Allocation Plan last July, the expense necessary to obtain the necessary approvals and agreements and the comparatively higher cost of

Water Planning Committee

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the supplies themselves, staff recommends the Water Authority not exercise its call rights to the 2010 dry-year transfer with the South Feather Water and Power Agency.

Prepared by: Meena Westford, Water Policy Manager

Approved by: Dennis A. Cushman, Assistant General Manager



March 17, 2010

**Attention: Water Planning Committee**

**Coordination of Regional Surface Water Storage Reservoirs (Discussion)**

**Purpose**

To report back to the Board on member agency interest in participating in the development of a comprehensive regional strategy for managing local surface storage reservoirs.

**Background**

At the February 25, 2010, Water Planning Committee, staff reviewed historical and current efforts related to regional coordination of surface storage reservoirs. The coordination that currently occurs between the member agencies and the Water Authority allows for effective management of the seasonal variation in water demands and the operating constraints of the aqueduct system.

At the Water Planning Committee meeting, Director Steiner made the following motion:

*“Direct staff to work with member agencies and other stakeholders to develop a Strategic Long-Range Plan for Surface Storage in the San Diego Region that comprehensively reviews the viability of the region’s drinking water reservoirs and related systems; identifies opportunities for optimizing local yield from the reservoirs with potential improvements in infrastructure, operations, and policies; identifies strategies for optimizing storage of imported and locally produced water to enhance water supply reliability and manage peak demands; and, develop guiding principles for the long-term utilization of the region’s reservoirs. This Strategic Plan will be completed by December 31, 2011, so that it may be incorporated in the Water Authority’s 2012 update of the Regional Water Facilities Master Plan.*

Vice Chair Ferguson moved a substitute motion to continue the item to the next Committee meeting. Director Daily seconded and the motion to continue passed. The committee agreed that staff should solicit input from the storage member agencies regarding the level of effort and desired participation needed to develop a comprehensive strategy for managing the region’s reservoirs. This memorandum reports on the follow-up discussion with the member agencies with surface storage regarding the comprehensive regional planning effort described in the motion.

**Discussion**

On March 11, 2010, member agency representatives and Water Authority staff met to discuss the comprehensive regional surface water reservoir storage planning effort outlined in the motion. The agencies that participated in the discussion included the cities of Escondido, Poway, and San Diego, Fallbrook Public Utilities District, Helix Water District, San Dieguito Water District, Santa Fe Irrigation District, and Vista Irrigation District.

As the discussion proceeded, the member agencies were very clear about the following points:

- The storage agencies constructed their reservoirs with rate payer funds and must operate their reservoirs for the benefit of their rate payers.

- The storage agencies do not want to relinquish any control of local production.
- Compliance with complex environmental rules and regulations is very reservoir specific and should be left to the member agencies themselves.

There was also general agreement, however, that opportunities do exist to optimize the use of reservoirs within the region for regional benefit. Member agencies did express the need to be compensated for any added risk they take on for a regional benefit. These opportunities, however, will be constrained by the complexity of operational issues specific to each reservoir. Areas of interest that were identified by the member agency staff present included:

- Better coordination on expectations of member agency storage pools during an ESP emergency
- Incentives through the Drought Management Plan for member agencies to use stored water during shortages to free up reduced imported water deliveries
- Opportunities to manage peak period demands and ensure raw water deliveries

Water Authority staff proposed to evaluate the opportunities for optimizing the region's reservoirs under the upcoming update to the Regional Water Facilities Master Plan. The Water Authority's 2002 Master Plan incorporated reservoir rule curves provided by the member agencies, and overlaid those rules with aqueduct operations to develop a computer model depicting current operating practices. For the Master Plan Update, a similar approach would be followed using current member agency operational constraints and priorities. The storage agencies agreed with staff that developing a regional reservoir operations model under the Master Plan update that compares the regional approach to current practices would show opportunities for multi-agency benefits. How these benefits are to be equitably realized would then be part of the discussion on reservoir management included in the Master Plan document.

The Aqueduct Operating Plan (AOP) was also discussed to see how this document may support strategic operations of reservoirs. The primary goal of the AOP is to identify aqueduct opportunities and constraints and plan operations on an annual basis. The priority of aqueduct operations is to meet immediate member agency retail demand. During non-peak periods, available capacity in the aqueduct can be used to optimize reservoir storage and operations. This AOP process is currently vetted through member agency manager and the operating heads meetings, and it was agreed that this is a positive effort.

A consensus was reached that opportunities for further coordination of reservoir operations can best be achieved by working within existing efforts, such as the AOP, and through the master planning process to develop reservoir operations scenarios that could benefit the region and storage agencies. Staff will continue to work closely with the storage agencies as part of both these planning efforts.

Prepared by: Paul Gebert, Senior Water Resources Specialist

Reviewed by: Ken Weinberg, Director Water Resources

March 17, 2010

**Attention: Water Planning Committee**

**Water Resources Report**

**Purpose**

This report includes the following exhibits for February 2010:

- Rainfall totals for the month and water year to date
- Deliveries to Member Agencies (Exhibit A)
- Water Use by Member Agencies (Exhibit B)
- Storage Available to Member Agencies (Exhibit C)
- Firm Water Deliveries to Member Agencies (Exhibit D)
- Summary of Water Authority Member Agency Operations (Exhibit E)

<b>RAINFALL TOTALS (inches)</b>						
<b>Station</b>	<b>February 2010</b>		<b>2009-2010 WATER YEAR (October 2009 through September 2010)</b>			
	<b>Actual</b>	<b>Normal</b>	<b>Actual</b>	<b>Normal</b>	<b>Departure</b>	<b>% Normal</b>
Lindbergh Field (N.O.A.A.)	<b>2.28</b>	<b>2.04</b>	<b>8.06</b>	<b>7.14</b>	<b>0.92</b>	<b>113</b>
Lake Cuyamaca (Helix W.D.)	<b>18.86</b>	<b>6.62</b>	<b>30.07</b>	<b>22.44</b>	<b>7.63</b>	<b>134</b>
Lake Henshaw (Vista I.D.)	<b>6.89</b>	<b>5.56</b>	<b>27.10</b>	<b>17.75</b>	<b>9.35</b>	<b>153</b>

Sources: National Weather Service, Helix Water District, Vista Irrigation District.



# MONTHLY WATER RESOURCES REPORT

## Water Deliveries to Member Agencies

(acre-feet)

### FEBRUARY 2010

AGENCY	February		12 Months Ended February	
	2010	2009	2010	2009
Carlsbad M.W.D.	893.2	698.7	18,136.8	20,757.8
Del Mar, City of	47.3	58.2	1,153.4	1,224.4
Escondido, City of	618.5	1,422.5	21,961.7	21,698.5
Fallbrook P.U.D.	313.2	483.8	14,796.9	15,292.3
Helix W.D.	2,477.2	2,934.2	33,482.3	46,682.1
Lakeside W.D.	137.5	164.9	3,533.2	4,201.1
National City, City of <sup>1</sup>	65.1	194.2	3,607.6	3,206.0
Oceanside, City of	1,056.1	1,388.2	27,266.7	31,621.4
Olivenhain M.W.D.	675.0	878.3	20,876.9	24,731.3
Otay W.D.	1,403.0	1,713.8	32,458.4	36,719.1
Padre Dam M.W.D.	508.4	615.3	13,224.6	15,526.8
Pendleton Military Reservation	4.6	5.2	65.1	85.9
Poway, City of	372.9	554.3	11,848.8	14,942.5
Rainbow M.W.D.	384.3	924.9	25,449.7	25,638.9
Ramona M.W.D.	506.0	263.2	7,350.9	9,377.1
Rincon Del Diablo M.W.D.	215.4	257.1	6,708.5	7,913.5
San Diego, City of <sup>1</sup>	9,491.7	9,673.7	194,003.0	203,864.6
San Dieguito W.D.	154.0	182.7	2,408.4	3,976.2
Santa Fe I.D.	44.0	241.3	6,052.0	8,774.5
South Bay I.D. <sup>1</sup>	635.8	1,607.4	14,058.0	15,119.5
Vallecitos W.D.	669.0	870.3	17,170.4	20,310.0
Valley Center M.W.D.	289.8	827.7	32,697.2	35,070.8
Vista I.D.	896.7	1,006.7	16,305.0	16,492.9
Yuima M.W.D.	0.0	4.8	2,571.5	2,404.6
Deliveries To SDCWA Agencies <sup>1</sup>	21,858.7	26,971.4	527,187.0	585,631.8
Deliveries To SDCWA Storage <sup>2</sup>	165.1	2,186.0	4,999.9	17,640.4
<b>TOTAL MEMBER AGENCY DELIVERIES</b>	<b>21,693.6</b>	<b>24,785.4</b>	<b>522,187.1</b>	<b>567,991.4</b>
Deliveries To Other Agencies	48.3	66.3	753.2	891.3
Deliveries From SDCWA Storage	0.0	0.0	0.0	0.0

<sup>1</sup> February 2010 deliveries include 163.3 AF to city of San Diego SDCWA storage accounts and 1.8 AF to Sweetwater Reservoir account. February 2009 deliveries include 1,170.7 AF to Sweetwater Authority SDCWA storage account; 847.4 AF to SDCWA's subaccount in Helix WD's El Capitan account; and 167.9 AF to city of San Diego SDCWA accounts.

<sup>2</sup> Deliveries to SDCWA storage accounts are deducted to calculate member agency deliveries.

**MONTHLY WATER RESOURCES REPORT**  
**Estimated Water Use by Member Agency**  
 (acre-feet)

**FEBRUARY 2010**

AGENCY	Imported Source S.D.C.W.A.		Local Sources						February Totals	
	2010	2009	Surface Water		Groundwater		Reclaimed Water		2010	2009
			2010	2009	2010	2009	2010	2009		
Carlsbad M.W.D.	773.2	986.7	0.0	0.0	0.0	0.0	29.1	117.2	802.3	1,103.9
Del Mar, City of	47.3	58.2	0.0	0.0	0.0	0.0	1.2	0.8	48.5	59.0
Escondido, City of	503.7	1,263.9	481.0	0.0	0.0	0.0	0.5	4.9	985.2	1,268.8
Fallbrook P.U.D. <sup>1</sup>	294.6	430.7	0.0	0.0	0.0	0.0	10.5	17.5	305.1	448.2
Helix W.D.	1,669.7	1,878.0	0.0	40.2	8.9	11.4	0.0	0.0	1,678.6	1,929.6
Lakeside W.D.	137.5	164.9	0.0	0.0	53.4	76.2	0.0	0.0	190.9	241.1
National City, City of <sup>2</sup>	64.7	68.0	0.0	32.4	259.5	229.6	0.0	0.0	324.2	330.0
Oceanside, City of <sup>2</sup>	1,056.1	1,388.2	0.0	0.0	224.4	131.7	0.0	0.0	1,280.5	1,519.9
Olivenhain M.W.D.	675.0	878.3	0.0	0.0	0.0	0.0	57.7	93.7	732.7	972.0
Otay W.D.	1,403.0	1,966.8	0.0	0.0	0.0	0.0	26.1	149.0	1,429.1	2,115.8
Padre Dam M.W.D.	511.5	601.7	0.0	0.0	0.0	0.0	24.3	31.6	535.8	633.3
Pendleton Military Reservation <sup>3</sup>	52.9	71.5	0.0	0.0	650.0	398.2	80.0	78.3	782.9	548.0
Poway, City of	362.1	501.1	38.6	90.8	0.0	0.0	0.0	0.0	400.7	591.9
Rainbow M.W.D.	334.3	914.9	0.0	0.0	0.0	0.0	0.0	0.0	334.3	914.9
Ramona M.W.D.	204.2	291.8	0.0	0.0	0.0	0.0	0.0	13.9	204.2	305.7
Rincon Del Diablo M.W.D.	215.4	257.1	0.0	0.0	0.0	0.0	259.9	244.5	475.3	501.6
San Diego, City of	8,977.7	9,558.3	1,564.3	3,869.2	37.6	0.0	350.0	258.2	10,929.6	13,685.7
San Dieguito W.D.	154.0	182.7	189.7	177.8	0.0	0.0	15.0	16.0	358.7	376.5
Santa Fe I.D.	44.4	242.0	254.9	238.9	0.0	0.0	55.0	63.6	354.3	544.5
South Bay I.D. <sup>2</sup>	632.6	562.9	0.0	268.0	217.9	173.8	0.0	0.0	850.5	1,004.7
Vallecitos W.D.	661.9	869.5	0.0	0.0	0.0	0.0	0.0	0.0	661.9	869.5
Valley Center M.W.D.	289.8	827.7	0.0	0.0	0.0	0.0	34.0	29.8	323.8	857.5
Vista I.D.	896.7	1,006.7	0.0	0.0	0.0	0.0	0.0	0.0	896.7	1,006.7
Yuima M.W.D.	0.0	4.8	0.0	0.0	4.0	24.8	0.0	0.0	4.0	29.6
<b>TOTAL USE</b>	<b>19,962.3</b>	<b>24,976.4</b>	<b>2,528.5</b>	<b>4,717.3</b>	<b>1,455.7</b>	<b>1,045.7</b>	<b>943.3</b>	<b>1,119.0</b>	<b>24,889.8</b>	<b>31,858.4</b>
<b>PERCENT CHANGE</b>	<b>-20%</b>		<b>-46%</b>		<b>39%</b>		<b>-16%</b>		<b>-22%</b>	

<sup>1</sup>De Luz figures included in Fallbrook P.U.D. total.

<sup>2</sup>Brackish groundwater use included in groundwater totals.

<sup>3</sup>Pendleton's imported water use includes water delivered by South Coast Water District.

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## MONTHLY WATER RESOURCES REPORT

## Reservoir Storage

(acre-feet)

FEBRUARY 2010

MEMBER AGENCY	Reservoir	Capacity	% of		% of		Change During Month
			FEBRUARY 2010	Capacity	FEBRUARY 2009	Capacity	
Carlsbad M.W.D.	Maerkle	600	294	49%	170	28%	119
Escondido, City of <sup>1</sup>	Dixon	2,606	2,427	93%	2,365	91%	154
	Wohlford	6,506	2,222	34%	2,210	34%	12
<b>Subtotal</b>		<b>9,112</b>	<b>4,649</b>	<b>51%</b>	<b>4,575</b>	<b>50%</b>	<b>166</b>
Fallbrook P.U.D.	Red Mountain	1,335	860	64%	373	28%	33
Helix W.D.	Cuyamaca	8,195	3,171	39%	1,964	24%	1,380
	Jennings	9,790	8,869	91%	8,683	89%	1,080
<b>Subtotal</b>		<b>17,985</b>	<b>12,041</b>	<b>67%</b>	<b>10,647</b>	<b>59%</b>	<b>2,460</b>
Poway, City of	Poway	3,330	3,066	92%	2,988	90%	18
Rainbow M.W.D.	Beck	625	242	39%	175	28%	(26)
	Morro Hill	465	144	31%	210	45%	20
<b>Subtotal</b>		<b>1,090</b>	<b>386</b>	<b>35%</b>	<b>385</b>	<b>35%</b>	<b>(6)</b>
Ramona M.W.D.	Ramona	12,000	3,516	29%	3,869	32%	373
San Diego, City of <sup>2</sup>	Barrett	37,947	30,314	80%	26,465	70%	3,396
	El Capitan	112,807	52,517	47%	48,620	43%	3,464
	Hodges	30,251	19,680	65%	21,746	72%	1,583
	Lower Otay	49,510	28,074	57%	25,579	52%	520
	Miramar	7,184	5,853	81%	5,383	75%	219
	Morena	50,206	6,868	14%	6,903	14%	721
	Murray	4,818	4,199	87%	4,199	87%	31
	San Vicente	89,312	24,462	27%	29,829	33%	32
<b>Subtotal</b>		<b>411,719</b>	<b>177,835</b>	<b>43%</b>	<b>174,042</b>	<b>42%</b>	<b>11,044</b>
San Dieguito W.D./Santa Fe I.D.	San Dieguito	883	480	54%	465	53%	(10)
Sweetwater Authority	Loveland	25,400	8,636	34%	11,199	44%	(4,806)
	Sweetwater	28,079	11,671	42%	5,967	21%	5,488
<b>Subtotal</b>		<b>53,479</b>	<b>20,307</b>	<b>38%</b>	<b>17,166</b>	<b>32%</b>	<b>682</b>
Valley Center M.W.D.	Turner	1,612	1,612	100%	1,612	100%	59
Vista I.D. <sup>3</sup>	Henshaw	51,774	11,377	22%	8,490	16%	3,084
<b>MEMBER AGENCY TOTAL WATER IN STORAGE</b>		<b>564,919</b>	<b>236,421</b>	<b>42%</b>	<b>224,781</b>	<b>40%</b>	<b>18,022</b>
SDCWA Accounts (Source: CWA Monthly Storage Reports)	El Capitan		14,287		13,964		323
	Lower Otay		6,496		7,441		(945)
	San Vicente		13,232		13,816		(584)
	Sweetwater		6,950		6,338		612
<b>Subtotal</b>			<b>40,965</b>		<b>41,559</b>		<b>(594)</b>
<b>TOTAL WATER IN STORAGE</b>		<b>564,919</b>	<b>277,385</b>	<b>49%</b>	<b>266,340</b>	<b>47%</b>	<b>18,372</b>
<b>OTHER AGENCIES</b>							
Metropolitan Water District	Skinner	44,264	37,072	84%	39,464	89%	487
	Diamond Valley	800,000	386,064	48%	407,693	51%	1,371
State Water Project	Oroville	3,521,797	1,385,646	39%	1,360,571	39%	195,190
<b>TOTAL OTHER WATER IN STORAGE</b>		<b>4,366,061</b>	<b>1,808,782</b>	<b>41%</b>	<b>1,807,728</b>	<b>41%</b>	<b>197,048</b>

<sup>1</sup> City of Escondido storage does not include water allocated to Escondido Mutual Water Company or its rights to a portion of the unallocated water in Lake Henshaw.

<sup>2</sup> Includes reserves subject to City's outstanding commitments to the San Dieguito W.D., and the California American Mutual Water Company. SDCWA has storage contracts in City of San Diego reservoirs in the amount of 40,000 a.f. if capacity is available.

<sup>3</sup> Vista I.D. storage includes both allocated and unallocated water in Lake Henshaw.

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**MONTHLY WATER RESOURCES REPORT**  
**Estimated Tier 1 Deliveries to Member Agencies**  
 (acre-feet)

**Through February 2010**

<b>AGENCY</b>	<b>CY2010 Tier 1 Threshold<sup>1</sup></b>	<b>CYTD Firm Deliveries<sup>2</sup></b>	<b>% of Tier 1 Threshold</b>
Carlsbad M.W.D.	18,228.5	2,076.6	11.4%
Del Mar, City of	1,408.3	100.3	7.1%
Escondido, City of	23,496.9	1,349.9	5.7%
Fallbrook P.U.D.	11,716.9	741.8	6.3%
Helix W.D.	38,421.4	6,244.9	16.3%
Lakeside M.W.D.	4,718.2	322.4	6.8%
Oceanside, City of	28,848.1	2,501.2	8.7%
Olivenhain M.W.D.	18,876.4	1,692.1	9.0%
Otay W.D. (excludes Tijuana deliveries)	32,173.0	3,308.2	10.3%
Padre Dam M.W.D.	14,310.8	1,194.3	8.3%
Pendleton M.R./South Coast	1,141.3	129.4	11.3%
Poway, City of	13,563.8	801.0	5.9%
Rainbow M.W.D.	23,470.5	914.4	3.9%
Ramona M.W.D.	8,067.0	1,085.8	13.5%
Rincon Del Diablo M.W.D.	7,307.0	523.7	7.2%
San Diego, City of	215,438.4	20,362.2	9.5%
San Dieguito W.D.	4,692.0	392.0	8.4%
Santa Fe I.D.	7,882.8	324.3	4.1%
Sweetwater Authority	13,094.7	1,688.0	12.9%
Vallecitos W.D.	14,476.9	1,551.9	10.7%
Valley Center M.W.D.	24,801.0	957.4	3.9%
Vista I.D.	17,550.5	2,016.4	11.5%
Yuima M.W.D.	94.0	2.0	2.1%
<b>MEMBER AGENCY TOTAL</b>	<b>543,778.4</b>	<b>50,280.2</b>	<b>9.2%</b>
<b>Less: QSA deliveries calendar year to date</b>		<b>(24,616.7)</b>	
<b>Plus: CWA purchases for own account<sup>3</sup></b>		<b>315.6</b>	
<b>Estimated Tier 1 deliveries calendar year to date</b>		<b>25,979.1</b>	<b>4.8%</b>

<sup>1</sup>Tier 1 threshold is equal to all firm deliveries up to 90% of a member agency's historic maximum year firm demand. (CY10 Tier 1 limits not yet updated to reflect IAWP opt-out volumes for 2010.)

<sup>2</sup>Firm deliveries are net of IAWP certifications received.

<sup>3</sup>Includes forced deliveries and temporary carryover storage agreements with Helix WD and Sweetwater Authority.

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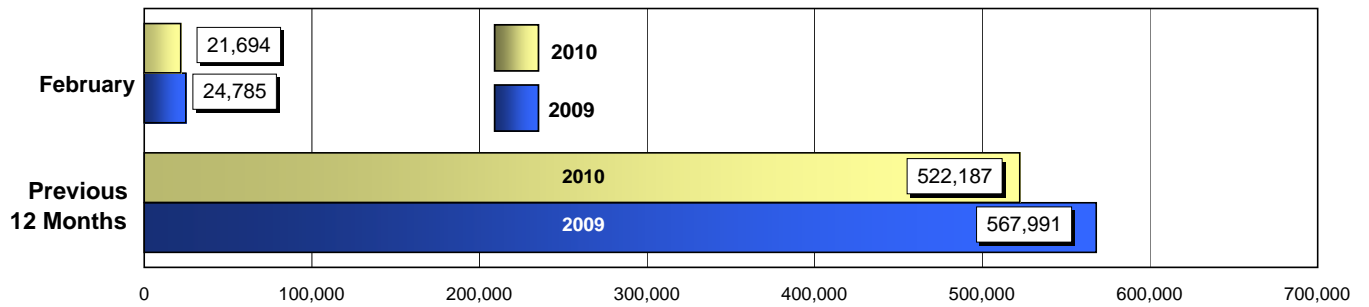

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# MONTHLY WATER RESOURCES REPORT

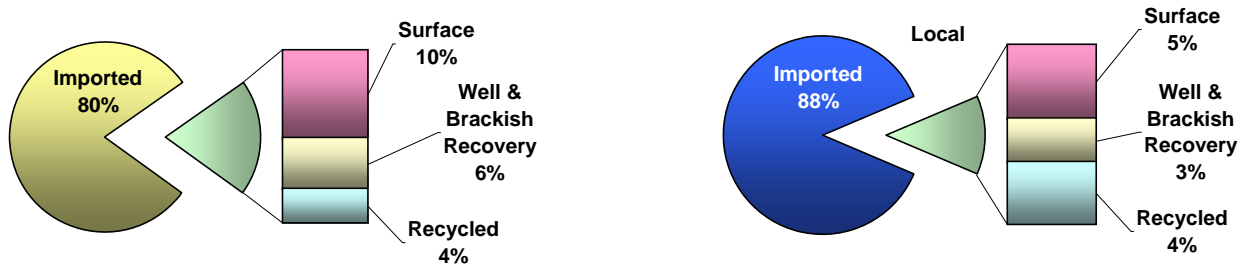
## Summary of Water Authority Member Agency Operations (acre-feet)

FEBRUARY 2010

### Member Agency Deliveries



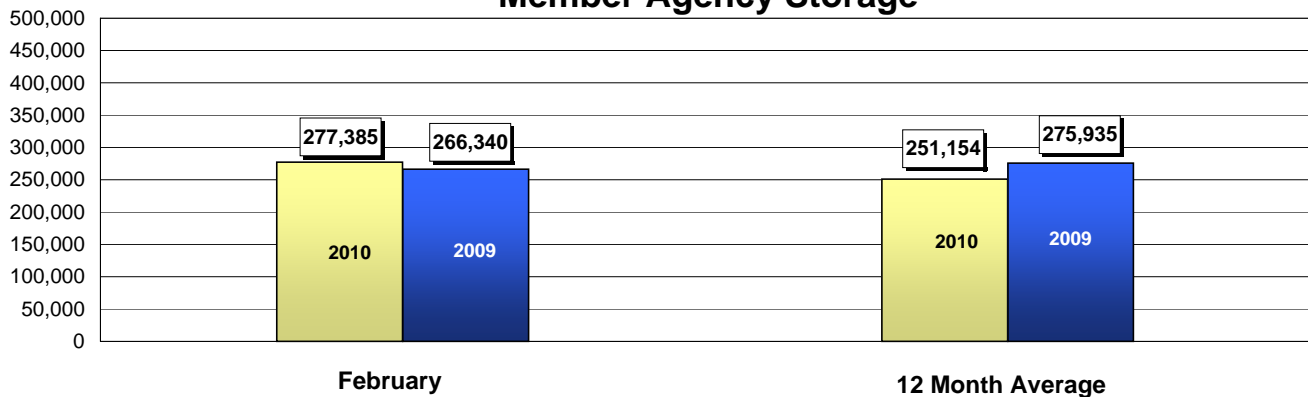
### Member Agency Water Use



FEBRUARY 2010

Previous 12 Months

### Member Agency Storage



February

12 Month Average