

- **Board of Directors**
Water Planning, Quality and Resources Committee

September 13, 2005 Board Meeting

7-6

Subject

Approve a Supplemental Storage Program agreement with the Municipal Water District of Orange County and the Orange County Water District

Description

This letter requests board approval for a letter agreement with the Municipal Water District of Orange County and the Orange County Water District to store water in addition to existing replenishment demands in the Orange County basin, and to sell water for this purpose at a discounted rate. Similar programs would be available to other member agencies with long-term storage capacity.

Background

Calendar year 2005 has been a particularly abundant year for water supplies. It is the second wettest year on record in Southern California, with rain and snow-pack levels above average in the Feather River watershed, the Colorado River watershed, and in the southern Sierras. As a result, demands for Metropolitan supplies are about 300,000 acre-feet less than last year, and the State Water Project allocation has been set at 90 percent. In addition, Metropolitan's Colorado River supplies will be higher than anticipated. As a result, after meeting all demands, Metropolitan's in-basin storage reservoirs will be at or near capacity, and all cost-effective storage options inside and outside the service territory (e.g., Carryover storage on the SWP, Desert-Coachella, San Bernardino, Kern Delta, Mohave, etc.) will be fully exercised.

As a result, staff has been working with the Municipal Water District of Orange County, the Orange County Water District, and the member agencies on a proposal to store available water supplies in local groundwater basins or surface reservoirs during the 2005/06 fiscal year (Supplemental Storage Program.) The basic parameters of this program, in which any member agency could participate, are as follows:

- Minimum purchase.** The member agency would agree to purchase all of the water the agency had planned for storage – either through the Replenishment Program at current rates or to be put into an existing conjunctive use account.
- Measurable call.** The member agency would agree to allow Metropolitan to withdraw the water from storage for a period of at least five years. The withdrawal must be quantifiable and measurable.
- Interruptible deliveries.** Water to be delivered under the 2005/06 Supplemental Storage Program would be fully interruptible and all participating agencies recognize that water would only be delivered under the program if other storage options were not available.
- Separate accounting.** All water delivered in the Supplemental Storage Program would be accounted for separately. In this manner, all stored water will be available for call in future years.
- No losses.** The water would be stored and would not be charged for losses (e.g., evaporation or basin losses.)
- Discounted rate.** All water delivered under the Supplemental Storage Program would be sold at a discounted rate of \$254/acre-foot for in-lieu delivery.

Since all basins and surface storage facilities operate in different ways, the details of each storage program would depend on the operating rules and the member agency's particular circumstances. As a result, all participating agencies would be required to execute a letter agreement that outlines the details of the storage program.

Description of Proposed Program with MWDOC and OCWD

The Orange County Basin operates as a managed groundwater basin. The primary tool for regulating the amount of pumping out of the basin during any year is the Basin Pumping Percentage. The Basin Pumping Percentage determines the quantity of overlying demand that can be met with groundwater production. For example, if OCWD sets a Basin Pumping Percentage of 70 percent, then each agency can pump up to 70 percent of their demands. If total demands are equal to 500,000 acre-feet, then agencies can pump 350,000 acre-feet.

Each April, OCWD establishes the Basin Pumping Percentage for the following fiscal year. The cost of groundwater pumping is approximately half the cost of purchasing treated imported water supplies. Groundwater pumping at or under the Basin Pumping Percentage pays only the Replenishment Assessment to OCWD, plus the cost of energy for pumping and operating and maintenance costs associated with the well. The Replenishment Assessment is currently \$205 - \$212 per acre-foot. As a result of this cost differential, there is pressure on OCWD to set the Basin Pumping Percentage as high as possible each year to maximize groundwater pumping. OCWD must weigh this desire with the need to maintain a sustainable groundwater basin.

Any agency that pumps above the Basin Pumping Percentage incurs a significant penalty (called the Basin Equity Assessment) that is tied to Metropolitan's Tier 2 Rate. As a result of this penalty, there is a great deal of economic incentive to pump to or just under the Basin Pumping Percentage. For example, if the Basin Pumping Percentage is set at 65 percent, achieved pumping is typically between 64 percent and 65 percent.

It should also be noted that since the Basin Pumping Percentage is a percentage, actual pumping in any given year (and the amount of water purchased from Metropolitan) would depend on the overlying demands. Thus, a 70 percent Basin Pumping Percentage could result in 350,000 acre-feet of pumping if 500,000 acre-feet of water are used in the overlying area, or 280,000 acre-feet if only 400,000 acre-feet are used in the overlying area.

Since the Orange County Basin is a managed basin, the proposed program is based on Metropolitan's ability to deliver water to the basin via in-lieu means, and OCWD's ability to increase pumping by changing the Basin Pumping Percentage.

Proposal

The proposed rate for water sold under the Supplemental Storage Program is \$254 per acre-foot in 2005/06, as explained in [Attachment 1](#), "Financial Analysis and Proposed Pricing for 2005/06 Supplemental Storage Program." This rate recovers: (1) incremental treatment costs; (2) incremental power costs; and (3) contributes to the fixed costs of Metropolitan at the same level as the average of a Full Service Treated sale that initially was stored in an out-of-region storage program or left in the State Water Project system for purchase in a future year. Therefore, the rate is revenue neutral, resulting in no rate impact to other non-participating member agencies.

As more fully described in the principles for a letter agreement included in [Attachment 2](#), in exchange for the lower rate:

- For a period of up to five years, Metropolitan would be able to call upon OCWD to increase its Basin Pumping Percentage by up to 6 percent in a given year, resulting in an additional 24,000 acre-feet of groundwater production. OCWD establishes its annual Basin Pumping Percentage in April. Metropolitan would have the right to ask for increased pumping until June 30 of each year, providing Metropolitan with the opportunity to assess water supply conditions before making a call on this water.
- If OCWD declines to perform or pumping does not achieve the target levels, the water will be repriced at the applicable Tier 2 Full Service rate in effect at the time the water is called.
- The Supplemental Storage Program water would be delivered in-lieu and the deliveries are fully interruptible.
- Metropolitan will not reimburse the member agencies for any operations and maintenance or electric costs associated with a call on the Supplemental Storage Program water.
- There are no basin losses or storage fees on the Supplemental Storage Program water.

- Metropolitan would work through the existing Conjunctive Use Operating Committee to coordinate, reconcile and manage the program.

This program would provide regional benefits to other member agencies, as well as benefits to the Orange County agencies. The regional benefit is the ability to deliver water in a surplus supply year for use in a future dry year. The local benefit is the ability to move more water into the basin today, increasing basin levels.

Policy

Administrative Code Section 4206: Carryover Storage

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed actions are categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed actions involve the storage of supplemental water at the Orange County Basin involving negligible or no expansion of use and no possibility of significantly impacting the physical environment. Accordingly, the proposed actions qualify under a Class 1 Categorical Exemption (Section 15301 of the State CEQA Guidelines). In addition, the fiscal aspects of the Supplemental Storage Program agreement with MWDOC and OCWD are not subject to CEQA because they involve other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed actions qualify under a Categorical Exemption (Class 1, Section 15301 of the State CEQA Guidelines). In addition, the fiscal aspect of the Supplemental Storage Program agreement is not subject to CEQA (Section 15378(b)(4) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options/Fiscal Impacts

Option #1

Adopt the CEQA determination and authorize the Chief Executive Officer to execute a supplemental storage agreement with MWDOC and OCWD based on the principles in [Attachment 2](#).

Fiscal Impact: Approximately \$6.1 million in additional sales revenue if 24,000 acre-feet of water is stored.

Option #2

Do not authorize the Chief Executive Officer to execute a supplemental storage agreement with MWDOC and OCWD, and direct staff to modify the proposal.

Fiscal Impact: Fiscal impact would depend on resulting changes.

Staff Recommendation

Option #1



Brian G. Thomas
Chief Financial Officer

8/31/2005

Date



Dennis B. Underwood
CEO/General Manager

8/31/2005

Date

Attachment 1 – Financial Analysis and Proposed Pricing for 2005/06 Supplemental Storage Program

Attachment 2 – Principles for a Letter Agreement between Metropolitan Water District of Southern California, Municipal Water District of Orange County, and Orange County Water District

BLA #3879

Financial Analysis and Proposed Pricing for 2005/06 Supplemental Storage Program

August 20, 2005

Background

As Metropolitan has a significant amount of imported supplies available in 2005, with the potential for at least adequate supplies in 2006, Anaheim, Santa Ana, Fullerton, Municipal Water District of Orange County (MWDOC), and Orange County Water District (OCWD) have proposed to purchase additional water for storage in the Orange County Basin during 2005/06. In return for a discounted rate (a larger discount than the existing replenishment rate), the Orange County agencies have agreed to certain call provisions on the water that would allow Metropolitan to call for increased groundwater production in future years.

This program would provide benefits to Metropolitan and the other member agencies, as well as to the Orange County agencies. The regional benefits include the ability to deliver water in a surplus supply year, while having the opportunity to call the water in a future dry year. The local benefits include moving more water into the basin today, increasing basin levels. Given the unique nature of this water year (the second wettest on record in Southern California and a 90 percent allocation on the State Water Project), OCWD and MWDOC's commitment to purchase their budgeted supplies at existing rates, and the opportunity for Metropolitan to call the water in the future through increased groundwater production, a revenue neutral rate (that is, a rate that would not result in higher rates for all other member agencies) that is less than the existing replenishment could result in more water stored in Metropolitan's service territory.

Pricing Analysis

In order to meet the dual objectives of rate neutrality and appropriate pricing for such a program, Metropolitan has considered the following pricing options:

1. Creating an incentive price that reflects the cost of other available storage options (e.g., Arvin-Edison). This option reflects the fact that Metropolitan could store this water in other storage programs, and subsequently sell this water in the future at a Tier 1 or Tier 2 rate.
2. Creating an incentive price that reflects the value in terms of lost revenue associated with leaving water in the State Water Project system. This option would be viable if all cost-effective storage programs are full, and the only remaining option is to leave the water in the State Project system. As such, this option would provide indicative costing for additional storage programs or for pricing for storage in local basins.

Option 1. Storage Option Alternative, Low Rate Case

If Metropolitan were to store water in the Arvin-Edison Program, it would cost approximately \$133 per acre-foot to store water and about \$71 per acre-foot to extract the water for transport to the Metropolitan service territory. In addition, Metropolitan would have to pay the cost of power to transport the water both to Arvin-Edison and from Arvin-Edison to Metropolitan's service area (this is equal to the cost of transporting the water directly to Metropolitan) and incur variable treatment costs. The present value of the contribution to fixed costs from an incremental Tier 1 or Tier 2 treated water sale in the future is as shown in Table 1: *Net Present Value of Water Stored Out-of-Basin, Low Rate Case*.

Table 1: *Net Present Value of Water Stored Out-of-Basin, Low Rate Case*

Costs and Rates (\$/AF)						
Rates ¹ :	2005	2006	2007	2008	2009	Average
Tier 1		453	476	490	527	
Tier 2		549	572	594	628	
Costs:						
Put Cost	133					
Delivery Costs ²		267	275	283	292	
PV, Contribution to Fixed Costs ³ :						
Tier 1:		44	50	46	61	
Tier 2:		136	137	136	144	
PV, Contribution to Fixed Costs + Power (\$160/AF) + Variable Treatment (\$28/AF):						
Tier 1:		232	238	234	249	238
Tier 2:		324	325	324	332	326
Weighted Average						246

¹ Rates from the 2005/06 Budget, page 27, Low Rate Case

² Escalated at 3% annually, includes power, variable treatment, and take costs

³ Discount rate of 5%

As shown in Table 1, the net present value of the contribution to fixed costs of a Tier 1 Low Rate Case sale after accounting for storage, power and variable treatment costs five years from now is \$61 per acre-foot. Table 1 also demonstrates that the net present value is relatively stable over the five-year period for both a Tier 1 and Tier 2 sale. The net present value of the contribution to fixed costs of a Tier 2 Low Rate Case sale after accounting for storage, power and variable treatment costs five years from now is \$144 per acre-foot.

Adding in the cost of power and the variable cost of treatment in 2005/06 provides the equivalent price for an incremental sale of water that could be called in the next five years. As shown in Table 1, the equivalent price today for a Tier 1 sale in 2009 is \$249 per acre-foot. An equivalent Tier 2 sale is \$332 per acre-foot. Since the water could be called anytime over the period, the average of the prices is used to determine an overall equivalent price. Utilizing a weighted average of expected Tier 1 and Tier 2 sales (91 percent Tier 1 and 9 percent Tier 2) yields an estimated price of \$246 per acre-foot.

Option 2. Leave Water on the State Project, Low Rate Case

If Metropolitan were to meet all demands and fill all economical storage programs (e.g., Arvin-Edison, Diamond Valley Lake, Kern Delta, San Bernardino, etc.) and found that additional water was still available on the State Project, this water would remain in the system. The water would either remain in Oroville or be lost to the delta. If the water remains in the system, it would be reallocated next year, and since Metropolitan receives about 50 percent of the water allocated, Metropolitan would receive one-half an acre-foot for every acre-foot left on the system. If it turns out that water was left on the system for another year, Metropolitan would only receive half of the remainder as well.

Table 2: *Net Present Value of Water Remaining in State Project System* shows the net present value of the fixed contribution of water left on the State Project system, assuming either a Tier 1 or Tier 2 Low Rate Case sale sometime over the next five years.

Table 2: *Net Present Value of Water Remaining in State Project System, Low Rate Case*

Costs and Rates (\$/AF)						
Rates ¹ :	2005	2006	2007	2008	2009	Average
Tier 1		453	476	490	527	
Tier 2		549	572	594	628	
Costs:						
Delivery Costs ²		194	199	205	212	
PV, Contribution to Fixed Costs ³ :						
Tier 1:		124	63	31	16	
Tier 2:		169	84	42	21	
PV, Contribution to Fixed Costs + Power (\$160/AF) + Variable Treatment (\$28/AF):						
Tier 1:		312	251	219	204	246
Tier 2:		357	272	230	209	267
Weighted Average						248

¹ Rates from the 2005/06 Budget, page 27, Low Rate Case

² Escalated at 3% annually, includes power and variable treatment costs

³ Discount rate of 5%

By taking the simple average of the four years and weighting Tier 1 and Tier 2 contributions for a Low Rate Case sale as in Option 1, the equivalent price for a sale of water for under the Supplemental Storage terms would be \$248 per acre-foot.

Averaging the results of Options 1 and 2 using the Low Rate Case forecast would result in a price for Supplemental Storage Program water of \$247 per acre-foot.

Alternative for High Rate Case Scenarios

Both Options 1 and 2 were priced assuming the Low Rate Case forecast of rates from the Fiscal Year 2005/2006 Budget. Given Metropolitan's budget and revenue uncertainty over the next five years, a High Rate Case forecast was also developed for the Fiscal Year 2005/2006 Budget. The difference between the Low Rate Case forecast and High Rate Case forecast are the forecasted rates effective January 1, 2007, 2008 and 2009 as shown below.

Table 3: *High and Low Rate Case Forecast*

Effective January 1, \$/AF:		2007	2008	2009
Tier 1	Low Rate Case	476	490	527
Tier 1	High Rate Case	502	537	572
Tier 2	Low Rate Case	572	594	628
Tier 2	High Rate Case	594	628	663

Restating Table 1 for the High Rate Case forecast for the 2007 through 2009 period yields the following results.

Table 4: *Net Present Value of Water Stored Out-of-Basin, High Rate Case*

Costs and Rates (\$/AF)						
Rates ¹ :	2005	2006	2007	2008	2009	Average
Tier 1		453	502	537	572	
Tier 2		549	594	628	663	
Costs:						
Put Cost	133					
Delivery Costs ²		267	275	283	292	
PV, Contribution to Fixed Costs ³ :						
Tier 1:		44	73	86	98	
Tier 2:		136	157	165	173	
PV, Contribution to Fixed Costs + Power (\$160/AF) + Variable Treatment (\$28/AF):						
Tier 1:		232	261	274	286	263
Tier 2:		324	345	353	361	345
Weighted Average						271

¹ Rates from the 2005/06 Budget, page 26, High Rate Case

² Escalated at 3% annually, includes power, variable treatment, and take costs

³ Discount rate of 5%

By taking the simple average of the four years and weighting Tier 1 and Tier 2 contributions for a High Rate Case sale as in Option 1, the equivalent price for a sale of water under the Supplemental Storage terms would be \$271 per acre-foot.

The results for restating Table 2 for the High Rate Case forecast for the 2007 through 2009 period are shown in Table 5.

Table 5: *Net Present Value of Water Remaining in State Project System, High Rate Case*

Costs and Rates (\$/AF)						
Rates ¹ :	2005	2006	2007	2008	2009	Average
Tier 1		453	502	537	572	
Tier 2		549	594	628	663	
Costs:						
Delivery Costs ²		194	199	205	212	
PV, Contribution to Fixed Costs ³ :						
Tier 1:		124	69	36	19	
Tier 2:		169	89	46	23	
PV, Contribution to Fixed Costs + Power (\$160/AF) + Variable Treatment (\$28/AF):						
Tier 1:		312	257	224	207	250
Tier 2:		357	277	234	211	270
Weighted Average						251

¹ Rates from the 2005/06 Budget, page 26, High Rate Case

² Escalated at 3% annually, includes power and variable treatment costs

³ Discount rate of 5%

Averaging the results of Options 1 and 2 using the High Rate Case forecast would result in a price for Supplemental Storage Program water of \$261 per acre-foot. A simple average of all four results (High and Low Rate Case forecasts for Options 1 and 2) would result in a price for Supplemental Storage Program water of \$254 per acre-foot.

Recommendation

The appropriate price could range from \$246 per acre-foot to \$271 per acre-foot. Using the average of the four scenarios shown above, the recommended price for that water is \$254 per acre-foot stored.

Principles for a Letter Agreement between Metropolitan Water District of Southern California,
Municipal Water District of Orange County, and Orange County Water District

2005/06 Supplemental Storage Program

Whereas, the 2005 water year has been the second wettest in recorded history; and

Whereas, the Metropolitan Water District (Metropolitan) has ample supplies to fill its available storage facilities; and

Whereas, there is an opportunity to store additional water in member agency groundwater and surface water storage facilities; and

Whereas, Municipal Water District of Orange County (MWDOC), working with the Orange County Water District (OCWD), can store water in excess of current planned purchases and conjunctive use obligations; and

Whereas, MWDOC and OCWD agree to store such water for later years and to produce such water in later years; and

Whereas, Metropolitan agrees to provide additional water at a lower rate for groundwater storage purposes (the Supplemental Storage Program Rate) to increase the Orange County Groundwater Basin levels;

Now therefore, Metropolitan, MWDOC, and OCWD agree:

1. **Minimum Purchase.** OCWD agrees that it will purchase at least 65,000 acre-feet of water during fiscal year 2005/06 under Metropolitan's Replenishment Program at board-approved Replenishment Rates given that Metropolitan makes available such supplies. These purchases may be made via direct or in-lieu means through MWDOC, Anaheim, Santa Ana, and/or Fullerton.
2. **Conjunctive Use Storage.** OCWD agrees to store at least 15,000 acre-feet of water in the dry-year yield account (also known as the Metropolitan Conjunctive Use Program (CUP) account) given that Metropolitan makes available such supplies.
3. **Supplemental Storage Program Purchases.** All additional in-lieu purchases for groundwater storage (in excess of 80,000 acre-feet) by OCWD through MWDOC, Anaheim, Fullerton and/or Santa Ana, shall be made at the Supplemental Storage Program Rate of \$254/acre-foot, subject to the minimum delivery requirements in Section 8. This rate shall be effective for all in-lieu groundwater storage purchases made during the fiscal year beginning on July 1, 2005 and ending on June 30, 2006, after storage of the 80,000 acre-feet of replenishment and conjunctive use deliveries has been accomplished. Any applicable Supplemental Storage Program credits and reconciliation adjustments shall be invoiced through MWDOC. In any case, if OCWD has not purchased at least 65,000 acre-feet of water under Metropolitan's Replenishment Program at board-approved Replenishment rates and stored at least 15,000 acre-feet of water in the Conjunctive Use Program account, no water will be delivered to OCWD through MWDOC, Anaheim, Fullerton and/or Santa Ana at the Supplemental Storage Program Rate.
4. **Call Provisions.** Metropolitan shall have the right to request that OCWD increase its Basin Pumping Percentage (BPP) by 0.5 percent increments up to 6 percent in any one year. This request shall be made after May 15, but no later than June 30 of each year. In no case shall Metropolitan's request be for more than the amount of water purchased under the Supplemental Storage Program.

5. **Storage and Extraction Costs.** Metropolitan shall not be responsible for any costs related to stored water extraction, including extraction fees, basin storage fees, or basin losses.
6. **Estimated Extraction.** For purposes of the initial call, it shall be assumed that each one-half percent (0.5 percent) increase in the BPP will equal 2,000 acre-feet. Actual extraction shall be reconciled using OCWD's Engineer's Report by the CUP Operating Committee within nine months of the end of the fiscal year.
7. **Insufficient Production.**
 - (a.) If Metropolitan requests an increase in the BPP, and OCWD does not increase the BPP to the level of the request, Metropolitan shall bill OCWD through MWDOC for all water that would have been produced at the increased BPP at the bundled Treated Tier 2 Rate in effect at the time of the Call. That is, Metropolitan will bill MWDOC for the difference between the then effective bundled Treated Tier 2 Rate and \$254/acre-foot.
 - (b.) If OCWD increases the BPP to the level of Metropolitan's request, but production from the Orange County basin does not increase to the BPP established by OCWD at Metropolitan's request, Metropolitan's members on the existing CUP Operating Committee shall investigate and determine appropriate action. The Committee members shall consider (1) changes to total water demands; (2) Producer operational issues; (3) water quality issues; and (4) acts of God. If actual production is less than the requested BPP less 0.50 percent, then Metropolitan shall bill OCWD through MWDOC for the remaining water that would have been produced at the requested BPP at the bundled Treated Tier 2 Rate in effect at the time of the call. For example, if the requested BPP is 65 percent, and actual pumping is equal to 64.31 percent, then an amount of water equal to 0.19 percent of total demands will be billed at the Tier 2 Rate. As in Section 7.(a.) above, Metropolitan will invoice MWDOC for the difference between the then effective bundled Tier 2 Rate and \$254/acre-foot.
 - (c.) The attached table provides a sample of how the OCWD Basin Pumping Percentage will be calculated for this program.
8. **Minimum Deliveries.** A minimum of 2,000 acre-feet of water must be purchased for groundwater storage under the Supplemental Storage Program to qualify such purchases for the Supplemental Storage Program Rate. Further, additional deliveries shall be in 2,000 acre-foot increments. If, after reconciliation, less than 2,000 acre-feet have been delivered, the balance will be credited to the Conjunctive Use Account.
9. **Term of Call.** Metropolitan shall retain the right to call for an increase in the BPP for a period of five years, beginning May 2007 and ending June 30, 2011, with such increase in BPP to be effective for the following fiscal year.
10. **Record-keeping.** OCWD shall maintain records of the balance of water purchased under the Supplemental Storage Program and those amounts called. Records shall be confirmed by Metropolitan on an annual basis. The CUP Operating Committee shall monitor and manage the Supplemental Storage Program. Reconciliation of all amounts stored and called under the Supplemental Storage Program shall be completed by the CUP Operating Committee.

11. **One-year Program.** It is recognized that this is a one-year program, and that deliveries of Supplemental Storage Program water will not be available beyond June 30, 2006. The call provisions outlined herein extends for a period of five years ending June 30, 2011.
12. **Obligation to Call.** Metropolitan is under no obligation to call for an increase in the BPP. But, Metropolitan has the ability to call for an increase in the BPP in any year for any reason for a period of five years ending June 30, 2011, so long as that increase in BPP does not exceed the balance of water delivered under the Supplemental Storage Program.
13. **Coordination.** The Supplemental Storage Program will be coordinated with the Groundwater Producer operating plans that are developed annually to determine potential in-lieu deliveries and storage amounts into the existing CUP.
14. **OCWD Precautionary Actions.** OCWD may take precautionary actions to ensure adequate amounts of Metropolitan water are pumped during a call period. They include raising the BPP to a higher level than requested by Metropolitan and/or using OCWD's basin management authority to request other Producers to pump above the BPP. Possible additional pumping from these precautionary actions shall be included in the calculations for the purposes of Section 6. Additionally, such precautionary actions shall not be deemed required for the purposes of assessing OCWD's performance per Section 6 of this agreement or for the CUP agreement.

Supplemental Storage Program Example

Before (Typical Operations)

After MWD Call (Expected)

Non Irrigation Water

Agency	BPP%	Groundwater Below BPP	In-Lieu	Groundwater Above BPP (*)	Total Groundwater Below BPP	Total Imported Water	Recycled Water (**)	Total Demand (+)	Achieved BPP (***)	MWD Requested BPP	Groundwater Below BPP	In-Lieu (++)	Groundwater Above BPP	Total Groundwater Below BPP	Total Imported Water	Recycled Water	Total Demand	Achieved BPP
	(1)	(2)	(3)	(4)	(2+3) (5)	(6)	(7)	(2+3+4+6+7) (8)	5/(8-7) (9)	(1)	(2)	(3)	(4)	(2+3) (5)	(6)	(7)	2+3+4+6+7 (8)	5/(8-7)
Anaheim	65%	44,000	5,000		49,000	27,000		76,000	64.5%	71%	53,560	0		53,560	22,440		76,000	70.5%
Buena Park	65%	11,000	0		11,000	6,000		17,000	64.7%	71%	12,020	0		12,020	4,980		17,000	70.7%
Fountain Valley	65%	6,500	200		6,700	3,700	900	11,300	64.4%	71%	7,324	0		7,324	3,076	900	11,300	70.4%
Fullerton	65%	16,500	4,500		21,000	11,000		32,000	65.6%	71%	22,920	0		22,920	9,080		32,000	71.6%
Garden Grove	65%	14,000	6,000	500	20,000	10,000		30,500	65.6%	71%	21,830	0	500	21,830	8,170		30,500	71.6%
Huntington Beach	65%	15,500	6,500		22,000	12,500		34,500	63.8%	71%	24,070	0		24,070	10,430		34,500	69.8%
La Palma	65%	1,750	0		1,750	1,000		2,750	63.6%	71%	1,915	0		1,915	835		2,750	69.6%
MCWD	65%	11,500	1,000	5,000	12,500	2,000	1,000	20,500	64.1%	71%	12,670	1,000	5,000	13,670	830	1,000	20,500	70.1%
Newport Beach	65%	11,000	700		11,700	6,500	300	18,500	64.3%	71%	12,092	700		12,792	5,408	300	18,500	70.3%
Orange	65%	21,000	0	500	21,000	11,000		32,500	64.6%	71%	22,950	0	500	22,950	9,050		32,500	70.6%
Santa Ana	65%	24,500	7,000		31,500	17,000	150	48,650	64.9%	71%	34,410	0		34,410	14,090	150	48,650	70.9%
Seal Beach	65%	2,500	0		2,500	1,500		4,000	62.5%	71%	2,740	0		2,740	1,260		4,000	68.5%
SC Water Company	65%	11,000	8,500		19,500	10,500		30,000	65.0%	71%	21,300	0		21,300	8,700		30,000	71.0%
Tustin	65%	6,000	3,500		9,500	4,500		14,000	67.9%	71%	10,340	0		10,340	3,660		14,000	73.9%
Westminster	65%	7,000	2,500		9,500	5,000		14,500	65.5%	71%	10,370	0		10,370	4,130		14,500	71.5%
Yorba Linda	65%	12,500	0		12,500	7,000		19,500	64.1%	71%	13,670	0		13,670	5,830		19,500	70.1%
Totals		216,250	45,400	6,000	261,650	136,200	2,350	406,200	64.8%		284,181	1,700	6,000	285,881	111,969	2,350	406,200	70.8%

Cannot expect before achieved pumping to be 65% exactly or $65\% \times (406,200 - 2,350) = 262,502$ af

261,650 Actual Before Pumping
285,881 After Expected Pumping

24,231 Increase in Pumping

6% BPP increase = 24,231 af

1% BPP increase = 4,039 af

(*) OCWD Has programs that encourage some Producers to pump above the BPP

(**) This water is subtracted from total water demands when calculating the achieved BPP

(***) Achieved BPP is typically just under the set BPP for the year

(+) Reflect actual average total water demands for the past five years

(++) Assumes in-lieu is only available for the CUP program