MEETING OF THE
BOARD OF DIRECTORS OF THE
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Jointly with the
PLANNING & OPERATIONS COMMITTEE
May 2, 2005, 8:30 a.m.
MWDOC Conference Room 101

Committee:
Director Clark, Chairman
Director Bakall
Director Dick

Staff: K. Hunt, K. Seckel, M. Stone, R. Bell, J. Berg, D. Cordero, K. Davanaugh, D. Upadhyay

Ex Officio Member: E. Royce, Sr.

MWDOC Committee meetings are noticed and held as joint meetings of the Committee and the entire Board of Directors and all members of the Board of Directors may attend and participate in the discussion. Each Committee has designated Committee members, and other members of the Board are designated alternate committee members. If less than a quorum of the full Board is in attendance, the Board meeting will be adjourned for lack of a quorum and the meeting will proceed as a meeting of the Committee with those Committee members and alternate members in attendance acting as the Committee.

PUBLIC PARTICIPATION

ITEMS RECEIVED TOO LATE TO BE AGENDIZED

Determine there is a need to take immediate action on item(s) and that the need for action came to the attention of the District subsequent to the posting of the Agenda. (Requires a unanimous vote of the Committee)

ACTION ITEMS

1. AUTHORIZATION FOR PHASE 2 - I HORIZONTAL DIRECTIONALLY-DRILLED (HDD) WELL WITH GEOSCIENCE SUPPORT SERVICES FOR THE PROPOSED DANA POINT OCEAN DESALINATION PROJECT

2. POLICY REGARDING ABILITY TO DEAL WITH A SUSPENSION OF IMPORTED WATER DELIVERIES

3. SOUTH FEATHER WATER & POWER AGENCY WATER TRANSFER

INFORMATION ITEMS (The following items are for informational purposes only – background information is included in the packet. Discussion is not necessary unless a Director requests.)

4. ENGINEERING ACTIVITIES FOR 2005-06 (staff presentation)

5. UPDATE ON MWDOC ET CONTROLLER (SMARTIMER) REBATE PROGRAM

6. PENDING ITEMS
   a. Status of Ongoing MWDOC Reliability and Engineering/Planning Projects
   b. Water Use Efficiency Pending Items (to be e-mailed separately)
   c. Improved Water Use Efficiency Programs Savings and Implementation Reporting

7. REVIEW OF ISSUES RELATED TO CONSTRUCTION PROGRAMS, FACILITY AND EQUIPMENT MAINTENANCE, WATER STORAGE, WATER QUALITY, CONJUNCTIVE USE PROGRAMS, EDUCATION, DISTRICT FACILITIES, and SUB-AGENCY RELATIONS

8. DIRECTORS' AND GENERAL MANAGER'S REPORTS

ADJOURNMENT

NOTE: At the discretion of the Committee, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated and may be subject to action by the Committee. On those items designated for Board action, the Committee reviews the items and makes a recommendation for final action to the full Board of Directors; final action will be taken by the Board of Directors. Agendas for Committee and Board meetings may be obtained from the District Secretary. Members of the public are advised that the Board consideration process includes consideration of each agenda item by one or more Committees indicated on the Board Action Sheet. Attendance at Committee meetings and the Board meeting considering an item consequently is advised.

Accommodations for the Disabled. Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning Maribeth Goldsby, District Secretary, at (714) 963-3058, or writing to Municipal Water District of Orange County at P.O. Box 20895, Fountain Valley, CA 92728. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.

Item No. 1

ACTION ITEM

May 18, 2005

TO: Board of Directors

FROM: **Planning & Operations**
(Directors Bakall, Hinman, Finnegan)

Kevin Hunt
General Manager

Staff Contact: Richard B. Bell

SUBJECT: **Authorization for Phase 2 – Horizontal Directional Drilled (HDD) Test Well with Geoscience Support Services for the proposed Dana Point Ocean Desalination Project**

STAFF RECOMMENDATION

It is recommended that the Board of Directors authorize the General Manager to enter into a contract with Geoscience for $224,000 and approve an increase in the 10% project budget contingency by $24,000 for the Phase 2 Horizontal Directional Drilled (HDD) Test Well through design as described. It is necessary to initiate this work now to meet permitting schedules to accommodate test well construction work next winter. $13,000 is requested for specialized sampling and analysis for the NPDES discharge permit as recently required by the Regional Water Quality Control Board and to include a budget for miscellaneous fees (NPDES permit fee and State Park fee) is requested at $7,000. The total recommended authorization is $268,000.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

At the April P&O meeting, the Committee reviewed the Geoscience proposal and requested that staff re-evaluate the principal Geohydrologist billing rate. Staff was able to renegotiate the Geoscience billing rate for their Principal Geohydrologist (Dr. Dennis Williams). Dr. Williams has agreed to reduce his rate by 18%, resulting in a savings to the district of about $10,000.

Budgeted (Y/N): No	Budgeted amount:
Action item amount: $268,000	Line item: South Orange County Water Reliability
Fiscal Impact (explain if unbudgeted): An estimated $163,000 in additional authorization is required for work through June 30, 2005; the remaining $179,000 will be required in 2005/06 for completion of the design and permitting phase. Authorization for construction and related R&D phase services will be brought to the Board in the budget process for 2005-06. A Prop 50 grant of $1,000,000 has been recommended for award to MWDOC for this work.	

REPORT

Geoscience completed the Phase 1 Hydrogeology Investigation fieldwork on March 22. The Phase 1 exploratory borings found permeable sands and gravels at three of the four boreholes. Water quality was found to be brackish throughout most of the depth of the three boreholes within the main aquifer. As a result of this finding, Dr. Williams has recommended that the approach for Phase 2 be modified from a vertical well to a slant drilled well using horizontal directional drilling methods that would go out under the ocean. This will provide multiple benefits: (1) determination of offshore geologic lithology, (2) development of technical specifications for the HDD Test Well, and (3) allowing aquifer pump testing and water quality sampling. Preliminary calculations of the distance to the saltwater wedge indicate that this method will encounter saltwater. This method allows collection of needed hydrogeology data from the alluvial formation without having to work in the ocean environment. This revised approach and recommendation was presented by Geoscience to management staff and staff is in concurrence with the modified approach.

Phase 2 consists of four primary tasks:

1. Obtain aerial photograph and survey for project site plan
2. Prepare HDD Test Well Project Plan for CEQA and permitting support
3. Develop groundwater flow and variable density solute transport model
4. Design HDD Well Test Well Project and prepare technical specifications

The groundwater flow model is needed for a preliminary estimate of the yield from the subsurface feedwater intake system; the model will also be used in support of the permitting and CEQA effort. The aerial photograph, project plan and design are also necessary to support the CEQA and permitting effort as well as for the technical specifications bid document. Jurisdictional determinations from the US Army Corps of Engineers and State Lands Commission require this information. The State Lands Commission will also need to issue a lease for the project and requires this level of detail.

MWDOC met with staff from the Regional Water Quality Control Board on April 19 to discuss the disposal of test water. The good news is that we will be allowed to enroll under the RWQCB General Permit 2001-96, which will allow discharges to the surf zone or San Juan Creek, avoiding the need to construct a disposal pipeline. The current annual fee for this permit is $3471. The RWQCB staff are requiring sampling and testing of the water from Monitoring Well 1 for a specified list of contaminants of concern to provide a representative sample of the discharge. This will require an additional sampling effort and more costly chemical analysis to meet the level of detections required. The cost for this sampling, analysis and reporting effort is estimated at $13,000.

A budget item for the State Parks permit fee is included at an estimated cost of $3000.

The following table shows the authorized expenditures for Phase 1 and the revised funding request for Phase 2 and estimated Phase 3 costs. This refinement to the test well approach requires additional funds for Geoscience, but eliminates ocean test borings and defers the contract with Tetra Tech for the extended pumping test disposal pipeline and wellhead for one year or until deemed necessary. The Phase 2 expenditures for FYE 2005 are estimated at $163,000 and during FYE 2006 through design (September) at $179,000, totaling $342,000. There are sufficient funds remaining in the South Orange County Water

Reliability Study and MWDOC General Engineering budget to cover costs in FYE 2005 at the estimated $163,000 level.

Activity	Consultant	Phase 1 Hydrogeology (Expected)	Phase 2 Hydrogeology (Revised)	Phase 3 Construction (Future Request)
Hydrogeology Work	Geoscience	$299,000	$224,000	
NPDES Sampling	Geoscience		$13,000	
Misc Costs			$7,000	
Prop 50 Proposal	Tetra Tech	$62,500	0	
Wellhead/Pipe Design	Tetra Tech	0	0	
Permitting Assistance	MJF	$20,000	$40,000	
CEQA	Chambers	$12,500	$27,000	$10,000
Contingency			$31,000	
		$394,000	$342,000	
FYE05			($163,000)	
FYE06			($179,000)	
Bid/Const. Services	Geoscience			$207,000
Construction	Contractor			$1,250,000
Pumping Test/Eval.	Geoscience			$85,000
Contingency				$230,000
				$1,782,000

Attachment A is the Geoscience proposal for the revised approach. With the change in direction to design and installation of the HDD test well, $224,000 plus a $24,000 contingency needs to be authorized at this time. $20,000 is necessary for the NPDES permit and fees. The total authorization required at this time is $268,000. The MJF and Chambers Phase 2 fees plus contingency were previously authorized. The total cost for Phase 2 is estimated at $342,000. The Tetra Tech design work for the disposal pipeline and wellhead facilities will now be deferred. Phase 2 design is needed to be authorized now to set up for the Phase 3 construction work in the winter 2006.

Phase 3 will involve bidding, installation of the test well, aquifer pump testing, evaluation, and preparation of the final report on the feasibility of the subsurface intake system approach. Estimated costs for this phase are shown in the above table. Award of the HDD Test Well Project will be brought back to the Board later in the fall. The State Department of Water Resources and California Bay-Delta Authority have recommended that MWDOC receive a grant for $1,000,000 for Phase 3 work. Contract negotiations with the DWR are expected to commence in June, with Prop 50 funds expected to be available in December 2005, in time for the winter 2006 construction period.

Municipal Water District of Orange County

Estimated Hours and Costs - GEOSCIENCE Support Services, Inc. and Subcontractors

Dana Point Ocean Desalination Project

Phase II Horizontal Directionally-Drilled (HDD) Well Intake Feasibility Study

	HOURS								
Description / Hourly Rate	**Principal Hydrologist $205**	**Senior Geohydrologist/ Modeler $135**	**Staff Geohydrologist $95**	**Graphics $85**	**Clerical $65**	**Subcontractor $200**	**Total Labor**	**Reimbursable Expenses and Subcontractor Fees**	**Total**
TASK 1 – Prepare Phase II Demonstration Project Plan to Support Regulatory Approvals									
1.1 – Prepare work plan and provide assistance for obtaining permits for Phase II demonstration project	32	120	60	16	8		$30,340	$200	$30,540
1.2 – Attend meetings with MWDOC and representatives from regulatory agencies (Assume 5 meetings)	30	60					$14,250	$500	$14,750
Subtotals - Task 1:	62	180	60	16	8	0	**$44,590**	**$700**	**$45,290**
TASK 2 – Construct Ground Water Flow and Variable Density Solute Transport Model to Support CEQA Review of the Demonstration Project									
2.1 – Construct model, input parameters, establish initial conditions, and calibrate water levels and water quality	32	60	60				$20,360		$20,360
2.2 – Develop and run model HDD pumping scenarios [Estimate 2 design scenarios]	24	48					$11,400		$11,400
2.3 – Prepare technical memorandum summarizing model assumptions and predictions	16	40	40	16	4		$14,100	$200	$14,300
Subtotals - Task 2:	72	148	100	16	4	0	**$45,860**	**$200**	**$46,060**

Municipal Water District of Orange County

Estimated Hours and Costs - GEOSCIENCE Support Services, Inc. and Subcontractors

Dana Point Ocean Desalination Project

Phase II Horizontal Directionally-Drilled (HDD) Well Intake Feasibility Study

	HOURS								
Description / Hourly Rate	**Principal Hydrologist $205**	**Senior Geohydrologist/ Modeler $135**	**Staff Geohydrologist $95**	**Graphics $85**	**Clerical $65**	**Subcontractor $200**	**Total Labor**	**Reimbursable Expenses and Subcontractor Fees**	**Total**
TASK 3 – Obtain Custom Aerial Photograph of the Project Site									
3.1 – Subcontract with Eagle Aerial Imaging, of Costa Mesa, California, to provide custom aerial photography of the project site (Includes flight and orthorectification)	Total Quote: $1479.63						$1,480		$1,480
3.2 – Georeference custom aerial photograph		8		4			$1,420		$1,420
3.3 – Survey monitoring wells MW-1 and MW-2 (Estimated fee for Subcontractor to perform surveying work is $1,500)		8	8				$1,840	$1,500	$3,340
Subtotals - Task 3:	0	16	8	4	0	0	**$4,740**	**$1,500**	**$6,240**
TASK 4 – Design of Demonstration Well (320 ft Intake Well at 30° from Horizontal)									
4.1 – Design demonstration project, including meetings and conference calls with contractors in fields of directional drilling, mud systems, filter pack materials, well screens, and well pumps. Assume 3 meetings/trips to visit contractors and inspect operations/equipment.	120	120	120				$52,200	$3,000	$55,200
4.2 – Technical Advisory Panel	8	8				60	$14,720		$14,720
4.3 – Laboratory testing of alternative pre-packed well screen designs (including estimated $5,000 fee for use of the USC aquifer model)	24	80	80				$23,320	$5,000	$28,320
4.4 – Prepare technical specifications for demonstration well intake, including drilling, construction, and development (Assumes 1 Draft and 1 Final)	8	40	40	24	12		$13,660	$200	$13,860
Subtotals - Task 4:	160	248	240	24	12	60	**$103,900**	**$8,200**	**$112,100**

Municipal Water District of Orange County

Estimated Hours and Costs - GEOSCIENCE Support Services, Inc. and Subcontractors

Dana Point Ocean Desalination Project

Phase II Horizontal Directionally-Drilled (HDD) Well Intake Feasibility Study

	HOURS								
Description / Hourly Rate	**Principal Hydrologist $205**	**Senior Geohydrologist/ Modeler $135**	**Staff Geohydrologist $95**	**Graphics $85**	**Clerical $65**	**Subcontractor $200**	**Total Labor**	**Reimbursable Expenses and Subcontractor Fees**	**Total**
TASK 5 – Project Management									
5.1 - Project management	16	80					$14,080		$14,080
Subtotals - Task 5:	16	80	0	0	0	0	**$14,080**	**$0**	**$14,080**
Total Hours and Costs - Tasks 1 to 5:	310	672	408	60	24	60	**$213,170**	**$10,600**	**$223,770**

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Item No. 2

ACTION ITEM
May 18, 2005

TO: **Board of Directors**

FROM: **Planning & Operations**
(Directors Clark, Bakall and Dick)

Kevin Hunt
General Manager

Staff Contact: Karl W. Seckel

SUBJECT: **POLICY REGARDING ABILITY TO DEAL WITH A SUSPENSION OF IMPORTED WATER DELIVERIES**

STAFF RECOMMENDATION

Staff recommends the Board of Directors add Section § 5013 ABILITY TO DEAL WITH A SUSPENSION OF IMPORTED WATER DELIVERIES to MWDOC's Administrative Code indicating that MWDOC would pass on to any agency or agencies unable to sustain an interruption, any costs imposed by MET or incurred by MWDOC for having to postpone or reschedule a shutdown. The proposed language is provided below:

> **"§ 5013 ABILITY TO DEAL WITH A SUSPENSION OF IMPORTED WATER DELIVERIES**
>
> **Each of MWDOC's Member Agencies has the ultimate obligation to provide sufficient water supplies to their customers during both planned and unplanned outages of the import water system. It is the policy of the MWDOC Board of Directors that each of MWDOC's Member Agencies be able to continue providing service to their consumers, from storage, local resources or interconnections with other agencies, without benefit of imported water through MET's system, for 7 average days of demand. Further, it is MWDOC's role to work with the Member Agencies toward meeting or exceeding the policy. The work MWDOC is undertaking shall not, however, relieve the Member Agencies of any obligations towards meeting the needs of their consumers. The MWDOC staff shall submit a report to the Planning & Operations Committee on a periodic basis regarding progress on**

Budgeted (Y/N):	Budgeted amount:
Action item amount:	Line item:
Fiscal Impact (explain if unbudgeted):	

the ability of the Member Agencies to collectively comply with this provision.

In the event one or more of MWDOC's Member Agencies are unable to sustain a planned shutdown, MWDOC shall pass on any costs imposed by MET. MWDOC shall also pass on any non-staff costs directly incurred by MWDOC for helping an agency or agencies to plan for or to sustain a planned or unplanned outage of the import system. Costs imposed by MET and non-staff costs incurred by MWDOC will be passed through only to certain Member Agencies by way of a special invoice. MWDOC will determine the "need for import" supplies, based on demands and available local supplies including storage. Available MET supplies will be allocated proportionally among all agencies by their "need for import supplies". The special invoice will be allocated proportionally among all agencies calculated to have a "remaining unmet demand" after the MET supplies have been fully allocated. In the event MWDOC cannot reasonably determine which agency or agencies to pass the costs to, the Board shall have the option to pass the costs on to all of MWDOC's Member Agencies. To provide for a transition period for implementation of this policy, during calendar years 2006 through 2010, the Board shall consider the specific circumstances surrounding costs incurred when any of the MWDOC Member Agencies are unable to sustain a planned shutdown and shall have the option to absorb any costs incurred as part of the cost of doing business."

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

Committee Discussion from April 4 Meeting

At the April P&O Committee, it was requested that staff work with legal counsel to consider if changes are required to MWDOC's Water Rate Ordinance or Water Rate Resolution to enable MWDOC to pass on costs incurred by MET or MWDOC for assisting our agencies in dealing with a planned shutdown.

After further consideration, legal counsel noted that Ordinance No. 49, Section 3(a), already contains language that broadly establishes MWDOC's ability to recover "penalties and other applicable charges" through rate increases. In addition, the current Resolution establishing water rates provides for an adjustment in rates "to reflect the incentives and penalties, if any, which are imposed by Metropolitan on MWDOC under any Water Surplus and Drought Management Program or other allocation program…." (Resolution No. 1738, Section 6.) In practice, the likelihood of having to pass along additional costs imposed on MWDOC by MET due to an inability to sustain a shutdown would occur infrequently, if at all. Language in the present rate Ordinance and Resolution broadly establishes MWDOC's ability to

recover such costs. Developing any other express authority for MWDOC to pass on these costs is unnecessary.

Also at the April Committee meeting, an agency request was made for a transition period to allow time for agencies to be able to meet the 7-day policy to be adopted by MWDOC. A 5-year transition section was incorporated into the proposed Administrative Code Section, giving MWDOC the ability to review the specific circumstances and consider whether or not to pass on costs in calendar years 2006 through 2010.

DETAILED REPORT

Shutdowns of both a scheduled and unscheduled nature periodically occur in MET's system. Scheduled shutdowns in portions of MET's treatment, conveyance and distribution facilities are necessary for construction, inspection and maintenance. The season for scheduled shutdowns begins in October and ends in April of the following year. MET begins working with the member agencies in the spring. A final shutdown schedule is produced, which incorporates input from the member agencies, and is presented to them in September. System emergencies may require unscheduled shutdowns resulting in interruption of an agency's deliveries until the issue is resolved. Regardless of whether or not the shutdown is scheduled, MET expects its agencies to have needed resources during low demand months (October through April) to meet demands during any shutdown lasting seven days or less. Previous shutdowns have demonstrated that not all water purveyors within MET have adequate supplies or system capacity to sustain a seven-day interruption. In some cases, MET has, at the last minute, had to cancel or postpone a shutdown because agencies were unable to meet demands with alternative resources during the shutdown period. This prolongs the maintenance process and results in direct costs incurred by all MET member agencies. As a result, MET's Administrative Code was amended in November 2004 to require agencies to maintain the ability to withstand a seven-day interruption in MET deliveries and to make agencies responsible for direct costs, excluding direct labor costs, incurred by MET when postponement or cancellation of the scheduled shutdown takes place at the request of one of MET's member agencies or sub agencies.

In January 2004, prior to the MET Administrative Code changes, the MWDOC Board adopted the following policy:

MWDOC POLICY

"It is the policy of the MWDOC Board of Directors that each Member Agency be able to continue providing service, from storage, local resources or interconnections with other agencies, without benefit of imported water through MET's system, for 7 average days of demand, and further it is MWDOC's role to work with the Member Agencies toward meeting the policy. The MWDOC staff shall submit a progress report to the Planning & Operations Committee on a periodic basis."

In January 2004, MET had a policy, but it was somewhat ambiguous. MET worked with its member agencies to clarify their policy and in November 2004 adopted revisions to their Administrative Code §4503 **(see Attachment A)** that mirrored the MWDOC policy, with the exception that an enforcement provision was added to allow MET to invoice their member agencies for the direct costs resulting from the inability to sustain a planned interruption, following proper noticing of the shutdown by MET. MET's enforcement section reads as follows:

MET POLICY

"If a member public agency has been provided with a sixty (60) day notice of when an interruption in service is to occur, the member public agency shall be responsible for and reimburse direct costs, excluding labor costs, incurred by MET in the event that a scheduled non-emergency interruption of up to seven days is postponed or cancelled at the request of the member public agency as a result of insufficient local resources, and the District agrees to such cancellation or postponement. Direct costs shall be determined by MET's Chief Executive Officer, in consultation with the affected member agency. These direct costs shall be applied to the member public agency's water invoice following cancellation or postponement of the shutdown."

During recent discussions involving the MWDOC Administrative Code, the Board discussed whether or not to make any changes to the MWDOC Policy Statement to consider MWDOC's position in the event MET imposes costs on MWDOC for the inability of one of our member agencies to sustain a shutdown.

Discussion

MWDOC's goal is to work with our member agencies to ensure they are reliable on a collective basis. This will take 3 to 5 years at minimum to achieve. When the Board previously discussed this issue, the impetus for adopting the MWDOC policy was based on the fact that MET looks to MWDOC to comply with their policies and felt that MWDOC should have a similar policy and a goal for the MWDOC agencies to be able to be without the MET system for 7 average days of demand. The Board did not necessarily envision MWDOC imposing penalties when an agency does not have the ability to sustain an interruption for 7-days. Input from Directors, staff and others indicates:

- MWDOC should continue strongly advocating reliability improvements (storage, local supplies and emergency interconnections) with our agencies until such time as they have, at minimum, the ability to sustain 7-day interruptions of the MET system during periods of average annual demand.
- Cooperative efforts should be explored to the maximum extent feasible to minimize costs and accelerate the ability of our agencies to sustain interruptions.
- Incentives should be provided to stimulate action and avoid procrastination or resistance to moving forward by our agencies. One incentive MWDOC could provide is to pass on any costs imposed by MET as a result of having to cancel or postpone a planned shutdown.

- Reaching that policy collectively in South Orange County will likely take a number of years.
- MWDOC is working closer with its agencies to ensure that planned outages can be accommodated.
- During the February 2005 Diemer Plant shutdown, the MWDOC Board authorized costs to assist agencies in dealing with shutdowns. These costs were absorbed by MWDOC.
- MWDOC should not take on the ultimate responsibility, exposure and expense if a retail agency is unable to sustain a planned or unplanned emergency outage – that responsibility should remain with the retail agency.
- MWDOC has the authority to allocate supplies of water during an emergency. In certain cases MWDOC will have discretion on where water is routed and which agencies will be supplied water from available supplies. MWDOC should take this issue into consideration if costs are passed on to our agencies.

Attachment A

THE ADMI/NISTRATIVE CODE OF
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
DIVISION IV WATER SERVICE POLICIES

§ 4503. Suspension of Deliveries.

Whenever repairs or maintenance of the District's system, in the opinion of the Chief Executive Officer of the District, shall require suspension of delivery of water at any point or points, such delivery may be suspended without liability on the part of the District; provided, that except in cases of emergency, as determined by the Chief Executive Officer, notice of such suspension of service shall be given to the affected member public agency in advance of such suspension. MET will make a concerted effort to notify and work with member public agencies regarding all scheduled interruptions. The District will schedule non-emergency interruptions for the low demand months of the year, typically October through April, in coordination with the member public agencies.

Each member agency shall have sufficient resources such as local reservoir storage, groundwater production capacity, system interconnections or alternate supply source to sustain a seven-day interruption in MET deliveries based on annual average demands. If a member public agency has been provided with a sixty (60) day notice of when an interruption in service is to occur, the member public agency shall be responsible for and reimburse direct costs, excluding labor costs, incurred by MET in the event that a scheduled non-emergency interruption of up to seven days is postponed or cancelled at the request of the member public agency as a result of insufficient local resources, and the District agrees to such cancellation or postponement. Direct costs shall be determined by MET's Chief Executive Officer, in consultation with the affected member agency. These direct costs shall be applied to the member public agency's water invoice following cancellation or postponement of the shutdown.

Except in cases of emergency, the District, working with the member agencies, will produce a shutdown schedule each September for the annual shutdown season from October through April. The District will also develop a three-year shutdown schedule, which will give notice of the proposed shutdowns greater than seven days at least one-year in advance.

Replenishment Service certifications will be adjusted for the reduction of credits that are accrued due to shutdowns that are greater than seven days. No adjustments will be made for shutdowns seven days or less unless the member agency provides a service to the District by serving another member agency in-lieu of District deliveries during a shutdown even if the shutdown is seven days or less.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Item No. 3

ACTION ITEM
May 18, 2005

TO: Board of Directors

FROM: **Planning & Operations**
(Directors Clark, Bakall, Dick)

Kevin Hunt
General Manager

SUBJECT: **SOUTH FEATHER WATER & POWER WATER TRANSFER**

STAFF RECOMMENDATION

Staff recommends the Board of Directors

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

In March, Kevin Hunt, Matt Stone, John Schatz, General Manager, Santa Margarita Water District, and Eric Robbins, our consultant, met with Michael Glaze, General Manager, South Feather Water & Power, to tour their facilities and to discuss a potential short-term water transfer. South Feather Water & Power is a well-established (86 year old) water and power agency serving Oroville, California. They have a history of water transfers, with over 70,000 AF transferred in the last 10 years. Enclosed is a presentation on the South Feather Water & Power opportunity which Eric Robbins identified. While it is doubtful that we can do a transaction this year because of an abundance of State Water Project water, we would like to establish a relationship with the agency for future transactions. At the committee meeting, we will present options for establishing such a relationship.

The South Feather Water & Power opportunity could save MWDOC over $400,000 in water purchases.

Budgeted (Y/N):	Budgeted amount:
Action item amount:	Line item:
Fiscal Impact (explain if unbudgeted):	

South Feather Water and Power Agency

Proposed
Short-Term Water Transfer

Kevin P. Hunt
General Manager

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Water Transfer Objectives

- Identify low cost and transferable water supplies
- Coordinate supplemental water needs in Orange County
- Reduce Metropolitan Tier 2 payments
- Increase water supply reliability
- Develop water supply alternatives

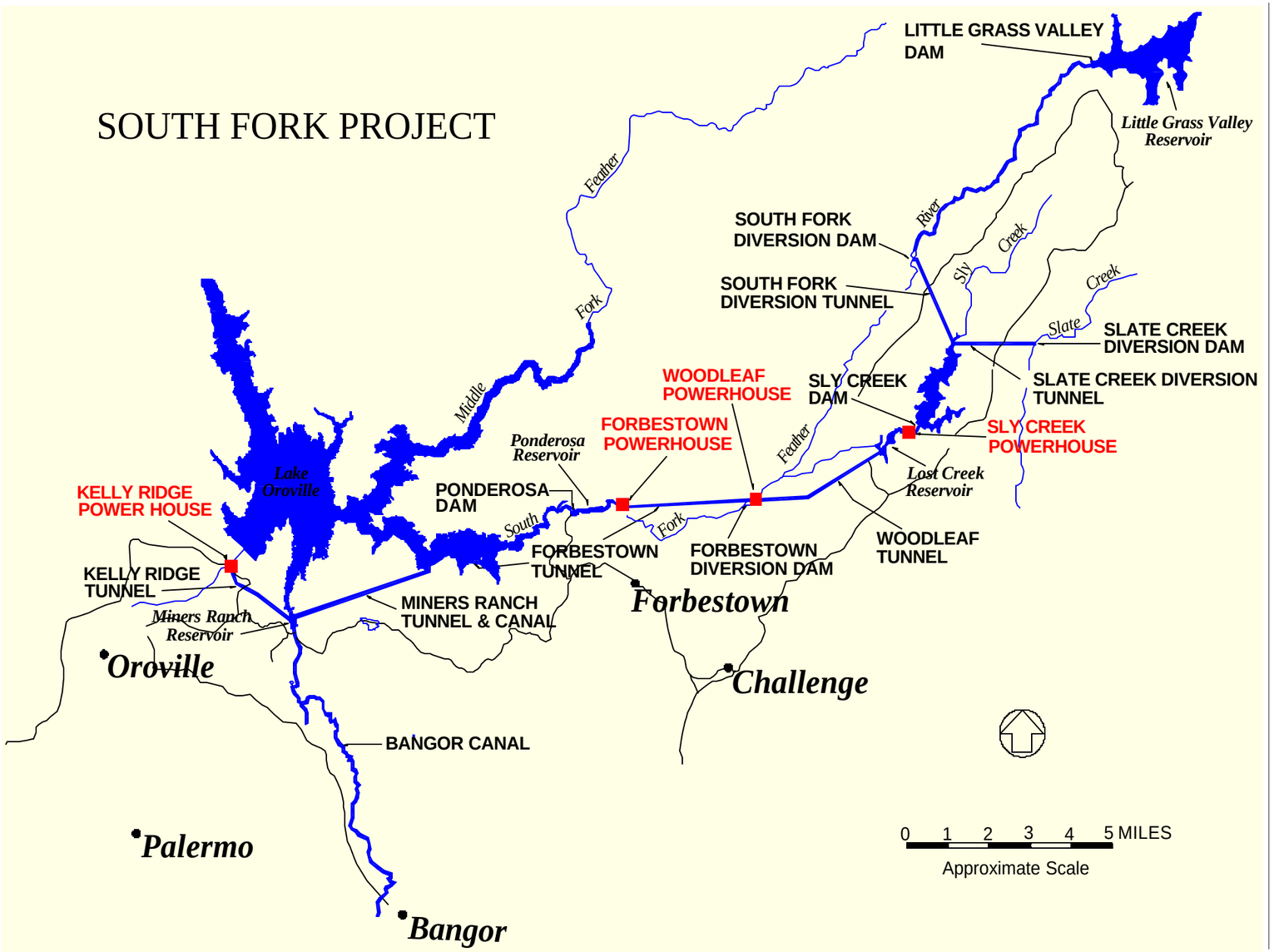
South Feather Water and Power Agency

- Organized Nov. 6, 1919
- Service area – 38,320 acres
- Population – 17,500
- Domestic accounts – 6,515
- Irrigation accounts – 557
- Annual water use – 28,000 acre-feet (average)
- 2005 water budget - $6.3 M
- Up to 15,000 acre-feet of transferable water per year
- 165,210 acre-feet of surface storage
- 550,000 megawatt hours of power production/year

SFWPA Water Transfers

- Seven separate water transfer transactions since 1990
- Total deliveries exceed 72,000 acre-feet of water
- Recent three sales made to the Environmental Water Account
- Received price of $75.00 per acre-foot
- Deliveries made from October through December
- Restricted to short-term transfers until power relicensing completed in 2009

SOUTH FORK PROJECT



South Fork Power Project's FERC License Renewal

- Current 50-year license expires in 2009
- Power-purchase agreement with PG&E expires in 2010
- Relicensing Process
  - Notice of Intent: September 30, 2003
  - Conduct Studies: 2004 – 2005 ($3 million)
  - Issue Draft License Application: July 2006
  - File License Application: March 2007
  - Environmental Review Process: 2007 - 2008
  - New License Issued March 2009
- Estimated Cost: $4.5 - $5 million

Proposed Water Transfer

- Purchase: 10,000 af of conserved water
- Pay: $75.00/af for water transferred
- Option: $5.00/af non-refundable
- Losses: 20% Delta
- Wheel: Metropolitan facilities
- Power: Metropolitan melded rate
- Delivery: October through December
- Savings: $432,000 (2005); $552,000 (2006)

Water Pricing Summary (2005)

Component	$/AF	Total AF	Total Cost
SFWPA Water	$75.00	10,000	$750,000
Option	$5.00	10,000	$50,000
Water Cost	**$80.00**	**10,000**	**$800,000**
Carriage Losses @ 20%	--	2,000	--
Total Cost	**$100.00**	**8,000**	**$800,000**
Avoided Tier 2	$154.00	8,000	$1,232,000
Savings	**$54.00**	**8,000**	**$432,000**

Key Unresolved Issues

Ability to Move Water

- Normally, only 3 out of 10
- This water is Nov/Dec so potentially can move more often
- Losses negotiable

Duration of Options

- Met Style – 1 yr, nonrefundable
- Alt. 1 – 2 yrs, nonrefundable
- Alt. 2 – until used, nonrefundable
- Propose to go for Alt 2

Price of Energy

- Current Met Policy $110-120/af
- Proposed Met Policy $81/AF
- Rates go up next year

Long-Term Relationship Approach

- Can only do 2 years without an EIR
- Rotate among agencies
- Share savings over set amount with SFW&P, i.e., goal-save $50/AF. If save $60, $5 to SFW&P
- Other approach?

Proposed Schedule

2005

- May – seek approval by MWDOC Board
- July – enter into option contract w/ SFWPA
- August – submit water transfer application to SWRCB
- September – finalize wheeling details with Metropolitan
- October to December – transfer water

2006

- March – begin negotiations with SFWPA
- (From this point on – same as above)

Questions, Comments

Item No. 4

INFORMATION ITEM

May 2, 2005

TO: **Planning & Operations**
(Directors Clark, Bakall and Dick)

FROM: Kevin Hunt
General Manager

Staff Contact: Karl W. Seckel

SUBJECT: **ENGINEERING ACTIVITIES FOR 2005-06**

STAFF RECOMMENDATION

Staff recommends the Committee review and provides input into the engineering activities for 2005-06 to be included in the draft Budget.

SUMMARY

Attached is a summary of the engineering activities proposed for inclusion in the budget. The activities are segregated between:

- General Consulting & Capital
- Those related to Ocean Desalination.

The difficulty in developing a specific recommended budget results from the many anticipated activities and a number of outside funding opportunities that may or may not occur in time to provided necessary funding or matching funding for study, or feasibility evaluations or capital projects. This is especially true for funding the continuing ocean desalination activities.

The detailed cost estimates in that attachments present the conceptual cost of the activity along with a Low Estimate of securing outside funding assistance and a High Estimate of securing outside funding assistance. Based on the range, staff has provided recommended dollar amounts for the proposed budget for 2005-06. Based on what actually occurs, staff may have to request a budget augmentation, delay or halt a project or it could actually result in funds going into the MWDOC reserves in the event more funding occurs than estimated.

The information is presented to the P&O Committee for input. The information was shared with the MWDOC Managers' at the April 27 meeting.

Budgeted (Y/N):	Budgeted amount:
Action item amount:	Line item:
Fiscal Impact (explain if unbudgeted):	

Engineering Budget 2005-06

Two Categories

- **General Consulting & Capital**
- **Related to Ocean Desalination**

Engineering Budget 2005-06

- **General Consulting & Capital**
  - **Many activities anticipated**
  - **Potential for considerable outside funds**
  - **13 Studies or projects estimated at $11.7 M**
  - **Potential outside funding = $11.4 to $11.6 M**
  - **Portion shared out of General fund estimated at $100 k to $300 k**
  - **Recommended budget = $200 k**
  - **(See attached breakdown)**

MWDOC Study Efforts in 2005-06

$1,000's of dollars

	Potential Study Effort	Total Estimated Cost	Potential Outside Funds		Remaining MWDOC Share	
			Low	High	Low	High
1	Serrano Treatment Plant Study	50	38	38	13	13
2	IRWD Interconnection Work	80	50	80	0	30
3	Prop 50 Chapter 3 Water Security for IRWD Interconnections and Pump Stations at Upper & Lower Chiquita	8,000	8,000	8,000	0	0
4	Coastal Junction Pump Station	50	0	50	0	50
5	Los Alamitos Recycled Water	40	20	20	20	20
6	North County Water Reliability Study	15	0	0	15	15
7	Groundwater Emergency Service	50	0	50	0	50
8	Laguna Beach Groundwater	25	17	17	8	8
9	Short-term and long-term Transfer	50	0	50	0	50
10	MET Issues Consulting	10	0	0	10	10
11	Hazard Mitigation Planning Grant	252	252	252	0	0
12	Hazard Mitigation Grant for IRWD	3,013	3,000	3,000	13	13
13	Contingency Work	50	0	0	50	50
	Total	11,685	11,376	11,556	129	309

Recommended Consulting Budget = $200 k

Ocean Desalination Activities

- **Goal is to finish the fiscal year in a position to declare the Dana Point Project either a “go” or “nogo” and to determine who will pursue the project, MWDOC, MET, Local, Joint Powers Authority or none of the above**
- **Three technical aspects:**
  - **Subsurface intake**
  - **SOCWA outfall capacity**
  - **Energy source and cost**
- **Also continue study at Camp Pendleton**

Ocean Desalination Activities

- Many activities anticipated
- Potential for considerable outside funding
- Projects recommended at $3.6 M
- Potential outside funding = $1.7 to $3.3 M
- Remaining MWDOC share = $0.3 to $1.9 M
- (See attached)

Ocean desal for 2005-06

$1,000's of dollars

	Potential Study Effort	Total Estimated Cost	Potential Outside Funds		Remaining MWDOC Share	
			Low	High	Low	High
1	Ocean Desalination Power Study	50	0	0	50	50
2	San Onofre Feasibility Study	800	725	725	75	75
3	Vendor Delivery System for Ocean Desal	50	0	0	50	50
4	Ocean Desalination Subsurface Intake	2,000	1,000	2,000	0	1,000
5	Engineering for 2006 Prop 50 Grant for Pilot/Demonstration Project	50	0	0	50	50
6	Dana Point Feasibility Report Update	50	0	50	0	50
7	Contingency Work	100	0	0	100	100
	Total	3,100	1,725	2,775	325	1,375

Recommended budget = $500k

SOUTH ORANGE COUNTY WATER RELIABILITY PROJECTS

Component	Cost $M	Capacity CFS
Orange County Cross Connector	$30	25+
GW Emergency Service	$15	15
Coastal Junction Pump Connection	$2	20
IRWD to JTM	$16	50
IRWD to SCPS	$23	50
Upper & Lower Chiquita Reservoirs	$80	32
Dana Point Ocean Desal	$?	?
Total	$166	135±(1)

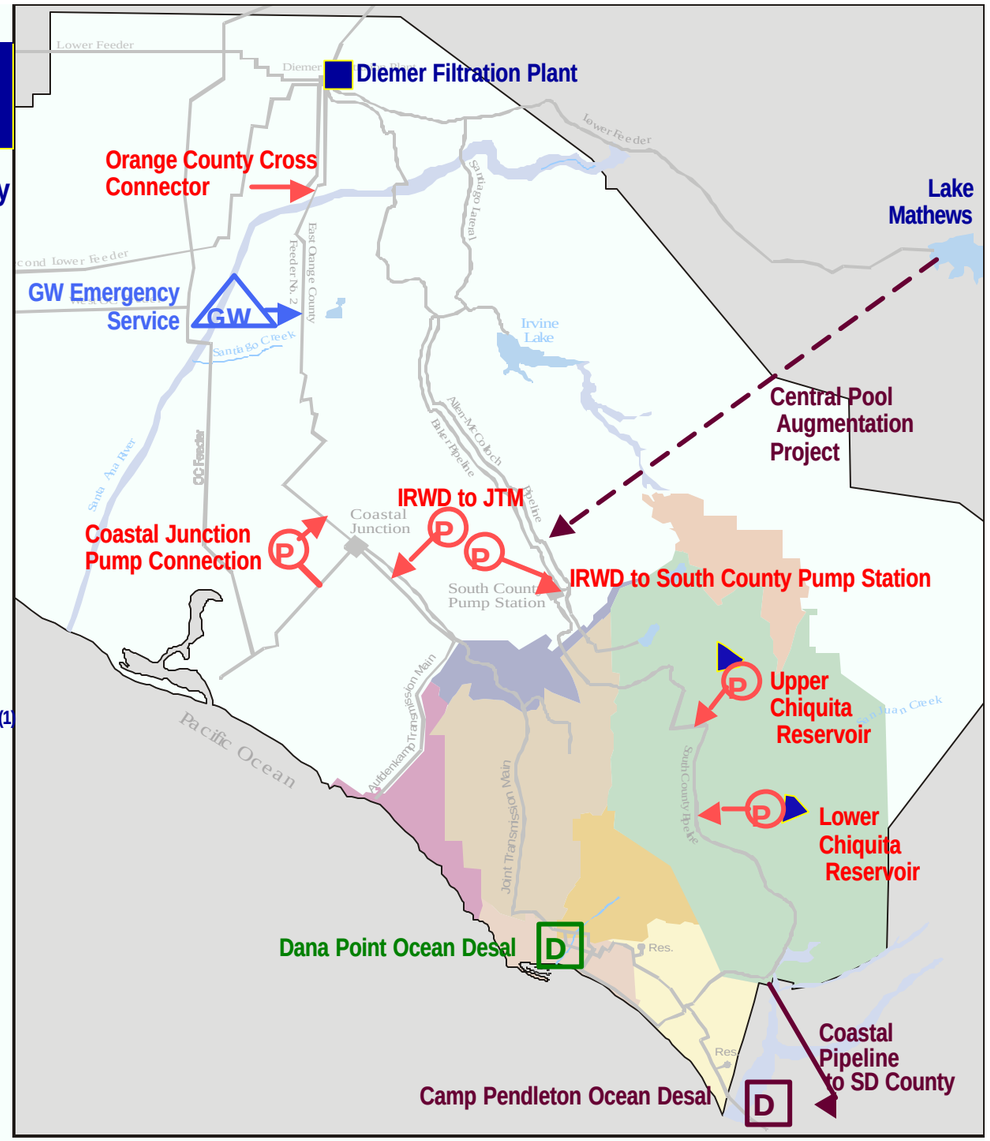
(1) Project Capacities are not all additive

Projects Further Out in Time:

Camp Pendleton Ocean Desal

Central Pool Augmentation Project

Coastal Pipeline to SD County



Item No. 5

INFORMATION ITEM

May 2, 2005

TO: Board of Directors

FROM: Planning and Operations Committee
Directors Clark, Bakall, Dick

Kevin Hunt
General Manager

Staff Contact: Joe Berg

SUBJECT: Update on MWDOC ET Controller (SmarTimer) Rebate Program

STAFF RECOMMENDATION

Staff recommends the Board of Directors

Review and discuss information.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

The ET Controller Rebate program uses funding from Metropolitan Water District of Southern California, Natural Resources Conservation Service, a Proposition 13 Grant, and Member Agencies to provide rebates for single-family residential and commercial customers who replace their less efficient “dumb” irrigation controller with a qualified “smart” controller. Marketing for the ET Controller Program started in September 2004.

While the initial startup of the program was expected to ramp up slowly, the response and sign up rates will need to increase significantly in the very near future so that MWDOC can meet targeted performance for the overall two year program, and for the period through March 2006 (when State Proposition 13 funds must be expended). This report covers marketing activities and results from February 2005 through April 2005, and includes additional steps that will be taken to improve the effectiveness of program marketing and increase the number of rebates that are issued.

Budgeted (Y/N):	Budgeted amount:
Action item amount:	Line item:
Fiscal Impact (explain if unbudgeted):	

DETAILED REPORT

A total of 49,373 letters, each in a retail agency envelope, have been mailed through April. These letters have been targeted to a database of about 177,500 addresses representing the top 40% of single-family residential water users in participating agencies.

Through April (25th), 763 residential customers have called to request an information packet, 117 have followed up to reserve a rebate (which requires completing a form and returning it), and 34 have submitted documentation that they have purchased and installed a new SmarTimer. Confirmation inspections have been completed and rebate checks issued for 32 residential SmarTimers. This represents more than a 400% increase over the seven rebates reported to the Committee in February 2005.

Also through April (25th), the commercial side of the program has received 52 requests for information packets, 28 rebate reservation requests, and 22 documentation packets for rebates (inspections and rebate checks pending). Commercial controller confirmation inspections have been completed and rebate checks issued for four commercial SmarTimers. No commercial controller rebates had been reported to the Committee in February 2005.

Our contractor, Volt Viewtech, handles processing of the requests for information packets, rebate reservation requests, rebate paperwork submission documentation, and issuance of the rebate check. Volt is also processing rebates for the High Efficiency Clothes Washer rebate and the Ultra Low Flow Toilet rebate programs. Staff of the Mission and Riverside/Corona Resource Conservation Districts (RCDs) under contract with MWDOC handles site inspections and verification of controller installations.

Staff estimates that approximately 1,000 rebates must be issued by March 2006 (in both single family residential and commercial categories combined) to expend the full amount of State Proposition 13 funding available. The overall target for the program is about 2,000 rebates. This assumes a mix of approximately 50/50 single-family and commercial rebates. The actual mix may vary.

Staff has begun implementing several good suggestions provided by the February P & O Committee to improve the program response rate. These efforts include the following:

- Changed mailing format from “postcard only” to a letter mailing that comes in an agency envelope. From February 2005 through April 25th, more than 49,000 letters have been distributed. The letter approach resulted in an additional 514 program information requests over the last three months, as opposed to 249 requests in the previous four months.

- California Landscape Contractors Association – Orange County Chapter: Joe Berg provided a presentation introducing the SmarTimer Rebate Program to the Orange County Chapter members at their April 13th meeting in Irvine. The presentation was well received by more than 30 landscape maintenance contractors, equipment manufacturers, and distributors in attendance. Only one maintenance contractor was familiar with the SmarTimer Program prior to the presentation. Staff will be

attending these monthly meetings to continue disseminating program information to this group and encouraging participation.

- Community Association Institute of Orange County: Staff submitted an online announcement through the Institute's website introducing the program and is attempting to provide a presentation describing the program at the Association's May 16 meeting and Mini Trade Show. This will include staffing a booth to showcase the SmarTimer Rebate Program, Landscape Performance Certification Program, Toilet Rebate Program, and Clothes Washer Rebate Program. Approximately 300 property managers, landscape contractors, and homeowner association board members attend these monthly meetings.

- Environmental Organizations: Staff introduced the Surf Rider Foundation, Coast Keeper, and Earth Resource Foundation to the SmarTimer Program and asked for their help to market the program. The request for marketing assistance included MWDOC providing these organizations with marketing materials displaying their logos as a marketing partner. These materials will be distributed to their membership and to the public as part of their general outreach efforts. These efforts should begin in May 05.

- Staff created a Commercial Controller Rebate Calculator to assist landscape contractors, property managers, and property owners in estimating rebate amounts for their sites. This rebate estimate is useful in calculating their final cost to participate in the program after the rebate is applied. For example, the County of Orange is retrofitting controllers at Wieder Park in Anaheim. The Rebate Calculator estimated 60% of the cost would be covered by the rebate. The County is now looking to retrofit controllers at other parks as a result of the 60% rebate, thus stretching their available funding to Dana Point Harbor Park, Niguel Regional Park, and Yorba Park.

- MWDOC staff is in the process of surveying a number of the people who requested program information, but did not reserve a rebate. Staff will inquire what factored into their decision not to participate. This information will be used to make any necessary refinements to our marketing materials or the program itself.

- Staff expanded the target population from the top 20% of residential users to the top 40% of residential water users in order to a new target population of more than 177,000 homes.

- Staff signed Irvine Ranch Water District on to the program in April, with marketing to commence in late April 2005

- MWDOC is in the process of contacting the ET Controller vendors to review their marketing efforts to date for the commercial portion of the program. We have already begun augmenting their efforts with an outreach to homeowner associations and property management companies.

- Staff met with City of Orange and City of La Habra staff in order to explain the program to facilitate participation targeting their community parks.

- Staff is taking an inventory of controllers to be installed by homebuilders in Ladera Ranch within the Santa Margarita Water District. A count of controllers is not yet available; however, staff has been informed that controllers are currently being installed. (This will help reach the March 2006 goal of 1,000 controllers)

Future marketing activities to be employed beyond April 2005 are set forth below. This overall marketing approach is consistent with the marketing approach contained in our funding agreement with the State Water Resources Control Board to maximize water savings and minimize irrigation runoff:

- Proceed to a more general marketing format with program announcements in bill stuffers, agency newsletters, and/or newspaper advertisements to all residential users. Experience from the ULFT rebate program indicates response levels increase when bill stuffers are used.

- Continue communications with the Orange County Chapter of the California Landscape Contractors Association

- Continue communications with the Community Association Institute of Orange County

- Open an ongoing dialog with the Apartment Association of Orange County

- Continue to expand the development of marketing partnerships with local environmental organizations to promote the program

- Pre-monitoring of surface water quality and runoff flow is underway in two special test/monitoring areas in the Proposition 13 grant program - Buck Gulley and Trabuco Canyon. After completion of pre-monitoring, an intensive marketed campaign will be implemented to promote installation of controllers. About 150 homes and a large number of commercial sites could participate, which will help meet the March 2006 goal of 1,000 controllers.

More focused and intensive marketing efforts have begun and are having a positive impact on participation in the program. Staff will continue to work on refinements to the program marketing to increase participation rates in order to meet our intermediate and long-term goals for the program.

Status of Ongoing MWDOC Reliability and Engineering/Planning Projects

May 2005

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
Dana Point Ocean Desalination Project				
Feedwater Supply				
Phase I Hydrogeology	MWDOC	75%	June 30, 2005	Field Work and Water Quality Testing Completed
Phase II Hydrogeology	MWDOC	1%	June 30, 2006	Prop 50 Funding and Contract; Start Project Planning & Permitting
Brine Disposal	SOCWA and MWDOC	20%	June 30, 2006	Awaiting analysis from SOCWA
Power Supply	MWDOC	No work	June 30, 2006	Need to update and expand Boyle study and develop strategy
Project Report	MWDOC	No work	December 2006	Needed for project description and preliminary cost estimate to assist the Board and agencies with the decision whether to move forward.
EPA STAG Grant	MWDOC	90%	July 1, 2005	Staff has submitted all of the requested information. Approval of the grant is anticipated in June for $144,300. The funding will go towards the Dana Point hydrogeology work.
Coastal Delivery Pipeline Study	MET	10%	November 30, 2005	Held two meetings, clarifying work and met with USMC and USBR
SOC Reliability Study Implementation				

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
GW Emergency Supply Policy and Project Plan	MWDOC	10%	June 30, 2006	Two meetings held with the Policy Advisory Committee
IRWD Interconnections Project Report & Costs	MWDOC, IRWD & SMWD	10%	November 30, 2005	IRWD oversizing PA6 facilities; overall study required
SOC Reservoir(s) Funding Agreement	MWDOC, SMWD	50%	June 30, 2005	Geotechnical work initiated by SMWD; drafting funding agreements; CEQA being started
Camp Pendleton Ocean Desalination Feasibility Study	SDCWA	0%	June 2007	Feasibility study has not yet been started
North Orange County Water Reliability Study				
Drafting of Report	MWDOC	75%	August 2005	The report and graphics are being prepared for release.
MET Reliability Projects	MWDOC Coordination			
CPA Project	MET	5%	On-going (Tentative online date of 2025 per draft System Overview Study)	Alternative alignment developed by MET; MET working with USFS for test borings and working on right-of-way
MET Interconnections	MET	10%	March 2008	OC Cross Feeder – to Board in July 05 for funding
Coastal Junction Pump Station	MET	30%	April 2006	Requires work during the winter 2006 shutdown period.

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
Infrastructure Reliability Protection Program	MET	90%	May 2005	Finalizing – many follow-up issues identified by MET.
South County Pump Station Upsizing	MET	80%	Unknown	Several new pumps are operating. Four anticipated by the summer of 2006. MET has had problems with the pump supplier quality and with the electrical contractor going bankrupt.
System Overview Study	MET	75%	Sep 2005	Reviewing
Diemer Bypass Service Connection	MET	20%	April 2006	Under construction by MET. Will require shutdown in winter 2006 for tie-in.
Orange County Reservoir Covering	MET	90%	June 2005	The percent complete is for the funding agreement between MET, MWDOC, La Habra, Brea and Fullerton. Final design and construction will take place thereafter.

Municipal Water District of Orange County

Water Use Efficiency Programs Savings
and
Implementation Report
March 2005

Interventions Implemented and Acre-Feet Water Savings for Program Activity

Program	Program Start Date	Current Month		Current Fiscal Year		Overall Program to Date	
		Interventions	Water Savings	Interventions	Water Savings	Interventions	Water Savings
Ultra-Low-Flush-Toilet Programs	1992	209	0.58	3381	47	355,106	66,718
High Efficiency Clothes Washer Program	2001	575	0.62	5092	30	19,065	520
Smart Timer Program - Irrigation Timers	2004	28	0.32	28	5.08	28	5.08
Commercial Industrial Institutional Program	2002	196	1.90	987	155	6,790	1,778
Landscape Certification Program	1997	1053	75.14	946	715	942	715
Home Water Surveys[1]	1995		0		0	11,867	1,708
Showerhead Replacements[1]	1991		0		0	270,604	19,083
Total Water Savings All Programs			**78.56**		**952**		**90,527**

[1] Inactive Program. Cumulative Water Savings Program to Date Totals are from a previous Water Use Efficiency Program Effort