



*Dedicated to
Satisfying our Community's
Water Needs*

**AGENDA
MESA WATER DISTRICT
BOARD OF DIRECTORS
Tuesday, March 15, 2016
1965 Placentia Avenue, Costa Mesa, CA 92627
3:30 p.m. Special Board Meeting**

**ENGINEERING AND OPERATIONS COMMITTEE MEETING
Tuesday, March 15, 2016 at 3:30 p.m.**

CALL TO ORDER

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

Non-Agendized Matters: Members of the public are invited to address the Board on matters which are not on the Agenda. Each speaker is limited to three (3) minutes. The Board will set aside thirty (30) minutes for public comments.

Agendized Matters: Members of the public may comment on Agenda items before action is taken, or after the Board has discussed the item. Each speaker is limited to five (5) minutes.

PRESENTATION AND DISCUSSION ITEMS:

Items recommended for approval at this meeting may be agendized for approval at a future Board meeting.

1. Committee Meeting Dates and Chair Appointment
2. Operations Department Staffing Update

ACTION ITEMS:

3. Smart Timer Rebate Program

REPORTS:

4. Developer Project Status Report
5. Mesa Water® and Other Agency Projects Status Report
6. Water Quality Call Report
7. Committee Policy & Resolution Review or Development
8. Operations Department Status Report
9. Municipal Water District of Orange County Activities Update
10. Orange County Water District Activities Update
11. Ocean Desalination Projects
12. Report of the General Manager
13. Directors' Reports and Comments



INFORMATION ITEMS:

14. OC-44 Pipeline Rehabilitation Update

In compliance with California law and the Americans with Disabilities Act, if you need disability-related modifications or accommodations, including auxiliary aids or services in order to participate in the meeting, or if you need the agenda provided in an alternative format, please contact the District Secretary at (949) 631-1206. Notification 48 hours prior to the meeting will enable Mesa Water District (Mesa Water®) to make reasonable arrangements to accommodate your requests.

Agenda materials that are public records, which have been distributed to a majority of the Mesa Water Board of Directors (Board), will be available for public inspection at the District Boardroom, 1965 Placentia Avenue, Costa Mesa, CA and on Mesa Water's website at www.MesaWater.org. If materials are distributed to the Board less than 72 hours prior or during the meeting, the materials will be available at the time of the meeting.

ADJOURNMENT

MEMORANDUM



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TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: March 15, 2016
SUBJECT: Committee Meeting Dates and Chair Appointment

RECOMMENDATION

Confirm the 2016 Engineering and Operations Committee (E&O) regular meetings for the third Tuesday of each month, starting at 3:30 p.m., and appoint the Committee Chair.

STRATEGIC PLAN

Goal #4: Increase public awareness about Mesa Water® and about water.

PRIOR BOARD ACTION/DISCUSSION

This item is annually updated at the January E&O meeting.

DISCUSSION

Annually, the E&O committee appoints a Committee Chair and Vice Chair and approves the regular meeting date and time. Historically, the E&O committee has been meeting at 3:30 p.m. on the third Tuesday of the month, unless that day falls on a holiday in which case the meeting moves to the following Tuesday.

In 2016, there are no revised meeting dates at this time.

FINANCIAL IMPACT

None.

ATTACHMENTS

None.



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: March 15, 2016
SUBJECT: Operations Department Staffing Update

RECOMMENDATION

This report is for information only. No action is recommended at this time.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Be financially responsible and transparent.
Goal #3: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

None.

BACKGROUND

The Operations Department is responsible for the operations and maintenance of Mesa Water's production, distribution, and transmission facilities, water quality testing and compliance, and fleet and facility maintenance activities. Mesa Water® has the following full-time staffing allocated to oversee each of these functions:

Supervision/Support: 5
Distribution: 10
Production: 4
Water Quality: 2

DISCUSSION

In fiscal year 2016, Mesa Water's Operations Department recognized the retirement of a few legacy employees. These retirements resulted in the promotions of some of Mesa Water's existing staff, thus, creating vacancies in the following positions:

- Maintenance Worker I/II - 1
- Senior Water Systems Operator – 1
- Water Systems Operator - 1

Mesa Water® recently completed recruitment of the Senior Water Systems Operator with the hiring of a full-time employee in February 2016. The Maintenance Worker I/II position is in the final recruitment process and it is expected that this position will be filled by mid-April 2016. The Water Systems Operator position has been reviewed and determined to no longer be a necessary position and will not be budgeted in fiscal year 2017.



FINANCIAL IMPACT

None.

ATTACHMENTS

None.

MEMORANDUM



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TO: Engineering and Operations Committee
FROM: Stacie Sheek, Customer Services Manager
DATE: March 15, 2016
SUBJECT: Smart Timer Rebate Program

RECOMMENDATION

- Approve Smart Timer Option 2: Increase supplemental funding to the regional program to a total of \$150 per residential timer, and \$15 per commercial station capacity, up to a total expenditure of \$15,000 per fiscal year, effective FY2017.
- Make no changes to the Conservation Ordinance at this time. Direct staff to include an exemption clause for Smart Timers upon the next revision of the Conservation Ordinance.

STRATEGIC PLAN

Goal #6: Provide outstanding customer service.

PRIOR BOARD ACTION/DISCUSSION

At the February 2016 meeting, the Board requested more information about Smart Timers and a plan for increasing public awareness and adoption of this technology.

DISCUSSION

The irrigation industry has developed a number of Smart Timers which are either Weather-Based Irrigation Controllers or Soil Moisture Sensor Systems.

A Weather Based Irrigation Controller (WBIC) adjusts the irrigation schedule based on changes in local EvapoTranspiration, determined by real-time on-site weather data, off-site data with internet access, or historical weather data. Controllers are programmed for each zone with information such as plant type, soil type, and sun exposure. Alternatively, the controller can be programmed for a default maximum watering time, based on the hottest time of year.

A Soil Moisture Sensor System (SMSS) will sense soil moisture content in the active root zone where it is installed at the property. The sensor is placed in a location that best represents the overall soil moisture condition of the site, and must be connected to an irrigation system controller that is equipped to accommodate a SMSS. A measurement is taken before each scheduled irrigation event, and the irrigation controller bypasses the scheduled run cycle if the soil moisture is above a certain threshold as defined by the user.

Metropolitan Water District of Southern California (MET), through its regional program SoCalWater\$mart, has offered rebates for WBICs for many years, and for SMSS within the last 2



years. Both products are currently eligible for an \$80 base rebate for residential properties, and \$35 per station capacity for commercial, industrial, and government properties. While MET's FY17/18 budget is not yet approved, it is anticipated that all conservation device rebates will be fully funded for the next two fiscal years.

Mesa Water® currently provides supplemental funding for residential smart timers in the amount of up to \$75 per residential timer. The funding mechanism utilized by MET is to first utilize MET's funding and then utilize supplemental funding. The total rebate to the customer is always capped at the cost of the product. MET, through MWDOC, invoices Mesa Water® on a monthly basis for supplemental funding based on program participation.

The average residential smart timer cost to customers is approximately \$270 and the average commercial smart timer cost is approximately \$75 per station capacity.

Mesa Water® previously administered a Smart Timer Pilot Program in 2008 for both residential and commercial properties. The program was successful in that it improved customer's irrigation efficiency and resulted in customer satisfaction. However, long-term customer satisfaction can suffer because customers tend to contact the District years after participating in the program to request technical assistance. Timers installed by a contractor tend to be programmed incorrectly, unless the contractor received technical training by the manufacturer, thereby decreasing water conservation and customer satisfaction.

Rebate programs are generally preferred over district-incentivized contractor-installed programs. Rebate programs significantly decrease liability to the District and offer a greater amount of product choices for customers. The following identify potential smart timer program options:

- Continue supplemental funding of \$75 per residential timer, up to \$5,000 per fiscal year.
- Increase supplemental funding to the regional program to a total of \$150 per residential timer, and \$15 per commercial station capacity, up to a total expenditure of \$15,000 per fiscal year, effective FY2017.
- Operate a Mesa Water® administered rebate program.

It is recommended that Mesa Water® continue contributing supplemental funding to the regional rebate program for residential smart timers, and add funding for commercial smart timers, because it could increase program participation and would not incur significant administrative costs. It is not recommended to administer another program parallel to the regional program because it would be confusing for customers to submit multiple applications and would significantly increase administrative costs.

The following identify potential Water Conservation Ordinance (Ordinance No. 26) Options:

1. Revise the Conservation Ordinance, and include a provision that Smart Timers would automatically make a property exempt from the designated watering schedule.
2. Make no changes to the Conservation Ordinance at this time. Direct staff to include an exemption clause for Smart Timers upon the next revision of the Conservation Ordinance.

It is recommended that Mesa Water® make no changes to the Conservation Ordinance at this time.



All Smart Timers are able to comply with the designated watering day schedule by specifying the days to water. Advanced Smart Timers will skip designated watering days if irrigation is not needed until the next designated watering day. Additionally, any customer with a Smart Timer could request an exemption from the designated watering day schedule by completing a Hardship Waiver Application. Staff would work with those customers on a case-by-case basis to ensure they would still save water during extended drought conditions.

FINANCIAL IMPACT

\$5,000 is budgeted in fiscal year 2016, \$1,056 funds have been spent to date in fiscal year 2016. The requested funding will come from Cash on Hand next fiscal year.

	<u>Project Estimate Amounts</u>	<u>Project Cost Amounts</u>
Initial Project Estimate (FY 2016)	\$ 5,000	
Original funding		\$ 5,000
Change Orders		0
Requested additional funding (FY2017)		<u>10,000</u>
Revised funding (FY 2017)		<u>\$ 15,000</u>
Actual spent to date (FY 2016)		\$ 1,056
Revised funding (FY 2017)	\$ 15,000	

ATTACHMENTS

None.

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2065	1677 Superior	Tract Homes	New plans received 2/27/14. Plans have been routed to other departments for plan review 3/11/14. Field investigation completed 3/17/14. Plans reviewed and sent for revisions 3/20/14. Mylars received, fees paid, and plans signed 5/5/14. Abandonment done and installed 800' pipe 6/30/14. Board accepted easement on 7/10/14 and meters set. Tested water line and tied into system on 7/28/14. Installed 18 - 1" meters on 11/20/14. Installed 6 - 1" meters on 6/5/15. Phased development project - Construction and inspections in progress. Installed 12 - 1" meters on 1/28/16. (3/1/16)
MC 2083	2600 Harbor Blvd.	Orange Coast Cadillac	Plans received on 3/12/14. Initial comments sent to Engineer via email 3/27/14 and official plan check with check prints completed 4/24/14. Revised plans received from Engineer 4/27/14. Revised plans did not address comments. Comments sent back to Engineer 4/29/14. Revised plans received 5/9/14. Notified Engineer that plans need to include fireline improvements in addition to meter and service relocations. Engineer stated that the fireline improvements were still under design and a re-submittal would not be immediate. Awaiting revised plans containing fire line improvements. Checked status with Engineer on 8/7/14. Developer stopped by on 10/7/14 to ask about status and was reminded that Engineer has not yet submitted revised plans. Developer again stopped by on 10/30/14 and was reminded that Engineer is awaiting revised plans. Revised plans submitted 12/4/14. Coordinating with developer on plan check comments. Plans reviewed and ready for permit issuance. Water service agreement application for new service and payment voucher mailed to the developer. Fees paid on 5/27/15. Mylars signed on 6/25/15. Permit issued 8/6/15. Hot-tapped watermain and ran fireline on 9/1/15. Abandonment of 1" and 1.5" service on 10/3/15. Irrigation meter installed on 10/12/15 (3/1/16)
MC 2099	1974 Meyer Place	5 New Homes	Revised plans submitted on 2/29/16. Fees paid on 3/1/16. Awaiting mylar copy of drawings. (3/1/16)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2118	220 E. 16th St.	Home Remodel (Complete Remodel)	Plans received and plan check fees paid 08/27/14. Plan check complete 8/28/14. Following plan check, and while awaiting corrected plans, inaccuracies in Mesa Water records were discovered, and inspector was requested to field verify the actual conditions. 2nd set of plans were revised to reflect actual conditions, and plan check finalized on 10/02/14. Mylars received and fees paid on 10/14/14. Permit issued on 10/21/14, and issued inspection checklist on 10/27/14. Mesa Water inspector reported no activity onsite 5/5/15. Contractor came into Mesa Water Plan Check Desk to discuss project status on 8/25/15. Pre-construction meeting held on 10/7/15. Inspector checked status of the project on 12/2/15. 1" water service installed on 2/24/16. 2 - 1" meters and boxes installed on 2/29/16. (3/1/16)
MC 2119	236 E. 16th St.	Home Remodel (Complete Remodel)	Plans received and fees paid 08/27/14. Plan check complete 8/28/14. Following plan check, and while awaiting corrected plans, inaccuracies in Mesa Water records were discovered, and inspector was requested to field verify the actual conditions. 2nd set of plans were revised to reflect actual conditions, and plan check finalized on 10/2/14. Mylars received and fees paid on 10/14/14. Permit issued on 10/21/14, and issued inspection checklist on 10/27/14. Contractor contacted on 8/10/15 to obtain status of project. Contractor scheduled to complete work, waiting for inspection to be scheduled. Pre-construction meeting held on 10/7/15. 1" water service installed on 2/24/16. 2 - 1" meters and boxes installed on 2/29/16. (3/1/16)
MC 2126	573 Victoria	37 New Homes	Plans received and plan check fees paid 10/7/14. Design of improvements found not to be satisfactory, and a meeting was held on 10/23/14 to discuss design alternatives. New meeting held on 2/6/15. Awaiting revised plans from developer. Revised plans submitted 4/6/15. Plans sent back for second revision 4/7/15. Plans sent back for third revision 7/17/15. Plans currently in fourth plan check 7/30/15. Plans approved and permit issued on 8/20/15. Hot-tap and service abandonment on 10/20/15. Pipeline installation ongoing 10/22/15. Pipeline pressure tested on 11/23/15. Bac-T testing completed on 11/30/15 & 12/1/15. Mainline turned on 12/25/15. Meter boxes installed and angle-stops locked on 1/19/15. (3/1/16)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2134	2026 Placentia	15 New Homes	Plans received and fees paid on 10/30/14. Plans reviewed on 10/30/14 and circulated for Dept. signatures. Plan check comments issued to Engineer on 11/13/14. Received revised plans 1/6/14. Plan check completed and permit issued 2/9/15. PreCon meeting held 2/11/15. Inspection ongoing as work progresses. Main hot-tap performed on 5/5/15. Services installed by contractor on 5/7/15. 16 - 1 inch meters installed and locked on 7/6/15. Inspector checked status of the project on 12/2/15. Backflow tested on two model units on 2/25/16. (3/1/16)
MC 2149	1620-1644 Whittier Ave and 970 16th St	89 Single Family Homes	Plans received and plan check fees paid 2/2/14. Working with developer to receive more information about the floor plans and irrigation as of 2/3/15. Hydraulic model is being performed by RBF. Conceptual Plan Check Completed and returned to customer 4/20/15. Second plan check returned to customer on 5/1/15. Third plan check returned to customer on 5/21/15. Permit issued on 7/23/15. Pre-con meeting held on 7/27/15. Pipeline installation on 10/21/15. Pressure test and chlorination on 11/5/15. Bac-T testing completed on 11/24/15 and 11/25/15. Waterline tied-in at Whittier, Newhall, and West 16th Street and angle-stops locked on 12/14/15. 4 - 1" meters installed on model homes. (3/1/16)
MC 2165	341 16th Place	2 Single Family Homes	Plans received and plan check fees paid 4/22/15. First plan check completed and returned to developer 4/30/15. Mylars received on 8/6/15. Permit issued on 8/13/15. Installed 1 - 1" service on 9/28/15. Installed 2 - 1" meters on 10/1/15. Second home in process of being built. (3/1/16)
MC 2168	650 Hamilton	24 Single Family Homes	Plans received and plan check fees paid 4/30/15. Comments returned on 5/21/15. Permit issued on 6/16/15. Fireline installed and turned on 9/29/15. Meters and boxes installed and locked on 1/21/16. (3/1/16)
MC 2176	3059 Country Club Drive	Single Family Home - Addition	Plans received and plan check fees paid on 6/5/15. Second submittal received on 7/15/15. Second plan check returned on 7/31/15. Permit issued 8/13/15. USA call out on 11/30/15. (3/1/16)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2177	125 East Baker Street	240 Unit Apartment Complex	Concept plans received and plan check fees paid on 6/11/15. First plan check comments returned on 7/31/15. Second plan check returned on 8/20/15. Third plan check submitted on 10/8/15. Additional information provided on 10/28/15. Hydraulic model initiated on 11/5/15. Additional information requested on 12/28/15 and information was provided on 1/4/16. Hydraulic model completed on 3/1/16, Mesa Water system improvements are not required. Awaiting revised plans. (3/1/16)
MC 2178	334 East 16th Street	2 Single Family Homes	Plans received and plan check fees paid on 6/12/15. Comments returned on 6/24/15. Second plan check received 8/10/15 and returned on 8/24/15. Fees and mylars delivered and permit issued on 11/17/15. Pre-con meeting held on 12/9/15. Services installed on 1/20/16. Service abandonment on 1/21/16. Meters and boxes installed on 1/29/16. (3/1/16)
MC 2181	250 Flower Street	Remodel	Plans received and plan check fees paid on 6/22/15. Comments returned on 7/22/15. Second submittal received on 10/29/15 and returned on 11/6/15. Final submittal and fees submitted on 11/30/15. Permit and mylar drawings signed on 12/10/15. (3/1/16)
MC 2184	1670 Tustin Ave	Remodel	Plans received and plan check fees paid on 7/1/15. Comments were not picked-up at Plan Check Desk until 10/6/15. Final plans and fees submitted on 11/6/15. Permit issued on 11/17/15. (3/1/16)
MC 2187	2245 Tustin Ave	Single Family Home	Plans received and plan check fees paid on 7/8/15. Second plan check submitted on 7/31/15 and comments returned on 8/17/15. Fees paid on 3/1/16. (3/1/16)
MC 2188	2701 Harbor Blvd	Restaurant	Plans received and plan check fees paid on 7/13/15. Inspector performed pre-site survey to determine size of meter in meter room. Fees paid and permit issued on 2/1/16. 1 - 1.5" meter installed on 2/25/16. (3/1/16)
MC 2196	580 Anton Ave	250 Unit Apartment Complex	Plans received and plan check fees paid on 7/28/15. Plan check comments returned 8/28/15, requesting information to complete a hydraulic model. Requested information provided on 10/25/15. Hydraulic model initiated on 11/5/15. Hydraulic model completed on 2/1/16, Mesa Water system improvements are not required. Fees paid and permit issued on 2/9/16. Pre-con held on 2/29/16. (3/1/16)
MC 2198	217 Ogle St.	Single Family Home	Plans received and plan check fees paid on 7/30/15. Plan check comments awaiting pick up. Project architect was contacted on 12/9/15. The project is delayed but will proceed in the new year. (3/1/16)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2199	225 Ogle St.	Single Family Home	Plans received and plan check fees paid on 7/30/15. Mylars and fees submitted on 9/17/15. Permit issued on 9/21/15. Project ownership changed and new agreement signed on 12/8/15. (3/1/16)
MC 2202	2880 Mesa Verde Drive East	10 Single Family Homes	Plans received and plan check fees paid on 8/19/15. First submittal returned on 9/11/15. Second submittal received 10/29/15 and returned on 11/6/15. Permit issued on 12/10/15. 6" manifold installed on 1/19/16. Services installed on 1/20/16. 10 - 1" meters and 1 - 5/8" meter installed and locked on 1/28/16. (3/1/16)
MC 2203	1239 Victoria Street	28 Single Family Homes	Plans received and plan check fees paid on 8/25/15. Second submittal received on 10/25/15 and returned on 11/6/15. Mylars and fees delivered on 11/25/15. Permit issued on 11/30/15. Pre-con held on 1/4/2016. Installed 2 - 8" manifolds on 1/14/16. Installed services on 1/28/16. Abandoned existing services on 1/29/16. 28 - 1" meters installed and locked on 2/22/16. (3/1/16)
MC 2204	1672 Placentia	31 Single Family Homes	Plans received and plan check fees paid on 8/26/15. Plan check picked up by customer on 10/6/15. Second plan check submitted on 2/11/16 and returned on 2/26/16. (3/1/16)
MC 2206	247 E 23rd St	Single Family Home	Plans received and plan check fees paid on 9/21/15. Plans did not require changes. Fees paid on 11/25/15. Permit issued on 12/1/15. Pre-con held on 1/27/16. 1 - 1" meter installed on 2/4/16. (3/1/16)
MC 2207	1654 Oahu Pl	Single Family Home	Plans received and plan check fees paid on 9/22/15. Permit issued on 10/1/15. (3/1/16)
MC 2208	353 & 355 Rochester St.	2 Single Family Homes	Plans received and plan check fees paid on 9/22/15. First submittal picked up on 10/23/15. Second plan check submitted on 11/19/15. Second plan check completed 12/3/16. Second plan check picked up from counter on 2/29/16. (3/1/16)
MC 2210	3086 Warren Lane	Single Family Home	Plans received and plan check fees paid on 9/22/15. First submittal picked up on 10/23/15. Project architect contacted on 12/17/15, project does not require fire sprinklers. Awaiting irrigation drawings. (3/1/16)
MC 2212	1499 Monrovia Ave	Fireline installation	Plans received and plan check fees paid on 9/29/15. First submittal picked up on 10/23/15. Second plan check submitted on 10/29/15. Second plan check returned on 11/13/15. Mylars delivered on 11/23/15. Fees paid and permit issued on 12/13/15. (3/1/16)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2213	847 W 16th St	Tenant Improvement / Fireline Installation	Plans received and plan check fees paid on 9/29/15. First submittal picked up on 10/26/15. Project engineer contacted on 12/17/15, the project is undergoing a re-design. (3/1/16)
MC 2214	1944 Church St	2 Single Family Homes	Plans received and plan check fees paid on 10/5/15. First submittal returned on 10/26/15. Fees paid on 12/15/15. Permit issued on 1/29/16 (3/1/16)
MC 2215	119 Cecil Pl	3 Single Family Homes	Plans received and plan check fees paid on 10/5/15. First submittal returned on 10/26/15. Fees paid on 12/15/15. Permit issued on 1/29/16 (3/1/16)
MC 2216	320 E 18th St	4 Single Family Homes	Plans received and plan check fees paid on 10/5/15. First submittal returned on 10/26/15. Fees paid on 12/15/15. Permit issued on 1/29/16 (3/1/16)
MC 2217	823 Towne St	Assisted Living Facility	Plans received and plan check fees paid on 11/3/15. First submittal returned on 11/23/15. Fees paid and permit issued on 2/28/16. (3/1/16)
MC 2224	286-288 15th Street	2 Single Family Homes	Plans received and plan check fees paid on 11/18/15. Plans were determined to be incomplete and additional information was requested on 11/19/15 and provided on 12/28/15. First plan check returned on 12/30/15. Second plan check submitted on 1/25/16. Second plan returned on 2/24/16. (3/1/16)
MC 2225	215 Knox Place	2 Single Family Homes	Plans received and plan check fees paid on 11/18/15. Plans were determined to be incomplete and additional information was requested on 11/19/15 and provided on 12/28/15. First plan check returned on 12/30/15. Second plan check submitted on 1/25/16. (3/1/16)
MC 2230	217 Cabrillo	2 Attached Dwellings	Plans received and plan check fees paid on 12/22/15. Plan check in progress. First plan check returned on 1/25/16. Second plan check submitted on 1/26/16. Second plan check returned on 2/2/16. Awaiting fee payment. (3/1/16)
MC2232	189-191 Merrill Place	2 Single Family Homes	Plans received and plan check fees paid on 2/1/16. Plan check completed on 2/12/16 and picked up on 2/29/16. (3/1/16)
MC2233	1560 Placentia	81 Single Family Homes	Plans received and plan check fees paid on 1/20/16. Request for additional information requested on 1/28/16. Requested information submitted on 2/24/16. Plan check in progress. (3/1/16)
MC2234	338 Hanover Drive	Meter Upgrade	Plans received and plan check fees paid on 1/21/16. Plan check completed 1/28/16 and awaiting pick up. (3/1/16)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC2235	671 W 17th Street	177 Condos	Plans received and plan check fees paid on 1/21/16. Hydraulic model initiated 2/24/16. Plan check returned on 2/29/16. (3/1/16)
MC2236	527-531 Bernard Street	10 Single Family Homes	Plans received and plan check fees paid on 2/8/16. Plan check returned on 2/12/16. (3/1/16)
MC2237	2245 Santa Ana Avenue	Meter Upgrade	Plans received and plan check fees paid on 2/29/16. Plan check in progress. (3/1/16)

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

March 2016

Project Title: OC-44 Transmission Main Leak

File No.: MC 1977

Description: Replace damaged section of pipeline

Status: Notice of intent to issue permit was granted by California Coastal Commission on 3/14/13. Staff is working on preparing a plan to monitor the disturbed area. Requested RBF to review the Habitat Restoration Plan and provide recommendations 7/2/14. Working with RBF on developing Permit Application and CEQA documents for OC-44 repair and proposed slip-lining project (see below OC-44 Replacement and Rehabilitation Evaluation and Cathodic Protection Study MC 2034)

Project Title: MWRP Finished Water Quality Polishing Project

File No.: MC 2039

Description: Enhance finished water quality water at the MWRP via Pilot Scale test

Status: Technical memo completed 4/13. Initiated bench test on 6/24/13. Draft bench test report received 8/5/13. Next steps are to refine dosing, perform a full-scale pilot test, and estimate design and construction costs. Notice to proceed on pilot test design given on 9/17/13. Full scale pilot test plan submitted to CDPH for approval 10/15/13. CDPH approved the plan 11/7/13. Carollo Engineers finalized construction plans and conducted pre-bid meeting 11/26/2013. Bids are due 12/12/13. Only one bid received. Carollo requested bids from additional contractors. Second bid received on 1/8/14. J.R. Filanc Construction, Inc. lowest bidder. Project kick off meeting took place on 2/24/14. Installation of the SBS Addition System is to be completed 3/14/2014. The Full Scale Pilot Start Up and testing started on March 19, 2014 and completed May 27, 2014. Report to be submitted on 7/3/2014. Meeting with Trussell Technologies to discuss staff comments held on 7/30/14. Meeting to review next phase recommendations held on 8/19/14. Revised Draft Final Report submitted August 27, 2014. Staff reviewed the Report and provided comments. The re-revised Draft Report submitted 10/9/14. Staff reviewed the report and recommended for approval continued operations of the full-scale polishing pilot until a permanent full-scale system can be implemented (E&O Committee meeting 10/21/14). Request for extension of the operation of the MWRP Water Polishing Project pilot testing past December 4, 2014 granted by DDW on November 11, 2014. Developing RFP for design of the permanent SBS addition system (2/6/15). RFP distributed 2/27/15 and proposals received 3/26/15. Selection interviews held on 4/9/15. Team Carollo/Trussell is proposed for the project. Proposal approved by E&O Committee 4/21/2015 and Board 5/14/2015. Contract with Carollo finalized 6/12/15 and the kickoff meeting held on 6/17/15. Preliminary Design Report received 8/3/15. Progress meeting and conference call with Carollo to discuss the review comments was held on 8/25/15 and 10/1/15, respectively. 60% design package submitted on 10/28/15. Review comments sent to Carollo on 11/23/15. Meeting with Carollo to discuss water chemistry and chemical dosing systems at the

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MWRF held on December 7, 2015. 90% design submitted on 2/1/16. Staff reviewed the submittal, provided comments and discussed the comments and project requirements at the meeting held on 3/2/16. Project is scheduled to bid in April 2016. Final design in progress. (3/4/16)

Project Title: OC-44 Replacement and Rehabilitation Evaluation and Cathodic Protection Study

File No.: MC 2034

Description: Evaluate potential repair and replacement options

Status: Contract awarded to RBF Consulting 2/12/13. Kick-off meeting held on 2/21/13. TM 1, 2 and 3 reviewed by Mesa Water® and City of Huntington Beach. Revised TM 1 and 3 submitted 6/12/13. Final study report due 7/31/13. Staff requested RBF to perform hydraulic modeling and habitat assessment to supplement original SOW. A meeting with MWDOC, MET and RBF to analyze possible new service connections on the OC Feeder held on 6/25/13. Workshop to discuss TM's held on 7/2/13. Meeting to discuss PDR, permitting, work plan and design concerns held on 7/16/13. Draft PDR and final design scope proposal received 8/6/13. Hydraulic studies "Evaluation of MWD Water Supply Facilities" and "Analysis of Emergency Supply from OC-44 and OCF" received 8/8/13. Staff reviewed the PDR and Hydraulic Study reports and submitted comments to RBF 9/12/13. Received proposal for design of OC-44 Pipeline Rehabilitation Project 9/24/13. Proposal approved by E&O Committee 11/19/13 and by Board on 12/12/13. Staff prepared change order to RBF. Kick-off meeting held on 01/22/14. Project on progress. Outreach coordination meetings with project stakeholders took place on 2/14/2014. RBF is working with City of Newport Beach, County of Orange, and Irvine Company on receiving permits for surveying and geotechnical boring work. Orange County Health Care Permit issued 3/24/2014. Geotechnical boring conducted on 3/28/14. The county of Orange permit was issued April 7, 2014. Biological and Topographic Survey started in mid-April and will continue through the end of July. Scour analysis completed on May 29, 2014. Jurisdictional Delineation completed on 6/30/2014. Project progress meeting with RBF and City of Huntington Beach held on 7/2/14 to review environmental assessment and pre-design requirements. The design of the pipeline rehabilitation started on 7/8/2014. 60% plans and specifications submitted for review 9/8/2014. Staff is coordinating with City of Huntington Beach and finalizing review of the design package. Initial Study and Mitigated Negative Declaration submitted 11/2/14. Staff is reviewing the submittal (11/6/14). 60% review meeting with City of Huntington Beach and RBF held on 12/1/14. 90% design submittal received on 2/5/15. Notice of Intent (NOI) posted at County Clerk and State Clearinghouse on 1/29/15. Initial Study/Mitigated Negative Declaration (IS/MND) posted on Mesa Water® website and distributed to agencies/parties identified on distribution list on 1/29/15. Permit applications submitted to the regulatory agencies, legal notice posted in the Daily Pilot, and hard copy of IS/MND posted at front counter on 1/29/15 for public review. The

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review period concluded 2/27/15. Three comment letters received. Prepared written responses to the comments and held public hearing at the Board Meeting on 4/9/15. 90% design submittal comments sent back to RBF on 3/26/15. Additional questions from RBF analyzed in coordination with the City of Huntington Beach and comments provided to RBF on 6/1/15. Progress meeting with RBF and City of Huntington Beach held 7/1/15. RBF is working with the regulatory agencies on obtaining encroachment permits and/or certifications. On 7/16/15 the consultant is scheduled to meet with the US Army Corps of Engineers (USACE) to discuss initial comments and obtain additional directions. Due to USACE staff shortage the permit is anticipated to be issued in March 2016. RBF is working with Regional Water Quality Control Board (RWQCB) on drafting the 401 Water Quality Certification for the project. The 401 Water Quality Certification was issued on 9/29/15. Comments to the California Department of Fish and Wildlife (CDFW) draft agreement were sent by RBF on 7/17/15. The CDFW permit is predicted to be issued in late October, 2015. In mid-June, 2015 RBF provided response to the California Coastal Commission's (CCC) comments. The comments from CCC were received in the late July, 2015 and the permit is expected to be issued in mid-November, 2015. Permit from Caltrans obtained on August 17, 2015. 100% design package submitted on 7/21/15. Scour protection evaluation and recommendations submitted on 11/5/15. The CDFW should be issued by 12/18/15. The USACE has indicated that their permit should be issued in mid-January 2016. The Habitat Mitigation and Monitoring Plan (HMMP) has been updated by Michael Baker (former RBF) to reflect the USACE's process and submitted to Mesa Water® for review on 1/8/16. Once the HMMP is revised and approved (1/19/16) it will be forward to all agencies, including Coastal Commission. Draft 1602 Streambed Permit obtained on 12/18/15. Final 1602 Streambed Permit pending CDFW will be issued while HMMP is accepted. U.S. Army Corps of Engineers' 404 permit received on 2/10/16. Revised HMMP sent to CCC for review and approval. Project is pending CCC's approval at the upcoming hearing. On 2/29/16 a meeting with Fletcher Jones Motorcars, City of Newport Beach, MBI (former RBF), and City of Huntington Beach was held to discuss issues associated with proposed construction activities. Final bid set will be completed once all permits are approved. Project in progress (3/4/16).

Project Title: Well Automation and Rehabilitation

File No.: MC 2101

Description: Rehabilitate all clear water wells and add remote control SCADA capabilities

Status: Design: RFP for Design Services released on 7/1/2014. Pre-proposal meeting held on 7/9/2014. 6 proposals received on 7/28/2014; interviewed 3 shortlisted firms on 8/6/2014. Recommendation to award contract to Carollo Engineers approved by E&O on 8/19/2014; Board approval requested on 9/11/2014. Project kickoff meeting held on 10/1/2014. Draft Permit plan received for review on 11/3/14. . Well Standardization workshop held on 11/21/14 to align on site layouts, chemical tank sizing, and

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instrumentation. Draft Preliminary Design Report received on 1/12/2015, and reviewed in workshops on January 21, 2015 and February 3, 2015, and March 3, 2015. 60% received on April 13, 2015. Meeting to resolve review comments scheduled for April 27, 2015.

Construction Management (CM) Services: Released and RFP for CM services on December 30, 2014 Preproposal meeting held on January 12, 2015. Four (4) proposals were received on January 26, 2015. Three proposers were interviewed on February 4, 2015, and the recommended Contract with RBF was approved by the Board on March 12, 2015.

60% design received on April 13, 2015. General 60% Design Review workshop held on April 27, 2015 and electrical/instrumentation review workshop held on May 11, 2015. Working on optimizing construction sequence. Electrical design workshop scheduled for June 25, 2015. 90% design submittal received on July 15, 2015. Engineer's Estimate of probable cost at 90% is approximately \$10.1. Workshop to review and address 90% comments held on July 29, 2015. Contractor prequalification package sent to eight (8) General Contractors on July 18, 2015. Four prequalification applications were received on August 17, 2015. 100% Design received on September 16, 2015. Notice Inviting Sealed Bids was released to four prequalified contractors on October 5, 2015. Job Walks were conducted on October 13, 2015 for prequalified Prime Contractors and on November 3, 2015. Addenda and clarifications in response to bidder's questions have been issued. Bid opening was extended to January 7, 2016 to allow for recent changes for new Well 9 layout. Four bids were received on January 7, 2016. An action item to award a contract to the lowest bidder was approved by the Engineering and Operations Committee on January 16, 2016 and by the full Board on February 11, 2016. Notice to proceed is expected in March 2016.

Project Title: Two New Wells

File No.: MC 2158

Description: New wells and real estate services to identify and acquire property

Status: Change Order to Well Rehabilitation and Automation approved at January 20, 2015 E&O to retain Carollo and subconsultant Geotechnical Consultants Inc. (GTC) to provide typical well site layout and hydrogeological investigation to identify promising locations for two new 2,000-gpm clear wells. Met with Real Estate Professionals on February 2, 2015, to discuss scope of work for well site property identification and acquisition. Met with OCWD Chief Hydrogeologist on March 24, 2015, to identify study area for new well sites. Gave Notice to Proceed to Real Estate company on May 4, 2015, and provided consultant report on preferred well site property characteristics. Real Estate consultant developed an advertisement postcard to describe the type of property needed, and sent it to over 1,000 commercial and industrial property owners in the study area. Three sites have been presented for evaluation. Also met with the Laguna Beach County Water District (LBCWD) Manager of Engineering & Operations

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on October 13, 2015, to discuss development of a jointly-owned well on property in Fountain Valley owned by LBCWD. An offer to purchase one site was presented to the property owner on November 16, 2016. The owner has not responded, and the offer time frame has expired. An offer for a different property was prepared and presented on January 6, 2016. Owner has decided to lease the property rather than selling. A third property is being evaluated by staff and OCWD for potential interference from the OCWD mid-basin injection. Travel time analysis results from OCWD showed that the property is inside the six month travel time window. A meeting was held on February 22, 2016, with OCWD and DDW to discuss the travel time analysis, and DDW determined that it would not issue a permit for a drinking water well at the site. A meeting with the City of Santa Ana Water Department was held to discuss the possibility of a jointly-owned well on a City of Santa Ana-owned site.

Project Title: Well 9B

File No.: MC 2229

Description: Replacement of Well 9

Status: Kickoff meeting was held on January 22, 2016. Well design criteria for depth, expected screen intervals, and expected pumping rate were established. Well design decisions include a continuous diameter of 18 inches with stainless steel casing and wire wrapped screen. Detailed design is in process. Draft bid documents are expected on April 4, 2016.

Project Title: MWRP Parking Project

File No.: MC 2052

Description: Conduct parking layout design

Status: Parking study prepared by Onward Engineering in November 2013. The Board approved alternative # 3 Parking Along the MWRP Frontage on Gisler Ave. on 3/15/2014. RFP for the parking design in consultants' review (11/6/14). RFP sent out to consultants 11/25/14. Proposals due 12/19/14. Interview with three consultants held on 1/7/15. Recommendation brought to January E and O for consideration of approval and will be brought to the Board on 2/12/15 for approval. Project approved 2/12/15. Kick-off meeting held on 2/19/15. Design in progress. 30% design submittal submitted 3/23/15. Staff met with C.J. Segerstrom and discussed concept and details of the proposed parking layout. Segerstrom verbally approved the project. City of Costa Mesa approved the concept and currently consultant is evaluating the landscape requirements with the City of Costa Mesa. E and O Committee accepted the conceptual design and provided comments on 5/19/15. The condition approval from Segerstrom received on 6/29/15. Staff is working with the designer (CivilSource), Mesa Water's attorney, and City of Costa Mesa on addressing Segerstrom's comments. Staff is reviewing the Initial Study/Summary of Findings Report received on 8/3/15. Staff has addressed all Segerstrom's requests included in their 6/29/15 letter and

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prepared a response letter. Approved construction plans were received from the City of Costa Mesa on 12/29/15. The final bid package to be completed 3/15/16. Project is scheduled to bid in April 2016. (3/4/16)

Project Title: OC 44 Import Stations Flow Meter Replacement

File No.: MC 2088

Description: Provide design for replacement of Flow Meters in the OC 44 Import Turnouts No. TO-2, TO-4, and TO-5

Status: Task Order No. RBF-3 for preparing construction drawings, technical specifications, and bid documents for the flow meter replacements in the import turnouts No. TO-2, TO-4, and TO-5 issued to RBF Consulting on July 23, 2014. . 75% plans and specifications submitted for review 10/7/2014. Staff is reviewing the submittal (10/9/2014). The review comments returned back to the consultant 11/4/14. Design of new pressure gauges, pressure transmitters, and related improvements were added to the scope in December 2014. Design in progress. 90% design package submitted for review on 2/20/15. Working with consultant and CLA-VAL on reviewing the design (3/6/15). 100% design submitted on 3/10/15. The comments to the 100% design sent back to the designer 4/30/15. Final design package received on 5/27/15. Mesa Water® staff is reviewing the package and working with RBF on addressing final comments 6/8/15. Project solicited 6/17/15 and pre-bid walk held on 6/29/15. Bids opened on 7/10/15. Staff recommended that the Board of Directors award a contract to the lowest bidder Jamison Engineering. E & O Committee recommended approval on 7/21/15. Board approved the project on 8/10/15. The kick-off meeting held on 8/17/15. Staff has finalized the contract and issued Notice to Proceed on 9/16/15. Project team is in the submittal review process. Progress meetings held on 2/2/16 and 3/2/16. Construction is scheduled to begin on March 22, 2016. (3/4/16)

Project Title: Reservoir 1 and 2 Improvements

File No.: MC 2111

Description: Installation of gas flow meters at Reservoir 1 and Reservoir 2,

Status: Staff prepared Scope of Work and sent a request for quote to on-call Engineering consultant (As-Needed Design Consultant) to provide:

Design and specifications for installation of gas meters for Res 1, Res 2, and Well 5. Evaluation and design of Res 1 Air Vent Covers and Roof Membrane, and design for replacement of Res 1 silencers. Request for quote sent out 3/5/15. Brady Engineers selected for the project. Kickoff meeting held on 4/7/15. 30% design package submitted 5/27/15. Designer is working on addressing the review comments and continuing the design (7/10/15). Well 5 gas meter moved into the well automation and rehabilitation project scope of work. 100% Design Package received on 8/4/15. Meeting with the designer to discuss reviewers' comments held on 8/10/15. The

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designer is revising the design and final bid package is anticipated to be submitted on 9/4/15. The final bid package submitted on 10/12/15. Staff has reviewed the submittal (11/5/15). Project will be advertised for bid in spring 2016. (3/4/16)

Project Title: Pipeline Testing Program

File No.: MC 2112

Description: Implement Resolution No. 1442 Replacement of Assets to annually perform non-destructive testing of 1% of the distribution system, and destructive testing of segments that are shown to have less than 70% of original wall thickness by non-destructive testing.

Status: Identifying segments for FY 2015 non-destructive testing and arranging for excavation and removal of segments that tested below 70% remaining wall thickness in FY2014 non-destructive testing. Released a Request for Proposal for a consultant to administer the program and develop standard operating processes on February 6, 2015. Three proposals were received on February 26, 2015, and interviews conducted on March 4, 2015. A contract with RBF was approved by the Board on April 9, 2015. Kickoff meeting held on April 21, 2015. Project status meeting held on June 8, 2015. Draft deliverable of prioritization of asbestos concrete pipe (ACP) for non-destructive testing received on June 26, 2015; updated draft received on August 7, 2015. Draft deliverable with recommendations for non-destructive testing technologies for metallic pipe received on August 7, 2015. Draft evaluation of destructive testing laboratories and tests received on August 21, 2015; final report received on September 16, 2015. Echologics performed non-destructive testing of 3 miles of ACP from July 13-17, 2015. Draft report received on August 14, 2015; final report received on September 1, 2015. Based on the Echologics reports from 2013 and 2015, ten ACP segments were selected for sampling and destructive testing. Three ferrous material pipelines with a history of repairs were also selected for field sampling and destructive testing. Draft bid documents for field sampling received on October 16, 2015. Final bid documents were released to three on-call contractors on November 23, 2015, for bids. Pre-bid meeting was held on December 7, 2015 and attended by all three of the bidders. Three bids were received on December 16, 2015. All bids exceeded the budget and the General Manager's signing authority. An action item to approve a contract with the low bidder was approved by the Engineering and Operations Committee on January 19, 2016, and by the Board on February 11, 2016. Notice to Proceed with field sampling was given on March 7, 2016, with a 75 day completion. Samples will be sent to MEIC Lab in Portland, Oregon, for destructive testing. Lab results, including estimates of remaining useful life, are expected in May 2016.

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Project Title: MWRF Outreach Center

File No.: MC 2147

Description: Report on the feasibility of reconfiguring and potentially expanding the functional uses of the MWRF Operations and Administration Building to include a multi-purpose room and educational forum.

Status: Mesa Water® is coordinating with IBI Group (designer) on the feasibility of implementing an education and outreach center at the MWRF. Kick-off meeting was held on 6/1/2015. Program Requirement Questionnaire meetings were held on 6/9/2015 and 6/17/15. Program Report delivered to Mesa Water® for review on 7/7/2015. 60% design concepts are scheduled for submittal on 08/14/15. 100% concept design received on 09/29/15. Virtual rendering received on 10/6/15. Concept designs presented at the October Board Workshop. A follow-up planning session was held at the November Engineering and Operations Committee Meeting to capture the Board's input on evaluating reduced cost options and to revisit the existing Boardroom improvements. Board directed staff to develop a scope of work to evaluate scaled down layouts of the MWRF Outreach Center and revisit expanded layouts of the main Boardroom. Engineering and Operations Committee approved a contract amendment with IBI Group to reflect the revised scope of work. Item was approved by the Board February 11, 2016. IBI Group performed an inspection of the existing Boardroom on February 25, 2016 and are in the process of developing conceptual layouts.

Project Title: Mesa Water® Main Office HVAC Study

File No.: MC 2171

Description: Evaluate the existing HVAC system and provide recommendations for improved efficiency and operations of the system.

Status: Mesa Water® has contracted with Goss Engineering Inc. to perform this study. Kick off meeting was held January 13, 2016. Goss Engineering performed a field survey of both main campus buildings over the course of three days. Draft report with results and recommendations is scheduled for submission on March 8, 2016.

Project Title: Reservoirs 1 & 2 Pumps, Controls, and Chemical System Assessment Project

File No.: MC 2173

Description: Evaluate the existing Pumps, Controls, and Chemical Systems at Reservoirs 1 & 2. The project includes lab testing of pump efficiency, physical assessment of pumps and pipework, assessment of the existing control system, and preliminary design of a chemical dosing system. Recommendations for improved efficiency and operations of the system will be included in a final report.

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Status: Mesa Water® has contracted with Hazen & Sawyer to perform this study. Kick off meeting was held September 30, 2015. The consultant performed a field survey of both Reservoirs 1 & 2 over two days. A preliminary outline of technical memo 1 was provided on December 11, 2015. Initial data requests were responded to by December 7, 2015, with follow up responses provided on January 7, 2016 (SCADA Data) and February 9, 2016 (Jockey Pump Data). Pump testing scope of work has been reviewed by Mesa Water® and returned to the Consultant for revision. TM-1 and a draft preliminary design report are scheduled for submission on March 23, 2016.

Project Title: South Coast Plaza Pipeline Repair

File No.: MC 2218

Description: Water main repair due to failed 12" main.

Status: On October 19, 2015, a 50-year old waterline near the western end of the interior roadway of South Coast Plaza at Bristol Street (across from Anton Boulevard), ruptured and impacted the soils supporting the pavement. At the rupture location the pavement caved-in resulting in a deep sinkhole (approximately 30 feet by 20 feet at the ground surface) undermining a South California Edison (SCE) high voltage (12 KVA) duct bank and roadway infrastructure (sidewalk, light poles, palm trees, etc.). Beyond the immediate location of the waterline rupture, the asphaltic concrete pavement was uplifted under the water pressure and the base course was filled with water, soaking the upper parts of the clay subgrade. Mesa Water® used its on-call contractor and consulting resources to facilitate the work. The project was completed on Thursday, October 29, 2015. Staff reviewed the contractors' invoicing and recommended approval. The Finance Committee approved payment of the invoices on 12/21/15 and the claim was submitted to ACWA JPIA. Staff is coordinating with ACWA JPIA and providing all information necessary to evaluate the claim. (3/4/16)

Project Title: Other Agency Project Coordination

File No.:

Description: Median construction in Placentia Ave. between Wilson St. and Adams Ave.

Status: Mesa Water® 16" main runs 5' East of the street center line. Mesa Water® is coordinating with designer and City on design of necessary protection and root barrier for the water main. 85% design plans received on (12/22/14). Plan review in progress 1/8/15. Plan review comments sent to the City 2/6/15. Mesa Water® provided update comments to landscaping plans on 6/17/15. Mesa Water® continuing to coordinate with the City, Stivers and Associates, Inc., and City Designer on layout of project. Revised final plans submitted for Mesa Water® review on 11/19/15. Staff reviewed the submittal in cooperation with Mesa Water® landscape consultant (Stivers Associates) and submitted comments to the City Designer on 12/28/15. The comments have been

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accepted by the Designer and Final Plans were submitted on 2/9/16. New comments sent to the designer on 2/18/16. Waiting on revised final plans. (3/4/16)

Project Title: Other Agency Project Coordination

File No.:

Description: Water main relocation in New Hampshire Ave. due to Greenville-Banning Channel Improvements by County of Orange.

Status: Relocation of 12" water main is required due to enlarged box culvert on Greenville-Banning Channel. Task Order No. RBF-2 issued to RBF Consulting on June 24, 2014 for design of the relocation. Mesa Water® is coordinating with County of Orange and RBF. Design in progress. Hydraulic analysis received from RBF 9/12/14 indicated that taking the New Hampshire pipeline out of service during construction of the Greenville-Banning Channel will have no adverse impacts on the distribution system (8/9/14). Mesa Water® is working with OCFCD on finalizing the cooperative agreement. E&O Committee approved the agreement 11/18/14. Pipeline relocation design package submitted to Mesa Water® on 1/31/15. Mesa Water® is coordinating with OCFCD and consultant to address final comments. Plans and specifications for the pipeline relocation completed 3/3/15 and forwarded to OCFCD on 3/5/15. Attended the pre-construction meeting on 7/21/15. Project start date has been moved to end of March 2016. (3/4/16)

Water Quality Call Report

February 2016

Date: 2/8/2016
Source: Phone/Visit
Address: 3134 Kerry Ln
Description: Customer concerned about the slight tint in toilet bowl water.
Outcome: Water was collected from both the outside hose bib and bathroom faucet. Both samples were clear and customer agreed. Note that the customer's toilet is beige in color.

Date: 2/8/2016
Source: Phone
Address: 350 Avocado St #B1
Description: Customer wants to know if Mesa Water® can test the water after it has gone through her reverse osmosis home treatment device.
Outcome: Explained to customer that Mesa Water® does not test customer's water that has been treated with their own home device. She can have a state certified drinking water laboratory do the analyses for her at her own cost.

Date: 2/9/2016
Source: Phone
Address:
Description: Customer wants to know the level of hardness so he can set up his water softener.
Outcome: Spoke with customer who lives in Mesa, Arizona. Explained to him that we do not supply water to his home and he should contact his local water supplier.

Date: 2/19/2016
Source: Phone
Address: 825 Jennifer
Description: Customer wants to know the hardness in grains per gallon.
Outcome: Provided customer the hardness level.

**MESA WATER DISTRICT
COMMITTEE POLICY & RESOLUTION
REVIEW OR DEVELOPMENT**

ENGINEERING & OPERATIONS COMMITTEE

Policy Assignments for 2016

Policy Name	Resolution	Date Adopted	Revision Schedule	Next Review
Rules and Regulations for Water Services (will include review of meter capacity charges and easement procedures)	Resolution No. 1452	10/09/14	Review and update as needed	
Standard Specifications and Drawings	Resolution No. 1449	08/14/14	Review and update as needed	

Water Operations Status Report
July 1, 2015 - February 29, 2016

Operations Department Status Report	Wk Unit	Plan Days	Act Days	Plan Qty	Act Qty	Plan Cost	Actual Cost
01 - HYDRANTS							
WD-0101 - HYDRANT MAINTENANCE	HYDRANTS	112	32	2233	678	\$95,517	\$22,438
WD-0102 - HYDRANT PAINTING	HYDRANTS	9	5	279	99	\$6,986	\$4,027
WD-0103 - HYDRANT REPAIR	HYDRANTS	34	29	40	28	\$36,794	\$20,840
WD-0104 - DAMAGED HYDRANT	HYDRANTS	0	17	0	6	\$0	\$15,031
	Program 01 TOTAL	155	83			\$139,297	\$62,336
02 - VALVES							
WD-0201 - DISTRIBUTION VALVE MAINTENANCE	VALVES	79	73	1696	1486	\$68,771	\$50,501
WD-0202 - NIGHT VALVE MAINTENANCE	VALVES	0	0	0	0	\$0	\$0
WD-0203 - REPLACE VALVE BOX	BOXES	17	2	20	1	\$15,573	\$1,612
	Program 02 TOTAL	96	75			\$84,344	\$52,113
03 - METERS							
WD-0301 - NEW METER INSTALLATION	METERS	7	15	33	171	\$17,138	\$48,293
WD-0302 - RAISE REPLACE METER BOX	BOXES	20	7	50	20	\$21,160	\$4,779
WD-0303 - METER LEAK INVESTIGATE/REPAIR	INV/REP	13	21	100	140	\$12,299	\$18,532
WD-0304 - METER FLOW TEST	TESTS	0	0	3	0	\$560	\$0
WD-0305 - ANGLE STOP/BALL VALVE REPLACE	REPLACE	40	41	79	86	\$40,377	\$29,026
WD-0306 - LARGE METER TEST/REPAIR - C	TESTS	6	6	40	32	\$13,840	\$4,983
	Program 03 TOTAL	86	90			\$105,374	\$105,613
04 - MAIN LINES							
WD-0401 - MAIN LINE REPAIR	REPAIRS	48	20	8	4	\$45,522	\$15,428
WD-0402 - AIR VAC MAINTENANCE/REPAIR	AIR VACS	10	8	52	53	\$9,569	\$6,262
WD-0404 - DEAD END FLUSHING	LOCATIONS	0	0	0	0	\$0	\$0
	Program 04 TOTAL	58	28			\$55,091	\$21,690
05 - SERVICE LINES							
WD-0501 - SERVICE LINE REPAIR	REPAIRS	37	29	9	11	\$36,262	\$20,594
WD-0502 - ABANDON SERVICE LINE	SERVICES	9	0	3	0	\$7,622	\$0
WD-0503 - RELOCATE SERVICE LINE	SERVICES	5	0	1	1	\$5,163	\$104
	Program 05 TOTAL	51	29			\$49,047	\$20,698
06 - CAPITAL							
CAP AV - CAPITAL AIR VACUUM REPLACE	AIR VACS	2	1	3	1	\$2,625	\$612
CAP BI - CAPITAL BYPASS & METER INSTALL	REPLACE	17	0	1	0	\$24,016	\$0
CAP FH - CAPITAL HYDRANT UPGRADE	HYDRANTS	184	89	27	12	\$247,282	\$102,548
CAP HV - CAPITAL HYDRANT VALVE	VALVES	13	56	5	9	\$18,831	\$47,749
CAP LM - CAPITAL LARGE METERS	METERS	36	23	143	71	\$140,583	\$43,111
CAP MV - CAPITAL MAINLINE VALVE REPLACE	VALVES	153	174	33	27	\$217,675	\$148,255
CAP SL - CAPITAL SERVICE LINE REPLACE	SERVICES	17	39	7	11	\$19,854	\$29,482
CAP SM - CAPITAL SMALL METERS	METERS	92	57	920	560	\$137,379	\$66,179
CAP SS - CAPITAL SAMPLE STATION REPLACE	STATIONS	7	15	7	1	\$7,783	\$11,678
	Program 06 TOTAL	521	454			\$816,028	\$449,614
	TOTAL					\$1,249,181	\$712,064



*Dedicated to
Satisfying our Community's
Water Needs*

MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: March 15, 2016
SUBJECT: Municipal Water District of Orange County Activities Update

RECOMMENDATION

This report is for information only. No action is recommended at this time.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Be financially responsible and transparent.
Goal #3: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

None.

DISCUSSION

This report on Municipal Water District of Orange County (MWDOC) issues is intended to brief the Committee and Board on activities relevant to Mesa Water District (Mesa Water®). The first section, "On-Going Issues", is a status update on current studies, reports, and/or policy work groups that staff are involved with. The second section, "Last Month's Issues", is a report on noteworthy items that were covered at the last month's MWDOC Board and Committee meetings. The last section, "Upcoming Issues", is a preview of new and forthcoming issues important to Mesa Water®. This format is intended to keep the Committee and Board informed about current and future items at MWDOC in order to provide direction to staff and its MWDOC representatives in a timely manner, if required.

ON-GOING ISSUES

Update on MWD's Proposed Biennial Budget and Rates for Fiscal Years 2016/17 and 2017/18: Two workshops on the budget were held February 8th and February 23rd. There are three more workshops scheduled for March 7th, March 22nd and April 11th. MET budget and rates are to be adopted by the Board on Tuesday, April 12th.

The estimated budget for each year is approximately \$1.575 billion with a majority of the costs coming from increases in State Water transportation and Delta charges, Colorado River Power expenditures, Supply programs and Demand Management expenditures.

MWDOC Rate Study Update: MWDOC staff and consultants are currently looking into the legal issues surrounding the MWDOC rate structure. The Board was disappointed in the lack of response to the survey recently sent out. Staff was directed by the Board to reach out to the agencies' elected officials to try and get a better response. The survey will remain the same as previously sent.



South County Agencies Meeting Structure Review: MWDOC Directors (along with audience members) emphasized the need for more and better communication between MWDOC, MET and MWDOC member agencies. Among the questions and suggestions made were: 1) Lobbying efforts with MET, MWDOC and IRWD, 2) Timing of issues and feedback, 3) Changing the order and time of the MWDOC Workshop meeting with MET MWDOC Directors, 4) Asking MWDOC to take a significant position after receiving input from MWDOC agencies and requesting MET respond in a timely manner. Most speakers emphasized the need to do 'what is best for Orange County as a whole'. These recommendations will be reviewed at the upcoming MWDOC Board meeting.

OC Water Reliability Study Update: MWDOC presented findings on the forecasted MET supply gap that will conceptually exist when considering their future water portfolio projects. MWDOC is using METs future projects forecast, implementation time frames, and MET member agencies projects to predict the impact to Orange County's water supply portfolio. The gap analysis will be used to identify potential regional Orange County projects that will be needed to bridge the shortfall. MWDOC is continuing to hold working meetings with its member agencies to receive input on the gap analysis and regional project solutions.

LAST MONTH'S ISSUES

Orange County Drought Performance

Orange County monthly % Savings vs. SWRCB Target: For the month of December 2015, Orange County retail water agencies reported total water saving of 17.67% (note: this is compared to December 2013 water usage). This falls short of Orange County's monthly conservation target of 21.73% by 4.06%. The cumulative savings for the six months into the State Board's mandatory regulations total 23.90% (1.18% above the conservation target) for Orange County.

January Update: Of the 21 MWDOC Retail Agencies, Mesa Water District had one of the largest conservation savings accomplishments of 19.58% over the SWRCB goal. Twelve districts did not meet the State Water Board goal for January.

MWDOC Actual Imported Water Usage vs. Imported Allocation Target: The total actual imported water usage for July through December totals 96,481 AF, this is 17,754 AF below the estimated allocation target (this figure includes OCWD purchases).

UPCOMING ISSUES

None.

FINANCIAL IMPACT

None.

ATTACHMENTS

None.



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Water Needs*

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RECOMMENDATION

This report is for information only. No action is recommended at this time.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Be financially responsible and transparent.
Goal #3: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

None.

DISCUSSION

This report on Orange County Water District (OCWD) issues is intended to brief the Committee and Board on activities relevant to Mesa Water District (Mesa Water®). The first section, "On-Going Issues", is a status update on current studies, reports, and/or policy work groups that staff are involved with. The second section, "Last Month's Issues", is a report on noteworthy items that were covered at the last month's OCWD Board and Committee meetings. The last section, "Upcoming Issues", is a preview of new and forthcoming issues important to Mesa Water®. This format is intended to keep the Committee and Board informed about current and future items at OCWD in order to provide direction to staff and its OCWD representatives in a timely manner, if required.

ON-GOING ISSUES

DESALINATION PROJECT DISTRIBUTION OPTIONS WORKSHOP:

OCWD staff presented the Board with eight distribution options ranging from distributing all water to Groundwater Producers to constructing 26 new injection wells. These options range in cost from \$107M to \$325M. Based on the option chosen by OCWD, the average household bill will increase between \$3.00 - \$4.00/month. Selling Poseidon water to local groundwater producers is the least expensive option and requires less infrastructure, however OCWD would have to approach local agencies to gauge interest and also negotiate water purchase agreements.

The Board is now focusing on the following three options;

Option 2A: Zero new injection wells, injection into the Talbert Barrier, use of the Burris Booster PS and Burris Outlet, and pipelines/turnouts to sell directly to Newport Beach and Huntington Beach. Proposed capital cost is \$131M.



Option 2B: Zero new injection wells, injection into the Talbert Barrier, and pipelines/turnouts to sell directly to Newport Beach, Huntington Beach, Seal Beach, Fountain Valley, Garden Grove, and Golden State Water. Proposed capital cost is \$97M.

Option 3: Zero new injection wells, injection into the Talbert Barrier, and pipelines/turnouts to sell directly to Newport Beach, Huntington Beach, Seal Beach, Fountain Valley, Garden Grove, Golden State Water, and South County Agencies. Proposed capital cost is \$161M.

The Poseidon schedule going forward includes project approval at the Coastal Commission meeting in May. OCWD is continuing to study the Distribution options and will return to the OCWD Board with further recommendations. By June the OCWD Board expects to 1) select a Distribution option, 2) initiate preliminary design, 3) initiate CEQA, and 4) initiate final Poseidon negotiations.

FUTURE MWD RATES: MWDOC staff updated the Groundwater Producers on the Draft MWD 2017 & 2018 Biannual Calendar Year budget projections as they relate to water costs. MWD staff looked at an overall 4% increase but the number is higher than that on the water purchase amount. As an example, the full service rate for treated water is projected to increase 12% in January. A PowerPoint was presented showing the difference in costs for full service and untreated water. MWDOC staff will keep the Board and member agencies updated as new information becomes available.

GROUNDWATER REMEDIATION PROJECTS UPDATE: The EPA has sent invitation letters to all parties concerned requesting participation as a group to meet the remediation needs. OCWD has requested a 60 day extension and is hopeful that this request will be honored by all parties. OCWD will continue moving forward with its remediation with or without participation from the responsible parties.

LAST MONTH'S ISSUES

TALBERT BARRIER WELL REDEVELOPMENT PROJECT-AWARD TO BOART LONGYEAR COMPANY. OCWD staff updated the Water Issues Committee on the need to clean the older "Legacy Wells" that are located within underground vaults on Ellis Avenue in the City of Fountain Valley. These older wells have a tendency to get "clogged" and lose their ability to inject water. The newer constructed injection wells require less cleaning. A total of (8) wells be cleaned during this project in an effort to restore 5-6 MGD of injection. The lowest responsible bidder was Boart Longyear Company at \$152,452.

ENGINEERING DESIGN SERVICES AND PROCUREMENT FOR THE FIVE COVES RUBBER DAM REPLACEMENT PROJECT: OCWD staff updated the Water Issues Committee on the need to replace the inflatable rubber dam at 5 Coves. The current dam is 23 years old and showing signs of failure. Temporary repairs were performed this past summer in an effort to keep the dam in operation over this winter season. Staff has included the replacement cost, estimated at \$1.6 million for design, fabrication and shipping on a new dam. Installation cost will be a separate item. Staff has requested approval to obtain proposals for engineering design services and material fabrication and authorize the General Manager to execute an Agreement for an



amount not to exceed \$1.6 million. This item was approved by the Committee to allow the General Manager to obtain proposals but the final award will be approved by the Board.

FUTURE PROJECTED TOTAL WATER DEMANDS

MWDOC conducted a project meeting to discuss future demands as part of the OC Water Reliability Study. The following highlights were discussed:

- a) MET Demand Forecast for 2015 IRP is significantly lower than the 2010 IRP.
- b) In Orange County, water demands in FY 2016 are almost 25% lower than FY 2014. It's unknown how much conservation will continue into the future and will there be bounce back in demand after use restrictions are lifted.
- c) MET's demand forecast for its 2015 IRP assumed water demands would return to 90% of pre-drought levels in 5 years. OC Reliability Study Agency Workgroup estimated water demand would return to 90% of pre-drought levels in 10 years.
- d) Future water conservation measures include: Model Water Efficient Landscape Ordinance (MWELO), Plumbing Code efficiencies for toilets (high efficiency) and expected plumbing code changes for high-efficiency clothes washers.

UPCOMING ISSUES

FINANCIAL IMPACT

None.

ATTACHMENTS

None.

There are no support materials for this item.

REPORTS AND INFORMATION ITEMS:

12. REPORT OF THE GENERAL MANAGER:

REPORTS AND INFORMATION ITEMS:

13. DIRECTORS' REPORTS AND COMMENTS:



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Water Needs*

MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: March 15, 2016
SUBJECT: OC-44 Pipeline Rehabilitation Update

RECOMMENDATION

This is for information only.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice perpetual infrastructure renewal and improvement.

PRIOR BOARD ACTION/DISCUSSION

On February 12, 2013, the Board awarded a contract to RBF Consulting for the OC-44 Pipeline Rehabilitation/Replacement Evaluation.

On December 16, 2013, the Board authorized execution of a contract change order to RBF Consulting for the design of the OC-44 Pipeline Rehabilitation.

On April 9, 2015, the Board reviewed and discussed the Initial Study/Mitigated Negative Declaration (IS/MND), conducted a public hearing, and adopted the IS/MND.

BACKGROUND

The OC-44 pipeline was constructed in 1963. The section of the pipe that crosses San Diego Creek (see Attachment A) was originally constructed with flexible double gasketed epoxy-coated joints with the concept that it would be temporary until the State of California finalized the alignment for State Route 73, thus, allowing a more permanent installation to be integrated as part of the overpass superstructure. However, due to seismic considerations and the large diameter of OC-44, the flexible joints were replaced with welded steel joints to convert the temporary line to a permanent installation independent of State Route 73 overpass. The cover over and around the OC-44 pipeline has been progressively decreasing (i.e., Loss of pipeline cover, erosion around the line, etc.) due to increasing storm events, tidal fluctuations, and invasive native plant growth. The OC-44 pipeline is now situated within the coastal zone and is regulated by the California Coastal Commission, making repairs and maintenance more challenging and costly.

Since 2002 Mesa Water® has had to mitigate three pipeline failures (2002, 2006, and 2011) where the pipeline crosses San Diego Creek. Investigations during these repairs indicated that the pipeline is showing signs of deteriorating support due to scouring from the flow in the creek and the pipeline is subject to adverse corrosion due to the loss of cover over the pipe within the creek. Repair activities indicate the OC-44, where it crosses the San Diego Creek, would benefit from replacement or rehabilitation and installation of a long-term cathodic protection system.

In December 2012 Mesa Water® issued a request for proposal (RFP) to study the alternatives for the OC-44 Pipeline Rehabilitation and Replacement Evaluation of the OC-44 pipeline within the



environmentally sensitive San Diego Creek crossing. Michael Baker International, Inc. (MBI – formerly RBF) was competitively selected for the project. The following is a summary of the scope of work requirements:

- Evaluation of OC-44 long-term needs
- Pipeline Rehabilitation Alternatives Analysis
- Pipeline Replacement Alternatives Analysis
- Cathodic Protection Assessment (for the entire 8.6 miles of pipeline)
- Preliminary Design Report

Findings and recommendations from the OC-44 Pipeline Rehabilitation and Replacement Evaluation were provided as immediate (Phase 1) and longer-term (Phase 2) as follows:

Phase 1

- Pipeline Rehabilitation of 1,800 linear feet of the OC-44 pipeline segment where it crosses the San Diego Creek with a 30" ductile iron pipe was the most feasible and cost effective approach and should proceed immediately;
- Pipeline Rehabilitation provides a streamlined approach to the environmental permitting process due to the biological and hydrologic sensitivity within San Diego Creek;
- A cathodic protection system was identified as a benefit to extend the remaining useful life of the OC-44.

Phase 2

- Implementation of a cathodic protection system would provide longevity to the OC-44 remaining useful life and reliability to Mesa Water's service area demands;
- Scour protection of the OC-44 pipeline segment where it crosses the San Diego Creek is necessary due to long-term erosion and scour.

On November 19, 2013 the Board of Directors adopted the findings and recommendations of the OC-44 Pipeline Rehabilitation and Replacement Evaluation and approved a change order for the design portion of the pipeline rehabilitation.

DISCUSSION

The following is a summary of the OC-44 Pipeline Rehabilitation Project activities completed to date:

Phase 1:

Design: Mesa Water® finalized the 100% design submittal on July 21, 2015. A Final construction bid set will be completed upon receiving all permit approvals from the governing regulators.

Permitting: The following is the Regulatory/Permitting activities update:

- **California Environmental Quality Act (CEQA):** The CEQA process is required to establish the level of environmental impacts that will result as part of construction activities. The CEQA analysis determined that the construction impacts for the proposed project

would be classified as a Mitigated Negative Declaration (MND). The MND classification is typically used when no permanent impacts are imported on the environment by the project. The MND was adopted by the Board in April 2015;

- **Habitat Mitigation and Monitoring Plan (HMMP):** The regulatory agencies (generally the California Department of Fish and Wildlife (CDFW) and California Coastal Commission (CCC)) will rely on an HMMP to off-set or mitigate construction impacts. The Final HMMP will be conditioned in the permit approvals; however, final approval is anticipated prior to the CCC hearing. Some revisions still may be required depending on each agency's review. The draft HMMP required several onerous mitigation responsibilities of Mesa Water®. For example, CDFW required Mesa Water® to maintain and rehabilitate effected construction areas until CDFW determines that native plant species are of sufficient quantity and type before releasing Mesa Water® from ongoing maintenance responsibilities. Mesa Water® has provided alternative language limiting its term of responsibilities to three years. The agencies currently have the HMMP for review and comments are anticipated by late March 2016. Further negotiations with CDFW and CCC staff regarding the term of the HMMP maintenance responsibilities may be required.
- **U.S. Army Corps of Engineers (USACOE):** The USACOE regulates the discharge of fill material within waters of the U.S. (i.e., San Diego Creek and Bonita Creek) pursuant to the Clean Water Act (CWA). Any activity that proposes fill must have a CWA Section 404 permit prior to construction. The 404 permit generally focuses on water quality as well as biological concerns. The 404 permit (also referred to as a Letter of Permission) was issued by the USACOE on February 10, 2016 and is considered complete. HMMP sets requirements to off-set the impacts;
- **Regional Water Quality Control Board (RWQCB):** The RWQCB requires that a 401 Water Quality Certification be issued for any activity that requires a USACOE 404 permit. This ensures that water quality standards are met. The 401 Water Quality Certification details Mesa Water's responsibilities for managing surface runoff, excavation activities, dust control mitigation, and other construction related activities that could impair water quality to the surrounding watershed. The 401 Water Quality Certification was issued on September 29, 2015 and is considered complete. The major compliance issues for the 401 Water Quality Certification requires Mesa Water® to maintain water quality through the deployment of Best Management Practices (BMPs) during construction;
- **California Department of Fish and Wildlife (CDFW):** The CDFW requires a 1602 Streambed Alteration Agreement pursuant to the California Department of Fish and Game Code when substantial alteration to a stream bed or bank is proposed. The draft 1602 Streambed Alteration Agreement was issued on April 20, 2015. Staff has provided comments on the Draft Agreement and has also prepared and sent comments to the HMMP. The HMMP is currently under review and comments/approval is anticipated by the end of March 2016. The Agreement largely focuses on BMPs as well as mitigation measures to off-set impacts caused by the construction which include revegetating temporary access roads, storage and staging areas, and sending and receiving pits required for new piping installation.
- **California Coastal Commission (CCC):** The CCC requires a Coastal Development Permit (CDP) for any project within the Coastal Zone. Coastal staff has reviewed the project application and provided comments in the summer of 2015. Mesa Water® provided a response to comments on February 22, 2016. The response to comments including the draft HMMP is currently under review by the CCC, with final comments anticipated by late



March 2016. It is anticipated that the Project will be on the agenda for approval for the June CCC hearings.

Construction: The phase 1 portion of the pipeline rehabilitation construction efforts are scheduled to occur in September of 2017. The 404 Letter of Permission issued by USACOE and in other permits does not allow construction activities to be performed within the breeding season, which is between March 15 and September 15. This condition requires that bid solicitations, Board approval, and contract Notice-to-Proceed occur well in advance of the September timeframe to allow the selected contractor sufficient time for construction submittals and material procurement. Bid solicitation is planned for the spring of 2017, allowing sufficient time to complete the permitting process and obtain qualified contractors to bid on the project.

Stakeholder Outreach: There are several stakeholders surrounding the OC-44 Pipeline Rehabilitation Project, including commercial interests and the general public, as described below:

- Fletcher Jones Motorcars (FJM). This property is located on the north side of the San Diego Creek. The main point of access for customers and maintenance is from Bayview Way, which is also used for a car rental staging area. Bayview Way is the only feasible access for the construction equipment and personnel to the proposed construction site. Prior to the start of the permitting process in the spring of 2014, Mesa Water's permitting team met with FJM management to inform them of the project and obtain input on impacts to their operations that Mesa Water® may need to address as part of the construction process. FJM management indicated they appreciated Mesa Water reaching out in advance and indicated they would work with Mesa Water's contractor during construction activities. No specific requests were made at the time.

On September 2, 2015, after the CEQA and MND approval process, Mesa Water® received a letter from FJM (via the City of Newport Beach) requesting that the construction work be conducted outside FJM's regular business hours, before 6:00 a.m. and after 11:00 p.m. 7-days per week. Mesa Water® provided a response to FJM explaining that the project site lies within high quality riparian habitat and the corresponding noise and light from construction activities in this area impact protected species and cannot be mitigated pursuant to the regulatory requirements placed on Mesa Water®. Mesa Water® offered to meet with FJM to assist in mitigating potential impacts to the operations on Bayview Way. A project coordination meeting was held on February 29, 2016, with FJM management, City of Newport Beach planning and engineering management, and Mesa Water® team. Several options were discussed to minimize impacts to Bayview Way and the FJM operations. The following resolution was facilitated:

- Bayview Way would be used as the primary access in lieu of Mesa Water's existing 30-foot wide easement within FJM's service bay.
 - Mesa Water® plans to allow construction between the hours of 7:00 am and 5:00 pm Monday through Friday. A dedicated construction access lane will be provided along Bayview Way separated by a temporary concrete barrier (K-rail).
 - A slurry seal and restriping of Bayview Way would be provided at the conclusion of construction activities.
- The Irvine Company: The Irvine Company (TIC) owns the Baypointe Apartments located on the south side of San Diego Creek. The Phase 1 project will not impact this property.



However, as a courtesy, outreach will be performed prior to the start of construction activities notifying them of the project impacts and schedule.

- City of Newport Beach: The project will have temporary impacts to public access adjacent to San Diego Creek Trail and Bonita Creek Park. These facilities are regional assets to the community and they are heavily utilized by the general public. Mesa Water's permitting team is working with the City of Newport Beach Planning and Parks Departments to coordinate the laydown area and rerouting of bike trails along San Diego and Bonita Creeks.

Mesa Water® is working closely with all stakeholders on expediting the permitting process. The Mesa Water® permitting team has established the need for reducing major regulatory requirements such as mitigation criteria and reducing time for habitat monitoring activities (from 5+ years to 3 years). The Board will be updated at a future Engineering and Operations Committee meeting when final permits have been obtained by the CCC and City of Newport Beach.

Phase 2:

Phase 2 activities are design, permitting and construction activities that require longer-term (i.e., 3+ years) coordination and approval. The following are the main work elements as part of the Phase 2 activities:

- Scour Protection: A scour study was completed to evaluate the long-term scour potential of the San Diego Creek. The study concluded that continued scour of the pipeline is likely due to upstream flood control improvements that impact sediment transport into the area surrounding the pipeline. A concept scour prevention design and cost estimate was prepared as part of the Pipeline Replacement and Rehabilitation Evaluation. The following findings and recommendations were provided:
 - Rehabilitation approach was confirmed as the best immediate response to extend longevity and reliability to the OC-44 with the intent to review scour prevention measures in the future as there is no imminent threat of failure due to scour.
 - A structural evaluation determined that a distance of approximately 20 feet of unsupported pipeline length (one pipe section) could remain unsupported prior to mitigation being needed.
 - The cost for scour protection design, construction, and permitting is estimated to be \$1.5 million.
 - Permitting for scour protection could take several years (3-5 years) given the environmentally sensitive area and the construction impacts within the creek and is subject to the jurisdiction of four regulatory agencies. The agencies are: the U.S. Army Corps of Engineers (Corps); the California Department of Fish and Wildlife (CDFW); the Regional Water Quality Control Board (RWQCB); and the California Coastal Commission (CCC). Scour design and permitting will be budgeted in a subsequent fiscal year.
- Cathodic Protection: A corrosion assessment of the pipeline within the San Diego Creek area was completed as part of the Pipeline Rehabilitation and Replacement Evaluation. Subsequent corrosion investigations will be performed over the remaining 8.3 miles of the OC-44 pipeline to evaluate cathodic protection alternatives designed to extend the service



life of the pipeline. A preliminary design report will be prepared to identify the best apparent alternative. Associated field activities for this task which include excavation for pipeline, appurtenant, and inspections are anticipated to begin in the May 2016 timeframe. The cost of the design report and associated field activities is included in the approved contract change order.

FINANCIAL IMPACT

\$429,500 was budgeted for fiscal year 2016. \$78,258 has been spent to date in fiscal year 2016.

	Project Estimate <u>Amounts</u>	Project Cost <u>Amounts</u>
Evaluation of Pipeline Rehabilitation/Replacement Original Contract	\$ 198,827	\$ 198,827
Change orders #1 (Design and Permitting of Pipeline Rehabilitation) Revised Contract		\$ 541,976 <u>\$ 740,803</u>
Actual spent to date Revised Project Estimate	\$ 750,803	\$ 446,890

ATTACHMENTS

Attachment A: OC-44 Pipeline Alignment



42" WATER MAIN REPAIR