



*Dedicated to
Satisfying our Community's
Water Needs*

**AGENDA
MESA WATER DISTRICT
BOARD OF DIRECTORS
Tuesday, August 16, 2016
1965 Placentia Avenue, Costa Mesa, CA 92627
3:30 p.m. Special Board Meeting**

**ENGINEERING AND OPERATIONS COMMITTEE MEETING
Tuesday, August 16, 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.

CONSENT CALENDAR ITEMS:

Approve all matters under the Consent Calendar by one motion unless a Board member, staff, or a member of the public requests a separate action.

1. Developer Project Status Report
2. Mesa Water® and Other Agency Projects Status Report
3. Water Quality Call Report
4. Committee Policy & Resolution Review or Development
5. Operations Department Status Report
6. Municipal Water District of Orange County Activities Update
7. Orange County Water District Activities Update
8. Well Automation and Rehabilitation Project Update

PRESENTATION AND DISCUSSION ITEMS:

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

None

ACTION ITEMS:

9. Pipeline Integrity Program Update

REPORTS:

10. Report of the General Manager



11. Directors' Reports and Comments

INFORMATION ITEMS:

None

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

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2065	1677 Superior	Tract Homes	<p>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. Inspector completed a site visit to check status on 4/20/16. Installed 4 - 1" meters on 5/12/16. Inspector completed a site visit to check status on 6/14/16 (8/5/16)</p>
MC 2119	236 E. 16th St.	Home Remodel (Complete Remodel)	<p>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. Flow through test on 8/4/16. (8/5/16)</p>

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2126	573 Victoria	37 New Homes	<p>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. Services lowered on 6/30/16 in preparation of meter installation. Meter box placement for model homes on 7/13/16. (8/5/16)</p>
MC 2134	2026 Placentia	15 New Homes	<p>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. Backflow tested on 8 units on 4/5/16. Inspector checked progress on phased project on 7/13/16. (8/5/16)</p>

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
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 on 2/25/16. 1 - 1.5" irrigation meter and 1 - 1" domestic meter installed and locked on 4/5/16. Inspected rock base on 7/11/16. Installed 7 - 1" meters on 7/13/16. (8/5/16)
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. Checked progress with owner on 7/18/16. (8/5/16)
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. Irrigation backflow tested and flow-thru system on models tested 3/31/16. Flow-thru tested for 6 units on 7/11/16. Flow-thru tested for 7 units on 7/26/16. (8/5/16)
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. Inspector went by project and found some changes to the overall structure, but work was not complete 5/31/16. Letter sent to owner to notify permit expiration on 8/3/16. (8/5/16)

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. Revised plans submitted on 4/6/16. Final mylars and payment received and permit issued on 5/4/16. Permit issued on 5/10/16. Precon held on 5/24/16. Abandoned water connections on 6/28/16. Installed hydrant, domestic, and fireline tap on 7/7/16. Abandoned 2 services on 7/27/16. Installed 1 fire hydrant on 8/1/16. (8/5/16)
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. Meter and box set on 8/2/16. (8/5/16)
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. Permit issued on 3/11/16. Meter installed on 8/4/16. (8/5/16)
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. Abandoned waterline on 3/15/16. Shutdown test on 7/19/16. (8/5/16)
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. Flow-thru test on 6/13/16 failed, contractor to reconfigure plumbing system. Model home flow-thru test on 7/10/16. (8/5/16)

DEVELOPER PROJECT STATUS REPORT

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FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
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. Backflows tested on 6/20/16. Flow-thru tested on model homes on 7/20/16. (8/5/16)
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. Mylars submitted, fees paid, and permit issued on 5/5/16. Tee cut-ins on 6/22/16. Pressure Test and Bac-T test on 7/7/16. Watermain turned on on 7/21/16. (8/5/16)
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. Property owner contacted to check project status on 8/3/16. (8/5/16)
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. Third plan check submitted on 3/14/16, awaiting pick-up at the plan check desk. (8/5/16)
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. Checked status on 7/13/16, no work apparent. (8/5/16)
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. Checked status on 7/13/16, no work apparent. Project delayed until end of the calendar year. (8/5/16)
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. Final mylars and payment received and permit issued on 1/29/16. Owner contacted on 7/11/16, work has not yet begun. (8/5/16)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
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. Final mylars and payment received and permit issued on 1/29/16. Owner contacted on 7/11/16, work has not yet begun. (8/5/16)
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. Owner contacted on 7/11/16, work has not yet begun. (8/5/16)
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. Owner contacted on 7/11/16, drawing amendments are still in progress. (8/5/16)
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. Second plan check returned on 2/12/16. Owner contacted on 7/11/16, drawing amendments are still in progress. (8/5/16)
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. Fees paid and permit issued on 3/11/16. Precon held on 5/24/16. Meter and box installed on 6/8/16. (8/5/16)
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. Second plan check received on 3/10/16. Awaiting Mylar drawings and fee payment. Owner contacted on 7/18/16 for project status. (8/5/16)
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 picked up on 4/18/16. Second plan check submitted on 5/18/16. Mylar drawings and fee payment received on 7/5/16. Permit issued on 7/11/16. (8/5/16)

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. Second plan check submitted on 3/24/16 and picked up 4/17/16. Mylar drawings and fee payment received on 7/5/16. Permit issued on 7/11/16. (8/5/16)
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. Second plan check received on 4/21/16. Fees paid and permit issued on 6/13/16. Manifold installed on 7/19/16. (8/5/16)
MC2237	2245 Santa Ana Avenue	Meter Upgrade	Plans received and plan check fees paid on 2/29/16. Plan check completed 3/24/16. Fee paid and permit issued on 5/16/16. (8/5/16)
MC2240	222 E 15th Street	Meter Upgrade	Plans received and plan check fees paid on 3/25/16. Plan check picked up on 4/20/16. Fee paid and permit issued on 5/10/16. Meter installed on 6/13/16 (8/5/16)
MC2241	2990 Mesa Verde Dr E	Fireline installation	Plans received and plan check fees paid on 3/25/16. Plan check picked up 4/20/16. Second plan check received on 4/28/16 and returned on 5/23. Fees paid and permit issued on 7/15/16. (8/5/16)
MC2243	165-171 22nd Street	2 Single Family Homes	Plans received and plan check fees paid on 4/20/16. Plan check picked up on 5/17/16. Awaiting final submittal and fee payment. (8/5/16)
MC2245	522-526 Bernard Street	10 Single Family Homes	Plans received and plan check fees paid on 5/11/16. Second plan check received on 6/10/16. Second plan check returned on 6/22/16. Permit issued on 7/11/16. Manifold installed on 7/19/16. (8/5/16)
MC2247	1808-1810 Pomona Ave	2 Single Family Homes	Plans received and plan check fees paid on 5/20/16. Second plan check received on 6/23/16. Second plan check returned on 7/11/16. Fees paid and permit issued on 7/28/16. (8/5/16)
MC2251	2995 Red Hill Ave	3 Single Family Homes	Plans received and plan check fees paid on 5/27/16. Fees paid and permit issued on 6/15/16. (8/5/16)
MC2252	1100 South Bristol Street	Ganahl Lumber	Plans received and plan check fees paid on 6/1/16. Awaiting pick up at plan check desk. (8/5/16)
MC2253	167 Magnolia	2 Single Family Homes	Plans received and plan check fees paid on 6/23/16. Resubmittal received on 7/28/16. Second plan check in progress. (8/5/16)
MC2255	2073-2080 Tablelands Way	8 Single Family Homes	Plans received and plan check fees paid on 6/23/16. Resubmittal received on 7/29/16. Second plan check in progress. (8/5/16)

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 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 MBI 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: MWRW Finished Water Quality Polishing Project

File No.: MC 2039

Description: Enhance finished water quality at the MWRW 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 MWRW 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

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 2016

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. Design completed on 4/1/16. Project sent out to bid on 4/4/2016. Two bids received on 5/4/16. Staff recommended that the Board of Directors award a contract to the lowest bidder J.R. Filanc. E & O Committee recommended approval on 5/17/16. Board approved the project on 6/9/16. Kick-off meeting held on 6/28/16. Working on submittal review and revising the baseline schedule. Project in progress (8/4/16).

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

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 2016

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 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 an 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. Traffic Plan prepared and submitted to the City of Newport Beach for approval on 6/29/16. Per request of CCC a dewatering plan was prepared and submitted for approval. It is anticipated that the project will be presented by the CCC on the August 2016 public hearing in Santa Cruz, California. Final bid set will be completed once all permits are issued. Project in progress (8/4/16).

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 2016

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 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 was sent on April 4, 2016. Preconstruction meeting held on April 12, 2016. The project is in the pre-construction submittal phase with several Requests for Information and equipment submittals received from the Contractor by the Construction Manager, and reviewed and responded to by the Design Engineer. Construction activities are expected to start at Well 5 on October 3, 2016. (updated Aug 5, 2016)

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 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 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. An offer to purchase was presented to a property owner for an underutilized portion of a property on May 4, 2016. The offer was rejected. A revised offer was submitted on June 7, 2016. The owner has decided not to sell the property. Staff is working with Voit Real Estate to identify and evaluate underutilized sites in the vicinity of the study area. One underutilized site on Sunflower Boulevard was considered but rejected for being only 200 feet from the current Well 9B site, which would add significantly to pumping costs at both sites. Another site near Bristol and St. Gertrude was considered, but rejected due to the cost of the property, its location adjacent to a residential area, and the cost of construction of two miles of pipeline to Mesa Water's service area. Voit is actively pursuing the ownership of other underutilized sites. (updated 8/5/16)

Project Title: Well 9B

File No.: MC 2229

Description: Replacement of Well 9

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 2016

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 reviewed and returned on March 25, 2016. Bid documents were released on April 22, 2016. The pre-bid site meeting was held on May 18, 2016 and attended by four bidders. Three bids were received by the deadline of June 7, 2016. The low bid from Weber Water Resources is approximately 30% below the Engineer's Estimate. Notice to Proceed was issued to the contractor on July 19, 2016. Destruction of the existing well begun on 8/4/16. Project in progress (8/4/16).

Project Title: MWRF 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 MWRF 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 prepared a response letter. Approved construction plans were received from the City of Costa Mesa on 12/29/15. The final bid package completed 3/15/16. Encroachment Permit Application submitted to the City on 3/6/16. Hold Harmless Agreement for the Installation of Off-Site Parking Improvements within Public Right-of-Way received on 5/4/16. Staff reviewed the Agreement and sent comments to the City of Costa Mesa on 5/27/16. City approved all revisions as proposed by Mesa Water® and sent the agreement for signature on 6/24/16. The Engineering and Operations Committee reviewed the Agreement at July 19, 2016 meeting and recommended Board approval. An encroachment permit is anticipated to be issued by the end of August 2016. (8/4/16)

Project Title: OC 44 Import Stations Flow Meter Replacement

File No.: MC 2088

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 2016

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 begun on April 4, 2016. The Contactor replaced 16" valve in Santa Ana Pressure Reducing Station on April 6, 2016 and meters in TO-2, TO-4, and TO-5 on April 29, 2016. Training for Mesa Water® personnel held on 6/14/16. Contractor continues working on remaining punch list tasks of the project including programming valve controls, integrating with SCADA, and preparing as-built documentation. (8/4/16)

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 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 advertised for bid on April 6, 2016. Pre-Bid meeting held on 4/20/16.

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 2016

Bids opened on 5/17/16. Two bids received for \$516,000 and \$556,600. Staff reviewed the bids and recommended E&O Committee to approve the lower bid. E&O Committee recommended approval of the project on 6/21/16. Kick-off meeting held on 8/3/16. Project in progress (8/4/16).

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. An encroachment permit from the City of Costa Mesa was received on April 25, 2016. Field sampling began on May 16, 2016 and completed on June 28, 2016. Samples were shipped to MEIC Lab in Portland, Oregon, for destructive testing on July 7, 2016. Samples were received at MEIC on July 11, 2016, and have been prepped by the lab for testing. Lab results, including estimates of remaining useful life, are expected in September 2016. Non-destructive testing of the next 3 miles of ACP is scheduled for the week of September 12, 2016.(8/5/2016)

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 2016

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. Staff review and meeting occurred on April 11, 2016. IBI Group is in the process of finalizing cost estimates and 3D renderings of 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 was reviewed by staff. The final report was delivered on June 30, 2016 and was reviewed by staff for completeness. Staff presented the findings and recommendation to the Board of Directors at the July E&O Committee Meeting. Board approved contract to move forward with the design of a complete Variable Refrigerant Flow system.

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 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.

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 has been reviewed by staff and returned to the consultant. Pump extraction plan and bid documents are currently being reviewed by staff. The Consultant has begun the preliminary design of a chemical dosing system. Request for bids for the pump extraction will be released in August 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 back-up invoicing detail necessary to finalize the claim. On 6/30/16 staff completed dialogues with ACWA JPIA regarding amount of final compensation for repair of the leak. The reimbursement check for \$128,581.10 was received from

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

August 2016

ACWA JPIA on July 7, 2016. (8/4/16)

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 accepted by the Designer and Final Plans were submitted on 2/9/16. New comments sent to the designer on 2/18/16. The revised final plans received on 3/21/16 and approved by Mesa Water® on 3/31/16. City of Costa Mesa awaiting state funding for the project (8/4/16)

Project Title: Other Agency Project Coordination

File No.:

Description: Water main relocation in New Hampshire Dr. 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. Project was delayed until Spring of 2016. Attended the pre-construction meeting on 7/21/15. Construction meeting with OCFCD's contractor Sukut Construction held on 4/7/16. Staff is coordinating with OCFCD and Sukut on project schedule. Two new 12-inch valves installed by Mesa Water® on New Hampshire Dr. at Idaho Ave. on 7/7/16 and air-vac valve relocated on 7/18/16. (8/4/16)

Water Quality Call Report

July 2016

Date: 7/7/2016
Source: Phone
Address: 1816 Jamica Rd.
Description: Customer had questions regarding the Groundwater Replenishment System (GWRS) and wants to know more about the water being used to replenish the aquifer.
Outcome: Customer was referred to Orange County Water District's website with information on the GWRS.

Date: 7/21/2016
Source: Phone
Address: 344 Magnolia
Description: Customer inquired about the pH in tap water and wanted the information because of her plants special pH requirements.
Outcome: Explained to customer about the water quality report and went over the pH levels. Customer was satisfied.

Date: 7/21/2016
Source: Phone/Visit
Address: 324 Magnolia
Description: Customer called to report low pressure and brown water.
Outcome: The angle stop was not fully opened at the time of the visit, so staff opened it completely and hose bibs and fixtures were flushed to remove all air and sediments. The pH, chlorine, and temperature were tested and were within normal range. Customer was very satisfied and called Mesa Water® to report the "spectacular job" staff performed.

Date: 7/25/2016
Source: Phone
Address: 3175 Barbados Pl.
Description: Customer is interested in installing a water treatment device to prevent water hardness buildup. He wanted to get some information so he can decide what unit will work best for him.

Outcome: Told customer that Mesa Water® provides water that meets and surpasses all drinking water regulations and does not provide recommendations for point-of-use treatment devices. The customer was provided with the link to the state's website on home treatment devices so they can make an informed decision.

Date: 7/27/2016

Source: Phone/Visit

Address: 211 Broadway

Description: Customer called to report that there was some white material in the water.

Outcome: During site visit, it was determined that the water was fine, but the garden hose at the rear hose bib closest to the meter was the likely cause. The garden hose was deteriorating causing the white interior lining of the hose to release into the water. Customer will replace garden hose and was satisfied with the service provided.

Date: 7/27/2016

Source: Phone/Visit

Address: 2905 Redwood

Description: Customer called with questions in regards to storing water in 55 gallon drums for emergency use.

Outcome: Sent customer the EPA instructions on how to prepare/store water for emergency use along with a copy of the Water Quality Report.

**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. 1470	02/09/16	Review and update as needed	
Standard Specifications and Drawings	Resolution No. 1449	08/14/14	Review and update as needed	9/20/16

Water Operations Status Report
July 1, 2016 - July 31, 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	29	16	575	242	\$22,784	\$9,746
WD-0102 - HYDRANT PAINTING	HYDRANTS	1	0	38	0	\$1,232	\$0
Program 01 TOTAL		30	16			\$24,016	\$9,746
02 - VALVES							
WD-0201 - DISTRIBUTION VALVE MAINTENANCE	VALVES	18	21	385	320	\$14,477	\$14,247
WD-0202 - NIGHT VALVE MAINTENANCE	VALVES	2	0	18	0	\$1,420	\$0
Program 02 TOTAL		20	21			\$15,897	\$14,247
03 - METERS							
WD-0301 - NEW METER INSTALLATION	METERS	2	1	11	14	\$3,039	\$5,637
WD-0302 - RAISE REPLACE METER BOX	BOXES	2	3	9	6	\$2,071	\$2,259
WD-0305 - ANGLE STOP/BALL VALVE REPLACE	REPLACE	6	9	12	19	\$5,862	\$5,821
WD-0306 - LARGE METER TEST/REPAIR - C	TESTS	1	0	11	0	\$1,223	\$0
Program 03 TOTAL		11	13			\$12,195	\$13,717
04 - MAIN LINES							
WD-0400 - MAIN LINE REPAIR	REPAIRS	11	7	2	1	\$9,557	\$5,998
WD-0402 - AIR VAC MAINTENANCE/REPAIR	REPAIRS	2	0	14	0	\$1,879	\$0
Program 04 TOTAL		13	7			\$11,436	\$5,998
05 - SERVICE LINES							
WD-0501 - SERVICE LINE REPAIR	REPAIRS	4	3	2	1	\$2,920	\$2,189
Program 05 TOTAL		4	3			\$2,920	\$2,189
06 - CAPITAL							
CAP AV - CAPITAL AIR VACUUM REPLACE	AIR VACS	0	0	0	0	\$0	\$0
CAP BI - CAPITAL BYPASS & METER INSTALL	REPLACE	0	0	0	0	\$0	\$0
CAP FH - CAPITAL HYDRANT UPGRADE	HYDRANTS	4	0	0	0	\$4,861	\$0
CAP LM - CAPITAL LARGE METERS	METERS	1	0	5	0	\$4,114	\$0
CAP MV - CAPITAL MAINLINE VALVE REPLACE	VALVES	3	25	1	4	\$3,387	\$17,639
CAP SL - CAPITAL SERVICE LINE REPLACE	SERVICES	2	0	0	0	\$1,977	\$0
CAP SM - CAPITAL SMALL METERS	METERS	1	7	6	93	\$783	\$8,815
CAP SS - CAPITAL SAMPLE STATION REPLACE	STATIONS	1	0	1	0	\$754	\$0
Program 06 TOTAL		12	32			\$15,876	\$26,454
VACANT POSITIONS			7				\$4,949
TOTAL						\$82,340	\$77,300



*Dedicated to
Satisfying our Community's
Water Needs*

MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: August 16, 2016
SUBJECT: Municipal Water District of Orange County Activities Update

RECOMMENDATION

This update is provided for information only.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #3: Be financially responsible and transparent.
Goal #7: 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

METROPOLITAN WATER DISTRICT (MWD) ITEMS:

- **MWD's Water Supply Conditions:** 1) Conditions are normal to slightly above normal in Northern California as a result of above average precipitation that has increased reservoirs levels. 2) Water supply conditions in Southern California are below normal for the 5th straight year.
- **MWD Finance and Rate:** Water sales for FY 2015-16 were 9% less than budgeted, bringing revenue down by \$153 million. With lower expenses, MWD does not anticipate a shortfall.
- **Bay Delta/State Water Project:** On July 26, the State Water Resources Control Board (SWRCB) began public hearings on the request to change the diversion of water to the three new intakes north of the Delta as proposed by the California WaterFix. During the first of the hearings, SWRCB will determine if the project would change water quality and flow in a way that would negatively affect other legal water right users. There will also be testimony from experts showing the impact to legal users of water in the area and their impact to flows and water quality.



LAST MONTH'S ISSUES

MWD'S WATER SUPPLY CONDITIONS: Local precipitation for the 2015-16 fiscal year was 8.14 inches, which was 4.76 inches below normal and 0.73 inches below last year's (2014-15) precipitation total. Orange County has now experienced five consecutive years of below average precipitation.

Comparatively, conditions in Northern California were average compared to historical data. The Sierra snowpack was 97% of average and the Sacramento River runoff is forecast to be 102% of normal.

Lake Mead is at 1,073 feet above sea level; this is the lowest level the reservoir has been since it was filled.

ORANGE COUNTY'S DROUGHT PERFORMANCE – MAY 2016 REPORT: Orange County's conservation target is 10%, based on a "self-certification" approach that requires retail water agencies to demonstrate their available supplies under three continuous drought years compared to their average potable demand of CY 2013 and CY 2014. In May, Orange County conserved 22.31% as compared to 2013 and had a cumulative savings of 23.86% for the last 12 months.

Over the last five years, Orange County is cumulatively 28.47" below average. This is the largest deficit since record-keeping began in 1908.

UPCOMING ISSUES

COLORADO RIVER DROUGHT CONTINGENCY DISCUSSIONS: California Colorado River contractors – Metropolitan Water District, Coachella Valley Water District, Imperial Irrigation District, and Palo Verde Irrigation District continued discussions in trying to reach consensus on a Colorado River Drought Contingency Plan. Additionally, the Colorado River Board of California and the U.S. Bureau of Reclamation are helping to facilitate these inter-agency discussions. The discussions have included how contractors within California would share any reductions in California if Lake Mead were to continue to decline to critically low levels. The discussions also included how to provide sufficient flexibility to help California contractors efficiently use their Colorado River water supplies for the full range of Lake Mead operating conditions. If a consensus is ultimately reached, each agency's respective boards would consider the draft agreement, which would significantly reduce the likelihood of Lake Mead falling below the elevation of 1,025 feet – an elevation of critical concern – during the ten-year term of the agreement.

FINANCIAL IMPACT

None.

ATTACHMENTS

None.



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Water Needs*

MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: August 16, 2016
SUBJECT: Orange County Water District Activities Update

RECOMMENDATION

This update is provided for information only.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #3: Be financially responsible and transparent.
Goal #7: 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

LEGAL & REGULATORY SUPPORT EXPENDITURES; NORTH & SOUTH BASIN FY

2016/17: Staff presented the estimated cost for legal and regulatory support for the 2016/17 FY Budget. \$845,000 is the encumbered request with three different firms. Additional funding may be needed if legal demands are greater than estimated; fees could also be less if services are not required as anticipated. Staff offered to keep the Board informed on an annual basis. Director Dewane suggested quarterly updates. Committee members approved this request and moved the item to the July 20, 2016 Board meeting – the Board approved this as part of their consent calendar.

ORANGE COUNTY WATER DISTRICT CLASSIFICATION OF RECLAIMED WATER:

OCWD staff presented a PowerPoint presentation on how the District currently sets the Basin Pumping Percentage (BPP). This information was presented in response to the



IRWD on-going lawsuit as it relates to the classification of reclaimed water. OCWD's Act does not currently recognize reclaimed water as supplemental water, as such, reclaimed water is not considered as part of an agency's total demands for the BPP. As part of the lawsuit IRWD opines that OCWD does not have the right to restrict groundwater from being sent outside OCWD's District watershed. IRWD was not willing to discuss this portion of the lawsuit and wanted to stay focused on the reclaimed water issue.

IRWD's lawsuit is based on three principal challenges: 1) OCWD improperly excludes reclaimed water from "supplemental sources", 2) OCWD cannot define "unlawful exportation of groundwater", and 3) OCWD cannot exclude reclaimed water from calculation of "unlawful exportation of groundwater".

UPDATE ON ALTERNATIVE APPROACHES FOR INTEGRATED REGIONAL WATER MANAGEMENT IN ORANGE COUNTY:

OCWD staff updated the committee on this issue. Currently, the Integrated Regional Water Management (IRWM) program for the Santa Ana River Watershed is managed by the Santa Ana Watershed Project Authority (SAWPA). Staff met with SAWPA and other stakeholders to discuss principles to guide future IRWM and address concerns raised by OCWD and other Orange County stakeholders. OCWD staff sent a letter to One Water One Watershed (OWOW) requesting language that would state "(1) all areas improve together and (2) improvements in one area are not achieved at the expense or detriment of another" when projects are being considered for Grant Funding. OWOW is considering such language but has not yet acted to fully incorporate the requested language. OCWD Director Sheldon asked for an update on the progress staff has made on forming a new funding area. Staff reported that they are awaiting direction from the Board before they move forward on making application to form a new funding area. There was also discussion on the role and mission of the Newport Bay Watershed Committee and if OCWD should attend or be part of this committee. This item was information only with no action requested.

POSEIDON HUNTINGTON BEACH: The OCWD Board and staff will continue their discussions regarding integration of the Poseidon Project into the local water supplies from the OCWD Groundwater basin. Most recently, the OCWD Board suggested delivering the bulk of the Poseidon supplies to agencies along the coast – Newport Beach, Mesa Water District, and Huntington Beach. Staff will be meeting with those agencies to determine feasible operational scenarios. Poseidon is continuing to work on the NPDES permit from the Santa Ana Regional Water Quality Control Board (operating permit) and their construction permit from the California Coastal Commission (anticipated September 2016 meeting).



LAST MONTH'S ISSUES

AGREEMENT WITH THE US ENVIRONMENTAL PROTECTION AGENCY (EPA) FOR THE NORTH BASIN REMEDIAL INVESTIGATION & FEASIBILITY STUDY (RI/FS)

The Board authorized execution by the General Manager of the Administrative Settlement Agreement with the United States Environmental Protection Agency to oversee the District's performance of the Remedial Investigation and Feasibility Study for groundwater contamination in the North Basin area.

WATER RESOURCES REPORT – JUNE 2016: June was the end of the year for rain totals and it was noted that Orange County received approximately 1" less rain than last year.

UPCOMING ISSUES

- **COASTAL PUMPING TRANSFER PROGRAM (CPTP):** A Public hearing was held to consider modifying the FY16-17 Basin Equity Assessments for Producers participating in the FY 2016-17 Coastal Pumping Transfer Program.
- Background: The District has periodically implemented (five times over the past 16 years, most recently in FY13-14 & FY14-15) a Coastal Pumping Transfer Program (CPTP) which reduces groundwater pumping along the coast and increases pumping by inland Producers. The CPTP would assist in reducing the potential for seawater intrusion. As discussed at the July 13, 2016 Water Issues Committee, staff recommended a program to reduce pumping by the City of Huntington Beach and Mesa Water District. Implementing the program requires modifying the Basin Equity Assessment of those participating Producers. Staff would manage the program to ensure that all Producers (inland or coastal) have no financial burdens as part of the CPTP. This would be accomplished by encouraging the inland or over pumping Producers to pump above the Basin Pumping Percentage (BPP) and pay OCWD a modified Basin Equity Assessment (BEA). The modification to the BEA for the overproducers will include a small incentive to encourage additional pumping. The City of Huntington Beach and Mesa Water District, in turn, would then pump below the BPP and receive a BEA payment from OCWD to make up for the additional imported water they will be required to purchase. The Board approved the Transfer Program for FY16-17.
- **POSEIDON HUNTINGTON BEACH**
- **GWRS & GREEN ACRES FINAL EXPANSION**
- **IRWD v. OCWD LAWSUIT**



FINANCIAL IMPACT

None.

ATTACHMENTS

None.



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: August 16, 2016
SUBJECT: Well Automation and Rehabilitation Project Update

RECOMMENDATION

This item is provided 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 March 15, 2014, the Board adopted Resolution No. 1442 Replacement of Assets, which calls for rehabilitation of groundwater production wells if and when well production drops by more than 20% for a given well, and 10% for overall clear water well production.

On March 18, 2014, the Board received an information item describing the scope of the Well Automation and Rehabilitation Project.

On October 10, 2014, the Board approved a contract with Carollo Engineers, Inc. for design of the Well Automation and Rehabilitation Project.

On March 12, 2015, the Board approved a contract with RBF Consulting- A Michael Baker International Company for Construction Management services for the Well Automation and Rehabilitation Project.

On May 19, 2015, the Committee received an information item on the planned appearance of the well sites, including the new chemical facility aesthetics.

On October 20, 2015, the Committee received an update and overview of the Well Automation and Rehabilitation Project, and approved the project as well as the Notice of Categorical Exemption from the California Environmental Quality Act (CEQA) for the project.

On January 19, 2016, the Committee approved a contract with Pacific Hydrotech for construction of the Well Automation and Rehabilitation Project.

BACKGROUND

The Well Automation and Rehabilitation Project was recommended as part of the 2014 Master Plan Update and included in the adopted Capital Improvement Program. The project provides the necessary improvements to Mesa Water's clear well sites and includes the following key objectives:

1. Rehabilitation of clear wells 1, 3, 5, and 7 that were shown to have lost more than 20% of production as a result of the condition assessment performed in October 2013;



2. Design of well automation functionality for all clear wells, including remote well start/stop capabilities and chemical addition system based on real-time system chemical demands;
3. Standardization of clear well operations across all well sites;
4. Reducing the frequency of chemical deliveries by increasing the size of the storage tanks;
5. Reducing the energy and labor costs of well operations;
6. Replacement equipment that has exceeded its useful life, including well pumps, motors, and electrical switchgear;
7. Back-up power for all wells to maintain operation when grid power is not available; and
8. Installation of well site security system infrastructure

A construction contract was awarded to Pacific Hydrotech for \$10,488,500 for the construction of the Well Automation and Rehabilitation Project. The construction cost will be spread over three fiscal years (FY 2016- FY 2018).

DISCUSSION

The Well Automation and Rehabilitation Project preconstruction meeting was held on April 12, 2016, with an anticipated construction start in October 2016. The submittal phase is progressing smoothly, with critical path items such as the new gas engine for the Nathan Reade Well No. 5 (Well 5) approved for construction. The baseline schedule has mobilization at Well 5 starting in late September in anticipation of beginning rehabilitation of Well 5 on October 3, 2016, once the peak summer water demand is over. The baseline schedule has only one well at a time out of service, and no wells out of service during any peak summer period of June 1 to September 30.

Work at the Well 5 site is planned through January 2017 and includes well rehabilitation, new engine and well pump, new electrical switchgear, removal of former UV and ozone equipment, and complete automation of well operation, including chemical dosing. Once Well 5 is returned to service, the project will move to Segerstrom Well No. 1.

Regular project updates to the Committee will be provided as physical construction work at each well site is completed and the well is returned to service.



FINANCIAL IMPACT

In Fiscal Year 2017, \$2,510,000 is budgeted for construction, construction management, and engineering support services during construction. No funds have been expended in FY 2017.

	<u>Project Estimate Amounts</u>	<u>Project Cost Amounts</u>
Project Estimate (FY 2016)	\$12,032,045	
Original Contracts		\$12,032,045
Change orders		NA
Requested funding		NA
Revised Contracts		NA
Actual spent to date		\$ 757,263
Revised Project Estimate	\$12,032,045	

ATTACHMENTS

None.



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, PE, Assistant General Manager
DATE: August 16, 2016
SUBJECT: Pipeline Integrity Program Update

RECOMMENDATION

Recommend that the Board of Directors approve a contract change order for an additional \$22,770 for MEI-Charlton (MEIC) Lab for additional sample preparation and evaluation of additional pipeline samples.

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 March 15, 2014, the Board adopted Resolution No. 1442 Replacement of Assets to supersede Resolution No. 1268 to better define the concept of pipeline useful life introduced in Resolution No. 1268.

On March 17, 2015, the E&O Committee approved a contract with Michael Baker International, Inc. to provide consulting services for the Pipeline Integrity Testing Program.

On January 19, 2016, the Board received an update on the progress of the Pipeline Integrity Testing Program, and approved contracts with Paulus Engineering, Inc. to remove pipeline segments for testing and to MEIC Lab for destructive testing.

BACKGROUND

Staff is implementing Resolution No. 1442 Replacement of Assets, adopted by the Board on March 15, 2014. Resolution No. 1442 Replacement of Assets utilizes two metrics to assess the remaining useful life:

1. Nondestructive testing (NDT) of 1% of the system (~3 miles each year) to measure the pipeline wall thickness; and
2. Destructive testing methodologies of pipe segments shown by nondestructive testing to have less than 70% of wall thickness remaining compared to a new pipe.

DISCUSSION

Non-Destructive Testing

Approximately five miles of Asbestos Cement Pipe (ACP) have been tested to date using non-destructive testing methods. The next three miles of non-destructive pipe to be tested is scheduled for the week of September 12, 2016. Approximately 10,814 feet of the five miles tested were candidates for destructive testing.



Destructive Testing

Of the five miles of ACP that have received non-destructive testing, ten ACP segments were selected for sampling and destructive testing. In addition to the ACP segments, three segments of ferrous pipeline were also selected for destructive testing. Two of these segments were selected for their known history of failures. The third is a cast iron pipeline in 19th street that was installed prior to 1951 and has reached its age-based useful life estimate of 65 years. These samples were collected in May and June 2016 and shipped to MEIC Lab for destructive testing. Testing is underway and results are expected mid-September. The following tests are being conducted:

ACP Tests:

- Scanning Electron Microscopy
- Phenolphthalein Stain Testing
- Crush Testing
- Hydrostatic Burst Testing

Ferrous Pipe Tests:

- Metallographic examination
- Chemical composition
- Ultrasonic
- Dye Penetration
- Tensile testing
- Hardness testing
- Pressure Testing

The Board authorized \$95,590 to MEIC for destructive testing of 11 ACP segments (including a sample collected from the South Coast Plaza AC pipeline break in October 2015) and three ferrous pipeline segments. Since the authorization was issued in February 2016, several changes have occurred:

1. An AC pipeline break occurred at Milboro, and a sample of the break was recovered for testing.
2. A break also occurred in the Placentia Avenue CMLC line, and MEIC proposed a complete corrosion chemical and biochemical analysis, and failure analysis of the site of failure.
3. All of the samples collected in the field require additional cutting and preparation of the ends for use in the pipe burst pressure testing apparatus. While some end preparation is included in the original quote, the unevenness of the pipe ends from breaking and cutting in the field requires additional work from the lab to smooth the rough ends to fit evenly in the hydrostatic pressure testing apparatus to ensure reliable test results.

The additional cost for the additional work is \$22,770, bringing the total Purchase Order to \$118,360. It is therefore recommend that the Board consider authorizing approval of the additional expenditure.

Next Steps

Once the laboratory analysis is complete and the report is received, the Pipeline Integrity Program Consultant will make recommendations for the remaining useful life of the segments tested. It is anticipated that the results will be presented to the Engineering and Operations Committee at the October 2016 meeting. In addition, the Consultant and staff are selecting the next three miles of pipeline for non-destructive testing in September 2016.



FINANCIAL IMPACT

In Fiscal Year 2017,\$335,000 is budgeted; no funds have been expended in FY 2017.

	<u>Project Estimate Amounts</u>	<u>Project Cost Amounts</u>
Initial Project Estimate (FY 2015)	\$ 584,500	
Original Contracts		\$ 767,942
Change orders		\$ (31,034)
Requested funding		<u>\$ 22,770</u>
Revised Contracts		<u>\$ 759,678</u>
Actual spent to date		\$ 479,937
Revised Project Estimate	\$ 759,678	

ATTACHMENTS

None.

REPORTS:

10. REPORT OF THE GENERAL MANAGER:

REPORTS:

11. DIRECTORS' REPORTS AND COMMENTS: