



*Dedicated to  
Satisfying our Community's  
Water Needs*

**AGENDA  
MESA WATER DISTRICT  
BOARD OF DIRECTORS  
Tuesday, April 18, 2017  
1965 Placentia Avenue, Costa Mesa, CA 92627  
3:30 p.m. Special Board Meeting**

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**ENGINEERING AND OPERATIONS COMMITTEE MEETING  
Tuesday, April 18, 2017 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. Water Operations Status Report
6. Municipal Water District of Orange County Activities Update
7. Orange County Water District Activities 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:**

8. On-Call Concrete and Paving Services

**REPORTS:**

9. Report of the General Manager
10. Directors' Reports and Comments



## INFORMATION ITEMS:

11. SCADA System Maintenance and Support Services
12. MWRP Performance Support Services

*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.*

*Members of the public desiring to make verbal comments utilizing a translator to present their comments into English shall be provided reasonable time accommodations that are consistent with California law.*

*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](http://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 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 &amp; 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. Backflows tested on 1/4/17. Fireline backflow tested on 1/30/17. Meter and box placement on 2/23/17. Backflow tested on 3/1/17. (4/13/17)</p>
MC 2149	1620-1644 Whittier Ave and 970 16th St	89 Single Family Homes	<p>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. Flow-thru tested on 8/25/16 and 9/8/16. Rock base and meters installed on 11/3/16. Flow-thru check on 12/1/16. (4/13/17)</p>

# 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	<p>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. Adjacent supporting 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. Pipeline lateral installed on 10/5/16. Backflows tested on 10/24/16. Turned on mainline on 11/18/16. Site visit on 3/14/17, construction of parking garage and apartment complex in progress. Irrigation meters will be installed near project completion. (4/13/17)</p>
MC 2196	580 Anton Ave	250 Unit Apartment Complex	<p>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. Valve replaced on 10/3/16 to allow for abandonment. Pressure test and backflow placement on 3/6/17. Bac-t test on 3/18/17. (4/13/17)</p>
MC 2203	1239 Victoria Street	28 Single Family Homes	<p>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. Backflows tested on 12/7/16. Site visit on 2/6/17, empty lots remain. (4/13/17)</p>

# DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
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. Water main turned on 7/21/16. Services installed and locked off on 9/6/16. Meter installation on 10/28/16. Backflows tested on 11/16/16. Backflow tested on 12/9/16. Rock base on 2/1/17. Service placement on 2/16/17. Meters installed on 3/28/17. Backflows tested on 3/30/17. (4/13/17)
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. Fees paid and permit issued on 11/4/16. Pre-con held on 2/1/17. (4/13/17)
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. Attended pre-con meeting on 9/1/16. 3 - 1 inch meters and meter boxes installed on 9/29/16. Site visit on 2/6/17, homes in construction. (4/13/17)
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. Pre-construction meeting held on 11/15/16. Service installed on 1/3/17. Hydrant relocation on 1/24/17. Meters installed on 3/15/17. (4/13/17)
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. Regular site visit on 12/4/16. Letter sent regarding outstanding items on 4/10/17. (4/13/17)

# DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
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 12/4/16 for project status. Letter sent regarding permit expiration on 3/9/17. Owner contacted on 3/14/17. Awaiting final fee payment. (4/13/17)
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. Mainline installed on 8/24/16. Hydrant laterals installed on 8/25/16. Services installed on 9/1/16. Mainline installed on 9/20/16. Pressure and Bac-T test on 9/28/16. Laterals installed on 9/29/16 and 10/5/16. Mainline charged on 10/17/16. Angle stop adjusted on 12/6/16. Meter and meter box placement on 1/5/17. Services adjusted to grade on 3/2/17. Meter installation on 3/24/17. (4/13/17)
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. Demolition of existing services on 8/16/16. Mainline installation on 12/6/16. Service laterals installed on 1/9/17. Pressure test on 2/6/17. Bac-t test on 2/15/17. Bedding and service line placement on 4/3/17. (4/13/17)
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. Regular inspection site visit on 11/4/16 with no progress to report. Site visit on 1/30/17, homes in construction. (4/13/17)
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. Fees paid and permit issued on 5/10/16. Meter installed on 6/13/16. Regular inspection site visit on 11/4/16 with no progress to report. Letter sent regarding outstanding items on 4/10/17. (4/13/17)

## DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
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. Fees paid and permit issued on 11/18/16. Water service installed on 12/1/16. Rock base installed on 1/3/17. Meters installed on 4/5/17. (4/13/17)
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. Regular inspection site visit on 11/4/16 with no progress to report. Site visit on 1/30/17, homes in construction. (4/13/17)
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. Owner contacted on 3/14/17, construction on-hold. (4/13/17)
MC2252	1100 South Bristol Street	Ganahl Lumber	Plans received and plan check fees paid on 6/1/16. Hydrant flow test completed on 9/7/16. Final plan check completed and returned on 10/28/16. Fees paid and permit issued on 11/29/16. On site construction has begun, contractor notified to notify Mesa Water for water utility inspection. (4/13/17)
C003-16-01	788 Center Street	2 Single Family Homes	Plans received and plan check fees paid on 6/28/16. Plans returned on 7/14/16. Fees paid and permit issued on 1/6/17. (4/13/17)
C004-16-01	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. Fees paid and permit issued on 8/24/16. Manifold installed on 9/27/16. Meters and backflows installed on 11/13/16. Site visit on 3/14/17, construction in progress. (4/13/17)
C0005-17-01	22nd and Santa Ana	12 Single Family Homes	Plans received and plan check fees paid on 7/22/16. Plans returned on 8/3/16. Fees paid and permit issued on 9/28/16. Manifold installed on 11/2/16. Service abandonment on 12/7/16. Meter installation on 12/19/16. Meters installed on 3/15/17. (4/13/17)
C0006-17-01	155 Flower Street	2 Single Family Homes	Plans received and plan check fees paid on 8/1/16. Plans returned on 8/11/16. Fees paid and permit issued on 9/22/16. On site construction has begun, contractor notified to notify Mesa Water for water utility inspection. (4/13/17)

# DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
C0006-17-02	163 Flower Street	2 Single Family Homes	Plans received and plan check fees paid on 8/1/16. Plans returned on 8/11/16. Fees paid and permit issued on 9/22/16. On site construction has begun, contractor notified to notify Mesa Water for water utility inspection. (4/13/17)
C0007-17-01	1620 Orange	2 Single Family Homes	Plans received and plan check fees paid on 8/10/16. Fees paid and permit issued on 2/16/17. Service and meter placement on 3/27/17. (4/13/17)
C0008-17-01	410 Walnut Place	4 Single Family Homes	Plans received and plan check fees paid on 8/10/16. Plans returned on 8/24/16. Awaiting resubmittal. Fees paid and permit issued on 4/7/17. (4/13/17)
C0010-17-01	1053 W. Wilson	2 Single Family Homes	Plans received and plan check fees paid on 8/30/16. Plans picked up on 10/4/16. Fees paid and permit issued on 11/18/16. (4/13/17)
C0011-17-01	527 Anton	Fire Line Backflow Relocation	Plans received and plan check fees paid on 9/8/16. Fees paid and permit issued on 4/10/17. (4/13/17)
C0012-17-01	2300 Harbor Blvd	33 Detached Condos	Plans received and plan check fees paid on 9/15/16. Plans picked up on 10/18/16. Plans submitted for second plan check on 12/6/16. Fees paid and permit issued on 3/24/17. (4/13/17)
C0012-17-02	929 Baker Street	55 Detached Condos	Plans received and plan check fees paid on 9/27/16. Plans picked up on 10/18/16. Plans submitted on 2/22/17. Plans returned on 3/6/17. Fees paid and permit issued on 3/21/17. (4/13/17)
C0013-17-01	2803 Royal Palm Drive	Fire Station	Plans received and plan check fees paid on 8/25/16. Plans picked up on 10/4/16. Plans resubmitted on 3/1/17. Plans returned to the City on 3/22/17. (4/13/17)
C0014-17-01	Segerstrom Center for the Arts	Water Main Relocation	Plans received and plan check fees paid on 10/19/16. Plans picked up on 11/5/16. Fees paid and permit issued on 2/16/17. Mainline placement on 4/7/17. (4/13/17)
C0015-17-01	548 Victoria Street	5 Single Family Homes	Plans received and plan check fees paid on 10/26/16. Plans returned on 11/9/16. Awaiting final fee payment. (4/13/17)
C0016-17-01	3101 Redhill	Commercial Building	Plans received and plan check fees paid on 11/22/16. Plans returned on 11/29/16. Meeting held with owner on 1/5/17. Awaiting final fee payment. (4/13/17)
C0017-17-01	166 Rochester	2 Single Family Homes	Plans received and plan check fees paid on 12/7/16. Plans returned on 12/15/16 and resubmitted on 1/5/17. Awaiting final fee payment and mylar drawing. (3/10/17)
C0018-17-01	1951 Tustin	2 Single Family Homes	Plans received and plan check fees paid on 12/6/16. Plans returned on 12/7/16. Awaiting final fee payment. (3/10/17)



# DEVELOPER PROJECT STATUS REPORT

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FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
C0019-17-01	535 Anton	Water Service for Lunch Area	Plans received and plan check fees paid on 12/29/16. Plans returned on 1/12/17. Awaiting final fee payment. (4/130/17)
C0020-17-01	2136 Thurin	4 Single Family Homes	Plans received and plan check fees paid on 1/13/17. Fees paid and permit issued on 2/28/17. Meters installed on 4/7/17. (4/13/17)
C0021-17-01	2068 Maple Ave	4 Single Family Homes	Plans received and plan check fees paid on 1/13/17. Awaiting final fee payment. (4/13/17)
C0022-17-01	330 E 17th Street	Bar/Lounge	Plans received and plan check fees paid on 3/22/17. Plans returned on 4/6/16. (4/13/17)
C0024-17-01	1989 Orange	Meter Upgrade	Plans received and plan check fees paid on 3/27/17. Awaiting final fee payment. (4/13/17)
C0025-17-01	2053 Tustin	2 Single Family Homes	Plans received and plan check fees paid on 3/22/17. Plans returned on 4/7/16. (4/13/17)
C0026-17-01	326 E 16th Street	2 Single Family Homes	Plans received and plan check fees paid on 3/20/17. Plans returned on 4/7/16. (4/13/17)
C0027-17-01	231 Flower Street	Meter Upgrade	Plans received and plan check fees paid on 3/23/17. Awaiting final fee payment. (4/13/17)
C0028-17-01	400 Enclave Circle	Recycled Water Conversion	Plans received and plan check fees paid on 3/23/17. Plan check in progress. (4/13/17)

**MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT**  
**April 2017**

**Project Title:** MWRFF Finished Water Quality Polishing Project

**File No.:** M17-005

**Description:** Enhance finished water quality at the MWRFF 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 MWRFF 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 MWRFF 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. Construction activities began at the MWRFF on 9/21/16 with demolishing for the SBS Tank pad and trenching for new piping. Up to date the contractor has installed the following:

- Supports and skid mounted SBS and Sodium Hypochlorite (SH) metering pumps
- SBS and SH double containment piping

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- Power, control conduits, wiring and termination in the Chemical Building.
- Concrete pad for the new Clean in Place (CIP) Pump
- CIP suction and discharge piping system
- Pneumatic actuators onto the existing degasifier inlet valves
- Softened water piping including tie in to existing system, pneumatic and block and bleed valves. Completed pneumatic air system
- New SS316 piping and air-vacuum valves for the Carbonic Acid System
- SBS tank containment area
- SBS tank and appurtenances including piping, vents, pneumatic valve and level indication
- new chemical analyzers
- CIP pump
- New paving
- Ammonia diffuser in
- Integration of newly installed equipment with SCADA
- System disinfection and startup
- Demolished and removed the temporary SBS system

The project is completed. The contractor is working with vendors on addressing minor warranty items.

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

**File No.:** M 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

## MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

April 2017

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 predesign 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 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

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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. Mesa Water® staff, MBI and CCC met on 10/6/16 and discussed mitigation conditions. Project approved at CCC Public Hearing on 12/7/16. MBI is working on finalizing the HMMP and construction plans and will submit them to CCC. Coastal Development Permit for Construction is anticipated in early May, 2017. Project in progress.

**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

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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 began at Well 5 on October 3, 2016 with demolition and well rehabilitation beginning in the first week. Video of Well 5 showed scale on the louvers, and potential failure of an unused sounding tube and a small area of the louvers potentially requiring swage patches. Repair completed on November 29, 2016. Well 5 rehabilitation resumed on December 3, 2016. Well 5 chemical facility pad has been constructed and is awaiting a weather forecast of 8 days with no predicted rain to apply the chemical-resistant coatings to the concrete. Well 5 pumping development began on January 4, 2017, and produced fine sand at pumping rates above 1100 gpm. Repairs were made to Well 5, and test pumping performed in February showed acceptable well production over 2500 gpm with manageable sand. Construction continues at the well 5 site, with the chemical tanks set and the chemical facility roof nearly complete. A start up planning meeting was held on March 29, 2017, with Well 5 startup expected in May 2017. Construction of the Well 7 chemical facility is also in progress.

**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 and 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

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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. A purchase agreement for an industrial site in Santa Ana is being negotiated. The purchase agreement includes a 45 day contingency period, escrow close date of March 31, 2017, and 18 month leaseback to the seller. The Phase 1 Environmental Site Assessment and Property Condition Assessment were received on February 23, 2017, and showed the site and property to be in good condition. The lease was executed on March 27, 2017, and escrow closed on April 5, 2017. The real estate consultant is continuing to look for an additional property for a second new well site.

**Project Title:** MWRF Parking Project

**File No.:** M 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

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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 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. Board approval obtained on August 11, 2016. Agreement sent to the City for execution and recording on 9/7/16. Recorded Agreement received from the City on 10/19/16.

**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



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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. Lab results, including estimates of remaining useful life, were received on October 24, 2016. Non-destructive testing of the next 3 miles of ACP was completed on September 16, 2016, and the draft report was received October 1, 2016. All of the ACP and Cast Iron Pipe (CIP) showed less than 70% remaining wall thickness compared to its assumed original thickness. Extraction of six sections of ACP and two sections of CIP are in process for 2017 destructive testing. ACP samples will be sent to WSP Canada for destructive testing. CIP samples will be sent to McWane Ductile's lab in Ohio for destructive testing. Destructive testing results are expected in June 2017. A Request for Qualifications for consulting services for the Pipeline Integrity Program will be developed and released in May 2017.

**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. Conceptual layout work has been completed.

**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.

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**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. Contract has been executed and returned to Goss Engineering. Project kick-off and notice to proceed was issued on November 30, 2016. 50% drawings have been delivered for review and comments returned. Stakeholder meeting was held on February 2, 2017 to provide comments for the new VRF system 50% design. 90% design drawings and specifications were submitted for Mesa Water® review on March 10, 2017. Bid package is currently being developed by the consultant.

**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. Bids for the pump extraction were submitted and reviewed. The item was presented to the Engineering and Operations Committee at the September 20, 2016 meeting. Contract has been executed. Field assessment was completed on October 19, 2016. Factory pump testing scheduled in early January 2017. Further field tests conducted on December 2, 2016. Pump 2 from Reservoir 1 was removed and sent to the factory test facility on January 3, 2017. Factory testing was completed on February 27, 2017 with results aligning with the results obtained in the field. The pump has undergone a physical assessment and a refurbishment scope of work developed. The pump will be installed and operational by mid-April 2017. The

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motor control system technical memo was reviewed and comments returned to the consultant on March 6, 2017.

**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.

**Project Title:** Other Agency Project Coordination

**File No.:** M 2106

**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 (Sukut) 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. Approx. 110 ft. long section of existing 12"

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water main removed and existing box culvert demolished on 7/25/16. Construction of the new box culvert and water main replacement were completed in September, 2016. Completion of the Channel Improvements Project is scheduled for mid-February, 2017. Final project walk through was held on 2/23/17. Project is completed. Awaiting invoice for the water main replacement.

**Project Title:** Well 8 Demolishing Project

**File No.:** M 2219

**Description:** Prepare Well 8 demolishing plans and remove above-ground portions of the well and onsite facilities at the well facility to the scope and extent acceptable to the land owner Interinsurance Exchange of the Automobile Club of Southern California (the "Exchange") to return the site to its near original condition.

**Status:** Prepare Well 8 demolishing plans and remove above-ground portions of the well and onsite facilities at the well facility to the scope and extent acceptable to the land owner Interinsurance Exchange of the Automobile Club of Southern California (the "Exchange") to return the site to its near original condition.

Status: The Consultant has performed the required site Investigation and final design Services. The Consultant provided a 90% design which is being reviewed by Mesa Water. On February 6, 2017, Mesa Water® staff met with the Exchange personnel and discussed the 90% plan review comments. The comments will be incorporated into the 100% design. In November 2016, the property owner assigned a project manager to work with Mesa Water® to move the project forward. Well 8 demolition is scheduled for early June and should take approximately 60 calendar days to complete. Received 100% construction plans on 3/30/17. Staff is reviewing the plans.

# Water Quality Call Report

## March 2017

**Date:** 3/2/2017  
**Source:** Phone/Visit  
**Address:** 1575 and 1585 Sunflower  
**Description:** Property management requested site visit because tenants reported dirt in the water and low flow in sinks and toilets.

**Outcome:** Unit 1575 was vacant and unit 1585 was occupied. Both units were sampled and water taken at the outside hose bib was clear with good pressure and normal pH, temperature, and chlorine residuals. For unit 1585, pressure was good for one bathroom but not for another and appears to be an internal plumbing issue.

**Date:** 3/10/2017  
**Source:** Phone/Visit  
**Address:** 1555 Mesa Verde  
**Description:** Customer concerned about the blue color/tint in the water since that morning.

**Outcome:** Water sample from outside hose bib was clear as well as the water from the backflow serving the apartment. Apartment Unit #32A is on the upper level and #32C is directly below. Both units reported seeing blue water. The water in both units were clearing up except the refrigerator from Unit #32A, which was still showing a strong blue color. There appears to be an internal cross connection with Unit #32A's toilet tank water containing a blue cleaning tablet. It was explained to the customer and apartment management that the water coming in to the apartment was clear and they were advised to not drink the water until they investigate the situation further and eliminate the cross connection.

**Date:** 3/15/2017  
**Source:** Phone/Visit  
**Address:** 2077 West Place  
**Description:** Customer reported sulfur odor from hot water in shower that was rarely used.

**Outcome:** Customer was not home during site visit. Staff checked the water at the outside hose bib and the water appears clear with no odor. Customer was advised to flush the water heater and follow the manufacturer's maintenance.

**Date:** 3/27/2017  
**Source:** E-mail/Website  
**Address:** Scott Place  
**Description:** Customer inquired about any changes to water quality that may have killed all her fish after recent water change out from the fish tank.

**Outcome:** Responded to customer's e-mail and let her know that there has been no change in water treatment or operation. Informed the customer that the water is disinfected with chloramines and she may have to neutralize both chlorine and ammonia. Customer was also advised to consult with fish tank/aquarium expert.

**Date:** 3/31/2017  
**Source:** Phone  
**Address:** 19th Street  
**Description:** Customer wanted to know about fluoride in the water.

**Outcome:** Explained to customer about the Annual Water Quality Report and provided him the range of fluoride levels detected. Customer was satisfied.

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

**ENGINEERING & OPERATIONS COMMITTEE**

**Policy Assignments for 2017**

<b>Policy Name</b>	<b>Resolution</b>	<b>Date Adopted</b>	<b>Revision Schedule</b>	<b>Next Review</b>
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	TBD
Standard Specifications and Drawings	Resolution No. 1449	01/12/17	Review and update as needed	TBD

Water Operations Status Report  
July 1, 2016 -March 31, 2017

Operations Department Status Report	Wk Unit	Plan Days	Act Days	Plan Qty	Act Qty	Plan Cost	Actual Cost
<b>01 - HYDRANTS</b>							
WD-0101 - HYDRANT MAINTENANCE	HYDRANTS	127	177	2537	3376	\$100,518	\$118,884
WD-0102 - HYDRANT PAINTING	HYDRANTS	12	8	317	280	\$10,265	\$4,588
<b>Program 01 TOTAL</b>		139	185			\$110,783	\$123,472
<b>02 - VALVES</b>							
WD-0201 - DISTRIBUTION VALVE MAINTENANCE	VALVES	84	113	1804	2152	\$67,861	\$78,113
WD-0202 - NIGHT VALVE MAINTENANCE	VALVES	8	1	82	12	\$6,453	\$321
<b>Program 02 TOTAL</b>		92	114			\$74,314	\$78,434
<b>03 - METERS</b>							
WD-0301 - NEW METER INSTALLATION	METERS	14	10	90	96	\$25,321	\$37,617
WD-0302 - RAISE REPLACE METER BOX	BOXES	17	12	76	25	\$17,255	\$8,101
WD-0305 - ANGLE STOP/BALL VALVE REPLACE	REPLACE	50	72	100	142	\$48,851	\$45,268
WD-0306 - LARGE METER TEST/REPAIR - C	TESTS	13	14	88	71	\$10,188	\$9,169
<b>Program 03 TOTAL</b>		94	108			\$101,615	\$100,155
<b>04 - MAIN LINES</b>							
WD-0400 - MAIN LINE REPAIR	REPAIRS	90	107	15	20	\$79,645	\$79,743
WD-0402 - AIR VAC MAINTENANCE/REPAIR	REPAIRS	20	14	119	90	\$15,661	\$8,789
<b>Program 04 TOTAL</b>		110	121			\$95,306	\$88,532
<b>05 - SERVICE LINES</b>							
WD-0501 - SERVICE LINE REPAIR	REPAIRS	35	73	16	22	\$24,333	\$47,273
<b>Program 05 TOTAL</b>		35	73			\$24,333	\$47,273
<b>06 - CAPITAL</b>							
CAP AV - CAPITAL AIR VACUUM REPLACE	AIR VACS	2	4	3	3	\$1,198	\$2,267
CAP BI - CAPITAL BYPASS & METER INSTALL	REPLACE	5	0	2	0	\$4,163	\$0
CAP FH - CAPITAL HYDRANT UPGRADE	HYDRANTS	105	123	15	26	\$121,532	\$128,658
CAP LM - CAPITAL LARGE METERS	METERS	9	11	38	37	\$34,282	\$25,883
CAP MV - CAPITAL MAINLINE VALVE REPLACE	VALVES	67	112	14	18	\$84,670	\$90,012
CAP SL - CAPITAL SERVICE LINE REPLACE	SERVICES	19	13	8	3	\$16,477	\$9,108
CAP SM - CAPITAL SMALL METERS	METERS	90	90	901	1051	\$117,432	\$150,629
CAP SS - CAPITAL SAMPLE STATION REPLACE	STATIONS	5	5	5	11	\$4,187	\$3,531
<b>Program 06 TOTAL</b>		302	358			\$383,941	\$410,088
<b>VACANT POSITIONS</b>			7				\$4,949
<b>TOTAL</b>						\$790,292	\$852,903





*Dedicated to  
Satisfying our Community's  
Water Needs*

## MEMORANDUM

TO: Engineering and Operations Committee  
FROM: Phil Lauri, P.E., Assistant General Manager  
DATE: April 18, 2017  
SUBJECT: Municipal Water District of Orange County Activities Update

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### RECOMMENDATION

This item 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

None.

### BACKGROUND

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

#### **California WaterFix**

The Delta Science Program staff convened a phased independent scientific peer review process to review and evaluate the methods and scientific information used in developing the California WaterFix (CWF) Biological Opinions. Metropolitan Water District of Southern California (MWD) staff attended the independent review panel meeting held in January 2017. On March 10, the final Independent Review Panel Report for the 2016-2017 California WaterFix Aquatic Science Peer Review Phase 2B was released to the public. The review panel found improvement in the state and federal fish agencies' approaches to assessing potential impacts of CWF, however, the panel noted that there could be clarification in the way the CWF elements fit together to contribute to the protection of the Endangered Species Act listed species. MWD staff is reviewing the review panel report and is continuing to evaluate the analytical tools and scientific information used in developing the CWF Biological Opinions.



## **Poseidon Huntington Beach**

On March 20, 2017, Orange County Water District sent a letter to Santa Ana Regional Water Quality Control Board indicating the California Environmental Quality Act process for distributing water from a potential Huntington Beach Desalination Project would be placed on hold until the facility is permitted. Poseidon is continuing to work on permitting issues which are estimated to be completed in early 2018.

## **Governor Brown Declares End to Drought Emergency**

In early April, Governor Brown issued an executive order that lifts the drought emergency in all but a handful of San Joaquin Valley counties. However, he emphasized that the need for conservation has not gone away. The ban on wasteful water practices, such as hosing down driveways or watering a yard when it's raining, will continue.

The State Water Resources Control Board is developing water budgets for urban agencies that will go into effect in 2021. These budgets will be more flexible than the drought cuts and will take into account local factors such as summer temperatures, evaporation rates, and population. The State Water Resources Control Board will give each urban water district a number for how much water it can use in total every year; how the agencies meet that target will be up to them. If they fall short, in 2025 the Board can start demanding conservation steps.

## LAST MONTH'S ISSUES

### **H.R. 1269 (Lamalfa, R-CA) – Sacramento Valley Water Storage and Restoration Act**

MWDOC voted to support H.R. 1269 and sent a letter to the bill's author(s) and members of the Orange County Congressional delegation.

### **Water Supply Condition Update and Orange County Performance Report for January, 2016**

1) For the month of January 2017, Orange County saved 26.94% (compared to the historical average for January 2013-2014), exceeding the MWDOC goal of 10%. 2) Since June 2015, Orange County cumulative water savings have totaled 21.25%. 3) Orange County has saved 183,000 AF compared to CY 2013.

The Northern California accumulated precipitation (8-Station Index) is reporting **83 inches or 201% of normal as of March 29, 2017**. In just the month of March, accumulated precipitation reached 40.8 inches, which is 147% of normal compared to the historical average.

Based on these conditions and the ongoing uncertainty of how Oroville Dam will be operated this spring/summer, the Department of Water Resources (DWR) has not changed the State Water Project (SWP) "Table A" allocation from 60%. This allocation will provide MWD with approximately 1,146,900 AF in State Water Project (SWP) deliveries this water year; already equal to MWD's final SWP's Allocation last year.



### **Induction of New MWD Directors**

- Zareh Sinanyan was inducted to the Board representing the City of Glendale.
- Phillip D. Hawkins was inducted to the Board representing Central Basin Municipal Water District.
- Pedro Aceituno was inducted to the Board representing Central Basin Municipal Water District.

### **ACWA JPIA Executive Committee**

MWDOC Board voted to support Fred Adjarian, Paul Dorey, Kathleen Tiegs and Melody McDonald for the ACWA JPIA Executive Committee.

### UPCOMING ISSUES

- MWDOC Reserve Policy
- OC Reliability Study TM-4
- Development of the Annual Budget

### FINANCIAL IMPACT

None.

### ATTACHMENTS

None.



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## MEMORANDUM

TO: Engineering and Operations Committee  
FROM: Phil Lauri, P.E., Assistant General Manager  
DATE: April 18, 2017  
SUBJECT: Orange County Water District Activities Update

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### RECOMMENDATION

This item 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

#### **Proposed FY 2017-18 Capital Improvement Program (CIP) Budget**

The CIP projects are funded by debt proceeds, state loans, grants, state revolving fund loans, and \$7 million from operating revenues (Pay-as-you-go Program). The total proposed CIP cost for the FY 2017-18 budget is \$34.4 million and includes 13 projects.

The CIP is primarily driven by the following objectives: 1) increasing the District's recharge capacity to allow for increased sustainable production out of the groundwater basin; 2) protecting water quality by removing contaminated groundwater from the basin; and 3) protecting the coastal portion of the groundwater basin.

FY 2017-18 CIP Projects include:

- Mid Basin Injection
- GWRS Final Expansion (Design)



- Alamitos Seawater Barrier Improvements
- Santiago and Burris Basin Tracer Study
- GWRS Flow Equalization Tank (Design)
- North Basin Groundwater Protection Project
- South Basin Groundwater Protection Project
- Prado Sediment Management
- Burris Basin Booster Pump Station and Outlet (Design)
- North Basin Extraction Well
- Watershed and Wildlife Exhibit (Design)
- GAP Connection to GWRS (Design)
- Conrock-Warner Transfer Tube (Design)

### **Groundwater Remediation Monthly Status Update**

- North Basin current activities include 1) Field studies including installation of 14 monitoring wells in eight locations with the project going out to bid in May and an estimate of one year to complete the wells, and 2) Installation of EW-1 Pumping System.
- North Basin Appeal Update: Oral arguments took place on March 29, 2017. Questions to both sides were on subjects such as causation, investigative costs, National Contingency Plan (NCP) compliance, and the OCWD Act.
- South Basin Remedial Investigations and Feasibility Studies (RI/FS): Current activities include 1) Field studies including installation of 24 monitoring wells, 2) responding to planning document comments from the Department of Toxic Substance Control and Regional Water Quality Control Board, and 3) kick-off meeting with the project contractor. Well installation project is scheduled to be completed by the end of the year.
- MTBE: Trial scheduled to begin October 17, 2017.

### **LAST MONTH'S ISSUES**

#### **Public Hearing on 2015-16 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization**

RECOMMENDATION: Receive public hearing comments and file Engineer's Report.

As required by the District Act, the Engineer is to report on the Groundwater Conditions, Water Supply and Basin Utilization.

A summary of the Engineer's report is as follows:

- Precipitation for the water year July 1, 2015 through June 30, 2016 within the District's boundaries averaged 8.4 inches, which was 62% of the long-term average rainfall.
- Santa Ana River flow past Prado Dam for the water year totaled 113,780 acre-feet, which was fifty-one percent of the 30-year average flow.
- Flow past the District's spreading grounds (including any flow from the Santiago Creek) that was lost to the Pacific Ocean totaled 610 acre-feet.
- Total water demands within the District for the 2015-2016 water year were 367,402 acre-feet (excluding water used for groundwater replenishment and barrier maintenance).



- Supplemental water used for groundwater replenishment and barrier maintenance during the water year totaled 47,524 acre-feet (excludes any available In-Lieu Program water).
- Groundwater production within the basin for the water year totaled 277,090 acre-feet (includes any available In-Lieu Program water) which was a nine percent decrease from the prior water year.
- The accumulated basin overdraft decreased from 381,000 acre-feet on June 30, 2015 to 379,000 acre-feet on June 30, 2016 using the three-layer approach and the new benchmark for full-basin conditions.

### **La Palma Recharge Basin Project: Authorize Notice of Completion to Los Angeles Engineering, Inc. and Ratify Change Orders 1-4**

1. Change orders to Los Angeles Engineering, Inc. for a total amount of \$77,543; and
2. Accept completion of work and authorize filing a Notice of Completion for Contract No. LPRB-2015-1; La Palma Recharge Basin.

The La Palma Recharge Basin Project included:

- Excavate/haul 248,000 cy of sandy soil, 180,000 cy retained by OCWD
- Flow Control Structure
- Connection to GWRS pipeline
- Pump Station
- Monitoring well
- Process Controls/Fiber Optics
- Mira Loma Basin Air-Gap Structure

The four change orders equaled 1.09% of the total project. Total project costs are \$8.1 million.

### UPCOMING ISSUES

- GAP Study
- Poseidon Project
- IRWD Lawsuit
- North and South County Groundwater Clean-up
- Development of Annual Budget
- Setting of the RA and BPP

### FINANCIAL IMPACT

None.

### ATTACHMENTS

None.



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## MEMORANDUM

TO: Engineering and Operations Committee  
FROM: Phil Lauri, P.E., Assistant General Manager  
DATE: April 18, 2017  
SUBJECT: On-Call Concrete and Paving Services

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### RECOMMENDATION

Recommend that the Board of Directors award contracts for a period of three years with two one year renewable options with an annual amount of \$200,000 each to Ben's Asphalt, Inc., Copp Contracting, Inc., and The RJ Noble Company for the cumulative annual not-to-exceed amount of \$200,000 across all contracts to provide on-call Concrete and Paving Services and to authorize execution of the contracts.

### STRATEGIC PLAN

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

### PRIOR BOARD ACTION

At its March 21, 2017 meeting, the Engineering and Operations Committee was presented this topic as an information item.

### BACKGROUND

Emergency repairs caused by unexpected water main breaks result in significant pavement damage. Saturated soil, undermined pavements, and lifted curbs and gutters are repaired on a case-by-case basis through a traditional construction contract. This process results in concrete and pavement restoration taking four to eight weeks as a bid process; and proper bonding and insurance are required for each project. In an effort to reduce the period of time between an unexpected water main or service line break repair and the pavement restoration, Mesa Water District (Mesa Water®) has solicited prequalifications for on-call concrete and paving services. On-call pavement contracts will allow for more expedient pavement restoration and less impact to residents.

### DISCUSSION

Construction bids for on-call concrete and paving services were solicited from nine contractors on two separate occasions. One bid was received from the first bid solicitation request and two bids were received from the second bid solicitation request. The low response rate was discussed with the contractors and it was determined, that due to quantities of scale, it was difficult to provide competitive unit prices. For example, the second bid solicitation request resulted in extremely variable pricing, which ranged from \$10.50 per square foot to \$300 per square foot for asphalt replacement. Evaluation of viable options to facilitate this work indicates the more efficient approach would be to select paving contractors based on qualifications and past experience working with Mesa Water or the City of Costa Mesa.





In order to keep bids competitive, a letter proposal will be required with a 48 hour response time for each non-critical paving project, thus reducing the restoration period from four to eight weeks to less than two weeks. In the case of emergency work, work will be directed on a time and materials basis to the team that has available resources and satisfactory response time.

### **Selection Process**

Contractor qualifications were reviewed and evaluated further based on having successfully performed previous work for Mesa Water or the City of Costa Mesa.

The following contractors are being considered:

- Ben's Asphalt, Inc.
- Copp Contracting, Inc.
- The R.J. Noble Company

Contractor selection criterion was based on: 1) the quality of work, 2) pricing, 3) responsiveness, and 4) historical performance of work completed for Mesa Water or the City of Costa Mesa in the last 24 months. All three Contractors have performed high quality work, have been relatively competitive on larger paving projects, and received excellent reviews by the City of Costa Mesa staff.

Therefore, staff recommends that the Board consider awarding contracts for a period of three years with two one year renewable options with an annual amount of \$200,000 each to Ben's Asphalt, Inc., Copp Contracting, Inc., and The RJ Noble Company for the cumulative annual not-to-exceed amount of \$200,000 across all contracts to provide on-call concrete and paving services and to authorize execution of the contracts.

### FINANCIAL IMPACT

In Fiscal Year 2018, \$200,000 will be budgeted for on-call Concrete and Paving Services.

### ATTACHMENTS

None.



**REPORTS:**

9. REPORT OF THE GENERAL MANAGER:

**REPORTS:**

10. DIRECTORS' REPORTS AND COMMENTS:



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## MEMORANDUM

TO: Engineering and Operations Committee  
FROM: Tracy E. Manning, Water Operations Manager  
DATE: April 18, 2017  
SUBJECT: SCADA System Maintenance and Support Services

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### 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

None.

### BACKGROUND

Mesa Water's Supervisory Control and Data Acquisition (SCADA) system is a significant tool utilized by Water Operations to manage the water production and distribution systems. The SCADA system currently functions with high reliability and efficiency. Continuous maintenance and improvement of Mesa Water's SCADA system provides multiple benefits which include reliable remote monitoring and improved water quality via real-time operations data, enhanced operational functionality, and efficient work flow processes. Mesa Water is soliciting proposals from qualified firms to provide professional consulting support. The selected consultant shall provide professional programming and support, staff training and SOP development, maintenance, and troubleshooting activities.

### DISCUSSION

Mesa Water® is requesting proposals from qualified full-service professional firms specializing in SCADA systems for server, hardware, and software maintenance and support. A request for proposals was issued on March 28, 2017. Proposals are scheduled for receipt on April 20, 2017. Results of the selection process and a recommendation will be brought to a future Engineering and Operations Committee meeting.

### FINANCIAL IMPACT

Funds will be budgeted in Fiscal Year 2018 for SCADA System Maintenance and Support.

### ATTACHMENTS

None.



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## MEMORANDUM

TO: Engineering and Operations Committee  
FROM: Tracy E. Manning, Water Operations Manager  
DATE: April 18, 2017  
SUBJECT: MWRF Performance Support Services

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### 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

None.

### BACKGROUND

The Mesa Water Reliability Facility (MWRF) uses highly advanced membrane treatment technology to remove organic color from high-quality ground water. Mesa Water is soliciting proposals from qualified firms to provide professional consulting support. The selected consultant shall assist with monitoring membrane and overall MWRF performance, staff training and SOP development, and troubleshooting activities.

### DISCUSSION

Mesa Water® is requesting proposals from qualified full-service professional engineering firms specializing in membrane and nanofiltration technology to support MWRF operations. Support shall include performance monitoring and reporting, ongoing Standard Operating Procedures development and staff training, field troubleshooting activities, on-call support services, and investigation of proper operation of system controls and equipment. A request for proposals was issued on March 20, 2017. Proposals are scheduled for receipt on April 17, 2017. Results of the selection process and a recommendation will be brought to a future Engineering and Operations Committee meeting.

### FINANCIAL IMPACT

Funds will be budgeted in Fiscal Year 2018 for MWRF Performance Support Services.

### ATTACHMENTS

None.