ENGINEERING AND OPERATIONS COMMITTEE MEETING
Tuesday, October 20, 2015 at 3:30 p.m.

CALL TO ORDER

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

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

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

PRESENTATION AND DISCUSSION ITEMS:
Items recommended for approval at this meeting may be agendized for approval at a future Board meeting.

1. Natural Gas Engine Maintenance and Compliance Requirements

ACTION ITEMS:

2. Well Automation

3. Conservation Update

4. GIS Support Services

5. CLOSED SESSION:

   CONFERENCE WITH REAL PROPERTY NEGOTIATORS:
Pursuant to Government Code Section 54956.8:
Property: Portion of Assessor's Parcel Number 169-421-29
District Negotiator: General Manager
Negotiating Parties: Los Caballeros
Under Negotiation: Possible purchase of property for well site.

RETURN TO OPEN SESSION.

REPORTS:

6. Developer Project Status Report

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

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

ADJOURNMENT
MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: October 20, 2015
SUBJECT: Natural Gas Engine Maintenance and Compliance Requirements

RECOMMENDATION

Receive the presentation.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice Continuous Infrastructure Renewal and Improvement.

PRIOR BOARD ACTION/DISCUSSION

None.

INTRODUCTION

Mesa Water® provides approximately 6 billion gallons (~18,500 acre-feet) of water per year to its customers primarily using 5 local groundwater wells pumped directly to the distribution system and 2 deep aquifer groundwater wells treated through the Mesa Water Reliability Facility (MWRF). Average daily demands are 17.4 million gallons per day (MGD) with a maximum daily demand of 26.1 MGD. Mesa Water® uses a mix of electric motors and natural gas powered engines, which provides some level of redundancy in power sources and creates a more robust water supply system.

Mesa Water® relies on internal combustion engines for pumping water into the District’s water supply system at Reservoir I, Kemp Reservoir, and Well No. 5. All three engines operating at Reservoir I are 137 horsepower, four engines at Kemp Reservoir are 369 horsepower, and a single engine at the Well No.5 Facility is 625 horsepower. All engines are permitted to operate by the South Coast Air Quality Management District (SCAQMD) and subject to rule compliance. The Well No. 5 engine is also subject to United State Environmental Protection Agency (USEPA) requirements because it is more than 500 horsepower.

DISCUSSION

Maintenance Requirements & Frequency

SCAQMD Rule 1110.2 requires Mesa Water® to submit an Inspection and Monitoring Plan (I&M Plan). The purpose of the I&M Plan is to provide Mesa Water® with an approach for maintaining compliance with rules and permit conditions between biannual source tests. The Mesa Water I&M Plan is approved by SCAQMD and it provides an overview of the required preventive and corrective maintenance activity, scope, and frequency. SCAQMD rules and permit conditions also require the District to perform periodic maintenance on engines per the manufacturer’s recommendations. For example, Mesa Water's permit for the Reservoir II engines requires the replacement of the oxygen sensor every 2,000 operating hours and requires the cleaning or
replacement of catalyst elements every 8,000 operating hours. Engines also require periodic engine oil changes, tune-ups, and valve adjustments.

USEPA Federal rules require Mesa Water® to perform maintenance according to best management practices and manufacturer’s recommendations. The exception is for Well No. 5, which falls under more stringent standards due to its larger engine size. The permitted engines at both reservoirs and the Well No. 5 engine require Mesa Water® to perform maintenance every 1,440 operating hours. For low use engines such as the emergency generator engines, Mesa Water® is allowed to extend maintenance requirements, such as oil changes, by analyzing the oil sample to determine useful life. The Mesa Water Well No. 5 facility is required to perform an annual catalyst activity check by completing a test for carbon monoxide emissions.

General preventive and corrective maintenance on each engine is carried out according to Mesa Water’s preventative maintenance schedules and work orders stored in a Computerized Maintenance Management System (CMMS). Mesa Water® records the engine maintenance performed for each engine that includes the date of the activity, the engine operating hours, and a brief explanation of the maintenance activity.

**AQMD Testing and Action Points**

SCAQMD Rule 1110.2 and Mesa Water’s I&M Plan requires the District to develop an air-to-fuel ratio controller (AFRC) load table for establishing oxygen sensor set points. After establishing a load table, a test for oxides of nitrogen (NOx) and carbon monoxide (CO) is conducted to verify compliance with rule and permit conditions. After replacement of an oxygen sensor, a compliance verification test is required within 24 operating hours. A follow-up emission check after the oxygen sensor replacement is required within 100-150 operating hours.

Mesa Water® is required to perform a portable analyzer emissions check every 150 operating hours or on a weekly basis (whichever comes later). The emission check frequency is reduced to 750 hours or on a monthly schedule if the emission check continues demonstrating compliance, AFRC set-points are not altered, or the oxygen sensor is not replaced. Currently there is a provision in the rule that allows for continued operation on the reduced schedule after set-point adjustment if tests performed both before and after AFRC adjustment document compliance.

Mesa Water® notifies SCAQMD of equipment breakdown as required due to unplanned emission control or engine related hardware failure. If an engine experiences a breakdown of an engine hardware component, catalytic converter, or an electrical component, the incident is closed out by verifying compliance with the performance of an emission check which follows the approved SCAQMD portable analyzer testing procedure.

Rule 1110.2 requires the performance of a source test on an engine every 8,760 hours or two years, whichever comes earlier. The rule provides relief from source testing if the engine has operated less than 2,000 hours since the last source test. Following a source test, the report is due to the SCAQMD Enforcement Department within 60 days.
For the Well No. 5 facility, Federal rules require the performance of a test for carbon monoxide annually. Currently, Mesa Water® complies with the Federal rule requirement by utilizing the results for carbon monoxide obtained from a source test or from a test conducted according to USEPA test procedures.

**Reporting Requirements**

SCAQMD Rule 1110.2 requires that each facility submit a report by the 15th day of each calendar quarter and include all incidences of excess emissions checks, AFRC alarms, parameters out-of-range, and other deviations. This report is required for each facility regardless of the incident that occurred.

In addition, SCAQMD rules require a facility to report a breakdown due to equipment failure within 60 minutes of the discovery of the breakdown. Once the breakdown has been corrected, a written report is due to the SCAQMD Enforcement Department within 7 days of correcting the problem. If the repair can’t be completed within 30 days, a written report is required.

For the Well No. 5 facility, EPA rules require Mesa Water® to submit a semi-annual compliance status report to EPA Region IX in San Francisco. This report is similar to the SCAQMD Rule 1110.2 Quarterly Report, except that the report is required semi-annually. All incidences of control equipment deviation and failures, emissions excursions, and incidences of breakdown must be reported.

**Rule 1110.2 Proposed Amendments**

The SCAQMD is in the process of revising Rule 1110.2 to amend certain sections applicable to biogas engines. With the proposed amendment, the SCAQMD is trying to address the issues brought up by the EPA regarding the current rule. The SCAQMD has been holding frequent stakeholder’s working group meetings to discuss the issues related to startup, shutdown, and malfunction issues brought up by the EPA.

EPA’s issue relates to a 2008 amendment to Rule 1110.2 that allowed for the continued operation of an engine after a failed portable analyzer emissions check until the end of an operating cycle or for 24 hours from the time the operator knew of excess emissions or reasonably should have known, whichever is sooner. The EPA disagrees with this provision and wants the SCAQMD to amend the condition so that an engine cannot stay operating while it is violating the rule. Stakeholders agree that a violating engine shouldn’t continue operating, but they disagree with SCAQMD’s approach to revising the rule.

As a part of the rule amendment process, SCAQMD staff proposed language to appoint a compliance staff for breakdown verification. The SCAQMD is proposing to allow three (3) breakdown incidents per engine per quarter. One of the provisions in the current proposal states that if the compliance staff can’t verify the breakdown or a portable analyzer emissions check can’t be completed to verify the breakdown, the incident will count towards the three strikes that are
allowed per quarter.

A majority of the stakeholders disagree with SCAQMD’s proposal and many have submitted comment letters. Mesa Water® also submitted a comment letter to SCAQMD staff and presented reasons for disagreement with the proposed rule language and offered alternative language.

The current proposal includes new enforcement actions for recurring non-compliance issues such as the inability to conduct a portable analyzer emission check following an alarm or deviations from engine control system set point failure. In the letter, Mesa Water® explained that the engines operated by Mesa Water® have fail-safe control devices (safety devices) installed to shut down the engine to prevent catastrophic engine failure in case of a fault or an AFRC alarm. As a result, the opportunity to perform a portable analyzer emissions check does not exist. Under the current proposal, an engine shut down of this nature would be counted against the facility, even if no excess emissions have occurred. In addition, Mesa Water® requested that SCAQMD staff provide definitions for diagnostic emissions check and verifiable incidences.

To comply with Federal and SCAQMD engine rules, Mesa Water® must employ resources from internal staff, including operators and compliance staff, and outside contractors including consultants for reporting and source testing. Mesa Water® spends approximately $85,000 per year in compliance related activities in support of the natural gas engines.

FINANCIAL IMPACT

None.

ATTACHMENTS

Attachment A: Comment Letter from Mesa Water to the SCAQMD Re: PAR 1110.2
October 7, 2015

Kevin Orellana
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Comments to Proposed Amended Rule (PAR) – Rule 1110.2
Mesa Water District

Dear Mr. Orellana,

Mesa Water District (Mesa Water®) is a special district that provides water service to 108,000 customers in an 18 square-mile area. Mesa Water® serves most of Costa Mesa, parts of Newport Beach, and some unincorporated areas of Orange County, including the John Wayne Airport.

Mesa Water® relies on internal combustion engines for the distribution of drinking water in the service area. These engines, which support the critical infrastructure for water distribution, are subject to South Coast Air Quality Management District (SCAQMD) Rule 1110.2. Mesa Water® understands that the SCAQMD is in the process of revising certain portions of Rule 1110.2 and is currently seeking comments from the stakeholders in the rule amending process. Mesa Water® is submitting this comment letter to address our concerns on the Proposed Amended Rule (PAR) 1110.2.

In order to respond to the United States Environmental Protection Agency (USEPA) Startup, Shutdown, and Malfunction (SSM) policy, the SCAQMD is seeking comments from the stakeholders to address the breakdown procedures. Mesa Water® understands that an engine that deviates from the Rule 1110.2 emission limits or permit conditions should not continue operating as a result of a breakdown. Currently, Rule 1110.2 allows an engine to continue operating after a failed portable analyzer emission check for 24 hours or by the end of the operating cycle, whichever comes sooner. The SCAQMD is considering adding provisions in the rule to discourage engine operators from continuing operation if an engine violates emission limits. This will impact Mesa Water’s® ability to provide reliable water service to its customers as Mesa Water® diversifies its energy sources for emergency purposes. Mesa Water®’s reservoirs and some well sites are powered by natural gas engines.

In order to address the Rule 1110.2 breakdown policy, on September 15, 2015, at the Rule 1110.2 Working Committee Group Meeting, SCAQMD staff proposed the following:
- If a diagnostic emission check finds excess emissions that are the result of a breakdown, then it will count as a breakdown and it will need to be reported to the SC AQMD
- A breakdown is deemed valid by SC AQMD compliance staff if the facility has proven that it occurred beyond its control
  - Will not count as a strike
- A breakdown that is not verifiable by SC AQMD compliance staff or a breakdown where emissions cannot be measured or quantified will be counted as a strike

Mesa Water® would like to comment on the third bullet item above, which states that a breakdown that cannot be verified by SC AQMD compliance staff or a breakdown where emissions cannot be measured or quantified will be counted as a strike.

Mesa Water® would like to request SC AQMD Executive Staff consider revising the third bullet item to remove the language that states when emissions cannot be measured or quantified, it will be counted as a strike. For example, if an incident occurs outside of Mesa Water’s® normal business hours, a portable analyzer emission check may be delayed and not completed within the timeframe required to comply with the provision of the breakdown rule.

Each engine operated by Mesa Water® has an automatic shutdown feature installed that will shut down an engine if there is a potential for severe damage associated with faults or alarms. Common engine shutdown faults or alarms are a high catalyst inlet temperature alarm, an ignition fault, intake manifold pressure, and fuel system failure. The purpose of this fail-safe control mechanism is to prevent the engine from operating when it could lead to catastrophic failures. As a result of the shut down due to possible detrimental engine failure, there will not be an opportunity to perform a portable analyzer test. Under the proposed rule, the incident can easily be counted as a strike for that quarter which is unreasonable. Allowing an engine to continue operating following a fault or an alarm may be catastrophic to the engine. Thus Mesa Water® strongly feels that the proposed language should exclude incidents that could lead to potential catastrophic engine failure. The following language revision is proposed:

- A breakdown that is not verifiable by SC AQMD compliance staff or a breakdown where emissions cannot be measured or quantified will be counted as a strike

Mesa Water® would also like to request SC AQMD Executive Staff provide a definition for verifiable breakdown incident. Mesa Water® feels that a definition identifying the assessment method, metrics, quantity, etc. will provide clarity in maintaining compliance.
Additionally, Mesa Water® would like to request SCAQMD Executive Staff add a definition for a diagnostic emission check for clarity. Rule 1110.2 specifies a frequency of weekly/monthly (or every 150/750 hours) for portable analyzer emission checks. Mesa Water® performs diagnostic emission checks following an Air-to-Fuel Ratio Controller (AFRC) alarm, parameter out of range, or other deviations. It appears that the SCAQMD is proposing to replace the current language for “portable analyzer emission check” to “diagnostic emission check.” For such reason, Mesa Water® believes that adding a definition for a proposed diagnostic emission check will provide clarity in the rule.

Please feel free to contact Kaying Lee, Water Quality and Compliance Supervisor, at (949) 207-5491 if there are further questions.

Sincerely,

Phil Lauri
Assistant General Manager
Mesa Water District

cc: Paul Shoenberger, General Manager
Tracy Manning, Assistant Water Operations Manager
District File
MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: October 20, 2015
SUBJECT: Well Automation and Rehabilitation Notice of Categorical Exemption from the California Environmental Quality Act

RECOMMENDATION

Recommend the Board:

1. Approve the Well Automation and Rehabilitation Project.
2. Approve filing of the Notice of Categorical Exemption from the California Environmental Quality Act (CEQA).

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 call 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.

DISCUSSION

A Notice Inviting Sealed Bids for the Well Automation and Rehabilitation Project was released to four (4) pre-qualified contractors on October 5, 2015. The project provides the necessary improvements to Mesa Water’s clear well sites, and includes the following key objectives:

1. Rehabilitation of all 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, 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
8. Upgrades to the well site security system infrastructure

The bid documents were prepared by Carollo Engineers, Inc. and include detailed drawings for each well site, specifications for all equipment, instrumentation diagrams, and functional control logic for SCADA control of well operations. The instrumentation drawings and control descriptions were reviewed by Mesa Water’s SCADA consultant at the 30%, 60%, 90% and 100% design milestones. The bid package was reviewed for bid-ability and constructability by Mesa Water’s construction manager at the 60% and 90% design milestones.

An application for prequalification was prepared by Baker, and sent to 10 potential contractors. Completed Prequalification packages were received from four of the contractors:
- Pascal & Ludwig
- Pacific Hydrotech
- Kiewit Infrastructure West
- JF Shea

Review of the prequalification packages found all four to have the licenses, experience, insurance, financial stability, and safety record needed to be successful on this project.

The Engineer’s Estimate of Probable Construction Cost prepared at the 90% design milestone is $10.1 Million. The construction cost will be spread over three fiscal years (FY2016- FY2018). Bid opening is planned for December 1, 2015, and a recommendation of contract award will be brought to the December Engineering and Operations Committee.

In parallel with the preparation of bid documents, Carollo retained a sub-consultant to perform an evaluation of Mesa Water’s requirements under the California Environmental Quality Act (CEQA). The project was found to be categorically exempt from CEQA under Class 1 (Section 15301 (b)) and Class 2 (Section 15302 (c)) as follows:
- The project is an improvement to existing public utility facilities.
- The improvements involve public structures, facilities, and mechanical equipment that will produce a negligible expansion of capacity.
- The improvements will consist of replacement and reconstruction of existing structures and facilities.
- The new structures/facilities will be located on the same site(s) and will have the same purpose and production capacity and the existing chemical storage sheds will be replaced with new facilities with greater storage.
- The project improvements will not have a significant effect on the environment.

Attachment A is the Notice of Exemption, which described the well site locations, site layouts, and planned improvements. It is recommended that the Board consider (1) Approval of the Well Automation and Rehabilitation Project; and (2) Approval of the filing of the Notice of Categorical Exemption from the CEQA process evaluation.
FINANCIAL IMPACT

$569,347 has been expended to date on design and construction management in FY15 and FY16. $857,815 is budgeted in FY16 for design and construction. Remaining necessary funds will be budgeted in FY17 and FY18 for construction and construction management.

ATTACHMENTS

Attachment A: Notice of Exemption from the California Environmental Quality Act for the Mesa Water District Well Automation and Rehabilitation Project
Notice of Exemption

To: Office of Planning and Research
   P.O. Box 3044, Room 113
   Sacramento, CA 95812-3044

From: (Public Agency): Mesa Water District
       1965 Placentia Avenue
       Costa Mesa, CA 92627

County Clerk
County of: Orange
   12 Civic Center Plaza, Rm. 101
   Santa Ana, CA 92701

Project Title: Mesa Water District Well Automation and Rehabilitation

Project Applicant: Mesa Water District

Project Location - Specific:
Well No. 1 - 1150 Sunflower Avenue; Well No. 3 - 3581 Harbor Boulevard; Well No. 5 - 3596 Cadillac Avenue; Well No. 7 - 3525 Harbor Boulevard; Well No. 9 - 1301 Sunflower Avenue. All five wells are located within the City of Costa Mesa, CA 92626.

Project Location - City: Costa Mesa Project Location - County: Orange

Description of Nature, Purpose and Beneficiaries of Project:
The project consists of the rehabilitation of five existing well facilities to improve outdated existing well infrastructure. Project improvements include on-site demolition/removal of certain existing structures and facilities, installation of new structures/facilities, including but not limited to, water disinfection chemical storage structures/facilities, automation equipment, valve replacement, mechanical/electrical equipment, pipeline replacement, and installation of security/safety facilities. All improvements will be conducted within each site boundary and no off-site improvements or connections are proposed, as the facilities will connect to the existing distribution system for the benefit of the community served by these existing Mesa Water District well facilities. Refer to Attachment A.

Name of Public Agency Approving Project: Mesa Water District
Name of Person or Agency Carrying Out Project: Mesa Water District

Exempt Status: (check one):

☐ Ministerial (Sec. 21080(b)(1); 15268);
☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
☒ Categorical Exemption. State type and section number: Class 1 (Section 15301 (b)) and Class 2 (Section 15302 (c))
☐ Statutory Exemptions. State code number:

Reasons why project is exempt:
The project is an improvement to existing public utility facilities. The improvements involve public structures, facilities, and mechanical equipment that will produce a negligible expansion of capacity. The improvements will consist of replacement and reconstruction of existing structures and facilities. The new structures/facilities will be located on the same site(s) and will have the same purpose and production capacity, as the existing chemical storage sheds (700 gallon storage), they will be replaced with new facilities with greater storage (8,000 gallons total). The project improvements will not have a significant effect on the environment. Refer to Attachment A for more details regarding the well facility improvements.

Lead Agency
Contact Person: Karyn Igar, PE (Senior Civil Engineer) Area Code/Telephone/Extension: (949) 207-5452

If filed by applicant:
1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project?  ☐ Yes ☐ No

Signature: ___________________________ Date: ___________________________ Title: ___________________________

☒ Signed by Lead Agency ☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.
Mesa Water District (Mesa Water®) intends to rehabilitate existing wells after the Mesa Water District Board of Directors adopted a resolution in March of 2014 to improve individual wells where production had dropped by 20% or more, and when overall well production had decreased by 10% (The 2014 Water System Master Plan Update confirmed that the five clear water wells had declined in capacity by 11%). All five well sites are existing facilities on fully developed and operational sites. A brief description and proposed improvements of the five clear water wells is provided below:

WELL NO. 1

The Mesa Water® Segerstrom Well 1B (Well 1B) is located at 1150 Sunflower Avenue in Costa Mesa, California. In 1994, Mesa Water® drilled on the premises to create Well 1B, which has a depth of 610 feet. The Well 1B site property is 6,000 square feet and Well 1B pumps 2,400 gallons per minute using a 350 horsepower electric motor.

Well 1 - Aerial
The Mesa Water® Lee Pickens Well 3B (Well 3B) is located at 3581 Harbor Boulevard in Costa Mesa, California. In 1989, Mesa Water® drilled Well 3B to a depth of 600 feet. The Well 3B site property is 9,500 square feet and Well 3B pumps 1,800 gallons per minute using a 250 horsepower electric motor.
WELL NO. 5

The Mesa Water® Nathan L. Reade Well 5 (Well 5) is located at 3596 Cadillac Avenue in Costa Mesa, California. The well was drilled in 1980 to a depth of 960 feet. The Well 5 Site is 10,000 square feet and pumps 2,800 gallons per minute using a 600 horsepower natural gas engine. As part of the project, the 600 horsepower engine will be replaced by a smaller 420 horsepower engine.
WELL NO. 7

The Mesa Water® William “W.K.” Patrick Well 7 (Well 7) is located 3525 Harbor Boulevard in Costa Mesa, California. The well was drilled in 1986 to a depth of 580 feet. The Well 7 Site is 10,000 square feet and pumps 1,500 gallon per minute using a 200 horsepower electric motor.

Well 7 – Aerial
The Mesa Water® Mario Durante Well 9 (Well 9) is located at 1301 Sunflower Avenue in Costa Mesa, California. Well 9 was drilled in 1993 to a depth of 610 feet. The Well 9 Site is 14,400 square feet and pumps 2,100 gallons per minute using a 300 horsepower electric motor.
The overall goal of Mesa Water’s® Well Automation Project is to improve outdated existing well infrastructure and improve time management through remote operation of the wells, thus, reducing manpower requirements. The Mesa Water® Well Automation Project will modernize many components of the five existing clear water wells, although well production will not exceed previous as drilled rated capacities, and is considered a negligible expansion of capacity.

Design features include, but are not limited to, the demolition and removal of certain existing structures and well facilities, removal of chlorine and aqueous ammonia sheds and related wellhead and blow down piping. Blow down water will travel through 6-inch blow down piping to be metered by a magnetic flowmeter and then discharged at the pumping rate of each well for a maximum of 15 minutes into existing storm drains. New 16 feet by 45 feet chemical storage facilities (including shade canopies) will be installed on each site to store sodium hypochlorite and aqueous ammonia in larger quantities (8,000 gallons total). Half inch sample lines with ball and solenoid valves will attach to well discharge piping to collect sample water for the measurement of chemical concentrations. Static mixers will also be included into new well discharge piping to provide adequate mixing of chemicals and sample water. Safety design features will be incorporated into the design of the chemical tanks, as each tank will be equipped with a containment area to hold the entire tank contents and 20 minutes of fire flow. Furthermore, sodium hypochlorite and ammonia software interlocks would initiate alarms and, if necessary, shutdown the facility in the event of an emergency. In addition to chemical storage and feed infrastructure, all wells (except Well No. 1) will utilize a 36-inch diameter sand separator to remove sand from the well discharge, which has been previously identified in pipelines and reservoirs. The existing Well 5 600 horsepower natural gas engine will be replaced with a new state-of-the-art 420 horsepower gas engine. Additionally, a small 25 kW natural gas generator will be installed at Well 5. A permanent emergency generator with 300 gallons of diesel fuel will be added at Well 7 to ensure that Well 7 can continue to produce water in the event of an electrical power outage. A portable emergency generator with 300 gallons of diesel fuel will be housed at Well 9 for use at Well 1 in the event of an electrical power outage.

The overall system pressures will remain the same for the Project. Existing well discharge piping ranging from 12-inch to 14-inch in diameter, will be replaced with 12-inch diameter cement mortar lined steel pipeline. Blow down pressure regulating valves, butterfly valves, ball valves, solenoid valves, and check valves will replace existing valves. The well sites will require some asphalt resurfacing.

Security equipment will be installed, which includes cameras, card readers, motion detectors, and infrared nighttime monitoring. No off-site improvements or connections are proposed for the project, as the facilities will connect to the existing distribution system.

Refer to Exhibits 1 – 6 for locations and conceptual improvement plans to the existing well sites.
Exhibit 2
Well No. 1
Conceptual Site Plan

A WELL NO. 1 PLAN
FILL 08001

MESA WATER DISTRICT
MEMORANDUM

TO: Engineering and Operations Committee
FROM: Stacie Sheek, Customer Services Manager
DATE: October 20, 2015
SUBJECT: Water Conservation Program Update

RECOMMENDATION

1. Recommend that the Board approve modifications to Resolution 1460 to reflect one day per week of watering and perform additional outreach with top users as necessary to achieve SWRCB 20% reduction of demands;

2. Recommend that the Board authorize an additional $150,000 with Fraser Communications for water conservation outreach professional services from Nov. 2015 through Feb. 2016.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #4: Increase public awareness about Mesa Water® and about water.
Goal #6: Provide outstanding customer service.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION

Mesa Water District Board adopted Ordinance 26, the Water Conservation and Water Supply Emergency Program, on May 14, 2015, and passed Resolution 1460 which activated the Conservation Program and authorized the General Manager to take actions as necessary to carry out the directives of that Resolution and Conservation Program.

BACKGROUND

In May 2015 Mesa Water® adopted and implemented a comprehensive conservation outreach plan to achieve the State Water Resources Control Board’s (SWRCB) mandate to conserve 20% and Governor Brown’s reduction of a statewide 25% reduction. The comparative baseline for compliance is based upon each agency’s 2013 calendar year production. Each agency is required to report monthly on the status of their conservation efforts along with the number of violations issued for non-conformance.

DISCUSSION

Mesa Water® implemented a multi-faceted conservation program that is focused on achieving the aforementioned SWRCB mandates. The following is a summary of the program’s core tools to monitor, educate, and report on Mesa Water’s performance:

1. **Potable Water Production Monitoring**: Potable water production is monitored weekly, and until recently have been on-track to meet the SWRCB’s assigned 20% reduction goal when compared to the 2013 calendar year baseline. While weekly production has remained fairly steady, the percent conserved has decreased because the 2013 baselines have decreased.
The decreased conservation appears to be correlated to recent unseasonably warmer weather. Continued warmer weather and increased demands will result in challenges of meeting the SWRCB’s 20% goal.

2. **Monitoring:** Mesa Water hired 6 part-time temporary Water Conservation Ambassadors, which have been patrolling the service area in both the mornings and evenings on non-watering days with the goal of observing and documenting violations of the Conservation Ordinance, educating residents on the severity of the drought, and the emphasizing the value of water conservation. The part-time temporary work force was recently reduced to 4 part-time workers due to a decreasing number of violations. Water Ambassadors travel pre-determined routes that are alternated each day to ensure that each route is visited twice a week, once in the morning and again in the evening on a different day. Recently the work hours of the temporary Water Conservation Ambassadors has shifted to observe potential irrigation during other prime irrigation hours (i.e. After midnight). Additionally, 2 full-time temporary office workers were hired to assist with the Conservation Program Administration, including logging and mailing violation letters and answering phone calls for questions from the public. Staff has recently reduced the full-time temporary office worker to 1 part-time temporary worker due to standardization of the program setup and subsequent decreased work load.

3. **Conservation Education:** Mesa Water’s customers found not to be in compliance with the Water Conservation Ordinance are notified via a courtesy door hanger. The table on the following page shows, to date, the number of water conservation violations that occurred in each month.
To date, no conservation fees have been assessed to accounts due to staff reaching out to customers and correcting the issues.

Mesa Water® also works closely with the District’s top 250 accounts in providing monthly updates regarding the progress towards their conservation goals. The top 250 meters accounts for approximately 25% of use. Each of the 250 accounts receive a monthly letter showing their 2013 water usage for each month, a goal for that respective month in 2015, and whether or not they are meeting that goal. Staff is using Meter Masters, a data logger that records hourly water usage, to provide information to the customers about their water use behavior, and to verify that customers are abiding by the water conservation ordinance. Additionally, many of the top 250 accounts utilize automated meter reading technology where hourly water use data is stored within the meter and can be manually or automatically downloaded.

4. **Media Outreach:** Mesa Water® implemented an aggressive outreach campaign to communicate the Conservation Ordinance requirements to its customers. The hyper-local, geo-targeted campaign included bilingual (English/Spanish) multi-media/multi-platform outreach via various tactical elements: digital, mobile, print, online, and radio advertisements; doorhangers; postcard mailings; two (2) eblasts; truck magnets; outdoor advertisements (billboards and bus shelters); public relations; social media; video advertisements in cinemas and gas stations (pump toppers); and the MesaWaterSaver.org website.
While this effort has had the immediate effect and desired outcome, unusual trending of warmer weather has escalated demands coupled with a lower comparative baseline resulting in a decreasing conservation. Additional outreach opportunities have been developed for the Committee to consider and discuss as follows:

- Expand top user list to include additional high use accounts
- Additional outreach to current list of top users
- Reach out to dedicated irrigation accounts that are above water efficiency goals.
- Recommend that customers reduce their irrigation by utilizing the watering schedule online.
- Require that customers’ allowable watering days are reduced to 1 day per week.

**FINANCIAL IMPACT**

$240,000 has been expended to date. Funds were not budgeted in FY2016 for this effort; additional funds will come from cash on hand for a not to exceed amount of $150,000.

**ATTACHMENTS**

Attachment A: Weekly Production Conservation Report
Attachment B: Ordinance 26
Attachment C: Resolution 1460
ORDINANCE NO. 26
ORDINANCE OF THE
MESA WATER DISTRICT BOARD OF DIRECTORS
ADOPTING THE MESA WATER DISTRICT
WATER CONSERVATION AND
WATER SUPPLY EMERGENCY PROGRAM
RESCINDING ORDINANCE NOS. 8, 19, 24

WHEREAS, the Mesa Water District (Mesa Water® or District) is a county water
district organized and operating according to California law; and

WHEREAS, water is a limited natural resource and the District desires to use this
natural resource in the most efficient manner possible; and

WHEREAS, Mesa Water District has the authority to adopt water conservation
requirements and programs to promote and effectuate wise water use and avoid water
wastage; and

WHEREAS, the Board of Directors (Board) of Mesa Water District has previously
adopted, and supplemented, Ordinance No. 8 adopting an Emergency Water
Conservation Program, which was adopted on March 21, 1991 (Ordinance No.8); and

WHEREAS, Ordinance No. 8 was further supplemented by the adoption of
Ordinance No. 19 on December 10, 2007, and Ordinance No. 24 on August 28, 2014
(Ordinance No. 8, as supplemented, Ordinance Nos. 19 and 24 are collectively in
certain cases referred to herein as the "Prior Ordinances"); and

WHEREAS, the District desires to repeal its existing Water Conservation
Programs and establish an updated and consolidated Water Conservation and Water
Supply Emergency Program (Conservation Program) to conform to additional State
Water Resources Control Board (SWRCB) Regulations; and

WHEREAS, periodic droughts are a historic fact in the State of California; and

WHEREAS, the District’s service area is located in a region with a Mediterranean
climate, densely populated demographics, and a mixed economic base of residential,
commercial, industrial, and institutional consumers; and

WHEREAS, Mesa Water District derives the water which it delivers to its
customers from local groundwater and supplemental waters imported from outside
District boundaries; and
WHEREAS, the quality and quantity of supplemental imported water is under the control of other agencies, and may be subject to conditions beyond the control of those other agencies or Mesa Water District; and

WHEREAS, pursuant to California Water Code Section 31026, Mesa Water District may restrict the use of water it provides during any emergency caused by drought, or other threatened or existing water shortage, and to prohibit the wastage of water or the use of water it provides during such periods, for any purpose other than domestic uses or such other restricted uses as may be determined to be necessary by the District and may prohibit use of water it provides during such periods for specific uses which it may from time to time find to be non-essential; and

WHEREAS, pursuant to the applicable provisions of California law, Mesa Water District is required to periodically prepare and update an Urban Water Management Plan in order to address certain water supply and planning requirements; and

WHEREAS, Water Code Section 10632 requires the Urban Water Management Plan to provide an urban water shortage contingency analysis, which includes stages of action to be undertaken by an urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage; and

WHEREAS, pursuant to California Water Code Sections §§31020, and 375-377, inclusive, Mesa Water District may establish additional guidelines, surcharges, cost recovery systems, enforcement procedures, and other rules and regulations to assist in the conservation of water; and

WHEREAS, the Board of Directors of Mesa Water District finds and determines that a water shortage or threat of a water shortage may be found to exist based upon the occurrence of one or more of the following conditions or circumstances:

A. A general water supply shortage due to increased demand and/or limited supplies.

B. Distribution or storage facilities of Mesa Water District or any agency supplying water to the District, become inadequate or are restricted.

C. A major failure of the supply, storage, and/or distribution facilities of Mesa Water District or any agency supplying water to the District.

D. Contamination of the water supply, storage, and/or distribution facilities of Mesa Water District or any agency supplying water to the District.

E. Acts of nature which in the opinion of Mesa Water District constitute an emergency situation or which require special water conservation actions.
WHEREAS, prior to the adoption of this Ordinance, the Board has conducted a noticed public hearing to receive public comments concerning the subject matter hereof; and

WHEREAS, the purpose of this Ordinance is to adopt and enact the Conservation Program within the District’s service area.

NOW, THEREFORE, BE IT ORDAINED BY THE MESA WATER DISTRICT BOARD OF DIRECTORS AS FOLLOWS:

Section 1. Recitals. The foregoing recitals are true and correct and are incorporated herein by this reference.

Section 2. Findings. The Board hereby finds and determines as follows:

a. A reliable minimum supply of potable water is essential to the public health, safety, and welfare of the people, and economy of the southern California region.

b. Water management that includes active water use efficiency measures not only in times of drought, but at all times, is essential to ensure a reliable minimum supply of water to meet current and future water supply needs.

c. California Water Code Section 375 authorizes water suppliers to adopt and enforce a comprehensive water conservation program to reduce water consumption and conserve supplies.

d. Mesa Water District has the authority, pursuant to California Water Code Sections 31026-31029 to take action(s) relative to the use and conservation of water within its service area.

e. The adoption and enforcement of a permanent water conservation program is necessary to help to manage the District’s potable water supply in the short and long-term and to avoid or minimize the effects of periodic drought and shortage conditions within, or affecting its service area and potable water supplies. Such program is essential to ensure a reliable and sustainable minimum supply of water for the public health, safety and welfare.

f. The Board does hereby find that the following circumstances may constitute an emergency condition or a threatened or existing water shortage condition within or affecting Mesa Water District:

i. A general water supply shortage due to increased demand and/or limited supplies.
ii. Distribution or storage facilities of Mesa Water District or any agency supplying water to the District, become inadequate.

iii. A major failure of the supply, storage, and/or distribution facilities of Mesa Water District or any agency supplying water to its service area.

iv. Contamination of the water supply, storage, and/or distribution facilities of Mesa Water District or any agency supplying water to its service area.

v. Acts of nature which in the opinion of the District constitute an emergency situation.

Section 3. Program Designation: Purpose; Intent and Integration.

a. The purpose of the Conservation Program enacted by this Ordinance is to establish a water conservation and water supply emergency program that will reduce water consumption within the District's service area through water conservation, enable effective water supply planning, assure reasonable and beneficial use of water, prevent waste of water, and maximize the efficient use of water within the District's service area to avoid and minimize the effect and hardship of water shortages to the greatest extent possible.

b. This Conservation Program enacted by this Ordinance establishes permanent water conservation standards intended to alter behavior related to water use efficiency at all times and further establishes three levels of water supply shortage response actions to be implemented during times of declared water shortage or declared water shortage emergency, with increasing restrictions on water use in response to worsening drought or emergency conditions and decreasing supplies as determined by the Board.

c. This Ordinance, and the Conservation Program enacted hereby, is intended solely to further the conservation of water. It is not intended to implement any provision of federal, State, or local statutes, ordinances, or regulations relating to protection of water quality or control of drainage or runoff. This Ordinance, and the Conservation Program enacted hereby, shall not act to repeal, supersede or amend any federal, State or local law, ordinance or regulation relating to protection of water quality or control of drainage or runoff (including, but not limited to, any and all NPDES permits or requirements which
may be applicable in such instance) or exempt any person or party from compliance therewith.

d. Mesa Water's prior Water Conservation Programs, as adopted, supplemented, and amended pursuant to the Prior Ordinances, are recinded and superseded upon this Ordinance becoming effective.


a. The Conservation Program provisions are set forth in Exhibit A to this Ordinance and are incorporated herein by this reference.

b. The Conservation Program shall be referred to in Mesa Water's Rules and Regulations for Water Service.

c. The Board reserves the right to amend, revise, and/or supplement this Ordinance and/or the Conservation Program provisions in the future based upon the District's needs, circumstances and requirements.

d. This Ordinance and the Conservation Program are adopted by this Board pursuant to the provisions and authority set out in the California Constitution and California law as referenced herein.

e. All penalties set forth in the Conservation Program are administrative and regulatory penalties and are not fees or charges for water service or water capacity.

Section 5. CEQA Exemption.

The Board finds that this Ordinance, the Water Conservation and Water Supply Emergency Program (Conservation Program), and actions taken hereafter pursuant to the Conservation Program are exempt from the California Environmental Quality Act as specific actions necessary to prevent or mitigate an emergency pursuant to 14 California Code of Regulations, Sections 15269, 15273, and 15321, and the applicable statues of the Public Resources Code.

The General Manager is hereby authorized and directed to file a Notice of Exemption as soon as possible following the adoption of this Ordinance.

Section 6. Terms and Provisions. The terms and provisions of this Ordinance, and the Conservation Program enacted hereby, shall be subject to, and shall be interpreted pursuant to, State law.
Section 7. **Notice and Provisions**: Notice of the adoption of this Ordinance, and the provisions hereof, shall be provided as set out in State law, including, but not limited to, Water Code Section 31027.

Section 8. **Other Actions.** Mesa Water District staff and officers are hereby authorized and directed to take such other and further action(s) as may be reasonably necessary to carry out the determinations, findings and directives set forth herein, and in the Conservation Program enacted hereby, within the limits set forth by, and in accordance with, direction of the Board.

Section 9. **Effective Date.** This Ordinance No. 26, and the Conservation Program enacted hereby, shall take effect on May 14, 2015.

ADOPTED, SIGNED, AND APPROVED this 14th day of May 2015 by a roll call vote:

AYES: DIRECTORS: Atkinson, Bockmiller, Fisler, Temianka
NOES: DIRECTORS:
ABSENT: DIRECTORS: Dewane
ABSTAIN: DIRECTORS:

Shawn Dewane
President, Board of Directors

ATTEST:

Coleen L. Monteleone
District Secretary
ORDINANCE NO. 26

EXHIBIT A

ORDINANCE OF THE
MESA WATER DISTRICT BOARD OF DIRECTORS
ADOPTING THE MESA WATER DISTRICT
WATER CONSERVATION AND
WATER SUPPLY EMERGENCY PROGRAM
RESCINDING ORDINANCE NOS. 8, 19, 24

Mesa Water District
Water Conservation and
Water Supply Emergency Program

Adopted: May 14, 2015
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Section 1: Title. This program is designated as the Water Conservation and Water Supply Emergency Program (Conservation Program).

Section 2. Authority. The Conservation Program is adopted pursuant to California law and the provisions of Mesa Water District Ordinance No. 26. The General Manager is hereby authorized and directed to implement the provisions of this Conservation Program as provided for herein.

Section 3. Definitions. The following words and phrases whenever used in this Conservation Program have the meaning(s) defined in this section:

a. “Board” means the Board of Directors of Mesa Water District.


c. “Conservation Fee” means any monetary fee assessed by Mesa Water District for violations of the Conservation Program.

d. “Customer” means any person, persons, firm, corporation, association, or agency receiving water or services from Mesa Water District.

e. “General Manager” means the duly appointed and acting General Manager of the Mesa Water District, or an authorized agent.

f. “Landscape Irrigation System” means an irrigation system with pipes, hoses, spray heads, or sprinkling devices that are operated by hand or through an automated system.

g. “Large Landscape Areas” means a lawn, landscape, or other vegetated area, or combination thereof, equal to more than 5,000 square feet of irrigable land.

h. “Mesa Water® or District” means the Mesa Water District, a county water district organized pursuant to California Water Code Sections 33200 and following and operating pursuant to Water Code Sections 30000 and following. References to Mesa Water® or the District also include its Directors, officers, agents, and employees, as applicable.

i. “Person” means any natural person or persons, corporation, public or private entity, governmental agency or institution, including Mesa Water District, or any other user of water provided by the District.

j. “Potable Water” means water that is suitable for drinking.
k. “Recycled Water” means the reclamation and reuse of non-potable water for beneficial use as defined in Title 22 of the California Code of Regulations.

l. “Single Pass Cooling Systems” means equipment where water is circulated only once to cool equipment before being disposed.

m. “Water Conservation Coordinator” means the person (who may be an officer or employee of Mesa Water District) charged with the principal enforcement of this Conservation Program. The Water Conservation Coordinator may be the General Manager or another person so designated in writing by the General Manager.

n. “Water Flow Restrictor” means a device that is inserted into the service connection and is designed to limit the water flow capacity.

Section 4. Application.

a. The provisions of this Conservation Program apply to any customer, Person, and property using water provided by Mesa Water District.

b. The provisions of this Conservation Program do not apply to uses of water necessary to protect public health and safety or for essential government services, such as police, fire, and other similar emergency services.

c. The provisions of this Conservation Program do not apply to the use of Recycled Water, with the exception of Sections 6(b), 6(d), 6(m), 6(n), 7(b)(2), 8(b)(2), and 9(b)(2).

d. The provisions of this Conservation Program do not apply to the use of water by commercial nurseries and commercial growers to sustain plants, trees, shrubs, crops or other vegetation intended for commercial sale, with the exception of Section 6(b).

e. This Conservation Program is intended solely to further the conservation of water.

Section 5. Procedures for Determination of Water Supply Shortage and Level Implementation.

The existence of a Level 1, Level 2 or Level 3 Water Supply Shortage condition may be declared by resolution adopted by the Board at a regular, adjourned regular, or special Board meeting.
The Board shall determine the extent of the Water Supply Shortage condition, and the corresponding conservation required through the implementation and/or termination of particular levels, which may be made upon recommendation by the General Manager.

In the event of an extreme emergency, requiring immediate action that cannot be delayed until the next regular, adjourned regular, or special Board meeting, the General Manager shall determine the extent of the conservation required and implement the appropriate level necessary to achieve the required level of conservation. In such event, the General Manager shall notify the Board as soon thereafter as practical and shall consult with the Board President with regard to the calling of an emergency meeting of the Board.

The General Manager will provide a plan to the Board that specifies a timeline for noticing of customers and the implementation of the Water Supply Shortage Level determined by the Board. In addition, the Board of Directors shall be notified at the next regular, adjourned regular, or special Board Meeting of any action taken by the General Manager under this Conservation Program.

A Water Supply Shortage Level shall be deemed to be effective upon the date of adoption and shall remain in place until rescinded, superseded, or modified by further action of the Board.

**Section 6: Permanent Water Conservation Requirements – Prohibition Against Waste.**

This Section is intended to provide for up to a 10 percent reduction in water usage.

The following water conservation requirements shall be effective at all times as prescribed by the Board and shall be permanent. Violations of this Section constitute waste and an unreasonable use of water.

a. **Limits on Watering Hours:** Watering or irrigating of lawn, landscape, or other vegetated area with potable water is prohibited between the hours of 8:00 a.m. and 5:00 p.m. Pacific Standard Time on any day. Hand-held watering cans, buckets, or similar containers reasonably used to convey water for irrigation purposes are not subject to these time restrictions. Similarly, a hand-held hose equipped with a fully functioning, positive self-closing water shut-off nozzle or device may be used during the otherwise restricted period. If necessary, and for very short periods of time for the express purpose of adjusting or repairing it, one may operate an irrigation system during the otherwise restricted period.
b. **No Excessive Water Flow or Runoff:** No person shall cause or allow watering or irrigating of any lawn, landscape or other vegetated area in a manner that causes or allows excessive runoff from the property. Additionally, to the extent prohibited by any Statewide statute, or regulation adopted by any State agency with jurisdiction to adopt such regulations, including, but no limited to, the State Water Resources Control Board, no person shall cause or allow water to flow or runoff their property onto adjacent property, non-irrigated areas, private and public walkways, driveways, roadways, gutters or ditches, parking lots, or structures.

c. **No Washing Down Hard or Paved Surfaces:** Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys, is prohibited except when necessary to alleviate safety or sanitary hazards, and then only by use of a hand-held bucket or similar container, a hand-held hose equipped with a fully functioning, positive self-closing water shut-off device, a low-volume, high-pressure cleaning machine equipped to recycle any water used, or a low-volume high-pressure water broom.

d. **Obligation to Fix Leaks, Breaks or Malfunctions:** Excessive use, loss or escape of water through breaks, leaks or other malfunctions in the water user’s plumbing or distribution system for any period of time after such escape of water should have reasonably been discovered and corrected and in no event more than seven (7) days of receiving notice from the District, is prohibited.

e. **Re-circulating Water Required for Water Fountains and Decorative Water Features:** Operating a water fountain or other decorative water feature that does not use re-circulated water is prohibited.

f. **Limits on Washing Vehicles:** Using water to wash or clean a vehicle, including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not is prohibited, except by use of a hand-held bucket or similar container or a hand-held hose equipped with a fully functioning, positive self-closing water shut-off nozzle or device that causes it to cease dispensing water immediately when not in use. This subsection does not apply to any commercial car washing facility.

g. **Drinking Water Served Upon Request Only:** Eating or drinking establishments, including but not limited to a restaurant, hotel, cafe, cafeteria, bar, or other public place where food or drinks are sold,
served, or offered for sale, are encouraged not to provide drinking water to any person unless expressly requested.

h. Commercial Lodging Establishments Must Provide Guests Option to Decline Daily Linen Services: Hotels, motels and other commercial lodging establishments must provide customers the option of not having towels and linen laundered daily. Commercial lodging establishments shall prominently display notice of this option in each bathroom using clear and easily understood language.

i. No Installation of Single Pass Cooling Systems: Installation of single pass cooling systems is prohibited in buildings requesting new water service from Mesa Water District.

j. No Installation of Non-re-circulating in Commercial Car Wash and Laundry Systems: Installation of non-re-circulating water systems is prohibited in new commercial conveyor car wash and new commercial laundry systems.

k. Restaurants Required to Use Water Conserving Dish Wash Spray Valves: Food preparation establishments, such as restaurants or cafes, are prohibited from using non-water conserving dish wash spray valves.

l. Commercial Car Wash Systems: All commercial conveyor car wash systems must utilize re-circulating water systems, or must secure a waiver of this requirement from Mesa Water District.

m. Recycled Water Use Required if Available: After the District has provided to the user an analysis demonstrating that Recycled Water is available, cost effective, and safe for the intended use, and the user has been given a reasonable time to make the conversion to recycled water, the use of potable water, is prohibited.

n. Water Recycling – New Service: Prior to the connection of any new commercial, industrial, or multi-residential water service, the District shall perform an evaluation to determine whether recycled water is available, cost effective, and safe for the intended use to supply all or some of the water needed by the new user. If available, cost effective, and safe for the intended use, recycled water must be used.

Section 7: Level 1 Water Supply Shortage: Water Alert.

This Section is intended to provide for up to a 20 percent reduction in water usage.
a. A Level 1 Water Supply Shortage exists when Mesa Water District determines, in its sole discretion, a water supply shortage or threatened shortage exists and a consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions. Upon the declaration of a Level 1 Water Supply Shortage condition, the District will implement all of the mandatory Level 1 conservation measures identified in this Section.

b. Additional Water Conservation Measures: In addition to the prohibited uses of water identified in Section 6, the following water conservation requirements shall apply during a declared Level 1 Water Supply Shortage as prescribed by the Board:

1. Designated Watering Days: Watering or irrigating of lawn, landscape, or other vegetated area is limited up to a maximum of three (3) days per week on a schedule established and posted by Mesa Water District by a Resolution of the Board of Directors. This provision does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system, and then only while under the supervision of a competent person.

2. Obligation to Fix Leaks, Breaks or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within seventy-two (72) hours of notification by Mesa Water District, or turned off, unless other arrangements are made with the District.

3. Irrigation During Rain Events: Irrigation is prohibited during rain events.

c. Other Measures Available for Consideration: In addition to the conservation requirements specified in Sections 6 and 7(b), other measures are available for additional consideration by the Board that may be necessary to achieve immediate or short term water conservation, and are referenced in Section 10.

Section 8. Level 2 Water Supply Shortage: Water Warning.

This Section is intended to provide for up to a 30 percent reduction in water usage.

a. A Level 2 Water Supply Shortage exists when Mesa Water District determines, in its sole discretion, that due to drought or other water
supply conditions, a water supply shortage or threatened shortage exists and a consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions. Upon the declaration of a Level 2 Water Supply Shortage condition, the District will implement all of the mandatory Level 2 conservation measures identified in this Section.

b. Additional Conservation Measures: In addition to the prohibited uses of water identified in Sections 6 and 7, the following additional water conservation requirements shall apply during a declared Level 2 Water Supply Shortage as prescribed by the Board:

1. Designated Watering Days: Watering or irrigating of lawn, landscape, or other vegetated area is limited up to a maximum of two (2) days per week on a schedule established and posted by Mesa Water District by a Resolution of the Board of Directors. This provision does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system, and then only while under the supervision of a competent person.

2. Obligation to Fix Leaks, Breaks or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within forty-eight (48) hours of notification by Mesa Water District, or turned off, unless other arrangements are made with the District.

3. Limits on Filling Ornamental Fountains, Lakes, and Ponds: Filling or re-filling ornamental fountains, lakes, and ponds is prohibited, except to the extent needed to sustain aquatic life, provided that such animals have been actively managed within the water feature prior to declaration of a supply shortage level under this Conservation Program.

c. Other Measures Available for Consideration: In addition to the conservation requirements specified in Sections 6, 7, and 8, other measures are available for additional consideration by the Board that may be necessary to achieve immediate or short term water conservation, and are referenced in Section 10.
Section 9. **Level 3 Water Supply Shortage – Water Emergency**.

This Section is intended to provide for up to a 50 percent reduction in water usage.

a. A Level 3 Water Supply Shortage condition is also referred to as an “Emergency” condition. A Level 3 condition exists when Mesa Water District declares a water shortage emergency and notifies its residents and businesses that a significant reduction in consumer demand is necessary to maintain sufficient water supplies for public health and safety. Upon the declaration of a Level 3 Water Supply Shortage condition, the District may implement all of the mandatory Level 3 conservation measures identified in this section as prescribed by the Board.

b. **Additional Conservation Measures**: In addition to the prohibited uses of water identified in Sections 6, 7, and 8, the following water conservation requirements shall apply during a declared Level 3 Water Supply Shortage Emergency:

1. **No Watering or Irrigating**: Watering or irrigating of lawn, landscape, or other vegetated area is prohibited. This restriction does not apply to the following categories of use:

   i. Maintenance of vegetation, including trees and shrubs, that are watered using a hand-held bucket or similar container, hand-held hose equipped with a positive self-closing water shut-off nozzle or device.

   ii. Maintenance of existing landscape necessary for fire protection.

   iii. Maintenance of existing landscape for soil erosion control.

   iv. Maintenance of plant materials identified to be rare or essential to the well-being of protected species.

   v. Maintenance of landscape within active public parks and playing fields, day care centers, golf course greens, and school grounds, provided that such irrigation does not exceed a maximum of two (2) days per week according to the schedule established in Section 8(b)(1) and time restrictions in Section 6(a).

   vi. Actively irrigated environmental mitigation projects.
2. Obligation to Fix Leaks, Breaks or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within twenty four (24) hours of notification by Mesa Water District, or turned off, unless other arrangements are made with the District.

3. Car Washing at Commercial Facilities Only: Washing of motor vehicles, trailers, boats, aircraft and other types of mobile equipment shall be done only at a commercial car wash with water recycling facilities. No restrictions apply where the healthy, safety, and welfare of the public is contingent upon frequent vehicle cleaning, such as with refuse trucks and vehicles used to transport food and perishables.

4. No Initial Filling or Re-Filling of Swimming Pools & Spas: Filling and Re-Filling of residential swimming pools or outdoor spas with water is prohibited.

5. No New Potable Water Service: No new potable water service will be provided, no new temporary meters or permanent meters will be provided, and no statements of immediate ability to serve or provide potable water service (such as, will-serve letters, certificates, or letters of availability) will be issued, except under the following circumstances:

   i. A valid, unexpired building permit has been issued for the project; or
   
   ii. The project is necessary to protect the public health, safety, and welfare; or
   
   iii. A parcel that has or previously had a water meter; or
   
   iv. The applicant provides substantial evidence of an enforceable commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of the District.

   This provision does not preclude the resetting or turn-on of meters to provide continuation of water service or the restoration of service that has been interrupted prior to declaration of a supply shortage level under this Conservation Program.

   c. Other Measures Available for Consideration: In addition to the conservation requirements specified in Sections 6, 7, 8, and 9, other measures are available for additional consideration by the Board that
may be necessary to achieve immediate or short term water conservation, and are referenced in Section 10.

Section 10. Other Conservation Measures Available for Implementation.

The following water conservation measures may be implemented at any Water Supply Shortage Level, in addition to, or supplementary to, the Water Conservation Measures set out in Sections 6-9, inclusive, pursuant to the directive(s) of the Board.

a. Large Landscape Areas – Rain Sensors: Large landscape areas, such as parks, cemeteries, golf courses, school grounds, and playing fields, that use landscape irrigation systems to water or irrigate, must use landscape irrigation systems with rain sensors that automatically shut off such systems during periods of rain or irrigation timers which automatically use information such as evapotranspiration sensors to set an efficient water use schedule.

b. Recycled Water for Construction Purposes: Recycled or non-potable water must be used for construction purposes when available, feasible, and cost-effective.

c. Water Conserving Plumbing Standards – Change in Service: Upon the establishment of new water service or a new customer of record for an existing service, all existing plumbing fixtures (including but not limited to: toilets, showerheads, and faucets) must be retrofitted exclusively with water-conserving plumbing fixtures. The water use standards permitted will be those current standards approved by the California Energy Commission.

d. Irrigation During Rain Events: The application of potable water to outdoor landscapes during and up to forty-eight (48) hours after measurable rainfall is prohibited.

e. Irrigated Medians: The use of potable water to irrigate ornamental turf on public street medians is prohibited.

f. Irrigated Parkways: The use of potable water to irrigate ornamental turf on public street parkways is prohibited.

g. Drinking Water Served Upon Request Only: Eating or drinking establishments, including but not limited to a restaurant, hotel, cafe, cafeteria, bar, or other public place where food or drinks are sold, served, or offered for sale, are prohibited from providing drinking water to any person unless expressly requested.
h. **Other Measures:** Other measures as may be required by the State or deemed necessary by the Board.

**Section 11. Penalties, Violations, and Enforcement.**

**During Effective Period of Permanent Water Conservation Requirements**

a. **Penalties:** Penalties for failure to comply with any provisions of the Conservation Program while Mesa Water District is enforcing the Permanent Water Conservation stage are as follows:

1. **First Violation:** Mesa Water District will issue a written warning and deliver a copy of this Conservation Program to the service address and/or by mail.

2. **Second Violation:** A second violation within the preceding twelve (12) calendar months will receive a second written warning and an attempt to contact the customer of record via telephone.

3. **Third Violation:** A third violation within the preceding twelve (12) calendar months will receive a third written warning with reference to the previous two violations and possibility of future actions including, but not limited to, water flow restriction and discontinued water service.

4. **Fourth and Subsequent Violations:** A fourth and any subsequent violation within the preceding twelve (12) calendar months may result in the installation of a water flow restrictor.

5. **Water Flow Restrictor:** In addition to any written warnings, Mesa Water District may install a water flow restrictor device of approximately one gallon per minute capacity for services up to one and one-half inch size and comparatively sized restrictors for larger services after written notice of intent to install a flow restrictor until the prohibited actions or practices have been deemed by the District to be satisfactorily discontinued or remedied and for a minimum of forty-eight (48) hours.

6. **Discontinuing Service:** In addition to any fines and the installation of a water flow restrictor, Mesa Water District may disconnect a customer’s water service for willful violations of mandatory restrictions in this Conservation Program.
During Effective Period of Level 1, Level 2, and Level 3 – Water Supply Shortage(s)

b. Penalties: Penalties for failure to comply with any provisions of the Conservation Program while Mesa Water District is enforcing Water Supply Shortage Level 1, Level 2, or Level 3 are as follows:

1. First Violation: A written warning will be issued and a copy of this Conservation Program delivered to the service address and/or by mail.

2. Second Violation: A second violation within the preceding twelve (12) calendar months will receive a second written warning and an attempt to contact the customer of record via telephone.

3. Third Violation: A third violation within the preceding twelve (12) calendar months will receive a third written warning with reference to the previous two violations and a Conservation Fee of $100, or the current charge per the schedule of fees and charges as then in effect, will be assessed to the customer’s water account.

4. Fourth and Subsequent Violations: A fourth and any subsequent violation within the preceding twelve (12) calendar months will receive an additional written warning with reference to the previous violations and a Conservation Fee of $200, or the current charge per the schedule of fees and charges as then in effect, will be assessed to the customer’s water account.

5. Discontinuing Service: In addition to any fines, Mesa Water District may disconnect a customer’s water service for a willful violation of mandatory restrictions in this Conservation Program.

c. Cost of Flow Restrictor, Conservation Fees, and Disconnecting Service: A person or entity that violates this Conservation Program is responsible for payment of charges for installing and/or removing any flow restricting device, Conservation Fees, and for disconnecting and/or reconnecting service per the schedule of fees and charges as then in effect. The charge for installing and/or removing any flow restricting device must be paid before the device is removed. Nonpayment thereof will be subject to the same remedies as nonpayment of water rates.

d. Separate Offenses: Each day that a violation of this Conservation Program occurs is a separate offense.
e. Notice and Hearing:

1. Mesa Water District will issue a Notice of Violation by mail or personal delivery at least ten (10) days before taking enforcement action on a particular violation. Such notice shall describe the violation and the date by which corrective action(s) must be taken. A customer may appeal the Notice of Violation by filing a written notice of appeal attention the District Secretary no later than the close of business on the day before the date scheduled for enforcement action. Any Notice of Violation not timely appealed will be final. Upon receipt of a timely appeal, a hearing on the appeal will be scheduled by the General Manager, and a written notice of the hearing date will be mailed to the customer at least ten (10) days before the date of the hearing.

f. Additional Actions, Penalties: The Board may prescribe additional action(s) and/or penalties for violation of the prohibited actions or practices described herein. Mesa Water District may also implement additional actions or programs to educate its customers, ratepayers, and Persons in the District’s service area as to the on-going need to conserve and use water wisely.

g. Application of Penalties: The General Manager or Water Conservation Coordinator, as applicable, shall have discretion as to the application of penalties and enforcement actions set forth herein. The overall intention of this Conservation Program is to implement water conservation actions as described herein.

h. The penalties established and set forth herein are regulatory and administrative in nature. Such penalties are not imposed for water service or water capacity to any particular customer or person.

Section 12. Hardship Waiver.

a. Undue and Disproportionate Hardship: If, due to unique circumstances, a specific requirement of this Conservation Program would result in undue hardship to a Person using water or to property upon which water is used, then the Person may apply for a waiver to the requirements as provided in this Section.

b. Written Finding: The waiver may be granted or conditionally granted only upon a written finding of the existence of facts demonstrating an undue hardship to a person using water or to property upon which water is used.
1. **Application:** An application for a waiver must be on a form prescribed by Mesa Water District and is available upon request from the Water Conservation Coordinator. The application must be submitted to the Water Conservation Coordinator and be accompanied by a written statement of the applicant.

2. **Approval Authority:** The Water Conservation Coordinator, as applicable, must act upon any completed application no later than ten (10) days after submittal and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver will be promptly notified in writing of any action taken. Unless specified otherwise at the time the waiver is approved, the waiver will apply to the subject property or person during the period of the mandatory water supply shortage condition, or a period not to exceed one (1) calendar year.

3. **Right of Appeal:** Any aggrieved applicant, who remains dissatisfied with the decision of the Water Conservation Coordinator, can appeal, in writing, such final decision to the General Manager. The General Manager shall hear such appeal and render his or her decision. The decision of the General Manager shall be final.

**Section 13. Other Provisions.**

Mesa Water® may provide water efficiency devices either directly or through supported programs. Such devices should remain within the District’s service area at all times. Devices provided by the District should be used with the intent to conserve water and not be modified in any way or sold.

**Section 14. Severability.** If any section, subsection, sentence, clause or phrase in this Conservation Program is for any reason held invalid, the validity of the remainder of the Conservation Program will not be affected. The Board hereby declares it would have passed this Conservation Program and each section, subsection, sentence, clause or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses, or phrases is declared invalid.
RESOLUTION NO. 1460

RESOLUTION OF THE
MESA WATER DISTRICT BOARD OF DIRECTORS
MAKING CERTAIN FINDINGS, ACTIVATING
THE MESA WATER DISTRICT
WATER CONSERVATION AND
WATER SUPPLY EMERGENCY PROGRAM
REDUCING WATER CONSUMPTION BY TWENTY (20) PERCENT
AND TAKING RELATED ACTIONS

WHEREAS, the Mesa Water District (Mesa Water®) is a county water district organized and operating according to California law; and

WHEREAS, periodic droughts are a historical fact in the State of California; and

WHEREAS, on January 17, 2014, the Governor of the State of California (“State”) declared a State of Emergency to exist throughout the State due to severe and identified drought conditions; and

WHEREAS, on July 16, 2014, March 17, 2015, and May 5, 2015 the California State Water Resources Control Board (SWRCB) adopted various drought-related emergency regulations for urban water conservation; and

WHEREAS, on April 1, 2015, the Governor issued an Executive Order that, in part, directed the SWRCB to impose restrictions on water suppliers to achieve a statewide 25 percent reduction in potable urban usage through February 28, 2016; and

WHEREAS, the State is entering a fourth consecutive year of below-normal precipitation and many communities in the State will suffer water shortages; and

WHEREAS, Mesa Water® has the authority to adopt water conservation requirements and programs to promote and effectuate wise water use and avoid water wastage; and

WHEREAS, the Board of Directors of Mesa Water® (Board) has previously adopted Ordinance No. 26, including the Mesa Water District Water Conservation and Water Supply Emergency Program (Conservation Program) to address water supply shortages and water conservation requirements to address such; and

WHEREAS, Mesa Water® derives the water which it delivers to its customers from local groundwater and supplemental waters imported from outside Mesa Water® boundaries; and
WHEREAS, the quality and quantity of supplemental imported water is under the control of other agencies, and may be subject to conditions beyond the control of those other agencies or Mesa Water®; and

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE MESA WATER DISTRICT DOES HEREBY RESOLVE, DETERMINE, AND ORDER AS FOLLOWS:

Section 1. Under the provisions of Ordinance No. 26, the Board finds and determines that a water shortage, or threat of a water shortage exists, such that it is necessary to activate the Water Conservation and Water Supply Emergency Program, based upon the occurrence of the following condition:

(a) A general water supply shortage due to limited supplies and drought conditions.

Section 2. The Water Conservation and Water Supply Emergency Program is activated at Water Supply Shortage Level 1 in its entirety. Such activation shall be effective immediately upon the adoption of this Resolution.

Designated Watering Days: Watering or irrigating of lawn, landscape, or other vegetated area is limited to a maximum of two (2) days per week, as referenced in Section 7(b)(1), on the following schedule:

- For all properties upon which water is used, the Watering Days are Tuesday and Saturday.

Section 3. In addition to the direction set out in Section 2, the Board directs that the provisions of Sections 10(d), 10(e), and 10(g) of the Conservation Program shall become effective immediately upon the adoption of this Resolution.

Section 4. This Resolution shall remain in place until rescinded, superseded, or modified by action of the Board.

Section 5. The Conservation Program is not otherwise amended or revised.

Section 6. The General Manager is authorized to take such other and further action(s) as are necessary or desirable to carry out the directives of this Resolution.
ADOPTED, SIGNED, and APPROVED, this 14th day of May 2015 by a roll call vote.

AYES: DIRECTORS: Atkinson, Bockmiller, Fisler, Temianka
NOES: DIRECTORS: 
ABSENT: DIRECTORS: Dewane
ABSTAIN: DIRECTORS: 

Coleen L. Monteleone
District Secretary

Shawn Dewane
President, Board of Directors
MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: October 20, 2015
SUBJECT: GIS Support Services

RECOMMENDATION

Recommend the Board approve:

1. Renew the GIS Support Services contract for two years and six months for $325,000 per year with Michael Baker International (formerly RBF); or

2. Direct staff to develop Requests for Proposals for GIS Support Services.

STRATEGIC PLAN

Goal #2: Practice Continuous Infrastructure Renewal and Improvement

PRIOR BOARD ACTIONS

- RBF was competitively selected in 2012. On December 11, 2012, the Board approved a contract with RBF for $85,000 for GIS Support Services.

- A change order for $157,000 was approved by the Board on July 23, 2013, to provide GIS support services for FY2014.

- A change order for $133,500 was approved by the Board on July 10, 2014, to provide GIS support services for FY2015.

BACKGROUND

Mesa Water® has strategically developed a versatile Geographical Information System (GIS) that is central to managing its infrastructure assets. Mesa Water’s GIS System also functions as the backbone for Mesa Water’s hydraulic model, District mapping activities, record drawings database, demographic and parcel information database, and interface to the District’s construction maintenance management system (CMMS). Key successes to the FY 2015 GIS Program include the following:

1. **Database, Modeling, and GIS Server Services**: This task included hosting of the web-based GIS access, GIS server and software maintenance, and performing Mesa Water’s hydraulic model analyses. In addition, hydraulic model analysis was conducted for several large scale development projects (i.e. Lighthouse 89).

2. **GIS Database Support Services**: This task included updating the GIS database with new development asset construction and Mesa Water® asset replacement activities.

3. **Special Map Production**: This task involved map production using the GIS spatial database
information and hydraulic model results that are used for presentations to the Board, management team, and at community activities. Maps created include the Storm Drain Map, used to facilitate compliance with a new Mesa Water® discharge permit, system pressure maps, and the new wall map in the Board room.

4. **User Training**: To ensure that Staff was able to fully utilize the GIS system, including the new web-based system, on-site and in-the-field training was completed with members of Engineering, Operations, and Customer Service field staff.

**DISCUSSION**

In FY 2016, the GIS Program will expand the use of the new web-based GIS viewer system, continue to use the integrated GIS and hydraulic model to improve operations of Mesa Water’s distribution system hydraulics, update the ArcView GIS licensing, and integrate other Mesa Water® databases into the GIS as recommended in the Business Processes Evaluation (BPE). FY2016 Program tasks are outlined as follows:

1. **Upgrade ArcSDE and ArcGIS Server**: Mesa Water® is currently using software version 9.3.1 which is no longer supported by the Environmental Systems Research Institute (ESRI). This fiscal year’s GIS program includes upgrading to software version 10.3.

2. **Web Mapping Updates**: Update the web based forum to allow for mapping updates, apply redline and online editing tools, streamline ChangingLands Work Order System, and host database synchronization.

3. **Atlas Map Updates**: Update Mesa Water® Atlas Maps including facility ID updates and integrating as-built drawings as part of the development plan check process.

4. **Staff Training**: Provide training for new software, mapping, and database manipulation.

5. **On-Call Support Services**: This task involves map production using the GIS spatial database information and hydraulic model results that are used for presentations to the Board, management team, and at community activities.

Michael Baker International has been instrumental in integrating and customizing Mesa Water’s GIS System. They currently host the GIS and web based software platform and provide excellent service in both planned and response based work conditions. Therefore, it is recommended that the Board consider authorizing an amendment to Michael Baker International contract for $325,000 for two and half year contract extension to use the institutional knowledge invested by Michael Baker International in Mesa Water’s GIS System. Alternatively, the Engineering & Operations Committee may desire to direct staff to competitively solicit proposals for this contract.

**FINANCIAL IMPACT**

$371,225 has been expended to date. $130,000 was budgeted for FY 2015. A budget request of $130,000 will be made for GIS Support Services in the FY2016 and FY2017 Budget.
ACTION ITEMS:

5. CLOSED SESSION:

   CONFERENCE WITH REAL PROPERTY NEGOTIATORS:
   Pursuant to Government Code Section 54956.8:
   Property: Portion of Assessor's Parcel Number 169-421-29
   District Negotiator: General Manager
   Negotiating Parties: Los Caballeros
   Under Negotiation: Possible purchase of property for well site.
<table>
<thead>
<tr>
<th>FILE NO.</th>
<th>PROJECT ADDRESS</th>
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<th>PROJECT NOTES/STATUS</th>
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<tr>
<td>MC 2083</td>
<td>2600 Harbor Blvd.</td>
<td>Orange Coast Cadillac</td>
<td>Plans received on 3/12/14. Initial comments sent to Engineer via email 3/27/14 and official plan check with check prints completed 4/24/14. Revised plans received from Engineer 4/27/14. Revised plans did not address comments. Comments sent back to Engineer 4/29/14. Revised plans received 5/9/14. Notified Engineer that plans need to include fireline improvements in addition to meter and service relocations. Engineer stated that the fireline improvements were still under design and a re-submittal would not be immediate. Awaiting revised plans containing fire line improvements. Checked status with Engineer on 8/7/14. Developer stopped by on 10/7/14 to ask about status and was reminded that Engineer has not yet submitted revised plans. Developer again stopped by on 10/30/14 and was reminded that Engineer is awaiting revised plans. Revised plans submitted 12/4/14. Coordinating with developer on plan check comments. Plans reviewed and ready for permit issuance. Water service agreement application for new service and payment voucher mailed to the developer. Fees paid on 5/27/15. Mylars signed on 6/25/15. Permit issued 8/6/15. Hot-tapped watermain and ran fireline on 9/1/15. Abandonment of 1&quot; and 1.5&quot; service on 10/3/15. (10/6/15)</td>
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<tr>
<td>MC 2095</td>
<td>2023-2027 Placentia</td>
<td>36 Condos</td>
<td>Plans received and fees paid on 6/3/14. Plans reviewed and discussed with Phil L and easement proposal denied. Plan revisions emailed to Engineer and discussed over the counter. Engineer inquired about master meter options. Mesa Water indicated that master meter option was not within Board policy. Direction to install meter manifolds sent to Engineer on 7/3/14. Engineer submitted completely revised plans on 8/19/14. 1st plan check comments (1st with complete revised design) issued on 8/21/14. Revised plans received on 9/4/14 and 2nd plan check complete on 09/9/14. Final plans submitted, reviewed, and approved for mylar printing on 09/9/14. Signed/stamped mylars received, forms signed, and fees paid on 10/2/14. Water service agreement signed and permit issued on 10/21/14. USA underground marking on 3/30/15. Awaiting request for inspection. Pre-con meeting on 7/15/15. Inspector performed site visit on 8/26/15 to check status. Inspected 6” manifold installation on 10/3/15. (10/6/15)</td>
</tr>
<tr>
<td>MC 2099</td>
<td>1974 Meyer Place</td>
<td>5 New Homes</td>
<td>Inactive project reopened on 7/22/15. Awaiting plan resubmittal. (10/6/15)</td>
</tr>
<tr>
<td>MC 2118</td>
<td>220 E. 16th St.</td>
<td>Home Remodel (Complete Remodel)</td>
<td>Plans received and plan check fees paid 08/27/14. Plan check complete 8/28/14. Following plan check, and while awaiting corrected plans, inaccuracies in Mesa Water records were discovered, and inspector was requested to field verify the actual conditions. 2nd set of plans were revised to reflect actual conditions, and plan check finalized on 10/02/14. Mylars received and fees paid on 10/14/14. Permit issued on 10/21/14, and issued inspection checklist on 10/27/14. Mesa Water inspector reported no activity onsite 5/5/15. Contractor came into Mesa Water Plan Check Desk to discuss project status on 8/25/15. (10/6/15)</td>
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<tr>
<td>MC 2119</td>
<td>236 E. 16th St.</td>
<td>Home Remodel</td>
<td>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. Mesa Water inspector reported no activity onsite 5/5/15. Engineering called contractor on 8/10/15. Contractor scheduled to complete work, waiting for inspection to be scheduled. (10/6/15)</td>
</tr>
<tr>
<td>MC 2126</td>
<td>573 Victoria</td>
<td>37 New Homes</td>
<td>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. (10/6/15)</td>
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| MC 2130 | 789-795 Paularino           | 19 New Homes              | Plans received and fees paid on 10/17/14. Plans reviewed on 10/28/14 and circulated for Dept. signature. Due to an existing private well nearby and discharge piping on site, staff has asked the Developer to have the well capped and the discharge piping removed prior to issuance of plan check comments. After Developer agreed to cap the well, plan check comments were issued to Developer on 11/20/14. Received revisions from developer on 1/8/15. Plans approved 2/3/15. PreCon meeting held 2/4/15. Installed 6 - 2” services on 2/13/15. Installed 19 - 1” services on 4/28/15. Installed 1 - 3/4” irrigation meter on 6/4/15. Flow through test completed on 7/6/15. Inspection ongoing as work progresses.  
(10/6/15) |
| MC 2134 | 2026 Placentia              | 15 New Homes              | Plans received and fees paid on 10/30/14. Plans reviewed on 10/30/14 and circulated for Dept. signatures. Plan check comments issued to Engineer on 11/13/14. Received revised plans 1/6/14. Plan check completed and permit issued 2/9/15. PreCon meeting held 2/11/15. Inspection ongoing as work progresses. Main hot-tap performed on 5/5/15. Services installed by contractor on 5/7/15. 16 - 1 inch meters installed on 7/6/15.  
(10/6/15) |
| 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.  
(9/3/15) |
(10/6/15) |
(10/6/15) |
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<tr>
<td>MC 2165</td>
<td>341 16th Place</td>
<td>2 Single Family</td>
<td>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&quot; service on 9/28/15. Installed 2 - 1&quot; meters on 10/1/15. (10/6/15)</td>
</tr>
<tr>
<td>MC 2177</td>
<td>125 East Baker Street</td>
<td>240 Unit Apartment</td>
<td>Plans received and plan check fees paid on 6/11/15. Comments returned on 7/31/15. Second plan check returned on 8/20/15. Awaiting resubmittal. (10/6/15)</td>
</tr>
<tr>
<td>MC 2178</td>
<td>334 East 16th Street</td>
<td>2 Single Family</td>
<td>Plans received and plan check fees paid on 6/12/15. Comments returned on 6/24/15. Second plan check returned on 8/24/15. Awaiting fee payment. (10/6/15)</td>
</tr>
<tr>
<td>MC 2181</td>
<td>250 Flower Street</td>
<td>Remodel</td>
<td>Plans received and plan check fees paid on 6/22/15. Comments returned on 7/22/15. Awaiting re-submittal (10/6/15)</td>
</tr>
<tr>
<td>MC 2183</td>
<td>262 Esther Street</td>
<td>Single Family Home</td>
<td>Plans received and plan check fees paid on 7/1/15. Comments returned on 7/31/15. Second plan comments returned on 8/24/15. Plan check process completed on 9/17/15. Awaiting construction cost estimate. (10/6/15)</td>
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<tr>
<td>MC 2184</td>
<td>1670 Tustin Ave</td>
<td>Remodel</td>
<td>Plans received and plan check fees paid on 7/1/15. Comments awaiting pick-up at Plan Check Desk. (10/6/15)</td>
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<tr>
<td>MC 2187</td>
<td>2245 Tustin Ave</td>
<td>Single Family Home</td>
<td>Plans received and plan check fees paid on 7/8/15. Second plan check comments returned on 8/17/15. Awaiting fee payment. (10/6/15)</td>
</tr>
<tr>
<td>MC 2188</td>
<td>2701 Harbor Blvd</td>
<td>Restaurant</td>
<td>Plans received and plan check fees paid on 7/13/15. Inspector performed pre-site survey to determine size of meter in meter room. Plan check comments awaiting pick up. (10/6/15)</td>
</tr>
<tr>
<td>MC 2193</td>
<td>3154 G Airway Ave</td>
<td>Tenant Improvement</td>
<td>Plans received and plan check fees paid on 7/23/15. Plan check comments returned 8/24/15. Awaiting payment of fees. (10/6/15)</td>
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<tr>
<td>MC 2196</td>
<td>580 Anton Ave</td>
<td>250 Unit Apartment Complex</td>
<td>Plans received and plan check fees paid on 7/28/15. Plan check comments returned 8/28/15. (10/6/15)</td>
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<tr>
<td>MC 2198</td>
<td>217 Ogle St.</td>
<td>Single Family Home</td>
<td>Plans received and plan check fees paid on 7/30/15. Plan check comments awaiting pick up. (10/6/15)</td>
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<tr>
<td>MC 2199</td>
<td>225 Ogle St.</td>
<td>Single Family Home</td>
<td>Plans received and plan check fees paid on 7/30/15. Permit issued on 9/21/15. (10/6/15)</td>
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<tr>
<td>MC 2200</td>
<td>3150 Pullman St.</td>
<td>Fireline installation</td>
<td>Plans received and plan check fees paid on 8/6/15. Plan check comments returned 8/25/15. Permit issued on 9/21/15. (10/6/15)</td>
</tr>
<tr>
<td>MC 2202</td>
<td>2880 Mesa Verde Drive East</td>
<td>10 Single Family Homes</td>
<td>Plans received and plan check fees paid on 8/19/15. Plan check waiting to be picked up. (10/6/15)</td>
</tr>
<tr>
<td>MC 2203</td>
<td>1239 Victoria Street</td>
<td>28 Single Family Homes</td>
<td>Plans received and plan check fees paid on 8/25/15. Plan check waiting to be picked up. (10/6/15)</td>
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<tr>
<td>MC 2204</td>
<td>1672 Placentia</td>
<td>32 Single Family Homes</td>
<td>Plans received and plan check fees paid on 8/26/15. Plan check waiting to be picked up. (10/6/15)</td>
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<tr>
<td>MC 2205</td>
<td>2701 Harbor Blvd</td>
<td>Yoga Studio</td>
<td>Plans received and plan check fees paid on 9/21/15. Permit issued on 9/23/15. (10/6/15)</td>
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<tr>
<td>MC 2206</td>
<td>247 E 23rd St</td>
<td>Single Family Home</td>
<td>Plans received and plan check fees paid on 9/21/15. Plan check waiting to be picked up. (10/6/15)</td>
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<tr>
<td>MC 2207</td>
<td>1654 Oahu Pl</td>
<td>Single Family Home</td>
<td>Plans received and plan check fees paid on 9/22/15. Permit issued on 10/1/15. (10/6/15)</td>
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<tr>
<td>MC 2208</td>
<td>353 &amp; 355 Rochester St.</td>
<td>2 Single Family Homes</td>
<td>Plans received and plan check fees paid on 9/22/15. Plan check in progress. (10/6/15)</td>
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<tr>
<td>MC 2210</td>
<td>3086 Warren Lane</td>
<td>Single Family Home</td>
<td>Plans received and plan check fees paid on 9/22/15. Plan check in progress. (10/6/15)</td>
</tr>
<tr>
<td>MC 2212</td>
<td>341 Bayside Drive</td>
<td>Fireline installation</td>
<td>Plans received and plan check fees paid on 9/29/15. Plan check in progress. (10/6/15)</td>
</tr>
<tr>
<td>MC 2213</td>
<td>847 W 16th St</td>
<td>Tenant Improvement</td>
<td>Plans received and plan check fees paid on 9/29/15. Plan check in progress. (10/6/15)</td>
</tr>
<tr>
<td>MC 2214</td>
<td>1944 Church St</td>
<td>2 Single Family Homes</td>
<td>Plans received and plan check fees paid on 10/5/15. Plan check in progress. (10/6/15)</td>
</tr>
<tr>
<td>MC 2215</td>
<td>119 Cecil Pl</td>
<td>3 Single Family Homes</td>
<td>Plans received and plan check fees paid on 10/5/15. Plan check in progress. (10/6/15)</td>
</tr>
<tr>
<td>MC 2216</td>
<td>320 E 18th St</td>
<td>4 Single Family Homes</td>
<td>Plans received and plan check fees paid on 10/5/15. Plan check in progress. (10/6/15)</td>
</tr>
</tbody>
</table>
**Project Title:** OC-44 Transmission Main Leak  
**File No.:** MC 1977  
**Description:** Replace damaged section of pipeline  
**Status:** Notice of intent to issue permit was granted by California Coastal Commission on 3/14/13. Staff is working on preparing a plan to monitor the disturbed area. Requested RBF to review the Habitat Restoration Plan and provide recommendations 7/2/14. Working with RBF on developing Permit Application and CEQA documents for OC-44 repair and proposed slip-lining project (see below OC-44 Replacement and Rehabilitation Evaluation and Cathodic Protection Study MC 2034)

**Project Title:** Project Management Guidelines  
**File No.:** MC 2043  
**Description:** Develop Project Management Guidelines  

**Project Title:** District Engineering Services for East Orange County Water District  
**File No.:** MC 2051  
**Description:** Provide District Engineering services to East Orange County Water District  
**Status:** Sent draft RFP for consultant review for Master Plan Update and Feasibility Study for new water treatment plant on 11/6/13. Additional analysis to predict the cost of imported water in progress. RFP release approved by EOCWD Board on March 20, 2014. Final RFP Released May 2, 2014. Interviews of 4 proposers were held on June 5, 2014. Recommendation for the Master Plan and treatment plant study was awarded
to Carollo Engineers and approved by EOCWD Engineering Committee on June 17, 2014. Interviews with candidate Project Managers held on September 4, 2014. Assisting EOCWD with 6 MG reservoir seismic analysis. Assisting with review of customer development projects. Staff supported kickoff of EOCWD Peter’s Canyon Water Treatment Plan Feasibility Study and Master Plan Updates on September 24, 2014, and Master Plan Criteria Selection meeting on October 7, 2014. Scope of the project was changed to include condition assessment and recommendations for Peter’s Canyon Reservoir. Project Workshop and Board Engineering Committee Meetings to review the Basis of Design and the Condition Assessment Plan were held on January 13, 2015. The draft Reservoir Evaluation, and Water System Condition Assessment where received on January 30, 2015. A workshop to review these documents and the Treatment Technology Evaluation was held on February 13, 2015 to prepare for Engineering Committee Meeting held on March 10, 2015. A workshop for EOCWD’s Board was held on July 9, 2015, to present the proposed Capital Improvement Program.

**Project Title:** MWRF Finished Water Quality Polishing Project  
**File No.:** MC 2039  
**Description:** Enhance finished water quality water at the MWRF via Pilot Scale test  

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. Design in progress. (10/12/15)

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 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 Brach 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. Final bid set will be completed once permits are approved (10/12/15).

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>Well Automation and Rehabilitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>File No.:</td>
<td>MC2101</td>
</tr>
<tr>
<td>Description:</td>
<td>Rehabilitate all clear water wells and add remote control SCADA capabilities</td>
</tr>
<tr>
<td></td>
<td>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</td>
</tr>
</tbody>
</table>

Page 4 of 10
for June 25, 2015. 90% design submittal received on July 15, 2015. Engineer's Estimate of probable cost at 90% is approximately $8.5M. 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 Walk was conducted on October 13, 2015. Bid opening in scheduled for December 1, 2015.

<table>
<thead>
<tr>
<th>Project Title: Well 9 Repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>File No.: MC2145</td>
</tr>
<tr>
<td>Description: Comprehensive cost/benefit evaluation and planning for Well 9</td>
</tr>
<tr>
<td>Status: Change Order 1 to Well Automation and Rehabilitation Project issued on 10/23/14 to provide comprehensive evaluation and recommendations for Well 9. Kickoff held on 10/24/14. OCWD provided requested aquifer information on 11/3/14. Evaluation recommended rehabilitation of existing Well 9 and placement of pump at 300' below ground to account for predicted aquifer drawdown levels at 500,000 AF overdraft. Design of rehabilitation and pump specification are in process. Change Order 2 issued to Carollo on 12/15/14 for Well 9 Design scope. Draft Well Rehabilitation design package and pump procurement design package were received on January 16, 2015. Draft combined Request for Bid (RFB) for well rehabilitation, pump procurement, and pump installation was received on February 3, 2015. The RFP was released to six recommended contractors on February 24, 2015. A job walk was held on March 5 with four contractors. Bid opening is held on March 16, 2015. Three bids were received. A contract was awarded to General Pump, the low bidder, on March 30, 2015. Pre-construction meeting was held on March 27, 2015. Well video to diagnose camera port damage conducted on April 1, 2015, and viewed on April 5, 2015. Well screens cleaned May 1-May 11, 2015. Well redevelopment and pumping tests planned for May 25-June 4, 2015, stopped due to sanding. Well 9 progress report provided at May 19, 2015 E&amp;O Committee meeting, and updated at July 21, 2015 E&amp;O Committee meeting. Swage of casing successfully completed on July 27, 2015. Well screen swabbing completed on July 31, 2015. Video after swabbing on August 3, 2015, confirmed filter pack in place and no additional visible issues. Test pumping and redevelopment successfully completed August 14-21, 2015. Well casing survey performed on August 27, 2015, and well bottom bailing and re-capping planned for September 16, 2015. Well pump factory witness testing was completed August 31, 2015. Well pump installed during the week of September 28, 2015 and construction of water flush system and reconnection to distribution system piping performed during the week of October 5, 2015. Well start up and testing continuing in October.</td>
</tr>
</tbody>
</table>
Project Title: Two New Wells  
File No.: MC2158  
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. An offer to purchases is being prepared for one site. 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.

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. Staff and City of Costa Mesa are reviewing the 100% design submittal package. The final design package is expected to be submitted on 10/16/15. Design in progress (10/12/15).
### Project Title: OC 44 Import Stations Flow Meter Replacement  
**File No.:** MC 2088  
**Description:** Provide design for replacement of Flow Meters in the OC 44 Import Turnouts No. TO-2, TO-4, and TO-5  
**Status:** Task Order No. RBF-3 for preparing construction drawings, technical specifications, and bid documents for the flow meter replacements in the import turnouts No. TO-2, TO-4, and TO-5 issued to RBF Consulting on July 23, 2014. 75% plans and specifications submitted for review 10/7/2014. Staff is reviewing the submittal (10/9/2014). The review comments returned back to the consultant 11/4/14. Design of new pressure gauges, pressure transmitters, and related improvements were added to the scope in December 2014. Design in progress. 90% design package submitted for review on 2/20/15. Working with consultant and CLA-VAL on reviewing the design (3/6/15).  
100% design submitted on 3/10/15. The comments to the 100% design sent back to the designer 4/30/15. Final design package received on 5/27/15. Mesa Water staff is reviewing the package and working with RBF on addressing final comments 6/8/15. Project solicited 6/17/15 and pre-bid walk held on 6/29/15. Bids opened on 7/10/15. Staff recommended that the Board of Directors award a contract to the lowest bidder Jamison Engineering. E & O Committee recommended approval on 7/21/15. Board approved the project on 8/10/15. The kick-off meeting held on 8/17/15. Staff has finalized the contract and issued Notice to Proceed on 9/16/15. Project in progress (10/12/15).

### 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 is reviewing the submittal (10/12/15).
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 expected on October 28, 2015.

Project Title: Fall Protection Implementation

File No.: MC 2129

Description: Implement recommendations from Fall Protection evaluation.

Status: Developing project schedule and recommendations for procurement. Identifying qualified contractors for design-build for construction of guardrails and access gates. Developing scope of services. Job walk conducted on March 25, 2015, with Versatile Fall Protection to identify options for closing the fall protection audit findings. Initial recommendations and cost estimate received on April 8, 2015. Contract for implementation of fall protection recommendations signed with Versatile Fall Protection under General Manager’s authority on July 7, 2015. Preconstruction meeting held on July 9, 2015. Initial project submittals received on July 22, 2015. Installation of guardrails, skylight screens, ladder gates, and anchor points at the Administration Building and Field Office completed Aug 20-22, 2015. Installation of skylight screens and guardrails completed at the MWRF on September 1, 2015, and anchor points on September 14, 2015. Installation of new ladders, guardrail repair, and ladder gates at

**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 will be presented at the October Board Workshop.

**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® is coordinating with Goss Engineering Inc. on signing the contract and obtaining insurance certificates.

**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. Awaiting revised plans. (10/12/15).
Project Title: Other Agency Project Coordination

File No.: 

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

Status: Relocation of 12” water main is required due to enlarged box culvert on Greenville-Banning Channel. Task Order No. RBF-2 issued to RBF Consulting on June 24, 2014 for design of the relocation. Mesa Water® is coordinating with County of Orange and RBF. Design in progress. Hydraulic analysis received from RBF 9/12/14 indicated that taking the New Hampshire pipeline out of service during construction of the Greenville-Banning Channel will have no adverse impacts on the distribution system (8/9/14). Mesa Water® is working with OCFCD on finalizing the cooperative agreement. E&O Committee approved the agreement 11/18/14. Pipeline relocation design package submitted to Mesa Water® on 1/31/15. Mesa Water® is coordinating with OCFCD and consultant to address final comments. Plans and specifications for the pipeline relocation completed 3/3/15 and forwarded to OCFCD on 3/5/15. Attended the pre-construction meeting on 7/21/15. Project start date has been moved to end of March 2016. (10/12/15)

Project Title: Other Agency Project Coordination

File No.: 

Description: Water main relocation due to proposed improvements at the Performing Arts Center.

Status: Mesa Water staff is coordinating with Pacific Arts Center and RBF (designer) on relocation of 12” water main. Coordination meeting with Performing Arts Center and RBF held on 8/5/2014. Additional information regarding the proposed type of trees and root barrier submitted on August 28, 2014. Submittal was received and comments provided. Revised submittal received on 10/6/14. Staff is reviewing the submittal and coordinating with RBF and Performing Arts Center (11/6/14). Project on hold due to C.J. Segerstrom’s review until April/May 2015. Coordination meeting with Performing Arts Center and RBF held on 6/17/15. Awaiting revised submittal. (10/12/15)
Water Quality Call Report  
September 2015

Date: 9/16/2015  
Source: Phone  
Address: 359 E. 16th Place  
Description: Customer called and was concerned about the temperature of the water in his home. He noticed the water has been luke warm on the cold water line ever since he had a tankless water heater put in.

Outcome: Customer was asked to flush and check the water temperature of the faucet closest to the water main since that will be representative of the water entering his home. Looked up recent field data and provided customer the average temperature for the sample stations closest to his home. Explained to customer that the heat has an impact on the water in the distribution system over which Mesa Water® has no control.

Date: 9/29/2015  
Source: Phone  
Address: 3093 Loren  
Description: Customer concerned with water getting cloudy in the fish tank.

Outcome: Customer was asked to confirm if the water was clear at the tap but she had no clear glass to use. Her concern was with the fish tank water only. She was advised to contact her local aquarium store.
## MESA WATER DISTRICT
### COMMITTEE POLICY & RESOLUTION
### REVIEW OR DEVELOPMENT

### ENGINEERING & OPERATIONS COMMITTEE

### Policy Assignments for 2015

<table>
<thead>
<tr>
<th>Policy Name</th>
<th>Resolution</th>
<th>Date Adopted</th>
<th>Revision Schedule</th>
<th>Next Review</th>
</tr>
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<tbody>
<tr>
<td>Rules and Regulations for Water Services (will include review of meter capacity charges and easement procedures)</td>
<td>Resolution No. 1452</td>
<td>10/09/14</td>
<td>Review and update as needed</td>
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<tr>
<td>Standard Specifications and Drawings</td>
<td>Resolution No. 1449</td>
<td>08/14/14</td>
<td>Review and update as needed</td>
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## Operations Department Status Report

### July 1, 2015 - September 30, 2015

<table>
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<tr>
<th>Program</th>
<th>Plan Days</th>
<th>Act Days</th>
<th>Plan Qty</th>
<th>Act Qty</th>
<th>Plan Cost</th>
<th>Actual Cost</th>
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<tbody>
<tr>
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RECOMMENDATION

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

STRATEGIC PLAN

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

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

<table>
<thead>
<tr>
<th>Orange County monthly % Savings vs. SWRCB Target</th>
<th>June</th>
<th>July</th>
<th>August</th>
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<tbody>
<tr>
<td>Orange County SWRCB Savings Target*</td>
<td>21.73%</td>
<td>21.73%</td>
<td>21.73%</td>
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<tr>
<td>Orange County Actual Savings</td>
<td>23.86%</td>
<td>29.16%</td>
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<td>Savings beyond the Target</td>
<td>2.13%</td>
<td>7.43%</td>
<td>3.39%</td>
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</table>

For the month of August, Orange County retail water agencies reported a total water savings of 25.12% (note this is compared to August 2013 water usage). This exceeds the Orange County conservation target for the month of 21.73% by 3.39%. The cumulative savings for three months into the State Board regulations total is 26.57% for Orange County. While the 10-year average historical water usage is 64,107 AF, water usage for August 2015 was only 50,000 AF.
As of October 1, the total actual imported water usage for July through September totals 43,748 AF, 21,208 AF below the estimated allocation target (this includes the approximately 6,500 AF purchased for OCWD in July and August).

The total rainfall on the single day of rain in September was more than January, February and March combined. The 2015/2016 rain season has reached almost 2” in rainfall. All weather patterns indicate that we are on track for a strong El Nino. California is currently experiencing above average rainfall throughout the state with Southern California at 60% above normal, Central California at 50% above normal and Northern California at 33% above normal. This unusual wet summer is providing a benefit to Southern California by slowing down the draw on local and regional storage. MET projects that if demands continue to be low, storage could end the year slightly below a 1.0 million AF (Note: MET storage levels were at 1.2 MAF Jan. 1 2015).

**MET IRP Update:** MET is using a new model to project demands to the year 2040. Demographics show a decrease of 500,000 acft from the 2010 study period. Retail water demands are projected to be about 4.2M acft in 2020 and 4.5M acft in 2040. The model shows about 2.3M acft will come from local supply in 2020 and 2.4M in 2040. It should be noted that only current supplies are being included in this forecast. Demands on the MET system are estimated to be 1.94M acft in 2020 and 2M acft in 2040. The GAP in supply between MET and local supply vs. demand is about -128,000 acft in 2020 and 292,000 acft in 2040. The next phase of the IRP will address the GAP. About 400,000 acft can be realized by the “California Water Fix” Delta program. This 2015 plan does not include future active WUE beyond 2015-16. It does not take into account any new local projects unless they are already under construction. The California Fix or yield is not considered. What is included is existing storage and transfers and future passive WUE, including plumbing code changes. The shortage probability of doing nothing in 2020 is about an 8% shortage and a 59% shortage in 2040. The summary of shortage probability with the addition of some new projects, such as the California Water Fix and desalination, is about 2% in both 2020 and 2040.

**LAST MONTH’S ISSUES**

- **Water Sales:** Within MET’s service area demands are down 25% from baseline budget numbers. MET had projected a possible 15% reduction due to conservation, but not 25%. They will use reserves to make up the losses.
- **IRP Process:** The first IRP was developed in 1994 and has been updated three (3) times. The last update was in 2010 and will continue on the same schedule as the UWMP (every 5 years on years ending in 0 or 5). MET is working on two areas of the plan: 1) Goals & Targets of the existing 2010 plan and 2) Highlights & Targets from 2010. In other words, how did MET do with respect to their projects within the past 5 years. They are reviewing Policy issues as they relate to groundwater clean-up via the LRP Programs.
• **California Water Fix (Bay Delta):** The process is moving forward and there are no significant changes to the project itself, just how it will be permitted. MET’s staff is very involved in the process and is compiling comments that are due by the end of the month. Final environmental documents should be completed by the 1st quarter of 2016.

• **Waters of the U.S.:** The EPA and Army Corp. have the mission to regulate all waterways within the U.S. including dry rivers, creeks and channels that only have water 20-30 days per year. This is a complicated issue and restrictive permitting can have negative effects for waters entering the Colorado River. MWDOC will be participating in policy development that could result in lower water supplies.

• **Diamond Valley Reservoir:** Levels within the reservoir are tracking as projected and the goal is to keep the reservoir at current levels. MET believes this to be an attainable goal.

• **Drought Rebound:** MET is evaluating how much of the demands will rebound once the drought is finished. MET believes that 100% of demands will not recover due to changes in habits and demand hardening.

• **Equity Partners:** There is a growing movement within MET to look into this concept for large projects (i.e. desalination). MET is evaluating partnering opportunities.

**UPCOMING ISSUES**

- Emergency Drought Regulations
- MET- Integrated Resource Planning
- Local Resource Planning - Desalination

**FINANCIAL IMPACT**

There is no financial impact.

**ATTACHMENTS**

None.
MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: October 20, 2015
SUBJECT: Orange County Water District Activities Update

RECOMMENDATION

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

STRATEGIC PLAN

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

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

Direct Access Electricity Purchase for Groundwater Replenishment System: The Board voted unanimously to solicit an electricity bid from Constellation New Energy, authorize the General Manager to Purchase two additional long-term blocks of fixed-price power from Constellation New Energy if the bids are favorable, and report the results back to the Executive Committee.

The current agreement runs from June 2013 – June 2018. The direction given is to look at purchasing an additional block for 2018 - 2021. The existing contract is for 12 Mega Watts on-peak and 11 Mega Watts off-peak at a cost of $.04837 kWh through 2018. Because energy rates are favorable it is beneficial to purchase additional blocks of energy now vs. purchasing on the open market where prices can vary. The power purchase would be a combination of natural gas and renewable energy.
LAST MONTH’S ISSUES

• Results of September 2, 2015 Public Hearing to consider changing the BPP and MWD Untreated Full Service Water Implications: OCWD staff presented the concept of raising the BPP to the Board. There were three options under consideration:
  1) Raise the BPP to 90%
  2) Leave the BPP at 70%
  3) Raise the BPP to 76%.

Staff recommended that the BPP be raised to 76% for the remaining 10 months of the water year. The Board Members made comments as to their determined vote. All nineteen (19) Producers voted, with ten (10) agencies supportive of 76%, five (5) agencies voted for staying at 70% and four (4) agencies wanting 90%. A motion was made to approve the recommended action of 76%. The vote was seven (7) ‘yes’ votes and three (3) ‘no’ votes. The District Act requires a minimum of eight (8) ‘Yes’ votes to change the BPP. After another round of discussion and several Board Members reminding the three (3) ‘no’ votes that it will not harm the basin because of reduced demands within the Basin due to conservation. In fact, it would help the agencies with some of their budget shortfall as a result of lower water sales (conservation). One Board Member made a motion to take the BPP to 74% and another round of discussion occurred. Finally, a recommendation was made to table the issue for another two weeks and bring this issue back to the Board. This motion passed and the Public Hearing was held over to the next regular meeting. There was one public comment from Yorba Linda Water District encouraging the Board to keep the BPP at 70%.

• Water Resources Report – OCWD reported that 1.56” of rain was received in the last week. Season to date rain fall is 2.4” above normal. OCWD also stated that 3200 af of storm flow was captured at Prado Dam. At the current rate of 150 cfs of in-flow and 200 cfs of outflow, the dam would drain down in approximately 10 days. Staff was directed to research the possibility of an inflatable dam at Coyote Creek.

• Laguna Beach 1993 MOU to Pump Groundwater: OCWD staff presented an update to the committee on the 1993 MOU between OCWD and Laguna Beach County Water District (LBCWD). LBCWD originally owned wells in the City of Huntington Beach near Atlanta and Magnolia along with a pipeline that transported groundwater back to their service territory. In the early 1940’s, the groundwater was contaminated with ocean water and it was abandoned in the mid 1940’s. Due to the seawater intrusion, LBCWD eventually annexed out of Orange County Water District and took actions to begin receiving imported water from the Metropolitan Water District by 1948 to replace its lost supply. LBCWD has a court ordered judgment from 1933 allocating 2,025 acre-feet per year of groundwater to LBCWD to be extracted from this area of the basin. In 1993, OCWD entered into a MOU with LBCWD to allow groundwater pumping at the Lindsay well site located on Magnolia and Garfield in the City of Huntington Beach. The MOU stipulated that LBCWD extract water from the seaward side of the Talbert Seawater Barrier. GWRS was developed in the late 1990’s, which then rendered the well site within the 2,000’ barrier. In 2015, LBCWD was granted permission to develop a well at this location. LBCWD has estimated it would cost millions of dollars to develop the site with the
required treatment. LBCWD has asked that OCWD allow them to proceed in finding water outside the barrier. Both OCWD staff and their Board do not desire anyone to pump from the seawater barrier, this would be counterproductive. LBCWD has presented a “cost neutral” concept, if they were allowed to move their well location. The Board has directed OCWD staff to work with LBCWD on an agreeable compromise and to bring this issue back to the committee within the next 30 days.

- **OCWD Integrated Watershed Management Plan (IWMP):** OCWD is evaluating the possibility of preparing its own Integrated Watershed Management Plan outside the purview of SAWPA. The advantage of this would allow more equitable distribution of future grant money to Orange County, as Orange County would not be supporting projects that would take water away from OCWD (such as reclamation projects in the upper watershed). This would help others to recognize that Orange County has approximately 50% of the population and contributes over 50% to the tax rolls. The disadvantage of this approach would cause the SAWPA agencies to be concerned at a potential for reduced grant funding for future endeavors. The WIC committee has directed OCWD staff to come up with recommendations on whether or not OCWD should split and develop its own IWMP outside of SAWPA.

- **Poseidon Resources Update:**
  a) Letter from City of Huntington Beach: The Mayor from Huntington Beach sent a letter to OCWD warning OCWD that Huntington Beach fully expect to be paid a franchise fee and utility tax no matter who owns the pipeline.

  b) Possible Water Issues Committee Direction Regarding Mesa Water Survey: WIC members directed staff to look into the possibility of doing additional surveys that would include the entire OCWD service area or all of Orange County. The committee wants the larger surveys to give both the advantages and challenges of desalination in an effort to not influence the survey on only positive issues.

  c) Distribution System Evaluation Status: OCWD staff has nearly completed their concept study on “How to distribute the proposed desalinated water”. One possible option is to take all of the water for recharge and at the Talbert barrier. Another option would be to take a majority of the water for recharge and the Talbert barrier then sell the remainder to local agencies. A third option would be to use for the Talbert barrier, sell some locally and then sell the remainder to South County agencies. As soon as OCWD completes their study, they will hire a peer review performed by an outside consultant.

- **Results of ISTAP Meeting/Draft Report:** OCWD staff updated the committee on this grant project with the SAWPA members. Water Banking is the key project that could bring 12,000 acft/year to OCWD in dry years which averages 4,000 acft/yr. OCWD’s funding share will be $9M dollars. There is also a conservation element that promotes budget-based rates. OCWD will not participate in this portion of the grant and the cost of this conservation goal will need to be funded by the other (4) members. The cost of the water is just under $1,000/acft after the grant funds are applied.
UPCOMING ISSUES

- Groundwater Management
- MWD IRP
- Drought
- Poseidon
- North/South Basin

FINANCIAL IMPACT

There is no financial impact.

ATTACHMENTS

None.
There are no support materials for this item.
REPORTS AND INFORMATION ITEMS:

14. REPORT OF THE GENERAL MANAGER:
REPORTS AND INFORMATION ITEMS:

15. DIRECTORS' REPORTS AND COMMENTS:
RECOMMENDATION

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

STRATEGIC PLAN

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

BACKGROUND

Since 2005 Mesa Water® has used on-call consulting design services to perform as-needed capital improvement project design that is beyond Mesa Water’s staffing ability and/or expertise. These types of projects typically consist of pipeline design, surveying, structural analysis, mechanical design, electrical design, traffic analysis, environmental-related services, corrosion protection assessment, and other miscellaneous design disciplines.

Over the next few years Mesa Water® will be facilitating construction of small to medium size capital improvement construction projects that will require the assistance and expertise of professional construction management services. These projects will consist of construction improvements to Mesa Water’s distribution, treatment, and reservoir facilities that are larger in scope than can be handled by internal engineering staff.

DISCUSSION

Mesa Water’s existing on-call design and as-needed construction management services contracts expire on December 31, 2015. Mesa Water® will be soliciting proposals from qualified consultants to perform design services for capital improvement projects related to Mesa Water’s production, storage, and distribution facilities and to provide as-needed construction management services for implementation of the upcoming capital improvement projects. The intent is to award contracts to three qualified engineering consulting firms to provide as-needed design and construction management-related services for a period of two and half years. The contract with each selected consultant will be for an annual not-to-exceed amount of $150,000.

To ensure a competitive bidding environment is maintained for an as-needed design and/or construction management project, proposals will be solicited from each consultant for each specific project or group of projects. Staff will review the cost proposals and select the most qualified consultants based on the expertise, cost, and available resources.

Unused funds from each contract will be retained for future as-needed design and/or construction management services or until the contracts expire. Unused funds will not be spent nor will the consultants be entitled to unspent funds. Results of the selection process and proposed consultants will be brought to a future Engineering and Operations Committee for consideration.
FINANCIAL IMPACT

Funds are budgeted for FY16 in the as-needed design services capital budget. Costs will be charged to each specific project as they occur.

ATTACHMENTS

None.