AGENDA
MESA WATER DISTRICT
BOARD OF DIRECTORS
Thursday, April 9, 2015
1965 Placentia Avenue, Costa Mesa, CA 92627
6:00 p.m. Regular Board Meeting

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ASSOCIATION OF CALIFORNIA WATER AGENCIES JOINT POWERS INSURANCE AUTHORITY RECOGNITION

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.

ITEMS TO BE ADDED, WITHDRAWN, OR REORDERED ON THE AGENDA
At the discretion of the Board, all items appearing on this agenda, whether or not expressly listed as an Action Item, may be deliberated and may be subject to action by the Board.

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

1. Approve minutes of regular Board meeting of March 12, 2015.
2. Approve minutes of special Board meeting of March 16, 2015.
3. Approve minutes of special Board meeting of March 17, 2015.
4. Approve minutes of adjourned regular Board meeting of March 21, 2015.
5. Approve minutes of special Board meeting of March 26, 2015.
6. Approve attendance considerations (additions, changes, deletions).
7. Board Schedule:
   • Conferences, Seminars, and Meetings
   • Board Calendar
   • Upcoming Community Outreach Events
8. Approve a contract with SCI Consulting Group for a not-to-exceed amount of $55,000 for professional consulting services to perform a study of potential funding strategies and constituency support survey for future water supply reliability project, and authorize the General Manager to execute the contract.
9. Approve a contract with LA Consulting for shared services study in an amount not-to-exceed $20,000.
10. Deny claim of Jody Terry, Claim No. 15-0499 and refer it to ACWA/Joint Powers Insurance Authority for handling.
11. Renew the membrane support services contract for two years for $97,871 per year with Separation Processes Inc.

12. Renew the On-call Pipeline Construction Services contracts for two years for $150,000 per year with Paulus Engineering, JA Salazar Construction and Supply, and Doty Bros with an increase of 2.5% in all categories per Engineering News Record’s Construction Cost Index for Los Angeles, California for Calendar Year 2015.

13. Authorize the General Manager to execute a contract with RBF Consulting, A Michael Baker International Company, in the amount of $337,302 to provide consulting services for the Pipeline Infrastructure Testing Program.

14. Approve an adjustment to special legal services contract with Foley & Mansfield in the amount of $5,100.

PRESENTATION AND DISCUSSION ITEMS:

15. MESA WATER® CUSTOMER SURVEY RESULTS:

Recommendation: Receive the presentation.

16. MTBE IN GROUNDWATER WELLS:

Recommendation: Receive the presentation.

ACTION ITEMS:

17. PUBLIC HEARING – ORDINANCE NO. 25 – DIRECTOR’S COMPENSATION AND EXPENSE REIMBURSEMENT:

Recommendation:
  a. Conduct public hearing
  b. Review and discuss Ordinance No. 25
  c. Adopt Ordinance No. 25 – Director’s Compensation and Expense Reimbursement

18. PUBLIC HEARING – OC-44 PIPELINE REHABILITATION INITIAL STUDY/MITIGATED NEGATIVE DECLARATION:

Recommendation:
  a. Conduct public hearing
  b. Review and discuss Mitigated Negative Declaration
  c. Adopt Mitigated Negative Declaration

REPORTS:

19. REPORT OF THE GENERAL MANAGER
   • March Key Indicators Report
   • Water Supply Update (no enclosure)

20. DIRECTORS' REPORTS AND COMMENTS
INFORMATION ITEMS:

21. DIRECTORS’ REPORTS (AB 1234) PER CA GOVERNMENT CODE SECTION 53232.3 (D)

22. OTHER (NO ENCLOSURE)

ADJOURN TO A REGULAR BOARD MEETING SCHEDULED FOR THURSDAY, MAY 14, 2015 AT 6:00 P.M.
CALL TO ORDER

The meeting of the Board of Directors was called to order on March 12, 2015 at 6:12 p.m. by President Dewane at the District Office Boardroom, located at 1965 Placentia Avenue, Costa Mesa, CA 92627.

PLEDGE OF ALLEGIANCE

Director Bockmiller led the Pledge of Allegiance.

Directors Present

Shawn Dewane, President
Ethan Temianka, Vice President
Jim Atkinson, Director
Fred R. Bockmiller, Director
James R. Fisler, Director

Directors Absent

None

Staff Present

Paul E. Shoenberger, General Manager
Andrew Hamilton, Chief Financial Officer
Phil Lauri, Engineering & Operations Manager
Stacie Sheek, Customer Services Manager
Stacy Taylor, Public & Government Affairs Manager
Denise Garcia, Executive Assistant to the General Manager
Jeff Hoskinson Attorney, Bowie, Arneson, Wiles & Giannone

Others Present

Lisa Ohlund, General Manager, East Orange County Water District (EOCWD)
Renee White Fraser, President & CEO, Fraser Communications
Ilene Prince, SVP, Director Client Services, Fraser Communications

PUBLIC COMMENTS

President Dewane asked for public comments. There were no public comments.

PRESENTATION:

Public & Government Affairs Manager Taylor introduced Renee White Fraser and Ilene Prince with Fraser Communications.

Ms. Fraser proceeded with a presentation on the “Drought-Reach” Campaign final report.
The following topics were highlighted:

- **Campaign Objectives**
  - Increase water conservation efforts by 20 gallons or more per person per day
  - Drive residents to MesaWaterSaver.com
  - Utilize a mix of traditional and grassroots tactics
  - Achieve measurable results

- **Campaign Theme**

- **Campaign Rollout**

- **Multiple ways the District reached out to customers:**
  - Bill Insert, Postcard Mailer, Outdoor Billboards, KOCI (101.5 FM) Radio, Automated Calls, Door Hanger, Canvassing, Newspaper, Social Media

- **Earned Media**

- **Customer Service Survey**

- **Campaign Summary**

Ms. Taylor responded to a question from the Board regarding follow-up efforts to retain the momentum of the “Drought-Reach” Campaign. She reported staff would continue with its strong customer service efforts and messaging through the website and various media.

Ms. Fraser responded to questions from the Board and the Board thanked Ms. Fraser for the campaign and resultant efforts.

**RECESS**

President Dewane declared a recess at 6:38 p.m. The Board meeting reconvened at 6:48 p.m.

**ITEMS TO BE ADDED, WITHDRAWN, OR REORDERED ON THE AGENDA**

General Manager Shoenberger announced there were no items to be added or reordered on the agenda. He noted staff recommended withdrawing the recommendation for Item 16. There were no objections.

**CONSENT CALENDAR ITEMS:**

1. Approve minutes of special Board meeting of February 4, 2015.
2. Approve minutes of regular Board meeting of February 12, 2015.
3. Approve minutes of special Board meeting of February 17, 2015.
4. Approve minutes of special Board meeting of February 18, 2015.
5. Approve minutes of special Board meeting of February 23, 2015.
6. Approve minutes of special Board meeting of February 26, 2015.
7. Approve attendance considerations (additions, changes, deletions).
8. Board Schedule:
   - Conferences, Seminars, and Meetings
   - Board Calendar
   - Upcoming Community Outreach Events
9. Approve a change order in the amount of $24,688 to MWH Global for the changes to the development of Project Management Guidelines and authorize the General Manager to execute the change order.
10. Approve a contract with RBF Consulting, a Michael Baker International Company, in the amount of $778,270 with a 10% contingency for a not-to-exceed amount of $856,097 for professional Construction Management Services of the Well Automation and Rehabilitation Project, and authorize the General Manager to execute the contract.

11. Approve a contract with LA Consulting in the amount of $51,387 to perform CMMS Annual Plan Update & Management Training and authorize the General Manager to execute the contract.

12. Approve an extension to the existing contract with SBS Group in the amount of $10,000 for Great Plains consulting services and authorize the General Manager to execute the extension.

13. Approve an extension to the existing contract with Fieldman Rolapp & Associates in the amount of $25,000 for Financial Advisory services and authorize the General Manager to execute the extension.

14. Approve a contract with Best Best & Krieger LLP for special legal services in an amount not to exceed $50,000.

15. Approve a proclamation honoring the service of Piet Pijl to Mesa Water District.

President Dewane asked for public comments. There were no comments.

MOTION

Motion by Director Bockmiller, seconded by Director Fisler, to approve the Consent Calendar. Motion passed 5-0.

PRESENTATION AND DISCUSSION ITEMS:

16. ORANGE COUNTY SANITATION DISTRICT LOCAL SEWER AREA #7:

General Manager Shoenberger introduced General Manager Lisa Ohlund. It was noted this presentation addressed: 1) the transfer of ownership and operation of the Local Sewer Area #7 from OCWD to EOCWD; 2) the annexation of thirteen parcels within EOCWD’s service boundaries; and 3) the activation of EOCWD’s latent sewer service powers.

Ms. Ohlund proceeded with a presentation and highlighted the following topics:

- History of EOCWD
- New Service Opportunity to assume ownership and operation of local sewer lines (Sewer Area #7)
- Sewer Area #7: Transfer Plan
- Community Support for EOCWD

Ms. Ohlund responded to questions from the Board and the Board thanked Ms. Ohlund for the presentation.

RECESS

President Dewane declared a recess at 7:22 p.m. to conduct the annual meeting of the Mesa Consolidated Water District Improvement Corporation.
ACTION ITEMS:

17. MESA CONSOLIDATED WATER DISTRICT IMPROVEMENT CORPORATION ANNUAL MEETING:

The Board meeting reconvened at 7:29 p.m.

REPORTS:

18. Report of the General Manager
   • February Key Indicators Report
   • Water Supply Update (no enclosure)
   • Other Information
     o Orange County Water District desalination term sheet will be presented at its March 18, 2015 Board meeting.
     o Well 9 bids will be opened on March 16, 2015 at 2:00 p.m.
     o Form 700s are due April 1, 2015.
     o The City/District Liaison meeting was rescheduled for March 13, 2015 at 9:30 a.m.
     o March 13, 2015 is the second anniversary of Mesa Water® Reliability Facility.
     o The Board Workshop group photo will be taken March 21, 2015 at 8:00 a.m.
     o An email was sent to Directors regarding State Water Resources Control Board proposed drought regulations. Landscape water restrictions are being enacted. Staff will provide recommendations to the Board at a future committee meeting.
     o The OC Register has submitted a public records request regarding water use by the individual directors.

19. Directors’ Reports and Comments

INFORMATION ITEMS:

20. Directors’ Reports (AB 1234) Per CA Government Code Section 53232.3 (d)

21. Other (no enclosure)

President Dewane adjourned the meeting at 7:54 p.m. to an adjourned regular Board meeting scheduled for Saturday, March 21, 2015 at 8:00 a.m.

Approved:

______________________________
Shawn Dewane, President

______________________________
Coleen L. Monteleone, District Secretary

Recording Secretary: Sharon D. Brimer
The meeting of the Board of Directors was called to order on March 16, 2015 at 3:32 p.m. by Chairman Temianka at the District Office Boardroom, located at 1965 Placentia Avenue, Costa Mesa, California.

Director Fisler led the Pledge of Allegiance.

Directors Present:
Ethan Temianka, Vice President, Chair
Jim Atkinson, Director
James R. Fisler, Director

Directors Absent:
Shawn Dewane, President
Fred R. Bockmiller, Director

Staff Present:
Paul E. Shoenberger, P.E., General Manager
Andrew Hamilton, Chief Financial Officer/Treasurer
Denise Garcia, Executive Assistant to the General Manager
Cherlynn Hurdle, Financial Services Assistant

Others Present:
None

There was no public present.

No items.

Motion by Director Atkinson, second by Vice President Temianka, to add to the next regular Board meeting agenda the claim of Jody Terry, Claim No. 15-0499. Motion passed 3-0-2 with President Dewane and Director Bockmiller absent.
REPORTS:

2. Accounts Paid Listing
3. Monthly Financial Reports
4. Major Staff Projects
5. Report of the General Manager
6. Directors’ Reports and Comments

INFORMATION ITEMS:

7. Microsoft Great Plains/Cogsdale Support

The Board meeting was adjourned at 3:58 p.m.

Approved:

_____________________________
Shawn Dewane, President

_____________________________
Coleen L. Monteleone, District Secretary
ENGINEERING AND OPERATIONS COMMITTEE MEETING

CALL TO ORDER
The meeting of the Board of Directors was called to order on March 17, 2015 at 3:37 p.m. by Chairman Bockmiller at the District Office Boardroom, located at 1965 Placentia Avenue, Costa Mesa, California.

PLEDGE OF ALLEGIANCE
Tracy E. Manning led the Pledge of Allegiance.

Directors Present
Shawn Dewane, President
Ethan Temianka, Vice President (arrived at 3:42 p.m.)
Jim Atkinson, Director
Fred R. Bockmiller, Director, Chairman
James R. Fisler, Director

Directors Absent
None

Staff Present
Phil Lauri, Engineering and Operations Manager
Tracy E. Manning, Assistant Operations Manager
Karyn Igar, Senior Civil Engineer
Mark Pelka, Senior Civil Engineer
Denise Garcia, Executive Assistant to the General Manager/Assistant District Secretary

Others Present
Howard Johnson, Chief Operating Officer, Richard Brady & Associates
Alan Ashimine, Senior Associate, RBF Consulting

PUBLIC COMMENTS
There were no public comments.

PRESENTATION AND DISCUSSION ITEMS:

1. Water Industry Liaison Support Services

   Engineering and Operations Manager Lauri introduced Mr. Johnson from Richard Brady & Associates, who proceeded with the presentation.

   The following topics were highlighted:
   - OCWD FY2015-16 Budget Schedule
   - BPP and RA
   - Accumulated Overdraft
   - YTD Change in Groundwater Storage in OCWD
• MF Area Construction  
• Contract Schedule Status  
• Poseidon Desalination Update  

Mr. Johnson responded to questions from the Board, and the Board thanked Mr. Johnson for the presentation.

MOTION

2. OC-44 Pipeline Rehabilitation Initial Study/Mitigated Negative Declaration

Engineering and Operations Manager Lauri introduced Mr. Ashimine from RBF Consulting, who proceeded with the presentation.

The following topics were highlighted:
• Proposed Improvements  
• Initial Study/Mitigated Negative Declaration  
• Purpose of the IS/MND  
• Summary of IS/MND Analysis  
• Public Comments  
• Regulatory Permitting  
• Next Steps  

Mr. Ashimine responded to questions from the Board, and the Board thanked Mr. Ashimine for the presentation.

ACTION ITEMS:

3. Mesa Water Reliability Facility Operations Support Services

MOTION

Motion by Director Fisler, second by Vice President Temianka, to add to the next regular Board meeting agenda a two-year contract renewal for membrane support services to SPI for $97,871 per year. Motion passed 5-0.

4. On-Call Pipeline Construction Services

MOTION

Motion by President Dewane, second by Vice President Temianka, to add to the next regular Board meeting agenda two year contracts for On-Call Pipeline Construction Services for $150,000 per year with Paulus Engineering, JA Salazar Construction and Supply, and Doty Bros with an increase of 2.5% in all categories per Engineering News Record's Construction Cost Index for Los Angeles, California for Calendar Year 2015. Motion passed 5-0.
5. Pipeline Infrastructure Testing Program

MOTION

Motion by President Dewane, second by Vice President Temianka, to add to the next regular Board meeting agenda a contract with RBF Consulting, A Michael Baker International Company, in the amount of $337,302 to provide consulting services for the Pipeline Infrastructure Testing Program. Motion passed 5-0.

6. Special Legal Services

MOTION

Motion by President Dewane, second by Vice President Temianka, to add to the next regular Board meeting agenda an adjustment to the special legal services contract with Foley & Mansfield in the amount of $5,100. Motion passed 5-0.

REPORTS:

7. Developer Project Status Report
8. Mesa Water® and Other Agency Projects Status Report
9. Water Quality Call Report
10. Committee Policy & Resolution Review or Development
11. Operations Department Status Report
12. Municipal Water District of Orange County Activities Update
13. Orange County Water District Activities Update
14. Ocean Desalination Projects (no enclosure)
15. Report of the General Manager
16. Directors’ Reports and Comments
INFORMATION ITEMS:

17. Administration Building Improvements

The Board meeting was adjourned at 5:12 p.m.

Approved:

______________________________
Shawn Dewane, President

______________________________
Coleen L. Monteleone, District Secretary
CALL TO ORDER  

The meeting of the Board of Directors was called to order on March 21, 2015 at 8:50 a.m. by President Dewane at the District Office Boardroom, located at 1965 Placentia Avenue, Costa Mesa, CA 92627.

PLEDGE OF ALLEGIANCE  

Director Temianka led the Pledge of Allegiance.

Directors Present  
Shawn Dewane, President  
Ethan Temianka, Vice President  
Jim Atkinson, Director  
Fred R. Bockmiller, Director  
James R. Fisler, Director 

Directors Absent  
None 

Staff Present  
Paul E. Shoenberger, General Manager  
Coleen L. Monteleone, Administrative Services Manager/ District Secretary  
Andrew Hamilton, Chief Financial Officer  
Phil Lauri, Engineering & Operations Manager  
Stacie Sheek, Customer Services Manager  
Stacy Taylor, Public & Government Affairs Manager  
Kurt Lind, Business Administrator  
Denise Garcia, Executive Assistant to the General Manager  
Rob Anslow, Attorney, Bowie, Arneson, Wiles & Giannone 

Others Present  
John Bliss, Vice President, SCI Consulting Group  
Harry C. Lorick, LA Consulting, Inc.

PUBLIC COMMENTS  

There were no public comments. President Dewane proceeded with the meeting.

ITEMS TO BE ADDED, WITHDRAWN, OR REORDERED ON THE AGENDA  

General Manager Shoenberger announced there were no items to be added, withdrawn or reordered on the agenda.
ACTION ITEMS:

1. REGIONAL WATER ISSUES UPDATE:

   General Manager Shoenberger provided an overview of the Board’s Policy Positions. General Manager Shoenberger offered that the topic presented to the Board addresses the numerous regional water supply issues currently under assessment and development. Mr. Shoenberger introduced Mr. John Bliss with SCI Consulting Group, who proceeded with a presentation on Water Infrastructure Financing.

   The following topics were highlighted:
   - Overview of SCI Consulting Group
   - Infrastructure Measures Successes
   - Successful Water Ballot Measure Examples
   - Traditional Funding Mechanisms
   - Value of going to the Ballot Box
   - Potential Next Steps

   President Dewane asked for public comments. There were no comments.

   Motion by Director Atkinson, to authorize the expenditure of $55,000 for a Mesa Water® service survey and to include two additional agencies.

   A substitute motion was offered.

   Motion by President Dewane, seconded by Director Bockmiller, to authorize the expenditure of $55,000 for a Mesa Water® Survey and place the item on the next regular Board meeting consent calendar. No vote was taken on this motion.

   A substitute motion was offered.

   MOTION

   Motion by President Dewane, seconded by Director Bockmiller, to authorize the expenditure of $55,000 for a Mesa Water® Survey and place the item on the next regular Board meeting consent calendar. Motion passed 5-0.

RECESS

   President Dewane declared a recess at 10:21 a.m. The Board meeting reconvened at 10:39 a.m.

   The Board discussed the contracting service as a strategic goal. Mr. Lorick with LA Consulting, Inc. responded to questions from the Board regarding the study of contracting services and the benefits to the District.

   President Dewane asked for public comments. There were no comments.
MOTION

Motion by President Dewane, seconded by Director Temianka, to engage LA Consulting, Inc. for an amount not to exceed $20,000 to conduct a preliminary study on contracting services and place the item on the next regular Board meeting consent calendar. Motion passed 5-0.

2. STRATEGIC PLAN UPDATE:

The Board reviewed the 2014 Strategic Plan and received an update and the proposed changes to the 2015 Strategic Plan.

President Dewane asked for public comments. There were no comments.

MOTION

Motion by President Dewane, seconded by Director Bockmiller, to adopt the 2015 Strategic Plan. Motion passed 5-0.

3. FINANCIAL GOALS:

General Manager Shoenberger introduced Chief Financial Officer Hamilton, who proceeded with a presentation on the Financial Goals for 2015.

The following topics were highlighted:
- Board Goals – Past and Future
- Five Options to Deal with Projection
  - Option 1 – Status Quo, moving forward in time needed for capital projects, keeping open Options #2, 3 and 4 at the end of the five-year rate cycle
  - Option 2 – Reduce Water Rates
  - Option 3 – Reduce Pension Liability (similar to an OPEB Trust)
  - Option 4 – Reduce Outstanding Debt
  - Option 5 – Establish a Trust for future Capital Spending (similar to an OPEB Trust)

A discussion ensued. Mr. Hamilton responded to questions from the Board.

President Dewane asked for public comments. There were no comments.

MOTION

Motion by Director Bockmiller, seconded by President Dewane, to approve Financial Goals, Option 1 – Status Quo, moving forward in time with needed capital projects. Motion passed 5-0.

4. ORDINANCE NO. 23 – DIRECTORS’ FEES:

Administrative Services Manager Monteleone reviewed Directors’ fees. Ms. Monteleone noted that the current Director fee is $207 per meeting, which was approved in October.

A discussion ensued.

President Dewane asked for public comments. There were no comments.

MOTION

Motion by President Dewane, seconded by Director Fisler, to schedule a public hearing to consider an increase to the directors’ fee from $207 per meeting up to $250 per meeting. Motion passed 3-1-0-1 with Director Atkinson voting no and Vice President Temianka abstaining.

5. GUIDELINES FOR PROCUREMENT OF GOODS AND SERVICES AND CASH DISBURSEMENTS:

Mr. Hamilton provided a presentation on the guidelines for the procurement of goods and services and cash disbursement.

The following topics were highlighted:
- Review of Resolution No. 1271 – Current Authority
- Increase in inflation
- Proposed Approval Authority Increases

President Dewane asked for public comments. There were no comments.

MOTION

Motion by President Dewane, seconded by Vice President Temianka, to approve Resolution No. 1458, Providing Guidelines for the Procurement of Goods and Services and Cash Disbursements superseding Resolution No. 1415 and increasing the approval authority amounts to $125,000 for Capital Construction Projects, $75,000 or 30% percent whichever is lower for Capital Construction Projects-Change Orders and $50,000 for Professional Services Providers; in addition, increase the limit for competitive procurement and written agreements to $10,000. Motion passed 5-0.

6. BOARD GOVERNANCE:

General Manager Shoenberger reviewed the resolutions (Resolution Nos. 1456 and 1457) recommended by the Executive Committee.

A discussion ensued.

The following are proposed modifications to Resolution No. 1456:
- IV. Rules of Order – B. Determination of Acting President: The first item of business in the absence of the President and Vice President, where a meeting includes a quorum of the Board was changed from the remaining three Board Members to determine to the Immediate Past President shall act as the acting President.

President Dewane asked for public comments. There were no comments.
MOTION

Motion by Director Temianka, seconded by Director Fisler, to approve Resolution No. 1456 Adopting Procedures for Meetings of the Board of Directors superseding Resolution No. 1427. Motion passed 3-2 with Directors Atkinson and Bockmiller voting no.

A discussion ensued on the recommended changes to Resolution No. 1457.

The following are proposed modifications to Resolution No. 1457:
- III. Election of Board Officers – Added new section d. Duties: The President shall serve as the official Mesa Water® Board representative and he/she shall also have the authority to delegate such responsibility. In the absence of the President, the Vice President will act in the official capacity of the President. The Immediate Past President will assume the role in the absence of the Vice President.

President Dewane asked for public comments. There were no comments.

MOTION

Motion by Director Fisler, seconded by Vice President Temianka, to approve Resolution No. 1457 Adopting Protocols of the Board of Directors superseding Resolution No. 1428. Motion passed 3-2 with Directors Atkinson and Bockmiller voting no.

7. MESA WATER SUPPORT SERVICES:

Mr. Lauri offered that a few vendors may have been originally competitively selected, but not within the last five years. As such, staff is recommending that vendors who provide various specialty services be competitively selected.

President Dewane asked for public comments. There were no comments.

MOTION

Motion by Vice President Temianka, seconded by President Dewane, to direct staff to administer a competitive selection process for services provided in the following areas: Legal Services, Water Industry Advocates, Reproduction Services, Electrical Maintenance/Repair, and Electrical Maintenance. Motion passed 5-0.

8. MESA WATER® RELIABILITY FACILITY SIGNAGE PROJECT:

Mr. Lauri reviewed the Mesa Water® Reliability Facility (MWRF) signage project. He noted that when the project was initiated consideration was given to use electronic signage at the MWRF. After a study, it has been determined that electronic signage would not be appropriate for Mesa Water® and the estimated revenue projections would yield lower revenue than originally indicated.

President Dewane asked for public comments. There were no comments.
MOTION

Motion by President Dewane, seconded by Director Bockmiller, to discontinue evaluation and development of a Mesa Water Reliability Facility (MWRF) Signage Project. Motion passed 5-0.

9. MESA WATER RELIABILITY FACILITY OUTREACH CENTER:

Mr. Lauri reviewed the results of an evaluation for developing an Outreach Center at the MWRF. The results identified 1) Minimal Improvements, 2) Moderate Improvements, and 3) Major Improvements.

A discussion ensued on the three levels of improvements.

MOTION

Motion by Director Atkinson, seconded Director Bockmiller, to approve Option 1 – Minimal Improvements. The motion was withdrawn.

The Board agreed to continue with proposals, which are due the early part of April and will be presented to the Engineering and Operations Committee at its April meeting.

10. FISCAL YEAR 2016 STAFFING PLAN:

Mr. Shoenberger reviewed the staffing plan for Fiscal Year (FY) 2016. The Board concurred with the General Manager’s proposed FY 2016 Staffing Plan and directed the General Manager Shoenberger to incorporate the changes in the FY 2016 Budget.

REPORTS:


12. Directors’ Reports and Comments

INFORMATION ITEMS:

13. OTHER (NO ENCLOSURE)

President Dewane adjourned the meeting at 2:12 p.m. to a Regular Board Meeting scheduled for Thursday, April 9, 2015 at 6:00 p.m.

Approved:

Shawn Dewane, President

Coleen L. Monteleone, District Secretary
# LEGISLATIVE & PUBLIC AFFAIRS COMMITTEE MEETING

## CALL TO ORDER

The meeting of the Board of Directors was called to order on March 26, 2015 at 3:34 p.m. by Chairman Fisler at the District Office Boardroom, located at 1965 Placentia Avenue, Costa Mesa, California.

## PLEDGE OF ALLEGIANCE

Director Atkinson led the Pledge of Allegiance.

**Directors Present**
- Ethan Temianka, Vice President
- Jim Atkinson, Director
- Fred R. Bockmiller, Director
- James R. Fisler, Director, Chairman

**Directors Absent**
- Shawn Dewane, President

**Staff Present**
- Stacy Taylor, Public and Government Affairs Manager
- Stacie Sheek, Customer Services Manager
- Noelle Collins, Public Affairs Coordinator
- Denise Garcia, Executive Assistant to the General Manager /Assistant District Secretary
- Justin Finch, Resource Efficiency Specialist

**Others Present**
- Linda and Lane Koluek, Mesa Water Customer
- Cori Williams, Senior Associate, Townsend Public Affairs (TPA)
- Ian Delzer, Associate, TPA

## PUBLIC COMMENTS

There were no public comments.

Public and Government Affairs Manager Taylor requested to re-order the agenda and take Item 2. There were no objections by the Board.

## PRESENTATION AND DISCUSSION ITEMS:

2. **SWRCB Urban Water Conservation Emergency Regulation Update**

**MOTION**

Motion by Director Atkinson, second by Director Bockmiller, to authorize staff to draft a comprehensive Water Conservation Program and bring the item to the April 21, 2015 Engineering and Operations Committee meeting. Motion passed 4-0-1 with President
Dewane absent.

1. Legislative Consulting Services Update

Public and Government Affairs Manager Taylor introduced Ms. Williams from TPA, who proceeded with the presentation.

The following topics were highlighted:
- Orange County Board of Supervisors Election 1st District
- Election Day Results: May 17, 2015
- Bill Introduction
- Priority Legislation Areas
- 2015 Emergency Drought Package
- Bay Delta Conservation Plan
- Governor Brown Proposition 1 Budget Proposal
- Proposition 1 Implementation
- SAWPA Integrated Regional Water Management Plan: Round 3 Update
- Federal FY 2016 Budget Request
- Federal Legislation Snapshot

Ms. Williams responded to questions from the Board, and the Board thanked Ms. Williams for the presentation.

2. SWRCB Urban Conservation Emergency Regulation Update

This item was addressed earlier on the agenda.

3. Social Media Metrics

Public and Government Affairs Manager Taylor introduced Public Affairs Coordinator Collins, who proceeded with the presentation.

The following topics were highlighted:
- Social Media Metrics
- Expectations & Topics
- Facebook Tracks
- Boosted vs. Organic Reach

Ms. Collins responded to questions from the Board, and the Board thanked Ms. Collins for the presentation.

**ACTION ITEMS:**

4. Join Californians for Water Security

The Board postponed action on this item and directed staff to monitor the Californians for Water Security Coalition’s activity. Staff will provide an update at a future LPAC meeting.

**REPORTS:**
5. Advocacy Consulting Services Report


7. Directors’ Reports and Comments

INFORMATION ITEMS:

8. Consumer Confidence Report

9. Outreach Update

The Board meeting was adjourned at 5:02 p.m.

Approved:

_________________________________________________________________
Shawn Dewane, President

_________________________________________________________________
Coleen L. Monteleone, District Secretary
MEMORANDUM

TO:        Board of Directors
FROM:     Paul E. Shoenberger, P.E., General Manager
DATE:     April 9, 2015
SUBJECT:  Attendance at Conferences, Seminars, Meetings, and Events

RECOMMENDATION

In accordance with Ordinance No. 23, adopted February 12, 2013, authorize attendance at conferences, seminars, meetings, and events.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice perpetual infrastructure renewal and improvement.
Goal #3: Be financially responsible and transparent.
Goal #4: Increase public awareness about Mesa Water® and about water.
Goal #5: Attract and retain skilled employees.
Goal #6: Provide outstanding customer service.
Goal #7: Actively participate in regional water issues.

Proposed List:

None.

PRIOR BOARD ACTION

On July 7, 2014, the Board approved the Fiscal Year 2015 attendance at Conferences, Seminars, Meetings, and Events.

DISCUSSION

During the discussion of this item, if any, the Board may choose to delete any item from the list and/or may choose to add additional conferences, seminars, meetings, or events for approval, subject to available budget or additional appropriation.

FINANCIAL IMPACT

There is no financial impact as there are no events for attendance consideration.

ATTACHMENTS

None.
## 2015 CONFERENCES, SEMINARS, AND MEETINGS:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Name</th>
<th>Location</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 22, 2015</td>
<td>CSDA Props 26 and 218 Workshop</td>
<td>Sacramento, CA</td>
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<tr>
<td>May 4 - 8, 2015</td>
<td>ACWA/JPIA Spring Conference</td>
<td>Sacramento, CA</td>
<td>Atkinson, Bockmiller, Dewane, Fisler</td>
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<tr>
<td>May 15, 2015</td>
<td>OC Water Summit</td>
<td>Anaheim, CA</td>
<td>Temianka</td>
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<tr>
<td>May 19 - 20, 2015</td>
<td>CSDA Legislative Days</td>
<td>Sacramento, CA</td>
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<tr>
<td>June 7 - 10, 2015</td>
<td>AWWA ACE15</td>
<td>Anaheim, CA</td>
<td>Atkinson</td>
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<td>8:30AM MWDOC/OCWD Workshop (MWDOC/OCWD Boardroom)</td>
<td>8:00AM Meeting w/General Manager - Fisler</td>
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<td>5:30PM OCWD Board Meeting - Atkinson, Temianka (MWDOC/OCWD Boardroom)</td>
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<td>8:30AM MWDOC/OCWD Board Meeting - Atkinson (MWDOC Conference Room 101)</td>
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<td>8:00AM OCWD Water Issues Committee Meeting (OCWD Boardroom)</td>
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<td>8:30AM LAFCO Meeting (OCTA Boardroom; 600 South Main Street Orange, CA)</td>
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<tr>
<td></td>
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<td></td>
<td>10:00AM Communications Training w/ Joan Gladstone - Atkinson, Bockmiller, Fisler, Temianka (Panian Conf Room)</td>
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<td>12:00PM Executive Committee Meeting - Dewane, Temianka (Panian Conf Room)</td>
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<td>7:30AM ISDOC Executive Committee Meeting - Atkinson (MWDOC Conference Room 101)</td>
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<td>9:30AM OCWD Producers Meeting (OCWD Boardroom)</td>
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<td>8:30AM ACWA 2015 Drought (Sacramento, CA)</td>
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<td>5:30PM OCWD Board Meeting - Atkinson (OCWD Boardroom)</td>
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<td></td>
<td>6:00PM Mesa Water Board Meeting - Atkinson, Bockmiller, Dewane, Fisler, Temianka (Boardroom)</td>
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<td>8:30PM Ocean Desalination Citizens Advisory Committee Meeting (OCWD)</td>
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<td>6:00PM Mesa Water Board Meeting - Atkinson, Bockmiller, Dewane, Fisler, Temianka (Boardroom)</td>
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<td>6:00PM Mesa Water Board Meeting - Atkinson, Bockmiller, Dewane, Fisler, Temianka (Boardroom)</td>
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<td>6:00PM Mesa Water Board Meeting - Atkinson, Bockmiller, Dewane, Fisler, Temianka (Boardroom)</td>
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<tr>
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<td>7:30AM ACWA 2015 Drought (Sacramento, CA)</td>
<td>8:30PM Ocean Desalination Citizens Advisory Committee Meeting (OCWD)</td>
</tr>
</tbody>
</table>
|        |        | 5:30PM OCWD Board Meeting - Atkinson (OCWD Boardroom) | 6:00PM Mesa Water Board Meeting - Atkinson, Bockmiller, Dewane, Fisler, Temianka (Boardroom) |          |        | October 1

**Notes:**
- Pay Day indicates the pay period ends.
- Meeting times and locations are provided for various committees and boards.
- Specific events, such as the ACWA 2015 Drought and Ocean Desalination Citizens Advisory Committee meetings, are scheduled on specific dates.
- The calendar runs from April 2015 to May 2015, covering a period of 30 days.
## May 2015

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
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<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
</table>

### Monday
- **7:30AM - 9:00AM** WACO Meeting (Atkinson, Bockmiller, Dewane, Fisler, Temianka) (MWDOC/OCWD Boardroom)

### Tuesday
- **7:30AM - 8:30AM** JMDCC Executive Committee Meeting - Atkinson (MWDOC Conference Room 101)
- **12:00PM - 1:30PM** ACWA/JPIA Executive Meeting (Sacramento)

### Wednesday
- **7:30AM - 9:00AM** ACWA/JPIA Spring Conference & Exhibition • Sacramento, CA

### Thursday
- **7:30AM - 1:30PM** OC Water Summit (Anaheim, CA)

### Friday
- **7:30AM - 9:00AM** OC Water Board Meeting - Atkinson, Bockmiller, Dewane, Fisler, Temianka (Boardroom)

### Saturday
- **7:30AM - 9:00AM** WACO Planning Committee Meeting - Temianka (MWDOC)

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### Monday
- **10:15AM - 11:15AM** ACWA/JPIA Executive Meeting (Sacramento)
- **12:00PM - 1:30PM** Executive Committee Meeting - Dewane, Temianka (Panian Conf Room)

### Tuesday
- **8:30AM - 11:00AM** JMDCC/MMD Workshop (MWDOC/OCWD Boardroom)
- **5:30PM - 7:00PM** OCWD Board Meeting (MWDOC/OCWD Boardroom)

### Wednesday
- **7:30AM - 8:30AM** ISDOC Executive Committee Meeting - Atkinson (MWDOC Conference Room 101)
- **8:00AM - 9:30AM** OCWD Water Issues Committee Meeting (OCWD Boardroom)
- **11:00AM - 1:00PM** Tour of Mesa Water District Facility (Mesa Water District - 1965 Placentia Ave, Costa Mesa CA 92627)
- **3:30PM - 5:00PM** Finance Committee Meeting (Bockmiller, Temianka) (Boardroom)

### Thursday
- **7:30AM - 9:00AM** WACO Planning Committee Meeting - Temianka (MWDOC)
- **3:30PM - 5:30PM** LPAC Meeting - Fisler, Atkinson (Boardroom)

### Friday
- **7:30AM - 11:00AM** MWDOC Board Meeting (MWDOC Boardroom)
- **5:30PM - 7:00PM** OCWD Board Meeting - Atkinson  (OCWD Boardroom)

### Saturday
- **7:30AM - 9:00AM** OCWD Water Issues Committee Meeting (OCWD Boardroom)

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### Monday
- **3:30PM - 5:00PM** Engineering and Operations Committee Meeting (OCWD Boardroom)

### Tuesday
- **7:30AM - 8:30AM** CM Chamber of Commerce Breakfast  (1701 Golf Course Drive, Costa Mesa, CA 92626)

### Wednesday
- **11:00AM - 1:00PM** MWDOC Board Meeting (MWDOC Boardroom)

### Thursday
- **7:30AM - 9:00AM** WACO Planning Committee Meeting - Temianka (MWDOC)
- **3:30PM - 5:30PM** Planning Committee Meeting - Temianka (MWDOC)

### Friday
- **7:30AM - 9:00AM** SMDCOCOMD Board Meeting (MWDOC/OCWD Boardroom)
- **5:30PM - 7:00PM** OCWD Board Meeting - Atkinson  (OCWD Boardroom)

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### Monday
- **3:30PM - 5:30PM** LPAC Meeting - Fisler, Atkinson (Boardroom)

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**ACWA/JPIA Spring Conference & Exhibition • Sacramento, CA**

**Pay Period Ends**

**Pay Day**

**Holiday**

**Pay Period Ends**

**Pay Period Ends**

**Memorial Day**

**Pay Period Ends**

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4/1/2015 1:55 PM 2/3 deniseg
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<td>7:30AM - 8:30AM ISDOC Executive Committee Meeting - Atkinson (MWDOC Conference Room 101)</td>
<td>8:30AM - 11:00AM, MWDOC/MWD Workshop (MWDOC/OCWD Boardroom)</td>
<td>9:00AM - 11:00AM Executive Committee Meeting - Atkinson, Bockmiller, Dewane, Fisler, Temianka (Boardroom)</td>
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<td>12:00PM - 1:30PM Executive Committee Meeting - Davaine, Temianka (Panian Conf Room)</td>
<td>11:00AM - 12:00PM Pay Day</td>
<td>11:00AM - 12:00PM Pay Day</td>
<td>7:30AM - 9:00AM WACO Meeting (MWWDOC)</td>
<td>Out-of-Town - Temianka</td>
</tr>
</tbody>
</table>
|        |        | Pay Day | 8:15AM - 11:00AM IAWOC Meeting - Waiters, Davaine, T.

**Pay Day**
- 8:30AM - 11:00AM IAWOC Planning Committee Meeting - Davaine, Temianka (MWDOC) (Boardroom)
- 3:30PM - 5:30PM WACO Planning Committee Meeting (MWDOC Conference Room)

**Out-of-Town - Temianka**
- 3:30PM - 5:30PM Finance Committee Meeting (Bockmiller, Temianka) (Boardroom)
- 7:30AM - 9:00AM Pay Day Meeting - Atkinson, Bockmiller, Dewane, Fisler, Temianka (Boardroom)
- 3:30PM - 5:30PM LPAC Meeting - Fisler, Atkinson (Boardroom)

**Pay Period Ends**
- 7:30AM - 9:30AM OCWD Board Meeting - Atkinson, Bockmiller, Davaine, Fisler, Temianka (MWDOC/OCWD Boardroom)
- 6:00PM - 9:00PM Mesa Water Board Meeting - Atkinson, Bockmiller, Davaine, Fisler, Temianka (Boardroom)
- 5:30PM - 7:00PM OCWD Board Meeting - Atkinson, Bockmiller, Davaine, Fisler, Temianka (Boardroom)
- 5:30PM - 7:30PM OCWD Board Meeting - Atkinson, Bockmiller, Davaine, Fisler, Temianka (Boardroom)
- 7:30AM - 9:30AM OCWD Board Meeting - Atkinson, Bockmiller, Davaine, Fisler, Temianka (Boardroom)
- 6:00PM - 9:00PM OCWD Board Meeting - Atkinson, Bockmiller, Davaine, Fisler, Temianka (Boardroom)
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- 6:00PM - 9:00PM OCWD Board Meeting - Atkinson, Bockmiller, Davaine, Fisler, Temianka (Boardroom)
- 7:30AM - 9:00AM OCWD Board Meeting - Atkinson, Bockmiller, Davaine, Fisler, Temianka (Boardroom)
## Upcoming Community Outreach Events

<table>
<thead>
<tr>
<th>Event:</th>
<th>Date &amp; Time:</th>
<th>Location:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5th Grade Water Education Assembly</strong></td>
<td>Friday April 10, 2015 10:30 a.m. – 11:30 a.m.</td>
<td>Renascence School International 2987 Mesa Verde Dr. E Costa Mesa, CA 92626</td>
</tr>
<tr>
<td><strong>Water Use Efficiency Workshop #1:</strong> California Friendly® Plants</td>
<td>Saturday April 11, 2015 9:00 a.m. – 12:00 p.m.</td>
<td>Mesa Water District Boardroom 1965 Placentia Ave. Costa Mesa, CA 92627</td>
</tr>
<tr>
<td><strong>5th Grade Water Education Assembly</strong></td>
<td>Tuesday April 14, 2015 1:15 p.m. – 2:15 p.m.</td>
<td>Paularino Elementary 1060 Paularino Ave. Costa Mesa, CA 92626</td>
</tr>
<tr>
<td><strong>Orange Coast College Green Coast Day</strong></td>
<td>Wednesday April 15, 2015 9:00 a.m. – 1:30 p.m.</td>
<td>Orange Coast College 2701 Fairview Rd, Costa Mesa, CA 92626 (Campus Quad &amp; Robert B Moore Theater)</td>
</tr>
<tr>
<td><strong>OC Reuse</strong></td>
<td>Thursday April 16, 2015 11:30 a.m. – 1:30 p.m.</td>
<td>Mesa Water Reliability Facility 1350 Gisler Ave. Costa Mesa, CA 92626</td>
</tr>
<tr>
<td><strong>5th Grade Water Education Assembly</strong></td>
<td>Thursday April 16, 2015 2:00 p.m. – 3:00 p.m.</td>
<td>Wilson Elementary 801 W. Wilson St. Costa Mesa, CA 92627</td>
</tr>
<tr>
<td><strong>Water Use Efficiency Workshop #2:</strong> Sprinkler Systems &amp; Wise Watering</td>
<td>Saturday April 18, 2015 9:00 a.m. – 12:00 p.m.</td>
<td>Mesa Water District Boardroom 1965 Placentia Ave. Costa Mesa, CA 92627</td>
</tr>
<tr>
<td>Event</td>
<td>Date</td>
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<td>--------------------------------------------</td>
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</tr>
<tr>
<td>5th Grade Water Education Assembly</td>
<td>Monday</td>
<td>1:30 p.m. – 2:30 p.m.</td>
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<tr>
<td>Save Our Youth (S.O.Y.) Festival</td>
<td>Friday</td>
<td>5:30 p.m. – 8:30 p.m.</td>
</tr>
<tr>
<td>Costa Mesa Community Run &amp; Expo</td>
<td>Saturday</td>
<td>7:00 a.m. – 11:30 a.m.</td>
</tr>
<tr>
<td>Water Use Efficiency Home Depot Garden Friendly Expo</td>
<td>Saturday</td>
<td>8:00 a.m. – 12:00 p.m.</td>
</tr>
<tr>
<td>Chamber of Commerce Breakfast: Les Miller Outstanding Students Awards Breakfast &amp; My Favorite Teacher Awards</td>
<td>Friday</td>
<td>7:15 a.m. – 9:00 a.m.</td>
</tr>
<tr>
<td>5th Grade Water Education Assembly</td>
<td>May 8, 2015</td>
<td>9:00 a.m. – 10:00 a.m.</td>
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<tr>
<td>Mayor’s Gala</td>
<td>Thursday</td>
<td>5:30 p.m. – 9:00 p.m.</td>
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<tr>
<td>OC Water Summit</td>
<td>Friday</td>
<td>7:30 a.m. – 1:30 p.m.</td>
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</tbody>
</table>
| Costa Mesa – Newport Harbor Lion’s Club Fish Fry | Friday, May 29, 2015 5:00 p.m.  
Saturday & Sunday May 30 & 31, 2015 12:00 p.m. | Fairview Park  
2501 Placentia Ave.  
Costa Mesa, CA 92627 |
MEMORANDUM

TO: Board of Directors
FROM: Phil Lauri, P.E., Engineering and Operations Manager
DATE: April 9, 2015
SUBJECT: Water Supply Reliability Funding Study

RECOMMENDATION

Approve a contract with SCI Consulting Group for a not-to-exceed amount of $55,000 for professional consulting services to perform a study of potential funding strategies and constituency support survey for future water supply reliability project, and authorize the General Manager to execute the contract.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

On March 21, 2015, the Board discussed local and regional water supply reliability issues and received a presentation on potential funding strategies and cost impacts.

DISCUSSION

Mesa Water® is engaged in the local and regional planning and development of long-term water supply reliability projects to ensure that they are cost effectively implemented in a timely manner. Many of the local and regional water supply reliability projects being considered and evaluated mirror the proposed Orange County Water District’s Long Term Facilities Plan (LTFP).

At the March 21, 2015, Board Workshop, various LTFP Projects and the potential cost impacts of implementation were discussed. A presentation was provided on potential funding options and background requirements that Mesa Water® could consider in implementing the proposed LTFP Projects.

To ensure future sustainable local, and regional water supply reliability projects are cost-effectively developed, it is recommended that a detailed study be performed to assess viable funding strategies. This study will evaluate the legal requirements, benefits, and costs impacts for each of the aforementioned funding options. The study will also evaluate and identify the local constituent support for each of the aforementioned options.

Mesa Water® solicited proposals from SCI Consulting Group and True North Research. These firms are industry leaders in developing municipal financing strategies and constituency support surveys. Evaluation of each team’s qualifications determined that SCI Consultants provides the most comprehensive experience in this work and have extensive experience working with other small and large municipal agencies on similar types of projects. It is recommended that the Board consider authorizing the General Manager to execute a contract for a not-to-exceed amount of $55,000, with SCI Consulting Group to perform a study of potential funding strategies and constituency support survey for the implementation of future LTFP Projects.
FINANCIAL IMPACT

Funds were budgeted for FY 2015 in the Management Consultants Budget for this work. Approximately $30,000 will be expended in FY 2015. The remaining $25,000 will be expended during FY 2016. A budget request of $25,000 is included in the proposed FY 2016 budget.

ATTACHMENTS

None.
MEMORANDUM

TO: Board of Directors
FROM: Paul E. Shoenberger, P.E., General Manager
DATE: April 9, 2015
SUBJECT: Shared Services Study

RECOMMENDATION

Approve a contract with LA Consulting for shared services study in an amount not-to-exceed $20,000.

STRATEGIC PLAN

Goal #3: Be financially responsible and transparent.
Goal #6: Provide Outstanding Customer Service

PRIOR BOARD ACTION/DISCUSSION

The Board of Directors (Board) discussed this item at the March 21, 2015 Board Workshop.

DISCUSSION

Local government organizations face significant challenges such as reduced funding, doing more with less, and duplication of operations. The option for shared services as a comprehensive service delivery model has grown into a viable alternative for local government. The primary advantage of shared services strategy is to simplify processes, improve service delivery, improve operational efficiencies, and ultimately achieve savings in ratepayer dollars.

The Board directed staff to engaged with a professional services firm to conduct a preliminary study of shared services related to regional water issues opportunities for improvements. The following work effort will be performed: a collection of research information, a compilation of performance measures, review of budget, and outline opportunities and any potential cost savings.

FINANCIAL IMPACT

Funds are available in the FY 2015 budget for Management Consultants account number 60400-200. No additional funds are required.

ATTACHMENTS

None.
MEMORANDUM

TO: Board of Directors
FROM: Paul E. Shoenberger, P.E., General Manager
DATE: April 9, 2015
SUBJECT: Jody Terry
Claim No. 15-0499
Date of Claim: 2-26-15

RECOMMENDATION

Deny claim of Jody Terry, Claim No. 15-0499 and refer it to ACWA/Joint Powers Insurance Authority (ACWA/JPIA) for handling.

The Finance Committee reviewed this item at its March 16, 2015 meeting and recommends Board approval.

STRATEGIC PLAN

Goal #3: Be financially responsible and transparent.

PRIOR BOARD ACTION/DISCUSSION

None.

DISCUSSION

Mesa Water District (Mesa Water®) received a claim from Jody Terry for $274.00 related to a broken toilet which was purported to be a result of routine maintenance performed by Mesa Water® on February 9 -11, 2015, on Sumatra Place (near the intersection of Gisler Ave and Gibraltar Ave). A copy of the claim which was received by Mesa Water® on February 26, 2015 is attached for your information.

It is recommended that the Board deny claims in question within forty five days of presentation. If the claim is rejected in writing, the claimant then has six months in which to file suit. If the claim is not denied in this manner, it will automatically be deemed rejected by operation of law on the forty-fifth day and the claimant will have up to two years to file suit.

FINANCIAL IMPACT

Mesa Water® could be required to expend some money, the amount of which is unknown at this time, for defense if a lawsuit is filed. The funding source would be money Mesa Water® has on deposit with ACWA/JPIA.

ATTACHMENTS

Attachment A: Copy of Claim
Attachment B: Cover Letter & Rejection Letter
### Claim Form

(A claim shall be presented by the claimant or by a person acting on his behalf.)

#### NAME OF DISTRICT:

<table>
<thead>
<tr>
<th>1</th>
<th>Claimant's name, address (mailing address if different), and phone number.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
<td>Jody Terry</td>
</tr>
<tr>
<td><strong>Address(es):</strong></td>
<td>1729 Eridas Dr, Costa Mesa, CA</td>
</tr>
<tr>
<td><strong>Phone Number:</strong></td>
<td>714-434-2377</td>
</tr>
</tbody>
</table>

#### 2 List name, address, and phone number of any witnesses.

| **Name:** | Joe Miller |
| **Address:** | Same |
| **Phone Number:** |  |

#### 3 List the date, time, place, and other circumstances of the occurrence or transaction, which gave rise to the claim asserted.

| **Date:** | 2-11-15 |
| **Time:** | 9-3 |
| **Place:** | Jumatra, Costa Mesa |

**Tell What Happened (give complete information):**

Water was turned off for repairs on street. When turned back on, toilets exploded & backs broke requiring repair. Backflow and to be cleared. Receipts attached.

**NOTE:** Attach any photographs you may have regarding this claim.

#### 4 Give a general description of the indebtedness, obligation, injury, damage, or loss incurred so far as it may be known at the time of presentation of the claim.

Number costs $189 and $495, receipts attached.

#### 5 Give the name or names of the public employee or employees causing the injury, damage, or loss, if known.

Unknew.

#### 6 The amount claimed if it totals less than ten thousand dollars ($10,000) as of the date of presentation of the claim, including the estimated amount of any prospective injury, damage or loss, insofar as it may be known at the time of the presentation of the claim, together with the basis of computation of the amount claimed. If the amount claimed exceeds ten thousand dollars ($10,000), no dollar amount shall be included in the claim. However, it shall indicate whether the claim would be a limited civil case.

$274.

**Date:** 2-11-15  **Time:** 9:30am  
**Signature:** Jody Terry

**Answer All Questions. Omitting Information Could Make Your Claim Legally Insufficient!**
<table>
<thead>
<tr>
<th>Customer's Order</th>
<th>Source</th>
<th>Cash</th>
<th>Check #</th>
<th>Charge Terms</th>
<th>Now Due on Receipt</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repaired 2 toilets w/parts</td>
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<td>as needed, labor/service</td>
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<td>1 Tank Valve</td>
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<td>2 Flappers @ $9.00 ea</td>
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<td></td>
</tr>
</tbody>
</table>

Customer Expense for Leaks or Breaks in Old Pipes or Fixtures Due to Repairs.
Customer Expense if Roof is Damaged or Leaks Due to Rooter Work on Roof.
Return Check Charge of $25.00.

Work Authorized by: 

Guarantee: 60 days [Except unusual objects-toys, sanitary napkins, etc.]

Work Approved by: “Thanks for the Business”

Total Labor $95.00
Total Parts $34.00

INVOICE TOTAL $129.00
Mesa Rooter
DRAIN CLEANING & PLUMBING REPAIRS
P.O. Box 11482 • Costa Mesa, CA 92627-0482

(949) 646-2476       (714) 434-6344

Customer: Terry Rental:
Address: 1709 Orozco City, State, and Zip: Costa Mesa
City, State, and Zip:

<table>
<thead>
<tr>
<th>Customer's Order</th>
<th>Source</th>
<th>Cash</th>
<th>Check #</th>
<th>Charge Terms: Now Due on Receipt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rootered main sewer from 4&quot; roof vent to street</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Customer Expense for Leaks or Breaks in Old Pipes or Fixtures Due to Repairs.
Customers Expense if Roof is Damaged or Leaks Due to Rooter Work on Roof.
Return Check Charge of $25.00.

Work Authorized by:

Guarantee: [Except unusual objects-toys, sanitary napkins, etc.]

Work Approved by: ________________________________

"Thanks for the Business"

Total Labor $145.00
Total Parts $

INVOICE TOTAL $145.00
April 9, 2015

Jody Terry
1709 Orcas Drive
Costa Mesa, CA 92626

Ms. Terry:

Please be advised that Mesa Water District (Mesa Water®), as a public entity, is bound by certain Government Code regulations relating to claims. A formal claims procedure must be followed which requires us to make certain legal notifications to the claimant.

Mesa Water® is forwarding your claim to its insurance carrier, ACWA/Joint Powers Insurance Authority (ACWA/JPIA), for processing; however, the ACWA/JPIA cannot process the claim unless Mesa Water® has formally "rejected" the claim at its level. Therefore, I am enclosing a rejection letter as a formality to meet the legal requirement and have forwarded your claim to the ACWA/JPIA for handling.

Rejecting this claim is not a ruling on the validity of the claim; it is merely the process for referring the claim to our insurance carrier.

Thank you for your cooperation in this process.

Sincerely,

Andrew Hamilton
Chief Financial Officer
c: Claim File
April 9, 2015

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Jody Terry
1709 Orcas Drive
Costa Mesa, CA  92626

Re: Claim #15-0499 Filed for Jody Terry

Ms. Terry:

Notice is hereby given that the claim which you presented to the Mesa Water District on February 26, 2015 was rejected on March 16, 2015.

WARNING

Subject to certain exceptions, you have only six (6) months from the date this notice was personally delivered or deposited in the mail to file a State Court Action on this claim. See California Government Code §945.6. Your time for filing an action in federal court may be less than this six months.

You may seek the advice of an attorney of your choice in connection with this matter. If you desire to consult an attorney, you should do so immediately.

In providing this notice, or by any other action it has taken on this claim, Mesa Water District does not intend to relinquish or waive any of its legal claims requirements or any rights or defenses potentially available to Mesa Water District or its officers, directors, employees or agents.

Should you file a lawsuit in this matter, which is determined to be in bad faith and without reasonable cause, please be advised that Mesa Water District will attempt to recover all of its defense costs from you as allowed by California Code of Civil Procedure §128.5 and §1038.

If you have any questions about your claim, or this letter, please call the undersigned or our claims administrator at 800.231.5742.

Sincerely,

Coleen L. Monteleone
Administrative Services Manager/District Secretary

c: ACWA/JPIA
Claim File
MEMORANDUM

TO: Board of Directors
FROM: Phil Lauri, P.E., Engineering and Operations Manager
DATE: April 9, 2015
SUBJECT: Mesa Water Reliability Facility Operations Support Services

RECOMMENDATION

Renew the membrane support services contract for two years for $97,871 per year with Separation Processes Inc.

The Engineering and Operations Committee reviewed this item at its March 17, 2015 meeting and recommends Board approval.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice perpetual infrastructure renewal and improvement.
Goal #3: Be financially responsible and transparent.

PRIOR BOARD ACTION/DISCUSSION

For the FY2015 budget, the Board approved $90,000 for membrane support services.

DISCUSSION

On January 9, 2013, the Mesa Water Reliability Facility (MWRF) was put into service making Mesa Water® 100% locally reliable. In an effort to ensure reliable operations and efficient maintenance, Mesa Water® solicited proposals for MWRF operations support services in January 2013. A multitude of related MWRF operations support services are performed on a routine basis with this effort. Oversight of the MWRF treatment performance and health of the membranes is critical to minimizing Mesa Water’s long-term maintenance costs, minimizing annual treatment costs, and optimizing chemical usage. Proper care and performance monitoring of the MWRF membranes can provide several years of continued use with the vigilant oversight of efficient cleaning protocols and frequencies, thus minimizing early replacement of the membranes. The scope of work provided under the MWRF Operations Support Services contract is summarized as follows:

1. **MWRF Performance Monitoring**: A monthly review of the SCADA system operating data for the MWRF nano-filtration system is performed along with a written report providing operational observations and recommendations. The report also summarizes MWRF performance and trending membrane performance to date. Through the trending and analysis of the reported data, recommendations are made for appropriate cleaning intervals for the membranes by train and stage, ensuring maximum performance and durability of the membranes in each stage of the nano-filtration process.

2. **Training & Testing**: Standard operating procedures (SOP’s) have been developed for the proper startup and shutdown of the MWRF. Training and testing for operators and supervisors has been provided, supporting Mesa Water’s goal of a well trained staff to operate the facility.
3. **As-Needed Field Services**: As-needed technical assistance is provided in all areas of MWRF operations to optimize overall system performance and provide onsite overview and direction of membrane clean-in-place efforts, conduct investigations to identify control system adjustments required for optimization of chemical use, and assist in the development of a preventative maintenance schedule for MWRF assets.

4. **Engineering Support**: Engineering Support Activities are provided on an as-needed basis and may include activities related to the proper operation of system controls or plant equipment.

Mesa Water® selected Separation Processes Inc. (SPI) through a competitive bidding process to provide professional services in support of MWRF operations. SPI has provided excellent support and tremendous value to Mesa Water®. Mesa Water’s objectives are to ensure a cost competitive and transparent bidding process while balancing prudent use of internal resources to conduct competitive solicitation processes. In consideration of the outstanding value recognized by Mesa Water® from the existing support service contract provider (SPI) versus the costs to competitively rebid this work, it is recommended that the Engineering & Operations Committee consider extending this contract through June 30, 2017 for the combined amount of $195,742. Alternatively, the Engineering & Operations Committee may desire to direct staff to competitively solicit proposals for this contract.

**FINANCIAL IMPACT**

A budget request of $120,000 has been made for membrane support in the FY16 Budget.

**ATTACHMENTS**

Attachment A: SPI Proposal Letter
March 9, 2015

Tracy Manning  
Engineering Department  
Mesa Water District  
1965 Placentia Avenue  
Costa Mesa, CA 92627

Subject: SPI Proposal for MWRF Support Services

Ms. Manning,

SPI is pleased to provide this proposal for continuation of engineering support services related to the operation of the Mesa Water Reliability Facility (MWRF).

Based on the current understanding of Mesa Water District’s support needs and requirements, SPI proposes the following scope of services for a two year period (FY 15/16 and FY 16/17).

**Scope of Services:**

1. **Monthly Performance Monitoring & Reporting** – SPI will update and monitor the MWRF performance data on a monthly basis. SPI will prepare a monthly technical memo documenting the performance of the MWRF and will attend monthly operations meetings to discuss the content and answer any questions from staff.
2. **Training & Testing** – SPI provides periodic training sessions and will continue the development of standard operating procedures for the MWRF facility.
3. **Field Troubleshooting Activities** – SPI has allotted a specific budget to assist with any field troubleshooting activities or investigations that may arise. This could include activities such as investigation into and resolution of pretreatment, membrane, or post-treatment performance issues.
4. **Engineering Support Services** – SPI has allocated additional budget for engineering support services. Engineering Support Activities will be on an as-needed basis and could include activities such as investigating proper operation of system controls or plant equipment.

Fee
The following table incorporates the proposed scope and fee associated with the items discussed above. The proposed fee schedule reflects a 3%/year rate increase to adjust for inflation. As indicated in the table the total proposed fee for the two year period is $195,742.

<table>
<thead>
<tr>
<th>Task No.</th>
<th>Task Description</th>
<th>Cost (FY15/16)</th>
<th>Cost (FY16/17)</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Monthly MWRF Performance Monitoring &amp; Reporting (24 months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.a</td>
<td>Data acquisition and weekly update of data</td>
<td>24</td>
<td>96</td>
<td>$16,400</td>
</tr>
<tr>
<td>3.b</td>
<td>Preparing Monthly Trends, Performance Report, Recommendations</td>
<td>72</td>
<td>144</td>
<td>$31,368</td>
</tr>
<tr>
<td>3.c</td>
<td>Attend Monthly Performance Meetings</td>
<td>48</td>
<td>0</td>
<td>$10,464</td>
</tr>
<tr>
<td>4.</td>
<td>Training &amp; SOP Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.a</td>
<td>&quot;As-needed&quot; Activities (Staff training and development of SOP's)</td>
<td>20</td>
<td>40</td>
<td>$18,712</td>
</tr>
<tr>
<td>5.</td>
<td>Field Troubleshooting Activities (24 months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.a</td>
<td>&quot;As-needed&quot; Activities (e.g. troubleshooting, performance investigation, CIP assistance)</td>
<td>80</td>
<td>160</td>
<td>$78,999</td>
</tr>
<tr>
<td>6.</td>
<td>Engineering Support Services (24 months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.a</td>
<td>On call Assistance</td>
<td>100</td>
<td>100</td>
<td>$39,800</td>
</tr>
<tr>
<td></td>
<td>TOTAL CONTRACTED HOURS</td>
<td>200</td>
<td>444</td>
<td>$42,000</td>
</tr>
<tr>
<td></td>
<td>TOTAL CONTRACTED SERVICES COST</td>
<td>$83,472</td>
<td>$65,630</td>
<td>$195,742</td>
</tr>
</tbody>
</table>

**Personnel**

SPI proposes to continue serving Mesa Water with our current assigned staff. This includes Alex Wesner as Principal-in-Charge, John Perlman as Project Manager and Michael Dummer as Project Engineer.

We would be please to continue providing support services to Mesa Water. Please contact myself or John Perlman with any questions regarding this proposal.

Sincerely,

Gerry Filteau
President
TO: Board of Directors  
FROM: Phil Lauri, P.E., Engineering and Operations Manager  
DATE: April 9, 2015  
SUBJECT: On-Call Pipeline Construction Services

RECOMMENDATION

Renew the On-call Pipeline Construction Services contracts for two years for $150,000 per year with Paulus Engineering, JA Salazar Construction and Supply, and Doty Bros with an increase of 2.5% in all categories per Engineering News Record’s Construction Cost Index for Los Angeles, California for Calendar Year 2015.

The Engineering and Operations Committee reviewed this item at its March 17, 2015 meeting and recommends Board approval.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.  
Goal #2: Practice perpetual infrastructure renewal and improvement.  
Goal #3: Be financially responsible and transparent.

PRIOR BOARD ACTION/DISCUSSION

On March 8, 2013, the Board approved On-Call Pipeline Construction Services with Doty Bros., J.A. Salazar Construction and Supply, and Paulus Engineering.

For the FY 2014 and FY2015 budget, the Board approved $100,000 and $150,000, respectively, for on-call construction.

DISCUSSION

On-call Pipeline Construction Contractors allow Mesa Water to react quickly to urgent operational events, such as pipeline breaks that require external personnel and equipment beyond Mesa Water crews’ expertise (i.e., Deep excavations and shoring, etc.). The on-call contractors are also an efficient resource to complete small projects that take away from traditional capital replacement work efforts performed by Mesa Water crews.

Competitive solicitation for the On-Call Contractors was performed and approved by the Board in March 2013. This competitive solicitation guaranteed the rates for the duration of the two-year contract period. The two-year contracts expire at the end of March 2015. The following table summarizes the On-call Construction Contracts expenditure status to date:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Initial Contract</th>
<th>Expended FY14 &amp; FY15 Contract Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paulus Engineering</td>
<td>$100,000</td>
<td>$86,622</td>
</tr>
<tr>
<td>JA Salazar</td>
<td>$100,000</td>
<td>$71,978</td>
</tr>
<tr>
<td>Doty Bros.</td>
<td>$100,000</td>
<td>$0</td>
</tr>
</tbody>
</table>
Emergency work is assigned to Contractors most readily available and capable of performing the work. Capital replacement work is competitively bid on a project-by-project basis to the three pre-approved contractors to ensure cost effective pricing. Paulus Engineering and JA Salazar have performed excellent work, been responsive in emergency repair events, and have provided valuable capital replacement project resources to Mesa Water for Other Agency Project. Doty Bros. has provided competitive quotes for Other Agency Project work, but has not been selected due to their higher cost quotes. Thus, no work has been awarded to them to date.

The On-call Construction services provide tremendous value to Mesa Water. Mesa Water’s objectives are to ensure a cost competitive and transparent bidding process while balancing prudent use of internal resources to conduct competitive solicitation processes. In consideration of the outstanding value recognized by Mesa Water® from the existing On-call Construction contracts versus the costs to competitively rebid this work, it is recommended that the Engineering & Operations Committee consider extending these contracts through June 30, 2017 for the amount of $150,000 per year. As these contracts were bid and negotiated in 2013, it is also recommended that the rate schedules for each contract in Attachment A be increased by 2.5% to account for inflation. The 2.5% is based on Engineering News Record’s Construction Cost Index (ENR-CCI) for Los Angeles in January and February 2015. The current On-call Contractors have been queried and have agreed to hold the current contract pricing with an escalation in accordance with the ENR-CCI. Alternatively, the Engineering & Operations Committee may desire to direct staff to competitively solicit bids for these contracts.

FINANCIAL IMPACT

Of the $150,000 budgeted in FY2015 for On-call Construction, $39,314 has been expended and $110,686 remains in the budget. $150,000 will be budgeted for the On-call Construction Contracts in FY 2016.

ATTACHMENTS

Attachment A: 2013 On-call Construction Contracts rate schedules
Attachment A. On Call Construction Contracts Fee Schedules

1. Paulus Engineering
2. JA Salazar
3. Doty Bros.
APPENDIX TWO

FEE SCHEDULE

In the event that a conflict or contradiction is discovered between the proposal language and Mesa Water's standard contract terms, Mesa Water's standard contract terms shall prevail. Mesa Water's payment terms are Net 30.

Labor and equipment rates for Emergency Work shall be in accordance with the following schedule:

<table>
<thead>
<tr>
<th>STANDARD LABOR RATE (per hour)</th>
<th>RATE PER HOUR ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Person Crew</td>
<td>197.88</td>
</tr>
<tr>
<td>Three Person Crew</td>
<td>276.00</td>
</tr>
<tr>
<td>Four Person Crew</td>
<td>342.70</td>
</tr>
<tr>
<td>Each Additional Person</td>
<td>68.00</td>
</tr>
<tr>
<td>Additional Equipment Operator</td>
<td>72.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OVERTIME LABOR RATES (time &amp; 1/2)</th>
<th>RATE PER HOUR ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Person Crew</td>
<td>293.25</td>
</tr>
<tr>
<td>Three Person Crew</td>
<td>393.30</td>
</tr>
<tr>
<td>Four Person Crew</td>
<td>493.35</td>
</tr>
<tr>
<td>Each Additional Person</td>
<td>102.00</td>
</tr>
<tr>
<td>Additional Equipment Operator</td>
<td>108.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOUBLE LABOR RATES (double time)</th>
<th>RATE PER HOUR ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Person Crew</td>
<td>377.20</td>
</tr>
<tr>
<td>Three Person Crew</td>
<td>510.60</td>
</tr>
<tr>
<td>Four Person Crew</td>
<td>644.00</td>
</tr>
<tr>
<td>Each Additional Person</td>
<td>136.00</td>
</tr>
<tr>
<td>Additional Equipment Operator</td>
<td>144.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EQUIPMENT RATE (per hour)</th>
<th>RATE PER HOUR ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreman’s Truck</td>
<td>54.00</td>
</tr>
<tr>
<td>Crew’s Truck</td>
<td>54.00</td>
</tr>
<tr>
<td>Backhoe</td>
<td>86.25</td>
</tr>
<tr>
<td>Backhoe w/Compactor</td>
<td>115.00</td>
</tr>
<tr>
<td>Excavator</td>
<td>172.50</td>
</tr>
<tr>
<td>Loader</td>
<td>126.50</td>
</tr>
<tr>
<td>Crane</td>
<td>300.00</td>
</tr>
<tr>
<td>Skip Loader</td>
<td>80.50</td>
</tr>
<tr>
<td>Water Truck</td>
<td>82.50</td>
</tr>
<tr>
<td>Concrete Saw &amp; Truck</td>
<td>150.00</td>
</tr>
<tr>
<td>Dump Truck</td>
<td>110.00</td>
</tr>
<tr>
<td>Delivery Truck</td>
<td>75.00</td>
</tr>
<tr>
<td>Equipment</td>
<td>Rate (daily)</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Hand Operated Compactor (Wacker)</td>
<td>92.00</td>
</tr>
<tr>
<td>Asphalt Paving Machine</td>
<td>500.00</td>
</tr>
<tr>
<td><strong>EQUIPMENT RATES (daily rates)</strong></td>
<td><strong>RATE PER DAY ($)</strong></td>
</tr>
<tr>
<td>Light Plant</td>
<td>300.00</td>
</tr>
<tr>
<td>Arrow Board</td>
<td>150.00</td>
</tr>
<tr>
<td>Message Board</td>
<td>450.00</td>
</tr>
<tr>
<td>Compaction Wheel</td>
<td>n/a</td>
</tr>
<tr>
<td>Air Compressor w/Jackhammer</td>
<td>322.00</td>
</tr>
<tr>
<td>Trash Pump</td>
<td>120.75</td>
</tr>
<tr>
<td>Generator</td>
<td>143.75</td>
</tr>
<tr>
<td>Steel Plates</td>
<td>20.00</td>
</tr>
<tr>
<td>Shield (trench Box)</td>
<td>155.00</td>
</tr>
<tr>
<td>Trench Shoring (struts, plates, etc.)</td>
<td>1,000.00</td>
</tr>
</tbody>
</table>
APPENDIX TWO

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<tr>
<th>STANDARD LABOR RATE (per hour)</th>
<th>RATE PER HOUR ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Person Crew</td>
<td>195.00</td>
</tr>
<tr>
<td>Three Person Crew</td>
<td>282.00</td>
</tr>
<tr>
<td>Four Person Crew</td>
<td>345.00</td>
</tr>
<tr>
<td>Each Additional Person</td>
<td>73.00</td>
</tr>
<tr>
<td>Additional Equipment Operator</td>
<td>102.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OVERTIME LABOR RATES (time &amp; 1/2)</th>
<th>RATE PER HOUR ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Person Crew</td>
<td>259.26</td>
</tr>
<tr>
<td>Three Person Crew</td>
<td>370.42</td>
</tr>
<tr>
<td>Four Person Crew</td>
<td>457.58</td>
</tr>
<tr>
<td>Each Additional Person</td>
<td>97.16</td>
</tr>
<tr>
<td>Additional Equipment Operator</td>
<td>136.34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOUBLE LABOR RATES (double time)</th>
<th>RATE PER HOUR ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Person Crew</td>
<td>323.50</td>
</tr>
<tr>
<td>Three Person Crew</td>
<td>458.78</td>
</tr>
<tr>
<td>Four Person Crew</td>
<td>570.06</td>
</tr>
<tr>
<td>Each Additional Person</td>
<td>121.28</td>
</tr>
<tr>
<td>Additional Equipment Operator</td>
<td>169.71</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EQUIPMENT RATE (per hour)</th>
<th>RATE PER HOUR ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreman’s Truck</td>
<td>29.90</td>
</tr>
<tr>
<td>Crew’s Truck</td>
<td>35.00</td>
</tr>
<tr>
<td>Backhoe</td>
<td>71.30</td>
</tr>
<tr>
<td>Backhoe w/Compactor</td>
<td>111.30</td>
</tr>
<tr>
<td>Excavator</td>
<td>59.00</td>
</tr>
<tr>
<td>Loader</td>
<td>58.65</td>
</tr>
<tr>
<td>Crane</td>
<td>500.00</td>
</tr>
<tr>
<td>Skip Loader</td>
<td>46.00</td>
</tr>
<tr>
<td>Water Truck</td>
<td>98.00</td>
</tr>
<tr>
<td>Concrete Saw &amp; Truck</td>
<td>130.00</td>
</tr>
<tr>
<td>Dump Truck</td>
<td>99.00</td>
</tr>
<tr>
<td>Delivery Truck</td>
<td>85.00</td>
</tr>
<tr>
<td>Equipment</td>
<td>Rate Per Day ($)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Hand Operated Compactor</td>
<td>30.00</td>
</tr>
<tr>
<td>(Wacker)</td>
<td></td>
</tr>
<tr>
<td>Asphalt Paving Machine</td>
<td>80.00</td>
</tr>
<tr>
<td><strong>EQUIPMENT RATES (daily rates)</strong></td>
<td></td>
</tr>
<tr>
<td>Light Plant</td>
<td>350.00</td>
</tr>
<tr>
<td>Arrow Board</td>
<td>200.00</td>
</tr>
<tr>
<td>Message Board</td>
<td>240.00</td>
</tr>
<tr>
<td>Compaction Wheel</td>
<td>150.00</td>
</tr>
<tr>
<td>Air Compressor w/Jackhammer</td>
<td>250.00</td>
</tr>
<tr>
<td>Trash Pump</td>
<td>110.00</td>
</tr>
<tr>
<td>Generator</td>
<td>150.00</td>
</tr>
<tr>
<td>Steel Plates</td>
<td>8.00</td>
</tr>
<tr>
<td>Shield (trench Box)</td>
<td>800.00</td>
</tr>
<tr>
<td>Trench Shoring (struts, plates, etc.)</td>
<td>250.00</td>
</tr>
</tbody>
</table>
APPENDIX TWO

FEE SCHEDULE

In the event that a conflict or contradiction is discovered between the proposal language and Mesa Water’s standard contract terms, Mesa Water’s standard contract terms shall prevail. Mesa Water’s payment terms are Net 30.

Labor and equipment rates for Emergency Work shall be in accordance with the following schedule:

<table>
<thead>
<tr>
<th></th>
<th>RATE PER HOUR ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STANDARD LABOR RATE (per hour)</strong></td>
<td></td>
</tr>
<tr>
<td>Two Person Crew</td>
<td>165.97</td>
</tr>
<tr>
<td>Three Person Crew</td>
<td>238.54</td>
</tr>
<tr>
<td>Four Person Crew</td>
<td>310.80</td>
</tr>
<tr>
<td>Each Additional Person</td>
<td>72.26</td>
</tr>
<tr>
<td>Additional Equipment Operator</td>
<td>94.25</td>
</tr>
<tr>
<td></td>
<td><strong>OVERTIME LABOR RATES (time &amp; 1/2)</strong></td>
</tr>
<tr>
<td>Two Person Crew</td>
<td>225.70</td>
</tr>
<tr>
<td>Three Person Crew</td>
<td>321.03</td>
</tr>
<tr>
<td>Four Person Crew</td>
<td>418.26</td>
</tr>
<tr>
<td>Each Additional Person</td>
<td>97.23</td>
</tr>
<tr>
<td>Additional Equipment Operator</td>
<td>127.86</td>
</tr>
<tr>
<td></td>
<td><strong>DOUBLE LABOR RATES (double time)</strong></td>
</tr>
<tr>
<td>Two Person Crew</td>
<td>293.14</td>
</tr>
<tr>
<td>Three Person Crew</td>
<td>413.13</td>
</tr>
<tr>
<td>Four Person Crew</td>
<td>538.66</td>
</tr>
<tr>
<td>Each Additional Person</td>
<td>125.01</td>
</tr>
<tr>
<td>Additional Equipment Operator</td>
<td>161.46</td>
</tr>
<tr>
<td></td>
<td><strong>EQUIPMENT RATE (per hour)</strong></td>
</tr>
<tr>
<td>Foreman’s Truck</td>
<td>18.38</td>
</tr>
<tr>
<td>Crew’s Truck</td>
<td>18.38</td>
</tr>
<tr>
<td>Backhoe</td>
<td>46.82</td>
</tr>
<tr>
<td>Backhoe w/Compactor</td>
<td>66.82</td>
</tr>
<tr>
<td>Excavator</td>
<td>98.13</td>
</tr>
<tr>
<td>Loader</td>
<td>59.00</td>
</tr>
<tr>
<td>Crane</td>
<td>50.63</td>
</tr>
<tr>
<td>Skip Loader</td>
<td>32.82</td>
</tr>
<tr>
<td>Water Truck</td>
<td>10.63</td>
</tr>
<tr>
<td>Concrete Saw &amp; Truck Rental</td>
<td></td>
</tr>
<tr>
<td>Dump Truck</td>
<td>32.63</td>
</tr>
<tr>
<td>Delivery Truck</td>
<td>17.38</td>
</tr>
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</table>

NAME OF FIRM & DATE OF CONTRACT
<table>
<thead>
<tr>
<th>Equipment</th>
<th>Rate per Day ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand Operated Compactor (Wacker)</td>
<td>23.50</td>
</tr>
<tr>
<td>Asphalt Paving Machine</td>
<td>115.63</td>
</tr>
<tr>
<td><strong>EQUIPMENT RATES (daily rates)</strong></td>
<td></td>
</tr>
<tr>
<td>Light Plant</td>
<td>125.00</td>
</tr>
<tr>
<td>Arrow Board</td>
<td>136.00</td>
</tr>
<tr>
<td>Message Board</td>
<td>Rental</td>
</tr>
<tr>
<td>Compaction Wheel</td>
<td>132.00</td>
</tr>
<tr>
<td>Air Compressor w/Jackhammer</td>
<td>172.00</td>
</tr>
<tr>
<td>Trash Pump</td>
<td>53.00</td>
</tr>
<tr>
<td>Generator</td>
<td>53.00</td>
</tr>
<tr>
<td>Steel Plates</td>
<td>6.25</td>
</tr>
<tr>
<td>Shield (trench Box)</td>
<td>200.00</td>
</tr>
<tr>
<td>Trench Shoring (struts, plates, etc.)</td>
<td>25.00</td>
</tr>
</tbody>
</table>
MEMORANDUM

TO: Board of Directors
FROM: Phil Lauri, P.E., Engineering and Operations Manager
DATE: April 9, 2015
SUBJECT: Pipeline Testing Program

RECOMMENDATION

Authorize the General Manager to execute a contract with RBF Consulting, A Michael Baker International Company, in the amount of $337,302 to provide consulting services for the Pipeline Infrastructure Testing Program.

The Engineering and Operations Committee reviewed this item at its March 17, 2015 meeting and recommends Board approval.

STRATEGIC PLAN

Goal #2: Practice perpetual infrastructure renewal and improvement.

PRIOR BOARD ACTION/DISCUSSION

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

On January 20, 2015, the board received an information item about the plan to retain a consultant to assist in developing the Pipeline Testing Program protocols.

DISCUSSION

Mesa Water® released a Request for Proposal (RFP) for Professional Consulting services in support of the Pipeline Testing Program in February 2015. The scope of work was designed to retain a consultant to develop, execute, and document the Pipeline Testing Program to ensure a continued perpetual agency management philosophy in subsequent years. The scope of work includes the following major tasks:

**Pipeline Infrastructure Testing Program Procedures Manual Development:** The Consultant will use the TMs developed in Tasks 1-8 to develop a comprehensive Pipeline Testing Program Procedures Manual that includes step-by-step directions, requirements, background, and project management responsibilities to be provided.

**Project Administration:** This task defines Mesa Water’s expectations for project meetings, schedule, budget, invoicing, and progress reports.

**Coordinate Non-Destructive Testing (NDT):** This task includes selection of proposed pipeline segments for NDT, evaluation of NDT technologies, development of acceptable NDT standards, and review of useful life calculations.

**Materials Lab Testing Program:** This task identifies standards, protocols, and costs for conducting destructive lab testing consisting of crush tests, burst tests, stain test, scanning
electron microscope (SEM) observations, and other tests related to determining the wall thickness, strength, and remaining useful life of the pipelines. This includes identifying the labs, obtaining quotes, and preparing recommendations and procedures.

**Field Sampling Procedures:** This task will identify specific pipelines for lab testing, develop procedures for field sampling, prepare construction drawings, and prepare a TM summarizing the field sampling procedures.

**Obtain Bids for Field Sampling:** This task includes developing plans, specifications, and bid packages for field sampling and administering contractor selections.

**Construction Management of Field Sampling:** This task includes assisting with construction management of the contractors taking the field samples, overseeing the packaging and shipping the samplings to the labs, and updating GIS with sample locations.

**Lab Testing, Analysis, and Report:** This task includes conducting laboratory testing, reviewing results, preparing a pipeline replacement schedule and estimated construction costs. This task will also include a protocol for how to evaluate the lab data and test results.

**Next Year Test Plan:** This task includes the protocol for and preparation of the next year’s proposed testing plan including non-destructive testing, field sampling, and lab testing requirements, schedule, and proposed costs.

**Annual Pipeline Infrastructure Testing Program Report:** This task will include development of a standardized protocol and format and the preparation of an Annual Pipeline Testing Program Report, review of draft reports with Mesa Water Project Manager, and presentation to Mesa Water’s Board.

**Soil Corrosivity Study:** The soil corrosivity study is envisioned to provide information required to support Mesa Water’s cathodic protection program for its existing and future Pipeline Replacement Program. Mesa Water® intends to use the information from this study to determine where cathodic protection is required within its service area.

**Selection Process**

Proposals were solicited from 13 firms to provide the required scope of work. The firms included: Arcadis, Black & Veatch, Brown and Caldwell, Brady and Associates, Carollo Engineers, CDMSmith, Louis Berger and Associates, MWH Global, Inc., RBF Consulting A Michael Baker International Company (RBF), TetraTech, V&A Consulting Engineers (V&A), URS, and West Yost Associates (West Yost). A pre-proposal meeting was conducted on February 18, 2015. Three (3) proposals were received on February 26, 2015. The proposing firms included RBF, V&A, and West Yost.

Proposals were reviewed and evaluated by a selection panel comprised of Mesa Water staff and staff from Metropolitan Water District of Southern California. Each proposal was scored based on qualifications, experience, staff availability and commitment, scope of work approach, and proposal quality. The Selection Committee determined that all three proposers warranted an interview. The following table summarizes the selection process evaluation scores:
<table>
<thead>
<tr>
<th>Final Ranking</th>
<th>Proposer</th>
<th>Score</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RBF</td>
<td>4.73</td>
<td>$337,302</td>
</tr>
<tr>
<td>2</td>
<td>West Yost</td>
<td>3.95</td>
<td>$339,890</td>
</tr>
<tr>
<td>3</td>
<td>V&amp;A</td>
<td>2.65</td>
<td>$299,958</td>
</tr>
</tbody>
</table>

Each of the interviewing teams had excellent proposed personnel and good approaches to the scope of work. However, the Selection Committee found that RBF had the most thorough approach and team experience to deliver the project scope of work. RBF’s Technical Proposal is included as Attachment A. **Hardcopies of the other two proposals are available upon request.** While all the proposing firms had qualified staff and a good experience, RBF’s proposal provided the most comprehensive approach, had excellent experience in delivering similar projects, and understood the need to develop a perpetual agency standards protocol for Mesa Water® to use into the future. RBF’s fee proposal is included as Attachment B. Therefore, it is recommended that the Board consider authorizing the General Manager to execute a contract with RBF in the amount $337,302 for a 16-month duration to provide consulting services for the Pipeline Testing Program.

**FINANCIAL IMPACT**

The FY 2015 budget for the Pipeline Testing Program is $80,000. Approximately $17,000 will be expended during FY2015 to establish the program and the remaining budget to be expend on non-destructive testing. $320,00 will be budgeted for FY2016.

**ATTACHMENTS**

Attachment A: Technical Proposals for Consulting Services for Pipeline Testing Program  
Attachment B: Cost Proposal for Consulting Services for Pipeline Testing Program
Program Management for Pipeline Infrastructure Testing

February 26, 2015

Submitted by: RBF Consulting
Michael Baker International company
Cover Page

Name of Business
RBF Consulting, a Michael Baker International Company
14725 Alton Parkway
Irvine, CA 92618-2027
Phone: 949.472.3505  Fax: 949.472-8373
www.mbakerintl.com

Federal Tax I.D.: 95-224-7293

Type of Business
Privately Held Corporation

Years in Business: +70 Years

Year Established: 1944 (Orange County, CA)

Name, Title, Phone, Email, Address of Person Authorized to Represent RBF and Sign Contracts
Cindy L. Miller, P.E.
Vice President, Water Resources
949.855.3616, clmiller@mbakerintl.com
14725 Alton Parkway
Irvine, CA 92618-2027

Certificate of Insurance
RBF's Certificate of Insurance is provided on the following page.

Ms. Cindy Miller, PE  Dated 2/26/2015
Vice President, Water Resources
(Authorized Representative)

WATER RESOURCES SERVICES

Planning:
- Pipeline Testing & Inspection
- Hydraulic Modeling
- Master Plans
- Operating Efficiency Optimization
- System Conversion Feasibility Studies
- UWMP Act: Urban Water Management Plans
- SB 610: Water Supply Assessments
- SB 221: Written Verifications
- Due Diligence Studies
- Specific Plan Support Studies
- General Plan Support Studies
- Fire Hydrant Flow Testing
- Capital Improvement/ Replacement Programs

Transmission and Storage:
- Transmission Mains
- Distribution Pipelines
- Infrastructure Condition Assessment
- Flow Control Facilities
- Pump Stations
- Well Equipping
- Reservoirs

Water Treatment Facilities:
- Water Quality Analysis
- Blending Analysis
- Ion Exchange Plants
- Coagulation / Filtration
- Membrane Treatment
- Disinfection Facilities

Support Services:
- Electrical Engineering
- Structural Engineering
- Hydrology / Hydraulics
- Environmental & Permitting
- Surveying
- Construction Management and Inspection
- Geographic Information Systems
CERTIFICATE OF LIABILITY INSURANCE

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not affect, negative, affirmatively, or otherwise amend, extend or alter the coverage afforded by the policies below. This certificate of insurance does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder.

Important: If the certificate holder is an additional insured, the policies must be endorsed. If substitution is waived, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsements.

**PRODUCER**
Mesa Water District
Program Management for Pipeline Infrastructure Testing

**INSURER**
RFP Consulting
PO Box 57057
Irvine, CA 92619-7657 USA

**COVERAGES**

<table>
<thead>
<tr>
<th>TYPE OF INSURANCE</th>
<th>POLICY NUMBER/RTN</th>
<th>COVERAGE LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. COMMERCIAL / GENERAL LIABILITY</td>
<td>2821-004255-14</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>B. AUTOMOBILE LIABILITY</td>
<td>AS2-968-904145-724</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>C. WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY</td>
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<td>$1,000,000</td>
</tr>
<tr>
<td>D. LIABILITY战争</td>
<td>GC402665-405</td>
<td>$5,000,000</td>
</tr>
</tbody>
</table>

DESCRIPTION OF OPERATIONS LOCATIONS (OCL): ACORD 101, additional risk exposures may be reported if appropriate during the work.

The ACORD name and logo are registered marks of ACORD.

ACORD 25 (2014/01)
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## Appendix A: Resumes of Key Staff

## Appendix B: Professional Services Agreement Acceptance Form

- Signed Professional Services Agreement Acceptance Form
- Signed Addendum
Section 1: Firm Qualifications, Experience, and References
Section 1: Firm Qualifications, Experience and References

Firm Introduction

Established in Orange County in 1944, RBF Consulting (RBF), a Michael Baker International Company, is a multi-disciplinary planning, engineering, and construction management firm that offers Mesa Water District (Mesa Water) comprehensive Program Management services for its Pipeline Infrastructure Testing Program. The firm employs 450 professionals in California and 250 in our Irvine office where the work will be managed. Our professional staff has the requisite expertise in all aspects of buried infrastructure inspection and assessment, and related support services, to successfully perform on this contract.

Strength and Stability of the Firm

RBF is a strong, financially stable firm, operating continuously since 1944, with no bankruptcy, pending litigation, closures or mergers that would impede our ability to complete any assignment. RBF, as part of Michael Baker International, is nationally ranked 11th in Water Supply and 16th in pipelines as published in the 2014 Engineering News Record (ENR).

Through more than 70 years of experience in the southern California region, we have learned that one solution does not fit all. We work closely with local agencies, cities, and communities of all sizes to help them solve their unique water resources challenges. Our expertise and knowledge of the industry allows us to identify and deliver practical and cost-effective solutions for water supply systems. Delivery of high quality service is what our skilled teams care most about.

Subconsultants

Rajani Consultants, Inc.: Testing Technology Evaluation Consulting:
Ninyo & Moore: Geotechnical Engineering

Overview of Relevant Capabilities

RBF is a leader in water resources engineering and has provided professional engineering services for water supply, storage, and delivery facilities since the early 1980s. The firm has proven experience in developing practical and cost effective solutions to water resources design challenges, and is an innovator of creative ideas in the planning, finance, design, and construction of water supply facilities. The firm specializes in the
planning, design, and construction management of transmission, storage, pumping, and treatment for water and wastewater facilities.

**Pipeline Inspection, Testing, Evaluation, and Maintenance.** Our pipeline assessment group provides services for the ongoing maintenance and evaluation of existing and newly constructed systems. We are industry leaders in CCTV inspection, hydraulic modeling, capital improvement plan development, and navigating state and federal regulatory requirements. The RBF team has provided inspection and assessment for more than 2,500 miles of pipeline in California. Members of RBF’s Pipeline Assessment Group have long been innovators in the field of CCTV, using the latest equipment and software that result in concise, meaningful, customized reports designed to meet the specific needs of each client. Team members are frequent speakers at water/wastewater seminars, have published articles in trade magazines, and are trained and certified in the Pipeline Assessment and Certification Program (PACP).

For Las Vegas Valley Water District, RBF provided forensic engineering services, including field investigations of pipeline failures, collection and testing of pipe material and soil samples, preparation of field investigation reports, and preparation of an annual summary report. For the City of San Diego Pump Station 65 and associated force main and leader line, RBF managed destructive testing for 30- and 42-inch ductile iron pipe for the City of San Diego. This involved overseeing sampling, traffic control, safety plan, and chain of custody forms and procedures, as well as installing repair couplings and reinstating pipeline flow.

**Data Management.** Pipeline testing and inspection programs rely heavily on data collection and data analysis, particularly with GIS based systems which require the latest pipeline integrity data management solutions. Our Pipeline Assessment Group have been involved in creating extensive databases, writing script and queries to mine data, and developing protocols and metrics for prioritization of repairs. For the City of El Cajon City-wide Pipeline Assessment project, RBF created and maintained a database that stored over a terabyte of data.

**Geographic Information Systems.** RBF has highly experienced Geographic Information System (GIS) staff. Our GIS specialists have worked directly with water agencies and cities to develop, integrate, and utilize GIS in the management of their water systems. Clients have included Newhall County Water District, Rancho California Water District, El Toro Water District, Irvine Ranch Water District, City of Thousand Oaks, City of Chino Hills, as well as others. RBF offers the latest in computer aided design drafting (CADD) systems and GIS resources to generate master planning graphics and atlas maps. The use of advanced computer systems results in savings in graphic and atlas map preparation time, as well as improved accuracy and presentation of the maps.

**Construction Management.** RBF offers a complete integrated package of Construction Project Management services that are “tailored” to the individual needs of the project and the client. Services include construction management, inspection, contract administration, record drawing and preparation of operation and maintenance manuals.

**Corrosion.** RBF performs a full range of corrosion engineering services including design of cathodic protection and coating systems; construction inspection; electropotential surveys; coating specification; and metallurgical evaluations of failures.
**Surveying / Mapping.** RBF also offers comprehensive surveying services utilizing proven survey electronics and state-of-the-art equipment for both topographic mapping and construction staking services.

**Design.** RBF has extensive experience in the traditional aspects of pipeline design, such as alternative alignment analysis, materials selection, hydraulic and transient analysis, hydraulic modeling, and cost estimates, as well as state-of-the-art technology and construction methods. Our experience covers the spectrum of pipeline design including welded steel pipe, ductile iron pipe, high-density polyethylene (HDPE) pipe, and polyvinyl chloride (PVC) pipe. Analysis and final design has been provided for a wide variety of pipeline projects, from small distribution pipelines to large transmission mains ranging in size from 8-inches to 114-inches in diameter.

**Rehabilitation.** RBF has been at the forefront of pipeline rehabilitation technologies and methods for over 15 years. Our in-house expertise includes design for rehabilitation of existing pipeline conveyances, as well as providing construction engineering support and construction management services. Our multi-disciplined team brings many years of practical experience to every project to help develop a set of construction documents that is of sound design, thorough in detail, and encourages competitive contractor bids.

**Why Select RBF?**

The key benefits of selecting the RBF team are:

1. Successful working relationship with Mesa Water staff through current work on the OC-44 Pipeline Project and As-Needed GIS services. The team has intimate knowledge of Mesa Water’s distribution system and GIS schema, which will provide a seamless approach to the work.

2. Deep breadth of talent and local resources with full service capabilities in water resources, pipeline assessment, GIS, cathodic protection, surveying, construction management, traffic control, environmental permitting, and related services. The team can address any challenge that arises!

3. Collaboration with Rajani Consultants, Inc. brings preeminent expert knowledge and decades of experience in distribution system pipeline inspection technology and condition assessment methodologies.

4. Successful relevant experience with water pipeline inspection and testing programs including Castaic Lake Water Agency and Las Vegas Valley Water District.

5. The Team brings Mesa Water the knowledge and lessons learned from thousands of miles of pipeline inspection and assessment with data management and integrated GIS executed in the past 10 years.

6. A team with longevity and stability with the firm and an excellent track record of successfully working together on many similar projects.

7. We can meet your schedule and be responsive to the needs of Mesa Water throughout the duration of the project. This includes senior level staff involvement throughout the process.

8. Excellent past performance on relevant projects as demonstrated by the testimonials in our representative projects and client commendation quotes provided on the following page.
What our clients are saying.

“Your work will allow the City of Vista and Buena Sanitation District to confidently spend Capital Improvement Program replacement and rehabilitation funds projects that will have the greatest positive impact…”

The work of Mr. Mark Hill and the rest of the RBF Pipeline Assessment Group were particularly appreciated...Mark’s dedication to facilitation communication between all of the stakeholders was critical for the successful completion of field work.

The automation of the data transfer between the City’s inspection software and maintenance management system and the integration of the engineering analysis with GIS has streamlined the process of creating CIP projects from the 2,269 specific recommendations for the system. We are pleased with the final results of your efforts…” City-wide Sewer Pipeline Inspection Program, Lawrence D. Pierce, PE, Director of Engineering, City of Vista

“I wanted to take a moment to commend a job well done by RBF. Rancho California Water District (RCWD) has committed to inspecting and assessing the condition of its entire wastewater collection system... RCWD contracted with RBF and you assigned your Pipeline Assessment Group along with your GIS department to fulfill the contract. Specifically, the excellent work provided by these assignment departments included addressing our data management concerns, working very closely with me and my staff to complete the work, and creating a customized report that surpassed our needs. The GIS project viewer developed by the GIS Department allowed us to track the project and review the results as they developed.

I particularly appreciate the advance work performed to ensure that the data collected will transfer into our computerized maintenance management software once it is implemented. It is rare to find such dedication to delivering excellence! I would gladly recommend RBF for future work in the inspection and evaluation of pipelines.’ Rancho California Water District, Warren A. Back, P.E., Engineering Planning Manager

“On behalf of the City of Anaheim, I would like to personally thank the RBF team for their excellent support on the Citywide Sanitary Sewer system Repair and Rehabilitation Program. The solutions provided by RBF will significantly improve the reliability of the City’s system.” Khanh Chu, P.E., Principal Civil Engineer, City of Anaheim, Department of Public Works

“The Laguna Beach County Water District (District) selected RBF Consulting to prepare an update Water Master Plan of our domestic water system. We were extremely pleased with the efforts by RBF on this project. The RBF team worked seamlessly to meet all our expectations on the project. All team members showed professionalism, expertise, and a commitment to serving the District. It was a pleasure working with RBF on this project and look forward to working together in the future.” Richard B. Mathis, Manager of Operations, Laguna Beach County Water District

The following pages include our three representative projects, additional experience matrix and subconsultant summaries.
Representative Projects and References

Pipeline Inspection Program Planning
Santa Clarita, CA

RBF developed an innovative, comprehensive pipeline inspection program for the CLWA, a public water wholesaler providing domestic and recycled water to three retail water agencies. CLWA operates three treatment plants, three pump stations, and three storage facilities and has more than 40 miles of potable and recycled water pipelines that range in diameter from 12- to 102-inches.

Each pipeline segment within the CLWA GIS database was assigned a ranking (score) based on a number of different criteria. The ranking is a calculated score that accounts for the probability of failure and the consequence of failure. The ranking was used as a basis to develop the prioritization and schedule of the inspection program. The ranking (scoring) system took into consideration all available data that factors into a pipelines’ probability of failure and the consequence of failure.

Work also included collecting data on pipelines and appurtenances, turnouts, cathodic test stations, and utility crossings, along with traffic, environmental, and other impacts; designing and developing an Esri-based GIS geodatabase; mapping CLWA pipeline easements; evaluating and reporting on inspection priorities, procedures, and frequencies; developing a pipeline ranking matrix; generating a report on pipelines to be inspected and cost requirements; developing an inspection schedule; and preparing draft and final inspection program documents.

Reference
Castaic Lake Water Agency
27234 Bouquet Canyon Road
Santa Clarita, California 91350
Mr. Jason Yim, P.E., Principal Engineer
(661) 513-1277
jyim@clwa.org

Project Relevance
- Inspection technology evaluation
- Data management
- GIS database update
- Pipeline ranking matrix
- Prioritization and schedule of the inspection program
- Preparing draft and final inspection program documents
- Develop pipe profiles
- Detailed cost estimate
- Stakeholder presentation
- 30-year CIP

Client Satisfaction
“RBF Consulting is a great company to work with. We are pleased with their past and current work performance and look forward to continuing to work with them. John Nagle is a great person to work with and is a proactive project manager ....”

Jason Yim, P.E., Principal Engineer
Castaic Lake Water Agency
Miramar Transmission Line Evaluation  
North Pomona & La Verne, CA

Under this Closed Circuit Television (CCTV) inspection contract for Three Valleys Municipal Water District, RBF completed the investigation of 7,500 feet of the Miramar Transmission Line, ranging from Amherst Street south on Williams Avenue to Grove Street, west to Fulton Road and south on Fulton to 6th Street. The pipe was a 56-year-old, 30-inch pre-stressed concrete cylinder pipe potable water transmission line. RBF completed the field inspections in two days, documenting defects and observations of the pipe. The inspections were completed utilizing a dedicated potable waterline Inuktun VT300 CCTV robotic tractor. Prior to the inspection, four access points were added so that the camera could be inserted into the line. Close coordination with remote field eddy / transformer coupling (RFEC/TC) inspectors was required.

Reference
Three Valleys Municipal Water Mesa Water  
1021 East Miramar Avenue  
Claremont, CA  91711  
Mr. Ray Evangelista, Project Engineer  
(909) 621-5568  
revangelista@tvmwd.com

Project Relevance
• 30-inch potable waterline inspection
• Field inspection performed in two days
• Coordination with remote field eddy / transformer coupling inspectors
• 30-year CIP

Client Satisfaction
“I would like to commend RBF Consulting…Mark Hill and the RBF Pipeline Assessment Group completed the closed circuit television (CCTV) inspection of our 30” Miramar Transmission Line … We were pleased with RBF’s ability to complete the field inspection in two days. We were especially impressed with your team’s innovation in retrofitting the dedicated potable water CCTV camera with a custom fabricated grappling hook to remove pipe coupons and other debris discovered in the line during your previous inspection.”

Ray Evangelista Engineer | Three Valleys Municipal Water Mesa Water
City-wide Pipeline Inspection, Repair, and Replacement Program, El Cajon, CA

RBF provided the City of El Cajon with comprehensive sewer collection system services to develop a proactive and comprehensive approach for maintaining and renewing their 192-mile collection system.

An analysis of existing attribute and maintenance data was performed to develop risk of failure and consequence of failure classifications for each pipeline and manhole within the system. This analysis was then utilized to develop a schedule to inspect and evaluate the entire system over a five year period, addressing the highest risk and consequence of failure pipelines first.

RBF managed the inspection work, including developing traffic control design, coordinating with affected agencies, businesses and organizations, and providing comprehensive quality control. The work also included data management that allowed the inspection data to be imported into a future Computerized Maintenance Management System (CMMS) program.

Management of the inspection process is tracked through an on-line Geographic Information System (GIS) viewer that shows the pipeline inspection schedule, and allows the client to view the inspection videos and engineering analysis. Based on the findings of the inspection program, RBF prioritized the pipeline improvement projects and providing suggestions for the most appropriate and cost-effective methods of repair or replacement, cost estimates, and preparing a Capital Improvement Program (CIP) to implement the rehabilitation program.

The project also involved assisting the City with the selection and installation of a CMMS system to manage the sewer collection system operations, preventative maintenance, repair and replacement program, maintenance staff work orders, and public inquiries, as well as City’s other assets. RBF input the inspection and maintenance data into the CMMS in order to evaluate the system maintenance requirements and implement an annual schedule for system cleaning and inspection.

Reference
City of El Cajon
200 Civic Center Way
El Cajon, CA 92020
Mr. David Keltner, Project Manager
(619) 441-1510
dkeltner@cityofelcajon.us

Project Relevance
- System Analysis
- Risk of failure and consequence of failure classifications
- Evaluation of Technology
- Extensive Data Management
- Recommend Repairs
- Prioritize Repairs
- Cost Estimates
- CIP Project List
- GIS Mapping / Coding
- Management/scheduling of field inspections
### Additional RBF Project Experience

**Proven Experience in Water Pipeline Inspection, Assessment, Planning & Design!**

**Project / Client-Owner**

<table>
<thead>
<tr>
<th>Description</th>
<th>Pipe Length (feet)</th>
<th>Diameter (inches)</th>
<th>Pipeline Inspection Planning</th>
<th>Pipeline Inspection</th>
<th>Condition Assessment</th>
<th>Non Destructive Testing</th>
<th>Alignment Analysis</th>
<th>Corrosion</th>
<th>Survey</th>
<th>Utility Location</th>
<th>Traffic Control Plans</th>
<th>Permitting / Agency Coordination</th>
<th>Environmental</th>
<th>Construction Services</th>
<th>GIS Based Data Management</th>
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<tbody>
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</tbody>
</table>
Section 2: Staff Experience and Availability
Section 2: Staff Experience and Availability

The RBF team members proposed for this contract have all worked together on similar projects, providing seamless coordination and team synergy that will result in a well-managed and efficiently executed project. In addition to having worked together for many years, our staff all has longevity and stability with the firm, and will be dedicated to this project through completion. The team will take a pro-active approach to communication with Mesa Water staff and forward project planning.

Our Project Director, John Nagle, will serve as RBF’s primary point of contact with Mesa Water staff. He will provide team direction, coordinate project efforts, and ensure adherence to the project schedule and budget. John will be responsible for providing regular status reports and facilitate regular progress meetings to track the inspection and production schedules.

Cindy Miller will serve as Principal in Charge where she will provide team leadership, resource allocation, technical consultation, and have overall responsibility for successful delivery of the work. She is available to Mesa Water throughout the duration of the contract.

Task Leaders Mark Hill, Tori Yokoyama and Jerome Ruddins have been assigned to provide leadership and management of the Testing Program, Engineering Support and Construction Management services respectively. These individuals are experts in leading their technical teams and have performed together on numerous pipeline assessment projects throughout southern California. The Task Manager will report directly our Project Director, John Nagle.

John Harris will be responsible for QA/QC providing regular submittal reviews developed by the Task Leaders. The Task Leaders will perform a pre-submittal review of the deliverables, and John will then provide a final review.

Please refer to the project approach/scope of work for additional team member involvement for associated tasks.
Proposed staff members Mark Hill and David Hill are trained and certified in the Pipeline Assessment and Certification Program (PACP).
Key Staff Biographical Sketches

Blue box indicates why this person was selected to lead their specific task.

John Nagle, PE | Program Manager

John Nagle has been responsible for managing all phases of water and wastewater projects, including master planning, feasibility studies, condition assessments, facility design, and construction management for potable water and wastewater transmission and distribution systems.

Recently John served as Task Leader for Program Planning on the Castaic Lake Water Agency’s Pipeline Inspection Program where he was responsible for overseeing data evaluation, pipeline schematic plans, and document development. John also managed consulting services to Las Vegas Valley Water District for the development of their Pipeline Failure Analysis and Root Cause Training Program, which included forensic engineering services on an "as-requested" basis. These services included field investigations of pipeline failures, collection and testing of pipe material and soil samples, preparation of field investigation reports, and the preparation of an annual summary report.

Cindy Miller, PE | Principal-in-Charge

Cindy Miller is experienced in all aspects of water resources engineering. She has a 21-year tenure with the firm and has been integrally involved in water supply issues in southern California throughout her career. Cindy has been responsible for the successful planning and design of major water supply, storage, treatment, and delivery facilities to agencies located throughout region. In her role as Principal in Charge, she will provide team leadership, resource allocation, technical consultation, and have overall responsibility for successful delivery of the work.
John Harris, PE | QA-QC

John Harris has 35 years of experience in water resources engineering with expertise in the planning and design of pipelines. He has managed complex pipeline projects in environmentally sensitive and urban areas, worked closely with community members and other stakeholders, and has extensive experience in special construction techniques, and difficult soil conditions.

John has served in the same capacity for numerous condition assessment programs which required the evaluation of multiple inspection programs, prioritization of repairs, cost projections and preparation of long-term capital improvement programs. He has a thorough understanding of all pipeline and construction materials used throughout Mesa Water’s facilities and, through previous assignments, is familiar with Mesa Water’s water distribution system. He has been instrumental in the development and integration of data management with GIS and will utilize this knowledge to provide guidance in the development of a user-friendly GIS program to track the results of this program.

Mark Hill, PE | Task Leader, Testing Program

Mark Hill’s experience includes pipeline evaluation, GIS, cost estimating, computer modeling and database generation, construction monitoring and scheduling, quality control, plan checking and agency coordination. He has worked extensively with Microsoft Access, SQL Server, Microsoft Project, Primavera P3 and Suretrack. Over the past 15 years, his group has been responsible for the completion of nearly 2,500 miles of pipeline inspection, condition assessment and capital improvement program development. He is very familiar with the various non-destructive testing and testing technologies.

He has been involved in creating extensive databases, writing script and queries to mine data, and developing protocols and metrics for prioritization of repairs. For the City of El Cajon City-wide Pipeline Assessment project, Mark created and maintained a database that stored over a terabyte of data.

Mark is trained and certified in the Pipeline Assessment and Certification Program (PACP).
Steve Bein, PE, GISP | Task Leader, GIS
Steve Bein has applied his talents to the development of computer aided engineering and planning applications, facilities management, and spatial information systems for over 28 years. He has extensive experience utilizing many systems including AutoCAD, ArcGIS, ArcInfo, and Oracle, SQL Server, SDE, and web technologies. Steve’s experience includes large, complex utility condition assessment projects with GIS integration, database development of field test data, relating existing GIS data sets for analysis and map making, and updating GIS data to include the results of field data. He has developed Mesa Water’s current GIS database schema and created the current system atlas maps.

Tori Yokoyama, PE | Task Leader, Engineering Support
Tori Yokoyama has 10 years of experience in the planning and design of water and sewer pipelines. He has a proven track record of managing complex projects and directing multifaceted teams. Tori coordinated a similar field work effort at the Port of Long Beach, which included installation and monitoring of 30 flow monitors, field survey of 700 manholes, CCTV inspection of 75,000 LF of sewer pipeline, and condition assessment of 30 lift stations. Specialized coordination was required to keep track of multiple crews for each discipline, working at different areas within the Port, all with different access windows and requirements.

Michael J. Boeck, P.E. | Corrosion Engineering
Mike Boeck provides design engineering for water and wastewater projects that includes domestic and recycled water and sewer pipelines, lift stations, booster pump stations, water reservoirs, and pressure reducing stations. Mike provides corrosion design using galvanic or impressed current cathodic protection systems. He is also experienced in conducting soils resistivity surveys, and in the preparation of detailed plans for the construction of cathodic protection facilities for pipelines and steel tanks. Mike served as corrosion engineer associated with forensic engineering services for the Las Vegas Valley Water District and has also provided corrosion engineering services for the Laguna Beach County Water District, El Toro Water District, Santa Margarita Water District and other utility and municipal agencies in Southern California.
Jerome A. Ruddins II, C.C.M., QSP | Task Leader, Construction Management

Jerome is responsible for managing construction managers and inspection personnel on projects of various levels of complexity. He possesses many years of construction management and inspection experience and has been responsible for the construction administration and inspection of over $2.5 billion of public works construction projects. As a Construction Manager, he has worked closely with Resident Engineers coordinating RFI’s, submittals, material testing and inspection, and field survey. He has also chaired construction site meetings, reviewed schedules, quantity calculations, and pay estimates. Other responsibilities include quality control of inspection, utility coordination, constructibility reviews, value engineering, specification quality control, and construction safety. His experience includes all types of water and wastewater infrastructure projects.

David Hill | Field Coordinator

What does David do in his field coordinator role? David Hill has been working in the field of pipeline inspections quality control sewer pipeline condition assessment for the 10 years. He is responsible for the development and design of GIS layers, maps, and attribute data. He is currently a Design Technician for RBF. His responsibilities include quality control for CCTV database management, creating and maintaining databases for CCTV, creating maps, and editing and developing GIS layers. He is proficient with ARC Map and MS Access. David is trained and certified in the Pipeline Assessment and Certification Program (PACP).

Dr. Balvant Rajani, PE, PhD | Testing Technology Evaluation

Dr. Balvant Rajani is a leading expert in infrastructure analysis and improvement with 40 years of experience. He has authored or co-authored more than 200 publications on the renewal planning, failure analysis, testing and condition assessment of water mains. His expertise lies in buried asset management, behavior and performance analysis, reliability and risk assessment, economic evaluation, corrosion assessment, life-cycle costs and decision support for the operation, maintenance and rehabilitation of water distribution and sewage collection systems.

- Over 30 years of construction management and inspection for water and wastewater projects in southern California.
- Experience overseeing sampling, traffic control, safety plans, and chain of custody forms and procedures, as well as installing repair couplings and reinstating pipeline flow.
- Has coordinated field crews on over 15 pipeline inspection/assessment projects in the past 10 years
- Trained and certified in the Pipeline Assessment and Certification Program (PACP).
- 30 years of experience in reliability and risk analysis, and decision optimization for buried infrastructure systems.
- Provides innovative approaches and solutions to infrastructure deterioration.
Dr. Yehuda Kleiner, PE, PhD | Testing Technology Evaluation
Dr. Yehuda Kleiner has 30 years of experience in reliability and risk analysis, and decision optimization for buried infrastructure systems. He has managed client funded research activities in the area of infrastructure asset management, including the development and provision of innovative approaches and solutions to infrastructure deterioration. Dr. Kleiner performs economic evaluation and life-cycle costing, and modeling of infrastructure deterioration; and provides decision support for the operation, maintenance rehabilitation and renewal of infrastructure systems.

Lawrence Jansen, PG, CEG | Geotechnical Engineer
Lawrence Jansen has over 35 years of engineering geology experience in southern California for pipelines, reservoirs, treatment plants, tunnels, and pump stations. His experience includes exploration of geologic structure, groundwater, landslides, slope stability, and fault and seismic hazards. He is well versed in exploration techniques including aerial photo interpretation, downhole logging, hollow stem and mud rotary drilling, monitoring wells, fault trenching, and geophysical surveys. Lawrence was the project manager for several pipeline projects including the Monterey County Coastal Water Project in Monterey County, the Inland Empire Utility Agency Recycled Water System – Phase II project, and the Central Basin Recycled Water System Expansion project which included the evaluation of over 12 miles of planned water pipelines extending into six different cities located throughout Los Angeles County.
Key Staff Current Workload

RBF has the resources, capability, and capacity to provide the range of services needed to complete multiple concurrent assignments. Individual team members will be available at their commitment levels for the duration of each assignment.

The percentage of time available is based on an evaluation of the current workload and backlog of each team member assigned to this project. The time commitment included in the table below will allow us to successfully deliver the required services for this contract within the stated schedule. In addition, the firm has deep resources and a wide-breadth of expertise in southern California and the West Region to provide additional support if needed on any of the tasks within the scope of work.

<table>
<thead>
<tr>
<th>Staff Member/Role</th>
<th>% of time available for this contract</th>
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<tbody>
<tr>
<td>John Nagle, Project Director</td>
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<tr>
<td>Cindy Miller, Principal in Charge</td>
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<tr>
<td>John Harris, QA-QC</td>
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<tr>
<td>Mark Hill, Testing Program Task Leader</td>
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<tr>
<td>Steve Bein, GIS Analyst Lead</td>
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<td>Rick Hendrickson, GIS Analyst</td>
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<tr>
<td>Tori Yokoyama, Engineering Support Task Leader</td>
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<td>Mike Boeck, Corrosion Engineering</td>
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<td>J.D. Chiniaeff, Corrosion Engineering</td>
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<td>Jerome Ruddins, CM Task Leader</td>
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<tr>
<td>David Hill, Field Coordinator</td>
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</table>
Subconsultant Experience Summaries

Rajani Consultants Inc. - Testing Technology Evaluation Consultation

Rajani Consultants Inc. provides specialized advice/consultancy services in pipeline engineering and risk management of pipelines. Dr. Rajani and Dr. Kleiner hold key positions to provide broad technical expertise and skills in the response and behavior of buried pipes within the municipal domain. We have has led many projects to meet the needs of international water and wastewater utilities. Over the last 20+ years, we have established a world-wide network of professionals across academia and professionals in water and wastewater industries who can be accessed as the need arises. Selected experience includes:

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Client(s)</th>
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<tbody>
<tr>
<td>Guidance &amp; Strategies to Determine when to justify the use of Condition Assessment Technologies</td>
<td>WaterRF</td>
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<tr>
<td>Potable Water Pipeline Defect Condition Rating</td>
<td>WaterRF &amp; University of Waterloo</td>
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<tr>
<td>Advanced Condition Assessment and Pipe Failure Prediction</td>
<td>Monash University, Australia</td>
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<tr>
<td>Guidance manual for condition assessment of metallic pipes</td>
<td>WaterRF &amp; NRC</td>
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Ninyo & Moore – Geotechnical Engineering

Ninyo & Moore, a California Corporation, is a minority-owned, multidisciplinary consulting firm that provides high-quality geotechnical and environmental consulting services. The firm was incorporated 28 years ago in 1986 to provide consulting services in geotechnical engineering, construction inspection and testing, engineering geology, hydrogeology, hazardous waste remediation and environmental assessment.

In addition, Ninyo & Moore has five fully-equipped, certified geotechnical laboratory facilities supervised by registered engineers. Their laboratories are certified by the City of Los Angeles, AASHTO, Caltrans, the Division of the State Architect, and the City of San Diego. Selected experience includes:

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Client</th>
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<tr>
<td>Rehabilitation of C-44 Pipeline</td>
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<td>Newport Beach, California</td>
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<tr>
<td>Monterey County Coastal Water Project in Monterey County</td>
<td>RBF Consulting c/o California American Water</td>
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<tr>
<td>Harbor Area Recycled Water Conveyance Pipeline</td>
<td>AKM c/o West Basin Municipal Water District</td>
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<td>Task No.</td>
<td>Task Description</td>
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<td>Kickoff Meeting</td>
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<td>Project Schedule (Baseline)</td>
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<td>1.3</td>
<td>Project Meetings (Assume 6 meetings/6 Teleconferences/2 Board Mts)</td>
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<td>2.3</td>
<td>Evaluate NDT Methodologies</td>
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<td>2.4</td>
<td>Develop Non-Destructive Testing (NDT) Plans</td>
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<td>2.6</td>
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<td>NDT Technical Memo/TM</td>
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<td>Identify Qualified Labs</td>
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<td>3.3</td>
<td>Obtain and Evaluate Testing Quotes</td>
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<td>Testing Schedule</td>
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<td>3.5</td>
<td>Develop Recommendations for Testing</td>
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<td>Arrange for Packaging and Shipping Samples</td>
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<td>4.0</td>
<td>Field Sampling Procedures</td>
</tr>
<tr>
<td>4.1</td>
<td>Identify Pipe Segments</td>
</tr>
<tr>
<td>4.2</td>
<td>Develop Field Sampling Procedures</td>
</tr>
<tr>
<td>4.3</td>
<td>Construction Drawings (Assume 3 drawings)</td>
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<tr>
<td>4.4</td>
<td>Prepare TM Summarizing Field Sample Procedures</td>
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<tr>
<td>5.0</td>
<td>Obtain Bids for Field Sampling</td>
</tr>
<tr>
<td>5.1</td>
<td>Prepare Bid Packages</td>
</tr>
<tr>
<td>5.2</td>
<td>Administration Bids for Contractor Selection (Assume 1 Bid Addendum)</td>
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## Work Breakdown Structure

### MESA WATER DISTRICT

#### PROGRAM MANAGEMENT FOR PIPELINE INFRASTRUCTURE TESTING

### Task No. | Task Description | Project Management | Testing Program | Engineering Support | Construction Management | Total Labor | Total Hours
---|---|---|---|---|---|---|---
6.1 | Construction Management of Field Sampling (Assume 12 days) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 8
6.2 | Field Oversight (Assume 32 days) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 96 | 0 | 108
6.3 | Sample Handling Oversight | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 12 | 0 | 15
6.4 | Field Sampling | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2
6.5 | Records Update | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 16
6.6 | Soil Samples (Assume Mesa Water pays shipping fees) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 14
6.7 | Construction Management Report | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 8
Subtotal Task 6.0 | | | | | | | | | | | | | 30

#### 7.0 Lab Testing, Analysis and Report

7.1 | Coordinate Lab Testing (20 pipe bins; 8-correct 12 men and SEM tests) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36
7.2 | On-Site Lab Testing Observation (Assume 4) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 272
7.3 | Field and Interlab Lab Testing Results | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28
7.4 | Testing Summary TM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35
7.5 | Develop Pipeline Replacement Costs and Implementation Schedule | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60
Subtotal Task 7.0 | | | | | | | | | | | | | 480

#### 8.0 Determine Testing Plan for Following Year

8.1 | Prepare Testing Plan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46

#### 9.0 Annual Pipeline Infrastructure Testing Program Report

9.1 | Annual Report Preparation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46
9.2 | Develop Presentation | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40
9.3 | Attend Board Meeting or Workshop | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8
Subtotal Task 9.0 | | | | | | | | | | | | | 94

#### 10.0 Pipeline Infrastructure Testing Program Procedures Manual Development

10.1 | Introduction and Objectives | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6
10.2 | Program Management | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14
10.3 | Non-Destructive Testing Requirements | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14
10.4 | Field Sampling Requirements | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8
10.5 | Destructive Testing Requirements & Coordination | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13
10.6 | Data Analysis & Recommendations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55
10.7 | Review Report | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94
Subtotal Task 10.0 | | | | | | | | | | | | | 159

#### 11.0 Corrosivity Study

11.1 | Develop Sampling Plan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80
11.2 | Manage Field Geotechnical Sampling (Assume 8 locations) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30
11.3 | Provide Cathodic Protection TM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72
11.4 | Coordinate with GIS Consultant to Integrate Testing Results | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72
11.5 | Integrate Community Study into Board Presentation/Workshop | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8
Subtotal Task 11.0 | | | | | | | | | | | | | 182

**TOTALS** | 10 | 10 | 22 | 234 | 406 | 564 | 2 | 20 | 112 | 84 | 120 | 192 | 56 | 236 | 40 | 2,188
Section 3: Scope of Work Understanding and Schedule
Section 3: Scope of Work Understanding and Schedule

Understanding of Project Objectives, Scope and Deliverables
Mesa Water would like to avoid the social and economic impacts arising from pipeline failure and would like to spend capital improvement funds in an efficient manner to affect the greatest risk reduction for the water distribution system. To this end, RBF is proposing to develop and manage a prioritized approach to evaluating the pipelines within the system to determine the physical condition and develop a remediation plan to address pipelines that are outside of Mesa Water’s level of risk tolerance as defined by Resolution No. 1442.

A key benefit to our approach is the utilization of a web viewer, which allows access to data at all times.

Key Project Challenges and Approach

A key challenge on this project is an aggressive schedule. Our team will meet the schedule by utilizing our vast array of resources in the southwest region to move things forward quickly. We are utilizing GIS management to efficiently track data.

Another challenge is the vast array of available technology and pairing the correct technology to the system components. Rajani Consultant’s, Inc. will be able to review and recommend the correct application for each situation.

Project Approach / Scope of Work

Task 1: Project Management

The oversight of the project will be directly handled by senior staff. The proposed Project Director, John Nagle, PE will provide direction to project staff, coordinate project efforts, and be the primary point of contact for Mesa Water.

All of the award-winning projects that this team has worked on have been successful largely due to good communication. Good communication will make the job safe, enjoyable, and help produce an excellent end product. It is RBF’s desire to work very closely with Mesa Water’s Engineering Department and Operations Management staff during the detailed planning and scheduling of the work, the performance of the inspections, and the analysis of the data. The RBF Team is committed to providing timely information to Mesa Water. Our approach is designed to provide efficient program management to allow the project team to focus on the technical deliveries and keep Mesa Water involved and informed through the entire program.
As a team, it is our goal to be an extension of Mesa Water’s staff, available and on-call to provide program support and technical data as needed to facilitate Mesa Water’s internal needs. The technical nature of the contract will require close coordination with all stakeholders.

John will oversee the aggressive schedule for this project to ensure that the work is completed and delivered in adherence with the deliverable dates stated. One of the benefits of partnering with RBF for this project is the depth of resources available to ensure that the project schedule is met. With over 500 professionals in our region, we are able to seamlessly provide additional staff to augment the dedicated project team should the need arise.

Status Reports will be prepared detailing the activities of the previous month, project challenges and proposed solutions, milestones, and expected work in the upcoming month.

Agenda and minutes will be distributed in accordance with the RFP.

**Quality Assurance and Quality Control**

RBF has developed a culture of quality control that is integral to every project. The process begins with a schedule that includes sufficient time for careful quality control. Quality Control continues with an internal review of the proposed procedures and methodologies to accomplish the work involving the entire project team. John Harris, PE will then provide regular reviews of the submittal components as they are developed by the Task Leaders. The Task Leaders will perform a pre-submittal review of the deliverables, and John will then provide a final review. The involvement of senior staff throughout the development of the submittals and prior to delivery ensures that the deliverables will meet RBF’s high standards for accuracy, completeness, and clear presentation.

**Data Management**

RBF will utilize the unique GIS identifier for each of the pipeline segments, appurtenances, and structures throughout the assessment process. By associating all data to the identifier we will ensure, that upon completion of the project, the data can be linked back to Mesa Water’s GIS. It also provides project controls through data queries to insure that all lines have been included in the evaluation process.

For this project, RBF will establish an on-line GIS data viewer and data site. This will consist of a live GIS project map that will allow direct viewing of analysis, data, testing...
results, and reports; a master schedule viewer; and a project document repository. At the completion of the project, the viewer and all data will become property of Mesa Water.

**Task 2: Non-Destructive Testing**

RBF will provide management and oversight for the non-destructive testing of pipelines. Pipelines will be identified for testing through the following methodology:

- Pipelines having similar characteristics will be grouped together as cohort pipelines. It will be taken that the condition of the pipelines within a cohort group will have similar modes and rates of failure so that analysis can be uniformly applied across the entire cohort. The characteristics to be utilized will be developed in conjunction with Mesa Water and generally include pipe material, diameter, age, pressure class, pressure zone, and level of post installation development in the vicinity of the pipeline. One pipeline may be made up of several cohort groups, transitioning as the conditions change along the alignment.

- Once pipelines have been segregated into cohorts break history, leak history, the results of the previous NDT will be extrapolated as having application to all pipes within the cohort. Where no data exists, industry standard average life projections will be utilized until such time as data becomes available. Through the uniform application of the available break history, leak history, and NDT to the cohort groups, the likelihood of a pipeline to be within the defined end-of-useful-life level of service can be determined.

- In addition to determination of the probability that a pipeline has reached or is approaching the end of its useful life as defined by Resolution No. 1442, RBF will develop a consequence of failure for each of the pipelines. The consequence of failure can be generally defined as the level of liability that will be incurred should the pipeline fail. The consequence of failure will be estimated through the application of weighted factors such as size, pressure class, and location (relative to environmentally sensitive habitat, in a population center, near emergency services, etc.).

- Combining the likelihood that a pipeline is at or near the end of its useful life with the consequence of failure will provide the level of risk for each pipeline and the overall level of risk for each cohort group. GIS layers will be developed to indicate the likely service level, the consequence of failure, and the risk level of each pipeline and cohort group. This data will be displayed as layers in the web viewer. The planning of NDT can then be focused on obtaining qualifying data for the cohort groups that are most at risk.

- The proposed approach will allow the RBF Team to achieve the greatest economy from the NDT performed by applying the testing data to all of the pipelines within a cohort group and eliminating overlapping testing within a cohort. The most bang for the buck!

- As additional data becomes available through successive years of NDT, additional analysis, such as the soil corrosivity analysis and service history, the data can be incorporated into the GIS
model to provide a successively higher level of correlation between predicted and actual field conditions. This is a powerful decision making tool.

The methodology and results of the analysis utilized to determine the pipelines to be tested will be provided in a Technical Memo (TM#1).

RBF will then oversee the NDT. This work will generally involve coordinating and scheduling the testing, developing GIS mapping detailing the alignment of the pipeline, diameter, material, pressure class, locations of valves and appurtenances and locations of hydrants that can be utilized by Echologics to perform the testing. If needed, work will also include working with the contractor to obtain encroachment permits and traffic control permits to perform the work within the constituent municipalities. RBF will provide Construction Management personnel, lead by Jerome Ruddins, to oversee the work and confirm compliance with the contract documents.

The RBF team will work with advanced distribution system inspection technology experts Dr. Balvant Rajani, P.E., Ph.D., and Dr. Yehuda Kleiner, P.E., Ph.D., of Rajani Consultants, Inc. to evaluate potential technologies for NDT of Mesa Water’s ferrous pipelines.

Rajani Consultants bring preeminent expert knowledge and decades of experience, including over 20 years each of research at the Canadian National Research Council, with a focus on distribution system pipeline inspection technology and condition assessment methodologies. Dr. Rajani and Dr. Kleiner have assessed the efficacy of available pipeline assessment technologies, including technical evaluations of the probability of detection and probability of false positives.

The current state distribution inspection technology is in constant flux with new technologies and innovations becoming available on a regular basis. Rajani Consultants will assist with evaluating available technologies for the inspection of Mesa Water’s ferrous pipelines, the efficacy of the technologies and the applicability for the specific site conditions and pipe materials to be tested.

Once the technology for the NDT of the ferrous pipelines is determined to the satisfaction of Water, RBF will work with Mesa Water to bring the appropriate contractor under contract and provide scheduling, coordination, mapping, and permitting assistance.

The results of the NDT will provide the remaining useful life for the inspected pipelines as determined by Echologics proprietary inspection evaluation software. RBF will review the results for completeness, consistency and correlation to the predicted results from the probability matrix. The results will then be added to the GIS viewer for graphical representation.
The results will also be delivered in a Technical Memorandum.

Task 3: Materials Lab Testing Program & Task 4 Field Sampling Procedures

RBF is currently working with Neff Materials Consulting, Inc. for analysis of pipe coupons taken from live pressure pipes for the City of Escondido. The laboratory will perform a Metallographic Cross Section examination and a Scanning electron microscopy with energy dispersive X-ray spectroscopy (SEM/EDX) analysis. The metallography examination will determine the depth of corrosion and the SEM/EDX will be used to look for sulfur and chloride levels to determine microbiological corrosion.

RBF will work with Mesa Water, Neff, and other labs (there are only a few) that specialize in the evaluation of pipeline degradation to develop appropriate tests for each pipe material to be evaluated. The tests that will be ordered will determine the sample that will need to be taken. Once the tests have been decided upon and the requisite samples have been determined, RBF will develop the standards and procedures for collecting the samples (including standard drawings), protecting and shipping the samples, and the required testing and reporting from the laboratory. The results of this work will be presented in a Technical Memorandum. This will then be utilized to obtain competitive pricing from the laboratories.

Pipelines for destructive testing will be determined by incorporating the data and analysis from the NDT into the probability matrix and evaluating areas where destructive testing for validation of the NDT is appropriate.

Task 5: Obtain Bids for Field Sampling

RBF has prepared many Bid Packages and will work with Mesa Water to develop the bid language and Prepare Bid Packages in accordance with the Technical Memorandum on sampling and testing procedures. RBF will then administer the bids for contractor selection. For contractor bids such as this, we typically develop a pre-approved contractor list from a preliminary qualifications based solicitation. The pre-qualified contractors are then invited to bid on the work.

Task 6: Construction Management of Field Sampling

RBF will provide Construction Management in accordance with the Scope of Work for the field sampling effort.

Task 7: Lab Testing, Analysis and Report

In conjunction with the oversight of the sample collection effort, RBF will schedule and coordinate the Lab Testing. The field sampling, testing, and analysis will be in accordance with the previously developed procedures and methodologies and in accordance with the Scope of Work.
The results of the laboratory analysis will be added to the probability matrix, which in conjunction with the consequence of failure, will determine which pipelines are the source of the greatest risk to Mesa Water and are outside of the Mesa Water’s level of risk tolerance. Cohorts that have been identified as having reached, or are approaching the end of their useful life as verified by NDT and DT will be reviewed and recommendations will be developed for repair, rehabilitation, or realignment. An estimate of the construction costs will be developed for the recommended remediation. The level of risk for each pipeline will determine the prioritization of the remediation project. This will be correlated with available CIP funding to determine the capital improvement program for the pipelines.

**Task 8: Determine Testing Plan for Following Year**

A testing plan will be developed for FY 2017 in a similar manner as the proceeding work based on the results of the probability matrix and risk assessment.

**Task 9: Annual Pipeline Infrastructure Testing Program Report**

The Annual Report and workshop will be developed in accordance with the Scope of Work.

**Task 10: Pipeline Infrastructure Testing Program Procedures Manual Development**

A detailed documentation of the program will be developed into a manual for future work in accordance with the Scope of Work.

**Task 11: Soil Corrosivity Study**

A preliminary corrosion susceptibility analysis for Mesa Water’s ferrous pipelines will be performed by Lawrence Jansen, PE, CEG, who will review indicated pipeline coatings and available data (from USGS and previous Ninyo & Moore projects), identifying areas prone to groundwater exposure and cataloging areas known to have corrosive soils. Pipelines indicated as susceptible to corrosion will then receive an Electromagnetic Conductivity Survey (ECS) to identify areas where there is the greatest propensity for corrosion. The ECS provides a means of rapid data collection that measures the bulk ability of the subsurface to conduct electricity, including buried objects, groundwater, rock, soil, etc.

The potential for pipeline corrosion increases with the soil conductivity. The data from the ECS will be utilized to generate a GIS isopleth map showing continuous distributions of potentially corrosive areas (like a topographic map but with potential rather than elevations). This map will then be utilized to determine areas of concern for possible further analysis to categorize the soils.

*Figure 2 - Electromagnetic Conductivity Survey*
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<th>Task Name</th>
<th>Duration</th>
<th>Start</th>
</tr>
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<tbody>
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<td>7.2 On-Site Lab Testing Observation</td>
<td>45 days</td>
<td>Tue 10/27/15</td>
</tr>
<tr>
<td>78</td>
<td>7.3 Review and Interpret Lab Testing Results</td>
<td>60 days</td>
<td>Tue 10/27/15</td>
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<td>79</td>
<td>7.4 Testing Summary TM</td>
<td>25 days</td>
<td>Tue 1/19/16</td>
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<tr>
<td>80</td>
<td>7.5 Develop Pipeline Replacement Costs and Implementation Schedule</td>
<td>25 days</td>
<td>Tue 2/2/16</td>
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<td>8.0 Determine Testing Plan for Following Year</td>
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<td>8.1 Prepare Testing Plan</td>
<td>15 days</td>
<td>Fri 4/22/16</td>
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<td>9.0 Annual Pipeline Infrastructure Testing Program Report</td>
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<td>9.1 Annual Report Preparation</td>
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<td>Fri 5/13/16</td>
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<td>9.2 Develop Presentation</td>
<td>5 days</td>
<td>Fri 5/27/16</td>
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<td>9.3 Attend Board Meeting or Workshop</td>
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<td>92</td>
<td>10.1 Introduction and Objectives</td>
<td>25 days</td>
<td>Fri 4/22/16</td>
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<td>10.2 Program Management</td>
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</tr>
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<td>10.3 Non-Destructive Testing Requirements</td>
<td>25 days</td>
<td>Tue 4/19/16</td>
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<td>95</td>
<td>10.4 Field Sampling Requirements</td>
<td>25 days</td>
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<td>10.5 Destructive Testing Requirements &amp; Coordination</td>
<td>25 days</td>
<td>Fri 4/22/16</td>
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<td>10.6 Data Analysis &amp; Recommendations</td>
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<td>Fri 4/22/16</td>
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<td>10.7 Annual Report</td>
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<td>11.0 Soil Corrosivity Study</td>
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<td>11.1 Develop Sampling Analysis Plan</td>
<td>15 days</td>
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<td>11.2 Manage Field Geotechnical Sampling</td>
<td>35 days</td>
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<td>103</td>
<td>11.3 Provide Cathodic Protection TM</td>
<td>20 days</td>
<td>Wed 7/29/15</td>
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Project: Schedule 2015-02-26
Date: Thu 2/26/15
Appendix A: Resumes of Key Staff
John Nagle, P.E.
*Project Director*

**General Qualifications**

John Nagle has practiced in the field of civil engineering for many years, and he has extensive experience in planning, designing, and providing construction support services for major water and wastewater facilities. He has been responsible for the preparation of numerous construction plans, specifications and cost estimates for water and sewer pipelines, water pumping stations, wastewater lift stations, wells, and reservoirs. He has also prepared master plans for both municipal and private-sector clients for potable water, sanitary sewer, and recycled water systems. Mr. Nagle has used his combination of planning and design experience to prepare capital improvement programs, condition assessment studies, engineering feasibility studies, and connection fee and utility rate studies.

**Experience**

**Pipeline Inspection Program Planning - Castaic Lake Water Agency (Santa Clarita, CA)** - Task Manager responsible for developing a comprehensive pipeline inspection program for the client’s potable and recycled water systems. The client is a public water wholesaler providing domestic and recycled water to three retail water agencies: CLWA Santa Clarita Water Division, Newhall County Water District, and Los Angeles County Waterworks District 36. The client operates three treatment plants, three pump stations, and three storage facilities and has more than 40 miles of potable and recycled water pipelines that range in diameter from 12 to 102 inches.

**Pipeline Failure Analysis and Root Cause Training Program - Las Vegas Valley Water District (Las Vegas, NV)** - Senior Project Engineer responsible for developing a Pipeline Failure Root Cause Training Program including forensic engineering services. Field investigations included pipeline failures, collection and testing of pipe material and soil samples, preparation of field investigation reports, and preparation of an annual summary report. The purpose of the study was to investigate whether there was a correlation between cyclical pressure transients and pipeline failures.

**Norwalk Pipeline Improvement Project - Golden State Water Company (Norwalk, CA)** - Project Manager responsible for the design of water distribution pipeline replacement projects in their Norwalk System in Pioneer Boulevard and within the adjacent residential subdivision. These pipeline projects were necessary to address leaks, hydraulic deficiencies, inaccessibility and the deteriorating condition of the existing pipelines, which were built prior to 1960. The project included the installation of 1,300 LF of 12-inch DIP and 10,000 LF of 8-inch DIP, as well as the relocation of over 275 domestic water services. The project was constructed in two phases to ensure that 1,000 LF of pipeline within Pioneer Boulevard was constructed prior to a City of Norwalk paving project. The project also included close coordination with the California Department of Health Services to secure waivers for the installation of some of the new mains adjacent to existing non-potable facilities.

**Pipeline Rehabilitation Inspection Program (City of Beverly Hills, CA)** - Water Resources Engineer responsible for planning and design services for the evaluation and rehabilitation of a portion of the City’s existing sewer collection system. RBF’s services included: review and evaluation of closed-circuit television inspection tapes; coordination of work hours to minimize inconvenience to both residents and business owners; evaluation of alternative pipeline lining.
technologies; pipeline rehabilitation using Folded and Re-formed pipeline lining system, including 500 lineal feet of six-inch pipeline, 13,100 lineal feet of eight-inch pipeline, and 2,000 lineal feet of ten-inch pipeline; and manhole rehabilitation using air-placed concrete and polyurethane lining system.

**OC-44 Pipeline Rehabilitation/Replacement Project (Orange County, CA)** – Project Engineer for preparing a preliminary engineering analysis of alternatives for either rehabilitating or replacing the portion of the Mesa Water District’s 42-inch steel OC-44 pipeline, where it crosses the San Diego Creek and Bonita Creek, and conducting a cathodic protection study for the entire 8.4 mile-long pipeline. Final design of the selected rehabilitation alternative is currently under way, which will include slippage approximately 2,000 LF of the existing 42” pipeline with 30” DIP pipe.

**Southwest District Pipeline Replacement Projects (Gardena, Hawthorne and Inglewood, CA)** - Project Manager responsible for pipeline replacements in four separate areas including, including extensive utility research and field investigation to confirm locations of existing service connections and other appurtenances, preparation of final construction drawings, coordination with the Department of Health Services for utility waivers, and coordination with Caltrans for encroachment permits.

**Orangethorpe Transmission Main (Anaheim/Placentia, CA)** - Project Manager responsible for the design and construction of approximately 6,500 LF of 16” DIP pipeline, in the cities of Placentia and Anaheim. This pipeline will provide a connection between GSWC’s Placentia and Yorba Linda Service Areas, and will include three pressure regulating stations. The scope of services includes extensive utility research, topographic survey and right-of-way verification, preparation of PS&E’s, and traffic control plans. The project also requires coordination with the Orange County Flood Control District for crossing of the Atwood Channel, and coordination with Orange County Transportation Agency for the future grade separation project at Lakeview Avenue.

**Santa Margarita Water District Master Planning (Orange County, CA)** - Project Engineer for preparing numerous Plans of Work Reports for several communities within the Santa Margarita Water District, including Rancho Santa Margarita, Coto de Caza, Rancho Trabuco, portions of Mission Viejo, and Talega. The Plans of Works included development of water and wastewater planning criteria for both residential and commercial land uses, hydraulic analyses and computer modeling of both water and sewer systems, and development of capital improvement plans and facility financing programs.

**Rancho California Water District Water Facilities Master Plan (Riverside County, CA)** – Project Engineer for preparing the Master Plan for 100,000-acre service area, including detailed land use and population inventory and projections, development of water use factors, development of a hydraulic model and analysis of the RCWD’s 19 different pressure zones. The Master Plan also identified proposed capital improvements and funding requirements.

**Santa Margarita Water District (SMWD) Middle Chiquita Canyon Water Facilities (Orange County, CA)** – Project Manager for preliminary and final design services for approximately 23,000 LF (combined) of domestic and recycled water transmission mains, 4.0 MG of domestic water storage and 4.0 MG of recycled water storage. The project also included: alternative pipeline alignment analysis for routes through environmentally sensitive areas and agricultural areas; grading phasing analysis; and coordination with the Rancho Mission Viejo Company, California Department of Public Health, San Diego Gas and Electric, and the California Department of Fish and Wildlife.

**Professional Affiliations**

American Public Works Association (APWA), Southern California Chapter, Member - Exp. 3/31/2014, 161193
American Society of Civil Engineers (ASCE), Orange County Branch / Los Angeles Section, Member, 236352
American Water Works Association (AWWA), Member, 00267945
Orange County Water Association (OCWA), Member, 1131
Cindy L. Miller, P.E.

Principal in Charge

Ms. Miller serves as a Vice President in RBF’s Water Resources Department, supervising engineering and design staff. She has extensive experience in all aspects of water and wastewater engineering. Her background includes the planning and design of treatment plants, pump stations, wells, reservoirs, water and recycled water pipelines, flow control facilities, and sewer systems.

Experience

Norwalk Pipeline Improvement Project – Golden State Water Company (Norwalk, CA) – Principal in Charge responsible for overall project oversight for the design of water distribution pipeline replacement projects in their Norwalk System in Pioneer Boulevard and within the adjacent residential subdivision. These pipeline projects were necessary to address leaks, hydraulic deficiencies, inaccessibility and the deteriorating condition of the existing pipelines, which were built prior to 1960. The project included the installation of 1,300 LF of 12-inch DIP and 10,000 LF of 8-inch DIP, as well as the relocation of over 275 domestic water services. The project was constructed in two phases to ensure that 1,000 LF of pipeline within Pioneer Boulevard was constructed prior to a City of Norwalk paving project. The project also included close coordination with the California Department of Health Services to secure waivers for the installation of some of the new mains adjacent to existing non-potable facilities.

Milliken Avenue Pipeline and Flow Control Facility – Chino Basin Desalters (Ontario, CA) – Principal in Charge responsible for overall design services for new interconnection and 8,000 linear feet of 42-inch transmission pipeline along Milliken Avenue to provide water to the city. RBF also designed a 7,000-gallon-per-minute bidirectional flow-control facility to measure and control flow to the city, and prepared traffic control plans for construction.

Pipeline Inspection Program Planning – Castaic Lake Water Agency (Santa Clarita, CA) – Principal in Charge responsible for overall development of a comprehensive pipeline inspection program for the client’s potable and recycled water systems. The client is a public water wholesaler providing domestic and recycled water to three retail water agencies: CLWA Santa Clarita Water Division, Newhall County Water District, and Los Angeles County Waterworks District 36. The client operates three treatment plants, three pump stations, and three storage facilities and has more than 40 miles of potable and recycled water pipelines that range in diameter from 12 to 102 inches.

Pipeline Failure Analysis and Root Cause Training Program – Las Vegas Valley Water District (Las Vegas, NV) – Principal in Charge responsible for overall development of a Pipeline Failure Root Cause Training Program including forensic engineering services. Field investigations included pipeline failures, collection and testing of pipe material and soil samples, preparation of field investigation reports, and preparation of an annual summary report. The purpose of the study was to investigate whether there was a correlation between cyclical pressure transients and pipeline failures.

Norwalk Pipeline Improvement Project – Golden State Water Company (Norwalk, CA) – Principal in Charge responsible for the overall design of water distribution pipeline replacement projects in their Norwalk System in Pioneer Boulevard and within the adjacent residential subdivision. These pipeline projects were necessary to address leaks, hydraulic deficiencies, inaccessibility and the deteriorating condition of the existing pipelines, which were built prior to 1960. The project included the installation of 1,300 LF of 12-inch DIP and 10,000 LF of 8-inch DIP, as well as the relocation...
of over 275 domestic water services. The project was constructed in two phases to ensure that 1,000 LF of pipeline within Pioneer Boulevard was constructed prior to a City of Norwalk paving project. The project also included close coordination with the California Department of Health Services to secure waivers for the installation of some of the new mains adjacent to existing non-potable facilities.

**Pipeline Rehabilitation Inspection Program (City of Beverly Hills, CA)** - Principal in Charge responsible for overall planning and design services for the evaluation and rehabilitation of a portion of the City’s existing sewer collection system. RBF’s services included: review and evaluation of closed-circuit television inspection tapes; coordination of work hours to minimize inconvenience to both residents and business owners; evaluation of alternative pipeline lining technologies; pipeline rehabilitation using Folded and Re-formed pipeline lining system, including 500 lineal feet of six-inch pipeline, 13,100 lineal feet of eight-inch pipeline, and 2,000 lineal feet of ten-inch pipeline; and manhole rehabilitation using air-placed concrete and polyurethane lining system.

**Monte Vista Water District Interconnect (City of Chino Hills, CA)** – Project Manager for preliminary and final design for a water supply transmission main project that included approximately 22,000 lineal feet of 42-inch-diameter welded steel and ductile iron pipe. RBF provided alternative alignment analysis, pipe material selection, coordination with three different jurisdictions, and corrosion design. The project supplements the City of Chino Hills’ domestic water supply by bringing an additional 42 MGD capacity to the city’s middle and upper zones.

**Santa Margarita Water District (SMWD) Middle Chiquita Canyon Water Facilities – Santa Margarita Water District (Orange County, CA)** – Responsible for QA/QC of preliminary and final design services for approximately 23,000 LF (combined) of domestic and recycled water transmission mains, 4.0 MG of domestic water storage and 4.0 MG of recycled water storage. The project also included: alternative pipeline alignment analysis for routes through environmentally sensitive areas and agricultural areas; grading phasing analysis; and coordination with the Rancho Mission Viejo Company, California Department of Public Health, San Diego Gas and Electric, and the California Department of Fish and Wildlife.

**Professional Affiliations**

- American Society of Civil Engineers (ASCE), Member
- American Society of Civil Engineers (ASCE), Orange County, Board Member
- American Water Works Association (AWWA), Member
- Irvine Civil & Environmental Engineering Affiliates, University of California, Past-President
- Orange County Water Association (OCWA), Member
John H. Harris, P.E.
QA / QC

General Qualifications

Mr. Harris has extensive experience in developing practical and cost-effective solutions to water and wastewater design challenges and is a proven innovator of creative ideas and technical excellence. Mr. Harris is responsible for a full range of professional services including planning, design and construction support services for water supply, wastewater treatment, and water reclamation facilities. His experience includes distribution and transmission mains, pumping stations, flow control facilities, reservoirs, unit processes, water and wastewater treatment plants, storm drainage lines, roads and parking areas, site development and related civil engineering structures.

In association with water resources projects, Mr. Harris has been responsible for value engineering, economic analysis, environmental documentation, regulatory permit preparation and processing, construction management, and is knowledgeable about local, state and federal regulations.

Experience

Program Management for City-wide Collection System Inspection and Rehabilitation Program (City of Avalon, CA) – Principal Engineer for comprehensive engineering and program management services for the inspection and rehabilitation of the city’s 20-mile sanitary sewer system. RBF’s services included closed-circuit television (CCTV) condition assessment, engineering design, bidding-phase support, and construction management at-risk for the complete rehabilitation and repair of the entire sewer collection system, and the development of a compliance program for maintenance of the system, including a geographic information system (GIS)-based inspection and tracking system.

City-wide Pipeline Inspection Program (City of Vista, CA) – QA/QC for five closed circuit television (CCTV) crews to televise 240 miles of sewer system pipeline throughout the City of Vista. The team also performed a condition assessment of televised segments and transmitted red flag notifications of required emergency repairs; provided a detailed engineering evaluation with specific recommendations for pipeline replacement or rehabilitation and cost estimates; and integrated the evaluation data with a GIS overlay program, hydraulic analysis, and the existing capital improvement projects (CIP) program.

OC-44 Pipeline Rehabilitation/Replacement Project – Mesa Water District (Orange County, CA) – Project Manager responsible for preparing a preliminary engineering analysis of alternatives for either rehabilitating or replacing the portion of the Mesa Water District’s 42-inch steel OC-44 pipeline, where it crosses the San Diego Creek and Bonita Creek, and conducting a cathodic protection study for the entire 8.4 mile-long pipeline. Final design of the selected rehabilitation alternative is currently under way, which will include slippining approximately 2,000 LF of the existing 42” pipeline with 30” DIP pipe.
Harbor Drive and Lindbergh Field Cast Iron Pipeline Replacement (City of San Diego, CA) – Principal Engineer responsible for the replacement approximately seven miles of cast iron water pipelines beginning at Catalina Drive in Point Loma and ending at the bridge on North Harbor Drive, as well as a 16-inch cast iron water pipeline that begins in front of Lindbergh Field and ends at the intersection of Laurel Street and Pacific Highway. RBF Consulting, a Michael Baker International Company, provided engineering services for the replacement of approximately seven miles of cast iron water pipelines beginning at Catalina Drive in Point Loma and ending at the bridge on North Harbor Drive and a 16-inch cast iron water pipeline that begins in front of Lindbergh Field and ends at the intersection of Laurel Street and Pacific Highway. The project also included replacement of an existing waterline that extends onto airport property and two pressure reducing stations.

Water Groups 554 and 555 Design-Build (City of San Diego, CA) – Principal Engineer for the design and construction of projects under two separate City of San Diego Water Group Contracts. Part of the city’s long-term CIP to replace old cast-iron water mains city-wide, the projects replaced 8.5 miles of 8-inch, 12-inch, and 16-inch PVC water mains. The alignments traversed busy urban neighborhoods with several schools, major intersections, and high-use commercial business areas. Traffic control was a major issue, along with utility coordination and community outreach.

Santa Ana Regional Interceptor (SARI) Rehabilitation – SAWPA (Orange County, CA) – Principal Engineer for the development of standard design details to address parallel and perpendicular crossings of the Santa Ana Regional Interceptor (SARI) pipeline and standard manhole designs. The upper SARI line is a crucial conveyance facility serving as the primary mechanism for transporting over 30 million gallons per day of brine and industrial wastewater from the Inland Empire service region to the Orange County Sanitation District for treatment and disposal. RBF developed plans and specifications, reviewed CCTV video inspection files. Evaluated pipeline rehabilitation techniques and easement documents, and provided final design of repairs for approximately 11 miles of 27-, 36- and 42-inch unlined reinforced concrete pipe.

As-Needed Sewer Inspection (City of San Diego, CA) – Principal in Charge for project oversight. The contract encompassed the entire city and included residential, commercial, canyon and streambed areas. Inspection services were completed for pipelines ranging in size from 4-inch sewer mains to 36-inch trunk sewers. RBF provided standardized defect code listing with point value weighting; inspection codes for structural and maintenance deficiencies; detailed facility inspection reports; listing of pertinent locations; design and CCTV inspection data for facility inspection reports; a custom project database integrated with GIS; summary assessment reports, including maintenance and structural repair prioritization; and implementation of defect code point values and recommendation codes into the city’s GIS sewer database.

Water Group Job 949 and Water and Sewer Group Job 946 Design-Build Projects – City of San Diego (El Cajon, CA) Project Manager for the design and construction services for the replacement of deteriorating 8-inch, 12-inch and 16-inch cast iron water mains, and 8-inch and 15-inch sewer mains with new PVC pipe, as well as improvements to associated fire services, fire hydrants, laterals, valves, pressure reducing stations, sewer laterals, sewer replumb laterals and agreements, and manholes.

12-Inch Water Pipeline from San Diego County Estates to Ramona Oaks Road and Old Julian Pump Station – Ramona Municipal Water District (Ramona, CA) – Principal in Charge for the design and construction management of approximately 11,000 feet of 12-inch pipeline from San Diego County Estates (SDCE) Tank No. 1 to Ramona Oaks Road. The project provides the District with an alternate supply of water to the SDCE community and allows it to serve SDCE from the Baggar Water Treatment Plant. RBF provided preliminary hydraulic design; construction cost estimates; environmental reporting; survey and mapping; design phase and bid documents; final design drawings and specifications QA/QC; and construction management.
Mark A. Hill, P.E.

Testing Program Task Leader

General Qualifications

Mr. Hill has many years of diverse engineering experience that includes pipeline assessment and testing, water and wastewater infrastructure improvement planning and design, GIS, computer modeling and database generation, cost estimating and cost control, construction monitoring and scheduling, quality control, procurement of materials, plan checking and agency coordination. He has worked extensively with Microsoft Access, SQL Server, Microsoft Project, Primavera P3 and Suretrack. Mr. Hill has served as Project Manager for many pipeline inspection and condition assessment contracts, and has assisted numerous municipalities and utility districts with developing and implementing CCTV inspection programs and sewer system management plans. Over the past 15 years he has been responsible for the completion of more than 2,500 miles of pipeline inspection, condition assessment and capital improvement program development. He is an active member of the CWEA Collections System Committee, is involved with collection system operator training and is a regular speaker at collection system conferences.

Experience

Water Pipeline Inspection Program Planning - Castaic Lake Water Agency (Santa Clarita, CA) – Provided data management associated with the evaluation of innovative and thoughtful solutions for the development of a pipeline inspection program for CLWA potable water and recycled water systems. The water systems consist of approximately 40 miles of pipelines ranging in diameter from 12 inches to 102 inches. Some systems are old. RBF’s tasks included collecting data on pipelines and appurtenances, turnouts, cathodic test stations, and utility crossings, along with traffic, environmental, and other impacts; designing and developing an Esri-based GIS geodatabase; mapping CLWA pipeline easements; evaluating and reporting on inspection priorities, procedures, and frequencies; developing a pipeline ranking matrix; generating a report on pipelines to be inspected and cost requirements; developing an inspection schedule; and preparing draft and final inspection program documents.

Miramar Water Transmission Line Evaluation, Three Valleys Municipal Water District (North Pomona and La Verne, CA) - Project Manager for the inspection of the 7,500 feet of Miramar Transmission Line from Amherst Street south on Williams Avenue to Grove Street, west to Fulton Road and south on Fulton to 6th Street. The pipe is a 56-year-old 30-inch pre-stressed concrete cylinder pipe potable water transmission line. RBF completed the field inspections in two days, documenting defects and observations of the pipe. Prior to the inspection, four access points were constructed to facilitate inspection equipment access.

Sewer System Inspection, Repair and Replacement Program (City of El Cajon, CA) - Project Manager responsible for comprehensive geographic information system services to develop an approach for maintaining the 192-mile sanitary sewer collection system. RBF performed an analysis of existing attribute and maintenance data to develop a schedule to inspect and evaluate the entire system during a five-year period. RBF managed the inspection of trunk sewers and specialized cleaning to restore capacity in tuberculated cast-iron pipes.
Water Pipeline N-N Evaluation and Replacement, Rainbow Municipal Water District (Fallbrook, CA) - Project Manager for the emergency inspection and evaluation of a failed 16-inch diameter water transmission main running below the San Luis Rey River. Work included excavation, cutting into the pipe to provide access for the robotic camera system, inspecting the pipeline and providing an engineering evaluation of the pipeline condition.

60-Inch Diameter Pipeline Inspection, Inland Empire Utilities Agency (Chino, CA) - Project Manager for the confined space entry inspection of a critical large diameter pipeline connecting the secondary and tertiary treatment plants. Responsible for planning, coordination and management of 40 on-site personnel (a combination of subcontractors, Agency staff, and RBF pipeline inspectors). RBF completed the inspection within the strict eight hour shutdown window.

Lake San Marcos Pipeline Inspection, San Diego County Water Authority (San Diego County, CA) - Project Manager for the video and sonar inspection and evaluation of over 1300 feet of 72-inch and 450 feet of 96-inch water pipelines located under Lake San Marcos. RBF provided on-site assistance in coding defects, assembling a database, and generating reports based upon the findings. RBF's services included field inspection during the televising process, developing separate inspection codes for structural and maintenance deficiencies, preparing detailed facility inspection reports, developing a customized database developed in Microsoft® Access, and preparing summary assessment reports with maintenance and structural repair prioritization and individual facility recommendations.

Castaic Lake Water Agency NI Turnout Transmission Main Inspection, Castaic Lake Water Agency (Santa Clarita, CA) - Project Manager for the planning, design, and construction of inspection access ports for critical transmission mains. Work also includes procuring the contractor for construction, managing the construction of the access ports, inspecting the pipeline and providing an engineering assessment of the condition of the pipeline.

OC-44 Pipeline Rehabilitation/Replacement Project, Mesa Water District (Orange County, CA) - Performed a condition assessment for either rehabilitating or replacing the portion of the Mesa Water District's 42-inch steel OC-44 pipeline where it crosses the San Diego Creek and Bonita Creek. A cathodic protection study was performed for the entire 8.4 mile-long pipeline. Final design of the selected rehabilitation alternative is currently under way, which will include sliplining approximately 2,000 LF of the existing 42" pipeline with 30" DIP pipe.

Annual Mainline Repairs (City of Imperial Beach, CA) – Project Manager for comprehensive inspection and condition assessment, flow monitoring, and GIS mapping services for the development of a comprehensive sanitary sewer management plan. The resulting final report prioritized sewer improvement projects and offered recommendations for repair, rehabilitation, and replacement options for each segment.

City-Wide Sewer System Pipeline Inspection Program (Vista, CA) - Project Manager responsible for managing five crews to televise 240 miles of sewer system pipeline throughout the City. The team also performed a condition assessment of televised segments and transmitted red flag notifications of required emergency repairs; provided a detailed engineering evaluation with specific recommendations for pipeline replacement or rehabilitation and cost estimates; and integrated the evaluation data with a GIS overlay program.

West Anaheim Sewer Evaluation (City of Anaheim, CA) - Project Manager for CCTV inspection, manhole inspection, inflow/infiltration (I/I) identification, system condition assessment and recommendations for I/I elimination, and pipeline and manhole rehabilitation for the West Anaheim Sanitary Sewer System. The project area was approximately 11.65 square miles made up of residential, commercial and industrial land use designations.
Tori C. Yokoyama, P.E.
Engineering Support Task Leader

General Qualifications

Tori Yokoyama is experienced in developing hydraulic models, performing hydraulic analyses, and preparing master plan reports for various public and private sector clients. He is proficient in several hydraulic modeling platforms. Mr. Yokoyama is also experienced in the design and preparation of construction plans, specifications and cost estimates for large water and wastewater projects throughout Southern California.

Experience

Atlantic Avenue Cast Iron Main Replacement Project, Long Beach Water Department (Long Beach, CA) – Project Manager responsible for design and permitting services for approximately 7,340 linear feet of new eight-inch ductile iron pipe to replace the existing cast-iron water main on Atlantic Avenue, between East Spring Street and Pacific Coast Highway, in the City of Long Beach. Constructed around 1918, the existing pipeline was near the end of its useful life. The project consisted of the installation of a new domestic water pipeline and new and replacement appurtenances, valves, service laterals, services, and fire hydrants. In addition, five existing subgrade detector check valves and backflow assemblies for fire service lines were raised above grade. (2014 - Actual, 2014 - PS, 2014 - Estimate)

Western Avenue and Rolling Hills Water Main Replacement / Rehabilitation (City of Torrance, CA) – Project Engineer for the replacement of 4,200 feet of 12-inch water main on Western Avenue between 190th Street and Del Amo Boulevard and 700 feet along Rolling Hills Road, and the replacement of approximately 2,500 square feet of pavement in two locations along Western Avenue due to damage from water main breaks. RBF’s services included engineering design, topographic surveys and traffic control plans.

Spring Canyon Water Pipeline, Newhall County Water District (Santa Clarita, CA) – Project Engineer for design services for the design of a 20-inch water pipeline in the Santa Clarita area for Newhall County Water District. The project included 5000 LF of 20-inch ductile iron pipe in Soledad Canyon Road. The design included the design of a 36-inch steel casing installed by pipe ramming under the Antelope Valley Freeway (SR-14).

Milliken Avenue Pipeline and Flow Control Facility, Chino Basin Desalters Authority (Ontario, CA) – Project Engineer for design services for new interconnection and 8,000 lineal feet of 42-inch transmission pipeline along Milliken Avenue to provide water to the city. RBF also designed a 7,000-gallon-per-minute bidirectional flow-control facility to measure and control flow to the city, and prepared traffic control plans for construction.
2010 Waterline Replacement Project, Yorba Linda Water District (Yorba Linda, Anaheim, and Placentia, CA) – Project Engineer for preliminary and final design and construction support services for the replacement of seven pipeline segments, the replacement of one pressure-reducing station, and the installation of one new pressure-reducing station. The pipeline replacements required many connections to existing pipelines, laterals, services, fire hydrants, and other appurtenances.

Domestic Water Master Plan, Laguna Beach County Water District (Laguna Beach, CA). Project Engineer for the evaluation of the District’s existing computer system network and make recommendations for upgrading the existing system; implementation of InfoWater software, including model and calibration of the existing water system and hydraulic and water quality analysis; training of District personnel and follow-on support services for two years; evaluation of water supply sources and recommendations for the most cost-effective means of meeting the District’s ultimate demands; and preparation of a list of recommended capital improvements projects, including preliminary cost estimates for facilities to be constructed; and preparation of a financial plan for identified improvement facilities that will include developer fees, potential financial sources, and possible water rate impacts.

Sewer Master Plan and Capital Improvement Program, Port of Long Beach (Long Beach, CA) – Project Engineer responsible for preparing a sewer master plan and capital improvement program within the Harbor District. Services included developing and analyzing a hydraulic model of the sewer system, updating the geographic information systems (GIS), performing closed circuit television (CCTV) inspection of 24 miles of pipeline, performing a condition assessment of 449 manholes and 40 lift stations, performing a flow monitoring and inflow and infiltration (I&I) study, and preparing a sewer master plan and capital improvement program.

SCLA Water and Sewer Pipelines (Victorville, CA) – Project Engineer for sewer, domestic, and recycled water systems in connection with site civil improvements for the Southern California Logistics Airport. The design included 18,100 lineal foot of 16-inch and 14,500 lineal foot of 12-inch and smaller domestic water pipelines; 2,200 lineal foot of 16-inch and 21,500 lineal foot of 12-inch and smaller recycled water pipelines; and 4,000 lineal foot of 18-inch, 2,600 lineal foot of 15-inch, and 18,000 lineal foot of 12-inch and smaller sanitary sewer pipelines.

Professional Affiliations

American Society of Civil Engineers (ASCE), Member
American Water Works Association (AWWA), Member
Jerome A. Ruddins II, C.C.M., QSP
Construction Management Task Leader

General Qualifications

As Construction Management Department Manager, Mr. Ruddins is responsible for managing construction managers and inspection personnel on projects of various levels of complexity and intensity. He possesses many years of construction management and inspection experience and has been responsible for the construction administration and inspection of over $2.5 billion of public works construction projects. He has worked extensively with the Caltrans Standard Specification and Construction Manual. Throughout his career, Mr. Ruddins has worked hand-in-hand with Caltrans Compliance Officers on federally funded projects preparing, analyzing, and presenting change orders, force account work, coordinating the monthly field file audit, and the final construction file. As a Construction Manager, he has worked closely with Resident Engineers coordinating RFI’s, submittals, material testing and inspection, and field survey. He has also chaired construction site meetings, reviewed schedules, quantity calculations, and pay estimates. Other responsibilities include quality control of inspection, utility coordination, constructability reviews, value engineering, specification quality control, and construction safety. He has attended seminars on construction claim mitigation, sat on claim review panels, and worked closely with legal counsel to mitigate claims.

Experience

Joint Transmission Main Reach 7 Permanent Repair (Dana Point / Laguna Niguel, CA) – Construction Manager for grading, excavating, dewatering, installing 5,400 LF of 36” CML&C, cast-in-place concrete vault, valves, fittings, blow-off assemblies, hatches, sump pump, instrumentation, telemetry, RTU, cathodic protection, anode well, electrical work, pressure testing, and disinfection. RBF’s duties encompassed: contract administration; construction management and inspection; weekly progress meetings; quality control and quantity verification; monitoring the Contractor’s safety plan; public relations; utility, survey, material testing and survey coordination; building and maintaining web-based document repository; photos; processing control documents such as submittals, RFI’s, progress payments, daily reports, monthly reports, and weekly statement of working days reports; and coordination with District, City of Laguna Niguel, City of Dana Point.

Temple Avenue Cast Iron Main Replacement - MC-4865 (Long Beach, CA) – Construction Manager on this $785,000 project which included: constructing 6”-12” diameter ductile iron water mains to replace existing cast iron water mains; installation of pipe, ductile iron main laterals, valves, and fittings; connecting fire hydrants and meters; restoring the surface; traffic control; abandoning existing buried valves; and vault improvements. RBF’s duties included: providing construction management, inspection, and contract administration; monitoring project schedules, quality control, and the Contractor’s safety plan; conducting weekly meetings; processing work order directives, change orders, RFI’s, submittals, and progress payments; and preparing the final punch list.
Soledad Canyon Water Line (Santa Clarita, CA) – Construction Manager for this 9,000', 20" diameter water line. The work included evaluation of pipe material and corrosion protection to mitigate the soil conditions for the alignment. Approximately 2,000' of pipeline was installed using horizontal directional drilling or boring to construct the pipeline under Highway 14 and busy intersections. Contract documents included traffic control plans for multi-stage construction.

Artesia Boulevard Phase 1 Cast Iron Main Replacement Project (Long Beach, CA) - Principal in Charge on this $2,387,658 Cast Iron Main Replacement Project for the Long Beach Water Department. RBF provided Construction Management and Inspection services and the work included: constructing 4"-12" ductile iron water mains to replace existing cast iron water mains; installation of approximately 6,283 LF of 12" DIP, 536 LF of 8" DIP, 1,148 LF of 6" DIP, 220 LF of 4" DIP, ductile iron water main laterals, valves and fittings; connecting water meters; and restoring the surface. RBF’s duties included: providing construction management, inspection, and contract administration; verifying quantities and ensuring quality control; providing public relations and monitoring the Contractor’s safety plan; coordinating survey and material testing; scheduling and coordinating shut-downs and tie-ins; conducting bi-weekly meetings and preparing minutes; monitoring project schedules; and preparing and processing control documents such as RFI’s, submittals, work change directives, progress payments, change orders, daily construction reports, digital photos, and the final punch list.

JTM Cathodic Protection Facility at Marblehead, CP Station T16, South Coast Water District (San Clemente, CA) - Project Manager for project management, construction support and cathodic protection inspection, and contract administration services during the construction and testing phases of a project performed for the South Coast Water District in the Marblehead area of San Clemente. The work involved anode wells, drilling, cleaning, loading, grouting, sealing, and coke backfilling.

Archibald Pipeline Project, Chino Basin Desalter Authority (Ontario, CA) - Project Manager for construction management and inspection services for this pipeline project for the Chino Desalter Authority, which involved 10,000 linear feet of 12-inch polyvinyl chloride and 3,500 linear feet of 24 inch cement-mortar lining pipeline. RBF’s duties encompassed administering the contract; inspecting the work; conducting weekly progress meetings; coordinating with various agencies, departments, and utility companies; monitoring the schedule; verifying quantities and assuring quality control; monitoring the Contractor’s traffic control plan and safety plan, establishing and maintaining public relations; processing submittals, weekly statements of working days, change orders, progress payments, and punch lists; and documenting the work via daily reports and digital photography.

Zone 2 Transmission Pipeline, Yorba Linda Water District (Yorba Linda, CA) - Construction Manager furnishing and installing 9,670 linear feet of 30-inch steel pipe, 315 linear feet of 6inch PVC pipe, and 65 linear feet of corrugated metal pipe. RBF’s duties included contract administration; construction management and inspection; weekly progress meetings; quality control and quantity verification; monitoring the Contractor’s safety plan and public relations; utility, survey, and material testing coordination; processing of control documents, such as submittals, requests for information, progress payments, daily reports, and weekly statement of working-day reports; and coordination with district staff.

Large Potable Water Valve Replacement (WD-25-12), Long Beach Water Department (Long Beach, CA) – Project Manager for construction management and inspection services to the Long Beach Water Department for this $725,535 water valve replacement project. The construction included: removal of existing gate valves and associated piping, fittings, and accessories and replacing them with 24-inch, 30-inch, 36-inch, and 42-inch butterfly valves and new chlorination assemblies, piping, fittings, and accessories; installation and removal of two temporary line stops; and abandoning a 30-inch transmission stub.
Steven Bein, P.E., GISP

GIS Lead Analyst

General Qualifications

Mr. Bein's project experience includes Geographic Information Systems (GIS); civil and transportation engineering; GIS analysis, master planning, needs analysis, database design, system specification and selection, training, and operation. Mr. Bein has applied his talents to the development of computer aided engineering and planning applications, facilities management, and spatial information systems. His experience and relationships make him an ideal candidate for any project team proposing the manipulation and analysis of spatial data. Mr. Bein manages projects utilizing many systems including AutoCAD, ArcGIS, ArcInfo, and Oracle, SQL Server, SDE, and web technologies.

Experience

Mesa Water District On-Call GIS Support – Two-Year Contract - Project Manager augmenting Mesa Water staff for performing various GIS tasks. These tasks include updating GIS data per As-Built updates, addressing updates, creating an Atlas Map book for both Mesa’s Potable and Recycled Water systems, developing an online viewer to be used both for desktop review as well as with field mobile devices, verifying Mesa’s boundary, and other as needed GIS tasks. Performed live demonstrations/analyses to Mesa's board to assist with the re-districting of board division boundary.

Water Pipeline Inspection Planning Program, Castaic Lake Water Agency (Santa Clarita, CA) - GIS Manager for the development of a comprehensive pipeline inspection program for the client’s potable and recycled water systems. The client is a public water wholesaler providing domestic and recycled water to three retail water agencies: CLWA Santa Clarita Water Division, Newhall County Water District, and Los Angeles County Waterworks District 36. The client operates three treatment plants, three pump stations, and three storage facilities and has more than 40 miles of potable and recycled water pipelines that range in diameter from 12 to 102 inches.

Pipeline Inspection and Condition Assessment, Rancho California Water District (Temecula, CA) – Project Director for inspection and condition assessment for three of five of their sewer service areas. RBF was responsible for providing a master plan evaluation of the assigned portion of the sewer system. The pipeline inspections were performed in close coordination with the RCWD's field crews. A thorough engineering review of the inspection data was performed to generate recommended capital and maintenance projects and to provide estimates of the construction costs. In addition, RBF created an interactive Internet based GIS browser application to track the status of the project and provide an interactive problem/action form to track and resolve project issues immediately.

Sewer Master Plan, Port of Long Beach (Long Beach, CA) – GIS Manager for developing a comprehensive Sewer Master Plan, hydraulic model and condition assessment for the Port that utilizes the existing GIS database. RBF surveyed manholes and conducted CCTV inspections of the Manholes and Pipelines to evaluate the Ports Sewer System. As part of the deliverable the surveyed manholes will be incorporated into the Port’s existing GIS database along withinvert elevations. Attribute information has been updated based on As-Built information that has hyperlinks to GIS features.
Collected CCTV video will be linked to the GIS database to allow for users to click on a feature and pull up video of the inspected pipes. As GIS Project Manager, Mr. Bein developed the methodology to accurately import GPS data, link video and As-Built into while maintaining the accuracy of the Port’s GIS database.

On-Call GIS Services, Orange County Fire Authority (Orange County, CA) - Project Manager for on-site professional geographic information system (GIS) staff for Orange County Fire Authority to assist the authority in building and maintaining its GIS database. Tasks included updating 10 annotation feature-class layers and creating 150,000 annotation features, including streets, parcels, and schools. This data was used to produce 15 highly-detailed “First-Due” map packets for use by fire authority staff in their trucks when responding to incidents.

On-Call GIS Services, Newhall County Water District (Newhall County, CA) - Project Manager for conducting interviews and assessing and evaluating district data and current processes. Provided a framework for the GIS Master Plan, making recommendations, both near term and long term. Helped to set budgetary priorities with a Needs Assessment report and Strategic Plan document to identify the roadmap for moving forward with GIS at the District. Responsible for Data Conversion for 4 districts; NCWD consists of 4 noncontiguous water district areas. Serving as Project Manager, was responsible for managing RBF’s professional GIS staff in the conversion of existing water facility hardcopy map and CAD data into a GIS format. Oversaw the development of the data dictionary and procedural manuals so that the District could maintain their data easily and affectively. As Project Manager, supervised the design of the database that will allow for multiple links from the billing database to the Parcel database. Also created procedures for when the District receives new parcel information from the County to allow the District to re-link the tables without loss of data. RBF Consulting, a Michael Baker International Company, provided a detailed needs assessment and data conversion for the NCWD, a rapidly expanding water district located in Southern California. RBF organized and assessed the current facilities and converted them into a state-of-the-art geographic information system (GIS) so that the District will grow responsibly and profitably. RBF analyzed data needs, potential sources, and availability of the required data sets. Once obtained, the data was checked and moved to the project library. RBF also developed a maintenance mechanism to allow local project staff to maintain priority in frequently changing areas of the website without requiring additional advanced programming and designed the site so that viewing and printing web-based maps was user-friendly.

Utility and Basemap GIS Development, Port of Long Beach (Long Beach, CA) - GIS Manager for development of a long-range plan for integrating geographic information system (GIS) and computer-aided drafting (CAD) operations. RBF’s services included systems integration networking, software selection, technical support, and the development of custom file management software.

GIS Integration with Water Modeling and Computerized Maintenance Management System (CMMS) (City of Thousand Oaks, CA). GIS Manager for developing an integrated geographic information system (GIS) and computerized maintenance management system to support the creation of a citywide water master plan. RBF’s services included preparation of spatial data, hydraulic modeling, development of a website and web-based mapping application, and integration of water system data with zoning and land-use data to analyze current and future water demands.

Citywide Sewer and Water Atlas Conversion and Automated Mapping GIS Development Project (City of Santa Barbara, CA) - Project Manager for a large-scale GIS conversion and implementation project. The project was a 24-month effort requiring the expertise of RBF personnel from multiple offices. The project involved the conversion of over 300 sheets of sewer and water utilities, included the GPS location and mapping of 15,600 facility locations, and covered over 26 square miles. To help map such a large number of water and sewer facility points in the short time allotted for the initial facility location portion of the job, RBF utilized a differential Global Positioning Systems (GPS) strategy to expedite the project survey. The project strategy involved the use of preprogrammed GPS receivers to save critical time and money in the facility location phase of the project and maintain the project’s schedule.
Richard D. Hendrickson, GISP

GIS Analyst

General Qualifications

Mr. Hendrickson has years of experience in GIS and database management and holds a Bachelor’s Degree in Environmental Studies. He specializes in database design, data management, production of GIS maps, utility conversion and development of templates and forms for a variety of municipal and government agency projects. Rick regularly assists RBF’s planning, engineering, environmental, and stormwater staff with a variety of projects. Rick’s recent GIS experience also includes creating, coordinating and tracking numerous spatial datasets, and converting all spatial data between software platforms on several large-scale water/wastewater infrastructure improvement and development programs.

Experience

Pipeline Inspection Planning Program, Castaic Lake Water Agency (Santa Clarita, CA) - GIS Analyst a comprehensive pipeline inspection program for the client’s potable and recycled water systems. The client is a public water wholesaler providing domestic and recycled water to three retail water agencies: CLWA Santa Clarita Water Division, Newhall County Water District, and Los Angeles County Waterworks District 36. The client operates three treatment plants, three pump stations, and three storage facilities and has more than 40 miles of potable and recycled water pipelines that range in diameter from 12 to 102 inches.

Sewer Master Plan and Capital Improvement Program, Port of Long Beach (Long Beach, CA) - GIS Analyst for a sewer master plan and capital improvement program within the Harbor District. Services included developing and analyzing a hydraulic model of the sewer system, updating the geographic information systems (GIS), performing closed circuit television (CCTV) inspection of 24 miles of pipeline, performing a condition assessment of 449 manholes and 40 lift stations, performing a flow monitoring and inflow and infiltration (I&I) study, and preparing a sewer master plan and capital improvement program.

Pipeline Condition Assessment 2011/2012, Rancho California Water District (Temecula, CA) - GIS Analyst. For sewer assessment, data integration, GIS, and surveying professional services for Areas 4 and 5 of the client’s sewer system. The assignment was part of RBF’s continuing work over a number of years to advance the client’s sewer video and condition assessment initiative, serving as a partner in developing efficient capital improvement programs throughout the client’s sewer system. Tasks included inspection and evaluation of the client’s sewer mains and manholes to generate accurate, useful data and analysis, allowing the client to uniformly address system condition and maintenance requirements.
Santa Ana Regional Interceptor (SARI) Pipeline Site Clearing for Repairs of Reaches IV-A and IV-B (Riverside and San Bernardino Counties, CA) - GIS Analyst for brush clearing and grubbing services in preparation of repairs to Reaches IV-A Lower and IV-B of the SARI line network, which run through sensitive environmental habitat behind Prado Dam. RBF performed the work as part of the contract for design of repairs to the entire pipeline network, which encompasses approximately five miles of 27-inch, three miles of 36-inch, and three miles of 42-inch pipe and contains unlined RCP. The design called for rehabilitation of the 27-inch pipe using the cured-in-place pipe (CIPP) technique and repairs to the 36-inch and 42-inch sections using live-stream segmental slip-lining technique. (2013-Actual, 2013-PS, 2013-Estimate)

Corrugated Metal Pipe Storm Drain CCTV Inspection and Condition Assessment (City of Santee, CA) - GIS Analyst a citywide inventory of storm drains to fully identify deteriorating pipelines constructed of CMP, determine their condition, and develop a strategy for addressing the deterioration. The project included televising all corrugated metal storm drain pipes; rating their condition; providing repair technique recommendations; prioritizing replacement; and developing cost estimates for replacement, repair, or realignment.

Newhall County Water District (NCWD) On-Call GIS Services (Newhall County, CA) - GIS Analyst for map preparation, database maintenance, and GIS conversion. RBF Consulting, a company of Michael Baker International, provided a detailed needs assessment and data conversion for the NCWD, a rapidly expanding water district located in Southern California. RBF organized and assessed the current facilities and converted them into a state-of-the-art geographic information system (GIS) so that the District will grow responsibly and profitably. RBF analyzed data needs, potential sources, and availability of the required data sets. Once obtained, the data was checked and moved to the project library. RBF also developed a maintenance mechanism to allow local project staff to maintain priority in frequently changing areas of the website without requiring additional advanced programming and designed the site so that viewing and printing web-based maps was user-friendly.

Sewer Video Survey and Condition Assessment, Rancho California Water District (Temecula, CA) - GIS Analyst for inspection and condition assessment for one of five Rancho California Water District (RCWD) sewer service areas. RBF provided a master plan evaluation of the assigned portion of the sewer system and performed a land survey to determine the coordinates of the manhole covers within the area to within 0.1 foot. The pipeline inspections were performed in close coordination with the District’s field crews. A thorough engineering review of the inspection data was performed to generate recommended capital and maintenance projects and to provide estimates of the construction costs. In addition, RBF created an interactive internet-based GIS browser application to track the status of the project and provide an interactive problem/action form to track and resolve project issues immediately. The browser allowed the District to view inspected pipelines, watch related CCTV videos, and see logs and snapshots of field assessments as they were completed.

Otay Water District Sanitary Sewer CCTV Inspection and Assessment, San Diego County, California, Otay Water District. GIS Specialist. Responsible for developing a prioritization list of improvements and CCTV codes for integration of data into the District’s GIS. RBF Consulting, a company of Michael Baker International, provided inspection and condition assessment of sections of the District’s gravity pipelines. (2010-Actual, 2010-PS, -Estimate)

CCTV for Sewer System Pipeline (City of Vista, CA) - GIS Analyst to import the inspection data into the City’s computerized maintenance management system from the city’s inspection software. Also provided an interface between the inspection data and GIS so that the results of the program can be displayed graphically on maps and used for spatial analysis. RBF Consulting, a company of Michael Baker International, provided five closed circuit television (CCTV) crews to televise 240 miles of sewer system pipeline throughout the City of Vista. The team also performed a condition assessment of televised segments and transmitted red flag notifications of required emergency repairs; provided a detailed engineering evaluation with specific recommendations for pipeline replacement or rehabilitation and cost estimates; and integrated the evaluation data with a GIS overlay program, hydraulic analysis, and the existing capital improvement projects (CIP) program.
Balvant Rajani

Testing Technology Evaluation Consultant

General Qualifications

Dr. Rajani provides specialized advice/consultancy services in pipeline engineering and risk management of pipelines. He holds key positions to provide broad technical expertise and skills in the response and behavior of buried pipes within the municipal domain. Over the last 20+ years, he has established a world-wide network of professionals across academia and professionals in water and wastewater industries who can be accessed as the need arises.

Expertise

- Buried asset management, reliability and risk assessment, economic evaluation, life-cycle costs and decision support for the operation, maintenance and rehabilitation of water distribution and sewage collection systems.

- Behaviour, performance, analysis and design of municipal infrastructure: water mains, failure analysis, sewers, corrosion (cathodic protection) assessments. Pipe materials: cast and ductile iron, PCCP, reinforced concrete, PVC, PE.

- Participation in audit panels and advisory committees for renewal of water assets; transfer of technology activities such as workshops and teaching at universities.

Professional Experience

- Founded and organized "Buried Utilities" research group at the National Research Council of Canada (NRC). Established research team with a strong niche that develops leading technologies to aid the maintenance of safe, economical and reliable supply of water in ageing systems.

- Built and developed internal capacity to address national issues (maintenance and renewal of ageing water and sewer systems, quantification of short and long term capital needs).

- Organized, managed and delivered (technology transfer) cross-Canada seminars on issues related to ageing water supply and waste water and collection systems.

- Basic applied research work done at the NRC Buried Utilities group was pivotal to the development of "Best Practice Guides" for water and sewer systems for InfraGuide (FCM InfraGuide). InfraGuide was a joint initiative of National Research Council of Canada and Federation of Canadian Municipalities (FCM).

- Built and maintained national and international (US, Europe, Australia, South Korea and Taiwan) networks of collaboration through research and diffusion of experience & knowledge, e.g., Water Research Foundation (WaterRF), SINTEF (Norway), WRC (England), Instituto del Agua (Valencia, Spain), KWR Watercycle Research Institute (Netherlands), CSIRO (Australia), Pipeline Developments Ltd. (UK), Thames Water plc (UK), all major Canadian water utilities and US utilities.
Recent Professional Publications

To date Dr. Rajani has written or co-authored over 200 publications of which more than 60 are in refereed journals or conference proceedings. His most recent publications include:


Yehuda Kleiner  
Testing Technology Evaluation Consultant

General Qualifications

Dr. Kleiner provides specialized advice/consultancy services in pipeline engineering and risk management of pipelines. He holds key positions to provide broad technical expertise and skills in the response and behavior of buried pipes within the municipal domain. Over the last 20+ years, he has established a world-wide network of professionals across academia and professionals in water and wastewater industries who can be accessed as the need arises.

Expertise

- Reliability and risk in buried infrastructure systems.
- Economic evaluation and life-cycle costing of infrastructure systems.
- Modeling (deterministic, stochastic, fuzzy) of the deterioration of buried infrastructure.
- Decision support for the operation, maintenance rehabilitation and renewal of infrastructure systems to support the sustainable development of the urban environment.
- Decision optimization in infrastructure systems universities.

Professional Experience

National Research Council of Canada, Principal Research Officer

Developed, led and managed strategic research projects commensurate with the strategic direction of the research program as well as with stakeholders from the Canadian industry and Canadian municipalities. These strategic research projects were geared towards improving decision support mechanisms and management practices of Canadian infrastructure assets. The strategic research initiatives often involved leading and coordinating multidisciplinary research teams.

Led and managed client funded research activities in the area of infrastructure asset management. This activity involved development and provision of innovative approaches and solutions to complex asset management problems arising as a result of infrastructure deterioration. Collaborating with stakeholders from the municipal and industrial arena, to identify, collect and analyze available data that are pertinent to the development of sound asset management strategies. Interact with peers of complementary expertise as well as supervise technical subordinates assisting to the projects. Initiate collaboration on research activities with other research organization, world-wide, such as universities, research institutes and government agencies and supervise visiting scholars from such organizations.
Recent Professional Publications

To date Dr. Kleiner has authored and co-authored over 120 publications, of which more than 75 are in refereed journals or conference proceedings as well as 13 books and book chapters. His most recent publications include:


Michael J. Boeck, P.E.

Corrosion Engineering

General Qualifications

Mr. Boeck provides design engineering for water and wastewater projects that include domestic and recycled water and sewer pipelines, lift stations, booster pump stations, water reservoirs, and pressure reducing stations. Mr. Boeck provides corrosion design using galvanic or impressed current cathodic protection systems. He is also experienced in conducting soils resistivity surveys, and in the preparation of detailed plans for the construction of cathodic protection facilities for pipelines and steel tanks.

Experience

Pipeline Inspection Planning Program, Castaic Lake Water Agency (Santa Clarita, CA) - Civil Engineer responsible for planning services to develop a comprehensive pipeline inspection program for the client’s potable and recycled water systems. The client is a public water wholesaler providing domestic and recycled water to three retail water agencies: CLWA Santa Clarita Water Division, Newhall County Water District, and Los Angeles County Waterworks District 36. The client operates three treatment plants, three pump stations, and three storage facilities and has more than 40 miles of potable and recycled water pipelines that range in diameter from 12 to 102 inches.

El Toro Water District Corrosion Services (Lake Forest, CA) - Corrosion Engineer for conducting electrical continuity surveys and pipe-to-soil electropotential surveys for over 12 miles of water transmission mains on a semi-annual basis. RBF also conducts inspections and provides maintenance of the District’s cathodic protection system. In addition, RBF provides design, plan, and specification preparation and construction inspection for the installation of corrosion control mitigation systems and steel tank and prestressed concrete tank reservoirs.

Pipeline Failure Analysis and Root Cause Training Program, Las Vegas Valley Water District (Las Vegas, NV) - Corrosion Engineer associated with forensic engineering services, including field investigations of pipeline failures, collection and testing of pipe material and soil samples, preparation of field investigation reports, and preparation of an annual summary report. The purpose of the study was to investigate whether there was a correlation between cyclical pressure transients and pipeline failures.

Corrosion Services for the Laguna Beach County Water District, Laguna Beach County Water District (Laguna Beach, CA) - Corrosion Engineer responsible for conducting pipe-to-soil electropotential surveys for more than 16 miles of water transmission mains for Laguna Beach County Water District on an annual basis since 1984. RBF also performs inspections and needed maintenance of the district’s cathodic protection system.
RBF has prepared the design, plans, and specifications and provided construction inspection for the installation of more than 14 deep-well anode-impressed-current cathodic protection stations. RBF also conducts investigations and provides analyses of failures in buried metallic structures due to corrosion.

Corrosion Services, Santa Margarita Water District (Orange County, CA) – Corrosion Engineer responsible for annually conducted pipe-to-soil electropotential surveys since 1977 on all of the district’s metallic water transmission mains and sewer force mains. This ongoing project includes more than 230 miles of pipeline, varying in size from 12-inches to 66-inches in diameter. In addition to these surveys, RBF periodically inspects the coatings on the district’s 15 steel tank water reservoirs and inspect and adjusts the 60 deep-well anode-impressed current cathodic protection stations located throughout the district. RBF is also responsible for conducting analyses of failed metallic structures in association with a qualified testing laboratory.

Citywide Corrosion Study (City of Davis, CA) - Corrosion Engineer responsible for a city-wide corrosion study that was needed due to water system corrosion failures. RBF investigated and identified the cause of the corrosion and determined a course of action to mitigate the problem.

Back Basin Blending Pipeline, Elsinore Valley Municipal Water District (Lake Elsinore, CA) – Project Manager for the design for the Back Basin Wells Arsenic Blending Pipeline project for Elsinore Valley Municipal Water District. RBF designed 20-inch ductile iron pipe to convey low arsenic well water from the Summery and Diamond Wells to blend with the high arsenic well water from the Cereal #1 and Corydon Wells. The project design included constructability analyses, corrosion, topographic mapping, field surveys, and hydraulic review of the mixing system. Key issues included construction of facilities in an existing environment, evaluating alternative pipeline alignments, and pipeline constructability. Extensive potholing was provided to map existing utilities in the area. The construction costs came in $30,000 under the projected budget.

60-Inch Pipeline Inspection, Inland Empire Utility Agency (Chino, CA) – Corrosion Engineer associated with confined-space-entry inspection of a critical large-diameter pipeline connecting secondary and tertiary treatment plants. RBF completed the inspection within the strict eight-hour shutdown window.

Justification - Underground Utilities Study, Folsom State Prison (Folsom, CA) – Project Engineer for determining the location of utilities within the prison grounds using audio-frequency locating techniques. RBF Consulting, a Michael Baker International Company, performed a system-wide evaluation of Folsom State Prison’s (FSP) underground utilities that included the water, sewer, storm drain and gas systems. The project scope included locating and evaluating the condition of existing underground infrastructure and proposing a plan and expected cost for solving the prison’s utility problems. Major challenges included locating 100-year-old undocumented underground pipelines, engineering replacement systems in a structurally crowded, inmate-crowded site built on solid granite; exploring and evaluating a 1,300-foot-long granite storm tunnel; and navigating a 30-foot high, 20-foot deep prison wall.
Jon D. Chiniaeff, CCT
Corrosion Engineering

General Qualifications

Mr. Chiniaeff conducts corrosion surveys of pipeline facilities having active cathodic protection systems in order to evaluate the performance of those systems. Mr. Chiniaeff is also experienced in conducting soils resistivity surveys and in the preparation of detailed plans for the construction of cathodic protection facilities for pipeline and steel tanks.

Experience

Pipeline Inspection Program Planning, Castaic Lake Water Agency (Santa Clarita, CA) - Corrosion Technician for surveys associated with the comprehensive pipeline inspection program for the client's potable and recycled water systems. The client is a public water wholesaler providing domestic and recycled water to three retail water agencies: CLWA Santa Clarita Water Division, Newhall County Water District, and Los Angeles County Waterworks District 36. The client operates three treatment plants, three pump stations, and three storage facilities and has more than 40 miles of potable and recycled water pipelines that range in diameter from 12 to 102 inches.

Video Survey and Condition Assessment 2011/2012, Rancho California Water District (Temecula, CA) - Corrosion Technician for sewer system assessment, data integration, GIS, and surveying professional services for Areas 4 and 5 of the client's sewer system. The assignment was part of RBF's continuing work over a number of years to advance the client's sewer video and condition assessment initiative, serving as a partner in developing efficient capital improvement programs throughout the client's sewer system. Tasks included inspection and evaluation of the client's sewer mains and manholes to generate accurate, useful data and analysis, allowing the client to uniformly address system condition and maintenance requirements.

60-Inch Pipeline Inspection, Inland Empire Utility Agency (Chino, CA) - Corrosion Technician for corrosion surveys associated with confined-space-entry inspection of a critical large-diameter pipeline connecting secondary and tertiary treatment plants. RBF completed the inspection within the strict eight-hour shutdown window.

Pipeline Failure Analysis and Root Cause Training Program, Las Vegas Valley Water District (Las Vegas, NV) - Corrosion Technician for corrosion surveys associated with forensic engineering services, including field investigations of pipeline failures, collection and testing of pipe material and soil samples, preparation of field investigation reports, and preparation of an annual summary report. The purpose of the study was to investigate whether there was a correlation between cyclical pressure transients and pipeline failures.

WRR Land Outfall Pipeline (City of San Clemente, CA) - Corrosion Technician for corrosion surveys associated with the installation of a cathodic protection system for the City's Water Reclamation Plant (WRR) Land Outfall Pipeline. The corrosion engineering and construction management work for the cathodic protection system included establishment of cathodic test stations, bonding of all pipe joints within the 33,000 LF of ductile iron pipeline, and installation of an impressed current cathodic protection station including rectifier, enclosure and anode well.
David T. Hill
Field Coordinator

General Qualifications

Mr. Hill has been working in the field of CCTV inspections quality control sewer pipeline condition assessment for the last five years. He is responsible for the development and design of GIS layers, maps, and attribute data. He is currently a Design Technician for RBF. His responsibilities include quality control for CCTV database management, creating and maintaining databases for CCTV, creating maps, and editing and developing GIS layers. He is proficient with ARC Map and MS Access.

Experience

Pipeline Inspection Program Planning, Castaic Lake Water Agency (Santa Clarita, CA) – Field Coordinator for the development of a comprehensive pipeline inspection program for the client’s potable and recycled water systems. The client is a public water wholesaler providing domestic and recycled water to three retail water agencies: CLWA Santa Clarita Water Division, Newhall County Water District, and Los Angeles County Waterworks District 36. The client operates three treatment plants, three pump stations, and three storage facilities and has more than 40 miles of potable and recycled water pipelines that range in diameter from 12 to 102 inches.

Sewer Master Plan and Capital Improvement Program, Port of Long Beach (Long Beach, CA) – Field Coordinator for the sewer master plan and capital improvement program within the Harbor District. Services included developing and analyzing a hydraulic model of the sewer system, updating the geographic information systems (GIS), performing closed circuit television (CCTV) inspection of 24 miles of pipeline, performing a condition assessment of 449 manholes and 40 lift stations, performing a flow monitoring and inflow and infiltration (I&I) study, and preparing a sewer master plan and capital improvement program.

SARI Line Network Site Brush Clearing, Santa Ana Watershed Project Authority (Corona, CA) – Field Coordinator for site brush clearing and grubbing services in preparation for repairs to Reaches IV-A Lower and IV-B of the SARI line network, which run through sensitive environmental habitat behind Prado Dam.

Video Survey and Condition Assessment 2011/2012, Rancho California Water District (Temecula, CA) – Field Coordinator for CCTV, sewer assessment, data integration, GIS, and surveying professional services for Areas 4 and 5 of the client’s sewer system. The assignment was part of RBF’s continuing work over a number of years to advance the client’s sewer video and condition assessment initiative, serving as a partner in developing efficient capital improvement programs throughout the client’s sewer system. Tasks included inspection and evaluation of the client’s sewer mains and manholes to generate accurate, useful data and analysis, allowing the client to uniformly address system requirements.

Sewer Collection System Inspection, Assessment Rehabilitation and Repair Program (City of Avalon, CA) – Field Coordinator for comprehensive engineering and program management services for the inspection and rehabilitation of the city’s 20-mile sanitary sewer system. RBF’s services included closed-circuit television (CCTV) condition assessment, engineering design, bidding-phase support, and construction management at-risk for the complete rehabilitation and repair of the entire sewer collection system, and the development of a compliance program for maintenance of the system, including a geographic information system (GIS)-based inspection and tracking system.
Lawrence Jansen, PG, CEG

Geotechnical Engineer

General Qualifications

Mr. Jansen has over 35 years of engineering geology experience in California involving new construction for public works, commercial, and residential projects. He also has experience in forensic geologic investigations. His experience includes exploration of geologic structure, groundwater, landslides, slope stability, and fault and seismic hazards. He is well versed in exploration techniques including aerial photo interpretation, downhole logging, hollow stem and mud rotary drilling, monitoring wells, fault trenching, and geophysical surveys. He has field construction experience with grading, blasting, landslide buttresses, subsurface drainage systems, shoring systems, tie-back anchors, drilled foundations, and as-graded geologic evaluation/mapping. As Principal Geologist for Ninyo & Moore, Mr. Jansen supervises geologic staff, provides technical review of projects, and manages major projects.

Professional Experience

Michelson Water Reclamation Plant (MWRP) Phase 2 Expansion, Irvine Ranch Water District’s (IRWD), Irvine, California: Project Manager / Geologist responsible for geotechnical consulting services to evaluate the subsurface soil, geologic, and groundwater conditions at the project site and to provide geotechnical recommendations for the design and construction of the proposed improvements. The MWRP Phase 2 Expansion project was part of the planned treatment plant upgrades to handle projected wastewater flows, to meet effluent quality requirements and to satisfy reclaimed water demands. The primary structures of the project included: Headworks Building, Primary Clarifiers, Primary Sludge Pumping Station, Activated Sludge Basins, Secondary Clarifiers, RAS/WAS Pumping Station, Blower Building, Effluent Filters, and Chlorine Contact Basin.

Eastern Wells and Pipelines Recycled Water Supply System Project, San Juan Capistrano, California: Project Manager / Geologist responsible for geotechnical consulting services for the Eastern Wells and Pipelines Recycled Water Supply System Project for City of San Juan Capistrano and the Southwest Water Company (SWWC) in the City of San Juan Capistrano, California. The project included the design of two new wells, associated pump housing, and approximately 9,000 linear feet of 16-inch pipe to transport water to the City’s Groundwater Recovery Plant where the water will be treated for domestic use.

Recycled Water System Expansion, San Clemente, California: Principal Geologist retained to provide geotechnical consulting services during the design of the San Clemente Recycled Water System Expansion project. The project involved three separate components, including design and construction of a new above ground reservoir, expansion of an existing water treatment plant, and a new distribution pipeline system in the City. Mr. Jansen provided project coordination, provided oversight of the preparation of the subsurface exploration program.

Years Experience: 35

Degrees

Master of Science, Geological Science – San Diego State University, 1983
Bachelor of Science, Geological Science – San Diego State University, 1976

Licenses/Certifications

Professional Geologist, California, PG 3841
Certified Engineering Geologist, California, CEG 1198
OCWD/Burris and Lincoln Basins Reconfiguration Project, Anaheim, California:
Principal-In-Charger responsible for a geotechnical evaluation for the Burris and Lincoln Basins Reconfiguration Project in Anaheim, California. Burris Basin was a former sand and gravel quarry that is now being used by the Orange County Water District as a water storage facility, influent reservoir for the Burris Basin Pump Station, and as a groundwater recharge spreading basin. Lincoln Basin is located just to the north of Burris Basin and serves as a conveyance facility for flow between the Lower Five Coves Basin and Burris Basin. Provided geotechnical observation and testing services during grading of the Burris and Lincoln Basins Reconfiguration Project and during construction of the Burris Basin Transfer Well.

Inland Empire Utilities Agency (IEUA), San Antonio Channel Recycled Water Pipeline, Regional Recycled Water, Montclair, California
Principal-In-Charge responsible for providing geotechnical consulting services for the San Antonio Channel Pipeline project located in San Bernardino County, California. The San Antonio Channel pipeline extends from the end of RP-4 West Extension Regional Pipeline at 4th Street and Cucamonga Channel to the San Antonio Wash. From the San Antonio Wash the recycled water supplies recharge to the Brooks Basin via the Cucamonga Channel.
Appendix B: Professional Services Agreement Acceptance Form
Appendix B: Professional Services Agreement Acceptance Form

Firm Name: RBF Consulting

Address: 14725 Alton Parkway

City Irvine State CA Zip Code 92618

Telephone: (949) 472-3505 Fax: (949) 472-8373

I have reviewed the RFP and Professional Services Agreement in their entirety. Our firm will execute the Professional Services Agreement with no exceptions.

Name of Authorized Representative: Ms. Cindy Miller, PE

Signature of Authorized Representative: [Signature]

Date: February 25, 2015
ADDENDUM NO. #1

To the RFP for Pipeline Infrastructure Testing Program

TO ALL PLAN HOLDERS: Effective this date, February 19, 2015

The following changes, additions and/or deletions are hereby made a part of the RFP project for the Mesa Water District, Costa Mesa, California, as fully and completely as if the same were fully set forth therein:

A COPY OF THIS ADDENDUM SIGNED BY THE BIDDER SHALL BE ENCLOSED WITH THE PROPOSAL.

Amend Appendix B Professional Services Contract, section 10 Indemnification as follows

10.1 To the fullest extent permitted by law and except as otherwise provided in this Section X, Consultant shall hold harmless, defend at its own expense, and indemnify Mesa Water, its directors, officers, employees, agents, and authorized volunteers (collectively, "Mesa Water Indemnitees") and each of them from and against any and all liability, claims, losses, damages, or expenses, including reasonable attorney’s fees, arising from, pertaining to, or relating to performance of this Contract by Consultant, or any willful or negligent acts, or omissions to act, of or by Consultant or its officers, agents, subcontractors, employees, or anyone for whose acts any of them may be liable, in rendering services under this Contract; excluding, however, such liability, claims, losses, damages, or expenses arising from Mesa Water’s sole negligence or willful misconduct. The obligations set forth in this Section 10.1 shall also include the obligation to indemnify the Mesa Water Indemnitees from any liability arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of Consultant.

Amend Appendix C Scope of Work section 2.3 as follows:

**Evaluate NDT Methodologies for Ferrous Pipeline**: The Consultant shall evaluate NDT methods for ACP, cast iron, steel (CML&C and CCP), and ductile iron pipelines, including WachsWater LDS1000, Pure Technologies “Smart Balls”, and other applicable technologies. Consultant shall contact a minimum of three water agencies that have used the technologies, and document their experiences and feedback. Consultant shall develop a report with recommendations for NDT of steel-for-each pipelines material, including description of technologies investigated, advantages and disadvantages, recommendations, and cost estimate. **This task shall be delivered within 45 days of NTP.**

MESA WATER DISTRICT

By 
By

CINDY MILLER, VICE PRESIDENT

Name & Title

Karyn Igat, P.E.

Senior Civil Engineer
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[1] Direct Cost budget includes an administrative allowance of 15%
[2] Subconsultant Fee includes an administrative allowance of 10%
[3] Budget for Task 7.2 is based on 40 hours for engineer to witness testing, and trips to 2 labs (one in Canada, and one in the U.S.)
MEMORANDUM

TO: Board of Directors
FROM: Paul E. Shoenberger, P.E., General Manager
DATE: April 9, 2015
SUBJECT: Special Legal Services

RECOMMENDATION

Approve an adjustment to special legal services contract with Foley & Mansfield in the amount of $5,100.

The Engineering and Operations Committee reviewed this item at its March 17, 2015 meeting and recommends Board approval.

STRATEGIC PLAN

Goal #4: Increase public awareness about Mesa Water® and about water.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

At the November 14, 2013 Board meeting, the Board authorized the General Manager to employ legal counsel to write an amicus brief in favor of the position held by the Capistrano Taxpayers Association.

At the December 11, 2014 Board meeting, the Board approved a contract to Foley & Mansfield for special legal services in the amount not to exceed $50,000.

DISCUSSION

Foley & Mansfield has provided special legal services to Mesa Water® in connection with the Capistrano Taxpayers Association case. Funds in the amount of $5,100 are required to disburse the final Foley & Mansfield invoice for a contract total of $55,100. The additional funds required are available in the FY 2015 budget in the General Legal account.

FINANCIAL IMPACT

Sufficient funds are available in the FY 2015 budget General Legal account to cover the variance.

ATTACHMENTS

None.
MEMORANDUM

TO: Board of Directors
FROM: Stacy Taylor, Public & Government Affairs Manager
DATE: April 9, 2015
SUBJECT: Mesa Water® Customer Survey Results

RECOMMENDATION

Receive the presentation.

STRATEGIC PLAN

Goal #4: Increase public awareness about Mesa Water® and about water.
Goal #6: Provide outstanding customer service.

PRIOR BOARD ACTION/DISCUSSION

In November 2008, four years prior to the District’s rebranding, Mesa Water® conducted a survey of its customers’ awareness of -- and satisfaction with -- the District. In 2012, staff conducted a Request-for-Proposal process for survey services that resulted in retaining Probolsky Research to conduct two follow-up customer surveys for the District, the first of which was done in June 2012, and the second of which was done in February 2015.

DISCUSSION

The purpose of the 2015 follow-up survey was: 1) to conduct a similar survey and benchmark the 2015 results to the 2012 baseline survey; and, 2) to inform the District’s planning for future programs in the areas of communications and customer services. Due to the 2015 survey timing, additional questions were included to measure customers’ awareness of the Mesa Water Saver “drought-reach” campaign and any customer water-use behavior changes as a result.

Staff circulated the final survey questionnaire to the Board the week of February 17, 2015. Between February 13 and 22, 2015, Probolsky Research polled 500 Mesa Water® customers. The survey results accuracy is +/- 4.3% with a 95% degree of confidence. Probolsky Research will present the topline survey findings at Mesa Water’s April 9, 2015, Board meeting.

FINANCIAL IMPACT

$25,000 was budgeted and will not be exceeded for Mesa Water’s 2015 customer survey, funded in the Public & Government Affairs department.

ATTACHMENTS

Attachment A: Survey Results Report
Synopsis

Probolsky Research polled a total of 500 Mesa Water District (Mesa Water®) customers between February 13 and 22, 2015. The survey results accuracy is +/- 4.3% with a 95% degree of confidence. Interviews were conducted on both landline and cell phones and were offered in English, Spanish and Vietnamese languages. The respondents’ ethnic categorization was: 68.8% White/Caucasian, 13.0% Latino/Hispanic, 4.6% Asian, 1.8% Black/African-American and 6.2% identified with some other ethnicity. The respondents’ residence type was: 53.2% own their home (45.4% own single family homes, 7.8% own a condo or townhome) and 44.6% rent their home (26.8% rent an apartment, 11.6% rent a single family home, and 6.2% rent a condo or townhome).

This summary defines the report’s major findings. By way of context, respondents are largely positive about their community, with a majority (54.0%) regarding it as being “on-track”. In contrast to our last survey performed in 2012, “water” has emerged as one of the top three foremost important issues to respondents, after public safety and nearly equal to jobs and the economy, reflecting a generalized growing community awareness of Southern California’s drought, buttressed by Mesa Water’s ongoing outreach and education efforts over the past three years.

Major Findings

Favorability and Perception

- Mesa Water® being an independent district with an elected board is important to nearly three-quarters of respondents (73.8%).

- An overwhelming majority of respondents (87.0% or about nine out of ten people surveyed) approve of the job that Mesa Water® is doing. This is remarkably consistent (statistically equal) with the 88.6% that said they approved of Mesa Water’s job performance in 2012.

- Respondents are deeply committed to Mesa Water’s continued investment in its water infrastructure: 92.6% said this investment was personally important to them.

---

1 6.0% refused to answer
2 2.2% refused to answer
Water Quality and Reliability

- About eight out of ten of Mesa Water® customers (82.0%) are satisfied with their water quality; 72.8% say their water is safe to drink.

- A supermajority (67.4%) of Mesa Water® customers feel their community has a reliable water supply, down from 80.2% in 2012. Given that 91.2% this year feel Southern California faces a drought -- up from 77% in 2012 who felt Southern California faced a water crisis -- the decrease in confidence in community water supply reliability since 2012 likely reflects this growing concern.

- Well over a supermajority (71.8%) of customers support the concept of ocean desalination as a potential new water supply.

Water Cost

- A majority of Mesa Water® customers (57.6%) say the amount they pay for water is “just about right.” This is remarkably consistent with the 58.3% who agreed in 2012. Meanwhile, 15.6% think they pay too much, and 5.8% think they pay too little.

Awareness and Branding

- Awareness of the District as the respondents’ water provider has improved since 2012. Those who are aware of Mesa Water® regard it favorably.
  
  - When asked, unprompted, who provides their water, approximately 143 in 500 respondents (28.6%) correctly identified the District by its proper name -- Mesa Water District, or Mesa Water® -- reflecting an organization whose post-name change and re-branding campaign is building traction.

  - When asked, unprompted, who provides their water, approximately 90 in 500 respondents (18.0%) identified an incorrect or outdated variant of the District’s name or initials (Mesa, Consolidated, MCWD, Mesa Consolidated Water District, etc.).

  - A smaller proportion of respondents (9.2%) incorrectly identified the City of Costa Mesa/Newport Beach as their water provider than in 2012 (16.7%).
Awareness and Branding (continued)

- When specifically asked if they’ve heard of Mesa Water District, 80.8% responded yes. Perhaps more reflective of the District’s good standing in the community, of those respondents who were aware of the District, 58.8% reported holding a favorable opinion of it, which compares well to the 63.2% who regard Newport Mesa Unified School District (traditionally accepted as one of the community’s most well-regarded organizations) favorably. Furthermore, 27.8% of respondents were aware of the Mesa Water Reliability Facility (“MWRF”) and, of those, 16.4% regard it favorably.

Communications and Information Preferences

- Television is respondents’ top source for water news, with Mesa Water’s customer newsletter the second most referenced news source and with customers preferring it over newspapers, websites, radio, social media and family/neighbors.

- More than one third (35.0%) of respondents say they read Water District News -- a decline in readership of Mesa Water’s customer newsletter from 74.3% in 2012 -- reflecting an increased need to reach the community through multiple channels.

- Bill inserts, mail to homes and e-mails are top choices for how customers want the District to communicate with them. Also ranking significantly are notices and articles printed in newspapers, stories in Water District News, social media (such as Facebook and/or Twitter posts) and postings on MesaWater.org

- Regarding MesaWater.org, 28.8% of respondents have visited Mesa Water’s website, with top reasons including to find water information (54.9%), to pay a bill (44.4%), and to learn more about the District’s programs and events (38.9%). While few visitors say they would like to see something added to the website, the items of most interest are water consumption rate/estimated billing and general/educational information/resources.

Mesa Water Saver Campaign Awareness

- One-half (51.2%) of respondents say they were aware of water conservation campaigns/efforts in their area within the past few months, reflecting a significant penetration of Mesa Water’s “drought-reach” efforts with the Mesa Water Saver campaign.
Mesa Water Saver Campaign Awareness (continued)

o When asked what they knew of these efforts, a full one-fifth (19.1%) of respondents correctly identified one of the core messages of the campaign, “The Three L’s: Loads, Lawns, Leaks”.

o Regarding the campaign slogan, “Let’s do ourselves a favor, be a water saver”, 28.6% of respondents indicated that they had heard and/or seen this phrase. Of those who had heard/seen this phrase, the top four most recalled vehicles were either radio ads (32.9%) or billboards (32.2%), followed by inserts to their water bills (24.5%) and social media such as Facebook and/or Twitter (20.3%). Another 11.2% to 14.7% of respondents recalled newspaper articles, newspaper ads and doorhangers. TV was also mentioned by just over 10% of respondents, 7.7% recalled postcards, 4.9% recalled automated calls and 3.5% recalled personal visits to their home.

Water Use Efficiency

• Customers report broad acceptance of basic conservation measures, with 84.4% saying they practice at least one water conservation measure, and with about 70% saying they practice four unique measures. The top four most popular measures respondents undertook in their own homes to more efficiently use water were:

  o Only wash full loads of laundry and dishes (84.4%)
  o Turn off the faucet while brushing your teeth (83.8%)
  o Use a broom instead of a hose for cleaning walkways and patios (73.8%)
  o Monitor and repair leaky hoses and sprinkler heads (70.6%)

• When asked what would motivate them to use less water, 74.4% of respondents said drought conditions, nearly identical to personal moral obligation (73.4%), followed by a desire to be green and help the environment (71.2%). Higher water rates and water rationing polled much lower, at 54.2% and 54.0% respectively.

• More customers said we need to conserve water, even if it means higher water rates (56.4% - an increase from 43.6% in 2012) than those who said it isn’t fair that the less water we use the more we pay for water (33.0% - a decrease from 41.8% three years ago).

Customer Service

• About one-quarter (26.0%) of respondents say they use Mesa Water’s online bill payment system. Of respondents who say they don’t use online bill-pay, most simply
are not qualified or do not have the capability to do so (for example, they live in an apartment or don’t have access to/don’t know how to use a computer). The remaining respondents simply prefer a different method of payment, such by check or in person, or they simply are not interested in or don’t trust the system. These responses indicate that the District may have reached a ceiling of participation with those who would be willing to use an online bill payment system.

- Only 7.6% of customers had reason to contact Mesa Water® in the past six months, with the primary reasons being informational purposes (28.9%), billing questions (18.4%), and water leaks (15.8%).

- Well over three-quarters of those respondents (78.9%) were satisfied with their customer service experience.
MEMORANDUM

TO: Board of Directors
FROM: Tracy E. Manning, MPA, Assistant Operations Manager
DATE: April 9, 2015
SUBJECT: MTBE in Groundwater Wells

RECOMMENDATION

Receive the presentation.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.

PRIOR BOARD ACTION/DISCUSSION

The Board of Directors has requested information on methyl-tert butyl ether (MTBE) levels in Mesa Water District (Mesa Water®) potable wells.

DISCUSSION

MTBE is an additive used as an octane booster in fuels since the 1970’s. It was banned for use in California in 2004 and is a suspected carcinogen. There is no federal drinking water standard for MTBE, but California developed a secondary aesthetic standard of 5 ppb in 1997 and a primary health standard of 13 ppb in 2000 to ensure the safety and quality of water provided to consumers. Orange County Water District has been sampling Mesa Water® wells for MTBE since 1996. Since that time, there have been no Maximum Contaminant Level (MCL) or Secondary Maximum Contaminant Level (SCML) exceedances or detections above California’s Detection Limit for Reporting purposes (DLR) for MTBE in any of Mesa Water’s wells.

Orange County Water District has detected very low levels of MTBE in two of Mesa Water’s production wells using analytical methods that are sensitive to levels far below the California reportable detection level of 3 ppb. Well 9 had a single detection of 0.14 ppb in November 2008 using an instrumentation detection limit of 0.02 ppb while Well 8 had a detection of 0.1 ppb. Non-reportable detections continued at well 8 through 2011, with the January 31, 2012 sample showing no detectable levels. Well 8 had been used only sporadically since 2008 due to elevated color levels, and was temporarily taken out of service with the (now) Division of Drinking Water on May 22, 2012. Mesa Water® was granted a monitoring waiver for well 8 that expired on April 1, 2014 which triggered a new round of compliance monitoring. MTBE was detected at levels ranging from 0.5-1.3 ppb, still well below the reportable detection levels.

It is important to note that well 8 has not been used for production purposes since 2011. Detections in 2014 were based on limited pumping-to-waste sampling events and may not be representative due to the well’s limited use. Well 8 is scheduled to be removed from service permanently in 2015 due to increased color levels.
The following graphics demonstrate the detected Well 8 and Well 9 sampling events which are below the MCL, SMCL and reportable detection levels.

**Well 8 Chart**

MTBE Levels at Well 8

- **MCL = 13 ppb**
- **SMCL = 5 ppb  (Aesthetic only)**
- **DLR = 3 ppb**

MTBE (ppb)

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<td>MTBE (ppb)</td>
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</tbody>
</table>
MTBE Levels at Well 9

MCL = 13 ppb

SMCL = 5 ppb (Aesthetic only)

DLR = 3
The following graphics demonstrate the Well 8 and Well 9 actual reportable MTBE compliance results with no MCL and SMCL detections.

Well 8 Reportable Detections

![Reportable MTBE Detections at Well 8](image-url)
Reportable MTBE Detections at Well 9

MTBE (ppb)

MCL = 13

SMCL = 5 ppb (Aesthetic only)

DLR = 3 ppb
MTBE levels detected below the DLR are considered non-detect by the State Water Resource Control Board’s Division of Drinking Water and the Environmental Protection Agency. Non-detect constituents are reported as such to the Division of Drinking Water, and are specifically excluded by regulation from the annual Consumer Confidence Report. At no time has Mesa Water® provided water with reportable levels of MTBE, and the detections are not considered a contaminant issue or health risk.

FINANCIAL IMPACT

None.

ATTACHMENTS

None.
MEMORANDUM

TO: Board of Directors
FROM: Paul E. Shoenberger, P.E., General Manager
DATE: April 9, 2015
SUBJECT: Public Hearing – Ordinance No. 25 – Director’s Compensation and Expense Reimbursement

RECOMMENDATION

a. Conduct public hearing
b. Review and discuss Ordinance No. 25
c. Adopt Ordinance No. 25 – Director’s Compensation and Expense Reimbursement

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice perpetual infrastructure renewal and improvement.
Goal #3: Be financially responsible and transparent.
Goal #4: Increase public awareness about Mesa Water® and about water.
Goal #5: Attract and retain skilled employees.
Goal #6: Provide outstanding customer service.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

At the March 21, 2015 Board of Director’s (Board) Workshop, the Board directed staff to schedule a public hearing and prepare an ordinance increasing the Directors’ fee for an amount up to $250.00, to be effective as of July 1, 2015.

On February 12, 2013, the Board of Directors adopted Ordinance No. 23 – Director’s Compensation and Expense Reimbursement, which redefined a day of service, not a fee increase.

DISCUSSION

The current Directors’ fee of $207 per meeting was approved by the Board on October 28, 2008 and effective January 1, 2009. The Board has reviewed the topic of Director’s compensation in 2010, 2011, 2012, 2013, and 2014, but recommended no change in the fee.

The Board may approve an increase of up to 30 percent. The table below shows incremental 5 percent increases. If the Board approves an increase in 2015, the next available increase could be no sooner than one year later.

<table>
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<tr>
<th>Directors’ Fee</th>
<th>Allowable Percent Increase</th>
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The Consumer Price Index increase since July 2008 is 4.1%.

The Water Code requires a public hearing be held prior to the Board taking action to increase Directors’ fee. Prior to the date of the public hearing, Mesa Water District (Mesa Water®) is required to place a legal advertisement in a local newspaper, announcing the public hearing. If the Board approves the ordinance, a minimum of 60 days must elapse prior to the increase becoming effective.

Staff placed legal advertisements announcing the public hearing in the Daily Pilot on Thursday, March 26, 2015 and April 2, 2015. The same notice was posted on the District’s website and kiosk; and at the City of Costa Mesa City Hall and Adams Street Post Office.

Mesa Water’s Attorney has reviewed the draft ordinance and the following is a brief summary of the recommended changes:

- **Section 1:** The Board may approve to change the fee paid to members of the Board of Directors from $207.00 to up to $250.00 per day of service.
- **Section 2 (a):** Removed last paragraph regarding compensation for joint meetings due to inapplicability.
- **Section 2 (b):** Added a new section called Teleconferencing.
- **Section 2 (c):** Removed the last sentence regarding Directors expense reimbursement due to duplicate language in Section 4 Director Reimbursement(s).
- **Section 3:** Incorporated the last sentence in Section 1 regarding maximum number of meetings/days and Section 2 (f) regarding duplicate compensation into a new section called Limitations.
- **Section 5:** Added a new section called Authorization (Statutory Requirements).

**FINANCIAL IMPACT**

Should the Board approve an increase; staff will include the additional cost in the FY16 budget, as well as the mandatory payroll related Social Security (FICA), Medicare, and Workers’ Compensation costs.

Minimal time was spent for staff to prepare for the public hearing and draft the ordinance; and for the Attorney to review. The cost of the two legal advertisements was approximately $200, and sufficient funds are available in the Public Agency expense budget.

**ATTACHMENTS**

Attachment A: Draft - Ordinance regarding Director’s Compensation and Expense Reimbursement
Attachment B: Final - Ordinance regarding Director’s Compensation and Expense Reimbursement
ORDINANCE NO. 2325

ORDINANCE OF THE
MES A WA TER DISTRICT BOARD OF DIRECTORS
REGARDING DIRECTORS COMPENSATION
AND EXPENSE REIMBURSEMENT
SUPERSE DING OR DINANCE NO. 2223

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

WHEREAS, the California Water Code (Water Code) governs the compensation of Mesa Water Board of Directors (Directors) for each day of service rendered as a Director by request of the Board of Directors, together with any expenses incurred in the performance of his or her duties required or authorized by the Board of Directors of Mesa Water; and

WHEREAS, the Board of Directors has previously adopted Ordinance No. 22-23 regarding compensation for Directors attendance at Board of Directors meetings and days of service at committee meetings, attendance at conferences, seminars, and other water related agencies’ meetings and other activities and the Board of Directors desires to supersede Ordinance No. 22-23 by the provisions hereof; and

WHEREAS, it is the desire of the Board of Directors of Mesa Water to compensate Directors for expenses incurred in the performance of his or her duties required or authorized by the Board of Directors.

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

Section 1: Board of Directors Meetings and Days of Service: The compensation paid to members of the Board of Directors shall be Two Hundred Seven Dollars ($207.00) per day for each day’s attendance at meetings of the Board of Directors, or for each day’s service rendered as a member of the Board of Directors by request of the Board of Directors as further discussed herein. The fee paid to members of the Board of Directors shall be made for no more than one meeting per each day of service, and the maximum number of days for which any Director may receive compensation under this Section, or Section 2 hereof, in any calendar month shall be ten (10).

Section 2: Meetings/Activities that Constitute Days of Service for the Purpose of Section 1: The following meetings and activities constitute a day of service for purposes of Section 1 of this Ordinance:
(a) **Committee and Other Agency Meetings:** Committee meetings for those Directors assigned, or attending, as applicable, shall include the following:

(i). Executive Committee  
(ii). Finance Committee  
(iii). Engineering & Operations Committee  
(iv). Public Information Committee  
(v). Other Public Agency Meetings (including regular, adjourned regular and special meetings of the governing bodies of such public agencies as shall be designated by the Board of Directors from time to time)  
(vi). Other Mesa Water® committees, including, but not limited to, ad hoc committees, as the Board of Directors shall designate by Board action from time to time.

For joint meetings of the Board of Directors and a Committee, if such meeting is a meeting of the Board of Directors, attending Board members shall receive compensation as set forth in Section 1. If the meeting of the Board of Directors is not conducted due to lack of a quorum and only the meeting of the applicable Committee is held, attending Directors shall be compensated as set forth in this Section 2.

(b) **Teleconferencing:** Participation at any public agency meeting that is covered under Section 2 (a) by teleconference, or equivalent means, shall be considered as a day of service for the purpose of this Ordinance.

(c) **Conferences and Seminars:** Attendance at authorized conferences or seminars as assigned and designated by the Board of Directors. In addition to the compensation described in this Section 2 (b), Directors expenses shall be reimbursed pursuant to provisions of the Mesa Water reimbursement policy(ies) as then in effect and as set out in Section 3.

(d) **Meetings with Agencies, Organizations, and/or Representatives Concerning or relating to Water, Governmental or Environmental Matters or Issues:** Meetings by Directors of or with agencies or organizations, and/or representatives of such, in or related to the public water industry or governmental or environmental matters or issues to discuss, review, and/or receive information relating to Mesa Water®, Mesa Water’s business or operations, governmental or environmental matters or issues and/or water industry standards, operations, policy matters and/or fiscal issues.
(e) **Other Activities Approved by the Board:** Activities by members of the Board other than as described in Sections 2 (a), (b), or (c), or (d) above, as authorized by the Board of Directors in advance of such activity(ies) shall be considered a day of service for purposes of this Ordinance.

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No Duplicate Compensation: Notwithstanding the foregoing provisions of Section 1 or 2, any Director that receives compensation from any other entity for attendance of any meeting(s), conference(s), seminar(s) or other activity(ies) set out in Section 1 or 2 shall not be compensated by Mesa Water.

**Section 3:** Limitations:

(a) **Maximum Number of Meetings/Days:** The fee paid to members of the Board of Directors shall be made for no more than one meeting per each day of service, and the maximum number of days for which any Director may receive compensation under Sections 1 or 2 hereof, in any calendar month shall be ten (10).

(b) **No Duplicate Compensation:** Notwithstanding the foregoing provisions of Sections 1 or 2, any Director that receives compensation from any other entity for attendance of any meeting(s), conference(s), seminar(s) or other activity(ies) set out in Sections 1 or 2 shall not be compensated by Mesa Water®.

**Section 4:** Director Reimbursement(s): In addition to the compensation described in Section 1 as set forth in Section 2, and subject to applicable State law, Directors expenses shall be reimbursed if they are reasonable and necessary to conduct Mesa Water’s business pursuant to provisions of the Mesa Water® reimbursement policy(ies) adopted by the Board of Directors, as then in effect.

**Section 5:** Authorization (Statutory Requirements): This Ordinance is adopted pursuant to Water Code Sections 30523 and 20203. To the extent required by law, this Ordinance shall satisfy the requirements of Water Code Sections 20201 and 20202 and California Government Code Section 53232.1.

**Section 46:** Effective Date: This Ordinance No. 23–25 shall take effect from and after February 12, 2013July 1, 2015 (Effective Date).

**Section 57:** Superseding Prior Ordinance: This Ordinance No. 23–25 shall supersede Ordinance No. 22–23 upon the effective date hereof.
PASSED AND APPROVED at the regular meeting of the Board of Directors held on the 12th-9th day of February, 2013April 2015, and adopted by the following roll call vote:

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

ATTEST: 
James R. FislerShawn Dewane
President, Board of Directors

Coleen L. Monteleone
District Secretary
ORDINANCE NO. 25

ORDINANCE OF THE
MESA WATER DISTRICT BOARD OF DIRECTORS
REGARDING DIRECTORS COMPENSATION
AND EXPENSE REIMBURSEMENT
SUPERSEDING ORDINANCE NO. 23

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

WHEREAS, the California Water Code (Water Code) governs compensation of Mesa Water® Board of Directors (Directors) for each day of service rendered as a Director by request of the Board of Directors, together with any expenses incurred in the performance of his or her duties required or authorized by the Board of Directors; and

WHEREAS, the Board of Directors has previously adopted Ordinance No. 23 regarding compensation for Directors attendance at Board of Directors meetings and days of service at committee meetings, attendance at conferences, seminars, and other water related agencies' meetings and other activities and the Board of Directors desires to supersede Ordinance No. 23 by the provisions hereof; and

WHEREAS, it is the desire of the Board of Directors to compensate Directors for expenses incurred in the performance of his or her duties required or authorized by the Board of Directors.

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

Section 1: Board of Directors Meetings and Days of Service: The compensation paid to members of the Board of Directors shall be Dollars ($00) per day for each day's attendance at meetings of the Board of Directors, or for each day's service rendered as a member of the Board of Directors by request of the Board of Directors as further discussed herein.

Section 2: Meetings/Activities that Constitute Days of Service for the Purpose of Section 1: The following meetings and activities constitute a day of service for purposes of Section 1 of this Ordinance:

(a) Committee and Other Agency Meetings: Committee meetings for those Directors assigned, or attending, as applicable, shall include the following:
Executive Committee
Finance Committee
Engineering & Operations Committee
Public Information Committee
Other Public Agency Meetings (including regular, adjourned regular and special meetings of the governing bodies of such public agencies as shall be designated by the Board of Directors from time to time)
Other Mesa Water® committees, including, but not limited to, ad hoc committees, as the Board of Directors shall designate by Board action from time to time.

(b) Teleconferencing: Participation at any public agency meeting that is covered under Section 2 (a) by teleconference, or equivalent means, shall be considered as a day of service for the purpose of this Ordinance.

(c) Conferences and Seminars: Attendance at authorized conferences or seminars as assigned and designated by the Board of Directors.

(d) Meetings with Agencies, Organizations, and/or Representatives Concerning or relating to Water, Governmental or Environmental Matters or Issues: Meetings by Directors of or with agencies or organizations, and/or representatives of such, in or related to the public water industry or governmental or environmental matters or issues to discuss, review, and/or receive information relating to Mesa Water®, Mesa Water’s business or operations, governmental or environmental matters or issues and/or water industry standards, operations, policy matters and/or fiscal issues.

(e) Other Activities Approved by the Board: Activities by members of the Board other than as described in Sections 2 (a), (b), (c), or (d) above, as authorized by the Board of Directors in advance of such activity(ies) shall be considered a day of service for purposes of this Ordinance.

Section 3: Limitations:

(a) Maximum Number of Meetings/Days: The fee paid to members of the Board of Directors shall be made for no more than one meeting per each day of service, and the maximum number of days for which any Director may receive compensation under Sections 1 or 2 hereof, in any calendar month shall be ten (10).

(b) No Duplicate Compensation: Notwithstanding the foregoing provisions of Sections 1 or 2, any Director that receives
compensation from any other entity for attendance of any meeting(s), conference(s), seminar(s) or other activity(ies) set out in Sections 1 or 2 shall not be compensated by Mesa Water®.

Section 4: Director Reimbursement(s): In addition to the compensation described in Section 1 and subject to applicable State law, Directors expenses shall be reimbursed if they are reasonable and necessary to conduct Mesa Water’s business pursuant to provisions of the Mesa Water® reimbursement policy(ies) adopted by the Board of Directors, as then in effect.

Section 5: Authorization (Statutory Requirements): This Ordinance is adopted pursuant to Water Code Sections 30523 and 20203. To the extent required by law, this Ordinance shall satisfy the requirements of Water Code Sections 20201 and 20202 and California Government Code Section 53232.1.

Section 6: Effective Date: This Ordinance No. 25 shall take effect from and after July 1, 2015 (Effective Date).

Section 7: Superseding Prior Ordinance: This Ordinance No. 25 shall supersede Ordinance No. 23 upon the Effective Date hereof.

PASSED AND APPROVED at the regular meeting of the Board of Directors held on the 9th day of April 2015, and adopted by the following roll call vote:

AYES: DIRECTORS:
NOES: DIRECTORS:
ABSENT: DIRECTORS:
ABSTAIN: DIRECTORS:

ATTEST: Shawn Dewane
President, Board of Directors

Coleen L. Monteleone
District Secretary
MEMORANDUM

TO: Board of Directors
FROM: Phil Lauri, P.E., Engineering and Operations Manager
DATE: April 9, 2015
SUBJECT: OC-44 Pipeline Rehabilitation Initial Study/Mitigated Negative Declaration

RECOMMENDATION
a. Conduct public hearing
b. Review and discuss Mitigated Negative Declaration
c. Adopt Mitigated Negative Declaration

STRATEGIC PLAN

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

PRIOR BOARD ACTION/DISCUSSION

On February 12, 2013, the Board approved awarding the contract to RBF Consulting for the OC-44 Pipeline Rehabilitation/Replacement Evaluation & Cathodic Protection.

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

BACKGROUND

The proposed project is located within the eastern portion of the City of Newport Beach, within Orange County, California. The project site is generally situated to the west of and along State Route 73 (SR-73) at San Diego Creek. The proposed improvements are generally located within Bonita Creek and San Diego Creek, between Bayview Way and University Drive.

The proposed project will rehabilitate approximately 1,700 linear feet of the OC-44 Pipeline by inserting a new pipeline inside the existing pipeline. Due to the biological and hydrologic sensitivity associated with San Diego Creek and Bonita Creek, it is impractical to utilize conventional open trench excavations (disrupting the surface conditions) to replace the existing OC-44 Pipeline. Thus, the project proposes a trenchless rehabilitation technique, termed, slip lining. Through this process, a new pipe is installed inside the existing deteriorating pipe. Rather than conducting open trench improvements in the project area, the project proposes to slip line the existing 42-inch pipeline with a new 30-inch Ductile Iron Pipe (DIP). In order to accommodate these improvements, a pipe jacking operation will be conducted. As part of the proposed project, three access pits will be required. Implementation of the proposed project will also require temporary access roads for personnel and equipment to access the proposed pit locations. Upon completion of construction, the project site will be re-contoured to pre-construction grades and then be re-vegetated with a native plant mix.

DISCUSSION

As part of the design scope of work, Mesa Water’s Design Consultant prepared an Initial Study/Mitigated Negative Declaration (IS/MND) for the OC-44 project in accordance with the
California Environmental Quality Act (CEQA). The IS/MND analyzed a range of topical environmental issue areas in accordance with State law. Technical studies prepared to support the analysis included air quality, greenhouse gases, noise modeling, a biological resources report, and a cultural resources assessment. Based on the impact analysis, a comparison to established thresholds of significance, and incorporation of numerous mitigation measures, it was determined that all impacts of the proposed project can be mitigated to a level below significant. Mitigation measures identified within the IS/MND pertain to air quality, biological resources, cultural resources, and noise. These impacts will be addressed by providing the dust control during construction, conducting the preconstruction plant survey including special status plant assessments, and bird and wildlife surveys, taking precautionary measures in the event resources are unearthed during construction and complying with noise reduction requirements during construction.

The IS/MND was distributed to affected agencies, stakeholders, and the public for a State-mandated 30-day public review period. This review period began on January 29, 2015 and concluded on February 27, 2015. A total of three comment letters were received from the following agencies: Caltrans, the Metropolitan Water District of Southern California, and the City of Irvine. The Caltrans comment letter focuses on Caltrans encroachment permit requirements and data that will be required to support the encroachment permit application in the future. The MWD comment letter notes the locations of several existing MWD facilities in the project area, and that these facilities must be protected in place during construction of the OC-44 project. The City of Irvine notes that they do not have comments regarding the project at this time. None of these comment letters raised significant concerns that would require revisions to the analysis, reclassification of the environmental assessment findings (i.e., Mitigated Negative Declaration, etc.) or public recirculation of the IS/MND.

Mesa Water’s Design Consultant has prepared written responses to each of the three comment letters. These Responses to Comments were sent directly to each commenting agency for their review. In accordance with CEQA requirements, the IS/MND, Responses to Comments, and Mitigation Monitoring and Reporting Program are being brought to the Board for consideration of adoption of the Mitigated Negative Declaration as part of a public hearing (see Attachment A). An overview of the draft IS/MND was presented at the Engineering and Operations Committee Meeting on March 17, 2015.

FINANCIAL IMPACT

There is no financial impact.

ATTACHMENTS

Attachment A: Final Initial Study/Mitigated Negative Declaration
Responses to Comments

and

Mitigation Monitoring and Reporting Plan

for the

OC-44 Pipeline Rehabilitation Project

SCH #: 2015011044

LEAD AGENCY:

Mesa Water District
1965 Placentia Avenue
Costa Mesa, California 92627
Contact: Phil Lauri, P.E.
(949) 574-1000

CONSULTANT:

RBF Consulting, a Michael Baker International Company
14725 Alton Parkway
Irvine, CA 92618
Contact: Alan Ashimine
Environmental Project Manager
(949) 855-5710

March 9, 2015

JN 134205
This document is designed for double-sided printing to conserve natural resources.
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<td>3.0 MITIGATION MONITORING AND REPORTING PLAN</td>
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</tbody>
</table>
1.0 INTRODUCTION

The proposed OC-44 Pipeline Rehabilitation Project (herein referenced as the “project”) would involve rehabilitation of Mesa Water District’s (Mesa Water) existing OC-44 Pipeline within Bonita Creek and San Diego Creek, in the City of Newport Beach.

In accordance with the California Environmental Quality Act (CEQA) Guidelines and Mesa Water's Local Guidelines, an Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared for the proposed OC-44 Pipeline Rehabilitation Project.

The IS/MND was made available for public review and comment pursuant to CEQA Guidelines Section 15070. The public review commenced on January 29, 2015 and expired on February 27, 2015. The IS/MND and supporting attachments were available for review by the general public at the Mesa Water District located at 1965 Placentia Avenue, Costa Mesa, California 92627.
2.0 RESPONSE TO COMMENTS

During the public review period, comments were received on the IS/MND from certain interested public agencies and private parties. The following is a list of the persons, firms, or agencies that submitted comments on the IS/MND during the public review period:

<table>
<thead>
<tr>
<th>Comment Letter No.</th>
<th>Person, Firm, or Agency</th>
<th>Letter Dated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scott Morgan, Director, State Clearinghouse, State of California Office of Planning and Research</td>
<td>March 2, 2015</td>
</tr>
<tr>
<td>2</td>
<td>Andrew Douglass, Assistant Planner, Community Development, City of Irvine</td>
<td>February 24, 2015</td>
</tr>
<tr>
<td>3</td>
<td>Deirdre West, Manager, Environmental Planning Team, The Metropolitan Water District of Southern California</td>
<td>February 25, 2015</td>
</tr>
<tr>
<td>4</td>
<td>Maureen El Harake, Branch Chief, Regional-Community-Transit Planning, District 12, California Department of Transportation</td>
<td>February 27, 2015</td>
</tr>
</tbody>
</table>

Although the CEQA Guidelines do not require a Lead Agency to prepare written responses to comments received (see CEQA Guidelines Section 15088), Mesa Water has elected to prepare the following written responses with the intent of conducting a comprehensive and meaningful evaluation of the proposed project.

The number designations in the responses are correlated to the bracketed and identified portions of each comment letter.
March 2, 2015

Phil Lauri  
Mesa Consolidated Water District  
1965 Placentia Avenue  
Costa Mesa, CA 92627  

Subject: OC-44 Pipeline Rehabilitation Project  
SCH#: 2015011044  

Dear Phil Lauri:  

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on February 27, 2015, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.  

Please note that Section 21104(c) of the California Public Resources Code states that:  

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.  

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.  

Sincerely,  

Scott Morgan  
Director, State Clearinghouse  

Enclosures  
cc: Resources Agency
**SCH#** 2015011044  
**Project Title** OC-44 Pipeline Rehabilitation Project  
**Lead Agency** Mesa Consolidated Water District  

**Type** MND  Mitigated Negative Declaration  
**Description** The proposed project would rehabilitate approximately 1,700 linear feet of the OC-44 Pipeline by inserting a new pipeline inside the existing pipeline. Due to the biological and hydrologic sensitivity associated with San Diego Creek and Bonita Creek, it is impractical to utilize conventional open trench excavations (disrupting the surface conditions) to replace the existing OC-44 Pipeline. Thus, the project proposes a trenchless rehabilitation technique, termed, sliplining. Through this process, a new pipe is installed inside the existing deteriorated pipe. Rather than conducting open trench improvements in the project area, the project proposes to slipline the existing 42-inch pipeline with a new 30-inch Ductile Iron Pipe. In order to accommodate these improvements, a pipe jacking operation would be conducted. As part of the proposed project, three access pits would be required. Implementation of the proposed project would also require temporary access roads for personnel and equipment to access the proposed pit locations. Upon completion of construction, the project site would be re-contoured to pre-construction grades and then would be re-vegetated with a native paint mix. The project site is not listed on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

**Lead Agency Contact**  
**Name** Phil Lauri  
**Agency** Mesa Consolidated Water District  
**Phone** 949 574 1000  
**Address** 1965 Placentia Avenue  
**City** Costa Mesa  
**State** CA  
**Zip** 92627  

**Project Location**  
**County** Orange  
**City** Newport Beach  
**Region**  
**Lat / Long** 33° 39' 1.78" N / 117° 51' 47.79" W  
**Cross Streets** University Drive and La Vida  
**Parcel No.** 442-071-15, -071-21, -061-05, -061-06, -061-12, -061-16  
**Township** 6S  
**Range** 9W  
**Section** 57  
**Base** SSB&M  

**Proximity to:**  
**Highways** SR 73  
**Airports** John Wayne Airport  
**Railways**  
**Waterways** San Diego Creek, Bonita Creek  
**Schools** UC, Irvine  
**Land Use** Various  

**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

Note: Blanks in data fields result from insufficient information provided by lead agency.
Document Details Report
State Clearinghouse Data Base

Reviewing Agencies: Resources Agency; California Coastal Commission; Department of Conservation; Department of Fish and Wildlife, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services, California; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 12; Air Resources Board; Regional Water Quality Control Board, Region 8; Native American Heritage Commission; State Lands Commission

Date Received 01/29/2015  Start of Review 01/29/2015  End of Review 02/27/2015

Note: Blanks in data fields result from insufficient information provided by lead agency.
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Response No. 1

Mr. Scott Morgan, Director
State of California Office of Planning and Research, State Clearinghouse
March 2, 2015

1-1 This comment indicates that the State Clearinghouse submitted the IS/MND to selected state agencies for review, and that the comment period for the Draft IS/MND concluded on February 27, 2015 for State agencies. The comment indicates that the lead agency complied with the review requirements for draft environmental documents pursuant to CEQA. As such, the comment does not provide specific comments regarding information presented in the IS/MND and no further response is necessary.
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February 24, 2015

Mr. Phil Lauri, P.E.
District Engineer
Mesa Water District
1965 Placentia Avenue
Costa Mesa, CA 92627

Subject: Notice of Availability/Intent to Adopt Mitigated Negative Declaration for the OC-44 Pipeline Rehabilitation Project

Dear Mr. Lauri:

City of Irvine staff has received and reviewed the information provided for the referenced project and has no comments at this time.

Thank you for the opportunity to review and comment on the proposed project. Staff would appreciate the opportunity to review any further information regarding this project as the planning process proceeds.

If you have any questions, I can be reached at 949-724-6387, or by email at adouglass@cityofirvine.org.

Sincerely,

Andrew Douglass
Assistant Planner

cc: Bill Jacobs, Principal Planner (via email)
    Mark Carroll, City Engineer (via email)
    Thomas Perez, Senior Civil Engineer (via email)
    Tran Tran, Associate Engineer (via email)
Response No. 2

Mr. Andrew Douglass, Assistant Planner
Community Development, City of Irvine
February 24, 2015

2-1 The City of Irvine has no comments at this time. However, Mesa Water has noted that Mr. Douglass has requested any future public correspondence pertaining to the project as the planning process proceeds.
This page intentionally left blank.
February 25, 2015

Mr. Phil Lauri, P.E.
Mesa Water District
1965 Placentia Avenue
Costa Mesa, California 92627

Dear Mr. Lauri:

OC-44 Pipeline Rehabilitation Project Mitigated Negative Declaration

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the Mitigated Negative Declaration (MND) for the OC-44 Pipeline Rehabilitation Project (Project). Mesa Water District is acting as the Lead Agency under the California Environmental Quality Act (CEQA) for this project. The proposed Project will rehabilitate approximately 1,700 linear feet of the OC-44 Pipeline by inserting a new pipeline inside the existing pipeline. The Project includes the excavation of three access pits to accommodate a pipe jacking operation in order to slipline the existing 42-inch pipeline with a new 30-inch Ductile Iron Pipe (DIP). The Project also includes the construction of temporary access roads for personnel to access the proposed pit locations. The Project site is located within the eastern portion of the City of Newport Beach, within Orange County, California. The Project site is situated to the west of and along State Route 73 at San Diego Creek with Project improvements generally located within Bonita Creek and San Diego Creek, between Bayview Way and University Drive.

Metropolitan owns and operates the 36-inch Orange County Feeder pipeline and related facilities within a 15-foot-wide permanent easement right-of-way within the proposed Project area. This pipeline and related facilities are operated and maintained by Metropolitan for the purpose of water supply and your proposed construction project must protect these facilities in place. Prior to the start of construction please have your contractor submit a work plan which includes any work proposed within or in the vicinity of Metropolitan’s right-of-way. This plan should include shoring plans, and the locations of any stockpile of materials and/or equipment which will need to be approved by Metropolitan in writing. In order to avoid potential conflicts with Metropolitan’s right-of-way, we require that any design plans for any activity in the area of Metropolitan’s pipeline be submitted for our review and written approval. The applicant may obtain detailed prints of drawings of Metropolitan’s pipelines and rights-of-way by calling Metropolitan’s Substructures Information Line at (213) 217-6564. Please note that all submitted designs of plans must clearly identify Metropolitan’s facilities and right-of-way. Metropolitan must approve all improvements or proposed uses that are within or affect our rights-of-way.
In addition, Metropolitan has two projects which are in close proximity to the Project location: Orange County Feeder Relining Project for which an MND has been prepared, SCH#2014081017) and the Orange County Feeder Blow-off Structure Rehabilitation Project (for which a draft Environmental Impact report has been prepared, SCH#2013051022). Both projects will require the temporary shutdown of the Orange County Feeder pipeline and Metropolitan will need to coordinate these construction projects with your project to minimize the disruption to local water supplies and contractor conflicts. Please contact Kieran Callanan of our Substructures team at (213) 217-7474 to coordinate the proposed construction projects.

We appreciate the opportunity to provide input to your planning process and look forward to working with you in the future. If we can be of further assistance, please contact Ms. Malinda Stalvey at (213) 217-5545.

Very truly yours,

Deirdre West
Manager, Environmental Planning Team

MKS/mks
(EPT Project No. 20150208EXT)
Response No. 3

Deirdre West, Manager, Environmental Planning Team
The Metropolitan Water District of Southern California
February 25, 2015

3-1 The Commenter notes that The Metropolitan Water District of Southern California (MWD) owns and operates the 36-inch Orange County Feeder pipeline and related facilities within a 15-foot-wide permanent easement right-of-way within the vicinity of the proposed project. The MWD has requested that these facilities be protected-in-place during project construction. The MWD has requested a work plan prior to the start of construction. The MWD has also requested design plans for any activity in the area of the MWD’s pipeline be submitted for review and written approval by MWD. Further, the MWD requests that coordination of construction timing should be communicated between the proposed project and two other MWD projects involving the Orange County Feeder in order to minimize disruption to local water supplies and contractor conflicts. Mesa Water acknowledges these concerns related to MWD facilities and easements and will coordinate with the MWD during the plan review and approval process to ensure that utility conflicts do not occur. The Commenter does not provide specific comments regarding the environmental analysis presented in the IS/MND and no further response is necessary.
February 27, 2015

Mr. Phil Lauri
Mesa Water District
1965 Placentia Avenue
Costa Mesa, California 92627

Dear Mr. Lauri:

Thank you for the opportunity to review and comment on the Initial Study and Draft Mitigated Negative Declaration (IS/MND) for the OC-44 Pipeline Rehabilitation Project. The proposed project would rehabilitate approximately 1,700 linear feet of the OC-44 Pipeline by inserting a new pipeline inside the existing pipeline. Due to the biological and hydrologic sensitivity associated with San Diego Creek and Bonita Creek, it is impractical to utilize conventional open trench excavations (disrupting the surface conditions) to replace the existing OC-44 Pipeline. Thus, the project proposes a trenchless rehabilitation technique, termed, sliplining. The proposed improvements are generally located within Bonita Creek and San Diego Creek, between Bayview Way and University Drive in the City of Newport Beach. The nearest State route to the project sites are SR-261.

Caltrans District 12 is a commenting agency on this project and has the following comments:

1. In the event of any activity in Caltrans right of way an encroachment permit will be required. This includes storage of equipment, construction staging, storm drain construction, retaining wall construction, etc. For specific details for Encroachment Permits procedure, please refer to the Caltrans Encroachment Permits Manual. The latest edition of the Manual is available on the web site:
   http://www.dot.ca.gov/hq/traffops/developserv/permits/

2. A Traffic Management Plan (TMP) for construction vehicles should be submitted to Caltrans in order to minimize the impacts to State highway facilities, particularly Ortega Highway. Coordination of this project with other construction activities on SR-73 may be needed. Any hauling of materials should not occur during A.M and P.M peak periods of travel on State facilities during demolition and/or construction of the proposed project. All vehicle loads should be covered so that materials do not blow over or onto the Department’s Right-of-Way.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability."
3. Should the project encroach onto Caltrans’ right of way the following information should be submitted to Caltrans for review and comments:

a) **Water Quality**: All work within the State Right of Way must conform to Caltrans Standard Plans and Standard Specifications for Water Pollution Control including preparation of a Water Pollution Control Program (WPCP) or Storm Water Pollution Prevention Plan (SWPPP) as required. The applicant must provide Encroachments with a copy of the WPCP or SWPPP including Best Management Practices (BMPs) to be implemented for construction activities impacting Caltrans Right of Way prepared in accordance with the NPDES Statewide Storm Water Permit for General Construction Activities.

b) **Cultural Resources**: Provide a copy of all cultural resource assessment documents prepared containing the following minimal information:

- A complete project description, including the vertical and horizontal extents of excavation
- The route and postmile of the project site
- A complete set of project plans

c) **Biological Resources**: Submit a copy of all biological studies, surveys, or technical reports prepared by a qualified biologist that provides details on the existing vegetation and wildlife at the project site and any vegetation that is to be removed during project activities. The documents should include:

- A clear description of project activities and the project site,
- Completed environmental significance checklist (not just yes and no answers, but a description should be given as to the reason for the response),
- Staging/storage areas noted on project plans,
- Proposed time of year for work and duration of activities (with information available),
- Any proposed mitigation (if applicable to the project),
- And, a record of any prior resource agency correspondence (if applicable to the project).

d) If an environmental document (CE, EIR/EIS, ND, etc.) has been completed for the project, copy of the final, approved document must be submitted with the encroachment permit application.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability"
Mr. Phil Lauri  
February. 27, 2015  
Page 3.

Please continue to keep us informed of this project and any future developments that could potentially impact State transportation facilities. If you have any questions or need to contact us, please do not hesitate to call Maryam Molavi at (949) 724-2267.

Sincerely,

[Signature]

MAUREEN EL HARAKE  
Branch Chief, Regional-Community-Transit Planning  
District 12

C: Scott Morgan, Office of Planning and Research

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability."
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Response No. 4

Ms. Maureen El Harake, Branch Chief, Regional-Community-Transit Planning, District 12
California Department of Transportation
February 27, 2015

4-1 Page 2-6, Section 2.6, Agreements, Permits, and Approvals, of the Draft IS/MND identifies that the proposed project would require an Encroachment Permit with the California Department of Transportation (Caltrans), particularly in the southern portion of the project site, in the vicinity of Pit 3. All proposed work that will encroach onto Caltrans right-of-way will be required to comply with Caltrans procedures for an Encroachment Permit, including submittal of appropriate documentation. As such, the Commenter does not provide specific comments regarding information presented in the IS/MND and no further response is necessary.

Construction-related trucks are not anticipated to use Ortega Highway in order to access the project site, due to the distance from the project. However, trucks may access State Route 73 (SR-73) during construction. The proposed project would not require significant amounts of earthwork due to the proposed trenchless pipe line rehabilitation technique called sliplining. Further, as required by the recommended Mitigation Measure AQ-1 and SCAQMD Rule 402 pertaining to dust suppression techniques to prevent fugitive dust, the proposed project would be required to ensure that all material transported off-site be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site.

4-2 Mesa Water will provide Caltrans with a copy of the Final IS/MND along with the Encroachment Permit Application, as required. Ms. Harake, District 12 Branch Chief, has requested any future public correspondence pertaining to the project. As such, the Commenter does not provide specific comments regarding information presented in the IS/MND and no further response is necessary.
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3.0 MITIGATION MONITORING AND REPORTING PLAN

The CEQA requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring plan. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring plan must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, the attached MITIGATION MONITORING AND REPORTING PLAN has been prepared for the OC-44 Pipeline Rehabilitation Project. This Mitigation Monitoring and Reporting Plan is intended to provide verification that all applicable Conditions of Approval relative to significant environmental impacts are monitored and reported. Monitoring will include 1) verification that each mitigation measure has been implemented; 2) recordation of the actions taken to implement each mitigation; and 3) retention of records in the OC-44 Pipeline Rehabilitation Project file.

This Mitigation Monitoring and Reporting Plan delineates responsibilities for monitoring the project, but also allows Mesa Water flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented.

Reporting consists of establishing a record that a mitigation measure is being implemented, and generally involves the following steps:

- Mesa Water distributes reporting forms to the appropriate entities for verification of compliance.
- Departments/agencies with reporting responsibilities will review the Initial Study, which provides general background information on the reasons for including specified mitigation measures.
- Problems or exceptions to compliance will be addressed to Mesa Water as appropriate.
- Periodic meetings may be held during project implementation to report on compliance of mitigation measures.
- Responsible parties provide Mesa Water with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.
- Mesa Water prepares a reporting form periodically during the construction phase and an annual report summarizing all project mitigation monitoring efforts.
- Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.
Minor changes to the Mitigation Monitoring and Reporting Plan, if required, would be made in accordance with CEQA and would be permitted after further review and approval by Mesa Water. Such changes could include reassignment of monitoring and reporting responsibilities, plan redesign to make any appropriate improvements, and/or modification, substitution, or deletion of mitigation measures subject to conditions described in CEQA Guidelines Section 15162. No change will be permitted unless the Mitigation Monitoring and Reporting Plan continues to satisfy the requirements of Public Resources Code Section 21081.6.
### 4.3 AIR QUALITY

<table>
<thead>
<tr>
<th>MITIGATION MEASURE</th>
<th>RESPONSIBLE IMPLEMENTATION PARTY</th>
<th>MONITORING PERIOD</th>
<th>ENFORCEMENT AGENCY</th>
<th>MONITORING AGENCY</th>
<th>DOCUMENTATION OF COMPLIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ-1</td>
<td>Prior to any ground disturbance for the project, the Mesa Water District Engineer shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD’s Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:</td>
<td>Construction Contractor/ Mesa Water District</td>
<td>During Review of Grading Plan, Building Plans, and Specifications; During Construction</td>
<td>Mesa Water District</td>
<td>Mesa Water District</td>
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<tr>
<td></td>
<td>All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust;</td>
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<td>Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;</td>
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<td>All grading and excavation operations shall be suspended when</td>
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### MITIGATION MEASURE

<table>
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<tr>
<th>RESPONSIBLE IMPLEMENTATION PARTY</th>
<th>MONITORING PERIOD</th>
<th>ENFORCEMENT AGENCY</th>
<th>MONITORING AGENCY</th>
<th>DOCUMENTATION OF COMPLIANCE</th>
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<tbody>
<tr>
<td>wind speeds exceed 25 miles per hour;</td>
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<td>Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;</td>
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<tr>
<td>On-site vehicle speed shall be limited to 15 miles per hour;</td>
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<td>Visible dust beyond the project limits which emanates from the project shall be prevented to the maximum extent feasible;</td>
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<tr>
<td>All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site; and</td>
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<tr>
<td>Reroute construction trucks away from congested streets or sensitive receptor areas.</td>
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4.4 BIOLOGICAL RESOURCES

**BIO-1**  
Prior to site disturbance activities, a biological monitor shall be retained to conduct pre-construction surveys and shall be on-site daily during vegetation removal activities. The biological monitor shall conduct a pre-construction 100 percent clearance survey within the proposed disturbance limits immediately.
prior to the commencement of construction activity. If non-protected animal species are detected, the biological monitor shall flush or relocate them to areas outside of the construction zone. If special status or listed species are found within the construction zone, a biologist with suitable permits (i.e. U.S. Fish and Wildlife Service [USFWS] recovery permit, California Department of Fish and Wildlife [CDFW] Scientific Collecting Permit, and/or CDFW Memorandum of Understanding) shall be retained to relocate the individual, once approval is received from the appropriate regulatory agencies.
<table>
<thead>
<tr>
<th>MITIGATION MEASURE</th>
<th>RESPONSIBLE IMPLEMENTATION PARTY</th>
<th>MONITORING PERIOD</th>
<th>ENFORCEMENT AGENCY</th>
<th>MONITORING AGENCY</th>
<th>DOCUMENTATION OF COMPLIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-2</td>
<td>Construction Contractor/ Mesa Water District</td>
<td>Prior to Site Disturbance</td>
<td>Mesa Water District</td>
<td>Mesa Water District/ Qualified Biologist</td>
<td>(Title of Monitoring Report) (Signature/Date of Monitoring Agency)</td>
</tr>
</tbody>
</table>

Pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code, the Mesa Water District shall consider conducting all site disturbance/vegetation removal activities (such as removal of any trees, shrubs, or any other potential nesting habitat) outside the avian nesting season. The nesting season generally extends from early February through August, but can vary slightly from year to year based upon seasonal weather conditions. If ground disturbance/vegetation removal cannot occur outside of the nesting season, a pre-construction clearance survey for nesting birds shall be conducted within three days of the start of any ground disturbing activities to ensure that no nesting birds are disturbed during construction. Although the survey focuses on all bird species, the biologist conducting the survey shall particularly note any detections of least Bell’s vireo, southwestern willow flycatcher, or white-tailed kite in or near the project site, as well as any nesting or otherwise defensive behavior. The biologist conducting the clearance survey shall document a negative survey with a brief letter report indicating that no impacts to active bird nests would occur during site disturbance activities.
If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a 300-foot buffer around the active nest. For raptors and listed species, this buffer is expanded to 500 feet. A biological monitor shall be retained and be present during site disturbance activities in order to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, normal construction activities can occur.

Pursuant to California Fish and Game Code Section 3503, it is unlawful to destroy any bird’s nest or any bird’s eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks and owls) are protected under California Fish and Game Code Section 3503.5 which makes it unlawful to take, possess, or destroy their nest or eggs. Consultation with California Department of Fish and Wildlife (CDFW) shall be conducted prior to the removal of any raptor nest on the project site, if found.
<table>
<thead>
<tr>
<th>MITIGATION MEASURE</th>
<th>RESPONSIBLE IMPLEMENTATION PARTY</th>
<th>MONITORING PERIOD</th>
<th>ENFORCEMENT AGENCY</th>
<th>MONITORING AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-3</td>
<td>Construction Contractor/ Mesa Water District</td>
<td>Prior to Site Disturbance</td>
<td>Mesa Water District</td>
<td>Mesa Water District/ Qualified Biologist</td>
</tr>
</tbody>
</table>

A qualified biologist shall be retained to conduct a special status plant survey focusing on the southern tarplant and mud nama in the project area and within a 50-foot buffer around the project area. The plant survey shall be conducted in accordance with U.S. Fish and Wildlife Service’s (USFWS) Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 2000), the California Department of Fish and Wildlife’s (CDFW) Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2009), and the California Native Plant Society’s (CNPS) Botanical Survey Guidelines of the California Native Plant Society (CNPS 2001).

If a sensitive plant species is detected, its location shall be recorded with global positioning system (GPS) device. Should the number of individuals in the population be distributed across an area that exceeds 10 square meters, a polygon shall be recorded with the GPS device in order to document the extent of the population. The GPS coordinates shall be used to create a map of the project area showing the locations of the identified sensitive plant(s). California Natural Diversity Database (CNDDB)
forms shall be prepared and submitted to the CDFW within 5 days of identification, if the southern tarplant, mud nama, or any other sensitive plants are found during the survey.

A minimum of two surveys shall be conducted during the blooming season to capture the appropriate phenotypic stage for proper identification of the two plant species or as otherwise directed by the CDFW. A report shall be prepared and submitted to the CDFW within 10 days of the survey completion for review and comment to the Mesa Water District and submittal and approval to the CDFW.

BIO-4 Prior to site disturbance activities, a qualified biologist shall confirm whether or not the proposed site disturbance areas disturb least Bell's vireo habitat. Should habitat be disturbed as a result of the proposed project, the Applicant, or his/her designee, shall develop a mitigation plan in coordination with the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the reserve management corporation. The mitigation plan shall include feasible design modifications, habitat restoration and enhancement, and monitoring and adaptive management of habitat, consistent with Chapter 5 of the Natural Community Conservation Plan (NCCP).

<table>
<thead>
<tr>
<th>MITIGATION MEASURE</th>
<th>RESPONSIBLE IMPLEMENTATION PARTY</th>
<th>MONITORING PERIOD</th>
<th>ENFORCEMENT AGENCY</th>
<th>MONITORING AGENCY</th>
<th>DOCUMENTATION OF COMPLIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Construction Contractor/ Mesa Water District</td>
<td>Prior to Site Disturbance</td>
<td>Mesa Water District</td>
<td>Mesa Water District/ Qualified Biologist</td>
<td>(Title of Monitoring Report)</td>
</tr>
</tbody>
</table>
Upon completion, the mitigation plan shall then be submitted to and approved by USFWS prior to vegetation removal/site disturbance activities.

<table>
<thead>
<tr>
<th>MITIGATION MEASURE</th>
<th>RESPONSIBLE IMPLEMENTATION PARTY</th>
<th>MONITORING PERIOD</th>
<th>ENFORCEMENT AGENCY</th>
<th>MONITORING AGENCY</th>
<th>DOCUMENTATION OF COMPLIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5 CULTURAL RESOURCES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUL-1</td>
<td>If evidence of subsurface archaeological resources is found during construction, excavation and other construction activity within 50 feet of that area shall cease and the construction contractor shall contact the Mesa Water District Engineer. With direction from the District Engineer, an archaeologist certified by the County of Orange shall be retained to evaluate the discovery prior to resuming grading in the immediate vicinity of the find. If warranted, the archaeologist shall collect the resource, and prepare a technical report describing the results of the investigation. The test-level report shall evaluate the site including discussion of significance (depth, nature, condition, and extent of the resources), final mitigation recommendations, and cost estimates.</td>
<td>Construction Contractor/ Mesa Water District</td>
<td>During Construction</td>
<td>Mesa Water District</td>
<td>Mesa Water District/ Qualified Archaeologist</td>
</tr>
<tr>
<td>CUL-2</td>
<td>If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity within 50 feet of that area shall cease and the construction contractor shall contact the Mesa Water District Engineer. With direction from the District Engineer, a</td>
<td>Construction Contractor/ Mesa Water District</td>
<td>During Construction</td>
<td>Mesa Water District</td>
<td>Mesa Water District/ Qualified Paleontologist</td>
</tr>
<tr>
<td>MITIGATION MEASURE</td>
<td>RESPONSIBLE IMPLEMENTATION PARTY</td>
<td>MONITORING PERIOD</td>
<td>ENFORCEMENT AGENCY</td>
<td>MONITORING AGENCY</td>
<td>DOCUMENTATION OF COMPLIANCE</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>paleontologist certified by the County of Orange shall evaluate the find. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the salvage and curation of identified resources.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.12 NOISE

N-1 Prior to issuance of any construction activities associated with the project, the Mesa Water District Engineer shall verify that the project complies with the following:

- Construction contracts specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state required noise attenuation devices.

- Construction contracts specify that a sign, legible at a distance of 50 feet shall also be posted at the project construction site. All notices and signs shall be reviewed and approved by the Mesa Water District Engineer, prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number where residents can inquire about the construction process and register complaints.

<table>
<thead>
<tr>
<th>RESPONSIBLE IMPLEMENTATION PARTY</th>
<th>MONITORING PERIOD</th>
<th>ENFORCEMENT AGENCY</th>
<th>MONITORING AGENCY</th>
<th>DOCUMENTATION OF COMPLIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Contractor/ Mesa Water District</td>
<td>Prior to Construction Activities</td>
<td>Mesa Water District</td>
<td>Mesa Water District</td>
<td>(Title of Monitoring Report) (Signature/Date of Monitoring Agency)</td>
</tr>
</tbody>
</table>
- The project shall include a specification, to the satisfaction of the Mesa Water District Engineer, that the contractor has designated an employee as a qualified “Noise Disturbance Coordinator.” The Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Disturbance Coordinator shall notify the City within 24 hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, malfunctioning muffler, etc.) and shall implement reasonable measures to resolve the compliant, as deemed acceptable by the Mesa Water District Engineer. All signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator.

- Construction haul routes shall be designed to avoid noise sensitive uses (e.g., residences, convalescent homes, etc.).

- During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

<table>
<thead>
<tr>
<th>MITIGATION MEASURE</th>
<th>RESPONSIBLE IMPLEMENTATION PARTY</th>
<th>MONITORING PERIOD</th>
<th>ENFORCEMENT AGENCY</th>
<th>MONITORING AGENCY</th>
<th>DOCUMENTATION OF COMPLIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Mesa Water District 36 March 9, 2015)
### MITIGATION MEASURE

<table>
<thead>
<tr>
<th>RESPONSIBLE IMPLEMENTATION PARTY</th>
<th>MONITORING PERIOD</th>
<th>ENFORCEMENT AGENCY</th>
<th>MONITORING AGENCY</th>
<th>DOCUMENTATION OF COMPLIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction equipment staging areas shall be located as far away from adjacent sensitive receptors as possible.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction activities shall not take place outside of the allowable hours specified by the City of Newport Beach Municipal Code Section 10.28.040(A), Construction Activity – Noise Regulations (7:00 a.m. to 6:30 p.m. on weekdays, 8:00 a.m. to 6:00 p.m. on Saturdays, and at no time on Sundays or holidays).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.18 MANDATORY FINDINGS OF SIGNIFICANCE

Refer to Mitigation Measures AQ-1, BIO-1 through BIO-4, CUL-1 and CUL-2, and N-1.
REPORTS AND INFORMATION ITEMS:

19. REPORT OF THE GENERAL MANAGER:
   • March Key Indicators Report
   • Water Supply Update (no enclosure)
**Goal #1: Provide a safe, abundant, and reliable water supply**

**FY 15 Potable Production (Acre Feet)**

<table>
<thead>
<tr>
<th>Water Supply Source</th>
<th>FY2015 YTD Actual (AF)</th>
<th>FY2015 YTD Budget (AF)</th>
<th>FY2015 Annual Budget (AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Water</td>
<td>7,839</td>
<td>8,407</td>
<td>11,292</td>
</tr>
<tr>
<td>Amber Water (MWRF)</td>
<td>4,202</td>
<td>3,779</td>
<td>5,170</td>
</tr>
<tr>
<td>CPTP</td>
<td>1,437</td>
<td>1,358</td>
<td>2,000</td>
</tr>
<tr>
<td>Import</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Production</strong></td>
<td><strong>13,478</strong></td>
<td><strong>13,544</strong></td>
<td><strong>18,462</strong></td>
</tr>
</tbody>
</table>

YTD actual water production (AF) through March 31, 2015

**Water Production by Source - 12 Month Trailing Percent of Acre Feet Produced**

- Clear Water
- Amber
- CPTP
- Imported
Goal #1: Provide a safe, abundant, and reliable water supply

FY15 System Water Quality – This data reflects samples taken in February

<table>
<thead>
<tr>
<th>Distribution System:</th>
<th>Average</th>
<th>Range</th>
<th>MCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine Residual</td>
<td>2.08</td>
<td>0.75-3.13 mg/L</td>
<td>4 mg/L (RAA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Current RAA = 1.98</td>
<td></td>
</tr>
<tr>
<td>Coliform Positive</td>
<td>0</td>
<td>0-0%</td>
<td>5%</td>
</tr>
<tr>
<td>Temperature</td>
<td>73.7</td>
<td>69-80 °F</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reservoir I &amp; II:</th>
<th>Average</th>
<th>Range</th>
<th>MCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine Residual</td>
<td>1.52</td>
<td>1.09-1.87 mg/L</td>
<td>None</td>
</tr>
<tr>
<td>Monochloramine</td>
<td>1.49</td>
<td>1.04-1.82 mg/L</td>
<td>None</td>
</tr>
<tr>
<td>Ammonia</td>
<td>0.33</td>
<td>0.22-0.43 mg/L</td>
<td>None</td>
</tr>
<tr>
<td>Temperature</td>
<td>74.6</td>
<td>72-78 °F</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wells (Treated):</th>
<th>Average</th>
<th>Range</th>
<th>MCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine Residual</td>
<td>2.39</td>
<td>2.06-2.87 mg/L</td>
<td>None</td>
</tr>
<tr>
<td>Monochloramine</td>
<td>2.39</td>
<td>2.0-2.78 mg/L</td>
<td>None</td>
</tr>
<tr>
<td>Ammonia</td>
<td>0.55</td>
<td>0.49-0.63 mg/L</td>
<td>None</td>
</tr>
<tr>
<td>Temperature</td>
<td>74.5</td>
<td>70-81 °F</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MWRF:</th>
<th>Average</th>
<th>Range</th>
<th>MCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine Residual</td>
<td>2.45</td>
<td>2.19-2.67 mg/L</td>
<td>None</td>
</tr>
<tr>
<td>Monochloramine</td>
<td>2.43</td>
<td>2.17-3.01 mg/L</td>
<td>None</td>
</tr>
<tr>
<td>Ammonia</td>
<td>0.56</td>
<td>0.51-0.69 mg/L</td>
<td>None</td>
</tr>
<tr>
<td>Temperature</td>
<td>78.6</td>
<td>77-82 °F</td>
<td>None</td>
</tr>
<tr>
<td>Color (Compliance)</td>
<td>ND</td>
<td>ND</td>
<td>15 CU</td>
</tr>
<tr>
<td>Odor (Compliance)</td>
<td>2.5</td>
<td>1-4 TON</td>
<td>3 TON</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water Quality Calls/Investigations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Calls</td>
</tr>
<tr>
<td>Total Investigations (from calls)</td>
</tr>
</tbody>
</table>
Goal #2: Practice perpetual infrastructure renewal and improvement

Revenues of Potable Water
(in thousands)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Jul</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td></td>
<td></td>
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<tr>
<td>Sep</td>
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<td>Oct</td>
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<td>Nov</td>
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<td>Dec</td>
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<td>Jan</td>
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<td>Feb</td>
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<td>Mar</td>
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<td>Apr</td>
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<tr>
<td>May</td>
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<tr>
<td>Jun</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Actual</th>
<th>Budget</th>
<th>Difference</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>18,602</td>
<td>18,679</td>
<td>(77)</td>
<td>(0.4%)</td>
</tr>
</tbody>
</table>
Goal #3: Be financially responsible and transparent

Actual vs. Budget Capital Spending
(current month actual figures are estimated)
Goal #4: Increase public awareness about Mesa Water® and about water

Web Site Information

<table>
<thead>
<tr>
<th>Web Site Information</th>
<th>February 2015</th>
<th>March 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits to the web site</td>
<td>5,162</td>
<td>6,010</td>
</tr>
<tr>
<td>Unique visitors (First time to the site)</td>
<td>2,273</td>
<td>3,393</td>
</tr>
<tr>
<td>Average per day</td>
<td>184</td>
<td>193</td>
</tr>
<tr>
<td>Average visit length</td>
<td>2 minutes, 21 seconds</td>
<td>2 minutes, 10 seconds</td>
</tr>
<tr>
<td>Page visited most</td>
<td>Payment Options</td>
<td>Contact</td>
</tr>
<tr>
<td>Second most visited page</td>
<td>Contact</td>
<td>Payment Options</td>
</tr>
<tr>
<td>Third most visited page</td>
<td>MesaWaterSaver</td>
<td>Rebates</td>
</tr>
<tr>
<td>Fourth most visited page</td>
<td>Rebates</td>
<td>General Information</td>
</tr>
<tr>
<td>Fifth most visited page</td>
<td>Board Biographies</td>
<td>Rates &amp; Fees</td>
</tr>
<tr>
<td>Second most downloaded file</td>
<td>Shaded Division Map</td>
<td>NEW Shaded Division Map</td>
</tr>
<tr>
<td>Most active day of the week</td>
<td>Monday</td>
<td>Monday</td>
</tr>
<tr>
<td>Least active day of the week</td>
<td>Sunday</td>
<td>Saturday</td>
</tr>
</tbody>
</table>

Total visits since June 1, 2002 1,010,780

Water Vending Machine Information

<table>
<thead>
<tr>
<th>Vending Machine Location</th>
<th>Vend Measurement</th>
<th>March 2015 Vends</th>
<th>Totals Vends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesa Water Office</td>
<td>1 gal</td>
<td>2013</td>
<td>175,765</td>
</tr>
<tr>
<td>Orange Coast College</td>
<td>8 oz</td>
<td>0</td>
<td>20,521</td>
</tr>
</tbody>
</table>
**Goal #5: Attract and retain skilled employees**

<table>
<thead>
<tr>
<th>DEPARTMENT:</th>
<th>FY 2015</th>
<th>COMMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OFFICE OF THE GENERAL MANAGER:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Processes</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td><strong>ADMINISTRATIVE SERVICES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Services</td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>Records Management</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6.75</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CUSTOMER SERVICES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservation</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Customer Service</td>
<td>8.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.00</td>
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<td><strong>FINANCIAL SERVICES:</strong></td>
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<tr>
<td>Financial Reporting/ Cash Management</td>
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<td>Purchasing/ Risk Management</td>
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<tr>
<td>Accounting</td>
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<td><strong>PUBLIC AND GOVERNMENT AFFAIRS:</strong></td>
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<td>Community Outreach &amp; Education/ Market</td>
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<tr>
<td>&amp; Communication</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>WATER OPERATIONS:</strong></td>
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<tr>
<td>Management &amp; Operations Support</td>
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<tr>
<td>Distribution</td>
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<td>Production</td>
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<td>Water Quality</td>
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<tr>
<td>(0.5 FTE = 1 Intern)</td>
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<td><strong>TOTAL:</strong></td>
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Goal #6: Provide outstanding customer service

Customer Calls

<table>
<thead>
<tr>
<th>Call Type</th>
<th>FY15  YTD</th>
<th>March 2015</th>
<th>YTD Weekly Average</th>
</tr>
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<tbody>
<tr>
<td>General Billing Question</td>
<td>2608</td>
<td>247</td>
<td>67</td>
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<tr>
<td>Service Requests</td>
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<td>290</td>
<td>59</td>
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<tr>
<td>High Bill</td>
<td>494</td>
<td>25</td>
<td>13</td>
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<tr>
<td>Payments</td>
<td>2901</td>
<td>315</td>
<td>74</td>
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<tr>
<td>Late Fee</td>
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<td>55</td>
<td>30</td>
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<tr>
<td>Account Maintenance</td>
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<td>25</td>
<td>16</td>
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<tr>
<td>On-Line Bill Pay</td>
<td>533</td>
<td>54</td>
<td>14</td>
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<tr>
<td>Water Pressure</td>
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<td>16</td>
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</tr>
<tr>
<td>No Water</td>
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<td>18</td>
<td>2</td>
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<tr>
<td>Conservation</td>
<td>362</td>
<td>31</td>
<td>9</td>
</tr>
<tr>
<td>Water Waste</td>
<td>160</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Other (District info. other utility info. etc.)</td>
<td>3095</td>
<td>175</td>
<td>79</td>
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<tr>
<td>Rate Increase</td>
<td>24</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Fluoridation</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL CUSTOMER CALLS</td>
<td>14465</td>
<td>1264</td>
<td>371</td>
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<tr>
<td>AVERAGE ANSWER TIME (Seconds)</td>
<td>8</td>
<td>8</td>
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Online Bill Pay Customers

<table>
<thead>
<tr>
<th>Current Customers Enrolled</th>
<th>FY15  YTD</th>
<th>March 2015 (does not include all of March)</th>
<th>YTD Weekly Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>9646</td>
<td>1258</td>
<td>130</td>
<td>33</td>
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REPORTS AND INFORMATION ITEMS:

20. DIRECTORS' REPORTS AND COMMENTS:
DIRECTORS’ REPORTS (AB 1234) PER CA GOVERNMENT CODE SECTION 53232.3 (d)

In accordance with CA Government Code 53232.3 (d), the following report identifies the meetings for which Mesa Water Directors received expense reimbursement.

### James F. Atkinson

<table>
<thead>
<tr>
<th>Reimbursement Date:</th>
<th>Description, Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/04/15</td>
<td>ACWA Water Quality Committee Meeting, 2/17</td>
</tr>
<tr>
<td>03/06/15</td>
<td>ISDOC Quarterly Meeting, 1/28</td>
</tr>
<tr>
<td>03/06/15</td>
<td>MWDOC Water Policy Forum, 2/5</td>
</tr>
<tr>
<td>03/06/15</td>
<td>WACO Meeting, 2/6</td>
</tr>
<tr>
<td>03/06/15</td>
<td>OCWD Board Meeting, 2/4</td>
</tr>
<tr>
<td>03/18/15</td>
<td>Urban Water Institute Conference, 3/4-3/6</td>
</tr>
<tr>
<td>03/30/15</td>
<td>OCWD Board Meeting, 3/18</td>
</tr>
<tr>
<td>03/30/15</td>
<td>Costa Mesa Chamber Meeting, 3/19</td>
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### Fred R. Bockmiller, Jr., P.E.

<table>
<thead>
<tr>
<th>Reimbursement Date:</th>
<th>Description, Date</th>
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</thead>
<tbody>
<tr>
<td>03/06/15</td>
<td>Meeting w/Mesa Water® Director, 1/24</td>
</tr>
<tr>
<td>03/06/15</td>
<td>WACO Meeting, 2/5</td>
</tr>
<tr>
<td>03/18/15</td>
<td>ACWA Energy Committee Meeting, 3/10-3/11</td>
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<tr>
<td>03/30/15</td>
<td>WACO Meeting, 3/6</td>
</tr>
<tr>
<td>03/31/15</td>
<td>ACWA/JPIA Risk Management Committee Meeting, 3/29-3/30</td>
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</table>

### Shawn Dewane

<table>
<thead>
<tr>
<th>Reimbursement Date:</th>
<th>Description, Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/06/15</td>
<td>CalDesal Meeting, 2/25</td>
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</table>

### James Fisler

<table>
<thead>
<tr>
<th>Reimbursement Date:</th>
<th>Description, Date</th>
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</thead>
<tbody>
<tr>
<td>03/06/15</td>
<td>ISDOC Quarterly Meeting, 1/28</td>
</tr>
<tr>
<td>03/06/15</td>
<td>ISDOC Meeting, 2/3</td>
</tr>
<tr>
<td>03/06/15</td>
<td>WACO Meeting, 2/6</td>
</tr>
<tr>
<td>03/30/15</td>
<td>ISDOC Executive Committee Meeting, 3/3</td>
</tr>
<tr>
<td>03/30/15</td>
<td>OCWD Board Meeting, 3/18</td>
</tr>
</tbody>
</table>

### Ethan Temianka

<table>
<thead>
<tr>
<th>Reimbursement Date:</th>
<th>Description, Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/18/15</td>
<td>Urban Water Institute Conference, 3/4-3/6</td>
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</table>
There are no support materials for this item.