MARINA COAST WATER DISTRICT

11 RESERVATION ROAD, MARINA, CA 93933-2099
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# Agenda
## Regular Board Meeting, Board of Directors
## Marina Coast Water District
## and
## Regular Board Meeting, Board of Directors
## Marina Coast Water District Groundwater Sustainability Agency

Marina Council Chambers
211 Hillcrest Avenue, Marina, California
Monday, November 18, 2019, 6:30 p.m. PST

*This meeting has been noticed according to the Brown Act rules. The Board of Directors meet regularly on the third Monday of each month with workshops scheduled for the first Monday of some months. The meetings normally begin at 6:30 p.m. and are held at the City of Marina Council Chambers at 211 Hillcrest Avenue, Marina, California.*

***Our Mission:*** *We provide our customers with high quality water, wastewater collection and conservation services at a reasonable cost, through planning, management and the development of water resources in an environmentally sensitive manner.*

**1. Call to Order**

**2. Roll Call**

**3. Public Comment on Closed Session Items** *Anyone wishing to address the Board on matters appearing on Closed Session may do so at this time. Please limit your comment to four minutes. The public may comment on any other items listed on the agenda at the time they are considered by the Board.*

**4. Closed Session**

A. Pursuant to Government Code 54956.9
Conference with Legal Counsel – Existing Litigation

1) Marina Coast Water District vs California-American Water Company, Monterey County Water Resources Agency; and, California-American Water Company, Monterey County Water Resources Agency vs Marina Coast Water District, San Francisco Superior Court Case Nos. CGC-15-547125, CGC-15-546632 (Complaint for Damages, Breach of Warranties, etc.)

This agenda is subject to revision and may be amended prior to the scheduled meeting. Pursuant to Government Code section 54954.2(a)(1), the agenda for each meeting of the Board shall be posted at the City of Marina Council Chambers. The agenda shall also be posted at the following locations but those locations are not official agenda posting locations for purposes of section 54954.2(a)(1): District offices at 11 Reservation Road, Seaside City Hall, the City of Marina Library, and the City of Seaside Library. A complete Board packet containing all enclosures and staff materials will be available for public review on Wednesday, November 13, 2019. Copies will also be available at the Board meeting. Information about items on this agenda or persons requesting disability related modifications and/or accommodations should contact the Board Clerk 48 hours prior to the meeting at: 831-883-5910.

2) Marina Coast Water District v, California Coastal Commission (California-American Water Company, Real Party in Interest), Santa Cruz County Superior Court Case No. 15CV00267, Sixth Appellate District Court of Appeals Case No. H045468

3) Bay View Community DE, LLC; Bryan Taylor; Greg Carter; and Brooke Bilyeu vs Marina Coast Water District; Board of Directors of Marina Coast Water District; County of Monterey and Does 1-25, inclusive, Monterey County Superior Court Case No. 18CV000765 (Petition for Writ of Mandate or Administrative Mandate, and Complaint for Declaratory and Injunctive Relief and Breach of Contract)

4) Marina Coast Water District, and Does 1-100 v, County of Monterey, County of Monterey Health Department Environmental Health Bureau, and Does 101-110, Monterey County Superior Court Case No. 18CV000816 (Petition for Writ of Mandate and Complaint for Injunctive Relief)

5) Marina Coast Water District, and Does 1-100 v, County of Monterey, Monterey County Board of Supervisors, and Does 101-110 (California-American Water Company, Real Party in Interest), Monterey County Superior Court Case No. 19CV003305 (Petition for Writ of Mandate and Complaint for Injunctive Relief)

B. Pursuant to Government Code 54956.9(d)(4)
Conference with Legal Counsel – Anticipated Litigation
Initiation of Litigation – Three Potential Cases

**7:00 p.m. Reconvene Open Session**

**5. Reportable Actions Taken During Closed Session** *The Board will announce any reportable action taken during closed session and the vote or abstention on that action of every director present, and may take additional action in open session as appropriate. Any closed session items not completed may be continued to after the end of all open session items.*

**6. Pledge of Allegiance**

**7. Oral Communications** *Anyone wishing to address the Board on matters not appearing on the Agenda may do so at this time. Please limit your comment to four minutes. The public may comment on any other items listed on the agenda at the time they are considered by the Board.*

**8. Presentations**

A. Consider Adoption of Resolution No. 2019-80 in Recognition of Sarah Babcock, Public Member, for her Dedicated Service to the Marina Coast Water District as a Member on the Water Conservation Commission

*Action: The Board will consider adopting Resolution No. 2019-80 recognizing Sarah Babcock, public member, for her dedicated service to the Marina Coast Water District as a member on the Water Conservation Commission.*

B. Consider Adoption of Resolution No. 2019-81 in Recognition of Shawn Storm, Public Member, for his Dedicated Service to the Marina Coast Water District as a Member on the Water Conservation Commission

*Action: The Board will consider adopting Resolution No. 2019-81 recognizing Shawn Storm, public member, for his dedicated service to the Marina Coast Water District as a member on the Water Conservation Commission.*

**9. Consent Calendar**

A. Receive and File the Check Register for the Month of October 2019

B. Receive the Quarterly Financial Statements for April 1, 2019 to June 30, 2019

C. Approve the Draft Minutes of the Regular Joint Board/GSA Meeting of October 21, 2019

D. Approve the Draft Minutes of the Special Joint Board/GSA Meeting of November 4, 2019

E. Receive the Validated 2018 Water Loss Audit Report and Level 1 Validation Document

**10. Action Items** *The Board will review and discuss agenda items and take action or direct staff to return to the Board for action at a following meeting. The public may address the Board on these Items as each item is reviewed by the Board. Please limit your comment to four minutes.*

A. Consider Adoption of Resolution No. 2019-82 to Accept the Infrastructure Improvements Installed Under a Water, Sewer, and Recycled Water Infrastructure Agreement between Marina Coast Water District and Junsay Oaks, L.P. for the Junsay Oaks Senior Apartments Development Project ***Action:*** *The Board of Directors will consider accepting the infrastructure improvements installed under a Water, Sewer, and Recycled Water Infrastructure Agreement between Marina Coast Water District and Junsay Oaks, L.P. for the Junsay Oaks Senior Apartments Development Project.*

B. Consider Adoption of Resolution No. 2019-83 to Adopt the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Ord Village Lift Station and Force Main Replacement Project

*Action: The Board of Directors will consider adopting the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Ord Village Lift Station and Force Main Replacement Project.*

C. Consider Adoption of Resolution No. 2019-84 to Approve a Water, Sewer and Recycled Water Infrastructure Agreement between Marina Coast Water District and Monterey Military Housing, LLC for the Lower Stilwell Neighborhood, Phase 1 Project

*Action: The Board of Directors will consider approving a Water, Sewer and Recycled Water Infrastructure Agreement between Marina Coast Water District and Monterey Military Housing, LLC for the Lower Stilwell Neighborhood, Phase 1 Project.*

D. Consider Adoption of Resolution No. 2019-76 to Approve Funding for Director Le to Attend the Association of California Water Agencies (ACWA) Fall Conference in San Diego; and, Consider Appointing a Voting Representative to Vote for ACWA President and Vice President for the 2020-2021 Term

*Action: The Board of Directors will consider approving funding for Director Le to attend the Association of California Water Agencies Fall Conference in San Diego, and consider appointing a voting representative to vote for ACWA President and Vice President for the upcoming term.*

**11. Informational Items** *Informational items are normally provided in the form of a written report or verbal update and may not require Board action. The public may address the Board on Informational Items as they are considered by the Board. Please limit your comments to four minutes.*

A. General Manager's Report

B. Counsel's Report

C. Committee and Board Liaison Reports

1. Water Conservation Commission
2. Joint City-District Committee
3. Executive Committee
4. Community Outreach Committee
5. Budget and Personnel Committee
6. M1W Board Member Liaison
7. LAFCO Liaison
8. FORA
9. WWOC Report
10. JPIA Liaison
11. Special Districts Association
12. SVBGSA Liaison (Steering Committee)

**12. Correspondence**

**13. Board Member Requests for Future Agenda Items**

**14. Director's Comments** *Director reports on meetings with other agencies, organizations and individuals on behalf of the District and on official District matters.*

**15. Adjournment** *Set or Announce Next Meeting(s), date(s), time(s), and location(s):*

*Regular Meeting: Monday, December 16, 2019, 6:30 p.m.,*
*Marina Council Chambers, 211 Hillcrest Avenue, Marina*

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 8-A Meeting Date: November 18, 2019

Prepared By: Paul Lord Approved By: Keith Van Der Maaten

Agenda Title: Consider Adoption of Resolution No. 2019-80 in Recognition of Community Member, Sarah Babcock for her Dedicated Service to the Marina Coast Water District as a Member of the Water Conservation Commission.

Staff Recommendation: The Board of Directors consider adopting a resolution recognizing Sarah Babcock for her service on the Water Conservation Commission.

Background: *5-Year Strategic Plan Mission Statement – We provide our customers with high quality water, wastewater collection and conservation services at a reasonable cost, through planning, management and the development of water resources in an environmentally sensitive manner.*

Discussion/Analysis: Ms. Babcock was appointed as a public member to the Water Conservation Commission in December 2018. She served as a commissioner from January 2019 to October 2019. Ms. Babcock notified staff that due to a new job with the District, she needed to resign from her seat on the Commission.

As a member of the Commission, Ms. Babcock provided valuable insight and guidance on several water conservation matters and helped support the efforts towards recommendations forwarded to the Board of Directors.

Ms. Babcock's dedication and commitment to public service has been recognized by her fellow Commission members and all those who have worked with her. For her unselfish dedication and commitment, the Commission wishes to recognize Ms. Sarah Babcock for her service and wishes her well in the future

Environmental Review Compliance: None required.

Financial Impact: _____Yes ___X___No Funding Source/Recap: None

Other Considerations: None.

Material Included for Information/Consideration: Resolution No. 2019-80.

Action Required: ___X___Resolution _____Motion _____Review
(Roll call vote is required.)

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Board Action

Motion By_____ Seconded By_____ No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

November 18, 2019

Resolution No. 2019 - 80
Resolution of the Board of Directors
Marina Coast Water District
Recognition of Community Member, Sarah Babcock,
for her Dedicated Service to the Marina Coast Water District as a Member on the
Water Conservation Commission

RESOLVED by the Board of Directors ("Directors") of the Marina Coast Water District ("District"), at a regular meeting duly called and held on November 18, 2019 at 211 Hillcrest Avenue, Marina, California as follows:

WHEREAS, Sarah Babcock was appointed in December 2018 to serve as a member on the Water Conservation Commission of the Marina Coast Water District; and,

WHEREAS, Sarah notified staff that due to a new job with the District, she needed to resign from her seat on the Commission; and,

WHEREAS, during her tenure, Sarah rendered superior service to the District by providing invaluable participation and insights, and by contributing significant personal time.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Marina Coast Water District does hereby express its gratitude and commends Sarah Babcock for outstanding and dedicated service to the District and the Committee's of the Board.

PASSED AND ADOPTED on November 18, 2019, by the Board of Directors of the Marina Coast Water District by the following roll call vote:

Ayes: Directors_____

Noes: Directors_____

Absent: Directors_____

Abstained: Directors_____

_____
Thomas P. Moore, President

ATTEST:

_____
Keith Van Der Maaten, Secretary

CERTIFICATE OF SECRETARY

The undersigned Secretary of the Board of the Marina Coast Water District hereby certifies that the foregoing is a full, true and correct copy of Resolution No. 2019-80 adopted November 18, 2019.

_____
Keith Van Der Maaten, Secretary

October 27, 2019

Marina Coast Water District
Water Conservation Commission
11 Reservation Road
Marina, CA 93933

Dear Marina Coast Water District,

Please accept this letter as my formal resignation as commissioner with the Marina Coast Water District's Water Conservation Commission; my last day of service will be effective immediately. The decision to resign is due to recently accepting a position within the District and my position, as commissioner, would therefore be considered a conflict of interest.

I would like to thank the Marina Coast Water District's Board of Directors for selecting me to be a part of the Water Conservation Commission. This position has allowed me to use my voice and provide input that has helped the District's overall mission pertaining to the preservation of water resource through conservation, technological improvements and policy; I hope that the Board of Directors finds that I have served them well.

I have enjoyed my time serving on the commission and I am very grateful for the valuable experience it has brought me. I will miss being a part of such a wonderful group of commissioners, however I plan to attend future meetings as my schedule allows. Thank you so much for your understanding.

Sincerely,

Sarah Babcock

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 8-B Meeting Date: November 18, 2019

Prepared By: Paul Lord Approved By: Keith Van Der Maaten

Agenda Title: Consider Adoption of Resolution No. 2019-81 in Recognition of Community Member, Shawn Storm for his Dedicated Service to the Marina Coast Water District as a Member of the Water Conservation Commission.

Staff Recommendation: The Board of Directors consider adopting a resolution recognizing Shawn Storm for his service on the Water Conservation Commission.

Background: *5-Year Strategic Plan Mission Statement – We provide our customers with high quality water, wastewater collection and conservation services at a reasonable cost, through planning, management and the development of water resources in an environmentally sensitive manner.*

Discussion/Analysis: Mr. Storm was appointed as a public member to the Water Conservation Commission in December 2018. He served as the Commission Chairperson from January 2019 to October 2019. Mr. Storm notified staff that due to a new job, he needed to resign from his seat on the Commission.

As a member of the Commission, Mr. Storm provided valuable insight and guidance on several water conservation matters. Mr. Storm spent many dedicated hours on outlining valuable conservation practices that would benefit the District. His efforts helped support the Commissions endeavors to forward beneficial program changes to the Board of Directors.

Mr. Storm's dedication and commitment to public service has been recognized by his fellow Commission members and all those who have worked with him. For his unselfish dedication and commitment, the Commission wishes to recognize Mr. Shawn Storm for his service and wishes him well in the future

Environmental Review Compliance: None required.

Financial Impact: _____Yes ___X___No Funding Source/Recap: None

Other Considerations: None.

Material Included for Information/Consideration: Resolution No. 2019-81.

Action Required: ___X___Resolution _____Motion _____Review
(Roll call vote is required.)

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Board Action

Motion By_____ Seconded By_____ No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

November 18, 2019

Resolution No. 2019 - 81
Resolution of the Board of Directors
Marina Coast Water District
Recognition of Community Member, Shawn Storm,
for his Dedicated Service to the Marina Coast Water District as a Member on the
Water Conservation Commission

RESOLVED by the Board of Directors ("Directors") of the Marina Coast Water District ("District"), at a regular meeting duly called and held on November 18, 2019 at 211 Hillcrest Avenue, Marina, California as follows:

WHEREAS, Shawn Storm was appointed in December 2018 to serve as a member on the Water Conservation Commission of the Marina Coast Water District; and,

WHEREAS, Shawn notified staff that due to a new job, he needed to resign from her seat on the Commission; and,

WHEREAS, during his tenure, Shawn rendered superior service to the District by providing invaluable participation and insights, and by contributing significant personal time.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Marina Coast Water District does hereby express its gratitude and commends Shawn Storm for outstanding and dedicated service to the District and the Committee's of the Board.

PASSED AND ADOPTED on November 18, 2019, by the Board of Directors of the Marina Coast Water District by the following roll call vote:

Ayes: Directors_____

Noes: Directors_____

Absent: Directors_____

Abstained: Directors_____

_____
Thomas P. Moore, President

ATTEST:

_____
Keith Van Der Maaten, Secretary

CERTIFICATE OF SECRETARY

The undersigned Secretary of the Board of the Marina Coast Water District hereby certifies that the foregoing is a full, true and correct copy of Resolution No. 2019-81 adopted November 18, 2019.

_____
Keith Van Der Maaten, Secretary

**From:** Shawn
**Sent:** Friday, November 1, 2019 8:02 AM
**To:** Patrick Breen
**Subject:** WCC Resignation

Hello Patrick,

While serving the District, Board as the WCC Chair for ten months I had 100% attendance, participated in board meetings, analyzed, developed and proposed new WCC agenda. WCC improved landscape, toilets/urinals, messaging, metrics and website. My family dramatically reduced water demand through: UHE toilets/washer/shower-heads, efficient shower technique, warmup capture, home pressure reduction valve and drip irrigation. Given the Desal plant and aquifer intrusions, water conservation is critical.

Unfortunately due to recent life changes, I resign from the WCC.

Best Regards,

-Shawn Storm, P.E.

Return to Agenda

Agenda Transmittal

Agenda Item: 9 Meeting Date: November 18, 2019

Prepared By: Paula Riso Approved By: Keith Van Der Maaten

Agenda Title: Consent Calendar

Staff Recommendation: The Board of Directors approve the Consent Calendar as presented.

Background: *5-Year Strategic Plan Mission Statement – We provide our customers with high quality water, wastewater collection and conservation services at a reasonable cost, through planning, management and the development of water resources in an environmentally sensitive manner.*

Consent calendar consisting of:

A) Receive and File the Check Register for the Month of October 2019
B) Receive the Quarterly Financial Statements for April 1, 2019 to June 30, 2019
C) Approve the Draft Minutes of the Regular Joint Board/GSA Meeting of October 21, 2019
D) Approve the Draft Minutes of the Special Joint Board/GSA Meeitng of November 4, 2019
E) Receive the Validated 2018 Water Loss Audit Report and Level 1 Validation Document

Discussion/Analysis: See individual transmittals.

Environmental Review Compliance: None required.

Other Considerations: The Board of Directors can approve these items together or they can pull them separately for discussion.

Material Included for Information/Consideration: Check Register for October 2019; quarterly financial statements for April 1, 2019 to June 30, 2019; draft minutes of October 21, 2019; draft minutes of November 4, 2019; and, the Validated 2018 Water Loss Audit Report and review document.

Action Required: _____Resolution ___X___Motion _____Review
(Roll call vote is required.)

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Board Action

Motion By_____ Seconded By_____ No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 9-A Meeting Date: November 18, 2019

Prepared By: Kelly Cadiente Approved By: Keith Van Der Maaten

Agenda Title: Receive and File the Check Register for the Month of October 2019

Staff Recommendation: The Board of Directors receive and file the October 2019 expenditures totaling $1,691,585.16.

Background: *5-Year Strategic Plan, Objective No. 3 – Our objective is to manage public funds to assure financial stability, prudent rate management and demonstrate responsible stewardship. Our fiscal strategy is to forecast, control and optimize income and expenditures in an open and transparent manner. We will efficiently use our financial resources to assure availability to fund current and future demands.*

Discussion/Analysis: These expenditures were paid in October 2019 and the Board is requested to receive and file the check register.

Environmental Review Compliance: None required.

Financial Impact: _____Yes __X__No Funding Source/Recap: Expenditures are allocated across the six cost centers; 01-Marina Water, 02-Marina Sewer, 03- Ord Water, 04- Ord Sewer, 05-Recycled Water, 06-Regional Water.

Other Consideration: None.

Material Included for Information/Consideration: October 2019 Summary Check Register.

Action Required: _____Resolution ___X___Motion _____Review
(Roll call vote is required.)

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Board Action

Motion By_____ Seconded By_____ No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

## OCTOBER 2019 SUMMARY CHECK REGISTER

| DATE | CHECK # | CHECK DESCRIPTION | AMOUNT |
|---|---|---|---|
| 10/03/2019 | 68218 - 68293 | Check Register | 358,103.03 |
| 10/16/2019 | 68294 - 68380 | Check Register | 811,057.74 |
| 10/31/2019 | 68381 - 68383 | Check Register | 4,221.76 |
| 10/04/2019 | 500509 - 500513 | Payroll Checks and Direct Deposit | 108,981.94 |
| 10/04/2019 | 500514 - 500515 | Payroll Withholdings, Period Ended 09/27/19 | 1,471.23 |
| 10/04/2019 | ACH | Internal Revenue Service | 46,182.62 |
| 10/04/2019 | ACH | CalPERS | 24,690.41 |
| 10/04/2019 | ACH | State of California - EDD | 10,290.99 |
| 10/04/2019 | ACH | MassMutual Retirement Services, LLC | 12,528.58 |
| 10/16/2019 | 500516 - 500541 | Check Register | 110,887.71 |
| 10/18/2019 | 500542 - 500546 | Payroll Checks and Direct Deposit | 111,978.01 |
| 10/18/2019 | 500547 | Payroll Withholding, Period Ended 10/11/19 | 694.23 |
| 10/18/2019 | ACH | MassMutual Retirement Services, LLC | 10,918.58 |
| 10/18/2019 | ACH | Internal Revenue Service | 43,737.29 |
| 10/18/2019 | ACH | CalPERS | 25,579.25 |
| 10/18/2019 | ACH | State of California - EDD | 10,261.79 |
| | | **TOTAL DISBURSEMENTS** | **1,691,585.16** |

| Check No | Invoice Date | Check Date | Vendor Name | Description | Amount |
|---|---|---|---|---|---|
| 68218 | 08/31/2019 | 10/03/2019 | Ace Hardware | General Supplies | 1,345.18 |
| 68219 | 09/05/2019 | 10/03/2019 | Alhambra and Sierra Springs | Lab Grade Water | 51.26 |
| 68220 | 08/31/2019 | 10/03/2019 | Quinn Company | Troubleshoot/ Repair - E Booster Station Genset | 2,633.96 |
| 68221 | 09/12/2019 | 10/03/2019 | Monterey Peninsula Unified School District | Water Conservation Education 08/2019 | 1,997.50 |
| 68222 | 08/19/2019 | 10/03/2019 | Fisher Scientific | Laboratory Supplies | 94.62 |
| 68223 | 09/13/2019 | 10/03/2019 | PG&E | Deposit for Engineering Review - Ord Village LS/ Force Main Improvement | 2,000.00 |
| 68224 | 08/28/2019 | 10/03/2019 | Home Depot Credit Services | General Supplies | 1,662.86 |
| 68225 | 08/22/2019 | 10/03/2019 | Grainger | (2) Hour Meters - Booker LS | 63.62 |
| 68226 | 08/28/2019 | 10/03/2019 | Area Communications | Answering Service 08/2019 | 139.00 |
| 68227 | 07/31/2019 | 10/03/2019 | Schaaf & Wheeler | Preliminary Design - A1/A2 Tanks B/C BPS | 43,497.44 |
| 68228 | 08/31/2019 | 10/03/2019 | Monterey Regional Waste Management District | Hazardous Waste Disposal - O&M | 122.00 |
| 68229 | 08/30/2019 | 10/03/2019 | Peninsula Welding Supply | Gas Cylinder Tank Rental Fee - Welding Supplies | 12.90 |
| 68230 | 08/02/2019 | 10/03/2019 | Valley Saw and Garden Equipment | Chain/ Sprocket - Chain Saw Repair | 64.70 |
| 68231 | 09/11/2019 | 10/03/2019 | Environmental Resource Associates | Laboratory External Quality Control Samples | 2,301.75 |
| 68232 | 09/13/2019 | 10/03/2019 | Monterey Bay Analytical Services | HPC Testing - Watkins Gate Well | 140.00 |
| 68233 | 09/18/2019 | 10/03/2019 | Verizon Wireless | Cell Phone Service 08/2019 - 09/2019 | 2,247.51 |
| 68234 | 09/05/2019 | 10/03/2019 | Orkin Franchise 925 | BLM/ IOP Pest Control 09/2019 | 191.00 |
| 68235 | 08/22/2019 | 10/03/2019 | Johnson Controls Security Solutions LLC | Service Alarm / Installation Fee - Modular Office | 1,847.69 |
| 68236 | 07/31/2019 | 10/03/2019 | Maggiora Bros Drilling | Well RISD Rehabilitation - Watkins Gate | 5,070.68 |
| 68237 | 09/11/2019 | 10/03/2019 | Waterless Co LLC | Janitorial Supplies | 267.78 |
| 68238 | 09/20/2019 | 10/03/2019 | Maynard Group | NEC Phone Equipment, Cisco Meraki Hardware, AT&T Wireless Backup, eMVS Cloud, VoIP Services 09/2019 | 5,312.17 |
| 68239 | 09/17/2019 | 10/03/2019 | Forensic Analytical Consulting Services, Inc. | Asbestos Silica Testing | 2,349.00 |
| 68240 | 08/30/2019 | 10/03/2019 | Shape Incorporated | (2) Discharge Connections - Crescent LS, Hatch - Neeson LS | 5,495.28 |
| 68241 | 09/05/2019 | 10/03/2019 | USABluebook | 4" Check Valves - Neeson LS | 2,036.97 |
| 68242 | 09/11/2019 | 10/03/2019 | Core & Main LP | (2) 3" Octave Meters - Ord Marshall School, OMC Backflow Project | 4,433.68 |
| 68243 | 08/31/2019 | 10/03/2019 | DataProse, LLC | Customer Service Billing Statements 08/2019 | 5,414.99 |
| 68244 | 09/01/2019 | 10/03/2019 | American Messaging Services, LLC | Pager Service - O&M | 58.56 |
| 68245 | 08/21/2019 | 10/03/2019 | Commercial Truck Co. | General Supplies | 7.53 |
| 68246 | 09/21/2019 | 10/03/2019 | NEC Financial Services, Inc. | Phone Equipment Lease 09/2019 | 335.76 |
| 68247 | 09/16/2019 | 10/03/2019 | Carollo Engineers, Inc. | Construction Meetings, Submittal Review, Project Administration - RUWAP; Draft Plans/ Profile Drawings - Beach Rd Pipeline Project/ Crescent Ave Connector Project; Design Plans/ Specifications - RUWAP 08/2019 | 29,199.23 |

| Check No | Invoice Date | Check Date | Vendor Name | Description | Amount |
|---|---|---|---|---|---|
| 68248 | 08/19/2019 | 10/03/2019 | American Supply Company | Janitorial Supplies | 185.56 |
| 68249 | 08/26/2019 | 10/03/2019 | Fastenal Industrial & Construction Supplies | Janitorial Supplies | 192.09 |
| 68250 | 09/28/2019 | 10/03/2019 | O'Reilly Automotive Stores, Inc. | Auto/ General Supplies | 192.79 |
| 68251 | 09/03/2019 | 10/03/2019 | Mobile Modular | Modular Office - Water Resources 09/2019 | 743.69 |
| 68252 | 09/11/2019 | 10/03/2019 | TJC and Associates Inc | Genset Design - Generator Project | 14,898.25 |
| 68253 | 09/11/2019 | 10/03/2019 | Univar USA, Inc. | (1,575) gals Chlorine - Wells 10, 11, Watkins Gate, Intermediate Reservoir | 3,164.59 |
| 68254 | 08/27/2019 | 10/03/2019 | Sturdy Oil Company | (310) gals Clear Diesel - Convault Tank/ O&M Yard | 1,157.65 |
| 68255 | 09/04/2019 | 10/03/2019 | Monterey Signs, Inc. | MCWD Wood Sign/ Installation | 1,932.68 |
| 68256 | 08/24/2019 | 10/03/2019 | Voyager Fleet Systems, Inc. | Fleet Gasoline | 3,557.12 |
| 68257 | 09/06/2019 | 10/03/2019 | U.S. Bank Corporate Payment Systems | Employee Travel/ Training Expenses: Airfare for Cityworks Conference - Cray/ Espero, Hotel for S.F. Coastal Commission Meeting - Van Der Maaten, Wastewater Collection System Workshop - Luongo/ Magdaleno/ Foster, 2019 Exhibitor Showcase Conference - Le, 2020 LCW Annual Conference - Gill; Advertisement - O&M Administrative Assistant; General Supplies | 4,842.75 |
| 68258 | 09/05/2019 | 10/03/2019 | Marina Tire & Auto Repair | Oil Change - Vehicles #1401, #1001; New Tires/Oil Change - Vehicle #1002 | 666.09 |
| 68259 | 09/04/2019 | 10/03/2019 | Friedman & Springwater LLP | Legal Fees: Cal Am Coastal Water Project, MCWD v CPUC, RDP Superior Court Damages Cases 08/2019 | 86,726.02 |
| 68260 | 09/13/2019 | 10/03/2019 | Richards, Watson & Gershon | Regional Project Litigation 08/2019 | 15,535.79 |
| 68261 | 09/11/2019 | 10/03/2019 | Remy Moose Manley, LLP | Legal Fees: RAMCO Well 08/2019 | 1,323.36 |
| 68262 | 09/30/2019 | 10/03/2019 | Monterey Bay Technologies, Inc. | Dell PowerEdge R740 Springbrook/ Finance Servers Replacement, Dell Optiplex 7060 Computers - (2) Engineering/ (1) Accounting, StorageCraft Cloud Backup for Disaster Recovery - Finance/ Laserfiche | 24,644.68 |
| 68263 | 09/10/2019 | 10/03/2019 | ICONIX Waterworks (US), Inc. | Parts - Neeson LS | 918.46 |
| 68264 | 09/25/2019 | 10/03/2019 | Eurofins Eaton Analytical, Inc. | Laboratory Contract Testing | 4,790.00 |
| 68265 | 08/31/2019 | 10/03/2019 | GHD, Inc. | Professional Services/ Design Phase - Imjin LS | 3,941.00 |
| 68266 | 09/06/2019 | 10/03/2019 | Evoqua Water Technologies, LLC | (2,512) gals of Bioxide - East Garrison LS | 8,469.20 |
| 68267 | 09/23/2019 | 10/03/2019 | Dataflow Business Systems, Inc. | Ord Copier Maintenance (5551ci) 09/2019, RICOH Plotter/ Scanner Supplies | 526.48 |
| 68268 | 08/31/2019 | 10/03/2019 | Western Exterminator Company | Pest Control - Beach Office 08/2019 | 91.50 |
| 68269 | 08/31/2019 | 10/03/2019 | Iron Mountain, Inc. | Shredding Service 08/2019 | 148.60 |

| Check No | Invoice Date | Check Date | Vendor Name | Description | Amount |
|---|---|---|---|---|---|
| 68270 | 08/28/2019 | 10/03/2019 | AT&T | Beach Alarm, IOP Fire Alarm, Main Frame Computer 08/2019 | 99.28 |
| 68271 | 08/30/2019 | 10/03/2019 | Marina Coast Water District (BLM) | BLM Water, Sewer, Fire Service 08/2019 | 354.28 |
| 68272 | 09/03/2019 | 10/03/2019 | Johnson Electronics | Security System Check - BLM | 110.00 |
| 68273 | 09/13/2019 | 10/03/2019 | EKI Environment & Water, Inc. | Water Supply Augmentation Study - Fort Ord, Groundwater Planning Sustainability Study, City of Marina Permitting of CalAM Project Wells - Environmental, Evaluation of Aquifer Storage Recovery, SWRCB Recycled Water Grant Preparation | 47,606.94 |
| 68274 | 09/01/2019 | 10/03/2019 | Verizon Connect NWF, Inc. | GPS Service - (2) Meter Reader Trucks 08/2019 | 38.00 |
| 68275 | 09/01/2019 | 10/03/2019 | Greenwaste Recovery, Inc. | Garbage Collection and Recycling Services 09/2019 | 697.75 |
| 68276 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 174 Linde Cir | 5.28 |
| 68277 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - Hydrant Meter | 1,567.47 |
| 68278 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 307 Ardennes Cir | 35.00 |
| 68279 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 2900 A Ave | 37.50 |
| 68280 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - Hydrant Meter | 1,614.30 |
| 68281 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 5006 Telegraph Blvd | 6.00 |
| 68282 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 2981 Abrams Dr | 143.45 |
| 68283 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 3020 Crescent Ave | 46.79 |
| 68284 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - Hydrant Meter | 1,705.70 |
| 68285 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 2765 Sea Glass Ave | 137.29 |
| 68286 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 2979 Abrams Dr | 498.52 |
| 68287 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 2725 Bungalow Dr | 15.04 |
| 68288 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - Hydrant Meter | 1,727.04 |
| 68289 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 1312 Patch Ct | 95.65 |
| 68290 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - Hydrant Meter | 1,443.81 |
| 68291 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 4523 Sea Cliff Ct #25 | 33.55 |
| 68292 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 3267 Marina Dr | 2.09 |
| 68293 | 09/23/2019 | 10/03/2019 | Customer Service Refund | Refund Check - 482 Forest Cir | 1,039.33 |
| 68294 | 09/30/2019 | 10/16/2019 | Ace Hardware | General Supplies | 848.31 |
| 68295 | 10/03/2019 | 10/16/2019 | Alhambra and Sierra Springs | Lab Grade Water | 51.26 |
| 68296 | 09/26/2019 | 10/16/2019 | Quinn Company | ATS Switch - D Booster Station Genset; Replacement Controller - Watkins Gate Well Genset | 10,134.56 |
| 68297 | 09/26/2019 | 10/16/2019 | Carlons Fire Extinguisher | (26) Fire Extinguishers - District Vehicles and Heavy Equipment | 1,311.63 |
| 68298 | 09/30/2019 | 10/16/2019 | City of Marina | Franchise Fees 07/2019 - 09/2019 | 35,565.58 |
| 68299 | 09/26/2019 | 10/16/2019 | Insight Planners | Web Development/ Maintenance, Hosting 09/2019 | 1,203.00 |
| 68300 | 09/30/2019 | 10/16/2019 | Fort Ord Reuse Authority | Franchise Fees 07/2019 - 09/2019 | 146,729.87 |
| 68301 | 09/24/2019 | 10/16/2019 | Denise Duffy & Associates, Inc. | Water Distribution Laterals Construction Compliance - RUWAP | 2,201.20 |

| Check No | Invoice Date | Check Date | Vendor Name | Description | Amount |
|---|---|---|---|---|---|
| 68302 | 10/01/2019 | 10/16/2019 | Fisher Scientific | Laboratory Chemicals and Supplies | 958.88 |
| 68303 | 10/10/2019 | 10/16/2019 | Pitney Bowes (Lease) | Postage Machine Lease 08/2019 - 11/2019 | 649.44 |
| 68304 | 09/17/2019 | 10/16/2019 | PG&E | Gas and Electric Service 08/2019 | 89,762.00 |
| 68305 | 09/27/2019 | 10/16/2019 | Home Depot Credit Services | General Supplies | 969.20 |
| 68306 | 09/24/2019 | 10/16/2019 | Grainger | General Supplies | 226.54 |
| 68307 | 09/25/2019 | 10/16/2019 | Area Communications | Answering Service 09/2019 | 164.92 |
| 68308 | 08/31/2019 | 10/16/2019 | Schaaf & Wheeler | Staff Meetings, Design/ Preliminary Design - A1/A2 Tanks and B/C BPS, Preliminary Design for Easements - Ord Village LS/ Force Main, Developers (East Garrison, Marina Hotel Project, Marina Dunes RV Park, Cypress Development, Seaside Senior Living) 08/2019 | 94,865.22 |
| 68309 | 09/30/2019 | 10/16/2019 | ACWA Joint Power Ins Authority | Liability Insurance 10/2019 - 09/2020 | 91,936.00 |
| 68310 | 10/08/2019 | 10/16/2019 | MBS Business Systems | Copier Maintenance (454e, C754e) 07/13 - 10/12 | 2,027.38 |
| 68311 | 09/17/2019 | 10/16/2019 | Idexx Distribution Corporation | Laboratory Supplies | 492.87 |
| 68312 | 09/30/2019 | 10/16/2019 | Peninsula Welding Supply | Welding Supplies | 12.90 |
| 68313 | 08/02/2019 | 10/16/2019 | Valley Saw and Garden Equipment | General Supplies | 64.70 |
| 68314 | 09/25/2019 | 10/16/2019 | Monterey Bay Analytical Services | HPC Testing - Watkins Gate Well | 70.00 |
| 68315 | 10/08/2019 | 10/16/2019 | Water Awareness Comm Mtry | ZunZun Performances - (2) Crumpton, (2) Olson Elementary | 2,000.00 |
| 68316 | 09/30/2019 | 10/16/2019 | Monterey One Water | Sewer Treatment Charge 09/2019 - 10/2019 | 132.50 |
| 68317 | 09/05/2019 | 10/16/2019 | Staples Credit Plan | Office Supplies | 4,015.12 |
| 68318 | 09/23/2019 | 10/16/2019 | Harris & Associates | Developer Inspection Services (Dunes, East Garrison, Junsay Oaks, OMC Backflow Project, Wathen-Castanos Homes) | 11,950.00 |
| 68319 | 10/03/2019 | 10/16/2019 | Orkin Franchise 925 | BLM/ IOP Pest Control 10/2019 | 191.00 |
| 68320 | 09/26/2019 | 10/16/2019 | Cypress Coast Ford | Replace Solenoid/ Oil Change - Vehicle #0503 Crane Truck | 762.80 |
| 68321 | 09/20/2019 | 10/16/2019 | Federal Express | Shipping Charges | 90.61 |
| 68322 | 10/01/2019 | 10/16/2019 | Maynard Group | NEC Phone Equipment Maintenance, Cisco Meraki, AT&T Wireless Backup, eMVS Cloud, VoIP Services | 3,958.82 |
| 68323 | 06/25/2019 | 10/16/2019 | Shape Incorporated | Hatch - Booker LS Project | 3,550.63 |
| 68324 | 10/12/2019 | 10/16/2019 | Jobs Available, Inc. | Subscription Renewal | 45.00 |
| 68325 | 09/30/2019 | 10/16/2019 | DataProse, LLC | Customer Billing Statements 09/2019 | 5,512.16 |
| 68326 | 09/27/2019 | 10/16/2019 | American Supply Company | Janitorial Supplies | 254.73 |
| 68327 | 10/09/2019 | 10/16/2019 | Conservation Rebate Program | 4725 Sea Ridge Ct - (3) Toilet Rebates | 375.00 |
| 68328 | 09/23/2019 | 10/16/2019 | Fastenal Industrial & Construction Supplies | (10) "Keep Out Signs" - MCWD Sites | 287.62 |
| 68329 | 10/03/2019 | 10/16/2019 | Mobile Modular | Modular Office Rental - Water Resources 10/2019 | 743.69 |
| 68330 | 10/09/2019 | 10/16/2019 | Conservation Rebate Program | 299 Carmel Ave - Toilet Rebate | 125.00 |

| Check No | Invoice Date | Check Date | Vendor Name | Description | Amount |
|---|---|---|---|---|---|
| 68331 | 09/30/2019 | 10/16/2019 | Credit Consulting Services, Inc. | Commission on Collection of Past Due Accounts 09/2019 | 84.85 |
| 68332 | 10/04/2019 | 10/16/2019 | TJC and Associates Inc | Genset Design/ Installation Procurement Specifications - Generator Project | 12,447.25 |
| 68333 | 08/31/2019 | 10/16/2019 | Kimley-Horn and Associates, Inc. | Professional Services - Imjin Pkwy Pipeline | 3,077.49 |
| 68334 | 08/30/2019 | 10/16/2019 | Calcon Systems, Inc. | SCADA Update and Improvements | 18,064.99 |
| 68335 | 08/30/2019 | 10/16/2019 | Cavanaugh & Associates, P.A. | 2018 Water Loss Audit Validation Services | 2,500.00 |
| 68336 | 08/31/2019 | 10/16/2019 | Star Sanitation LLC | Mobile Restroom Rental - Beach Office 08/2019 | 71.01 |
| 68337 | 09/03/2019 | 10/16/2019 | Conservation Rebate Program | 2957 Abrams Dr - Washer Rebate | 150.00 |
| 68338 | 08/22/2019 | 10/16/2019 | Conservation Rebate Program | 153 Lakewood Dr - Landscape Incentive Rebate | 643.75 |
| 68339 | 09/04/2019 | 10/16/2019 | Conservation Rebate Program | 475 Larson Ct - Landscape Incentive Rebate | 646.00 |
| 68340 | 09/19/2019 | 10/16/2019 | Conservation Rebate Program | 164 Pacific Ct -Washer Rebate | 150.00 |
| 68341 | 09/19/2019 | 10/16/2019 | Conservation Rebate Program | 490 Ferris Ave - Toilet Rebate | 89.00 |
| 68342 | 09/17/2019 | 10/16/2019 | Daiohs USA | Coffee Supplies | 959.55 |
| 68343 | 10/09/2019 | 10/16/2019 | Conservation Rebate Program | 18938 Kilpatrick Ln - Washer Rebate | 100.00 |
| 68344 | 10/09/2019 | 10/16/2019 | Conservation Rebate Program | 159 Linde Cir - (2) Toilet Rebates | 250.00 |
| 68345 | 10/09/2019 | 10/16/2019 | Conservation Rebate Program | 461 Carmel Ave - (2) Toilet Rebates | 198.00 |
| 68346 | 10/09/2019 | 10/16/2019 | Conservation Rebate Program | 194 Terry Cir - Toilet Rebate | 125.00 |
| 68347 | 09/24/2019 | 10/16/2019 | Voyager Fleet Systems, Inc. | Fleet Gasoline | 2,764.27 |
| 68348 | 09/26/2019 | 10/16/2019 | Green Rubber-Kennedy AG, LP | General Supplies | 774.11 |
| 68349 | 09/25/2019 | 10/16/2019 | Conservation Rebate Program | 3072 Bostick Ave - (2) Toilet Rebates | 250.00 |
| 68350 | 10/02/2019 | 10/16/2019 | Marina Tire & Auto Repair | Oil Change - Vehicles #1234, #1802 | 83.00 |
| 68351 | 09/13/2019 | 10/16/2019 | Remy Moose Manley, LLP | Legal Fees: CPUC, Desalination Plan/ MPWSP 08/2019 | 80,389.86 |
| 68352 | 09/30/2019 | 10/16/2019 | Monterey Bay Technologies, Inc. | IT Support Services 10/2019 | 3,450.00 |
| 68353 | 09/24/2019 | 10/16/2019 | ICONIX Waterworks (US), Inc. | Parts - Booker LS, 3/4" Pack Joints, 4" Swing Check Valves | 8,523.79 |
| 68354 | 10/09/2019 | 10/16/2019 | Conservation Rebate Program | 1614 Hodges Ct - (2) Toilet Rebates | 250.00 |
| 68355 | 09/19/2019 | 10/16/2019 | Eurofins Eaton Analytical, Inc. | Laboratory Contract Testing | 130.00 |
| 68356 | 09/27/2019 | 10/16/2019 | The Pun Group, LLP | 2019 Audit - 1st Progress Billing | 20,000.00 |
| 68357 | 09/04/2019 | 10/16/2019 | Griffith & Masuda | Legal Fees: Bay View Mobile Home Park, CSUMB, FORA, General Matters, Groundwater, Joint Cal-AM Pipeline, RAMCO Lawsuit, RUWAP, Developers (Campus Town Project, Wathen-Castanos Homes, East Garrison) 08/2019 | 29,683.50 |
| 68358 | 09/18/2019 | 10/16/2019 | Aleshire & Wynder, LLP | Legal Fees: Opinion for Bay View Community vs MCWD 08/2019 | 24,895.30 |
| 68359 | 10/02/2019 | 10/16/2019 | Dataflow Business Systems, Inc. | Freight Fee - Cyan Cartridge/ Waste Toner | 7.50 |
| 68360 | 09/30/2019 | 10/16/2019 | Western Exterminator Company | Pest Control - Beach Office 09/2019 | 91.50 |

| Check No | Invoice Date | Check Date | Vendor Name | Description | Amount |
|---|---|---|---|---|---|
| 68361 | 10/06/2019 | 10/16/2019 | TIAA Commercial Finance, Inc. | (3) Office Copiers (C754E, 454E, 5551ci), eCopy ScanStation Leases 10/2019 | 1,109.54 |
| 68362 | 09/30/2019 | 10/16/2019 | Iron Mountain, Inc. | Shredding Service 09/2019 | 148.60 |
| 68363 | 09/28/2019 | 10/16/2019 | AT&T | Beach Alarm, IOP Fire Alarm, Main Frame Computer, Modem Line, Ord Alarm 09/2019 | 203.25 |
| 68364 | 10/01/2019 | 10/16/2019 | Simpler Systems, Inc. | UB Datapp Maintenance 10/2019 | 500.00 |
| 68365 | 09/30/2019 | 10/16/2019 | Marina Coast Water District (BLM) | BLM Water, Sewer, Fire Service 09/2019 | 350.15 |
| 68366 | 10/01/2019 | 10/16/2019 | Pure Janitorial, LLC | BLM Janitorial Services 09/2019 | 3,771.05 |
| 68367 | 10/09/2019 | 10/16/2019 | Conservation Rebate Program | 171 Linde Cir - (2) Toilet Rebates | 250.00 |
| 68368 | 10/07/2019 | 10/16/2019 | 4Imprint, Inc. | MCWD Pens - Conservation Advertisement | 300.40 |
| 68369 | 09/27/2019 | 10/16/2019 | EKI Environment & Water, Inc. | City of Marina Permitting of CalAm Project Wells - Environmental, SWRCB Recycled Water Grant Preparation | 15,803.26 |
| 68370 | 09/13/2019 | 10/16/2019 | Akel Engineering Group, Inc. | Master Plans/Capacity Fees Study - Water, Sewer, Recycled Water | 9,382.00 |
| 68371 | 10/02/2019 | 10/16/2019 | R&B Company | General Supplies | 342.48 |
| 68372 | 10/01/2019 | 10/16/2019 | Verizon Connect NWF, Inc. | GPS Service - (2) Meter Reader Trucks 09/2019 | 29.45 |
| 68373 | 09/17/2019 | 10/16/2019 | MWH Constructors Inc. | Construction Management Services - RUWAP | 2,142.00 |
| 68374 | 09/30/2019 | 10/16/2019 | Accela, Inc. | HR Module and Support Services | 9,634.94 |
| 68375 | 08/22/2019 | 10/16/2019 | American Water Works Assoc. | Utility Membership 12/2019 - 11/2020 | 2,237.00 |
| 68376 | 09/30/2019 | 10/16/2019 | City of Seaside | City Utility Tax 07/2019 - 09/2019 | 21,810.63 |
| 68377 | 09/12/2019 | 10/16/2019 | Alameda Electrical Distributors, Inc. | General Supplies | 53.38 |
| 68378 | 07/31/2019 | 10/16/2019 | Monterey Bay Air Resources District | Permit Fees - (18) Gensets | 8,406.00 |
| 68379 | | VOID | | | |
| 68380 | 09/30/2019 | 10/16/2019 | Mr. Albert Sanchez | AR Refund - RENASI/ Sea Heaven | 9,493.75 |
| 68381 | 09/19/2019 | 10/31/2019 | Monterey Co Tax Collector | Property Fees - District Wide 07/2019 - 06/2020 | 1,867.30 |
| 68382 | 09/19/2019 | 10/31/2019 | Monterey Co Tax Collector | Property Fees - District Wide 07/2019 - 06/2020 | 1,956.96 |
| 68383 | 09/30/2019 | 10/31/2019 | Pacific Smog | Smog Tests - (10) Vehicles | 397.50 |
| 500509 - 500513 | 10/04/2019 | 10/04/2019 | Payroll Checks and Direct Deposit | Payroll Ending 09/27/19 | 108,981.94 |
| 500514 | 10/04/2019 | 10/04/2019 | General Teamsters Union | Payroll Ending 09/27/19 | 777.00 |
| 500515 | 10/04/2019 | 10/04/2019 | WageWorks, Inc. | Payroll Ending 09/27/19 | 694.23 |
| ACH | 10/04/2019 | 10/04/2019 | Internal Revenue Service | Payroll Ending 09/27/19 | 46,182.62 |
| ACH | 10/04/2019 | 10/04/2019 | CalPERS | Payroll Ending 09/27/19 | 24,690.41 |
| ACH | 10/04/2019 | 10/04/2019 | State of California - EDD | Payroll Ending 09/27/19 | 10,290.99 |
| ACH | 10/04/2019 | 10/04/2019 | MassMutual Retirement Services, LLC | Payroll Ending 09/27/19 | 12,528.58 |
| 500516 | 10/14/2019 | 10/16/2019 | ACWA Joint Power Ins Authority | Workers Compensation Insurance 07/2019 - 09/2019 | 17,523.11 |
| 500517 | 10/04/2019 | 10/16/2019 | ACWA/ JPIA | Medical, Dental, Vision 11/2019 | 82,428.48 |
| 500518 | 09/13/2019 | 10/16/2019 | Calif-Nevada Section, AWWA | Backflow Assembly Tester Exam Fee - Magdaleno, Cross Connection Specialist Renewal - Pineda | 260.00 |

| Check No | Invoice Date | Check Date | Vendor Name | Description | Amount |
|---|---|---|---|---|---|
| 500519 | 09/10/2019 | 10/16/2019 | CWEA - Monterey Bay Section | CWEA Membership Renewal - Rodriguez, Grade I Collection System Exam Fee - Enzweiler | 559.00 |
| 500520 | 09/25/2019 | 10/16/2019 | AFLAC | Employee Paid Benefits 09/2019 | 2,831.42 |
| 500521 | 10/01/2019 | 10/16/2019 | Thomas P. Moore | Board Compensation 09/2019 | 50.00 |
| 500522 | 10/08/2019 | 10/16/2019 | Special District Association | Quarterly Meeting - Le, Shriner, Moore | 96.00 |
| 500523 | 09/11/2019 | 10/16/2019 | Jonathan P Lord | Grade II Water Distribution Certificate Renewal | 60.00 |
| 500524 | 08/15/2019 | 10/16/2019 | Federico Imprints | Yellow Safety Shirts - O&M | 298.79 |
| 500525 | 09/26/2019 | 10/16/2019 | American Public Works Association | Membership Dues - Wegley, Wilcox, True | 510.00 |
| 500526 | 10/05/2019 | 10/16/2019 | LegalShield | Employee Paid Benefits 10/2019 | 25.90 |
| 500527 | 10/01/2019 | 10/16/2019 | Matthew Zefferman | Board Compensation 09/2019 | 50.00 |
| 500528 | 08/21/2019 | 10/16/2019 | Derek Cray | 2019 CityWorks Annual Conference Per Diem Meals | 140.00 |
| 500529 | 08/21/2019 | 10/16/2019 | Teodulfo Espero | 2019 CityWorks Annual Conference Per Diem Meals | 252.00 |
| 500530 | 10/07/2019 | 10/16/2019 | Travis Enzweiler | Boot Benefit | 200.00 |
| 500531 | 09/17/2019 | 10/16/2019 | Principal Life | Employee Paid Benefits 10/2019 | 482.70 |
| 500532 | 09/30/2019 | 10/16/2019 | Justifacts Credential Verification, Inc. | Background Checks - (2) New Hires | 181.50 |
| 500533 | 09/10/2019 | 10/16/2019 | Lincoln National Life Insurance Company | Life, Long-Term/ Short-Term Disability, AD&D Premium 10/2019 | 2,363.01 |
| 500534 | 09/16/2019 | 10/16/2019 | WageWorks, Inc. | FSA Admin Fees 08/2019 | 128.00 |
| 500535 | 10/01/2019 | 10/16/2019 | Peter Le | Board Compensation 09/2019 | 50.00 |
| 500536 | 10/01/2019 | 10/16/2019 | Herbert Cortez | Board Compensation 09/2019 | 50.00 |
| 500537 | 09/17/2019 | 10/16/2019 | Transamerica Employee Benefits | Employee Paid Benefits 09/2019 | 1,205.30 |
| 500538 | 09/30/2019 | 10/16/2019 | Cintas Corporation No. 630 | Uniforms, Towels, Rugs 09/2019 | 681.50 |
| 500539 | 09/03/2019 | 10/16/2019 | American Society of Civil Engineers | Membership Renewal - Wegley | 300.00 |
| 500540 | 10/01/2019 | 10/16/2019 | Jan Shriner | Board Compensation 09/2019 | 50.00 |
| 500541 | 08/31/2019 | 10/16/2019 | Liebert Cassidy Whitmore | General Matters 08/2019 | 111.00 |
| 500542 - 500546 | 10/18/2019 | 10/18/2019 | Payroll Checks and Direct Deposit | Payroll Ending 10/11/19 | 111,978.01 |
| 500547 | 10/18/2019 | 10/18/2019 | WageWorks, Inc. | Payroll Ending 10/11/19 | 694.23 |
| ACH | 10/18/2019 | 10/18/2019 | MassMutual Retirement Services, LLC | Payroll Ending 10/11/19 | 10,918.58 |
| ACH | 10/18/2019 | 10/18/2019 | Internal Revenue Service | Payroll Ending 10/11/19 | 43,737.29 |
| ACH | 10/18/2019 | 10/18/2019 | CalPERS | Payroll Ending 10/11/19 | 25,579.25 |
| ACH | 10/18/2019 | 10/18/2019 | State of California - EDD | Payroll Ending 10/11/19 | 10,261.79 |
| | | | | **Total Disbursements for October 2019** | **1,691,585.16** |

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 9-B Meeting Date: November 18, 2019

Prepared By: Kelly Cadiente Approved By: Keith Van Der Maaten

Agenda Title: Receive the Quarterly Financial Statements for April 1, 2019 to June 30, 2019

Staff Recommendation: The Board receives the Quarterly Financial Statements for April 1, 2019 to June 30, 2019.

Background: *5-Year Strategic Plan, Strategic Element No. 3.2 – Regular Financial Updates to Policymakers and Managers.*

Discussion/Analysis: All figures reported for the quarter are based on accrual basis accounting. The District's consolidated financial statement for the quarter includes operating revenues of $4.126 million and expenses of $4.260 million, resulting in a net loss from operations of $0.134 million. The District budget projected net gain from operations of $0.584 million for the same period.

The difference between the actual net gain from operations for the quarter from the budget gain expectation is $0.718 million due to the timing of when revenues are earned and expenses are accrued producing different results than those in which the annual budget amounts are divided evenly by quarter.

Summary of Cost Centers:

| Description | Actual Qtr | Budget Qtr | Actual FYTD | Budget FYTD |
|---|---|---|---|---|
| | | | | |
| **Marina Water** | | | | |
| Revenue | 984,373 | 1,015,715 | 3,980,552 | 4,062,861 |
| Expenses | 994,579 | 785,151 | 3,033,977 | 3,140,599 |
| Net Gain/(Loss) | (10,206) | 230,564 | 946,575 | 922,262 |
| | | | | |
| **Marina Sewer** | | | | |
| Revenue | 353,497 | 356,468 | 1,374,937 | 1,425,873 |
| Expenses | 223,812 | 194,538 | 758,974 | 778,152 |
| Net Gain/(Loss) | 129,685 | 161,930 | 615,963 | 647,721 |
| | | | | |

| | | | | |
|---|---|---|---|---|
| **Ord Community Water** | | | | |
| Revenue | 2,029,735 | 1,848,868 | 7,756,359 | 7,395,470 |
| Expenses | 2,341,698 | 1,770,729 | 7,300,979 | 7,082,907 |
| Net Gain/(Loss) | (311,963) | 78,139 | 455,380 | 312,563 |
| | | | | |
| **Ord Community Sewer** | | | | |
| Revenue | 758,433 | 687,798 | 2,911,399 | 2,751,194 |
| Expenses | 533,790 | 486,153 | 1,800,072 | 1,944,605 |
| Net Gain/(Loss) | 224,643 | 201,645 | 1,111,327 | 806,589 |
| | | | | |
| **Recycled Water Project** | | | | |
| Revenue | 249 | 9 | 344 | 35 |
| Expenses | 166,487 | 88,160 | 374,125 | 352,641 |
| Net Gain/(Loss) | (166,238) | (88,151) | (373,781) | (352,606) |
| | | | | |
| **Regional Project** | | | | |
| Revenue | - | - | - | - |
| Expenses | - | - | - | - |
| Net Gain/(Loss) | - | - | - | - |
| | | | | |
| **Consolidated Cost Centers** | | | | |
| Revenue | **4,126,287** | **3,908,858** | **16,023,591** | **15,635,433** |
| Expenses | **4,260,366** | **3,324,731** | **13,268,127** | **13,298,904** |
| Net Gain/(Loss) | **(134,079)** | **584,127** | **2,755,464** | **2,336,529** |

As of June 30, 2019, the District had $20.540 million in liquid investments. The District also had $0.853 million of 2010 refunding bond proceeds for debt reserve purposes in the bank.

The District owed $27.045 million for the 2015 Senior Revenue Refunding Bonds Series A as well as $1.735 million for the 2010 Subordinate Revenue Refunding Bonds, $2.640 million to Holman Capital Corporation for the conversion of the Rabobank N.A. construction loan for the BLM building, and $5.423 million to BVAA Compass Bank Line of Credit for the Regional Urban Water Augmentation Project as of June 30, 2019.

Environmental Review Compliance: None required.

Financial Impact: _____Yes ___X___No Funding Source/Recap: None

Other Considerations: None.

Material Included for Information/Consideration: Quarterly Financial Statements, Investments and Debt Summary Statements.

Action Required: _____Resolution _____Motion ___X___Review

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Board Action

Motion By_____ Seconded By_____No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

MARINA COAST WATER DISTRICT
INCOME STATEMENT
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

CONSOLIDATED

| | CURRENT QUARTER | | | | YEAR-TO-DATE | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018/2019 | 2017/2018 | $ VARIANCE | % VARIANCE | 2018/2019 | 2017/2018 | $ VARIANCE | % VARIANCE |
| REVENUES | | | | | | | | |
| WATER SALES | 2,703,049 | 2,740,532 | (37,483) | -1.37% | 10,693,992 | 10,844,656 | (150,664) | -1.39% |
| SEWER SALES | 1,087,724 | 1,004,060 | 83,664 | 8.33% | 4,196,352 | 3,828,160 | 368,192 | 9.62% |
| INTEREST INCOME | 61,482 | 44,136 | 17,346 | 39.30% | 220,362 | 132,986 | 87,376 | 65.70% |
| OTHER REVENUE | 274,032 | 406,602 | (132,570) | -32.60% | 912,885 | 1,345,278 | (432,393) | -32.14% |
| TOTAL REVENUES | 4,126,287 | 4,195,330 | (69,043) | -1.65% | 16,023,591 | 16,151,080 | (127,489) | -0.79% |
| EXPENSES | | | | | | | | |
| ADMINISTRATIVE | 1,389,281 | 1,176,142 | 213,139 | 18.12% | 5,024,423 | 4,277,705 | 746,718 | 17.46% |
| OPERATING & MAINTENANCE | 1,033,764 | 813,093 | 220,671 | 27.14% | 3,658,830 | 3,181,860 | 476,970 | 14.99% |
| LABORATORY | 82,216 | 70,979 | 11,237 | 15.83% | 280,385 | 251,818 | 28,567 | 11.34% |
| CONSERVATION | 126,343 | 52,201 | 74,142 | 142.03% | 336,553 | 301,155 | 35,398 | 11.75% |
| ENGINEERING | 292,372 | 291,978 | 394 | 0.13% | 1,042,564 | 1,292,658 | (250,094) | -19.35% |
| WATER RESOURCES | 456,302 | - | 456,302 | 100.00% | 871,915 | - | 871,915 | 100.00% |
| INTEREST EXPENSE | 736,434 | 797,813 | (61,379) | -7.69% | 1,498,610 | 1,510,940 | (12,330) | -0.82% |
| FRANCHISE FEE | 143,654 | 159,069 | (15,415) | -9.69% | 554,847 | 629,939 | (75,092) | -11.92% |
| TOTAL EXPENSES | 4,260,366 | 3,361,275 | 899,091 | 26.75% | 13,268,127 | 11,446,075 | 1,822,052 | 15.92% |
| NET GAIN (LOSS) FROM OPERATIONS | (134,079) | 834,055 | (968,134) | -116.08% | 2,755,464 | 4,705,005 | (1,949,541) | -41.44% |
| CAPACITY FEE/ CAPITAL SURCHARGE | 1,106,049 | 1,084,096 | 21,953 | 2.03% | 4,306,233 | 5,151,848 | (845,615) | -16.41% |
| CONTRIBUTIONS/ GRANT REVENUE | 3,122,373 | 10,676,158 | (7,553,784) | -70.75% | 7,373,639 | 10,676,158 | (3,302,519) | -30.93% |
| NON-OPERATING REVENUE | 151,303 | 124,393 | 26,910 | 21.63% | 497,767 | 519,024 | (21,257) | -4.10% |
| CAPITAL IMPROVEMENT PROJECT | 3,300,841 | 16,681,825 | (13,380,984) | -80.21% | 11,884,958 | 26,132,429 | (14,247,471) | -54.52% |
| DEVELOPER REVENUE | 134,409 | 162,870 | (28,461) | -17.47% | 457,122 | 536,022 | (78,900) | -14.72% |
| DEVELOPER EXPENSES | 78,445 | 149,602 | (71,157) | -47.56% | 427,759 | 529,843 | (102,084) | -19.27% |

MARINA COAST WATER DISTRICT
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

CONSOLIDATED

| | MW FUND | | MS FUND | | OW FUND | | OS FUND | | RW FUND | | RP FUND | | CONSOLIDATED | | CONSOLIDATED (YTD) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| REVENUES | | | | | | | | | | | | | | | | |
| WATER SALES | 940,693 | 1,001,002 | - | - | 1,762,356 | 1,701,668 | - | - | - | - | - | - | 2,703,049 | 2,702,670 | 10,693,992 | 10,810,678 |
| SEWER SALES | - | - | 341,350 | 350,712 | - | - | 746,374 | 683,164 | - | - | - | - | 1,087,724 | 1,033,876 | 4,196,352 | 4,135,506 |
| INTEREST INCOME | 18,065 | 1,788 | 10,431 | 4,406 | 25,195 | 6,500 | 7,542 | 434 | 249 | 9 | - | - | 61,482 | 13,137 | 220,362 | 52,549 |
| OTHER REVENUE | 25,615 | 12,925 | 1,716 | 1,350 | 242,184 | 140,700 | 4,517 | 4,200 | - | - | - | - | 274,032 | 159,175 | 912,885 | 636,700 |
| TOTAL REVENUES | 984,373 | 1,015,715 | 353,497 | 356,468 | 2,029,735 | 1,848,868 | 758,433 | 687,798 | 249 | 9 | - | - | 4,126,287 | 3,908,858 | 16,023,591 | 15,635,433 |
| EXPENSES | | | | | | | | | | | | | | | | |
| ADMINISTRATIVE | 375,005 | 228,307 | 70,031 | 62,912 | 789,103 | 520,359 | 154,994 | 140,749 | 148 | 1,000 | - | - | 1,389,281 | 953,327 | 5,024,423 | 3,813,303 |
| OPERATING & MAINTENANCE | 227,876 | 253,159 | 94,427 | 93,989 | 527,790 | 473,850 | 183,671 | 202,582 | - | - | - | - | 1,033,764 | 1,023,580 | 3,658,830 | 4,094,314 |
| LABORATORY | 23,838 | 28,145 | - | - | 58,378 | 61,310 | - | - | - | - | - | - | 82,216 | 89,455 | 280,385 | 357,820 |
| CONSERVATION | 39,177 | 39,191 | - | - | 87,166 | 60,476 | - | - | - | - | - | - | 126,343 | 99,667 | 336,553 | 398,666 |
| ENGINEERING | 68,992 | 73,658 | 20,159 | 16,624 | 159,736 | 160,923 | 43,485 | 45,819 | - | - | - | - | 292,372 | 297,024 | 1,042,564 | 1,188,091 |
| WATER RESOURCES | 177,811 | 123,063 | - | - | 278,491 | 184,593 | - | - | - | - | - | - | 456,302 | 307,656 | 871,915 | 1,230,622 |
| INTEREST EXPENSE | 81,880 | 39,628 | 39,195 | 21,013 | 340,193 | 174,852 | 108,827 | 57,229 | 166,339 | 87,160 | - | - | 736,434 | 379,882 | 1,498,610 | 1,519,531 |
| FRANCHISE FEE | - | - | - | - | 100,841 | 134,366 | 42,813 | 39,774 | - | - | - | - | 143,654 | 174,140 | 554,847 | 696,557 |
| TOTAL EXPENSES | 994,579 | 785,151 | 223,812 | 194,538 | 2,341,698 | 1,770,729 | 533,790 | 486,153 | 166,487 | 88,160 | - | - | 4,260,366 | 3,324,731 | 13,268,127 | 13,298,904 |
| NET GAIN (LOSS) FROM OPERATIONS | (10,206) | 230,564 | 129,685 | 161,930 | (311,963) | 78,139 | 224,643 | 201,645 | (166,238) | (88,151) | - | - | (134,079) | 584,127 | 2,755,464 | 2,336,529 |
| CAPACITY FEE/ CAPITAL SURCHARGE | 56,167 | 64,722 | 34,995 | 46,660 | 732,664 | 850,585 | 282,223 | 298,159 | - | - | - | - | 1,106,049 | 1,260,126 | 4,306,233 | 5,040,502 |
| CONTRIBUTIONS/ GRANT REVENUE | - | 61,717 | - | - | 1,265,364 | 92,576 | 902,659 | - | 954,350 | 300,000 | - | - | 3,122,373 | 454,293 | 7,373,639 | 1,817,170 |
| NON-OPERATING REVENUE | 42,365 | 36,895 | 12,104 | 10,542 | 75,652 | 65,884 | 21,182 | 18,448 | - | - | - | - | 151,303 | 131,769 | 497,767 | 527,074 |
| CAPITAL IMPROVEMENT PROJECT | 30,904 | - | 3,373 | - | 1,388,596 | - | 1,029,760 | - | 593,151 | - | 255,057 | - | 3,300,841 | - | 11,884,958 | - |
| DEVELOPER REVENUE | 5,938 | - | 1,484 | - | 80,028 | 118,125 | 46,959 | 27,500 | - | - | - | - | 134,409 | 145,625 | 457,122 | 582,500 |
| DEVELOPER EXPENSES | 3,389 | 2,500 | 901 | 500 | 37,358 | 95,000 | 36,797 | 22,500 | - | - | - | - | 78,445 | 120,500 | 427,759 | 482,000 |

MARINA COAST WATER DISTRICT
INCOME STATEMENT
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

MARINA WATER FUND

| | CURRENT QUARTER | | | | YEAR-TO-DATE | | | |
|---|---|---|---|---|---|---|---|---|
| | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE |
| REVENUES | | | | | | | | |
| WATER SALES | 940,693 | 1,001,002 | (60,309) | (6.02%) | 3,825,755 | 4,004,008 | (178,253) | (4.45%) |
| SEWER SALES | - | - | - | - | - | - | - | - |
| INTEREST INCOME | 18,065 | 1,788 | 16,277 | 910.35% | 65,074 | 7,153 | 57,921 | 809.74% |
| OTHER REVENUE | 25,615 | 12,925 | 12,690 | 98.18% | 89,723 | 51,700 | 38,023 | 73.55% |
| TOTAL REVENUES | 984,373 | 1,015,715 | (31,342) | (3.09%) | 3,980,552 | 4,062,861 | (82,309) | (2.03%) |
| EXPENSES | | | | | | | | |
| ADMINISTRATIVE | 375,005 | 228,307 | 146,698 | 64.25% | 1,226,071 | 913,226 | 312,845 | 34.26% |
| OPERATING & MAINTENANCE | 227,876 | 253,159 | (25,283) | (9.99%) | 870,656 | 1,012,634 | (141,978) | (14.02%) |
| LABORATORY | 23,838 | 28,145 | (4,307) | (15.30%) | 82,816 | 112,581 | (29,765) | (26.44%) |
| CONSERVATION | 39,177 | 39,191 | (14) | (0.04%) | 121,399 | 156,764 | (35,365) | (22.56%) |
| ENGINEERING | 68,992 | 73,658 | (4,666) | (6.33%) | 236,899 | 294,630 | (57,731) | (19.59%) |
| WATER RESOURCES | 177,811 | 123,063 | 54,748 | 44.49% | 331,967 | 492,251 | (160,284) | (32.56%) |
| INTEREST EXPENSE | 81,880 | 39,628 | 42,252 | 106.62% | 164,169 | 158,513 | 5,656 | 3.57% |
| FRANCHISE/MEMBERSHIP FEES | - | - | - | - | - | - | - | - |
| TOTAL EXPENSES | 994,579 | 785,151 | 209,428 | 26.67% | 3,033,977 | 3,140,599 | (106,622) | (3.39%) |
| NET GAIN (LOSS) FROM OPERATIONS | (10,206) | 230,564 | (240,770) | (104.43%) | 946,575 | 922,262 | 24,313 | 2.64% |
| CAPACITY FEE/ CAPITAL SURCHARGE | 56,167 | 64,722 | (8,555) | (13.22%) | 71,963 | 258,888 | (186,925) | (72.20%) |
| CONTRIBUTIONS/ GRANT REVENUE | - | 61,717 | (61,717) | (100.00%) | - | 246,868 | (246,868) | (100.00%) |
| NON-OPERATING REVENUE | 42,365 | 36,895 | 5,470 | 14.83% | 139,375 | 147,581 | (8,206) | (5.56%) |
| CAPITAL IMPROVEMENT PROJECT | 30,904 | - | 30,904 | 100.00% | 479,260 | - | 479,260 | 100.00% |
| DEVELOPER REVENUE | 5,938 | - | 5,938 | 100.00% | 21,158 | - | 21,158 | 100.00% |
| DEVELOPER EXPENSES | 3,389 | 2,500 | 889 | 35.56% | 18,816 | 10,000 | 8,816 | 88.16% |

MARINA COAST WATER DISTRICT
INCOME STATEMENT
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

MARINA SEWER FUND

| | CURRENT QUARTER | | | | YEAR-TO-DATE | | | |
|---|---|---|---|---|---|---|---|---|
| | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE |
| REVENUES | | | | | | | | |
| WATER SALES | - | - | - | - | - | - | - | - |
| SEWER SALES | 341,350 | 350,712 | (9,362) | (2.67%) | 1,333,569 | 1,402,849 | (69,280) | (4.94%) |
| INTEREST INCOME | 10,431 | 4,406 | 6,025 | 136.75% | 37,622 | 17,624 | 19,998 | 113.47% |
| OTHER REVENUE | 1,716 | 1,350 | 366 | 27.11% | 3,746 | 5,400 | (1,654) | (30.63%) |
| TOTAL REVENUES | 353,497 | 356,468 | (2,971) | (0.83%) | 1,374,937 | 1,425,873 | (50,936) | (3.57%) |
| EXPENSES | | | | | | | | |
| ADMINISTRATIVE | 70,031 | 62,912 | 7,119 | 11.32% | 240,264 | 251,649 | (11,385) | (4.52%) |
| OPERATING & MAINTENANCE | 94,427 | 93,989 | 438 | 0.47% | 370,204 | 375,955 | (5,751) | (1.53%) |
| LABORATORY | - | - | - | - | - | - | - | - |
| CONSERVATION | - | - | - | - | - | - | - | - |
| ENGINEERING | 20,159 | 16,624 | 3,535 | 21.26% | 71,182 | 66,496 | 4,686 | 7.05% |
| WATER RESOURCES | - | - | - | - | - | - | - | - |
| INTEREST EXPENSE | 39,195 | 21,013 | 18,182 | 86.53% | 77,324 | 84,052 | (6,728) | (8.00%) |
| FRANCHISE/MEMBERSHIP FEES | - | - | - | - | - | - | - | - |
| TOTAL EXPENSES | 223,812 | 194,538 | 29,274 | 15.05% | 758,974 | 778,152 | (19,178) | (2.46%) |
| NET GAIN (LOSS) FROM OPERATIONS | 129,685 | 161,930 | (32,245) | (19.91%) | 615,963 | 647,721 | (31,758) | (4.90%) |
| CAPACITY FEE/ CAPITAL SURCHARGE | 34,995 | 46,660 | (11,665) | (25.00%) | 35,928 | 186,640 | (150,712) | (80.75%) |
| CONTRIBUTIONS/ GRANT REVENUE | - | - | - | - | - | - | - | - |
| NON-OPERATING REVENUE | 12,104 | 10,542 | 1,562 | 14.82% | 39,821 | 42,166 | (2,345) | (5.56%) |
| CAPITAL IMPROVEMENT PROJECT | 3,373 | - | 3,373 | 100.00% | 3,409 | - | 3,409 | 100.00% |
| DEVELOPER REVENUE | 1,484 | - | 1,484 | 100.00% | 5,085 | - | 5,085 | 100.00% |
| DEVELOPER EXPENSES | 901 | 500 | 401 | 80.20% | 2,769 | 2,000 | 769 | 38.45% |

MARINA COAST WATER DISTRICT
INCOME STATEMENT
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

ORD COMMUNITY WATER FUND

| | CURRENT QUARTER | | | | YEAR-TO-DATE | | | |
|---|---|---|---|---|---|---|---|---|
| | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE |
| REVENUES | | | | | | | | |
| WATER SALES | 1,762,356 | 1,701,668 | 60,688 | 3.57% | 6,868,237 | 6,806,670 | 61,567 | 0.90% |
| SEWER SALES | - | - | - | - | - | - | - | - |
| INTEREST INCOME | 25,195 | 6,500 | 18,695 | 287.62% | 90,385 | 26,000 | 64,385 | 247.63% |
| OTHER REVENUE | 242,184 | 140,700 | 101,484 | 72.13% | 797,737 | 562,800 | 234,937 | 41.74% |
| TOTAL REVENUES | 2,029,735 | 1,848,868 | 180,867 | 9.78% | 7,756,359 | 7,395,470 | 360,889 | 4.88% |
| EXPENSES | | | | | | | | |
| ADMINISTRATIVE | 789,103 | 520,359 | 268,744 | 51.65% | 3,014,970 | 2,081,434 | 933,536 | 44.85% |
| OPERATING & MAINTENANCE | 527,790 | 473,850 | 53,940 | 11.38% | 1,703,996 | 1,895,399 | (191,403) | (10.10%) |
| LABORATORY | 58,378 | 61,310 | (2,932) | (4.78%) | 197,569 | 245,239 | (47,670) | (19.44%) |
| CONSERVATION | 87,166 | 60,476 | 26,690 | 44.13% | 215,154 | 241,902 | (26,748) | (11.06%) |
| ENGINEERING | 159,736 | 160,923 | (1,187) | (0.74%) | 563,244 | 643,690 | (80,446) | (12.50%) |
| WATER RESOURCES | 278,491 | 184,593 | 93,898 | 50.87% | 539,948 | 738,371 | (198,423) | (26.87%) |
| INTEREST EXPENSE | 340,193 | 174,852 | 165,341 | 94.56% | 668,715 | 699,409 | (30,694) | (4.39%) |
| FRANCHISE/MEMBERSHIP FEES | 100,841 | 134,366 | (33,525) | (24.95%) | 397,383 | 537,463 | (140,080) | (26.06%) |
| TOTAL EXPENSES | 2,341,698 | 1,770,729 | 570,969 | 32.24% | 7,300,979 | 7,082,907 | 218,072 | 3.08% |
| NET GAIN (LOSS) FROM OPERATIONS | (311,963) | 78,139 | (390,102) | (499.24%) | 455,380 | 312,563 | 142,817 | 45.69% |
| CAPACITY FEE/ CAPITAL SURCHARGE | 732,664 | 850,585 | (117,921) | (13.86%) | 2,991,541 | 3,402,340 | (410,799) | (12.07%) |
| CONTRIBUTIONS/ GRANT REVENUE | 1,265,364 | 92,576 | 1,172,788 | 1266.84% | 1,265,364 | 370,302 | 895,062 | 241.71% |
| NON-OPERATING REVENUE | 75,652 | 65,884 | 9,768 | 14.83% | 248,884 | 263,537 | (14,653) | (5.56%) |
| CAPITAL IMPROVEMENT PROJECT | 1,388,596 | - | 1,388,596 | 100.00% | 1,481,760 | - | 1,481,760 | 100.00% |
| DEVELOPER REVENUE | 80,028 | 118,125 | (38,097) | (32.25%) | 270,693 | 472,500 | (201,807) | (42.71%) |
| DEVELOPER EXPENSES | 37,358 | 95,000 | (57,642) | (60.68%) | 281,592 | 380,000 | (98,408) | (25.90%) |

MARINA COAST WATER DISTRICT
INCOME STATEMENT
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

ORD COMMUNITY SEWER FUND

| | CURRENT QUARTER | | | | YEAR-TO-DATE | | | |
|---|---|---|---|---|---|---|---|---|
| | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE |
| REVENUES | | | | | | | | |
| WATER SALES | - | - | - | - | - | - | - | - |
| SEWER SALES | 746,374 | 683,164 | 63,210 | 9.25% | 2,862,783 | 2,732,657 | 130,126 | 4.76% |
| INTEREST INCOME | 7,542 | 434 | 7,108 | 1637.79% | 26,937 | 1,737 | 25,200 | 1450.78% |
| OTHER REVENUE | 4,517 | 4,200 | 317 | 7.55% | 21,679 | 16,800 | 4,879 | 29.04% |
| TOTAL REVENUES | 758,433 | 687,798 | 70,635 | 10.27% | 2,911,399 | 2,751,194 | 160,205 | 5.82% |
| EXPENSES | | | | | | | | |
| ADMINISTRATIVE | 154,994 | 140,749 | 14,245 | 10.12% | 542,795 | 562,994 | (20,199) | (3.59%) |
| OPERATING & MAINTENANCE | 183,671 | 202,582 | (18,911) | (9.33%) | 713,974 | 810,326 | (96,352) | (11.89%) |
| LABORATORY | - | - | - | - | - | - | - | - |
| CONSERVATION | - | - | - | - | - | - | - | - |
| ENGINEERING | 43,485 | 45,819 | (2,334) | (5.09%) | 171,239 | 183,275 | (12,036) | (6.57%) |
| WATER RESOURCES | - | - | - | - | - | - | - | - |
| INTEREST EXPENSE | 108,827 | 57,229 | 51,598 | 90.16% | 214,600 | 228,916 | (14,316) | (6.25%) |
| FRANCHISE/MEMBERSHIP FEES | 42,813 | 39,774 | 3,039 | 7.64% | 157,464 | 159,094 | (1,630) | (1.02%) |
| TOTAL EXPENSES | 533,790 | 486,153 | 47,637 | 9.80% | 1,800,072 | 1,944,605 | (144,533) | (7.43%) |
| NET GAIN (LOSS) FROM OPERATIONS | 224,643 | 201,645 | 22,998 | 11.41% | 1,111,327 | 806,589 | 304,738 | 37.78% |
| CAPACITY FEE/ CAPITAL SURCHARGE | 282,223 | 298,159 | (15,936) | (5.34%) | 1,206,801 | 1,192,634 | 14,167 | 1.19% |
| CONTRIBUTIONS/ GRANT REVENUE | 902,659 | - | 902,659 | 100.00% | 902,659 | - | 902,659 | 100.00% |
| NON-OPERATING REVENUE | 21,182 | 18,448 | 2,734 | 14.82% | 69,687 | 73,790 | (4,103) | (5.56%) |
| CAPITAL IMPROVEMENT PROJECT | 1,029,760 | - | 1,029,760 | 100.00% | 1,129,766 | - | 1,129,766 | 100.00% |
| DEVELOPER REVENUE | 46,959 | 27,500 | 19,459 | 70.76% | 160,186 | 110,000 | 50,186 | 45.62% |
| DEVELOPER EXPENSES | 36,797 | 22,500 | 14,297 | 63.54% | 124,582 | 90,000 | 34,582 | 38.42% |

MARINA COAST WATER DISTRICT
INCOME STATEMENT
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

RECYCLED WATER FUND

| | CURRENT QUARTER | | | | YEAR-TO-DATE | | | |
|---|---|---|---|---|---|---|---|---|
| | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE |
| REVENUES | | | | | | | | |
| WATER SALES | - | - | - | - | - | - | - | - |
| SEWER SALES | - | - | - | - | - | - | - | - |
| INTEREST INCOME | 249 | 9 | 240 | 2666.67% | 344 | 35 | 309 | 882.86% |
| OTHER REVENUE | - | - | - | - | - | - | - | - |
| TOTAL REVENUES | 249 | 9 | 240 | 2666.67% | 344 | 35 | 309 | 882.86% |
| EXPENSES | | | | | | | | |
| ADMINISTRATIVE | 148 | 1,000 | (852) | (85.20%) | 323 | 4,000 | (3,677) | (91.93%) |
| OPERATING & MAINTENANCE | - | - | - | - | - | - | - | - |
| LABORATORY | - | - | - | - | - | - | - | - |
| CONSERVATION | - | - | - | - | - | - | - | - |
| ENGINEERING | - | - | - | - | - | - | - | - |
| WATER RESOURCES | - | - | - | - | - | - | - | - |
| INTEREST EXPENSE | 166,339 | 87,160 | 79,179 | 90.84% | 373,802 | 348,641 | 25,161 | 7.22% |
| FRANCHISE FEE | - | - | - | - | - | - | - | - |
| TOTAL EXPENSES | 166,487 | 88,160 | 78,327 | 88.85% | 374,125 | 352,641 | 21,484 | 6.09% |
| NET GAIN (LOSS) FROM OPERATIONS | (166,238) | (88,151) | (78,087) | 88.58% | (373,781) | (352,606) | (21,175) | 6.01% |
| CAPACITY FEE/ CAPITAL SURCHARGE | - | - | - | - | - | - | - | - |
| CONTRIBUTIONS/ GRANT REVENUE | 954,350 | 300,000 | 654,350 | 218.12% | 5,205,616 | 1,200,000 | 4,005,616 | 333.80% |
| NON-OPERATING REVENUE | - | - | - | - | - | - | - | - |
| CAPITAL IMPROVEMENT PROJECT | 593,151 | - | 593,151 | 100.00% | 7,390,571 | - | 7,390,571 | 100.00% |
| DEVELOPER REVENUE | - | - | - | - | - | - | - | - |
| DEVELOPER EXPENSES | - | - | - | - | - | - | - | - |

MARINA COAST WATER DISTRICT
INCOME STATEMENT
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

REGIONAL PROJECT FUND

| | CURRENT QUARTER | | | | YEAR-TO-DATE | | | |
|---|---|---|---|---|---|---|---|---|
| | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE | ACTUAL | BUDGET | $ VARIANCE | % VARIANCE |
| REVENUES | | | | | | | | |
| WATER SALES | - | - | - | - | - | - | - | - |
| SEWER SALES | - | - | - | - | - | - | - | - |
| INTEREST INCOME | - | - | - | - | - | - | - | - |
| OTHER REVENUE | - | - | - | - | - | - | - | - |
| TOTAL REVENUES | - | - | - | - | - | - | - | - |
| EXPENSES | | | | | | | | |
| ADMINISTRATIVE | - | - | - | - | - | - | - | - |
| OPERATING & MAINTENANCE | - | - | - | - | - | - | - | - |
| LABORATORY | - | - | - | - | - | - | - | - |
| CONSERVATION | - | - | - | - | - | - | - | - |
| ENGINEERING | - | - | - | - | - | - | - | - |
| WATER RESOURCES | - | - | - | - | - | - | - | - |
| INTEREST EXPENSE | - | - | - | - | - | - | - | - |
| FRANCHISE FEE | - | - | - | - | - | - | - | - |
| TOTAL EXPENSES | - | - | - | - | - | - | - | - |
| NET GAIN (LOSS) FROM OPERATIONS | - | - | - | - | - | - | - | - |
| CAPACITY FEE/ CAPITAL SURCHARGE | - | - | - | - | - | - | - | - |
| CONTRIBUTIONS/ GRANT REVENUE | - | - | - | - | - | - | - | - |
| NON-OPERATING REVENUE | - | - | - | - | - | - | - | - |
| CAPITAL IMPROVEMENT PROJECT | 255,057 | - | 255,057 | 100.00% | 1,400,192 | - | 1,400,192 | 100.00% |
| DEVELOPER REVENUE | - | - | - | - | - | - | - | - |
| DEVELOPER EXPENSES | - | - | - | - | - | - | - | - |

MARINA COAST WATER DISTRICT
SCHEDULE OF INVESTMENTS SUMMARY
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

| ACCOUNT | ACCT TYPE | YIELD APR | 3/31/2019 BALANCE | QUARTERLY ACTIVITIES TRANSACTION TYPE | AMOUNT | 6/30/2019 BALANCE |
|---|---|---|---|---|---|---|
| LAIF ACCOUNT | | 2.57% | 7,735,654 | INTEREST 04/15/2019 | 48,524 | 7,784,178 |
| | | | | TRANSFERS | 4,600,000 | 12,384,178 |
| SAVINGS ACCOUNT | MM | 0.20% | 973,827 | INTEREST 04/01/19 - 06/30/19 | 482 | 974,309 |
| | | | | TRANSFERS | (700,000) | 274,309 |
| CPFCA DEPOSIT ACCOUNT | MM | 0.05% | 100,481 | INTEREST 04/01/19 - 06/30/19 | 13 | 100,494 |
| RESTRICTED FUNDS | MM | 0.16% | 6,332,494 | INTEREST 04/01/19 - 06/30/19 | 2,442 | 6,334,936 |
| | | | | TRANSFERS | (1,120,500) | 5,214,436 |
| RUWAP LOC PROCEEDS | CK | | 4,825 | DEPOSITS | 2,279,336 | 2,284,161 |
| | | | | WITHDRAWALS | (2,279,351) | 4,810 |
| CHECKING ACCOUNT | CK | | 5,376,924 | QUARTERLY DEPOSITS & CREDITS | 11,959,580 | 17,336,504 |
| | | | | QUARTERLY CHECKS & DEBITS | (11,995,138) | 5,341,366 |
| | | | | TRANSFERS | (2,779,500) | 2,561,866 |

| SUMMARY | As of June 30 2018 | 2019 |
|---|---|---|
| LAIF ACCOUNT | 7,611,520 | 12,384,178 |
| SAVINGS ACCOUNT | 972,372 | 274,309 |
| CPFCA DEPOSIT ACCOUNT | 100,444 | 100,494 |
| RESTRICTED FUNDS | 6,324,920 | 5,214,436 |
| RUWAP LOC PROCEEDS | 4,885 | 4,810 |
| CHECKING ACCOUNT | 3,750,594 | 2,561,866 |
| **TOTAL INVESTMENT** | **18,764,735** | **20,540,093** |

| RESERVES DETAIL (LAIF ACCOUNT) | As of June 30 2018 | 2019 |
|---|---|---|
| MW GEN OP RESERVE | 508,616 | 967,414 |
| MW CAPACITY REVENUE FUND | 565,760 | 608,758 |
| MW CAP REPL RESERVE FUND | 1,274,749 | 1,026,241 |
| MS GEN OP RESERVE | 1,336,098 | 1,377,187 |
| MS CAPACITY REVENUE FUND | 111,903 | 106,618 |
| MS CAP REPL RESERVE FUND | 1,945 | 99,032 |
| OW GEN OP RESERVE | 76,479 | 171,947 |
| OW CAPITAL/CAPACITY REVENUE FUND | 2,762,117 | 6,910,496 |
| OW CAP REPL RESERVE FUND | 68,784 | 90,888 |
| OS GEN OP RESERVE | 16,203 | 146,777 |
| OS CAPITAL/CAPACITY REVENUE FUND | 887,194 | 878,822 |
| OS CAP REPL RESERVE FUND | 1,672 | - |
| **TOTAL** | **7,611,520** | **12,384,178** |

MARINA COAST WATER DISTRICT
SCHEDULE OF INVESTMENTS SUMMARY - BOND PROCEEDS
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

| ACCOUNT | ACCT TYPE | YIELD APR | 3/31/2019 BALANCE | QUARTERLY ACTIVITIES TRANSACTION TYPE | AMOUNT | 6/30/2019 BALANCE |
|---|---|---|---|---|---|---|
| RESERVE FUND | TFUND | 1.95% | 857,190 | INTEREST 04/01/19 - 06/30/19 | 4,974 | 862,164 |
| 2010 REFUNDING BOND | | | | FUNDS TRANFER | (9,371) | 852,793 |

MARINA COAST WATER DISTRICT
SCHEDULE OF DEBT SUMMARY
APRIL 1, 2019 TO JUNE 30, 2019
(UNAUDITED)

| PRINCIPAL AMOUNT | FIRST PAYMENT | FINAL PAYMENT | RATE | 3/31/2019 BALANCE | QUARTERLY ACTIVITIES TRANSACTION TYPE | AMOUNT | 6/30/2019 BALANCE |
|---|---|---|---|---|---|---|---|
| HCC - BLM INSTALLMENT LOAN | | | | | | | |
| 2,799,880 | 07/20/2017 | 01/20/2037 | 5.750% | 2,640,374 | PAYMENT - PRINCIPAL | - | 2,640,374 |
| | | | | | INTEREST PAYMENT | (68,209) | |
| 2010 REFUNDING BOND - CLOSING DATE 12/23/2010 | | | | | | | |
| 8,495,000 | 06/01/2011 | 06/01/2020 | 4.340% | 2,585,000 | PAYMENT - PRINCIPAL | (850,000) | 1,735,000 |
| | | | | | INTEREST PAYMENT | (71,854) | |
| 2015 SERIES A REFUNDING BOND - CLOSING DATE 07/15/2015 | | | | | | | |
| 29,840,000 | 12/01/2015 | 06/01/2037 | 3.712% | 28,005,000 | PAYMENT - PRINCIPAL | (960,000) | 27,045,000 |
| | | | | | INTEREST PAYMENT | (750,788) | |
| BVAA COMPASS RUWAP LOC | | | | | | | |
| 55,000 | - | 08/01/2020 | 3.086% * | 3,148,798 | ADVANCES | 2,274,527 | 5,423,325 |
| | | | | | PAYMENT - PRINCIPAL | - | 5,423,325 |
| | | | | | INTEREST PAYMENT | (28,188) | |

*Line of Credit interest calculated on a variable basis (65.01% of the 30-Day Monthly LIBOR plus 1.50%). Amount represents interest rate at 06/03/2019.

**SUMMARY**

| | |
|---|---|
| HCC - BLM INSTALLMENT LOAN | 2,640,374 |
| 2010 REFUNDING BOND | 1,735,000 |
| 2015 REFUNDING BOND SERIES A | 27,045,000 |
| BVAA COMPASS RUWAP LOC | 5,423,325 |
| **TOTAL DEBT** | **36,843,699** |

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 9-C Meeting Date: November 18, 2019

Prepared By: Paula Riso Approved By: Keith Van Der Maaten

Agenda Title: Approve the Draft Minutes of the Regular Joint Board/GSA Meeting of October 21, 2019

Staff Recommendation: The Board of Directors approve the draft minutes of the October 21, 2019 regular joint Board meeting.

Background: *5-Year Strategic Plan, Mission Statement – We Provide high quality water, wastewater collection and conservation services at a reasonable cost, through planning, management and the development of water resources in an environmentally sensitive manner.*

Discussion/Analysis: The draft minutes of October 21, 2019 are provided for the Board to consider approval.

Environmental Review Compliance: None required.

Financial Impact: _____Yes ___X___No Funding Source/Recap: None

Other Considerations: The Board can suggest changes/corrections to the minutes.

Material Included for Information/Consideration: Draft minutes of October 21, 2019.

Action Required: _____Resolution ___X___Motion _____Review

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Board Action

Motion By_____ Seconded By_____ No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

# Marina Coast Water District

Regular Board Meeting/Groundwater Sustainability Agency Board Meeting
11 Reservation Road, Marina
October 21, 2019

Draft Minutes

1. Call to Order:

President Moore called the meeting to order at 6:30 p.m. on October 21, 2019 at the Marina Council Chambers, 211 Hillcrest Avenue, Marina, California.

2. Roll Call:

Board Members Present:

Thomas P. Moore – President
Jan Shriner – Vice President
Herbert Cortez – arrived at 6:34 p.m.
Peter Le

Board Members Absent:

Matt Zefferman

Staff Members Present:

Keith Van Der Maaten, General Manager
Roger Masuda, District Counsel
David Hobbs, District Counsel
Kelly Cadiente, Director of Administrative Services
Derek Cray, Operations and Maintenance Manager
Michael Wegley, District Engineer
Patrick Breen, Water Resources Manager
Rose Gill, HR/Risk Administrator
Paula Riso, Executive Assistant/Clerk to the Board

Audience Members:

Andrew Sterbenz, Schaaf & Wheeler
Philip Clark, Seaside Resident, WCC Member
Mark Kelly, Cal Am Consultant
Tina Walsh, Marina Resident
Harvy Biala, Marina Resident
Therese Kohlerer, East Garrison Resident
Bruce Delgado, City of Marina Mayor
Vera Nelson, EKI Environment and Water
Tammy Jennings, Monterey Resident
Lisbeth Visscher, Marina Resident
Evy Smith, Marina Resident
Lisa Berkley, City of Marina Councilmember
Brian McCarthy, Marina Resident
Alex Miller, Seaside Resident
Susan Schiavone, Seaside Resident
Steven Rice, Marina Resident
Sarah Babcock, East Garrison Resident
Judi Lehman, Carmel Resident

3. Public Comment on Closed Session Items:

There were no public comments.

The Board entered into closed session at 6:32 p.m. to discuss the following items:

4. Closed Session:

   A. Pursuant to Government Code 54956.9
   Conference with Legal Counsel – Existing Litigation

      1) In the Matter of the Application of California-American Water Company (U 210 W) for an Order (1) Approving a Settlement Agreement with the County of Monterey and the Monterey County Water Resources Agency to Settle and Resolve Claims and Issues Between the Parties and to Promote the Development, Construction and Operation of a Water Supply Project for Monterey County on an Expedited Basis, and (2) Authorizing the Transfer of Authorized Costs Related to the Settlement Agreement to Its Special Request 1 Surcharge Balancing Account, California Public Utilities Commission Application ("A.") 13-05-017, and related California Supreme Court petition for writ of review.

      2) Marina Coast Water District vs California-American Water Company, Monterey County Water Resources Agency; and, California-American Water Company, Monterey County Water Resources Agency vs Marina Coast Water District, San Francisco Superior Court Case Nos. CGC-15-547125, CGC-15-546632 (Complaint for Damages, Breach of Warranties, etc.)

      3) Marina Coast Water District v, California Coastal Commission (California-American Water Company, Real Party in Interest), Santa Cruz County Superior Court Case No. 15CV00267, Sixth Appellate District Court of Appeals Case No. H045468

      4) Bay View Community DE, LLC; Bryan Taylor; Greg Carter; and Brooke Bilyeu vs Marina Coast Water District; Board of Directors of Marina Coast Water District; County of Monterey and Does 1-25, inclusive, Monterey County Superior Court Case No. 18CV000765 (Petition for Writ of Mandate or Administrative Mandate, and Complaint for Declaratory and Injunctive Relief and Breach of Contract)

      5) Marina Coast Water District, and Does 1-100 v, County of Monterey, County of Monterey Health Department Environmental Health Bureau, and Does 101-110, Monterey County Superior Court Case No. 18CV000816 (Petition for Writ of Mandate and Complaint for Injunctive Relief)

      6) Marina Coast Water District, and Does 1-100 v, County of Monterey, Monterey County Board of Supervisors, and Does 101-110 (California-American Water Company, Real Property in Interest), Monterey County Superior Court Case No. 19CV003305 (Petition for Writ of Mandate and Complaint for Injunctive Relief)

Agenda Item 4 (continued):

B. Pursuant to Government Code 54956.9(d)(4)
Conference with Legal Counsel – Anticipated Litigation
Initiation of Litigation – Two Potential Cases

The Board ended closed session at 7:04 p.m.

President Moore reconvened the meeting to open session at 7:05 p.m.

5. Reportable Actions Taken during Closed Session:

Mr. Roger Masuda, District Counsel, stated that there were no reportable actions taken during Closed Session.

6. Pledge of Allegiance:

Director Cortez led everyone present in the pledge of allegiance.

7. Oral Communications:

Ms. Evy Smith, Marina Resident, addressed the Board about the lack of hot water recirculation systems in her home and the 128 other homes in the Dunes Development. She commented that she was looking for a variance from the District. Ms. Smith noted that the District had given a variance to Seaside Highlands when it was noticed that there were no hot water recirculation systems installed. She stated that the Infrastructure Agreement with Shea Homes states the District has the right to inspect the facilities including special fixtures including hot water recirculation systems. Ms. Smith commented that the Developer pays for inspections from MCWD and they were not done on these homes. She noted that the inspection forms were modified after the discovery in 2016. Ms. Smith stated that hot water recirculation systems were required in new construction but were not installed in 129 Dunes homes, although some were fixed with the Grundfos system. She also commented that the pipes were not insulated according to Code and there were no thermal expansion tanks in 83 homes with backflow preventers. Ms. Smith said master control valves were not installed as per MCWD regulations. She commented that she felt the General Manager bypassed the variance process. In conclusion, Ms. Smith provided a list of objectives she would like to see done. The list includes:

- Retain/restore ratepayers fair market home values to meet code and ordinances by providing assistance in remedying homes not at code (Can we file for a variance so we can be at code?)
- Amend and resend October 25, 2018 letter to Shea
    - Ratepayers with recirc unit (Grundfos) DO NOT meet code (first 5' pipe insulation or any other pipe insulation)
    - Does Recirc unit PLUS first 5' of pipe insulation meet code of MCWD and City? Qualify for a Variance?
    - Please arrange inspections of both and provide approvals of inspection to homeowners.
- Amend staff report dated November 19, 2018 for inconsistencies

Agenda Item 7 (continued):

  - MCWD conducted analysis?
  - Definition of recirc unit vs. the code definition of recirc system
  - Eliminate "MCWD does not have specific oversight in construction and installation matters…"
  - Fine Shea Homes as creating a public nuisance
  - Penalties to GM for violation of Brown Act, not following MCWD procedures in IA, suppression of information to ratepayers and MCWD Board, ignoring ratepayers as governing body of public water agency. Capitulation to Shea.
  - Penalties to Board of Directors for allowing GM to abuse role of MCWD to ratepayers
- Establish Ratepayers council/platform/committee to determine impacts to ratepayers of Board and Staff actions
  - Survey ALL homeowners with Grundfos retrofit for how recirc unit performs.
  - Perform scientific testing and analysis of Grundfos water usage, amount of time for hot water vs. a full piped recirc system performance.

Ms. Lisa Berkley, City of Marina Councilmember, invited the public to take a beach walk on October 26th to see the Cal Am slant wells. She also invited everyone to attend the Coastal Commission meeting on November 14th in Half Moon Bay to oppose the Cal Am desal plant.

President Moore commented that the Board would consider Action Item 11-A before Item 8 - Consent Calendar.

11. Action Items:

A. Consider Adoption of Resolution No. 2019-74 Making Determination of Lack of Unused Capacity in MCWD Water Conveyance Facility per California-American Water Company Request (Water Code § 1813):

President Moore explained the procedures for this item; 1) staff would give a report, 2) take clarifying questions for staff, 3) receive comments from Cal Am, 4) take clarifying questions for Cal Am, 5) open public comment, 6) close public comment, 7) Cal Am respond to public, 8) staff and Board member respond to public and Cal Am, 9) President asks for a motion, and, 10) vote on motion.

Mr. Keith Van Der Maaten, General Manager, introduced this item and gave a brief presentation. He noted that California-American Water Company (Cal Am) never notified MCWD of the intent to connect to the Water Conveyance Pipeline, and MCWD only found out about it through a USA marking request. Mr. Michael Wegley, District Engineer, discussed the pipeline and where Cal Am was proposing to tie into the line. Mr. Van Der Maaten reviewed the next steps and the results of the staff analysis on the capacity available in the pipeline. The Board asked clarifying questions.

Ms. Tina Walsh, Marina resident, commented that ratepayers paid for the pipeline and they support staff's analysis. She provided the Board Clerk with a written letter of support for the record.

Agenda Item 11-A (continued):

Ms. Lisbeth Visscher, Marina resident, voiced her support of staff stating the pipeline was not for profit and thanked staff for their service.

Ms. Susan Schiavone, Seaside Resident, commented that the pipeline should be kept for what it was intended to do. She voiced her support for Measure J.

Mr. Brian McCarthy, Marina Resident, voiced his support of MCWD staff.

Mr. Harvey Biala, Marina Resident, voiced his support of staff's conclusion and hard work.

Unknown Marina resident voiced her plea for MCWD not to allow the "for profit" Cal Am to take over the pipeline.

Ms. Therese Kohlerer, East Garrison, voiced her support of staff's analysis of the unused capacity in the pipeline and all the other citizens' comments. She also asked the Board to adopt the resolution before them.

Mr. Bruce Delgado, City of Marina Mayor, commented that Cal Am uses guerilla tactics and hearing how they were planning on tying into the District's pipeline without asking gives him a clearer vision of how Cal Am works. With regards to the 70% provision of capacity, he wanted to know if there would be room Pure Water Monterey water if it exceeds the 70% capacity.

Ms. Melody Chrislock, Public Water Now, commented that she supports whatever the District needs to do to adopt the resolution to stop Cal Am from using the pipeline. She would like to see the project stopped as it is not needed.

Ms. Berkley commented that she echoed everything everyone already said and supported the District's unbiased report.

Unknown resident asked the Board to read the fine print and realize that any decision of the Board will affect many people.

Mr. Van Der Maaten commented that in response to Mayor Delgado's question, there is available capacity in the District's pipeline that could be used for Pure Water Monterey Expansion which can possibly reduce the size of the pipeline that Pure Water Monterey Project will need to install.

Vice President Shriner voiced her appreciation to the public for attending and participating in the meeting.

President Moore commented that although the District and Cal Am have been in a tiff over several things, the District is not hostile to the needs of the Peninsula. He commented that the District is trying to be good citizens to help where they can without hurting the citizens they are primarily serving.

Agenda Item 11-A (continued):

Director Le made a motion to adopt Resolution No. 2019-74 Making Determination of Lack of Unused Capacity in MCWD Water Conveyance Facility per California-American Water Company Request (Water Code § 1813). Vice President Shriner seconded the motion. The motion was passed by the following vote:

| | | | | | |
|---|---|---|---|---|---|
| Director Zefferman | - | Absent | Vice President Shriner | - | Yes |
| Director Le | - | Yes | President Moore | - | Yes |
| Director Cortez | - | Yes | | | |

8. Consent Calendar:

Director Le requested to pull items B, and C from the Consent Calendar.

Vice President Shriner made a motion to approve the Consent Calendar consisting of: A) Receive the Check Register for the Month of September 2019. Director Cortez seconded the motion. The motion was passed by the following vote:

| | | | | | |
|---|---|---|---|---|---|
| Director Zefferman | - | Absent | Vice President Shriner | - | Yes |
| Director Cortez | - | Yes | President Moore | - | Yes |
| Director Le | - | Yes | | | |

B. Approve the Draft Minutes of the Regular Joint Board/GSA Meeting of September 16, 2019:

Director Le noted that on page 4 of the minutes, Barbara Montanti's position was incorrect. He also asked Item D on page 10 of the minutes state "Director Le asked questions and made a motion."

Director Le made a motion to approve the draft minutes of the regular joint Board/GSA meeting of September 16, 2019 with the corrections noted. Vice President Shriner seconded the motion. The motion was passed by the following vote:

| | | | | | |
|---|---|---|---|---|---|
| Director Zefferman | - | Absent | Vice President Shriner | - | Yes |
| Director Le | - | Yes | President Moore | - | Yes |
| Director Cortez | - | Yes | | | |

C. Consider Adoption of Resolution No. 2019-73 to Approve Revisions to the Policy for the High-Efficiency Toilet Rebate Program:

Director Le questioned what a "free rider" was. Mr. Breen, Water Resources Manager, answered that phrase was someone who was going to replace their toilet anyway, and not just to conserve water.

Agenda Item 8-C (continued):

Director Le questioned how the cost allocation for the rebates is decided. Mr. Breen answered that there were some large toilet replacement projects scheduled for the Ord Community which was why the Ord budget was so large. The Board asked clarifying questions. President Moore noted a typo for the UHET rebate and clarified that it should read "…when all toilets at an account are retrofitted to UHET toilets."

Director Cortez made a motion to adopt Resolution No. 2019-73 to approve revisions to the policy for the High-Efficiency Toilet Rebate Program with the corrections; and, asked for a follow-up in 6 months to see how the revised rebate program was working. Vice President Shriner seconded the motion. The motion was passed by the following vote:

| | | | | | |
|---|---|---|---|---|---|
| Director Zefferman | - | Absent | Vice President Shriner | - | Yes |
| Director Le | - | Yes | President Moore | - | Yes |
| Director Cortez | - | Yes | | | |

9. Marina Coast Water District Groundwater Sustainability Agency Matters

   A. Action Item:

      1. Consider Adoption of Resolution No. 2019-GSA03 to Authorize the General Manager to Apply to the California Department of Water Resources to Obtain a Grant under the 2019 Sustainable Groundwater Management (SGM) Grant Program Planning – Round 3 Grant Pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) (Wat. Code, § 79700 et seq.) and/or the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68) (Pub. Resources Code, § 80000 et seq.):

Mr. Van Der Maaten pointed out a typo in the first line of the Detailed Description. It should read Marina "Coast" not Marina "Cost".

Mr. Breen introduced this item and explained what the Grant was going to be used for. Vice President Shriner thanked staff for working on the Grant funding for this work.

Vice President Shriner made a motion to adopt Resolution No. 2019-GSA03 to authorize the General Manager to apply to the California Department of Water Resources to obtain a Grant under the 2019 Sustainable Groundwater Management (SGM) Grant Program Planning – Round 3 Grant Pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) (Wat. Code, § 79700 et seq.) and/or the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68) (Pub. Resources Code, § 80000 et seq.). Director Cortez seconded the motion.

Agenda Item 9-A1 (continued):

The motion was passed by the following vote:

| | | | | | |
|---|---|---|---|---|---|
| Director Zefferman | - | Absent | Vice President Shriner | - | Yes |
| Director Cortez | - | Yes | President Moore | - | Yes |
| Director Le | - | Yes | | | |

10. Return to Marina Coast Water District Matters

11. Action Items:

B. Consider Adoption of Resolution No. 2019-75 to Approve Reclassification of the Assistant Engineer to an Associate Engineer Position Within the Engineering Department:

Ms. Rose Gill, HR/Risk Administrator, introduced this item explaining the need for additional higher-level engineering staff. The Board asked clarifying questions.

Vice President Shriner made a motion to adopt Resolution No. 2019-75 to approve reclassification of the Assistant Engineer to an Associate Engineer position within the Engineering department. Director Cortez seconded the motion. The motion was passed by the following vote:

| | | | | | |
|---|---|---|---|---|---|
| Director Zefferman | - | Absent | Vice President Shriner | - | Yes |
| Director Le | - | Yes | President Moore | - | Yes |
| Director Cortez | - | Yes | | | |

C. Consider Approving Funding for Director Le to Attend the Association of California Water Agencies Fall Conference in San Diego:

Director Le removed himself from the dais and the chambers at 8:28 p.m.

Mr. Van Der Maaten introduced this item and explained that the budget for Director conferences does not have enough remaining funds for this conference. He stated that there is available funds in the employee training budget that could be used to fund this conference.

Vice President Shriner noted that ACWA does hold a meeting in Monterey in May and stated that when she was the ACWA/JPIA representative, she tried to attend the local conferences to save District funds. Director Cortez asked why the budget was set at such a low amount. Mr. Van Der Maaten answered that in the past there hasn't been a lot of interest from Board members in attending training or conferences. He noted that if there was more Board interest, the next budget could be increased to reflect that. President Moore stated that he supported Board member training and attending conferences. Director Cortez commented that he sees this training/conference budget item as a benefit and not an entitlement. He would like to make sure that Directors who take advantage of this benefit are ethically aligned with the Board Procedures Manual in their behavior. Director Cortez said that in the future, when a Director requests to go to a conference, the Board needs to make sure that Director is in line with the BPM and that the Board is not supporting behavior that doesn't abide by the BPM.

Agenda Item 11-C (continued):

President Moore made a motion to approve funding for Director Le to attend the Association of California Water Agencies Fall Conference in San Diego. Director Cortez seconded the motion. The motion failed by the following vote:

| | | | | | |
|---|---|---|---|---|---|
| Director Zefferman | - | Absent | Vice President Shriner | - | No |
| Director Le | - | Absent | President Moore | - | Yes |
| Director Cortez | - | Yes | | | |

President Moore asked for this item to be returned to the November meeting.

12. Staff Reports:

A. Receive an Update on the Ord Lift Station Easement:

Mr. Wegley gave a brief update on the easement. Director Le asked what the delay was in getting the easement. Mr. Wegley answered that staff has been working with Seaside and there has been a lot of information going back and forth. Director Le asked what the problem was with the existing lift station and if there had been spills. Mr. Wegley answered that there had been a few spills, including a force main break and a pump failure. The District did have to ask for help from Monterey One Water and Seaside to keep up with the flows and not allow them to go out to the ocean. Director Le asked if there have been any fines? Mr. Wegley answered not yet and have shown the State that the District is working on correcting the issues.

B. Receive a Report on Current Capital Improvement Projects:

Mr. Wegley gave a brief update on current CIP projects. The Board asked clarifying questions. President Moore cautioned staff to be careful of the historic row of Eucalyptus trees on Beach Road when working on that project.

C. Receive the 3rd Quarter 2019 MCWD Water Consumption Report:

Ms. Kelly Cadiente, Director of Administrative Services, introduced this item and reviewed the latest water consumption report and explained the variances in the report. The Board asked clarifying questions.

D. Receive the 2019 Sewer Flow Report through September 30, 2019:

Ms. Cadiente introduced this item. There were no questions on this item.

13. Informational Items:

A. General Manager's Report:

Agenda Item 13-A (continued):

1. Update on Developer's Deposit Policy:

Mr. Van Der Maaten gave a brief update on the Developer's Deposit Policy explaining that staff is still working on improving the policy.

2. Update on Well 12 and Watkins Gate Well:

Mr. Van Der Maaten gave a brief update on Well 12 and Watkins Gate Well. He stated that Well 12 has been placed as inactive and Watkins Gate Well has be rehabbed and is back on-line.

3. Update on SBVGSA Final Plan:

Mr. Van Der Maaten gave a brief update on the SVBGSA Final Plan and noted that District staff has provided comments and is monitoring it to make sure the comments are being included. The Board asked clarifying questions.

B. Counsel's Report:

No report was given.

C. Director's Report:

Director Le commented that if anyone had any questions, they could ask him and noted that there were slides on the CSDA website. Mr. Masuda stated that he attended the conference as well and was impressed with the speakers at the conference.

D. Committee and Board Liaison Reports:

1. Water Conservation Commission:

Mr. Breen gave a brief update and noted the next meeting is scheduled for November 7th.

2. Joint City District Committee:

President Moore noted the next meeting was moved to October 30th.

3. Executive Committee:

President Moore gave a brief update and noted the next meeting is scheduled for November 12th.

4. Community Outreach Committee:

Director Cortez stated that there was no meeting in October and the next meeting is scheduled for November 12th.

5. Budget and Personnel Committee:

Vice President Shriner stated that there was no meeting in October and the next meeting is scheduled for November 12th.

6. M1W Board Member:

President Moore gave a brief update and noted the next meeting is scheduled for October 28th.

7. LAFCO Liaison:

Director Cortez stated the next meeting is scheduled for October 28th.

8. FORA:

No report was given.

9. WWOC:

Mr. Van Der Maaten noted the next meeting was October 24th.

10. JPIA Liaison:

No report was given.

11. Special Districts Association Liaison:

President Moore stated they met on October 15th and gave a brief update.

12. SVGSA Liaison:

No report was given.

14. Board member Requests for Future Agenda Items:

President Moore noted that the Board members can email in their requests. Director Le said he had already emailed his request. Director Le also asked to review the comments of the Pure Water Monterey EIR at the next meeting

15. Director's Comments:

Director Cortez, Director Le, Vice President Shriner, and President Moore made comments.

President Moore recessed the meeting from 9:31 p.m. to 9:38 p.m.

The Board reentered into closed session at 9:38 p.m.to discuss the following item:

4. Closed Session:

   B. Pursuant to Government Code 54956.9(d)(4)
   Conference with Legal Counsel – Anticipated Litigation
   Initiation of Litigation – Two Potential Cases

President Moore reconvened the meeting to open session at 10:28 p.m.

5. Reportable Actions Taken during Closed Session:

Mr. Masuda stated that there were no reportable actions taken during Closed Session.

16. Adjournment:

The meeting was adjourned at 10:29 p.m.

APPROVED:

_____
Thomas P. Moore, President

ATTEST:

_____
Paula Riso, Deputy Secretary

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 9-D Meeting Date: November 18, 2019

Prepared By: Paula Riso Approved By: Keith Van Der Maaten

Agenda Title: Approve the Draft Minutes of the Special Joint Board/GSA Meeting of November 4, 2019

Staff Recommendation: The Board of Directors approve the draft minutes of the November 4, 2019 special joint Board meeting.

Background: *5-Year Strategic Plan, Mission Statement – We Provide high quality water, wastewater collection and conservation services at a reasonable cost, through planning, management and the development of water resources in an environmentally sensitive manner.*

Discussion/Analysis: The draft minutes of November 4, 2019 are provided for the Board to consider approval.

Environmental Review Compliance: None required.

Financial Impact: _____Yes ___X___No Funding Source/Recap: None

Other Considerations: The Board can suggest changes/corrections to the minutes.

Material Included for Information/Consideration: Draft minutes of November 4, 2019.

Action Required: _____Resolution ___X___Motion _____Review

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Board Action

Motion By_____ Seconded By_____ No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

# Marina Coast Water District

Special Board Meeting/Groundwater Sustainability Agency Board Meeting
11 Reservation Road, Marina
November 4, 2019

Draft Minutes

1. Call to Order:

President Moore called the meeting to order at 6:30 p.m. on November 4, 2019 at the District office, 11 Reservation Road, Marina, California.

2. Roll Call:

Board Members Present:

Thomas P. Moore – President
Jan Shriner – Vice President
Herbert Cortez – arrived at 6:32 p.m.
Peter Le
Matt Zefferman

Board Members Absent:

None

Staff Members Present:

Keith Van Der Maaten, General Manager
Roger Masuda, District Counsel
Derek Cray, Operations and Maintenance Manager
Kelly Cadiente, Director of Administrative Services
Teo Espero, IT Administrator
Paula Riso, Executive Assistant/Clerk to the Board

Audience Members:

Andrew Sterbenz, Schaaf & Wheeler
Robert Porr, Fieldman Rolapp & Associates
Laura Carpenter, Fieldman Rolapp & Associates
Ken Pun, The Pun Group
Charles Adams, Jones Hall
Dan Kurz, Morgan Stanley

3. Pledge of Allegiance:

Director Zefferman led everyone present in the pledge of allegiance.

4. Oral Communications:

There were no public comments.

5. Action Items:

   A. Consider Adoption of Resolution No. 2019-77 to Award a Contract to Calcon Systems for Installation and Integration of Generator and ATS Components; and, Consider Adoption of Resolution No. 2019-78 to Award a Contract to the Don Chapin Company to Perform Site Work to Allow the Installation of Generators:

Mr. Derek Cray, Operations and Maintenance Manager, introduced this item. Director Le asked if this contract was exempt from going out to bid. Mr. Cray answered that as this was an emergency, there was not the requirement to go to bid, and the District was using their on-call contractors. Director Le also asked who would inspect the project and inquired about survey work. Mr. Cray answered that staff would do the inspection and there would not be any surveying performed. The Board asked clarifying questions including if a warranty was included for the work.

Vice President Shriner made a motion to adopt Resolution No. 2019-77 awarding a contract to Calcon Systems for installation and integration of generator and ATS components; and, adopting Resolution No. 2019-78 awarding a contract to the Don Chapin Company to perform site work to allow the installation of generators. Director Cortez seconded the motion. More discussion regarding timing, how long the generators could run when the electricity is out, and how long diesel fuel will last.

President Moore made a substitute motion to adopt Resolution No. 2019-77 awarding a contract to Calcon Systems for installation and integration of generator and ATS components; and, adopting Resolution No. 2019-78 awarding a contract to the Don Chapin Company to perform site work to allow the installation of generators, and added that staff request a 1-year warranty for the work. Director Zefferman seconded the motion.

Director Le made a substitute motion to adopt Resolution No. 2019-77 awarding a contract to Calcon Systems for installation and integration of generator and ATS components; and, adopting Resolution No. 2019-78 awarding a contract to the Don Chapin Company to perform site work to allow the installation of generators, and added that surveying and testing to be done on the sites. The motion died for lack of a second.

Agenda Item 5-A (continued):

The substitute motion by President Moore was passed by the following vote:

| | | | | | |
|---|---|---|---|---|---|
| Director Zefferman | - | Yes | Vice President Shriner | - | Yes |
| Director Le | - | No | President Moore | - | Yes |
| Director Cortez | - | Yes | | | |

B. Consider Accepting the Comprehensive Annual Financial Report and the Independent Auditor's Report for the Fiscal Year ended June 30, 2019:

Ms. Kelly Cadiente, Director of Administrative Services, introduced this item and Mr. Ken Pun, The Pun Group. Mr. Pun gave a presentation on the Independent Auditor's Report for the Fiscal Year ended June 30, 2019. The Board asked clarifying questions.

Vice President Shriner made a motion to accept the Comprehensive Annual Financial Report and the Independent Auditor's Report for the Fiscal Year ended June 30, 2019. Director Zefferman seconded the motion. The motion was passed by the following vote:

| | | | | | |
|---|---|---|---|---|---|
| Director Zefferman | - | Yes | Vice President Shriner | - | Yes |
| Director Le | - | No | President Moore | - | Yes |
| Director Cortez | - | Yes | | | |

C. Consider Adoption of Resolution No. 2019-79 to Authorize the Delivery and Sales of Enterprise Revenue Certificates of Participation, Series 2019 in the Principal Amount of Not-to-Exceed $23,000,000 to Finance Water and Wastewater System Improvements, and Approving Related Documents and Official Actions:

Ms. Cadiente introduced this item. She introduced the consultants that were present for the meeting: Mr. Robert Porr and Ms. Laura Carpenter of Fieldman Rolapp & Associates; Mr. Charles Adams, Jones Hall; and Mr. Dan Kurz, Morgan Stanley. Ms. Carpenter gave a presentation on the debt service numbers and projections as well as an update to the financing schedule. Director Le asked why the presentation wasn't given to the Board prior to the meeting. Ms. Carpenter explained that the information in the presentation was all in the packet but was just summarized in the presentation. Mr. Kurz gave a brief presentation and provided a market update. Mr. Adams reviewed the legal documents the Board is requested to approve. The Board asked clarifying questions. Director Shriner noted a typo on page B-5 of the Purchase Agreement where the lettering for the last paragraph should be (n) and not (l).

Vice President Shriner made a motion to adopt Resolution No. 2019-79 to authorize the delivery and sales of Enterprise Revenue Certificates of Participation, Series 2019 in the principal amount of not-to-exceed $23,000,000 to finance water and wastewater system improvements, and approving related documents and official actions. Director Cortez seconded the motion.

Agenda Item 5-C (continued):

The motion was passed by the following vote.

| | | | | | |
|---|---|---|---|---|---|
| Director Zefferman | - | Yes | Vice President Shriner | - | Yes |
| Director Le | - | No | President Moore | - | Yes |
| Director Cortez | - | Yes | | | |

6. Public Comment on Closed Session Items:

There were no public comments.

President Moore recessed the meeting from 8:32 p.m. until 8:42 p.m.

The Board entered into closed session at 8:42 p.m. to discuss the following items:

7. Closed Session:

   A. Pursuant to Government Code 54956.9
      Conference with Legal Counsel – Existing Litigation

      1) Bay View Community DE, LLC; Bryan Taylor; Greg Carter; and Brooke Bilyeu vs Marina Coast Water District; Board of Directors of Marina Coast Water District; County of Monterey and Does 1-25, inclusive, Monterey County Superior Court Case No. 18CV000765 (Petition for Writ of Mandate or Administrative Mandate, and Complaint for Declaratory and Injunctive Relief and Breach of Contract)

   B. Pursuant to Government Code 54956.9(d)(4)
      Conference with Legal Counsel – Anticipated Litigation
      Initiation of Litigation – Two Potential Cases

President Moore reconvened the meeting to open session at 9:58 p.m.

8. Reportable Actions Taken during Closed Session:

Mr. Roger Masuda, District Counsel, stated that there were no reportable actions taken during Closed Session.

9. Director's Comments:

Director Zefferman, Director Cortez, Director Le, Vice President Shriner, and President Moore made comments.

10. Adjournment:

The meeting was adjourned at 10:03 p.m.

APPROVED:

_____
Thomas P. Moore, President

ATTEST:

_____
Paula Riso, Deputy Secretary

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 9-E | Meeting Date: November 18, 2019

Prepared By: Paul Lord | Approved By: Keith Van Der Maaten
Reviewed By: Patrick Breen

Agenda Title: Receive the Validated 2018 Water Loss Audit Report and Level 1 Validation Document

Staff Recommendation: The Board of Directors Receive the Validated 2018 Water Loss Audit Report and Level 1 Validation Document.

Background: *5-Year Strategic Plan Mission Statement – We provide our customers with high quality water, wastewater collection and conservation services at a reasonable cost, through planning, management and the development of water resources in an environmentally sensitive manner.*

Previously, retail water suppliers were asked to submit water loss audits as part of urban water management plans prepared only once every five years. Now, water loss audits are required annually. California Senate Bill 555, passed in October 2015, requires all urban retail water suppliers in the state to submit a completed and third party validated water loss audit annually to the California Department of Water Resources (DWR) beginning October 2017.

A water loss audit is an accounting exercise that is conceptually similar to a financial audit. Whereas a financial audit tracks all sources and uses of funds for an organization, a water loss audit tracks all sources and uses of water within a water system over a specified period to estimate the volume and value of water loss. Water loss audits are a valuable tool used to help identify and prioritize a water purveyor's operations that can be improved to maximize the efficiency of water production and delivery. The water loss audit also helps improve the generation of revenue by estimating the financial value of water losses. Having a water loss audit validated by an independent third party assures that the source of the data is reliable, complete, consistent, and accurate.

This year the Department of Water Resources has been working to establish minimum standards of audit reliability and performance measures to help guide water purveyors towards long-term water loss reductions, targeted conservation efforts, and an improvement in the generation of revenue.

This year's MCWD water audit metrics reveal an Infrastructure Leakage Index (ILI) of 2.26 that describes a water system that experiences low leakage at 2.26 times the modeled technical minimum for its system characteristics.

Responding to suggestions made by the 2017 Water Loss Audit third party validator about improving data validity and reducing real and apparent losses for the 2018 audit, district staff accomplished the following tasks in 2018:

- Metered 450 previously unmetered accounts

- Reduced billed, unmetered water consumption from 190 AF to 65 AF in 2018
- Prioritized efforts to replace older, failing meter registers
- Made a more precise calculation of the number of service connections

As summarized in the attached validation review documentation that summarizes the key audit metrics, the overall Data Validity Score of 68, falling within Band III (51-70) of five bands and a scale to 100, suggests that the next improvement steps for the District may be focused simultaneously on improving data reliability and evaluating cost-effective interventions for water and revenue loss recovery. While the District received higher grades for a few audit factors, and the overall score in 2018 was higher than 2017, the following operational factors would lead to an improvement in data reliability and data validity grades:

- Automation of production well meter readings and records
- An elimination of active, unmetered accounts
- The testing of oldest meters for accuracy
- The replacement of oldest meters based on age
- The random testing of all customer meters for accuracy
- The installation of distribution system pressure monitoring equipment
- The completion of a Real Loss Component Analysis to develop a leakage profile
- The completion of an Apparent Loss Component Analysis to develop an apparent loss profile
- Implement a Cost-benefit analysis & target setting for water loss components
- Design and implement a water loss control program for cost-effective interventions

Environmental Review Compliance: None required.

Financial Impact: _____Yes ___X___No Funding Source/Recap: None

Other Considerations: Make no program changes.

Material Included for Information/Consideration: Validated 2018 Water Loss Audit; and, 2018 Water Loss Validation Review document.

Action Required: _____Resolution ____X____Motion _____Review
(Roll call vote is required.)

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Board Action

Motion By_____ Seconded By_____ No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

CAVANAUGH
Stewardship Through Innovation

# AWWA 2018 Water Audit Level 1 Validation – Review Document

Validator Provided

**Audit Information:**

Utility: Marina Coast Water District PWS ID: 2710017

System Type: Potable Audit Period: Calendar 2018

Utility Representation: Paul Lord, Patrick Green, Amelia Sobrepena, Derek Cray, Mike Wegley

Validation Date: 8/6/2019 Call Time: 11:00am Sufficient Supporting Documents Provided: Yes

**Validation Findings & Confirmation Statement:**

**Key Audit Metrics:**

Data Validity Score: 68 Data Validity Band (Level): Band III (51-70)

ILI: 2.26 Real Loss: 41.99 (gal/conn/day) Apparent Loss: 4.03 (gal/conn/day)

Non-revenue water as percent of cost of operating system: 1.4%

**Certification Statement by Validator:**

This water loss audit report has been Level 1 validated per the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34.

All recommendations on volume derivation and Data Validity Grades were incorporated into the water audit. ☒

**Validator Information:**

Water Audit Validator: Drew Blackwell Validator Qualifications: Contractor for California Water Loss TAP

## 2018 AWWA Water Audit Level 1 Validation

| Water System Name: | Water System ID Number: | Water Audit Period: |
|---|---|---|
| Marina Coast Water District | #2710017 | Calendar Year 2018 |

Utility Provided

**Water Audit & Water Loss Improvement Steps:**

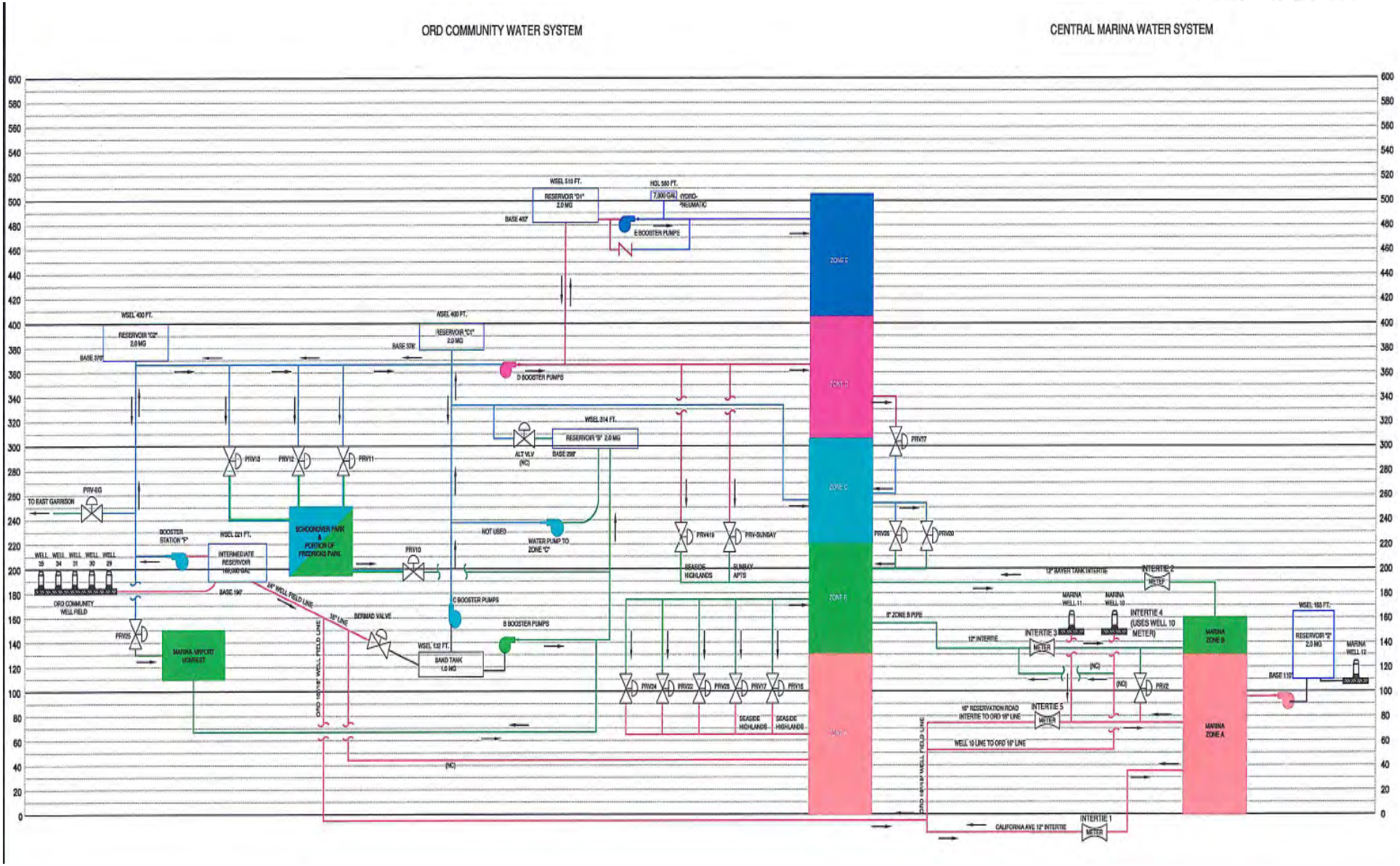
*Steps taken in preceding year to increase data validity, reduce real loss and apparent loss as informed by the annual validated water audit:*

- The number of unmetered, residential accounts has been reduced considerably. 450 previously unmetered residential housing units were metered in 2018. Billed Unmetered water consumption (estimated) dropped from 190 AF in 2017 to 65 AF in 2018.
- To more accurately determine customer consumption, an adjustment for lag time in customer meter reading data was made.
- The ongoing, prioritized effort to replace older, failing meter registers continued throughout 2018.
- A calculation was made to determine the net change in distribution storage between January 1st and December 31st.
- A more precise calculation of the number of service connections was made. 1" fire/domestic use services were not double-counted.

**Certification Statement by Utility Executive:**

This water loss audit report meets the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34 and has been prepared in accordance with the method adopted by the American Water Works Association, as contained in their manual, *Water Audits and Loss Control Programs, Manual M36, Fourth Edition* and in the Free Water Audit Software version 5.

| Keith Van Der Maaten | General Manager | | 9/5/19 |
|---|---|---|---|
| Executive Name (Print) | Executive Position | Signature | Date |


ORD COMMUNITY WATER SYSTEM
CENTRAL MARINA WATER SYSTEM
WSEL 510 FT.
RESERVOIR "D1"
2.0 MG
HGL 550 FT.
7,000 GAL HYDRO-PNEUMATIC
E BOOSTER PUMPS
BASE 402'
WSEL 400 FT.
RESERVOIR "C2"
2.0 MG
BASE 370'
WSEL 400 FT.
RESERVOIR "C1"
2.0 MG
BASE 370'
D BOOSTER PUMPS
WSEL 314 FT.
RESERVOIR "B" 2.0 MG
BASE 299'
ALT VLV (NC)
PRV13
PRV12
PRV11
PRV-EG
TO EAST GARRISON
BOOSTER STATION "F"
WSEL 221 FT.
INTERMEDIATE RESERVOIR
SCHOONOVER PARK & PORTION OF FREDERICKS PARK
PRV10
NOT USED
WATER PUMP TO ZONE "C"
PRV416
PRV-SUNDAY
SEASIDE HIGHLANDS
SUNDAY APTS
WELL 35
WELL 34
WELL 31
WELL 30
WELL 29
ORD COMMUNITY WELL FIELD
BASE 190'
24" WELL FIELD LINE
16" LINE
BERMAD VALVE
PRV25
MARINA AIRPORT UCMBEST
WSEL 132 FT.
BAND TANK 1.0 MG
C BOOSTER PUMPS
B BOOSTER PUMPS
PRV24
PRV22
PRV23
PRV17
PRV16
SEASIDE HIGHLANDS
SEASIDE HIGHLANDS
ORD 16"/18" WELL FIELD LINE
(NC)
ZONE F
ZONE D
ZONE C
ZONE B
ZONE A
PRV27
PRV26
PRV20
12" RAVER TANK INTERTIE
INTERTIE 2
METER
MARINA WELL 11
MARINA WELL 10
INTERTIE 4 (USES WELL 10 METER)
8" ZONE B PIPE
12" INTERTIE
INTERTIE 3
METER
(NC)
(NC)
PRV2
MARINA ZONE B
WSEL 155 FT.
RESERVOIR "2" 2.0 MG
BASE 119'
MARINA WELL 12
18" RESERVATION ROAD INTERTIE TO ORD 18" LINE
INTERTIE 5
METER
WELL 10 LINE TO ORD 18" LINE
MARINA ZONE A
ORD 16"/18" WELL FIELD LINE
CALIFORNIA AVE 12" INTERTIE
INTERTIE 1
METER

| # | AWWA Water Audit Input | Code | Final DVG | Basis on Input Derivation | Basis on Data Validity Grade |
|---|---|---|---|---|---|
| 1 | Volume from Own Sources | VOS | 7 | Supply meter profile: 8 wells, only 7 active with wells located centrally in the system (2 in Marina, 5 in Ord). Propeller-type meters are tied to SCADA except for Wells 29, 30, and 31.<br>VOS input derived from: Manual reads from production meters as archived.<br>Comments: Input derivation from supporting documents confirmed. Exclusion of non-potable volumes confirmed. | Percent of own supply metered: 100%<br>Signal calibration frequency: Annual. Test results provided.<br>Volumetric testing frequency: Occasional frequency. None in 2018, but in 2019. In 2019 be sure to provide test results.<br>Volumetric testing method: Clamp on meter with pump efficiency testing<br>Percent of own supply volumetrically tested: n/a.<br>Comments: Limiting factor is both electronic calibration and volumetric testing annually with documentation of test results. |
| 2 | VOS Master Meter & Supply Error Adjustment | VOS MMSEA | 3 | Input derivation: Volumetric accuracy results left blank in absence of available test data.<br>Net storage change included in MMSEA input: Yes.<br>Comments: Initial net storage volume omitted from audit. Made -2.58 AF (-0.84 MG) adjustment on the call. | Supply meter read frequency: Daily.<br>Supply meter read method: Manual.<br>Frequency of data review for trends & anomalies: Weekly.<br>Storage levels monitored in real-time: Yes.<br>Comments: No automatic data logging for all sources is limiting criteria. |
| 3 | Water Imported | WI | n/a | Import meter profile: One emergency connection with Cal American water, but not used during audit period. | |
| 4 | WI Master Meter & Supply Error Adjustment | WI MMSEA | n/a | | |
| 5 | Water Exported | WE | n/a | | |
| 6 | WE Master Meter & Supply Error Adjustment | WE MMSEA | n/a | | |
| 7 | Billed metered | BMAC | 5 | Customer meter profile:<br>Age profile: Many of small meters are less than 10 years old<br>Reading system: AMR.<br>Read frequency: Monthly.<br>Comments: Lag-time correction is employed in input derivation. Input derivation from supporting documents confirmed. BMAC volumes were | Percent of customers metered: At least than 90%<br>Small meter testing policy: Reactive - complaint based or flagged-consumption testing only.<br>Number of small meters tested/year: 0<br>Large meter testing policy: None.<br>Number of large meters tested/year: 0<br>Meter replacement policy: Upon failure only. |

| # | AWWA Water Audit Input | Code | Final DVG | Basis on Input Derivation | Basis on Data Validity Grade |
|---|---|---|---|---|---|
| | | | | 2954.06 AF plus the lag time adjustment (29.91 AF) to modify BMAC. Exclusion of non-potable volumes confirmed. | Number of replacements/year: Variable based on funding. Billing data auditing: Standard billing QC, plus review of volumes by use type each billing cycle. Comments: Limiting criteria is testing practices. |
| 8 | Billed unmetered | BUAC | 9 | Profile: Approximately 500 previously unmetered that were metered in 2018 military housing connections Input derivation: Extrapolation from like use data on metered connections (0.28 acre-feet/year). Periodically a report would be run for what a new community would use (last report in 2016). Comments: In process of installing meters with plan to meter in the next 1-2 years. No site-specific estimations. | Policy for metering exemptions: All connections require metering, but a few unmetered connections remain. Comments: No additional comments. |
| 9 | Unbilled metered | UMAC | 9 | Profile: Own facilities, vactor/valve/jetter truck, lift stations Input derivation: Direct from meter readings read annually. Comments: Input derivation from supporting documents confirmed. | Policy for billing exemptions: Limited to own facilities. Comments: Limiting factor is maintaining these meters like revenue generating meters (e.g. read frequency, testing practices). |
| 10 | Unbilled unmetered | UUAC | 10 | Profile: Operational flushing and fire department usage. Corrected leakage estimates to exclude from total volume. Comments: The District records hydrant run times for line flushing, fire pressure testing and fire training. Run times are converted to water use estimates and recorded in the work order database. Inadvertently had leakage volumes estimated and these were removed. | Comments: Good recordkeeping and estimation practices |
| 11 | Unauthorized consumption | UC | 5 | Comments: Default input applied. | Comments: Default grade applied. |
| 12 | Customer metering inaccuracies | CMI | 3 | See BMAC comments regarding meter testing & replacement activities. Input derivation: Rudimentary estimate. Recently installed 500 meters over last 2 years, so applying manufacturers accuracy. Comments: Although 500 meters were newly installed, the average age of customer meter population is approximately 10 years. For 2019 audit, consider increasing CMI to 1% - 1.5% (if estimating and not calculating) for a more reasonable estimate based on meter age. | Characterization of meter testing: Routine (proactive), but not fully representative. Characterization of meter replacement: Routine (proactive), but limited. Comments: No additional comments. |
| 13 | Systematic data handling errors | SDHE | 5 | Comments: Default input applied. | Comments: Default grade applied. |
| 14 | Length of mains | Lm | 9 | Input derivation: Totaled from GIS based map. Hydrant leads included: Yes. | Mapping format: Digital. |

| # | AWWA Water Audit Input | Code | Final DVG | Basis on Input Derivation | Basis on Data Validity Grade |
|---|---|---|---|---|---|
| | | | | Comments: No additional comments. | Asset management database: In place and integrated with GIS system.<br>Map updates & field validation: Accomplished through normal work order processes.<br>Comments: No additional comments. |
| 15 | Number of service connections | Ns | 7 | Input derivation: Standard report run from billing system to generate total metered connections. It is estimated that 70% of all 3,928 marina water service points share a connection to the mainline = 2750 water services share a connection. There are 2 services per connection so there are 1375 shared connections to the mains in Marina. Then there are the additional 1178 water services that do not share a connection to the main. All together in Marina there are 2553 water service connections to the main. Of the total 5,117 water services in the Ord Community, all 1872 military housing units share a connection to the mains. Therefore, there are 936 shared connections for these homes. The other 3,245 water services have a single connection. Combined, less fire connections, in the Ord community there are 4,181 service connections to the mains. In addition, throughout both Marina and Ord communities there are 129 fire connections. All combined, in both service areas, the number of total connections to the mains is 6,863 (2,553 + 4,181 + 129). This number is much lower than 2017 because many SF housing units with combined 1" fire/domestic use services were not counted as separate fire connections to the mainlines as done in 2017.<br>Basis for database query: Meter ID - non-premise based.<br>Comments: No additional comments. | CIS updates & field validation: No proactive visits to meters<br>Estimated error of total count within: Believed to be less than 1%.<br>Comments: Uncertain of review frequency for policy and procedures for new account activation and billing operations. |
| 16 | Ave length of cust. service line | Lp | 10 | Comments: Default input and grade applied, as customer meters are typically located at the property boundary given California climate. | |
| 17 | Average operating pressure | AOP | 3 | Number of zones, general profile: 5 pressure zones (Ord) & 2 in Marina controlled by PRVs<br>Typical pressure range: 30 to 90 psi<br>Input derivation: Calculated as simple average from analysis of field data.<br>Comments: No additional comments. | Extent of static pressure data collection: Hydrant pressures taken during routine system flushing and/or hydrant testing.<br>Characterization of real-time pressure data collection: No real-time monitoring currently in place.<br>Hydraulic model: One exists but has not been calibrated within the last 5 years.<br>Comments: Limiting criteria is well covered vs. basic coverage for telemetry. |

| # | AWWA Water Audit Input | Code | Final DVG | Basis on Input Derivation | Basis on Data Validity Grade |
|---|---|---|---|---|---|
| 18 | Total annual operating cost | TAOC | 10 | Input derivation: From official financial reports.<br>Comments: Confirmed costs limited to water only, and water debt service included. | Frequency of internal auditing: Annually.<br>Frequency of third-party CPA auditing: Annually.<br>Comments: No additional comments. |
| 19 | Customer retail unit cost | CRUC | 8 | Input derivation: Total consumptive revenue divided by Billed Metered Authorized Consumption. Sewer charges are not based on water meter readings. Sewer revenues are not applicable.<br>Comments: Rate structures are different for Marina & Ord systems, but were combined in the calculation. | Characterization of calculation: Weighted average composite of all rates. Input calculations have not been reviewed by an M36 water loss expert.<br>Comments: No additional comments. |
| 20 | Variable production cost | VPC | 5 | Supply profile: Own sources only.<br>Primary costs included: Treatment chemicals and supply & distribution power.<br>Secondary costs included: None currently included.<br>Comments: Calculation conducted for Marina and Ord separately and then weighted by volume produced for each system. Initial input was for Ord system only $280.22. Sum of electrical and chemical costs for both systems excluding Well 9 in Marina ($714,338.7) divided by water suppled volume for VPC = $209.64. | Characterization of calculation: Primary costs only. Input calculations have not been reviewed by an M36 water loss expert.<br>Comments: Score increased based on method of calculations. |

## Key Audit Metrics

(~) VALIDITY Data Validity Score: 68 Data Validity Band (Level): Band III (51-70)

(#) VOLUME ILI: 2.26 Real Loss: 41.99 (gal/conn/day) Apparent Loss: 4.03 (gal/conn/day)

($) VALUE Annual Cost of Real Losses: $67,677 Annual Cost of Apparent Losses: $63,451

## Infrastructure & Water Loss Management Practices:

Infrastructure age profile: Ord system was inherited from federal gov't. Infrastructure replacement policy (current, historic):Any rehab areas are being fully replaced.

Estimated main failures/year: Not discussed Estimated service failures/year: Not discussed

Extent of proactive leakage management: Have purchased leak equipment and are implementing pilot program.

Other water loss management comments: Have isolated unused areas of the system and seen reduction in leaks.

## Comments on Audit Metrics & Validity Improvements

The Infrastructure Leakage Index (ILI) of 2.26 describes a system that experiences leakage at 2.26 times the modeled technical minimum for its system characteristics.

The Data Validity Score falling within Band III (51-70) suggests that next steps may be focused simultaneously on improving data reliability and evaluating cost-effective interventions for water & revenue loss recovery. Opportunities to improve the reliability of audit inputs and outputs include:

- Improved understanding of Supply Meter (Own) Master Meter Error: consider adopting or increasing the rigor of a source meter volumetric testing and calibration program, informed by the guidance provided in AWWA Manual M36 – Appendix A.
    - Assess feasibility of annual volumetric accuracy testing.
    - Provide 2019 supply meter testing for 2019 audit period. Calculate weighted average based on percent of source flow at each meter. Show separately and do not incorporate into the Volume from Own Sources volume in the 2019 audit.
- Improved estimation of CMI: consider a customer meter testing program which tests a sample of random meters whose stratification (by size, age, or other characteristics) represents the entire customer meter stock.

## Further Recommendations

Since Data Validity Score is >50, consider follow-on implementations as described in the AWWA M36 Manual, once the annual water audit is established:

- Conduct a Real Loss Component Analysis to develop your leakage profile.
- Conduct an Apparent Loss Component Analysis to develop your apparent loss profile.
- Cost-benefit analysis & target setting for water loss components.
- Design & implement water loss control program for cost-effective interventions.

# AWWA Free Water Audit Software:
## Reporting Worksheet

WAS v5.0



? Click to access definition
+ Click to add a comment

**Water Audit Report for:** Marina Coast Water District (2710017)
**Reporting Year:** 2018 (1/2018 - 12/2018)

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

**All volumes to be entered as: ACRE-FEET PER YEAR**

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

<---------- Enter grading in column 'E' and 'J' ---------->

Master Meter and Supply Error Adjustments

### WATER SUPPLIED

| | | | | | Pcnt: | Value: | |
|---|---|---|---|---|---|---|---|
| Volume from own sources: | 7 | 3,404.930 | acre-ft/yr | 3 | | -2.580 | acre-ft/yr |
| Water imported: | n/a | 0.000 | acre-ft/yr | | | | acre-ft/yr |
| Water exported: | n/a | 0.000 | acre-ft/yr | | | | acre-ft/yr |

Enter negative % or value for under-registration
Enter positive % or value for over-registration

**WATER SUPPLIED:** 3,407.510 acre-ft/yr

### AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

| | | | | Pcnt: | Value: | |
|---|---|---|---|---|---|---|
| Billed metered: | 5 | 2,983.970 | acre-ft/yr | | | |
| Billed unmetered: | 9 | 64.580 | acre-ft/yr | | | |
| Unbilled metered: | 9 | 3.760 | acre-ft/yr | | | |
| Unbilled unmetered: | 10 | 1.376 | acre-ft/yr | | 1.376 | acre-ft/yr |

Use buttons to select percentage of water supplied OR value

**AUTHORIZED CONSUMPTION:** ? 3,053.686 acre-ft/yr

### WATER LOSSES (Water Supplied - Authorized Consumption)

353.824 acre-ft/yr

#### Apparent Losses

| | | | | Pcnt: | Value: | |
|---|---|---|---|---|---|---|
| Unauthorized consumption: | | 8.519 | acre-ft/yr | 0.25% | | acre-ft/yr |

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

| | | | | | | |
|---|---|---|---|---|---|---|
| Customer metering inaccuracies: | 3 | 15.014 | acre-ft/yr | 0.50% | | acre-ft/yr |
| Systematic data handling errors: | 5 | 7.460 | acre-ft/yr | 0.25% | | acre-ft/yr |

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

**Apparent Losses:** ? 30.992 acre-ft/yr

#### Real Losses (Current Annual Real Losses or CARL)

**Real Losses = Water Losses - Apparent Losses:** ? 322.832 acre-ft/yr

**WATER LOSSES:** 353.824 acre-ft/yr

### NON-REVENUE WATER

**NON-REVENUE WATER:** ? 358.960 acre-ft/yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

### SYSTEM DATA

| | | | |
|---|---|---|---|
| Length of mains: | 9 | 203.0 | miles |
| Number of active AND inactive service connections: | 7 | 6,863 | |
| Service connection density: | | 34 | conn./mile main |

Are customer meters typically located at the curbstop or property line? Yes

Average length of customer service line: (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: 3 60.0 psi

### COST DATA

| | | | | |
|---|---|---|---|---|
| Total annual cost of operating water system: | 10 | $9,626,824 | $/Year | |
| Customer retail unit cost (applied to Apparent Losses): | 8 | $4.70 | $/100 cubic feet (ccf) | |
| Variable production cost (applied to Real Losses): | 5 | $209.64 | $/acre-ft | ☐ Use Customer Retail Unit Cost to value real losses |

### WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 68 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

### PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Volume from own sources
2: Customer metering inaccuracies
3: Billed metered

# AWWA Free Water Audit Software:
## System Attributes and Performance Indicators



**Water Audit Report for:** Marina Coast Water District (2710017)
**Reporting Year:** 2018 | 1/2018 - 12/2018

*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 68 out of 100 ***

### System Attributes:

| | | | |
|---|---|---|---|
| | Apparent Losses: | 30.992 | acre-ft/yr |
| + | Real Losses: | 322.832 | acre-ft/yr |
| = | **Water Losses:** | **353.824** | acre-ft/yr |
| ? | Unavoidable Annual Real Losses (UARL): | 143.00 | acre-ft/yr |
| | Annual cost of Apparent Losses: | $63,451 | |
| | Annual cost of Real Losses: | $67,677 | Valued at **Variable Production Cost** |

Return to Reporting Worksheet to change this assumpiton

### Performance Indicators:

| | | | |
|---|---|---|---|
| Financial: | Non-revenue water as percent by volume of Water Supplied: | 10.5% | |
| | Non-revenue water as percent by cost of operating system: | 1.4% | Real Losses valued at Variable Production Cost |
| Operational Efficiency: | Apparent Losses per service connection per day: | 4.03 | gallons/connection/day |
| | Real Losses per service connection per day: | 41.99 | gallons/connection/day |
| | Real Losses per length of main per day*: | N/A | |
| | Real Losses per service connection per day per psi pressure: | 0.70 | gallons/connection/day/psi |
| | From Above, Real Losses = Current Annual Real Losses (CARL): | 322.83 | acre-feet/year |
| ? | Infrastructure Leakage Index (ILI) [CARL/UARL]: | 2.26 | |

* This performance indicator applies for systems with a low service connection density of less than 32 service connections/mile of pipeline

# AWWA Free Water Audit Software:
## User Comments



Use this worksheet to add comments or notes to explain how an input value was calculated, or to document the sources of the information used.

| | |
|---|---|
| **General Comment:** | 2018<br>Prepared by: Amelia Sobrepena and Paul Lord. Find complete workbook with calculations, derivations and comments in the File Pathway: J: \ Water Systen #2710017 Demand \ Anual Water System Stats \ Water System Stats 2018 \ 2018 Water Loss Audit \ 2018 Water Loss Data \ 2018 Audit Calculations (CURRENT DATE) |

| Audit Item | Comment |
|---|---|
| Volume from own sources: | *** 2018 MCWD has 8 wells, 7 of which are active. MCWD used well production numbers to determine the total water extracted. The data is reported by the O&M department. They produced a 2018 Well Production Summary Report in acre-feet. MCWD extracted a total of 3,404.93 acre-feet for the 2018 calendar year. File Pathway: P: \ 2018 WELL PRODUCTION \ Prod. Sum \ Production Summary |
| Vol. from own sources: Master meter error adjustment: | *** No volumetric testing was done and there was no adjustment to Water Supplied based on the production meter testing in 2018. This was discussed in an email titled "Net Storage Change for 2018 For Water Loss Audit." For supporting calculations see: 2018 Audit Calculations Workbook. |
| Water imported: | *** The MCWD does not import any water into their system. MCWD has an emergency connection with Cal Am. Rarely used. 1 direction (to Marina). Not actively metered. |
| Water imported: master meter error adjustment: | *** The emergency connection with Cal AM is not metered and has not been used during the 2018 calendar year. |
| Water exported: | *** The MCWD does not export any water into their system. All water is produced and distributed within the Marina Coast Water District service area. |
| Water exported: master meter error adjustment: | *** N/A The MCWD does not have systems installed for exporting to other agencies. |
| Billed metered: | *** Billed Metered Consumption for 2018 adjusted for Lag Time by + 29.91 AF. For supporting calculations see: 2018 Audit Calculations Workbook. |
| Billed unmetered: | *** In 2018, 450 previously unmetered army housing units were metered. The estimate of billed unmetered consumption varies from month to month reducing some each month. For this report, only the number of active accounts each month were multiplied by a water use factor of 0.28 AF/YR divided by twelve months in a year. The total estimated billed unmetered water use is 64.58 AF. For supporting calculations see: 2018 Audit Calculations Workbook. |

| Audit Item | Comment |
|---|---|
| Unbilled metered: | *** Operations and maintenance reported numbers below to address any unbilled metered consumption for meter flushing or loss due to breaks. Metered consumption which is authorized by the water utility, but, for any reason, is deemed by utility policy to be unbilled. This might for example include metered water consumed by the utility itself in treatment or distribution operations. = 3.76 AF |
| Unbilled unmetered: | *** Fire fighting and practice drill water use is reported to us at 0.9882 AF. Operations department estimates and records losses due to water main breaks. Marina used 0.55 AF and Ord used 2.084 AF for a total of 2.239 AF lost due to breaks. Marina used 0.168 AF for flushing and Ord used 0.22 AF, for a total of 0.388 AF used for flushing. The total unbilled unmetered consumption is 3.6152 AF. |
| Unauthorized consumption: | *** This was derived automatically from the AWWA water loss audit software. |
| Customer metering inaccuracies: | *** The MCWD does not have a system in place to test for customer meter inaccuracies. Meters were upgrades to AMR in 2004-2005. Accuracy assumed to still be +/- 0.5% |
| Systematic data handling errors: | *** The MCWD has not yet gathered detailed data or assesed the systematic data error. It's applying the default value of 0.25% of of the billing authorized consumtion volume. |
| Length of mains: | *** The data was sent in email from James Derbin estimating 203 miles of mains. This should be derrived from the GIS system / Geo-database. As of May 2017 the MCWD can only estimate this number. The 2018 length of mains is reported to be the same as the 2017 length of mains of 203 miles. |
| Number of active AND inactive service connections: | *** It is estimated that 70% of all 3,928 marina water service points share a connection to the mainline = 2750 water services share a connection. There are 2 services per connection so there are 1375 shared connections to the mains in Marina. Then there are the additional 1178 water services that do not share a connection to the main. All together in Marina there are 2553 water service connections to the main. Of the total 5,117 water services in the Ord Community, all 1872 military housing units share a connection to the mains. Therefore there are 936 shared connections for these homes. The other 3,245 water services have a single connection. Combined, less fire connections, in the Ord community there are 4,181 service connections to the mains. In addition, throughout both Marina and Ord communities there are 129 fire connections. All combined, in both service areas, the number of total connections to the mains is 6,863 (2,553 + 4,181 + 129). This number is much lower than 2017 because many SF housing units with combined 1" fire/domestic use services were not counted as separate fire connections to the mainlines as done in 2017. |
| Average length of customer service line: | *** 0 foot customer meters are typically located at the curbstop |
| Average operating pressure: | *** The O&M department measured service elevation in feet and service pressure to derive the average (PSI) for the individual zones (A-E). The average system operating pressure is calculated by the sum of all zones devided by the 5 zones to equal 60.0 PSI. 5 pressure zones (Ord) & 2 in Marina controlled by PRVs. Hydrant pressures taken during routine system flushing and/or hydrant testing. Basic - telemetry or pressure logging at boundary points (supply locations, tanks, PRVs, boosters). |
| Total annual cost of operating water system: | *** Input derivation: From official financial reports.<br>Comments: Confirmed costs limited to water only, and water debt service included. |

| Audit Item | Comment |
|---|---|
| Customer retail unit cost (applied to Apparent Losses): | *** Total consumptive revenue divided by Billed Metered Authorized Consumption. Sewer charges are not based on water meter readings. Sewer revenues are not applicable. Rate structures are different for Marina & Ord systems, but were combined in the calculation. Weighted average composite of all rates. |
| Variable production cost (applied to Real Losses): | *** Characterization of calculation: Primary costs only. Calculation conducted for Marina and Ord separately and then weighted by volume produced for each system. |

# AWWA Free Water Audit Software: Water Balance

WAS v5.0

American Water Works Association.

| | | |
|---|---|---|
| Water Audit Report for: | Marina Coast Water District (2710017) | |
| Reporting Year: | 2018 | 1/2018 - 12/2018 |
| Data Validity Score: | 68 | |

**Own Sources** (Adjusted for known errors): *3,407.510*

**Water Imported**: *0.000*

**System Input**: *3,407.510*

**Water Exported**: *0.000*

**Water Supplied**: *3,407.510*

**Authorized Consumption**: *3,053.686*

- **Billed Authorized Consumption**: *3,048.550*
  - Billed Metered Consumption (water exported is removed): *2,983.970*
  - Billed Unmetered Consumption: *64.580*
- **Unbilled Authorized Consumption**: *5.136*
  - Unbilled Metered Consumption: *3.760*
  - Unbilled Unmetered Consumption: *1.376*

**Water Losses**: *353.824*

- **Apparent Losses**: *30.992*
  - Unauthorized Consumption: *8.519*
  - Customer Metering Inaccuracies: *15.014*
  - Systematic Data Handling Errors: *7.460*
- **Real Losses**: *322.832*
  - Leakage on Transmission and/or Distribution Mains: *Not broken down*
  - Leakage and Overflows at Utility's Storage Tanks: *Not broken down*
  - Leakage on Service Connections: *Not broken down*

**Billed Water Exported**

**Revenue Water**: 0.000

- Revenue Water: 3,048.550
- **Non-Revenue Water (NRW)**: 358.960

# AWWA Free Water Audit Software:
# Dashboard

WAS v5.0



The graphic below is a visual representation of the Water Balance with bar heights propotional to the volume of the audit components

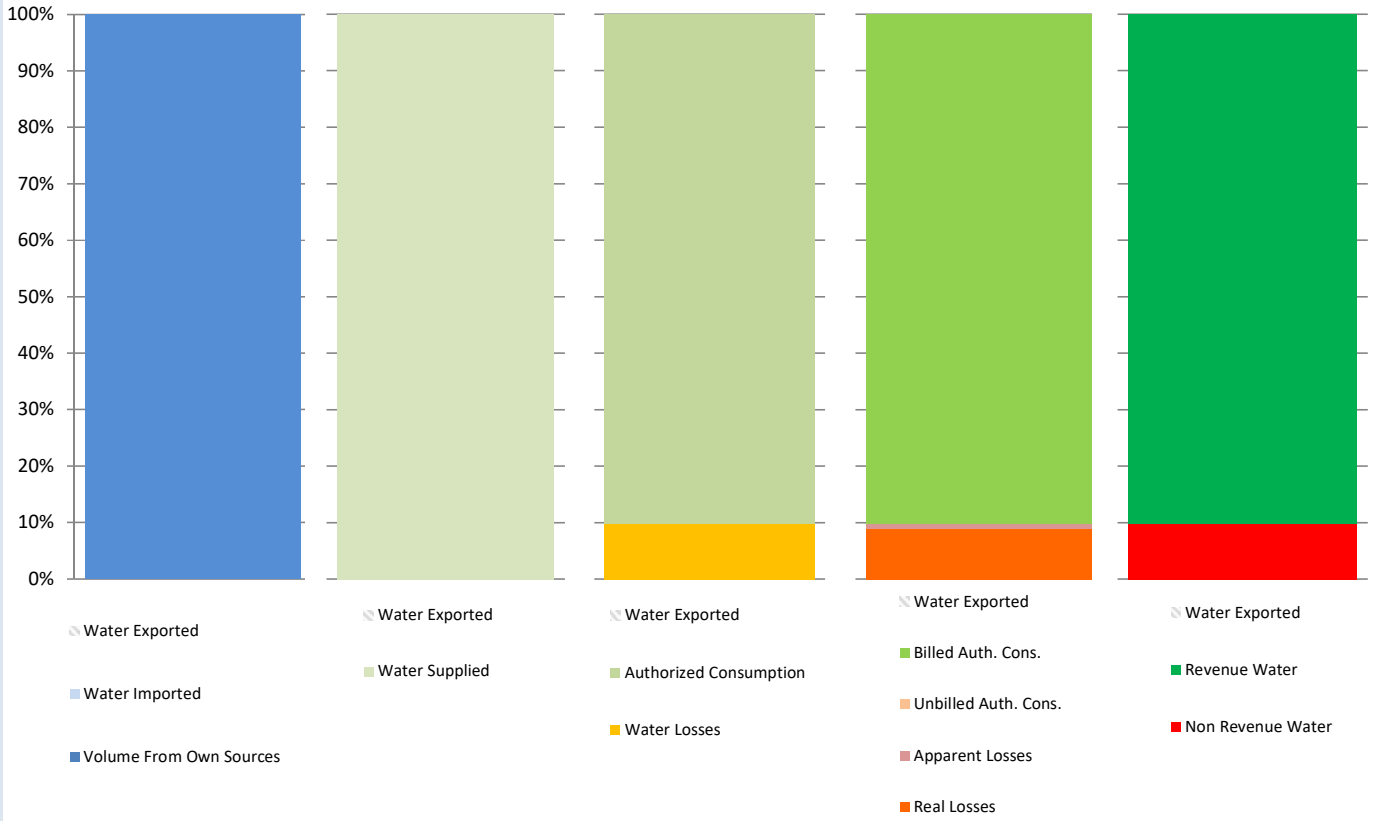
**Water Audit Report for:** Marina Coast Water District (2710017)

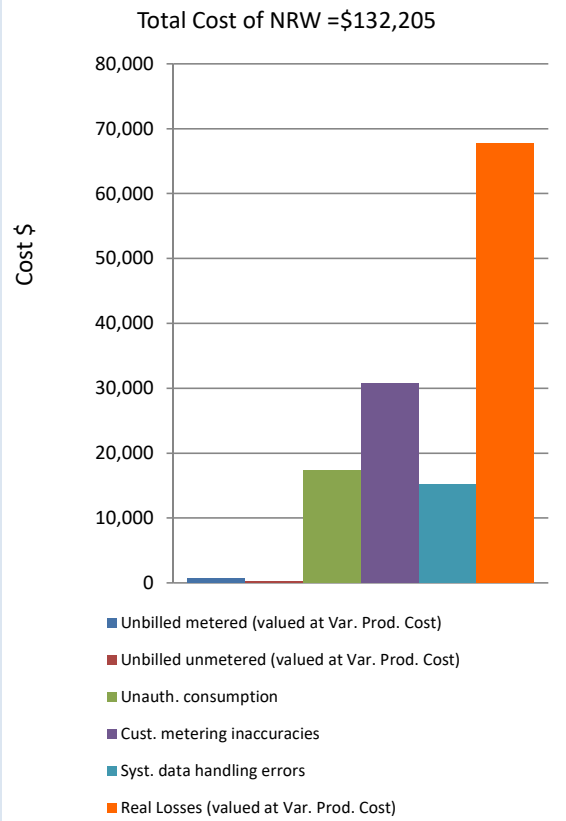
**Reporting Year:** 2018 | 1/2018 - 12/2018

**Data Validity Score:** 68

○ Show me the VOLUME of Non-Revenue Water

◉ Show me the COST of Non-Revenue Water



# AWWA Free Water Audit Software: Grading Matrix

WAS 5.0



The grading assigned to each audit component and the corresponding recommended improvements and actions are highlighted in yellow. Audit accuracy is likely to be improved by prioritizing those items shown in red

| Grading >>> | n/a | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **WATER SUPPLIED** | | | | | | | | | | | |
| **Volume from own sources:** | Select this grading only if the water utility purchases/imports all of its water resources (i.e. has no sources of its own) | Less than 25% of water production sources are metered, remaining sources are estimated. No regular meter accuracy testing or electronic calibration conducted. | 25% - 50% of treated water production sources are metered; other sources estimated. No regular meter accuracy testing or electronic calibration conducted. | Conditions between 2 and 4 | 50% - 75% of treated water production sources are metered, other sources estimated. Occasional meter accuracy testing or electronic calibration conducted. | Conditions between 4 and 6 | At least 75% of treated water production sources are metered, or at least 90% of the source flow is derived from metered sources. Meter accuracy testing and/or electronic calibration of related instrumentation is conducted annually. Less than 25% of tested meters are found outside of +/- 6% accuracy. | Conditions between 6 and 8 | 100% of treated water production sources are metered, meter accuracy testing and electronic calibration of related instrumentation is conducted annually, less than 10% of meters are found outside of +/- 6% accuracy | Conditions between 8 and 10 | 100% of treated water production sources are metered, meter accuracy testing and electronic calibration of related instrumentation is conducted semi-annually, with less than 10% found outside of +/- 3% accuracy. Procedures are reviewed by a third party knowledgeable in the M36 methodology. |
| Improvements to attain higher data grading for "Volume from own Sources" component: | | to qualify for 2: Organize and launch efforts to collect data for determining volume from own sources | to qualify for 4: Locate all water production sources on maps and in the field, launch meter accuracy testing for existing meters, begin to install meters on unmetered water production sources and replace any obsolete/defective meters. | | to qualify for 6: Formalize annual meter accuracy testing for all source meters; specify the frequency of testing. Complete installation of meters on unmetered water production sources and complete replacement of all obsolete/defective meters. | | to qualify for 8: Conduct annual meter accuracy testing and calibration of related instrumentation on all meter installations on a regular basis. Complete project to install new, or replace defective existing, meters so that entire production meter population is metered. Repair or replace meters outside of +/- 6% accuracy. | | to qualify for 10: Maintain annual meter accuracy testing and calibration of related instrumentation for all meter installations. Repair or replace meters outside of +/- 3% accuracy. Investigate new meter technology; pilot one or more replacements with innovative meters in attempt to further improve meter accuracy. | | to maintain 10: Standardize meter accuracy test frequency to semi-annual, or more frequent, for all meters. Repair or replace meters outside of +/- 3% accuracy. Continually investigate/pilot improving metering technology. |
| Volume from own sources master meter and supply error adjustment: | Select n/a only if the water utility fails to have meters on its sources of supply | Inventory information on meters and paper records of measured volumes exist but are incomplete and/or in a very crude condition; data error cannot be determined | No automatic datalogging of production volumes; daily readings are scribed on paper records without any accountability controls. Flows are not balanced across the water distribution system: tank/storage elevation changes are not employed in calculating the "Volume from own sources" component and archived flow data is adjusted only when grossly evident data error occurs. | Conditions between 2 and 4 | Production meter data is logged automatically in electronic format and reviewed at least on a monthly basis with necessary corrections implemented. "Volume from own sources" tabulations include estimate of daily changes in tanks/storage facilities. Meter data is adjusted when gross data errors occur, or occasional meter testing deems this necessary. | Conditions between 4 and 6 | Hourly production meter data logged automatically & reviewed on at least a weekly basis. Data is adjusted to correct gross error when meter/instrumentation equipment malfunction is detected; and/or error is confirmed by meter accuracy testing. Tank/storage facility elevation changes are automatically used in calculating a balanced "Volume from own sources" component, and data gaps in the archived data are corrected on at least a weekly basis. | Conditions between 6 and 8 | Continuous production meter data is logged automatically & reviewed each business day. Data is adjusted to correct gross error from detected meter/instrumentation equipment malfunction and/or results of meter accuracy testing. Tank/storage facility elevation changes are automatically used in "Volume from own sources" tabulations and data gaps in the archived data are corrected on a daily basis. | Conditions between 8 and 10 | Computerized system (SCADA or similar) automatically balances flows from all sources and storages; results are reviewed each business day. Tight accountability controls ensure that all data gaps that occur in the archived flow data are quickly detected and corrected. Regular calibrations between SCADA and sources meters ensures minimal data transfer error. |
| Improvements to attain higher data grading for "Master meter and supply error adjustment" component: | | to qualify for 2: Develop a plan to restructure recordkeeping system to capture all flow data; set a procedure to review flow data on a daily basis to detect input errors. Obtain more reliable information about existing meters by conducting field inspections of meters and related instrumentation, and obtaining manufacturer literature. | to qualify for 4: Install automatic datalogging equipment on production meters. Complete installation of level instrumentation at all tanks/storage facilities and include tank level data in automatic calculation routine in a computerized system. Construct a computerized listing or spreadsheet to archive input volumes, tank/storage volume changes and import/export flows in order to determine the composite "Water Supplied" volume for the distribution system. Set a procedure to review this data on a monthly basis to detect gross anomalies and data gaps. | | to qualify for 6: Refine computerized data collection and archive to include hourly production meter data that is reviewed at least on a weekly basis to detect specific data anomalies and gaps. Use daily net storage change to balance flows in calculating "Water Supplied" volume. Necessary corrections to data errors are implemented on a weekly basis. | | to qualify for 8: Ensure that all flow data is collected and archived on at least an hourly basis. All data is reviewed and detected errors corrected each business day. Tank/storage levels variations are employed in calculating balanced "Water Supplied" component. Adjust production meter data for gross error and inaccuracy confirmed by testing. | | to qualify for 10: Link all production and tank/storage facility elevation change data to a Supervisory Control & Data Acquisition (SCADA) System, or similar computerized monitoring/control system, and establish automatic flow balancing algorithm and regularly calibrate between SCADA and source meters. Data is reviewed and corrected each business day. | | to maintain 10: Monitor meter innovations for development of more accurate and less expensive flowmeters. Continue to replace or repair meters as they perform outside of desired accuracy limits. Stay abreast of new and more accurate water level instruments to better record tank/storage levels and archive the variations in storage volume. Keep current with SCADA and data management systems to ensure that archived data is well-managed and error free. |
| Water Imported: | Select n/a if the water utility's supply is exclusively from its own water resources (no bulk purchased/ imported water) | Less than 25% of imported water sources are metered, remaining sources are estimated. No regular meter accuracy testing. | 25% - 50% of imported water sources are metered; other sources estimated. No regular meter accuracy testing. | Conditions between 2 and 4 | 50% - 75% of imported water sources are metered, other sources estimated. Occasional meter accuracy testing conducted. | Conditions between 4 and 6 | At least 75% of imported water sources are metered, meter accuracy testing and/or electronic calibration of related instrumentation is conducted annually for all meter installations. Less than 25% of tested meters are found outside of +/- 6% accuracy. | Conditions between 6 and 8 | 100% of imported water sources are metered, meter accuracy testing and electronic calibration of related instrumentation is conducted annually, less than 10% of meters are found outside of +/- 6% accuracy | Conditions between 8 and 10 | 100% of imported water sources are metered, meter accuracy testing and electronic calibration of related instrumentation is conducted semi-annually for all meter installations, with less than 10% of accuracy tests found outside of +/- 3% accuracy. |

| Grading >>> | n/a | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Improvements to attain higher data grading for "Water Imported Volume" component:<br><br>(*Note: usually the water supplier selling the water - "the Exporter" - to the utility being audited is responsible to maintain the metering installation measuring the imported volume. The utility should coordinate carefully with the Exporter to ensure that adequate meter upkeep takes place and an accurate measure of the Water Imported volume is quantified.*) | | <u>to qualify for 2:</u><br>Review bulk water purchase agreements with partner suppliers; confirm requirements for use and maintenance of accurate metering. Identify needs for new or replacement meters with goal to meter all imported water sources. | <u>To qualify for 4</u>:<br>Locate all imported water sources on maps and in the field, launch meter accuracy testing for existing meters, begin to install meters on unmetered imported water interconnections and replace obsolete/defective meters. | | <u>to qualify for 6</u>:<br>Formalize annual meter accuracy testing for all imported water meters, planning for both regular meter accuracy testing and calibration of the related instrumentation. Continue installation of meters on unmetered imported water interconnections and replacement of obsolete/defective meters. | | <u>to qualify for 8</u>:<br>Complete project to install new, or replace defective, meters on all imported water interconnections. Maintain annual meter accuracy testing for all imported water meters and conduct calibration of related instrumentation at least annually. Repair or replace meters outside of +/- 6% accuracy. | | <u>to qualify for 10:</u><br>Conduct meter accuracy testing for all meters on a semi-annual basis, along with calibration of all related instrumentation. Repair or replace meters outside of +/- 3% accuracy. Investigate new meter technology; pilot one or more replacements with innovative meters in attempt to improve meter accuracy. | | <u>to maintain 10</u>:<br>Standardize meter accuracy test frequency to semi-annual, or more frequent, for all meters. Continue to conduct calibration of related instrumentation on a semi-annual basis. Repair or replace meters outside of +/- 3% accuracy. Continually investigate/pilot improving metering technology. |
| Water imported master meter and supply error adjustment: | Select n/a if the Imported water supply is unmetered, with Imported water quantities estimated on the billing invoices sent by the Exporter to the purchasing Utility. | Inventory information on imported meters and paper records of measured volumes exist but are incomplete and/or in a very crude condition; data error cannot be determined Written agreement(s) with water Exporter(s) are missing or written in vague language concerning meter management and testing. | No automatic datalogging of imported supply volumes; daily readings are scribed on paper records without any accountability controls to confirm data accuracy and the absence of errors and data gaps in recorded volumes. Written agreement requires meter accuracy testing but is vague on the details of how and who conducts the testing. | Conditions between 2 and 4 | Imported supply metered flow data is logged automatically in electronic format and reviewed at least on a monthly basis by the Exporter with necessary corrections implemented. Meter data is adjusted by the Exporter when gross data errors are detected. A coherent data trail exists for this process to protect both the selling and the purchasing Utility. Written agreement exists and clearly states requirements and roles for meter accuracy testing and data management. | Conditions between 4 and 6 | Hourly Imported supply metered data is logged automatically & reviewed on at least a weekly basis by the Exporter. Data is adjusted to correct gross error when meter/instrumentation equipment malfunction is detected; and to correct for error confirmed by meter accuracy testing. Any data gaps in the archived data are detected and corrected during the weekly review. A coherent data trail exists for this process to protect both the selling and the purchasing Utility. | Conditions between 6 and 8 | Continuous Imported supply metered flow data is logged automatically & reviewed each business day by the Exporter. Data is adjusted to correct gross error from detected meter/instrumentation equipment malfunction and/or results of meter accuracy testing. Any data errors/gaps are detected and corrected on a daily basis. A data trail exists for the process to protect both the selling and the purchasing Utility. | Conditions between 8 and 10 | Computerized system (SCADA or similar) automatically records data which is reviewed each business day by the Exporter. Tight accountability controls ensure that all error/data gaps that occur in the archived flow data are quickly detected and corrected. A reliable data trail exists and contract provisions for meter testing and data management are reviewed by the selling and purchasing Utility at least once every five years. |
| Improvements to attain higher data grading for "Water imported master meter and supply error adjustment" component: | | <u>to qualify for 2:</u><br>Develop a plan to restructure recordkeeping system to capture all flow data; set a procedure to review flow data on a daily basis to detect input errors. Obtain more reliable information about existing meters by conducting field inspections of meters and related instrumentation, and obtaining manufacturer literature. Review the written agreement between the selling and purchasing Utility. | <u>to qualify for 4</u>:<br>Install automatic datalogging equipment on Imported supply meters. Set a procedure to review this data on a monthly basis to detect gross anomalies and data gaps. Launch discussions with the Exporters to jointly review terms of the written agreements regarding meter accuracy testing and data management; revise the terms as necessary. | | <u>to qualify for 6</u>:<br>Refine computerized data collection and archive to include hourly Imported supply metered flow data that is reviewed at least on a weekly basis to detect specific data anomalies and gaps. Make necessary corrections to errors/data errors on a weekly basis. | | <u>to qualify for 8</u>:<br>Ensure that all Imported supply metered flow data is collected and archived on at least an hourly basis. All data is reviewed and errors/data gaps are corrected each business day. | | <u>to qualify for 10</u>:<br>Conduct accountability checks to confirm that all Imported supply metered data is reviewed and corrected each business day by the Exporter. Results of all meter accuracy tests and data corrections should be available for sharing between the Exporter and the purchasing Utility. Establish a schedule for a regular review and updating of the contractual language in the written agreement between the selling and the purchasing Utility; at least every five years. | | <u>to maintain 10</u>:<br>Monitor meter innovations for development of more accurate and less expensive flowmeters; work with the Exporter to help identify meter replacement needs. Keep communication lines with Exporters open and maintain productive relations. Keep the written agreement current with clear and explicit language that meets the ongoing needs of all parties. |
| Water Exported: | Select n/a if the water utility sells no bulk water to neighboring water utilities (no exported water sales) | Less than 25% of exported water sources are metered, remaining sources are estimated. No regular meter accuracy testing. | 25% - 50% of exported water sources are metered; other sources estimated. No regular meter accuracy testing. | Conditions between 2 and 4 | 50% - 75% of exported water sources are metered, other sources estimated. Occasional meter accuracy testing conducted. | Conditions between 4 and 6 | At least 75% of exported water sources are metered, meter accuracy testing and/or electronic calibration conducted annually. Less than 25% of tested meters are found outside of +/- 6% accuracy. | Conditions between 6 and 8 | 100% of exported water sources are metered, meter accuracy testing and electronic calibration of related instrumentation is conducted annually, less than 10% of meters are found outside of +/- 6% accuracy | Conditions between 8 and 10 | 100% of exported water sources are metered, meter accuracy testing and electronic calibration of related instrumentation is conducted semi-annually for all meter installations, with less than 10% of accuracy tests found outside of +/- 3% accuracy. |

| Grading >>> | n/a | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Improvements to attain higher data grading for "Water Exported Volume" component:<br><br>(*Note: usually, if the water utility being audited sells (Exports) water to a neighboring purchasing Utility, it is the responsibility of the utility exporting the water to maintain the metering installation measuring the Exported volume. The utility exporting the water should ensure that adequate meter upkeep takes place and an accurate measure of the Water Exported volume is quantified.* ) | | to qualify for 2:<br>Review bulk water sales agreements with purchasing utilities; confirm requirements for use & upkeep of accurate metering. Identify needs to install new, or replace defective meters as needed. | To qualify for 4:<br>Locate all exported water sources on maps and in field, launch meter accuracy testing for existing meters, begin to install meters on unmetered exported water interconnections and replace obsolete/defective meters | | to qualify for 6:<br>Formalize annual meter accuracy testing for all exported water meters. Continue installation of meters on unmetered exported water interconnections and replacement of obsolete/defective meters. | | to qualify for 8:<br>Complete project to install new, or replace defective, meters on all exported water interconnections. Maintain annual meter accuracy testing for all exported water meters. Repair or replace meters outside of +/- 6% accuracy. | | to qualify for 10:<br>Maintain annual meter accuracy testing for all meters. Repair or replace meters outside of +/- 3% accuracy. Investigate new meter technology; pilot one or more replacements with innovative meters in attempt to improve meter accuracy. | | to maintain 10:<br>Standardize meter accuracy test frequency to semi-annual, or more frequent, for all meters. Repair or replace meters outside of +/- 3% accuracy. Continually investigate/pilot improving metering technology. |
| Water exported master meter and supply error adjustment: | Select n/a only if the water utility fails to have meters on its exported supply interconnections. | Inventory information on exported meters and paper records of measured volumes exist but are incomplete and/or in a very crude condition; data error cannot be determined Written agreement(s) with the utility purchasing the water are missing or written in vague language concerning meter management and testing. | No automatic datalogging of exported supply volumes; daily readings are scribed on paper records without any accountability controls to confirm data accuracy and the absence of errors and data gaps in recorded volumes. Written agreement requires meter accuracy testing but is vague on the details of how and who conducts the testing. | Conditions between 2 and 4 | Exported metered flow data is logged automatically in electronic format and reviewed at least on a monthly basis, with necessary corrections implemented. Meter data is adjusted by the utility selling (exporting) the water when gross data errors are detected. A coherent data trail exists for this process to protect both the utility exporting the water and the purchasing Utility. Written agreement exists and clearly states requirements and roles for meter accuracy testing and data management. | Conditions between 4 and 6 | Hourly exported supply metered data is logged automatically & reviewed on at least a weekly basis by the utility selling the water. Data is adjusted to correct gross error when meter/instrumentation equipment malfunction is detected; and to correct for error found by meter accuracy testing. Any data gaps in the archived data are detected and corrected during the weekly review. A coherent data trail exists for this process to protect both the selling (exporting) utility and the purchasing Utility. | Conditions between 6 and 8 | Continuous exported supply metered flow data is logged automatically & reviewed each business day by the utility selling (exporting) the water. Data is adjusted to correct gross error from detected meter/instrumentation equipment malfunction and any error confirmed by meter accuracy testing. Any data errors/gaps are detected and corrected on a daily basis. A data trail exists for the process to protect both the selling (exporting) Utility and the purchasing Utility. | Conditions between 8 and 10 | Computerized system (SCADA or similar) automatically records data which is reviewed each business day by the utility selling (exporting) the water. Tight accountability controls ensure that all error/data gaps that occur in the archived flow data are quickly detected and corrected. A reliable data trail exists and contract provisions for meter testing and data management are reviewed by the selling Utility and purchasing Utility at least once every five years. |
| Improvements to attain higher data grading for "Water exported master meter and supply error adjustment" component: | | to qualify for 2:<br>Develop a plan to restructure recordkeeping system to capture all flow data; set a procedure to review flow data on a daily basis to detect input errors. Obtain more reliable information about existing meters by conducting field inspections of meters and related instrumentation, and obtaining manufacturer literature. Review the written agreement between the utility selling (exporting) the water and the purchasing Utility. | to qualify for 4:<br>Install automatic datalogging equipment on exported supply meters. Set a procedure to review this data on a monthly basis to detect gross anomalies and data gaps. Launch discussions with the purchasing utilities to jointly review terms of the written agreements regarding meter accuracy testing and data management; revise the terms as necessary. | | to qualify for 6:<br>Refine computerized data collection and archive to include hourly exported supply metered flow data that is reviewed at least on a weekly basis to detect specific data anomalies and gaps. Make necessary corrections to errors/data errors on a weekly basis. | | to qualify for 8:<br>Ensure that all exported metered flow data is collected and archived on at least an hourly basis. All data is reviewed and errors/data gaps are corrected each business day. | | to qualify for 10:<br>Conduct accountability checks to confirm that all exported metered flow data is reviewed and corrected each business day by the utility selling the water. Results of all meter accuracy tests and data corrections should be available for sharing between the utility and the purchasing Utility. Establish a schedule for a regular review and updating of the contractual language in the written agreements with the purchasing utilities; at least every five years. | | to maintain 10:<br>Monitor meter innovations for development of more accurate and less expensive flowmeters; work with the purchasing utilities to help identify meter replacement needs. Keep communication lines with the purchasing utilities open and maintain productive relations. Keep the written agreement current with clear and explicit language that meets the ongoing needs of all parties. |
| **AUTHORIZED CONSUMPTION** | | | | | | | | | | | |

| Grading >>> | n/a | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
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| **Billed metered:** | n/a (not applicable). Select n/a only if the entire customer population is not metered and is billed for water service on a flat or fixed rate basis. In such a case the volume entered must be zero. | Less than 50% of customers with volume-based billings from meter readings; flat or fixed rate billing exists for the majority of the customer population | At least 50% of customers with volume-based billing from meter reads; flat rate billing for others. Manual meter reading is conducted, with less than 50% meter read success rate, remainding accounts' consumption is estimated. Limited meter records, no regular meter testing or replacement. Billing data maintained on paper records, with no auditing. | Conditions between 2 and 4 | At least 75% of customers with volume-based, billing from meter reads; flat or fixed rate billing for remaining accounts. Manual meter reading is conducted with at least 50% meter read success rate; consumption for accounts with failed reads is estimated. Purchase records verify age of customer meters; only very limited meter accuracy testing is conducted. Customer meters are replaced only upon complete failure. Computerized billing records exist, but only sporadic internal auditing conducted. | Conditions between 4 and 6 | At least 90% of customers with volume-based billing from meter reads; consumption for remaining accounts is estimated. Manual customer meter reading gives at least 80% customer meter reading success rate; consumption for accounts with failed reads is estimated. Good customer meter records exist, but only limited meter accuracy testing is conducted. Regular replacement is conducted for the oldest meters. Computerized billing records exist with annual auditing of summary statistics conducting by utility personnel. | Conditions between 6 and 8 | At least 97% of customers exist with volume-based billing from meter reads. At least 90% customer meter reading success rate; or at least 80% read success rate with planning and budgeting for trials of Automatic Meter Reading (AMR) or Advanced Metering Infrastructure (AMI) in one or more pilot areas. Good customer meter records. Regular meter accuracy testing guides replacement of statistically significant number of meters each year. Routine auditing of computerized billing records for global and detailed statistics occurs annually by utility personnel, and is verified by third party at least once every five years. | Conditions between 8 and 10 | At least 99% of customers exist with volume-based billing from meter reads. At least 95% customer meter reading success rate; or minimum 80% meter reading success rate, with Automatic Meter Reading (AMR) or Advanced Metering Infrastructure (AMI) trials underway. Statistically significant customer meter testing and replacement program in place on a continuous basis. Computerized billing with routine, detailed auditing, including field investigation of representative sample of accounts undertaken annually by utility personnel. Audit is conducted by third party auditors at least once every three years. |
| Improvements to attain higher data grading for "Billed Metered Consumption" component: | If n/a is selected because the customer meter population is unmetered, consider establishing a new policy to meter the customer population and employ water rates based upon metered volumes. | to qualify for 2:<br>Conduct investigations or trials of customer meters to select appropriate meter models. Budget funding for meter installations. Investigate volume based water rate structures. | to qualify for 4:<br>Purchase and install meters on unmetered accounts. Implement policies to improve meter reading success. Catalog meter information during meter read visits to identify age/model of existing meters. Test a minimal number of meters for accuracy. Install computerized billing system. | | to qualify for 6:<br>Purchase and install meters on unmetered accounts. Eliminate flat fee billing and establish appropriate water rate structure based upon measured consumption. Continue to achieve verifiable success in removing manual meter reading barriers. Expand meter accuracy testing. Launch regular meter replacement program. Launch a program of annual auditing of global billing statistics by utility personnel. | | to qualify for 8:<br>Purchase and install meters on unmetered accounts. If customer meter reading success rate is less than 97%, assess cost-effectiveness of Automatic Meter Reading (AMR) or Advanced Metering Infrastructure (AMI) system for portion or entire system; or otherwise achieve ongoing improvements in manual meter reading success rate to 97% or higher. Refine meter accuracy testing program. Set meter replacement goals based upon accuracy test results. Implement annual auditing of detailed billing records by utility personnel and implement third party auditing at least once every five years. | | to qualify for 10:<br>Purchase and install meters on unmetered accounts. Launch Automatic Meter Reading (AMR) or Advanced Metering Infrastructure (AMI) system trials if manual meter reading success rate of at least 99% is not achieved within a five-year program. Continue meter accuracy testing program. Conduct planning and budgeting for large scale meter replacement based upon meter life cycle analysis using cumulative flow target. Continue annual detailed billing data auditing by utility personnel and conduct third party auditing at least once every three years. | | to maintain 10:<br>Continue annual internal billing data auditing, and third party auditing at least every three years. Continue customer meter accuracy testing to ensure that accurate customer meter readings are obtained and entered as the basis for volume based billing. Stay abreast of improvements in Automatic Meter Reading (AMR) and Advanced Metering Infrastructure (AMI) and information management. Plan and budget for justified upgrades in metering, meter reading and billing data management to maintain very high accuracy in customer metering and billing. |
| Billed unmetered: | Select n/a if it is the policy of the water utility to meter all customer connections and it has been confirmed by detailed auditing that all customers do indeed have a water meter; i.e. no intentionally unmetered accounts exist | Water utility policy does not require customer metering; flat or fixed fee billing is employed. No data is collected on customer consumption. The only estimates of customer population consumption available are derived from data estimation methods using average fixture count multiplied by number of connections, or similar approach. | Water utility policy does not require customer metering; flat or fixed fee billing is employed. Some metered accounts exist in parts of the system (pilot areas or District Metered Areas) with consumption read periodically or recorded on portable dataloggers over one, three, or seven day periods. Data from these sample meters are used to infer consumption for the total customer population. Site specific estimation methods are used for unusual buildings/water uses. | Conditions between 2 and 4 | Water utility policy does require metering and volume based billing in general. However, a liberal amount of exemptions and a lack of clearly written and communicated procedures result in up to 20% of billed accounts believed to be unmetered by exemption; or the water utility is in transition to becoming fully metered, and a large number of customers remain unmetered. A rough estimate of the annual consumption for all unmetered accounts is included in the annual water audit, with no inspection of individual unmetered accounts. | Conditions between 4 and 6 | Water utility policy does require metering and volume based billing but established exemptions exist for a portion of accounts such as municipal buildings. As many as 15% of billed accounts are unmetered due to this exemption or meter installation difficulties. Only a group estimate of annual consumption for all unmetered accounts is included in the annual water audit, with no inspection of individual unmetered accounts. | Conditions between 6 and 8 | Water utility policy does require metering and volume based billing for all customer accounts. However, less than 5% of billed accounts remain unmetered because meter installation is hindered by unusual circumstances. The goal is to minimize the number of unmetered accounts. Reliable estimates of consumption are obtained for these unmetered accounts via site specific estimation methods. | Conditions between 8 and 10 | Water utility policy does require metering and volume based billing for all customer accounts. Less than 2% of billed accounts are unmetered and exist because meter installation is hindered by unusual circumstances. The goal exists to minimize the number of unmetered accounts to the extent that is economical. Reliable estimates of consumption are obtained at these accounts via site specific estimation methods. |

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| Improvements to attain higher data grading for "Billed Unmetered Consumption" component: | | to qualify for 2: Conduct research and evaluate cost/benefit of a new water utility policy to require metering of the customer population; thereby greatly reducing or eliminating unmetered accounts. Conduct pilot metering project by installing water meters in small sample of customer accounts and periodically reading the meters or datalogging the water consumption over one, three, or seven day periods. | to qualify for 4: Implement a new water utility policy requiring customer metering. Launch or expand pilot metering study to include several different meter types, which will provide data for economic assessment of full scale metering options. Assess sites with access difficulties to devise means to obtain water consumption volumes. Begin customer meter installation. | | to qualify for 6: Refine policy and procedures to improve customer metering participation for all but solidly exempt accounts. Assign staff resources to review billing records to identify errant unmetered properties. Specify metering needs and funding requirements to install sufficient meters to significant reduce the number of unmetered accounts | | to qualify for 8: Push to install customer meters on a full scale basis. Refine metering policy and procedures to ensure that all accounts, including municipal properties, are designated for meters. Plan special efforts to address "hard-to-access" accounts. Implement procedures to obtain a reliable consumption estimate for the remaining few unmetered accounts awaiting meter installation. | | to qualify for 10: Continue customer meter installation throughout the service area, with a goal to minimize unmetered accounts. Sustain the effort to investigate accounts with access difficulties, and devise means to install water meters or otherwise measure water consumption. | | to maintain 10: Continue to refine estimation methods for unmetered consumption and explore means to establish metering, for as many billed remaining unmetered accounts as is economically feasible. |
| Unbilled metered: | select n/a if all billing-exempt consumption is unmetered. | Billing practices exempt certain accounts, such as municipal buildings, but written policies do not exist; and a reliable count of unbilled metered accounts is unavailable. Meter upkeep and meter reading on these accounts is rare and not considered a priority. Due to poor recordkeeping and lack of auditing, water consumption for all such accounts is purely guesstimated. | Billing practices exempt certain accounts, such as municipal buildings, but only scattered, dated written directives exist to justify this practice. A reliable count of unbilled metered accounts is unavailable. Sporadic meter replacement and meter reading occurs on an as-needed basis. The total annual water consumption for all unbilled, metered accounts is estimated based upon approximating the number of accounts and assigning consumption from actively billed accounts of same meter size. | Conditions between 2 and 4 | Dated written procedures permit billing exemption for specific accounts, such as municipal properties, but are unclear regarding certain other types of accounts. Meter reading is given low priority and is sporadic. Consumption is quantified from meter readings where available. The total number of unbilled, unmetered accounts must be estimated along with consumption volumes. | Conditions between 4 and 6 | Written policies regarding billing exemptions exist but adherence in practice is questionable. Metering and meter reading for municipal buildings is reliable but sporadic for other unbilled metered accounts. Periodic auditing of such accounts is conducted. Water consumption is quantified directly from meter readings where available, but the majority of the consumption is estimated. | Conditions between 6 and 8 | Written policy identifies the types of accounts granted a billing exemption. Customer meter management and meter reading are considered secondary priorities, but meter reading is conducted at least annually to obtain consumption volumes for the annual water audit. High level auditing of billing records ensures that a reliable census of such accounts exists. | Conditions between 8 and 10 | Clearly written policy identifies the types of accounts given a billing exemption, with emphasis on keeping such accounts to a minimum. Customer meter management and meter reading for these accounts is given proper priority and is reliably conducted. Regular auditing confirms this. Total water consumption for these accounts is taken from reliable readings from accurate meters. |
| Improvements to attain higher data grading for "Unbilled Metered Consumption" component: | | to qualify for 2: Reassess the water utility's policy allowing certain accounts to be granted a billing exemption. Draft an outline of a new written policy for billing exemptions, with clear justification as to why any accounts should be exempt from billing, and with the intention to keep the number of such accounts to a minimum. | to qualify for 4: Review historic written directives and policy documents allowing certain accounts to be billing-exempt. Draft an outline of a written policy for billing exemptions, identify criteria that grants an exemption, with a goal of keeping this number of accounts to a minimum. Consider increasing the priority of reading meters on unbilled accounts at least annually. | | to qualify for 6: Draft a new written policy regarding billing exemptions based upon consensus criteria allowing this occurrence. Assign resources to audit meter records and billing records to obtain census of unbilled metered accounts. Gradually include a greater number of these metered accounts to the routes for regular meter reading. | | to qualify for 8: Communicate billing exemption policy throughout the organization and implement procedures that ensure proper account management. Conduct inspections of accounts confirmed in unbilled metered status and verify that accurate meters exist and are scheduled for routine meter readings. Gradually increase the number of unbilled metered accounts that are included in regular meter reading routes. | | to qualify for 10: Ensure that meter management (meter accuracy testing, meter replacement) and meter reading activities for unbilled accounts are accorded the same priority as billed accounts. Establish ongoing annual auditing process to ensure that water consumption is reliably collected and provided to the annual water audit process. | | to maintain 10: Reassess the utility's philosophy in allowing any water uses to go "unbilled". It is possible to meter and bill all accounts, even if the fee charged for water consumption is discounted or waived. Metering and billing all accounts ensures that water consumption is tracked and water waste from plumbing leaks is detected and minimized. |
| Unbilled unmetered: | | Extent of unbilled, unmetered consumption is unknown due to unclear policies and poor recordkeeping. Total consumption is quantified based upon a purely subjective estimate. | Clear extent of unbilled, unmetered consumption is unknown, but a number of events are randomly documented each year, confirming existence of such consumption, but without sufficient documentation to quantify an accurate estimate of the annual volume consumed. | Conditions between 2 and 4 | Extent of unbilled, unmetered consumption is partially known, and procedures exist to document certain events such as miscellaneous fire hydrant uses. Formulae is used to quantify the consumption from such events (time running multiplied by typical flowrate, multiplied by number of events). | Default value of 1.25% of system input volume is employed | Coherent policies exist for some forms of unbilled, unmetered consumption but others await closer evaluation. Reasonable recordkeeping for the managed uses exists and allows for annual volumes to be quantified by inference, but unsupervised uses are guesstimated. | Conditions between 6 and 8 | Clear policies and good recordkeeping exist for some uses (ex: water used in periodic testing of unmetered fire connections), but other uses (ex: miscellaneous uses of fire hydrants) have limited oversight. Total consumption is a mix of well quantified use such as from formulae (time running multiplied by typical flow, multiplied by number of events) or temporary meters, and relatively subjective estimates of less regulated use. | Conditions between 8 and 10 | Clear policies exist to identify permitted use of water in unbilled, unmetered fashion, with the intention of minimizing this type of consumption. Good records document each occurrence and consumption is quantified via formulae (time running multiplied by typical flow, multiplied by number of events) or use of temporary meters. |

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| Improvements to attain higher data grading for "Unbilled Unmetered Consumption" component: | | to qualify for 5:<br>Utilize the accepted default value of 1.25% of the volume of water supplied as an expedient means to gain a reasonable quantification of this use.<br>to qualify for 2:<br>Establish a policy regarding what water uses should be allowed to remain as unbilled and unmetered. Consider tracking a small sample of one such use (ex: fire hydrant flushings). | to qualify for 5:<br>Utilize accepted default value of 1.25% of the volume of water supplied as an expedient means to gain a reasonable quantification of this use.<br>to qualify for 4:<br>Evaluate the documentation of events that have been observed. Meet with user groups (ex: for fire hydrants - fire departments, contractors to ascertain their need and/or volume requirements for water from fire hydrants). | | to qualify for 5:<br>Utilize accepted default value of 1.25% of the volume of water supplied as an expedient means to gain a reasonable quantification of all such use. This is particularly appropriate for water utilities who are in the early stages of the water auditing process, and should focus on other components since the volume of unbilled, umetered consumption is usually a relatively small quatity component, and other larger-quantity components should take priority. | to qualify for 6 or greater:<br>Finalize policy and begin to conduct field checks to better establish and quantify such usage. Proceed if top-down audit exists and/or a great volume of such use is suspected. | to qualify for 8:<br>Assess water utility policy and procedures for various unmetered usages. For example, ensure that a policy exists and permits are issued for use of fire hydrants by persons outside of the utility. Create written procedures for use and documentation of fire hydrants by water utility personnel. Use same approach for other types of unbilled, unmetered water usage. | | to qualify for 10:<br>Refine written procedures to ensure that all uses of unbilled, unmetered water are overseen by a structured permitting process managed by water utility personnel. Reassess policy to determine if some of these uses have value in being converted to billed and/or metered status. | | to maintain 10:<br>Continue to refine policy and procedures with intention of reducing the number of allowable uses of water in unbilled and unmetered fashion. Any uses that can feasibly become billed and metered should be converted eventually. |
| **APPARENT LOSSES** | | | | | | | | | | | |
| Unauthorized consumption: | | Extent of unauthorized consumption is unknown due to unclear policies and poor recordkeeping. Total unauthorized consumption is guesstimated. | Unauthorized consumption is a known occurrence, but its extent is a mystery. There are no requirements to document observed events, but periodic field reports capture some of these occurrences. Total unauthorized consumption is approximated from this limited data. | conditions between 2 and 4 | Procedures exist to document some unauthorized consumption such as observed unauthorized fire hydrant openings. Use formulae to quantify this consumption (time running multiplied typical flowrate, multiplied by number of events). | Default value of 0.25% of volume of water supplied is employed | Coherent policies exist for some forms of unauthorized consumption (more than simply fire hydrant misuse) but others await closer evaluation. Reasonable surveillance and recordkeeping exist for occurrences that fall under the policy. Volumes quantified by inference from these records. | Conditions between 6 and 8 | Clear policies and good auditable recordkeeping exist for certain events (ex: tampering with water meters, illegal bypasses of customer meters); but other occurrences have limited oversight. Total consumption is a combination of volumes from formulae (time x typical flow) and subjective estimates of unconfirmed consumption. | Conditions between 8 and 10 | Clear policies exist to identify all known unauthorized uses of water. Staff and procedures exist to provide enforcement of policies and detect violations. Each occurrence is recorded and quantified via formulae (estimated time running multiplied by typical flow) or similar methods. All records and calculations should exist in a form that can be audited by a third party. |
| Improvements to attain higher data grading for "Unauthorized Consumption" component: | | to qualify for 5:<br>Use accepted default of 0.25% of volume of water supplied.<br>to qualify for 2:<br>Review utility policy regarding what water uses are considered unauthorized, and consider tracking a small sample of one such occurrence (ex: unauthorized fire hydrant openings) | to qualify for 5:<br>Use accepted default of 0.25% of system input volume<br>to qualify for 4:<br>Review utility policy regarding what water uses are considered unauthorized, and consider tracking a small sample of one such occurrence (ex: unauthorized fire hydrant openings) | | to qualify for 5:<br>Utilize accepted default value of 0.25% of volume of water supplied as an expedient means to gain a reasonable quantification of all such use. This is particularly appropriate for water utilities who are in the early stages of the water auditing process. | to qualify for 6 or greater:<br>Finalize policy updates to clearly identify the types of water consumption that are authorized from those usages that fall outside of this policy and are, therefore, unauthorized. Begin to conduct regular field checks. Proceed if the top-down audit already exists and/or a great volume of such use is suspected. | to quality for 8:<br>Assess water utility policies to ensure that all known occurrences of unauthorized consumption are outlawed, and that appropriate penalties are prescribed. Create written procedures for detection and documentation of various occurrences of unauthorized consumption as they are uncovered. | | to qualify for 10:<br>Refine written procedures and assign staff to seek out likely occurrences of unauthorized consumption. Explore new locking devices, monitors and other technologies designed to detect and thwart unauthorized consumption. | | to maintain 10:<br>Continue to refine policy and procedures to eliminate any loopholes that allow or tacitly encourage unauthorized consumption. Continue to be vigilant in detection, documentation and enforcement efforts. |

| Grading >>> | n/a | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
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| **Customer metering inaccuracies:** | select n/a only if the entire customer population is unmetered. In such a case the volume entered must be zero. | Customer meters exist, but with unorganized paper records on meters; no meter accuracy testing or meter replacement program for any size of retail meter. Metering workflow is driven chaotically with no proactive management. Loss volume due to aggregate meter inaccuracy is guesstimated. | Poor recordkeeping and meter oversight is recognized by water utility management who has allotted staff and funding resources to organize improved recordkeeping and start meter accuracy testing. Existing paper records gathered and organized to provide cursory disposition of meter population. Customer meters are tested for accuracy only upon customer request. | Conditions between 2 and 4 | Reliable recordkeeping exists; meter information is improving as meters are replaced. Meter accuracy testing is conducted annually for a small number of meters (more than just customer requests, but less than 1% of inventory). A limited number of the oldest meters are replaced each year. Inaccuracy volume is largely an estimate, but refined based upon limited testing data. | Conditions between 4 and 6 | A reliable electronic recordkeeping system for meters exists. The meter population includes a mix of new high performing meters and dated meters with suspect accuracy. Routine, but limited, meter accuracy testing and meter replacement occur. Inaccuracy volume is quantified using a mix of reliable and less certain data. | Conditions between 6 and 8 | Ongoing meter replacement and accuracy testing result in highly accurate customer meter population. Testing is conducted on samples of meters of varying age and accumulated volume of throughput to determine optimum replacement time for various types of meters. | Ongoing meter replacement and accuracy testing result in highly accurate customer meter population. Statistically significant number of meters are tested in audit year. This testing is conducted on samples of meters of varying age and accumulated volume of throughput to determine optimum replacement time for these meters. | Good records of all active customer meters exist and include as a minimum: meter number, account number/location, type, size and manufacturer. Ongoing meter replacement occurs according to a targeted and justified basis. Regular meter accuracy testing gives a reliable measure of composite inaccuracy volume for the customer meter population. New metering technology is embraced to keep overall accuracy improving. Procedures are reviewed by a third party knowledgeable in the M36 methodology. |
| Improvements to attain higher data grading for "Customer meter inaccuracy volume" component: | If n/a is selected because the customer meter population is unmetered, consider establishing a new policy to meter the customer population and employ water rates based upon metered volumes. | to qualify for 2: Gather available meter purchase records. Conduct testing on a small number of meters believed to be the most inaccurate. Review staffing needs of the metering group and budget for necessary resources to better organize meter management. | to qualify for 4: Implement a reliable record keeping system for customer meter histories, preferably using electronic methods typically linked to, or part of, the Customer Billing System or Customer Information System. Expand meter accuracy testing to a larger group of meters. | | to qualify for 6: Standardize the procedures for meter recordkeeping within an electronic information system. Accelerate meter accuracy testing and meter replacements guided by testing results. | | to qualify for 8: Expand annual meter accuracy testing to evaluate a statistically significant number of meter makes/models. Expand meter replacement program to replace statistically significant number of poor performing meters each year. | | to qualify for 9: Continue efforts to manage meter population with reliable recordkeeping. Test a statistically significant number of meters each year and analyze test results in an ongoing manner to serve as a basis for a target meter replacement strategy based upon accumulated volume throughput. | to qualify for 10: Continue efforts to manage meter population with reliable recordkeeping, meter testing and replacement. Evaluate new meter types and install one or more types in 5-10 customer accounts each year in order to pilot improving metering technology. | to maintain 10: Increase the number of meters tested and replaced as justified by meter accuracy test data. Continually monitor development of new metering technology and Advanced Metering Infrastructure (AMI) to grasp opportunities for greater accuracy in metering of water flow and management of customer consumption data. |
| Systematic Data Handling Errors: | Note: all water utilities incur some amount of this error. Even in water utilities with unmetered customer populations and fixed rate billing, errors occur in annual billing tabulations. Enter a positive value for the volume and select a grading. | Policies and procedures for activation of new customer water billing accounts are vague and lack accountability. Billing data is maintained on paper records which are not well organized. No auditing is conducted to confirm billing data handling efficiency. An unknown number of customers escape routine billing due to lack of billing process oversight. | Policy and procedures for activation of new customer accounts and oversight of billing records exist but need refinement. Billing data is maintained on paper records or insufficiently capable electronic database. Only periodic unstructured auditing work is conducted to confirm billing data handling efficiency. The volume of unbilled water due to billing lapses is a guess. | Conditions between 2 and 4 | Policy and procedures for new account activation and oversight of billing operations exist but needs refinement. Computerized billing system exists, but is dated or lacks needed functionality. Periodic, limited internal audits conducted and confirm with approximate accuracy the consumption volumes lost to billing lapses. | Conditions between 4 and 6 | Policy and procedures for new account activation and oversight of billing operations is adequate and reviewed periodically. Computerized billing system is in use with basic reporting available. Any effect of billing adjustments on measured consumption volumes is well understood. Internal checks of billing data error conducted annually. Reasonably accurate quantification of consumption volume lost to billing lapses is obtained. | Conditions between 6 and 8 | New account activation and billing operations policy and procedures are reviewed at least biannually. Computerized billing system includes an array of reports to confirm billing data and system functionality. Checks are conducted routinely to flag and explain zero consumption accounts. Annual internal checks conducted with third party audit conducted at least once every five years. Accountability checks flag billing lapses. Consumption lost to billing lapses is well quantified and reducing year-by-year. | Conditions between 8 and 10 | Sound written policy and procedures exist for new account activation and oversight of customer billing operations. Robust computerized billing system gives high functionality and reporting capabilities which are utilized, analyzed and the results reported each billing cycle. Assessment of policy and data handling errors are conducted internally and audited by third party at least once every three years, ensuring consumption lost to billing lapses is minimized and detected as it occurs. |
| Improvements to attain higher data grading for "Systematic Data Handling Error volume" component: | | to qualify for 2: Draft written policy and procedures for activating new water billing accounts and oversight of billing operations. Investigate and budget for computerized customer billing system. Conduct initial audit of billing records by flow-charting the basic business processes of the customer account/billing function. | to qualify for 4: Finalize written policy and procedures for activation of new billing accounts and overall billing operations management. Implement a computerized customer billing system. Conduct initial audit of billing records as part of this process. | | to qualify for 6: Refine new account activation and billing operations procedures and ensure consistency with the utility policy regarding billing, and minimize opportunity for missed billings. Upgrade or replace customer billing system for needed functionality - ensure that billing adjustments don't corrupt the value of consumption volumes. Procedurize internal annual audit process. | | to qualify for 8: Formalize regular review of new account activation process and general billing practices. Enhance reporting capability of computerized billing system. Formalize regular auditing process to reveal scope of data handling error. Plan for periodic third party audit to occur at least once every five years. | | to qualify for 10: Close policy/procedure loopholes that allow some customer accounts to go unbilled, or data handling errors to exist. Ensure that billing system reports are utilized, analyzed and reported every billing cycle. Ensure that internal and third party audits are conducted at least once every three years. | | to maintain 10: Stay abreast of customer information management developments and innovations. Monitor developments of Advanced Metering Infrastructure (AMI) and integrate technology to ensure that customer endpoint information is well-monitored and errors/lapses are at an economic minimum. |
| **SYSTEM DATA** | | | | | | | | | | | |

| Grading >>> | n/a | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
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| Length of mains: | | Poorly assembled and maintained paper as-built records of existing water main installations makes accurate determination of system pipe length impossible. Length of mains is guesstimated. | Paper records in poor or uncertain condition (no annual tracking of installations & abandonments). Poor procedures to ensure that new water mains installed by developers are accurately documented. | Conditions between 2 and 4 | Sound written policy and procedures exist for documenting new water main installations, but gaps in management result in a uncertain degree of error in tabulation of mains length. | Conditions between 4 and 6 | Sound written policy and procedures exist for permitting and commissioning new water mains. Highly accurate paper records with regular field validation; or electronic records and asset management system in good condition. Includes system backup. | Conditions between 6 and 8 | Sound written policy and procedures exist for permitting and commissioning new water mains. Electronic recordkeeping such as a Geographical Information System (GIS) and asset management system are used to store and manage data. | Conditions between 8 and 10 | Sound written policy exists for managing water mains extensions and replacements. Geographic Information System (GIS) data and asset management database agree and random field validation proves truth of databases. Records of annual field validation should be available for review. |
| Improvements to attain higher data grading for "Length of Water Mains" component: | | to qualify for 2: Assign personnel to inventory current as-built records and compare with customer billing system records and highway plans in order to verify poorly documented pipelines. Assemble policy documents regarding permitting and documentation of water main installations by the utility and building developers; identify gaps in procedures that result in poor documentation of new water main installations. | to qualify for 4: Complete inventory of paper records of water main installations for several years prior to audit year. Review policy and procedures for commissioning and documenting new water main installation. | | to qualify for 6: Finalize updates/improvements to written policy and procedures for permitting/commissioning new main installations. Confirm inventory of records for five years prior to audit year; correct any errors or omissions. | | to qualify for 8: Launch random field checks of limited number of locations. Convert to electronic database such as a Geographic Information System (GIS) with backup as justified. Develop written policy and procedures. | | to qualify for 10: Link Geographic Information System (GIS) and asset management databases, conduct field verification of data. Record field verification information at least annually. | | to maintain 10: Continue with standardization and random field validation to improve the completeness and accuracy of the system. |
| Number of active AND inactive service connections: | | Vague permitting (of new service connections) policy and poor paper recordkeeping of customer connections/billings result in suspect determination of the number of service connections, which may be 10-15% in error from actual count. | General permitting policy exists but paper records, procedural gaps, and weak oversight result in questionable total for number of connections, which may vary 5-10% of actual count. | Conditions between 2 and 4 | Written account activation policy and procedures exist, but with some gaps in performance and oversight. Computerized information management system is being brought online to replace dated paper recordkeeping system. Reasonably accurate tracking of service connection installations & abandonments; but count can be up to 5% in error from actual total. | Conditions between 4 and 6 | Written new account activation and overall billing policies and procedures are adequate and reviewed periodically. Computerized information management system is in use with annual installations & abandonments totaled. Very limited field verifications and audits. Error in count of number of service connections is believed to be no more than 3%. | Conditions between 6 and 8 | Policies and procedures for new account activation and overall billing operations are written, well-structured and reviewed at least biannually. Well-managed computerized information management system exists and routine, periodic field checks and internal system audits are conducted. Counts of connections are no more than 2% in error. | Conditions between 8 and 10 | Sound written policy and well managed and audited procedures ensure reliable management of service connection population. Computerized information management system, Customer Billing System, and Geographic Information System (GIS) information agree; field validation proves truth of databases. Count of connections recorded as being in error is less than 1% of the entire population. |
| Improvements to attain higher data grading for "Number of Active and Inactive Service Connections" component: | **Note: The number of Service Connections does not include fire hydrant leads/lines connecting the hydrant to the water main** | to qualify for 2: Draft new policy and procedures for new account activation and overall billing operations. Research and collect paper records of installations & abandonments for several years prior to audit year. | to qualify for 4: Refine policy and procedures for new account activation and overall billing operations. Research computerized recordkeeping system (Customer Information System or Customer Billing System) to improve documentation format for service connections. | | to qualify for 6: Refine procedures to ensure consistency with new account activation and overall billing policy to establish new service connections or decommission existing connections. Improve process to include all totals for at least five years prior to audit year. | | to qualify for 8: Formalize regular review of new account activation and overall billing operations policies and procedures. Launch random field checks of limited number of locations. Develop reports and auditing mechanisms for computerized information management system. | | to qualify for 10: Close any procedural loopholes that allow installations to go undocumented. Link computerized information management system with Geographic Information System (GIS) and formalize field inspection and information system auditing processes. Documentation of new or decommissioned service connections encounters several levels of checks and balances. | | to maintain 10: Continue with standardization and random field validation to improve knowledge of system. |
| | Note: if customer water | Gradings 1-9 apply if customer properties are unmetered, if customer meters exist and are located inside the customer building premises, or if the water utility owns and is responsible for the entire service connection piping from the water main to the customer building. In any of these cases the average distance between the curb stop or boundary separating utility/customer responsibility for service connection piping, and the typical first point of use (ex: faucet) or the customer meter must be quantified. Gradings of 1-9 are used to grade the validity of the means to quantify this value. (See the "Service Connection Diagram" worksheet) | | | | | | | | | Either of two conditions can be met for a grading of 10: |

| Grading >>> | n/a | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Average length of customer service line: | meters are located outside of the customer building next to the curb stop or boundary separating utility/customer responsibility, then the auditor should answer "Yes" to the question on the Reporting Worksheet asking about this. If the answer is Yes, the grading description listed under the Grading of 10(a) will be followed, with a value of zero automatically entered at a Grading of 10. See the Service Connection Diagram worksheet for a visual presentation of this distance. | Vague policy exists to define the delineation of water utility ownership and customer ownership of the service connection piping. Curb stops are perceived as the breakpoint but these have not been well-maintained or documented. Most are buried or obscured. Their location varies widely from site-to-site, and estimating this distance is arbitrary due to the unknown location of many curb stops. | Policy requires that the curb stop serves as the delineation point between water utility ownership and customer ownership of the service connection piping. The piping from the water main to the curb stop is the property of the water utility; and the piping from the curb stop to the customer building is owned by the customer. Curb stop locations are not well documented and the average distance is based upon a limited number of locations measured in the field. | Conditions between 2 and 4 | Good policy requires that the curb stop serves as the delineation point between water utility ownership and customer ownership of the service connection piping. Curb stops are generally installed as needed and are reasonably documented. Their location varies widely from site-to-site, and an estimate of this distance is hindered by the availability of paper records of limited accuracy. | Conditions between 4 and 6 | Clear written policy exists to define utility/customer responsibility for service connection piping. Accurate, well-maintained paper or basic electronic recordkeeping system exists. Periodic field checks confirm piping lengths for a sample of customer properties. | Conditions between 6 and 8 | Clearly worded policy standardizes the location of curb stops and meters, which are inspected upon installation. Accurate and well maintained electronic records exist with periodic field checks to confirm locations of service lines, curb stops and customer meter pits. An accurate number of customer properties from the customer billing system allows for reliable averaging of this length. | Conditions between 8 and 10 | a) Customer water meters exist outside of customer buildings next to the curb stop or boundary separating utility/customer responsibility for service connection piping. If so, answer "Yes" to the question on the Reporting Working asking about this condition. A value of zero and a Grading of 10 are automatically entered in the Reporting Worksheet .<br>b). Meters exist inside customer buildings, or properties are unmetered. In either case, answer "No" to the Reporting Worksheet question on meter location, and enter a distance determined by the auditor. For a Grading of 10 this value must be a very reliable number from a Geographic Information System (GIS) and confirmed by a statistically valid number of field checks. |
| Improvements to attain higher data grading for "Average Length of Customer Service Line" component: | | to qualify for 2:<br>Research and collect paper records of service line installations. Inspect several sites in the field using pipe locators to locate curb stops. Obtain the length of this small sample of connections in this manner. | to qualify for 4:<br>Formalize and communicate policy delineating utility/customer responsibilities for service connection piping. Assess accuracy of paper records by field inspection of a small sample of service connections using pipe locators as needed. Research the potential migration to a computerized information management system to store service connection data. | | to qualify for 6:<br>Establish coherent procedures to ensure that policy for curb stop, meter installation and documentation is followed. Gain consensus within the water utility for the establishment of a computerized information management system. | | to qualify for 8:<br>Implement an electronic means of recordkeeping, typically via a customer information system, customer billing system, or Geographic Information System (GIS). Standardize the process to conduct field checks of a limited number of locations. | | to qualify for 10:<br>Link customer information management system and Geographic Information System (GIS), standardize process for field verification of data. | | to maintain 10:<br>Continue with standardization and random field validation to improve knowledge of service connection configurations and customer meter locations. |
| Average operating pressure: | | Available records are poorly assembled and maintained paper records of supply pump characteristics and water distribution system operating conditions. Average pressure is guesstimated based upon this information and ground elevations from crude topographical maps. Widely varying distribution system pressures due to undulating terrain, high system head loss and weak/erratic pressure controls further compromise the validity of the average pressure calculation. | Limited telemetry monitoring of scattered pumping station and water storage tank sites provides some static pressure data, which is recorded in handwritten logbooks. Pressure data is gathered at individual sites only when low pressure complaints arise. Average pressure is determined by averaging relatively crude data, and is affected by significant variation in ground elevations, system head loss and gaps in pressure controls in the distribution system. | Conditions between 2 and 4 | Effective pressure controls separate different pressure zones; moderate pressure variation across the system, occasional open boundary valves are discovered that breech pressure zones. Basic telemetry monitoring of the distribution system logs pressure data electronically. Pressure data gathered by gauges or dataloggers at fire hydrants or buildings when low pressure complaints arise, and during fire flow tests and system flushing. Reliable topographical data exists. Average pressure is calculated using this mix of data. | Conditions between 4 and 6 | Reliable pressure controls separate distinct pressure zones; only very occasional open boundary valves are encountered that breech pressure zones. Well-covered telemetry monitoring of the distribution system (not just pumping at source treatment plants or wells) logs extensive pressure data electronically. Pressure gathered by gauges/dataloggers at fire hydrants and buildings when low pressure complaints arise, and during fire flow tests and system flushing. Average pressure is determined by using this mix of reliable data. | Conditions between 6 and 8 | Well-managed, discrete pressure zones exist with generally predictable pressure fluctuations. A current full-scale SCADA System or similar realtime monitoring system exists to monitor the water distribution system and collect data, including real time pressure readings at representative sites across the system. The average system pressure is determined from reliable monitoring system data. | Conditions between 8 and 10 | Well-managed pressure districts/zones, SCADA System and hydraulic model exist to give very precise pressure data across the water distribution system. Average system pressure is reliably calculated from extensive, reliable, and cross-checked data. Calculations are reported on an annual basis as a minimum. |
| Improvements to attain higher data grading for "Average Operating Pressure" component: | | to qualify for 2:<br>Employ pressure gauging and/or datalogging equipment to obtain pressure measurements from fire hydrants. Locate accurate topographical maps of service area in order to confirm ground elevations. Research pump data sheets to find pump pressure/flow characteristics | to qualify for 4:<br>Formalize a procedure to use pressure gauging/datalogging equipment to gather pressure data during various system events such as low pressure complaints, or operational testing. Gather pump pressure and flow data at different flow regimes. Identify faulty pressure controls (pressure reducing valves, altitude valves, partially open boundary valves) and plan to properly configure pressure zones. Make all pressure data from these efforts available to generate system-wide average pressure. | | to qualify for 6:<br>Expand the use of pressure gauging/datalogging equipment to gather scattered pressure data at a representative set of sites, based upon pressure zones or areas. Utilize pump pressure and flow data to determine supply head entering each pressure zone or district. Correct any faulty pressure controls (pressure reducing valves, altitude valves, partially open boundary valves) to ensure properly configured pressure zones. Use expanded pressure dataset from these activities to generate system-wide average pressure. | | to qualify for 8:<br>Install a Supervisory Control and Data Acquisition (SCADA) System, or similar realtime monitoring system, to monitor system parameters and control operations. Set regular calibration schedule for instrumentation to insure data accuracy. Obtain accurate topographical data and utilize pressure data gathered from field surveys to provide extensive, reliable data for pressure averaging. | | to qualify for 10:<br>Annually, obtain a system-wide average pressure value from the hydraulic model of the distribution system that has been calibrated via field measurements in the water distribution system and confirmed in comparisons with SCADA System data. | | to maintain 10:<br>Continue to refine the hydraulic model of the distribution system and consider linking it with SCADA System for real-time pressure data calibration, and averaging. |

| Grading >>> | n/a | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
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| **COST DATA** | | | | | | | | | | | |
| Total annual cost of operating water system: | | Incomplete paper records and lack of financial accounting documentation on many operating functions makes calculation of water system operating costs a pure guesstimate | Reasonably maintained, but incomplete, paper or electronic accounting provides data to estimate the major portion of water system operating costs. | Conditions between 2 and 4 | Electronic, industry-standard cost accounting system in place. However, gaps in data are known to exist, periodic internal reviews are conducted but not a structured financial audit. | Conditions between 4 and 6 | Reliable electronic, industry-standard cost accounting system in place, with all pertinent water system operating costs tracked. Data audited periodically by utility personnel, but not a Certified Public Accountant (CPA). | Conditions between 6 and 8 | Reliable electronic, industry-standard cost accounting system in place, with all pertinent water system operating costs tracked. Data audited at least annually by utility personnel, and at least once every three years by third-party CPA. | Conditions between 8 and 10 | Reliable electronic, industry-standard cost accounting system in place, with all pertinent water system operating costs tracked. Data audited annually by utility personnel and annually also by third-party CPA. |
| Improvements to attain higher data grading for "Total Annual Cost of Operating the Water System" component: | | to qualify for 2: Gather available records, institute new financial accounting procedures to regularly collect and audit basic cost data of most important operations functions. | to qualify for 4: Implement an electronic cost accounting system, structured according to accounting standards for water utilities | | to qualify for 6: Establish process for periodic internal audit of water system operating costs; identify cost data gaps and institute procedures for tracking these outstanding costs. | | to qualify for 8: Standardize the process to conduct routine financial audit on an annual basis. Arrange for CPA audit of financial records at least once every three years. | | to qualify for 10: Standardize the process to conduct a third-party financial audit by a CPA on an annual basis. | | to maintain 10: Maintain program, stay abreast of expenses subject to erratic cost changes and long-term cost trend, and budget/track costs proactively |
| Customer retail unit cost (applied to Apparent Losses): | Customer population unmetered, and/or only a fixed fee is charged for consumption. | Antiquated, cumbersome water rate structure is used, with periodic historic amendments that were poorly documented and implemented; resulting in classes of customers being billed inconsistent charges. The actual composite billing rate likely differs significantly from the published water rate structure, but a lack of auditing leaves the degree of error indeterminate. | Dated, cumbersome water rate structure, not always employed consistently in actual billing operations. The actual composite billing rate is known to differ from the published water rate structure, and a reasonably accurate estimate of the degree of error is determined, allowing a composite billing rate to be quantified. | Conditions between 2 and 4 | Straight-forward water rate structure in use, but not updated in several years. Billing operations reliably employ the rate structure. The composite billing rate is derived from a single customer class such as residential customer accounts, neglecting the effect of different rates from varying customer classes. | Conditions between 4 and 6 | Clearly written, up-to-date water rate structure is in force and is applied reliably in billing operations. Composite customer rate is determined using a weighted average residential rate using volumes of water in each rate block. | Conditions between 6 and 8 | Effective water rate structure is in force and is applied reliably in billing operations. Composite customer rate is determined using a weighted average composite consumption rate, which includes residential, commercial, industrial, institutional (CII), and any other distinct customer classes within the water rate structure. | Conditions between 8 and 10 | Current, effective water rate structure is in force and applied reliably in billing operations. The rate structure and calculations of composite rate - which includes residential, commercial, industrial, institutional (CII), and other distinct customer classes - are reviewed by a third party knowledgeable in the M36 methodology at least once every five years. |
| Improvements to attain higher data grading for "Customer Retail Unit Cost" component: | | to qualify for 2: Formalize the process to implement water rates, including a secure documentation procedure. Create a current, formal water rate document and gain approval from all stakeholders. | to qualify for 4: Review the water rate structure and update/formalize as needed. Assess billing operations to ensure that actual billing operations incorporate the established water rate structure. | | to qualify for 6: Evaluate volume of water used in each usage block by residential users. Multiply volumes by full rate structure. | Launch effort to fully meter the customer population and charge rates based upon water volumes | to qualify for 8: Evaluate volume of water used in each usage block by all classifications of users. Multiply volumes by full rate structure. | | to qualify for 10: Conduct a periodic third-party audit of water used in each usage block by all classifications of users. Multiply volumes by full rate structure. | | to maintain 10: Keep water rate structure current in addressing the water utility's revenue needs. Update the calculation of the customer unit rate as new rate components, customer classes, or other components are modified. |
| Variable production cost (applied to Real Losses): | Note: if the water utility purchases/imports its entire water supply, then enter the unit purchase cost of the bulk water supply in the Reporting Worksheet with a grading of 10 | Incomplete paper records and lack of documentation on primary operating functions (electric power and treatment costs most importantly) makes calculation of variable production costs a pure guesstimate | Reasonably maintained, but incomplete, paper or electronic accounting provides data to roughly estimate the basic operations costs (pumping power costs and treatment costs) and calculate a unit variable production cost. | Conditions between 2 and 4 | Electronic, industry-standard cost accounting system in place. Electric power and treatment costs are reliably tracked and allow accurate weighted calculation of unit variable production costs based on these two inputs and water imported purchase costs (if applicable). All costs are audited internally on a periodic basis. | Conditions between 4 and 6 | Reliable electronic, industry-standard cost accounting system in place, with all pertinent water system operating costs tracked. Pertinent additional costs beyond power, treatment and water imported purchase costs (if applicable) such as liability, residuals management, wear and tear on equipment, impending expansion of supply, are included in the unit variable production cost, as applicable. The data is audited at least annually by utility personnel. | Conditions between 6 and 8 | Reliable electronic, industry-standard cost accounting system in place, with all pertinent primary and secondary variable production and water imported purchase (if applicable) costs tracked. The data is audited at least annually by utility personnel, and at least once every three years by a third-party knowledgeable in the M36 methodology. | Conditions between 8 and 10 | Either of two conditions can be met to obtain a grading of 10:<br>1) Third party CPA audit of all pertinent primary and secondary variable production and water imported purchase (if applicable) costs on an annual basis.<br>or:<br>2) Water supply is entirely purchased as bulk water imported, and the unit purchase cost - including all applicable marginal supply costs - serves as the variable production cost. If all applicable marginal supply costs are not included in this figure, a grade of 10 should not be selected. |
| Improvements to attain higher data grading for "Variable Production Cost" component: | | to qualify for 2: Gather available records, institute new procedures to regularly collect and audit basic cost data and most important operations functions. | to qualify for 4: Implement an electronic cost accounting system, structured according to accounting standards for water utilities | | to qualify for 6: Formalize process for regular internal audits of production costs. Assess whether additional costs (liability, residuals management, equipment wear, impending infrastructure expansion) should be included to calculate a more representative variable production cost. | | to qualify for 8: Formalize the accounting process to include direct cost components (power, treatment) as well as indirect cost components (liability, residuals management, etc.) Arrange to conduct audits by a knowledgable third-party at least once every three years. | | to qualify for 10: Standardize the process to conduct a third-party financial audit by a CPA on an annual basis. | | to maintain 10: Maintain program, stay abreast of expenses subject to erratic cost changes and budget/track costs proactively |

**Average Length of Customer Service Line**

The three figures shown on this worksheet display the assignment of the Average Length of Customer Service Line, Lp, for the three most common piping configurations.

**Figure 1** shows the configuration of the water meter outside of the customer building next to the curb stop valve. In this configuration Lp = 0 since the distance between the curb stop and the customer metering point is essentially zero.

**Figure 2** shows the configuration of the customer water meter located inside the customer building, where Lp is the distance from the curb stop to the water meter.

**Figure 3** shows the configuration of an unmetered customer building , where Lp is the distance from the curb stop to the first point of customer water consumption, or, more simply, the building line.

In any water system the Lp will vary notably in a community of different structures, therefore the average Lp value is used and this should be approximated or calculated if a sample of service line measurements has been gathered.

Click for more information

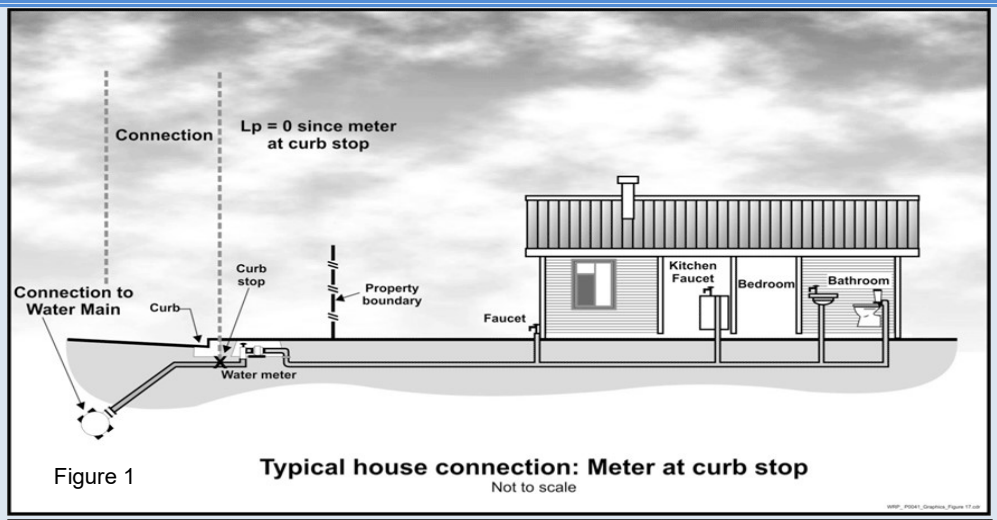



Figure 1 **Typical house connection: Meter at curb stop**
Not to scale

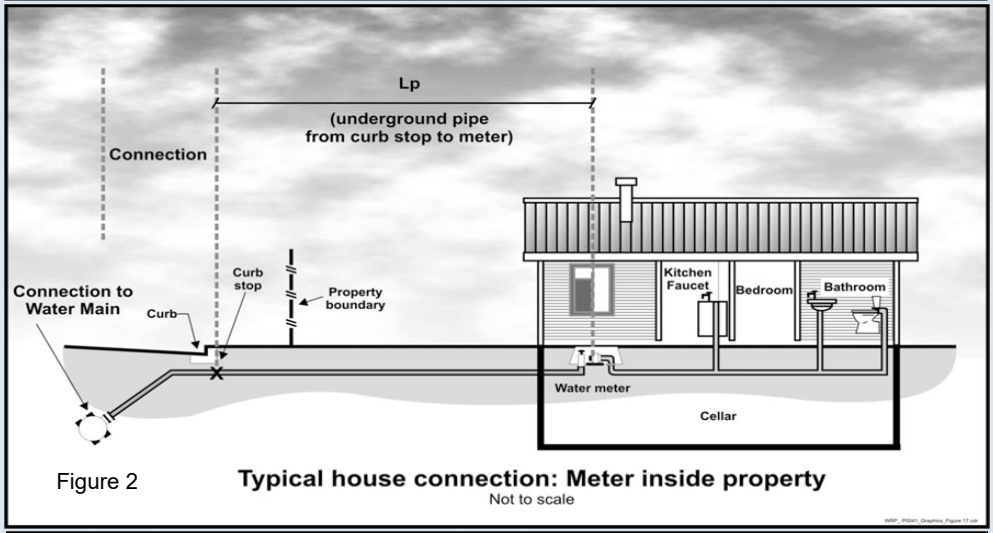



Figure 2 **Typical house connection: Meter inside property**
Not to scale

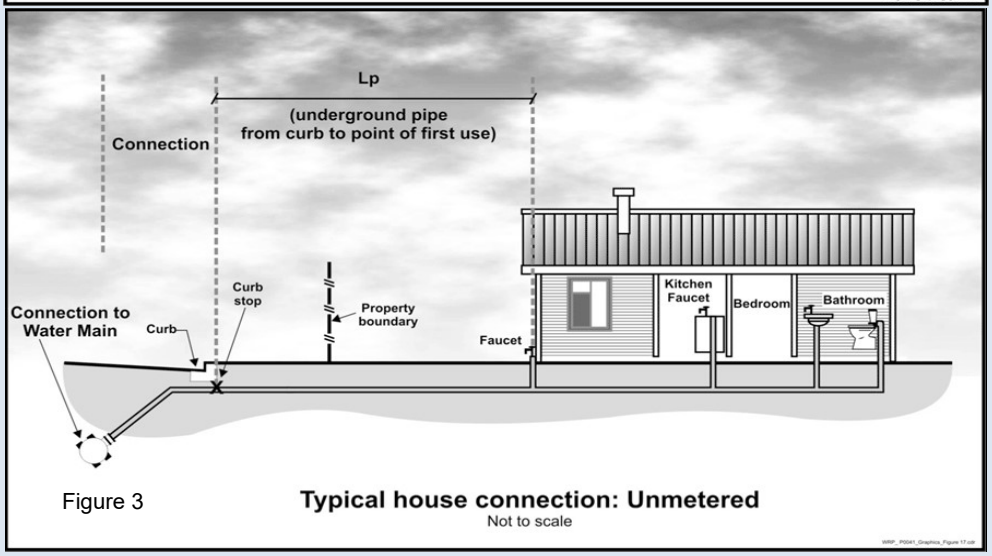



Figure 3 **Typical house connection: Unmetered**
Not to scale

# AWWA Free Water Audit Software: Definitions

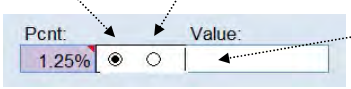
WAS v5.0



| Item Name | Description |
|---|---|
| **Apparent Losses** Find | = unauthorized consumption + customer metering inaccuracies + systematic data handling errors<br><br>Apparent Losses include all types of inaccuracies associated with customer metering (worn meters as well as improperly sized meters or wrong type of meter for the water usage profile) as well as systematic data handling errors (meter reading, billing, archiving and reporting), plus unauthorized consumption (theft or illegal use).<br>NOTE: Over-estimation of Apparent Losses results in under-estimation of Real Losses. Under-estimation of Apparent Losses results in over-estimation of Real Losses. |
| **AUTHORIZED CONSUMPTION** Find | = billed water exported + billed metered + billed unmetered + unbilled metered + unbilled unmetered consumption<br><br>The volume of metered and/or unmetered water taken by registered customers, the water utility's own uses, and uses of others who are implicitly or explicitly authorized to do so by the water utility; for residential, commercial, industrial and public-minded purposes.<br><br>Typical retail customers' consumption is tabulated usually from established customer accounts as billed metered consumption, or - for unmetered customers - billed unmetered consumption. These types of consumption, along with billed water exported, provide revenue potential for the water utility. **Be certain to tabulate the water exported volume as a separate component and do not "double-count" it by including in the billed metered consumption component as well as the water exported component.**<br><br>Unbilled authorized consumption occurs typically in non-account uses, including water for fire fighting and training, flushing of water mains and sewers, street cleaning, watering of municipal gardens, public fountains, or similar public-minded uses. Occasionally these uses may be metered and billed (or charged a flat fee), but usually they are unmetered and unbilled. In the latter case, the water auditor may use a default value to estimate this quantity, or implement procedures for the reliable quantification of these uses. This starts with documenting usage events as they occur and estimating the amount of water used in each event. (See Unbilled unmetered consumption) |
| View Service Connection Diagram<br><br>**Average length of customer service line**<br><br>Find | This is the average length of customer service line, Lp, that is owned and maintained by the customer; from the point of ownership transfer to the customer water meter, or building line (if unmetered). The quantity is one of the data inputs for the calculation of Unavoidable Annual Real Losses (UARL), which serves as the denominator of the performance indicator: Infrastructure Leakage Index (ILI). The value of Lp is multiplied by the number of customer service connections to obtain a total length of customer owned piping in the system. The purpose of this parameter is to account for the unmetered service line infrastructure that is the responsibility of the customer for arranging repairs of leaks that occur on their lines. In many cases leak repairs arranged by customers take longer to be executed than leak repairs arranged by the water utility on utility-maintained piping. Leaks run longer - and lose more water - on customer-owned service piping, than utility owned piping.<br><br>If the customer water meter exists near the ownership transfer point (usually the curb stop located between the water main and the customer premises) this distance is zero because the meter and transfer point are the same. This is the often encountered configuration of customer water meters located in an underground meter box or "pit" outside of the customer's building. The Free Water Audit Software asks a "Yes/No" question about the meter at this location. If the auditor selects "Yes" then this distance is set to zero and the data grading score for this component is set to 10.<br><br>If water meters are typically located inside the customer premise/building, or properties are unmetered, it is up to the water auditor to estimate a system-wide average Lp length based upon the various customer land parcel sizes and building locations in the service area. Lp will be a shorter length in areas of high density housing, and a longer length in areas of low density housing and varied commercial and industrial buildings. General parcel demographics should be employed to obtain a composite average Lp length for the entire system.<br><br>Refer to the "Service Connection Diagram" worksheet for a depiction of the service line/metering configurations that typically exist in water utilities. This worksheet gives guidance on the determination of the Average Length, Lp, for each configuration. |
| **Average operating pressure** Find | This is the average pressure in the distribution system that is the subject of the water audit. Many water utilities have a calibrated hydraulic model of their water distribution system. For these utilities, the hydraulic model can be utilized to obtain a very accurate quantity of average pressure. In the absence of a hydraulic model, the average pressure may be approximated by obtaining readings of static water pressure from a representative sample of fire hydrants or other system access points evenly located across the system. A weighted average of the pressure can be assembled; but be sure to take into account the elevation of the fire hydrants, which typically exist several feet higher than the level of buried water pipelines. If the water utility is compiling the water audit for the first time, the average pressure can be approximated, but with a low data grading. In subsequent years of auditing, effort should be made to improve the accuracy of the average pressure quantity. This will then qualify the value for a higher data grading. |
| **Billed Authorized Consumption** | All consumption that is billed and authorized by the utility. This may include both metered and unmetered consumption. See "Authorized Consumption" for more information. |
| **Billed metered consumption** Find | All metered consumption which is billed to retail customers, including all groups of customers such as domestic, commercial, industrial or institutional. **It does NOT include water supplied to neighboring utilities (water exported) which is metered and billed. Be sure to subtract any consumption for exported water sales that may be included in these billing roles. Water supplied as exports to neighboring water utilities should be included only in the Water Exported component.** The metered consumption data can be taken directly from billing records for the water audit period. The accuracy of yearly metered consumption data can be refined by including an adjustment to account for customer meter reading lag time since not all customer meters are read on the same day of the meter reading period. However additional analysis is necessary to determine the lag time adjustment value, which may or may not be significant. |
| **Billed unmetered consumption** Find | All billed consumption which is calculated based on estimates or norms from water usage sites that have been determined by utility policy to be left unmetered. This is typically a very small component in systems that maintain a policy to meter their customer population. However, this quantity can be the key consumption component in utilities that have not adopted a universal metering policy. **This component should NOT include any water that is supplied to neighboring utilities (water exported) which is unmetered but billed. Water supplied as exports to neighboring water utilities should be included only in the Water Exported component.** |

| Item Name | Description |
|---|---|
| **Customer metering inaccuracies** Find | Apparent water losses caused by the collective under-registration of customer water meters. Many customer water meters gradually wear as large cumulative volumes of water are passed through them over time. This causes the meters to under-register the flow of water. This occurrence is common with smaller residential meters of sizes 5/8-inch and 3/4 inch after they have registered very large cumulative volumes of water, which generally occurs only after periods of years. For meters sized 1-inch and larger - typical of multi-unit residential, commercial and industrial accounts - meter under-registration can occur from wear or from the improper application of the meter; i.e. installing the wrong type of meter or the wrong size of meter, for the flow pattern (profile) of the consumer. For instance, many larger meters have reduced accuracy at low flows. If an oversized meter is installed, most of the time the routine flow will occur in the low flow range of the meter, and a significant portion of it may not be registered. It is important to properly select and install all meters, but particularly large customer meters, size 1-inch and larger.<br><br>The auditor has two options for entering data for this component of the audit. The auditor can enter a percentage under-registration (typically an estimated value), this will apply the selected percentage to the two categories of metered consumption to determine the volume of water not recorded due to customer meter inaccuracy. Note that this percentage is a composite average inaccuracy for all customer meters in the entire meter population. The percentage will be multiplied by the sum of the volumes in the Billed Metered and Unbilled Metered components. Alternatively, if the auditor has substantial data from meter testing activities, he or she can calculate their own loss volumes, and this volume may be entered directly.<br><br>Note that a value of zero will be accepted but an alert will appear asking if the customer population is unmetered. Since all metered systems have some degree of inaccuracy, a positive value should be entered. A value of zero in this component is valid only if the water utility does not meter its customer population. |
| **Customer retail unit cost** Find | The Customer Retail Unit Cost represents the charge that customers pay for water service. This unit cost is applied routinely to the components of Apparent Loss, since these losses represent water reaching customers but not (fully) paid for. Since most water utilities have a rate structure that includes a variety of different costs based upon class of customer, a weighted average of individual costs and number of customer accounts in each class can be calculated to determine a single composite cost that should be entered into this cell. Finally, the weighted average cost should also include additional charges for sewer, storm water or biosolids processing, but only if these charges are based upon the volume of potable water consumed.<br><br>For water utilities in regions with limited water resources and a questionable ability to meet the drinking water demands in the future, the Customer Retail Unit Cost might also be applied to value the Real Losses; instead of applying the Variable Production Cost to Real Losses. In this way, it is assumed that every unit volume of leakage reduced by leakage management activities will be sold to a customer.<br><br>Note: the Free Water Audit Software allows the user to select the units that are charged to customers (either $/1,000 gallons, $/hundred cubic feet, or $/1,000 litres) and automatically converts these units to the units that appear in the "WATER SUPPLIED" box. The monetary units are United States dollars, $. |
| **Infrastructure Leakage Index (ILI)** Find | The ratio of the Current Annual Real Losses (Real Losses) to the Unavoidable Annual Real Losses (UARL). The ILI is a highly effective performance indicator for comparing (benchmarking) the performance of utilities in operational management of real losses. |
| **Length of mains** Find | Length of all pipelines (except service connections) in the system starting from the point of system input metering (for example at the outlet of the treatment plant). It is also recommended to include in this measure the total length of fire hydrant lead pipe. Hydrant lead pipe is the pipe branching from the water main to the fire hydrant. Fire hydrant leads are typically of a sufficiently large size that is more representative of a pipeline than a service connection. The average length of hydrant leads across the entire system can be assumed if not known, and multiplied by the number of fire hydrants in the system, which can also be assumed if not known. This value can then be added to the total pipeline length. Total length of mains can therefore be calculated as:<br><br>Length of Mains, miles = (total pipeline length, miles) + [ {(average fire hydrant lead length, ft) x (number of fire hydrants)} / 5,280 ft/mile ]<br>or<br>Length of Mains, kilometres = (total pipeline length, kilometres) + [ {(average fire hydrant lead length, metres) x (number of fire hydrants)} / 1,000 metres/kilometre ] |
| **NON-REVENUE WATER** Find | = Apparent Losses + Real Losses + Unbilled Metered Consumption + Unbilled Unmetered Consumption. This is water which does not provide revenue potential to the utility. |
| **Number of active AND inactive service connections** Find | Number of customer service connections, extending from the water main to supply water to a customer. Please note that this includes the actual number of distinct piping connections, including fire connections, whether active or inactive. This may differ substantially from the number of customers (or number of accounts). **Note: this number does not include the pipeline leads to fire hydrants - the total length of piping supplying fire hyrants should be included in the "Length of mains" parameter.** |
| **Real Losses** Find | Physical water losses from the pressurized system (water mains and customer service connections) and the utility's storage tanks, up to the point of customer consumption. In metered systems this is the customer meter, in unmetered situations this is the first point of consumption (stop tap/tap) within the property. The annual volume lost through all types of leaks, breaks and overflows depends on frequencies, flow rates, and average duration of individual leaks, breaks and overflows. |
| **Revenue Water** | Those components of System Input Volume that are billed and have the potential to produce revenue. |
| **Service Connection Density** Find | =number of customer service connections / length of mains |

| Item Name | Description |
|---|---|
| **Systematic data handling errors**<br>Find | Apparent losses caused by accounting omissions, errant computer programming, gaps in policy, procedure, and permitting/activation of new accounts; and any type of data lapse that results in under-stated customer water consumption in summary billing reports.<br><br>**Systematic Data Handling Errors result in a direct loss of revenue potential. Water utilities can find "lost" revenue by keying on this component.**<br><br>Utilities typically measure water consumption registered by water meters at customer premises. The meter should be read routinely (ex: monthly) and the data transferred to the Customer Billing System, which generates and sends a bill to the customer. Data Transfer Errors result in the consumption value being less than the actual consumption, creating an apparent loss. Such error might occur from illegible and mis-recorded hand-written readings compiled by meter readers, inputting an incorrect meter register unit conversion factor in the automatic meter reading equipment, or a variety of similar errors.<br><br>Apparent losses also occur from Data Analysis Errors in the archival and data reporting processes of the Customer Billing System. Inaccurate estimates used for accounts that fail to produce a meter reading are a common source of error. Billing adjustments may award customers a rightful monetary credit, but do so by creating a negative value of consumption, thus under-stating the actual consumption. Account activation lapses may allow new buildings to use water for months without meter readings and billing. Poor permitting and construction inspection practices can result in a new building lacking a billing account, a water meter and meter reading; i.e., the customer is unknown to the utility's billing system.<br><br>Close auditing of the permitting, metering, meter reading, billing and reporting processes of the water consumption data trail can uncover data management gaps that create volumes of systematic data handling error. Utilities should routinely analyze customer billing records to detect data anomalies and quantify these losses. For example, a billing account that registers zero consumption for two or more billing cycles should be checked to explain why usage has seemingly halted. Given the revenue loss impacts of these losses, water utilities are well-justified in providing continuous oversight and timely correction of data transfer errors & data handling errors.<br><br>If the water auditor has not yet gathered detailed data or assessment of systematic data handling error, it is recommended that the auditor apply the default value of 0.25% of the the Billed Authorized Consumption volume. However, if the auditor has investigated the billing system and its controls, and has well validated data that indicates the volume from systematic data handling error is substantially higher or lower than that generated by the default value, then the auditor should enter a quantity that was derived from the utility investigations and select an appropriate grading. Note: negative values are not allowed for this audit component. If the auditor enters zero for this component then a grading of 1 will be automatically assigned. |
| **Total annual cost of operating the water system**<br>Find | These costs include those for operations, maintenance and any annually incurred costs for long-term upkeep of the drinking water supply and distribution system. It should include the costs of day-to-day upkeep and long-term financing such as repayment of capital bonds for infrastructure expansion or improvement. Typical costs include employee salaries and benefits, materials, equipment, insurance, fees, administrative costs and all other costs that exist to sustain the drinking water supply. Depending upon water utility accounting procedures or regulatory agency requirements, it may be appropriate to include depreciation in the total of this cost. This cost should not include any costs to operate wastewater, biosolids or other systems outside of drinking water. |
| **Unauthorized consumption**<br>Find | Includes water illegally withdrawn from fire hydrants, illegal connections, bypasses to customer consumption meters, or tampering with metering or meter reading equipment; as well as any other ways to receive water while thwarting the water utility's ability to collect revenue for the water. Unauthorized consumption results in uncaptured revenue and creates an error that understates customer consumption. In most water utilities this volume is low and, if the water auditor has not yet gathered detailed data for these loss occurrences, it is recommended that the auditor apply a default value of 0.25% of the volume of water supplied. However, if the auditor has investigated unauthorized occurrences, and has well validated data that indicates the volume from unauthorized consumption is substantially higher or lower than that generated by the default value, then the auditor should enter a quantity that was derived from the utility investigations. Note that a value of zero will not be accepted since all water utilities have some volume of unauthorized consumption occurring in their system.<br><br>Note: if the auditor selects the default value for unauthorized consumption, a data grading of 5 is automatically assigned, but not displayed on the Reporting Worksheet. |
| **Unavoidable Annual Real Losses (UARL)**<br>Find | UARL (gallons)=(5.41Lm + 0.15Nc + 7.5Lc) xP,<br>or<br>UARL (litres)=(18.0Lm + 0.8Nc + 25.0Lc) xP<br><br>where:<br>Lm = length of mains (miles or kilometres)<br>Nc = number of customer service connections<br>Lp = the average distance of customer service connection piping (feet or metres)<br>(see the Worksheet "Service Connection Diagram" for guidance on deterring the value of Lp)<br>Lc = total length of customer service connection piping (miles or km)<br>Lc = Nc X Lp (miles or kilometres)<br>P = Pressure (psi or metres)<br><br>The UARL is a theoretical reference value representing the technical low limit of leakage that could be achieved if all of today's best technology could be successfully applied. It is a key variable in the calculation of the Infrastructure Leakage Index (ILI). Striving to reduce system leakage to a level close to the UARL is usually not needed unless the water supply is unusually expensive, scarce or both.<br><br>NOTE: The UARL calculation has not yet been proven as fully valid for very small, or low pressure water distribution systems. If,<br>in gallons:<br>(Lm x 32) + Nc < 3000 or<br>P <35psi<br>in litres:<br>(Lm x 20) + Nc < 3000 or<br>P < 25m<br>then the calculated UARL value may not be valid. The software does not display a value of UARL or ILI if either of these conditions is true. |

| Item Name | Description |
|---|---|
| **Unbilled Authorized Consumption** | All consumption that is unbilled, but still authorized by the utility. This includes Unbilled Metered Consumption + Unbilled Unmetered Consumption. See "Authorized Consumption" for more information. For Unbilled Unmetered Consumption, the Free Water Audit Software provides the auditor the option to select a default value if they have not audited unmetered activities in detail. The default calculates a volume that is 1.25% of the Water Supplied volume. If the auditor has carefully audited the various unbilled, unmetered, authorized uses of water, and has established reliable estimates of this collective volume, then he or she may enter the volume directly for this component, and not use the default value. |
| **Unbilled metered consumption** Find | Metered consumption which is authorized by the water utility, but, for any reason, is deemed by utility policy to be unbilled. This might for example include metered water consumed by the utility itself in treatment or distribution operations, or metered water provided to civic institutions free of charge. **It does not include water supplied to neighboring utilities (water exported) which may be metered but not billed.** |
| **Unbilled unmetered consumption** Find | Any kind of Authorized Consumption which is neither billed or metered. This component typically includes water used in activities such as fire fighting, flushing of water mains and sewers, street cleaning, fire flow tests conducted by the water utility, etc. In most water utilities it is a small component which is very often substantially overestimated. **It does NOT include water supplied to neighboring utilities (water exported) which is unmetered and unbilled – an unlikely case.** This component has many sub-components of water use which are often tedious to identify and quantify. Because of this, and the fact that it is usually a small portion of the water supplied, it is recommended that the auditor apply the default value, which is 1.25% of the Water Supplied volume. Select the default percentage to enter this value.<br><br>If the water utility has carefully audited the unbilled, unmetered activities occurring in the system, and has well validated data that gives a value substantially higher or lower than the default volume, then the auditor should enter their own volume. However the default approach is recommended for most water utilities.<br><br>Note that a value of zero is not permitted, since all water utilities have some volume of water in this component occurring in their system. |
| **Units and Conversions** | The user may develop an audit based on one of three unit selections:<br>1) Million Gallons (US)<br>2) Megalitres (Thousand Cubic Metres)<br>3) Acre-feet<br>Once this selection has been made in the instructions sheet, all calculations are made on the basis of the chosen units. Should the user wish to make additional conversions, a unit converter is provided below (use drop down menus to select units from the yellow unit boxes):<br><br>Enter Units: 1 — Convert From… Million Gallons (US) = **Converts to…..** 3.06888329 Acre-feet<br>(conversion factor = 3.06888328973723) |
| **Use of Option Buttons** | To use the default percent value choose this button<br>To enter a value choose this button and enter the value in the cell to the right<br>  <br>**NOTE:** For Unbilled Unmetered Consumption, Unauthorized Consumption and Systematic Data Handling Errors, a recommended default value can be applied by selecting the Percent option. The default values are based on fixed percentages of Water Supplied or Billed Authorized Consumption and are recommended for use in this audit unless the auditor has well validated data for their system. Default values are shown by purple cells, as shown in the example above.<br><br>If a default value is selected, the user does not need to grade the item; a grading value of 5 is automatically applied (however, this grade will not be displayed). |
| **Variable production cost (applied to Real Losses)** Find | The cost to produce and supply the next unit of water (e.g., $/million gallons). This cost is determined by calculating the summed unit costs for ground and surface water treatment and all power used for pumping from the source to the customer. It may also include other miscellaneous unit costs that apply to the production of drinking water. It should also include the unit cost of bulk water purchased as an import if applicable.<br><br>It is common to apply this unit cost to the volume of Real Losses. However, if water resources are strained and the ability to meet future drinking water demands is in question, then the water auditor can be justified in applying the Customer Retail Rate to the Real Loss volume, rather than applying the Variable Production Cost.<br><br>The Free Water Audit Software applies the Variable Production costs to Real Losses by default. However, the auditor has the option on the Reporting Worksheet to select the Customer Retail Cost as the basis for the Real Loss cost evaluation if the auditor determines that this is warranted. |
| **Volume from own sources** Find | The volume of water withdrawn (abstracted) from water resources (rivers, lakes, streams, wells, etc) controlled by the water utility, and then treated for potable water distribution. Most water audits are compiled for utility retail water distribution systems, so this volume should reflect the amount of treated drinking water that entered the distribution system. Often the volume of water measured at the effluent of the treatment works is slightly less than the volume measured at the raw water source, since some of the water is used in the treatment process. Thus, it is useful if flows are metered at the effluent of the treatment works. If metering exists only at the raw water source, an adjustment for water used in the treatment process should be included to account for water consumed in treatment operations such as filter backwashing, basin flushing and cleaning, etc. If the audit is conducted for a wholesale water agency that sells untreated water, then this quantity reflects the measure of the raw water, typically metered at the source. |

| Item Name | Description |
|---|---|
| **Volume from own sources: Master meter and supply error adjustment** Find | An estimate or measure of the degree of inaccuracy that exists in the master (production) meters measuring the annual Volume from own Sources, and any error in the data trail that exists to collect, store and report the summary production data. This adjustment is a weighted average number that represents the collective error for all master meters for all days of the audit year and any errors identified in the data trail. Meter error can occur in different ways. A meter or meters may be inaccurate by under-registering flow (did not capture all the flow), or by over-registering flow (overstated the actual flow). Data error can occur due to data gaps caused by temporary outages of the meter or related instrumentation. All water utilities encounter some degree of inaccuracy in master meters and data errors in archival systems are common; thus a value of zero should not be entered. Enter a negative percentage or value for metered data under-registration; or, enter a positive percentage or value for metered data over-registration. |
| **Water exported** Find | The Water Exported volume is the bulk water conveyed and sold by the water utility to neighboring water systems that exists outside of their service area. Typically this water is metered at the custody transfer point of interconnection between the two water utilities. Usually the meter(s) are owned by the water utility that is selling the water: i.e. the exporter. If the water utility who is compiling the annual water audit sells bulk water in this manner, they are an exporter of water.<br><br>Note: The Water Exported volume is sold to wholesale customers who are typically charged a wholesale rate that is different than retail rates charged to the retail customers existing within the service area. Many state regulatory agencies require that the Water Exported volume be reported to them as a quantity separate and distinct from the retail customer billed consumption. For these reasons - and others - the Water Exported volume is always quantified separately from Billed Authorized Consumption in the standard water audit. **Be certain not to "double-count" this quantity by including it in both the Water Exported box and the Billed Metered Consumption box of the water audit Reporting Worksheet. This volume should be included only in the Water Exported box.** |
| **Water exported: Master meter and supply error adjustment** Find | An estimate or measure of the volume in which the Water Exported volume is incorrect. This adjustment is a weighted average that represents the collective error for all of the metered and archived exported flow for all days of the audit year. Meter error can occur in different ways. A meter may be inaccurate by under-registering flow (did not capture all the flow), or by over-registering flow (overstated the actual flow). Error in the metered, archived data can also occur due to data gaps caused by temporary outages of the meter or related instrumentation. All water utilities encounter some degree of error in their metered data, particularly if meters are aged and infrequently tested. Occasional errors also occur in the archived data. Thus, a value of zero should not be entered. Enter a negative percentage or value for metered data under-registration; or enter a positive percentage or value for metered data over-registration. If regular meter accuracy testing is conducted on the meter(s) - which is usually conducted by the water utility selling the water - then the results of this testing can be used to help quantify the meter error adjustment. Corrections to data gaps or other errors found in the archived data should also be included as a portion of this meter error adjustment. |
| **Water imported** Find | The Water Imported volume is the bulk water purchased to become part of the Water Supplied volume. Typically this is water purchased from a neighboring water utility or regional water authority, and is metered at the custody transfer point of interconnection between the two water utilities. Usually the meter(s) are owned by the water supplier selling the water to the utility conducting the water audit. The water supplier selling the bulk water usually charges the receiving utility based upon a wholesale water rate. |
| **Water imported: Master meter and supply error adjustment** Find | An estimate or measure of the volume in which the Water Imported volume is incorrect. This adjustment is a weighted average that represents the collective error for all of the metered and archived imported flow for all days of the audit year. Meter error can occur in different ways. A meter may be inaccurate by under-registering flow (did not capture all the flow), or by over-registering flow (overstated the actual flow). Error in the metered, archived data can also occur due to data gaps caused by temporary outages of the meter or related instrumentation. All water utilities encounter some level of meter inaccuracy, particularly if meters are aged and infrequently tested. Occasional errors also occur in the archived metered data. Thus, a value of zero should not be entered. Enter a negative percentage or value for metered data under-registration; or, enter a positive percentage or value for metered data over-registration. If regular meter accuracy testing is conducted on the meter(s) - which is usually conducted by the water utility selling the water - then the results of this testing can be used to help quantify the meter error adjustment. |
| **WATER LOSSES** Find | = apparent losses + real losses<br><br>Water Losses are the difference between Water Supplied and Authorized Consumption. Water losses can be considered as a total volume for the whole system, or for partial systems such as transmission systems, pressure zones or district metered areas (DMA); if one of these configurations are the basis of the water audit. |

# AWWA Free Water Audit Software:
## Determining Water Loss Standing

WAS v5.0



**Water Audit Report for:** Marina Coast Water District (2710017)
**Reporting Year:** 2018 | 1/2018 - 12/2018
**Data Validity Score:** 68

## Water Loss Control Planning Guide

| Functional Focus Area | Water Audit Data Validity Level / Score | | | | |
|---|---|---|---|---|---|
| | **Level I** (0-25) | **Level II** (26-50) | **Level III** (51-70) | **Level IV** (71-90) | **Level V** (91-100) |
| Audit Data Collection | Launch auditing and loss control team; address production metering deficiencies | Analyze business process for customer metering and billing functions and water supply operations. Identify data gaps. | Establish/revise policies and procedures for data collection | Refine data collection practices and establish as routine business process | Annual water audit is a reliable gauge of year-to-year water efficiency standing |
| Short-term loss control | Research information on leak detection programs. Begin flowcharting analysis of customer billing system | Conduct loss assessment investigations on a sample portion of the system: customer meter testing, leak survey, unauthorized consumption, etc. | Establish ongoing mechanisms for customer meter accuracy testing, active leakage control and infrastructure monitoring | Refine, enhance or expand ongoing programs based upon economic justification | Stay abreast of improvements in metering, meter reading, billing, leakage management and infrastructure rehabilitation |
| Long-term loss control | | Begin to assess long-term needs requiring large expenditure: customer meter replacement, water main replacement program, new customer billing system or Automatic Meter Reading (AMR) system. | Begin to assemble economic business case for long-term needs based upon improved data becoming available through the water audit process. | Conduct detailed planning, budgeting and launch of comprehensive improvements for metering, billing or infrastructure management | Continue incremental improvements in short-term and long-term loss control interventions |
| Target-setting | | | Establish long-term apparent and real loss reduction goals (+10 year horizon) | Establish mid-range (5 year horizon) apparent and real loss reduction goals | Evaluate and refine loss control goals on a yearly basis |
| Benchmarking | | | Preliminary Comparisons - can begin to rely upon the Infrastructure Leakage Index (ILI) for performance comparisons for real losses (see below table) | Performance Benchmarking - ILI is meaningful in comparing real loss standing | Identify Best Practices/ Best in class - the ILI is very reliable as a real loss performance indicator for best in class service |

*For validity scores of 50 or below, the shaded blocks should not be focus areas until better data validity is achieved.*

Once data have been entered into the Reporting Worksheet, the performance indicators are automatically calculated. How does a water utility operator know how well his or her system is performing? The AWWA Water Loss Control Committee provided the following table to assist water utilities is gauging an approximate Infrastructure Leakage Index (ILI) that is appropriate for their water system and local conditions. The lower the amount of leakage and real losses that exist in the system, then the lower the ILI value will be.

**Note:** this table offers an approximate guideline for leakage reduction target-setting. The best means of setting such targets include performing an economic assessment of various loss control methods. However, this table is useful if such an assessment is not possible.

## General Guidelines for Setting a Target ILI (without doing a full economic analysis of leakage control options)

| Target ILI Range | Financial Considerations | Operational Considerations | Water Resources Considerations |
|---|---|---|---|
| **1.0 - 3.0** | Water resources are costly to develop or purchase; ability to increase revenues via water rates is greatly limited because of regulation or low ratepayer affordability. | Operating with system leakage above this level would require expansion of existing infrastructure and/or additional water resources to meet the demand. | Available resources are greatly limited and are very difficult and/or environmentally unsound to develop. |
| **>3.0 -5.0** | Water resources can be developed or purchased at reasonable expense; periodic water rate increases can be feasibly imposed and are tolerated by the customer population. | Existing water supply infrastructure capability is sufficient to meet long-term demand as long as reasonable leakage management controls are in place. | Water resources are believed to be sufficient to meet long-term needs, but demand management interventions (leakage management, water conservation) are included in the long-term planning. |
| **>5.0 - 8.0** | Cost to purchase or obtain/treat water is low, as are rates charged to customers. | Superior reliability, capacity and integrity of the water supply infrastructure make it relatively immune to supply shortages. | Water resources are plentiful, reliable, and easily extracted. |
| **Greater than 8.0** | Although operational and financial considerations may allow a long-term ILI greater than 8.0, such a level of leakage is not an effective utilization of water as a resource. Setting a target level greater than 8.0 - other than as an incremental goal to a smaller long-term target - is discouraged. | | |
| **Less than 1.0** | If the calculated Infrastructure Leakage Index (ILI) value for your system is 1.0 or less, two possibilities exist. a) you are maintaining your leakage at low levels in a class with the top worldwide performers in leakage control. b) A portion of your data may be flawed, causing your losses to be greatly understated. This is likely if you calculate a low ILI value but do not employ extensive leakage control practices in your operations. In such cases it is beneficial to validate the data by performing field measurements to confirm the accuracy of production and customer meters, or to identify any other potential sources of error in the data. | | |

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 10-A Meeting Date: November 18, 2019

Prepared By: Brian True Approved By: Keith Van Der Maaten

Agenda Title: Consider Adoption of Resolution No. 2019-82 to Accept the Infrastructure Improvements Installed Under a Water, Sewer, and Recycled Water Infrastructure Agreement between Marina Coast Water District and Junsay Oaks, L.P. for the Junsay Oaks Senior Apartments Development Project

Staff Recommendation: The Board consider adopting Resolution No. 2019-82 accepting the infrastructure improvements installed under the Water, Sewer, and Recycled Water Infrastructure Agreement between the Marina Coast Water District and Junsay Oaks, L.P. for the Junsay Oaks Senior Apartments development project.

Background: *5-Year Strategic Plan, Strategic Element 2.0 Infrastructure – Our objective is to provide a high quality water distribution system and an efficiently operating wastewater collection system to serve existing and future customers. Through the master planning process, our infrastructure strategy is to carefully maintain our existing systems and ensure future additions and replacements will meet District Standards.*

Community Housing Improvement Systems and Planning Association (CHISPA, Developer), under the entity named Junsay Oaks, L.P., is constructing the Junsay Oaks Senior Apartments development project in the Central Marina service area within MCWD's jurisdiction. The project is nearing final completion and occupancy. The project is located on the east side of DeForest Road, south of Reservation Road, immediately south of and adjacent to the Marina Post Office. The District entered into an Infrastructure Agreement with the Developer on March 19, 2018 with the adoption of Resolution No. 2018-17. The infrastructure installation is now complete and the Developer requests that, consistent with the Infrastructure Agreement, MCWD now accept the transfer of ownership of the installed water and sewer infrastructure.

Discussion/Analysis: The infrastructure improvements made by the Developer for which acceptance of ownership is requested includes potable water pipelines and appurtenances, and sanitary sewer pipelines and appurtenances. The Developer installed all improvements on behalf of MCWD out-of tract and at the edges of the project, mainly a potable water pipeline extension within the DeForest Road alignment. A depiction of the infrastructure to be owned by MCWD may be found within the attached Bill of Sale that includes an Exhibit (A-1) mapping the locations of the infrastructure. The total value of the infrastructure to be transferred to MCWD for ownership totals approximately $125,530.

Under the terms of the Infrastructure Agreement, MCWD requires the following items prior to final acceptance:

- Final inspection and walk-through by MCWD to verify completion of all punch-list items
- Completed easements for all pipelines outside of public rights-of-way or recorded public utility easements
- Conveyance of the property to MCWD by means of a Bill of Sale
- Submission of As-Built drawings for the work
- Submission of a One-Year Warranty Bond

The developer and MCWD conducted punch-list walk-throughs and the associated corrective work was completed within the week of November 4, 2019. A small easement extension of the Recorded Final Map PUE area for MCWD's sanitary sewer was needed; that easement was recorded in Monterey County during the week of November 12, 2019. All installed MCWD infrastructure assets are located within the public right-of-way, public utility easements recorded on the subdivision's Final Map, and the small private easement in MCWD's favor. A Bill of Sale is prepared for execution and is awaiting this Board-action for Acceptance (see attached). As-Built drawings for the improvements described above were received and accepted as adequate on November 7, 2019. A draft Warranty Bond has been provided (see attached); the value corresponds to 20% of the value of the installed infrastructure in accord with the Infrastructure Agreement. This listing of actions fulfills the District's requirements and conditions for accepting ownership of the installed infrastructure.

Based on the adequate completion of the above tasks and items, MCWD staff recommends that the MCWD Board of Directors accept ownership of the infrastructure installed on MCWD's behalf by Junsay Oaks, L.P. for the Junsay Oaks Senior Apartments development project by adopting the provided Resolution.

Environmental Review Compliance: None required.

Financial Impact: __X__Yes _____No Funding Source/Recap: There is no direct cost to MCWD in these transactions; however, a slight increase in operational and maintenance costs in the near-term future may be reasonably anticipated within the Marina Water and Marina Sewer cost centers because of the additional infrastructure that becomes MCWD's responsibility.

Other Considerations: None recommended.

Material Included for Information/Consideration: Resolution No. 2019-82; Engineer's Value Estimate; Bill of Sale prepared for execution; and draft Warranty Bond.

Action Required: __X__Resolution _____Motion _____Review
(Roll call vote is required.)

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Board Action

Motion By: _____Seconded By: _____No Action Taken:_____

Ayes:_____ Abstained:_____

Noes:_____ Absent:_____

November 18, 2019

Resolution No. 2019-82
Resolution of the Board of Directors
Marina Coast Water District
Accepting the Infrastructure Improvements Installed Under a
Water, Sewer, and Recycled Water Infrastructure Agreement
Between Marina Coast Water District and Junsay Oaks, L.P. for the
Junsay Oaks Senior Apartments Development Project

RESOLVED by the Board of Directors ("Directors") of the Marina Coast Water District (District, MCWD), at a regular meeting duly called and held on November 18, 2019 at 211 Hillcrest Avenue, Marina, California as follows:

WHEREAS, Junsay Oaks, L.P., a California limited partnership (Developer), has constructed water and sewer infrastructure for their Junsay Oaks Senior Apartments development project in the Central Marina service area of MCWD's jurisdiction; and,

WHEREAS, the Developer entered into a Water, Sewer and Recycled Water Infrastructure Agreement with MCWD on March 19, 2018 with the adoption of Resolution No. 2018-17; and,

WHEREAS, construction of the water and sewer infrastructure is complete and the Developer has now satisfied all of the close-out conditions required by MCWD in the Infrastructure Agreement for the Junsay Oaks Senior Apartments development project; and,

WHEREAS, the Developer requests, in conformance with the Infrastructure Agreement, that the District take ownership of the installed infrastructure.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Marina Coast Water District does hereby accept the transfer of ownership of the Water and Sewer Infrastructure for the Junsay Oaks Senior Apartments development project and directs the General Manager and/or District Engineer to take all actions and execute all documents as may be necessary or appropriate to give effect to this resolution.

PASSED AND ADOPTED on November 18, 2019 by the Board of Directors of the Marina Coast Water District by the following roll call vote:

Ayes: Directors_____

Noes: Directors_____

Absent: Directors_____

Abstained: Directors_____

_____
Thomas P. Moore, President

ATTEST:

_____
Keith Van Der Maaten, Secretary

CERTIFICATE OF SECRETARY

The undersigned Secretary of the Board of the Marina Coast Water District hereby certifies that the foregoing is a full, true and correct copy of Resolution No. 2019-82 adopted November 18, 2019.

_____
Keith Van Der Maaten, Secretary

# BILL OF SALE

## SEWER SYSTEM FACILITIES – SEE EXHIBIT A-1

For good and valuable consideration for sewer service installations, receipt of which is hereby acknowledged, the undersigned, JUNSAY OAKS, L.P. ("JO"), does hereby transfer and convey to the Marina Coast Water District (District), a County Water District organized under the laws of the State of California, and its successors and assigns, all right, title, and interest in and to the public sewer installations, including mains, manholes, laterals, and other appurtenances to said sewer installation, constructed and installed in accepted and recorded easements per approved Junsay Oaks Senior Apartments On-Site Improvement Plans dated April 2018, on plan sheets C0.4, C0.5, and C2.1; see Exhibit A-1 for a summary depiction of sewer system improvements being transferred. JO further warrants that the same is free and clear of any encumbrances and claims. The fair market value of the sewer system transferred to the District is $10,650.

## WATER SYSTEM FACILITIES – SEE EXHIBIT A-1

For good and valuable consideration for water service installations, receipt of which is hereby acknowledged, the undersigned, JUNSAY OAKS, L.P. ("JO"), does hereby transfer and convey to the Marina Coast Water District (District), a County Water District organized under the laws of the State of California, and its successors and assigns, all right, title, and interest in and to the water installations, including mains, hydrants, laterals, valves, PRV's, and other appurtenances to said water installation, constructed and installed in accepted and recorded easements per approved Junsay Oaks Senior Apartments Off-Site De Forest Road Improvement Plans dated April 2018, on plan sheets C0.4, C0.5, C0.6, C1.1, C1.2, and C1.3; see Exhibit A-1 for a summary depiction of water system improvements being transferred. JO further warrants that the same is free and clear of any encumbrances and claims. The fair market value of the water system transferred to the District is $114,880.

This Bill of Sale is in accordance with and subject to the Infrastructure Agreement dated December 4, 2017 between Junsay Oaks, L.P. and Marina Coast Water District. JO represents and warrants that, to the knowledge of JO, its members, officers, and employees, JO has title to and the legal right to transfer and dispose of the facilities being transferred. Plan sheets specified above are formally attached hereto by reference and are generally described in "Exhibit A-1", attached hereto:

**[SIGNATURE PAGES TO FOLLOW]**

**SIGNATURE OF DEVELOPMENT ENTITY:**

JUNSAY OAKS L.P.,
A Limited Partnership

By: Junsay Oaks, L.P., a Limited Partnership
Its: Sole Member

By: _____
Normond V. Kolpin
Chief Financial Officer
295 Main St., Suite 100
Salinas, CA 93901

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA )
) ss.
COUNTY OF MONTEREY )

On _____, 2019, before me, _____, a Notary Public in and for said State, personally appeared _____, who proved to me on the basis of satisfactory evidence, to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument, the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PURJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Notary Public in and for said State

**CERTIFICATE OF ACCEPTANCE**

As per Resolution No. 2019-____, as set forth in the minutes of a meeting of the Board of Directors of the Marina Coast Water District held on _____, 2019, the above Bill of Sale for Sewer System and Water System Facilities, dated _____, 2019 is hereby accepted by order of the Board of Directors of the Marina Coast Water District, a County Water District organized under the laws of the State of California.

Date of Acceptance: _____, 2019.

By: _____
Keith Van Der Maaten
General Manager
MARINA COAST WATER DISTRICT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA )
) ss.
COUNTY OF MONTEREY )

On _____, 2019, before me, _____, a Notary Public in and for said State, personally appeared _____, who proved to me on the basis of satisfactory evidence, to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument, the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PURJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____
Notary Public in and for said State

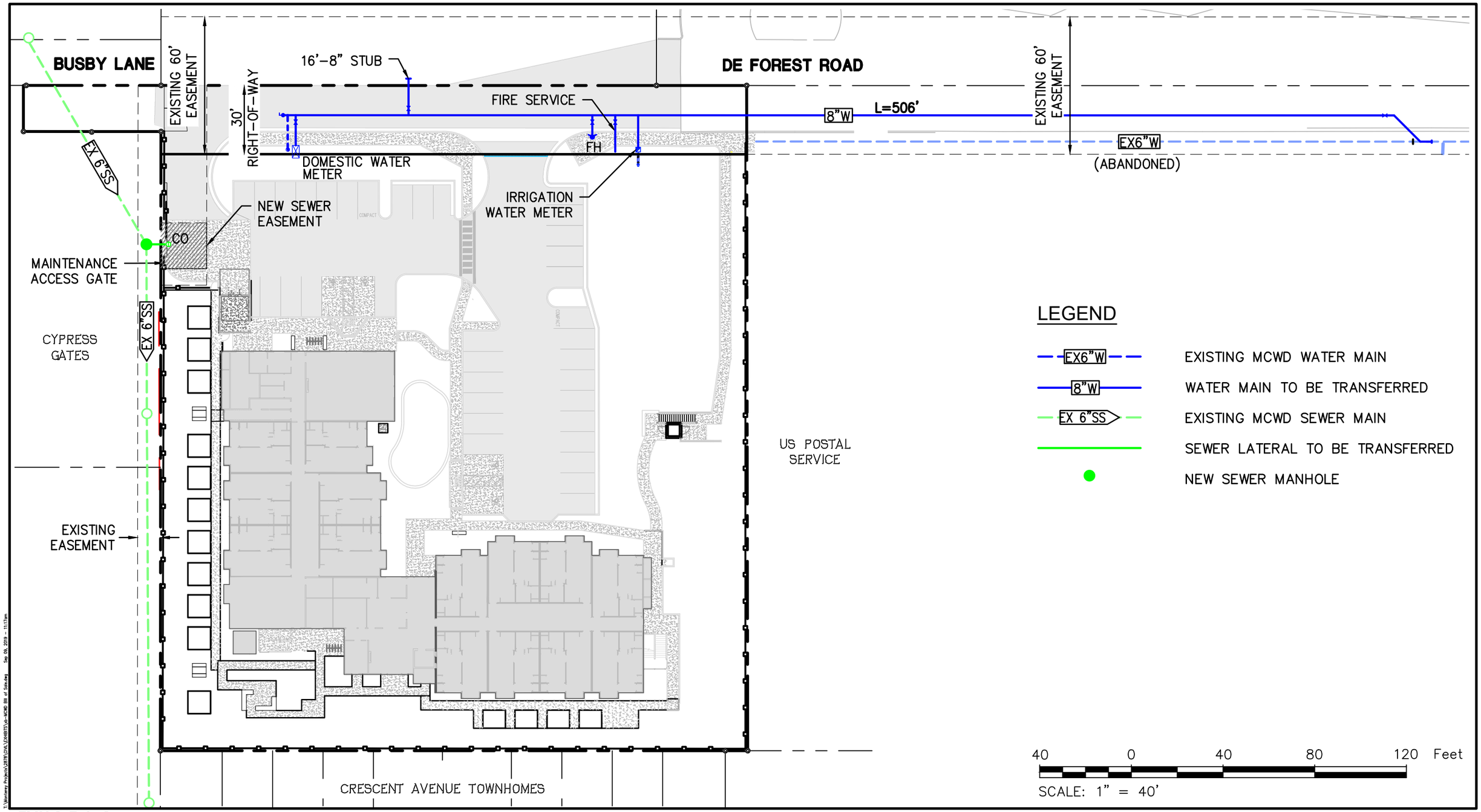


EXHIBIT A-1

WATER AND SEWER SYSTEM FACILITES - MCWD BILL OF SALE

# JUNSAY OAKS

**MARINA, CALIFORNIA**

**Whitson Engineers**
6 Harris Court | Monterey, CA 93940 | **831 649-5225 | F 831 373-5065**
CIVIL ENGINEERING ▪ LAND SURVEYING ▪ PROJECT MANAGEMENT | www.whitsonengineers.com

Project No.: 2878.00

AUG 30, 2019
Sheet 1 of 1

1"=40'

IFIC Surety GROUP

International Fidelity
INSURANCE COMPANY

One Newark Center, 20th flr. Newark, New Jersey 07102-5207 1-800-333-4167 / (973) 624-7200 / WWW.IFIC.COM

# MAINTENANCE BOND

BOND NO. 0734356

**Know All Persons by these presents** THAT WE, Junsay Oaks L.P., a limited partnership as Principal, and INTERNATIONAL FIDELITY INSURANCE COMPANY, a corporation organized under the laws of the State of New Jersey,and authorized to transact the business of surety in the State of California, as Surety, are held and firmly bound unto Marina Coast Water District as Obligee, in the full and just sum of TWENTY FIVE THOUSAND ONE HUNDRED SIX AND NO/100 ( $ 25,106.00 ) Dollars lawful money of the United States of America to the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves, their successors and assigns, jointly and severally, firmly by these presents.

**SIGNED, SEALED AND DATED THIS** 7th **day of** November **, 20** 19

**THE CONDITION OF THIS OBLIGATION IS THAT, WHEREAS the Principal entered into an agreement with the Obligee for**

Water and Sewer Infrastructure for the Junsay Oaks Senior Apartments Development

**AND WHEREAS,** the Obligee requires a guarantee from the Principal against defective materials and workmanship in connection with said Improvements.

**NOW, THEREFORE,** if the Principal shall make any repairs or replacements which may become necessary during the period of November 7, 2019 thru December 31, 2020 because of defective materials or workmanship in connection with said improvements of which defectiveness the Obligee shall give the Principal and Surety written notice within (30) thirty days after discovery thereof, then this obligation shall be void; otherwise it shall be in full force and effect.

All suits at law or proceedings in equity to recover on this bond must be instituted within twelve (12) months after the expiration of the maintenance period provided for herein.

Junsay Oaks L.P., a limited partnership

**Witness** _____ _____

INTERNATIONAL FIDELITY INSURANCE COMPANY

**Witness** _____ _____

Susan M. Exline
Attorney-in-Fact

Whitson ENGINEERS
Civil Engineering + Land Surveying
6 Harris Court, Monterey, CA 93940 | 831.649.5225
whitsonengineers.com

November 3, 2019
Job No.: 2878.00

ENGINEER'S ESTIMATE OF PROBABLE COSTS
**MARINA COAST WATER DISTRICT**
**JUNSAY OAKS BILL OF SALE**
MARINA, CALIFORNIA

| Item | Description | Quantity | Unit | | Unit Price | | Amount |
|---|---|---|---|---|---|---|---|
| | **MCWD SANITARY SEWER** | | | | | | |
| 1 | Manhole on Existing Main | 1 | EA | $ | 8,000.00 | $ | 8,000 |
| 2 | 6" SDR-35 PVC Main | 15 | LF | $ | 30.00 | $ | 450 |
| 3 | Sewer Cleanout | 1 | EA | $ | 2,200.00 | $ | 2,200 |
| | **Subtotal Sanitary Sewer** | | | | | **$** | **10,650** |
| | **MCWD POTABLE WATER (De Forest Road)** | | | | | | |
| 4 | 8" C900 SDR 14 PVC *(Incl. All Appurtances)* | 190 | LF | $ | 110.00 | $ | 20,900 |
| 5 | 8" C900 SDR 14 PVC *(Incl. All Appurtances) (in Ex Pvmnt)* | 332 | LF | $ | 165.00 | $ | 54,780 |
| 6 | 1" Irrigation Water Service | 1 | EA | $ | 1,100.00 | $ | 1,100 |
| 7 | 4" Potable Water Service | 1 | EA | $ | 9,500.00 | $ | 9,500 |
| 8 | 3" MCWD Water Meter | 1 | EA | $ | 5,600.00 | $ | 5,600 |
| 9 | 6" Fire Service | 1 | EA | $ | 10,500.00 | $ | 10,500 |
| 10 | Fire Hydrant | 1 | EA | $ | 7,500.00 | $ | 7,500 |
| 11 | Connect to Existing System | 1 | EA | $ | 5,000.00 | $ | 5,000 |
| | **Subtotal Potable Water** | | | | | **$** | **114,880** |
| | **TOTAL JUNSAY OAKS BILL OF SALE AMOUNT** | | | | | **$** | **125,530** |

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 10-B

Meeting Date: November 18, 2019

Prepared By: Don Wilcox

Approved By: Keith Van Der Maaten

Reviewed By: Michael Wegley

Agenda Title: Consider Adoption of Resolution No. 2019-83 to Adopt the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Ord Village Lift Station and Force Main Replacement Project

Staff Recommendation: The Board of Directors consider adoption of Resolution 2019-83 to adopt the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Ord Village Lift Station and Force Main Replacement Project.

Background: *5-Year Strategic Plan Mission Statement 2.0 – Our objective is to provide a high-quality water distribution system and an efficiently operating wastewater collection system to serve existing and future customers*.

The Board approved Resolution No. 2018-64, a Professional Services Agreement Amendment with Schaaf & Wheeler for design of the lift station and force main including sub-consulting electrical design by Fehr Engineering, survey by Whitson Engineers, and environmental by Denise Duffy & Associates.

Detailed Description: The Board of Directors is requested to consider adoption of the Initial Study/Mitigated Negative Declaration (IS/MND) and Mitigation Monitoring and Reporting Program (MMRP) for the Ord Village Lift Station and Force Main Replacement Project (the Project). The Project proposes to construct a replacement lift station on the east side of Monterey Road (East of Highway 1), and a replacement force main pipeline within existing roadways, eliminating the need for 1,600 linear feet (LF) of existing gravity and force main pipelines and two highway crossings. The existing Fort Ord Village Lift Station west of Highway 1 would be demolished and removed. Pipelines and manholes outside the site would be abandoned in place.

Discussion/Analysis: Based on the evaluation conducted by Denise Duffy & Associates, including, but not limited to, aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, mineral resources, noise, population/housing, public services, recreation, transportation, tribal resources, utilities and service systems, and wildfire, the IS/MND concludes that with applied mitigation measures, no significant impacts would result from the proposed action. Therefore, a proposed MND determination was prepared.

On September 16, 2019, District staff released the Draft IS/MND for a public review period. The end of the public review period was October 16, 2019. The entities that provided public comment were the following:

- State Clearinghouse, Office of Planning and Research
- Presidio of Monterey
- California Coastal Commission

- California Department of Transportation, District 5
- California Department of Parks and Recreation
- Monterey Bay Air Resources District
- Seaside Basin Watermaster

The complete Initial Study/Mitigated Negative Declaration (IS/MND) is comprised of the separately bound Draft IS/MND and the Final IS/MND documents dated September 2019, and October 2019, respectively. The comment letters and responses to pertinent comments are included in the Final IS/MND. The comments received on the Draft IS/MND did not result in a "substantial revision" of the negative declaration, as defined by CEQA Guidelines Section 15073.5, and the new information added to the negative declaration merely clarifies, amplifies, or makes insignificant modifications to the IS/MND. No new, avoidable significant effects were identified since the commencement of the public review period that would require mitigation measures or project revisions to be added in order to reduce the effects to insignificant.

Environmental Review Compliance: included above.

Financial Impact: ___X___Yes _____No Funding Source/Recap: Funding for this item comes from the Capital Improvement Project OS-0147 budget for consultant services.

Other Considerations: The Board may desire to consider other alternatives to adopting the motion as recommended by staff including:
1. Modifying or conditioning the action; or,
2. Direct further staff work; or,
3. Deny the action.

Material Included for Information/Consideration: Resolution No. 2019-83; Attachment 1 - Draft Initial Study/Mitigated Negative Declaration; Attachment 2 - Final Initial Study/Mitigated Negative Declaration; Attachment 3 - Mitigation Monitoring and Reporting Program; Attachment 4 – Ord LS-FM Site Map; and Attachment 5 – Ord LS Easements

Action Required: ___X___Resolution _____Motion _____Review
(Roll call vote is required.)

---

Board Action

Motion By_____ Seconded By_____ No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

November 18, 2019

Resolution No. 2019-83
Resolution of the Board of Directors
Marina Coast Water District
Adopting the Initial Study/Mitigated Negative Declaration and
Mitigation Monitoring and Reporting Program for the
Ord Village Lift Station and Force Main Replacement Project

RESOLVED by the Board of Directors ("Directors") of the Marina Coast Water District ("District"), at a regular meeting duly called and held on November 18, 2019, at 211 Hillcrest Avenue, Marina, California as follows:

WHEREAS, the existing Ord Village Lift Station (OVLS) and Force Main have exceeded their useful service life and require replacement; and,

WHEREAS, the District has budgeted for a project that includes construction of a replacement sewer lift station and force main on the east side of Monterey Road; and,

WHEREAS, the Board Approved a Professional Services Agreement Amendment with Schaaf & Wheeler under Resolution No. 2018-64 for design of the lift station and force main including sub-consulting environmental work by Denise Duffy & Associates; and,

WHEREAS, based on an Initial Study (IS) conducted by Denise Duffy & Associates, the IS concluded that with applied mitigation measures and a Mitigation Monitoring and Reporting Program (MMRP), no significant impacts would result from the proposed action and therefore a proposed Mitigated Negative Declaration (MND) determination was prepared; and,

WHEREAS, the Draft IS/MND for the Fort Ord Village Lift Station and Force Main Replacement Project, dated September 2019, and hereby incorporated by reference into this resolution (hereafter, the "Draft IS/MND" or "Project"), was released for a public review period and required copies of the Draft IS/MND were sent to the State of California Office of Planning and Research (State Clearinghouse) (SCH #2019099050); and,

WHEREAS, pursuant to Public Resources Code Section 21092 and CEQA Guidelines Section 15072, notice of the availability of the Draft IS/MND and the Notice of Intent to adopt a Mitigated Negative Declaration were posted with the Monterey County Clerk for a period of 30 days, posted at the site, and sent to responsible and trustee agencies and interested organizations; and,

WHEREAS, the public comment period closed on October 16, 2019 after a duly noticed 30-day public review period; and,

WHEREAS, comments were received from: the State Clearinghouse, Office of Planning and Research; Presidio of Monterey; California Coastal Commission; California Department of Transportation, District 5; California Department of Parks and Recreation; the Seaside Basin Watermaster; and the Monterey Bay Air Resources District, and the comments and responses are provided in the Final Initial Study/Negative Declaration ("Final IS/MND") dated October 2019; and,

WHEREAS, the IS/MND is comprised of the separately bound Draft IS/MND and the Final IS/MND documents dated September 2019, and October 2019, respectively; and,

WHEREAS, the comments received on the Draft IS/MND did not result in a "substantial revision" of the negative declaration as defined by CEQA Guidelines Section 15073.5 and the new information added to the negative declaration merely clarifies, amplifies, or makes insignificant modifications to the IS/MND; and,

WHEREAS, no new, avoidable significant effects were identified since the commencement of the public review period that would require mitigation measures or project revisions to be added in order to reduce the effects to insignificant; and,

WHEREAS, the IS/MND recommends mitigation measures for environmental effects of the Project that would reduce the Project-related impacts to an acceptable, less than significant level; and,

WHEREAS, the mitigation measures adopted by the District will be implemented as set forth in the Mitigation Monitoring and Reporting Program prepared in accordance with Public Resources Code Section 21081.6, which described the requirements and procedures to be followed in implementing mitigation measures.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of the Marina Coast Water District, finds as follows:

1) The IS/MND and the Mitigation Monitoring and Reporting Program for the Ord Village Lift Station and Force Main Replacement Project are hereby adopted.
2) The District intends to implement the Mitigation Monitoring and Reporting Program as set forth in the IS/MND during Project implementation and operation in order to reduce all identified significant impacts to a less-than-significant level.

PASSED AND ADOPTED on November 18, 2019, by the Board of Directors of the Marina Coast Water District by the following roll call vote:

Ayes: Directors_____

Noes: Directors_____

Absent: Directors_____

Abstained: Directors_____

_____
Thomas P Moore, President

ATTEST:

_____
Keith Van Der Maaten, Secretary

CERTIFICATE OF SECRETARY

The undersigned Secretary of the Board of the Marina Coast Water District hereby certifies that the foregoing is a full, true and correct copy of Resolution No. 2019-83 adopted November 18, 2019.

_____

Keith Van Der Maaten, Secretary

# DRAFT INITIAL STUDY/
# MITIGATED NEGATIVE DECLARATION

**for the**

# FORT ORD VILLAGE LIFT STATION &
# FORCE MAIN REPLACEMENT PROJECT


Prepared for:

Marina Coast Water District

11 Reservation Road

Marina, CA 93933-2099

Prepared by:

Denise Duffy & Associates

947 Cass Street, Suite 5

Monterey, CA 93940


**September 2019**

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# TABLE OF CONTENTS

**FIGURES**



**TABLES**



**APPENDICES**

# 1. BACKGROUND INFORMATION

1. **Project Title**: Fort Ord Village Lift Station and Force Main Replacement Project

2. **Lead Agency/Project Proponent Name and Address:** Marina Coast Water District (MCWD), 11 Reservation Road, Marina, CA 93933

3. **Contact Person & Phone Number**: Michael Wegley, MCWD District Engineer, (831) 883-5925

4 **Project Location:** The project is located in California within the City of Seaside, in Monterey County; unincorporated Monterey County; and Fort Ord Dunes State Park (FODSP). Specifically, the existing Fort Ord Village Lift Station is located on the west side of Highway 1, within the FODSP, in unincorporated Monterey County, on assessor parcel number (APN) 031-051-001-000. The proposed replacement lift station would be located along Monterey Road, east of Highway 1, on the edge of a City of Seaside percolation pond, next to the existing gravity sewer pipeline within APN 031-051-023-000. The existing force main would be accessed via an unpaved road along the pipeline easement, starting at the west end of Gigling Road within APNs 031-141-004-000 and 031-141-002-000. Staging areas for construction would be contained within APN 031-141-004-000.

The new sanitary sewer force main (SSFM) is proposed to go under existing roadways from the new pump station to the MCWD's Sanitary Sewer Manhole (SSMH) C6. Specifically, the new SSFM would follow Monterey Road, then turn into the U.S. Army housing area at Bougainville Road, turn onto Buna Road, then Kiska Road, and finally turn onto Okinawa Road, where it would reconnect to the MCWD's SSFM.

5. **Project Summary**: The existing Fort Ord Village Lift Station and Force Main have exceeded their service life and require replacement. The existing lift station is located on the west side of Highway 1, within the FODSP, but the area served, and the majority of the force main alignment, are on the east side of Highway 1. The project proposes to construct a replacement lift station on the east side of Highway 1, and a replacement force main pipeline within existing roadways, eliminating the need for 1,600 linear feet (LF) of existing gravity and force main pipelines and two highway crossings. The new lift station site would be 1,600 square feet (SF) (40 feet by 40 feet). The total length of new pipeline is approximately 5,600 LF from the proposed lift station to where it connects to the existing gravity sewer. The existing Fort Ord Village Lift Station west of Highway 1 would be demolished and removed. Pipelines and manholes outside the site would be abandoned in place.

6. **Land Use Designations**: The City of Seaside General Plan designates the proposed replacement lift station area as Parks and Open Space (POS). The proposed pipeline would be within existing roadways. The existing Fort Ord Village Lift Station is located on an easement on California Department of Parks and Recreation (State Parks) property within FODSP and the California Coastal Zone. As a result, the existing Fort Ord Village Lift Station is subject to the requirements of the California Coastal Act of 1976, as amended, as well as the FODSP General Plan, which identifies the project site as a natural resource management zone. In addition, the entire project site lies within the former Fort Ord and is subject to the requirements of the Fort Ord Habitat Management Plan (HMP). The parcel containing the existing lift station is designated by the HMP as "development with reserve areas or development with restrictions" and the parcel containing the proposed replacement pump station and pipeline designated as "development."

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# 2. PROJECT SUMMARY

## 2.1 INTRODUCTION

This Initial Study has been prepared to evaluate the potential environmental effects associated with the Fort Ord Village Force Main Replacement Project (project or proposed project), with a portion of the project (the existing lift station) located in unincorporated Monterey County and the other portion of the project (the proposed lift station and replacement force main) located in the City of Seaside, in Monterey County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 et. seq., and the state CEQA Guidelines, California Code of Regulations (CCR) §15000 et. seq.

An Initial Study is an informational document prepared by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines §15063, subd. (a)). If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by, or agreed to by, the applicant mitigate the potentially significant effects to a less-than-significant level, a Negative Declaration (ND) or Mitigated Negative Declaration (MND) may be prepared instead of an EIR (CEQA Guidelines §15070, subd. (b)). The lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This Initial Study conforms to the content requirements under CEQA Guidelines §15071.

The MCWD (or District) is acting as the Lead Agency pursuant to CEQA Guidelines §15050(a). The District is a special district established in 1960 and provides potable water and wastewater collection services to the City of Marina and the former Fort Ord. The MCWD serves approximately 33,000 residents through 10,000 connections (LAFCO, 2019). As the Lead Agency, the District prepared an Initial Study pursuant to CEQA Guidelines §15063, §15070, and §15152.

This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. This Initial Study will be circulated for agency and public review during a 30-day public review period pursuant to CEQA Guidelines §15073. During the public review period comments concerning the analysis contained in the Draft IS/MND should be sent to: Mike Wegley, MCWD, 11 Reservation Road, Marina, CA 93933; or via email at MWegley@mcwd.org or facsimile at (831) 883-5995. Comments received by the District on the Initial Study will be reviewed and considered as part of the deliberative process in accordance with CEQA Guidelines §15074.

The following section is consistent with the requirements of CEQA Guidelines §15124 to the extent that it is applicable to the project. This section contains a detailed description of the historical background and context, project location, project components and relevant project characteristics, project goals and objectives, and applicable regulatory requirements.

## 2.2 PROJECT BACKGROUND

The MCWD is a County Water District organized and operating under the County Water District Law, Water Code §30000. The MCWD is located on the coast of Monterey Bay at the northwest end of the Salinas Valley and occupies an area of about 4.5 square miles. The District was formed in 1960 and

provides potable water, wastewater collection, and reclaimed water services within the City of Marina and the Ord Community. In 1992 the District joined the Monterey Regional Water Pollution Control Agency, now Monterey One Water (M1W), and connected to the Regional Treatment Plant. In 2018, the District conveyed approximately 2,200 acre-feet of sewage to M1W for treatment.

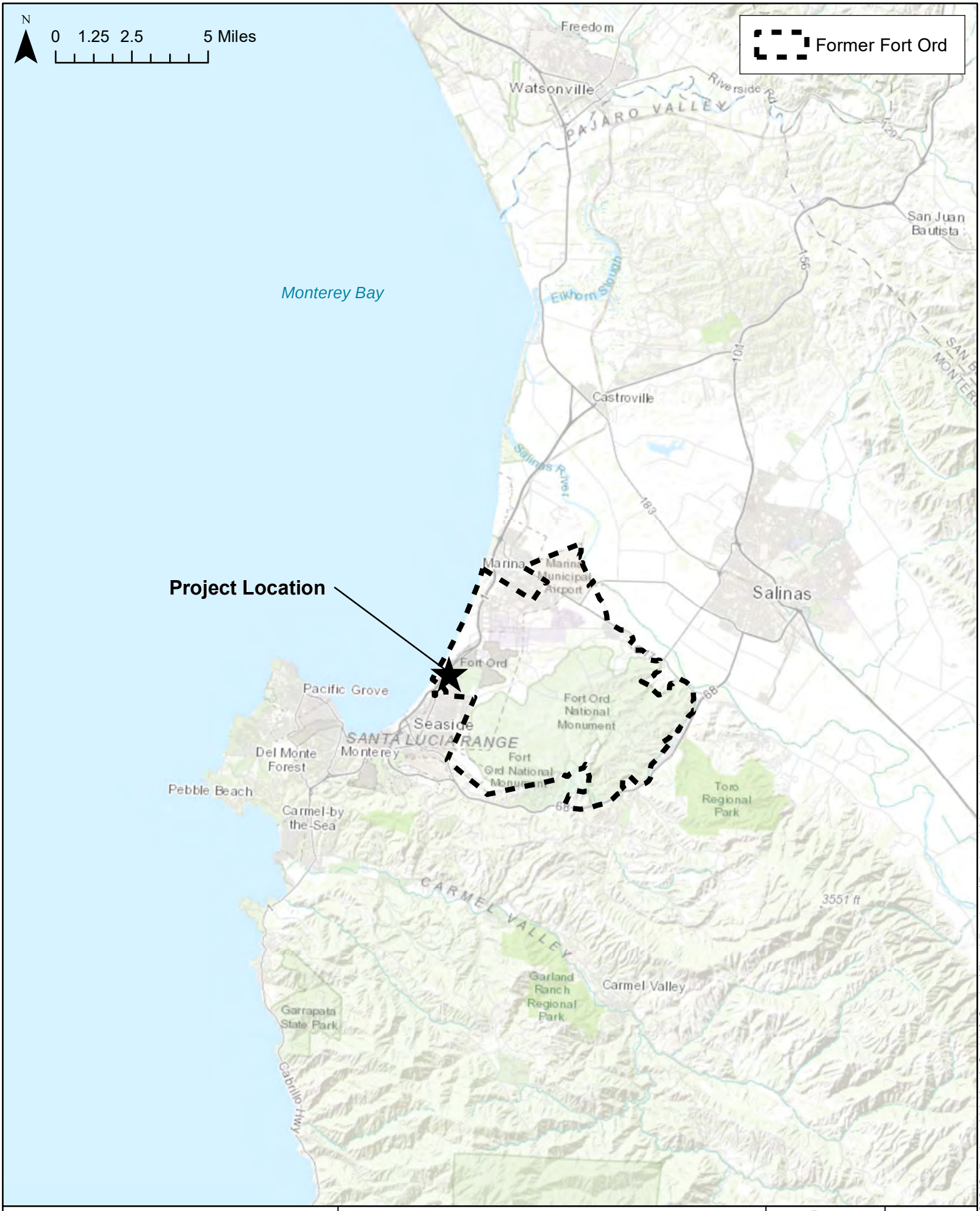
In 2001, the U.S. Army conveyed ownership of the water and wastewater infrastructure on the former Fort Ord through the Fort Ord Reuse Authority (FORA) to the MCWD.[1] As part of this transfer of ownership, the MCWD was conveyed the Fort Ord Village Lift Station. The Fort Ord Village Lift Station was originally a small wastewater treatment plant serving the housing areas along Coe Avenue. When the U.S. Army built the main wastewater treatment plant located at 10th Street, the Fort Ord Village wastewater treatment plant was converted into a sewer lift station, with a force main running north toward the main plant. When the M1W Regional Treatment Plant was constructed, the U.S. Army retired their treatment plant and now the sewage enters the M1W wastewater interceptor by gravity at the old plant site. In the 1970's, Del Monte Road was widened into the current Highway 1, separating the Fort Ord Village Lift Station from the area it serves.

The existing force main pipeline is a 10-inch diameter steel pipe. The pipeline runs east from the lift station, crosses Highway 1 and turns north, running outside the highway right-of-way to a high point near the corner of Buna and Kiska Roads. At that point is continues as a gravity sewer, running north to the Gigling Lift Station. The steel pipeline has broken six times in the past ten years, requiring emergency shut-downs and repairs. A large-diameter Pacific Gas & Electric (PG&E) gas main runs parallel to the force main, limiting the available space for a parallel replacement force main. The District would like to replace this pipeline before a break occurs within the Highway 1 corridor. The Fort Ord Village Lift Station is configured as a wet-pit/dry-pit station, requiring confined space entry controls for routine maintenance work. The District would like to replace this with a submersible pump lift station to eliminate that risk. The electrical equipment at the site is also experiencing corrosion due to the close proximity to the ocean.

## 2.3 PROJECT LOCATION

The project, described below, is located in California within the City of Seaside, in Monterey County; unincorporated Monterey County; and FODSP (see **Figure 1 Regional Map** and **Figure 2 Project Location**). Specifically, the existing Fort Ord Village Lift Station is located on the west side of Highway 1, within the FODSP, in unincorporated Monterey County, on a disturbed site at APN 031-051-001-000. The proposed replacement lift station would be located on the east side of Highway 1, along Monterey Road on the edge of a City of Seaside percolation pond, next to the existing gravity sewer on APN 031-051-023-000 (see **Figure 3 Site Photos**). The site of the replacement lift station currently contains a City of Seaside percolation pond and ruderal/landscaped vegetation. The existing force main would be accessed via an unpaved road along the pipeline easement, starting at the west end of Gigling Road within APNs 031-141-004-000 and 031-141-002-000. Staging areas for construction would also be contained within APN 031-051-023-000 and 031-141-004-000 as well.

[1] Assignment of Easements on Former Fort Ord and Ord Military Community, County of Monterey, and Quitclaim Deed for Water and Wastewater Systems, as and between FORA and the MCWD, dated October 24, 2001.

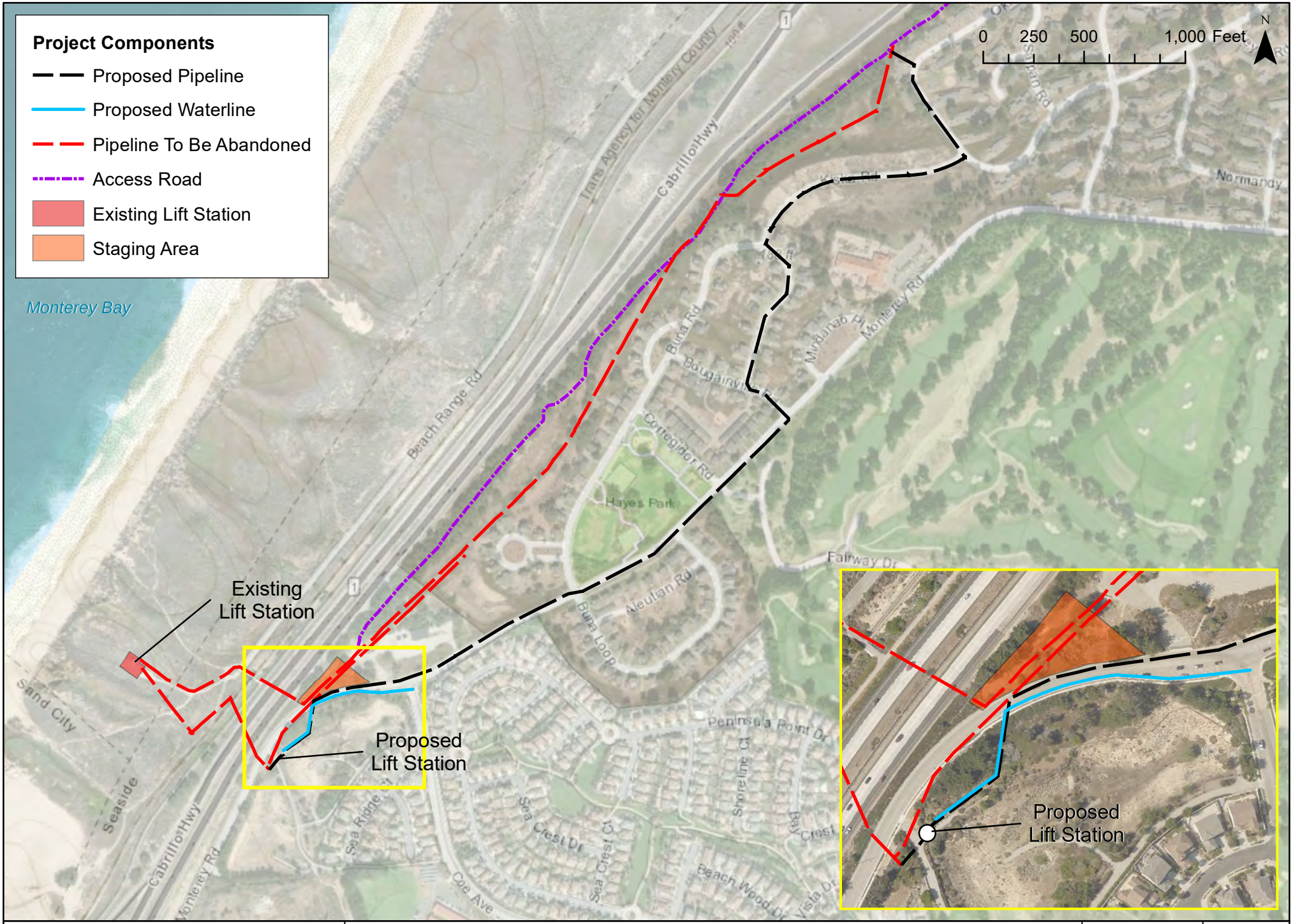



**Denise Duffy and Associates, Inc.**
Planning and Environmental Consulting

# Regional Map

Date: 6/25/2019
Scale: 1 in = 4 mi
Figure: 1

Path: D:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Regional Map 6-24-19.mxd

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Planning and Environmental Consulting

# Project Location

Date: 8/2/2019
Scale: 1 in = 606 ft
Figure: 2

Path: D:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Figure 2 Project Location 6-24-19.mxd

Photo 1. View of existing Fort Ord Lift Station.

Photo 2. View of proposed replacement lift station site facing east.

Photo 3. View of proposed replacement lift station site facing north.

| | | | |
|---|---|---|---|
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**Denise Duffy and Associates, Inc.**
Planning and Environmental Consulting

# Project Overview

Date
8/2/2019

Scale
1" : 150'

Figure
4

Source: Schaaf & Wheeler 2018

The new SSFM is proposed to go under existing Monterey Road from the new lift station to the existing gravity sewer, connecting near the MCWD's SSMH C6. Specifically, the new SSFM would follow Monterey Road, then turn into the U.S. Army housing area at Bougainville Road, turn onto Buna Road, then Kiska Road, and finally turn onto Okinawa Road where it would reconnect to the MCWD's gravity sewer. The total length of new pipeline is approximately 5,600 LF from the proposed lift station (see **Figure 4 Project Overview**).

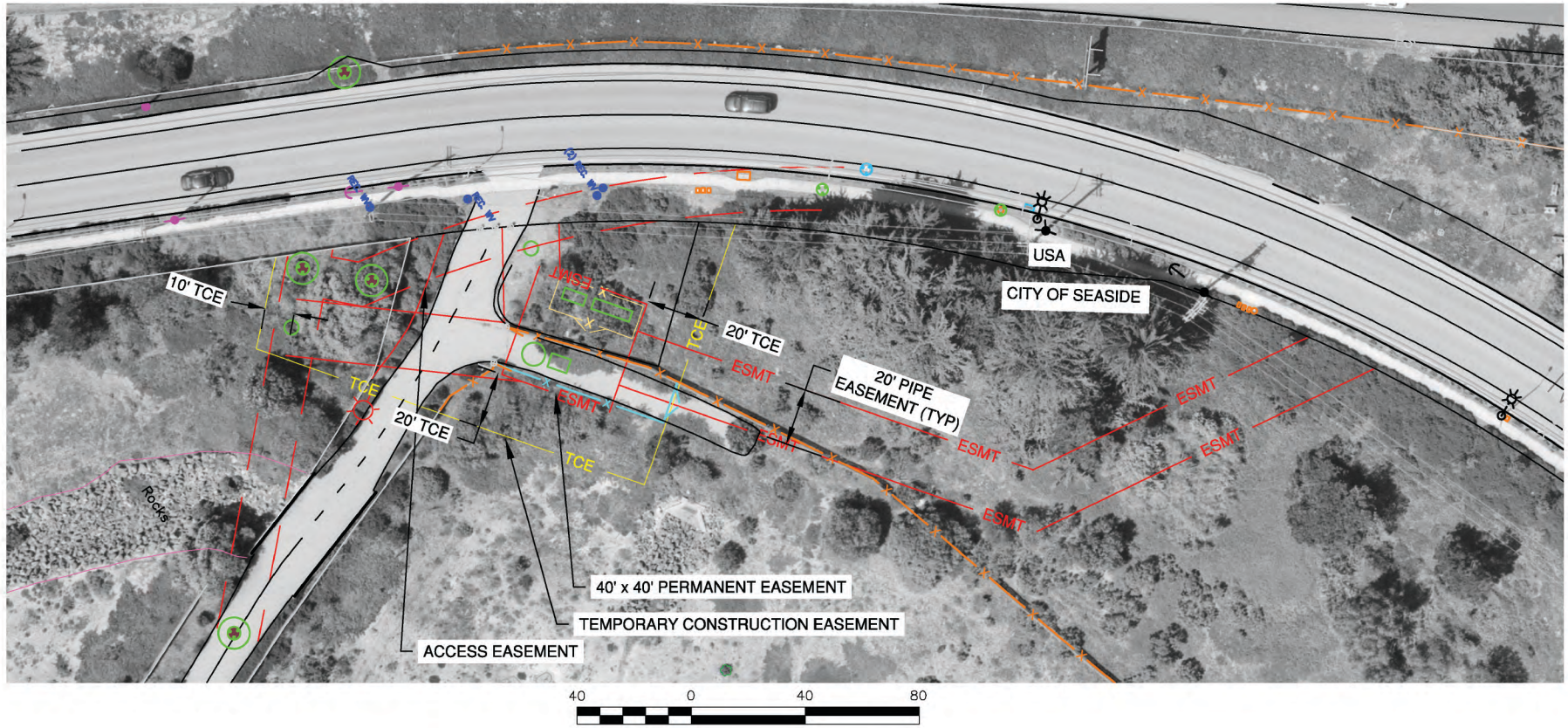
Regional access to the project site is provided from Highway 1 and Monterey Road. The existing force main is accessed via an unpaved road along the pipeline easement, starting at the west end of Gigling Road. The existing Fort Ord Village Lift Station is accessed from the paved bike path/maintenance road through the FODSP. The replacement lift station site is bounded by Monterey Road to the northwest, a paved pedestrian/bicycle path to the southwest and southeast, and landscaped area to the northeast. The overall parcel is a percolation pond owned by the City of Seaside. The force main pipeline would follow existing streets through the U.S. Army housing area and is bound on all sides by residential housing. Surrounding land uses include Highway 1, open space, and residential use to the north; residential use and a golf course to the east and south of the project site; and Highway 1, and open space to the west of the project site.

## 2.4 PROJECT DESCRIPTION

The existing Fort Ord Village Lift Station and Force Main have exceeded their service life and require replacement. The existing lift station is located on the west side of Highway 1 within the FODSP, but the area served, and the majority of the force main alignment, are on the east side of Highway 1. The project proposes to construct a replacement lift station on the east side of Highway 1, and a replacement force main pipeline within existing roadways, eliminating the need for 1,600 LF of existing gravity and force main pipelines and two highway crossings. The proposed replacement lift station site would be 1,600 SF (40 feet by 40 feet). The total length of the proposed pipeline is approximately 5,600 LF from the new lift station to where it connects to the existing gravity sewer. The proposed pipeline would include approximately 4,100 LF of pressurized force main, 1,500 LF of gravity sewer, and eight new manholes. The existing Fort Ord Village Lift Station, west of Highway 1, would be demolished and removed. Approximately 6,200 LF of pipelines and manholes outside the site would be abandoned in place.

For the existing Fort Ord Village system, municipal wastewater flows through gravity pipes west under Highway 1 to the pump station, then east under Highway 1 in a pressure pipeline. The pipeline follows the west edge of the U.S. Army housing area and connects to a gravity sewer pipeline at a high point near the corner of Buna and Kiska Roads. The existing force main pipe has exceeded its service life and has deteriorated structurally, requiring emergency repairs six times in the past 10 years. The MCWD has planned for the replacement of these facilities by allocating funds to improve these facilities in the 2018-19 Five Year Capital Improvement Plan.

Various alignments were considered for relocating the force main, many of which required tree removal and/or continued access through the open space corridor for pipeline maintenance. The proposed alignment was selected as it provides all-weather maintenance access and eliminates future maintenance work next to an existing PG&E gas pipeline.




SCALE: 1 INCH = 40 FEET

LEGEND:

| | |
|---|---|
| ESMT | EASEMENT |
| TCE | TEMPORARY CONSTRUCTION EASEMENT |
| X X X | (E) WOOD FENCE |
| X X X | (N) WOOD FENCE |
| X X X | (N) CHAIN LINK FENCE |
| | (E) UTILITY EASEMENT |

Source: Schaaf & Wheeler 2019

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# Site Plan

Date 8/2/2019
Scale 1" : 20'

Figure 5

Due to poor existing conditions and design considerations, the MCWD proposes to replace the existing lift station at a new location. The proposed replacement lift station would be located at the edge of a City of Seaside percolation pond along Monterey Road, at the point where the gravity sewers converge before crossing Highway 1. The proposed replacement lift station would consist of a wet well and valve vault (below grade), electrical control panel and an emergency generator, enclosed with a chain-link fence. A plan view of the replacement lift station site is shown in **Figure 5 Site Plan**.

The existing Fort Ord Village Lift Station west of Highway 1 would be demolished and removed after the replacement lift station is completed and operating. Work would be conducted within the currently disturbed area at this location. Pipelines and manholes outside the site would be abandoned in place. The following discussion provides a more detailed description of key project elements, including grading requirements, construction activities, operation, and schedule.

## GRADING

The proposed project involves approximately 10,500 cubic yards of cut and 10,500 cubic yards of fill. The majority of that is trench excavation and backfill, which would be cut and backfilled in the same day. Grading for the pipeline and pipeline connections would be limited to areas already disturbed.

## CONSTRUCTION

Land disturbance for construction of the proposed replacement lift station would be approximately 0.4 acres and 1.4 acres for pipeline trenching. Construction activities would include excavation to install the precast concrete manholes, wet well, valve vault, and pipelines; pavement cutting for pipeline trenches, pipeline installation using lifting equipment and trench boxes, trench and excavation backfilling and compaction, cast-in-place concrete work for manhole bases and equipment pads, and street paving. PG&E would install a new underground electrical service to the proposed replacement lift station from an existing service pole on Monterey Road. The system transition would require installing a line stop on the existing force main and pumping the force main contents into a nearby gravity sewer. Construction equipment would include, but would not be limited to, tracked excavator, backhoe, water truck, concrete trucks, dump trucks, flat-bed delivery trucks, vibratory compacters, asphalt paving equipment and trailer-mounted bypass pumps. Sheet-pile shoring may be installed around the lift station excavation using vibratory equipment. Work within roads would require traffic control and flagmen.

No separate construction access roads would be needed; existing roads would be used to access the existing and replacement pump stations and an unpaved road along the pipeline easement would be used to access the force main. During construction six round trip truck trips per day for 100 working days, and two roundtrip truck trips for equipment delivery for 50 days, are expected. Up to 10 employees are expected on the construction site per day.

Deconstruction of the existing Fort Ord Village Lift Station would include relocating the pumps to the proposed replacement lift station, salvaging metals for recycling, removing the concrete building and surface improvements within the 0.9-acre site, abandoning pipelines by flushing with clean water and setting grout plugs at the ends, abandoning manholes by removing the upper cone and filling the manhole with clean sand. PG&E may choose to remove the existing pole line serving the existing lift station. Site equipment would include excavators, dump trucks, water trucks and concrete trucks. Reseeding of the site would be coordinated with State Parks staff. Deconstruction is anticipated to take up to four weeks following start-up and commissioning of the new pump station.

**PROJECT SCHEDULE**

Construction activities would be limited to weekdays between the hours of 8:00 a.m. to 4:00 p.m. Night-time construction would be required for the system switch-over from existing to new, which would be a single night. Pipeline construction is anticipated to require eight weeks, and lift station site construction is anticipated to require four months. Construction is anticipated to occur between January 1 and September 30, 2020.

## 2.5 PROJECT GOALS AND OBJECTIVES

The primary goal of the proposed project is to relocate the existing Fort Ord Village Lift Station and reroute the sewer force main. The project's key objectives are as follows:

- Protect the environment as well as public health and safety, by improving deteriorating facilities.
- Support community needs now and in the future.

## 2.6 PROJECT APPROVALS AND PERMITS

This Initial Study is an informational document for both agency decision-makers and the public. The MCWD is the Lead Agency responsible for certification of this Initial Study. Below is a general list of federal, state, and local agencies that do or could have jurisdiction over the project and could issue permits in connection with site development. This list is not considered exhaustive and additional agencies and/or jurisdictions may have permitting authority.

**FEDERAL AGENCIES**

- Base Realignment and Closure, Construction Right-of-Entry
- U.S. Fish and Wildlife Service (if incidental take authorization is required)

**REGIONAL AND STATE AGENCIES**

- Regional Water Quality Control Board, National Pollution Discharge Elimination System (NPDES)
- State Water Resources Control Board (SWRCB), Construction Storm Water Pollution Prevention Plan (SWPPP)
- California Department of Transportation, Abandon Pipeline Easements
- California Coastal Commission, Coastal Development Permit (if determined required)
- State Parks, Encroachment Permit

**LOCAL AGENCIES**

- Monterey Bay Air Resource District, Permit for Emergency Generator, Demolition Permit
- City of Seaside Facility Easement, Encroachment, Ordnance Ordinance, and Grading Permits

# 3. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- ☐ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☐ Air Quality
- ☑ Biological Resources
- ☑ Cultural Resources
- ☐ Geology and Soils
- ☐ Greenhouse Gas Emissions
- ☑ Hazards and Hazardous Materials
- ☐ Hydrology and Water Quality
- ☐ Land Use
- ☐ Mineral Resources
- ☑ Noise
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation
- ☐ Tribal Cultural Resources
- ☑ Utilities and Service Systems
- ☑ Mandatory Findings of Significance

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## 4. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

9/5/19
Date

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# 5. ENVIRONMENTAL EVALUATION

This Initial Study evaluates the following resource sections within **Section 5.2. Environmental Setting and Impacts:** aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, mineral resources, noise, population/housing, public services, recreation, transportation, tribal resources, utilities and service systems, and wildfire.

## 5.1 EVALUATION OF ENVIRONMENTAL IMPACTS

The following describes how the proposed project's impacts to resource areas will be analyzed in this Initial Study in accordance with CEQA. Each resource section includes: 1) existing setting and applicable regulatory background, 2) CEQA impact checklist for the resource area, and 3) impact discussion in response to the questions in the checklist and mitigation where warranted. The impact discussion will identify the level of environmental effect from the proposed project. An explanation or discussion is required for all answers to the resource impact checklist as follows.

1. A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on project-specific screening analysis).

2. All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular environmental impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant based on the thresholds. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level mitigation measures.

5. Supporting Information Sources: A source list will be attached, and other sources used, or individuals contacted will be cited in the discussion.

6. The explanation of each issue will identify:

    a. The significance criteria or threshold, if any, used to evaluate each question; and

    b. The mitigation measure identified, if any, to reduce the impact to less than significant.

## 5.2 ENVIRONMENTAL SETTING AND IMPACTS

The following section describes the environmental setting and identifies the environmental impacts anticipated from implementation of the proposed project. The criteria provided in the CEQA environmental checklist was used to identify potentially significant environmental impacts associated with the project.

### *5.2.1 AESTHETICS*

#### Setting

The proposed project is located adjacent to Monterey Bay, which is a notable visual resource. The replacement lift station is proposed directly east of Highway 1 on a parcel owned by the City of Seaside shared by an existing percolation pond. The project site is currently comprised of non-native invasive and ruderal plant species. The City of Seaside General Plan does not designate the proposed replacement lift station site as a "scenic vista" (City of Seaside, 2003). The operation of the replacement lift station would require new exterior lighting.

The existing Fort Ord Village Lift Station lies on the west side of Highway 1, adjacent to the Pacific Ocean on the FODSP. The FODSP is not designated as a scenic resource by the FODSP General Plan.

The State Scenic Highways Program is designed to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The proposed project is located adjacent to Highway 1. The adjacent section of Highway 1 to the proposed project is not designated as scenic; however, it is listed as eligible for scenic highway designation by the California Scenic Highway Mapping System (Caltrans, 2018). The proposed replacement lift station location is not visible from Highway 1 due to topography and vegetation screening.

#### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| AESTHETICS. Would the project: | | | | | |
| a) Have a substantial adverse effect on a scenic vista? | | | X | | 1, 2, 3, 4 |
| b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | X | 1, 2, 3, 4 |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | | | X | | 1, 2, 3, 4 |
| d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? | | | X | | 1, 2, 3 |

**Explanation**

a) **Less-Than-Significant Impact**. The proposed replacement pump station site would be located in an urbanized location in the City of Seaside, which is not located in an area designated by the Seaside General Plan as having any scenic vistas. A scenic vista is generally characterized as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The existing Fort Ord Village Lift Station is not designated as a scenic resource by the FODSP General Plan. However, the existing lift station would be demolished, and, therefore, would not have any permanents impacts to scenic vistas. All pipelines would be located underground in previously disturbed roadways. Any impacts to scenic vistas during demolition or construction of all the project components would be temporary in nature and are considered less than significant. As a result, the proposed project would have a less-than-significant impact to scenic vistas.

b) **No Impact**. None of the proposed project components are visible from a state scenic highway; the portion of Highway 1 in the proximity of the proposed project is not designated as a state scenic highway. Therefore, no impact to scenic resources within a state scenic highway would occur.

c) **Less-Than-Significant Impact**. The proposed facilities would be located in an urbanized area; introducing a new lift station would be consistent with the visual character the of parcel as it already contains various infrastructure improvements and a detention basin. All development would be consistent with applicable City of Seaside zoning and regulations governing scenic quality. Construction impacts would include the presence of construction vehicles, equipment and materials, stockpiles, and exposed soils. These impacts would be temporary in nature. For these reasons, construction and operation of the proposed replacement lift station and sewer pipeline would result in a less-than-significant impact to the visual quality of the site.

d) **Less-than-Significant Impact**. The proposed replacement lift station would include new exterior lighting. However, all proposed exterior lighting would be downward-facing, shielded to direct light downwards to ensure that lighting does not spill over onto nearby residential properties, and consistent with local lighting ordinances. Lighting would be switched on and only used when maintenance personnel are present. In addition, the project does not propose to introduce materials into the design that would create substantial glare. The project would have a less-than-significant impact on light and glare.

**Conclusion**: The project would have a less-than-significant impact on aesthetics with implementation of identified mitigation measures as well as compliance with local ordinances.

### *5.2.2 AGRICULTURAL AND FORESTRY RESOURCES*

**Setting**

In California, agricultural land is given consideration under CEQA. According to Public Resources Code §21060.1, "agricultural land" is identified as prime farmland, farmland of statewide importance, or unique farmland, as defined by the U.S. Department of Agriculture land inventory and monitoring criteria, as modified for California:

- Prime Farmland (P) comprises the best combination of physical and chemical features able to sustain long-term agricultural production. Irrigated agricultural production is a necessary land use four years prior to the mapping date to qualify as Prime Farmland. The land must be able to store moisture and produce high yields.
- Farmland of Statewide Importance (S) possesses similar characteristics to Prime Farmland with minor shortcomings, such as less ability to hold and store moisture and more pronounced slopes.
- Unique Farmland (U) has a production history of propagating crops with high-economic value.
- Farmland of Local Importance (L) is important to the local agricultural economy. Local advisory committees and a county specific Board of Supervisors determine this status.
- Grazing Land (G) is suitable for browsing or grazing of livestock.

The Monterey County Important Farmlands Map classifies the land containing the existing Fort Ord Village Lift Station as "Other Land" and the proposed replacement pump station and associated pipelines as "Urban and Built Up Land." CEQA also requires consideration of impacts on lands that are under Williamson Act contract. The project site does not contain lands under Williamson Act contract (DOC, 2016).

CEQA requires the evaluation of forest and timber resources where they are present. The project site is in a parcel surrounded by residential properties. The site does not contain any forest land as defined in Public Resources Code section 12220(g), timberland as defined by Public Resources Code section 4526, or property zoned for Timberland Production as defined by Government Code section 51104(g).

## CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | | | | X | 1, 2, 6 |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X | 1, 2, 6 |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | | | | X | 1, 2, 3, 4 |
| d) Result in the loss of forest land or conversion of forest land to non-forest uses? | | | | X | 1, 2, 3, 4 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | | | | X | 1, 2, 6 |

**Explanation**

a, b) **No Impact**. The project site is designated as "Other Land" or "Urban of Built Up Land" on the Important Farmlands Map for Monterey County and does not contain any prime farmland, unique farmland, farmland of statewide importance (farmland), or lands under Williamson Act contract. As a result, the project would not convert farmland to a non-agricultural use, nor conflict with existing zoning for agricultural use or a Williamson Act contract.

c, d) **No Impact**. The proposed project would not impact forest resources or result in the loss or conversion of forest land since the project site does not contain any forest land as defined in Public Resources Code section 12220(g), timberland as defined by Public Resources Code section 4526, or property zoned for Timberland Production as defined by Government Code section 51104(g).

e) **No Impact**. As per the discussion above, the proposed project would not involve changes in the existing environment which, due to their location or nature, could result in conversion of farmland or agricultural land, since none are present on this property. The proposed project would involve the replacement of an existing structure and would not convert any land for other use.

**Conclusion**: The proposed project would have no impact on agricultural and forest resources.

### *5.2.3 AIR QUALITY*

**Setting**

The Federal Clean Air Act and the California Clean Air Act mandate the control and reduction of specific air pollutants. Under these Acts, the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board have established ambient air quality standards for specific "criteria" pollutants, designed to protect public health and welfare. Primary criteria pollutants include carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides ($NO_X$), particulate matter ($PM_{10}$), sulfur dioxide ($SO_2$), and lead (Pb). Secondary criteria pollutants include ozone ($O_3$), and fine particulate matter ($PM_{2.5}$).

The project site is located within the North Central Coast Air Basin (NCCAB), which is comprised of Santa Cruz, San Benito, and Monterey Counties, and is regulated by the Monterey Bay Air Resources District (MBARD, formally known as Monterey Bay Unified Air Pollution Control District).

The U.S. EPA administers the National Ambient Air Quality Standards (NAAQS) under the Federal Clean Air Act. The U.S. EPA sets the NAAQS and determines if areas meet those standards. Violations of ambient air quality standards are based on air pollutant monitoring data and evaluated for each air pollutant. Areas that do not violate ambient air quality standards are considered to have attained the standard. The NCCAB is in attainment for all NAAQS and for all California Ambient Air Quality Standards (CAAQS)

except $O_3$ and $PM_{10}$. The primary sources of $O_3$ and $PM_{10}$ in the NCAAB are from automobile engine combustion. To address exceedance of these CAAQS, the MBARD has developed and implemented several plans including the 2005 Particulate Matter Plan, the 2007 Federal Maintenance Plan, and the 2012-2015 Air Quality Management Plan (AQMP), a revision to the 2012 Triennial Plan. NCCAB Attainment Status to National and California Ambient Air Quality can be found in **Table 1** below.

**Table 1.**
**North Central Coast Air Basin Attainment Status Summary as of January 2015**

| Pollutant | State Standards[1] | National Standards |
|---|---|---|
| Ozone ($O_3$) | **Nonattainment[2]** | Attainment / Unclassified[3] |
| Inhalable Particulates ($PM_{10}$) | **Nonattainment** | Attainment |
| Fine Particulates ($PM_{2.5}$) | Attainment | Attainment / Unclassified[4] |
| Carbon Monoxide (CO) | Attainment | Attainment / Unclassified |
| Nitrogen Dioxide ($NO_2$) | Attainment | Attainment / Unclassified[5] |
| Sulfur Dioxide ($SO_2$) | Attainment | Attainment[6] |
| Lead | Attainment | Attainment / Unclassified[7] |

Notes:
1) State designations based on 2010 to 2012 air monitoring data.
2) Effective July 26, 2007, the ARB designated the NCCAB a nonattainment area for the state ozone standard, which was revised in 2006 to include an 8-hour standard of 0.070 ppm.
3) On March 12, 2008, EPA adopted a new 8-hour ozone standard of 0.075 ppm. In April 2012, EPA designated the NCCAB attainment/unclassified based on 2009-2011 data.
4) This includes the 2006 24-hour standard of 35 µg/m3 and the 2012 annual standard of 12 $\mu g/m^3$.
5) In 2012, EPA designated the entire state as attainment/unclassified for the 2010 NO2 standard.
6) In June 2011, the ARB recommended to EPA that the entire state be designated as attainment for the 2010 primary SO2 standard. Final designations to be addressed in future EPA actions.
7) On October 15, 2008 EPA substantially strengthened the national ambient air quality standard for lead by lowering the level of the primary standard from 1.5 µg/m3 to 0.15 $\mu g/m^3$. Final designations were made by EPA in November 2011.
8) Nonattainment designations are highlighted in Bold.

Plans to attain these standards already accommodate the future growth projections available at the time these plans were prepared. Any development project capable of generating air pollutant emissions exceeding regionally-established criteria is considered significant for purposes of CEQA analysis, whether or not such emissions have been accounted for in regional air planning. Furthermore, any project that would directly cause or substantially contribute to a localized violation of an air quality standard would generate substantial air pollution impacts. The same is true for a project that generates a substantial increase in health risks from toxic air contaminants or introduces future occupants to a site exposed to substantial health risks associated with such contaminants.

Sensitive receptors are more susceptible to the effects of air pollution than the general population. Land uses that are considered sensitive receptors include residences, schools, and health care facilities. Sensitive receptors in the vicinity of the project consist of single-family residences located approximately 400 ft east of the proposed replacement lift station site. In addition, single-family houses surround the residential streets the pipeline would be built under, which could be as close as 50 ft from installation of the pipeline.

## CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | X | | 1, 2, 7, 8 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | | | X | | 1, 2, 7, 8 |
| c) Expose sensitive receptors to substantial pollutant concentrations? | | | X | | 1, 2, 7, 8 |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | X | | 1, 2, 7, 8 |

## Explanation

a) **Less-Than-Significant Impact**. CEQA Guidelines §15125(b) requires that a project is evaluated for consistency with applicable regional plans, including the AQMP. As stated above, the MBARD has developed and implemented several plans to address exceedance of state air quality standards, including the MBARD 2012-2015 AQMP. The MBARD is required to update their AQMP once every three years; the most recent update was approved in March 2017. This plan addresses attainment of the state ozone standard and federal air quality standard. The AQMP accommodates growth by projecting growth in emissions based on population forecasts prepared by the Association of Monterey Bay Area Governments (AMBAG) and other indicators.

The proposed project would not result in a substantial increase in employment, nor would the proposed project result in increased population growth, as it is a replacement of an existing wastewater system. The proposed project would be consistent with the MBARD 2012-2015 AQMP. In addition, as noted in Response b, below, the proposed project would not result in a significant increase in emissions. For these reasons, implementation of the proposed project is not anticipated to result in a substantial increase in either direct or indirect emissions that would conflict with or obstruct implementation of the AQMP; this impact is considered less than significant.

b) **Less-Than-Significant Impact.** Grading and filling during construction could result in impacts to air quality. Site disturbance activities could result in short-term, localized decrease in air quality due to the generation of particulate emissions ($PM_{10}$). The MBARD 2008 CEQA Air Quality Guidelines contains standards of significance for evaluating potential air quality effects of projects subject to the requirements of CEQA (see Table 5-1, pg. 5-14, of the MBARD 2008 CEQA Guidelines). According to MBARD, a project would violate an air quality standard and/or contribute to an existing or projected violation if it would:

- Emit (from all sources, including exhaust and fugitive dust) less than;
- 137 pounds per day of oxides of nitrogen (NOx)
- 137 pounds per day of reactive organic gases (ROG)
- 82 pounds per day of respirable particulate matter ($PM_{10}$)
- 55 pounds per day of fine particulate matter ($PM_{2.5}$)
- 550 pounds per day carbon monoxide (CO)

*Construction*. According to the MBARD's criteria for determining construction impacts, a project would result in a potentially significant impact if it would result in 8.1 acres of minimal earthmoving per day or 2.2 acres per day with major grading and excavation. The proposed project would include a maximum of up to a ¼ of an acre to be graded on any given day, and, therefore, the proposed project is below the threshold. In addition, the proposed project would also implement standard construction Best Management Practices (BMPs) related to dust suppression, which would include: 1) watering active construction areas; 2) prohibiting grading activities during periods of high wind (over 15 mph); 3) covering trucks hauling soil; and, 4) covering exposed stockpiles. The implementation of BMPs would further ensure that potential construction-related emissions would be minimized. Since the proposed project is under the threshold for construction air quality impacts, this impact is considered to be less than significant.

*Operation.* Operation of the proposed replacement lift station and pipeline would not result in a new or substantially more severe significant impact due to air quality emissions during operations. The proposed project is a replacement of the existing lift station and pipeline. The pumps are being relocated from the existing Fort Ord Village Lift Station to the replacement station. Thus, the replacement lift station and pipeline would be consistent with the existing use and would not increase in operational emissions. The proposed project would also involve limited maintenance visits, resulting in vehicle trips; however, these trips would be consistent with the existing use. Based upon the low level of operational emissions and consistency of use, operation of the proposed replacement lift station and pipeline would not result in emissions that would cause a new or substantially more severe impact based on an exceedance or violation of the applicable air quality standards or result in a cumulatively considerable net increase of any criteria pollutants.

Project construction and operation would not result in a significant air quality impact. As stated above, all impacts would be below applicable MBARD thresholds of significance, including thresholds for ozone precursors. As there are no significant impacts, project construction and operation would not result in a cumulatively considerable net increase in any criteria pollutant. Air quality impacts associated with the project would result in a less-than-significant impact.

c) **Less-Than-Significant Impact**. A "sensitive receptor" is generally defined as: any residence including private homes, condominiums, apartments, or living quarters; education resources such as preschools and kindergarten through grade twelve (k-12) schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes. There are several single-family residences within the vicinity of the proposed project. The closest residence is located directly adjacent to the streets in which the pipeline would be placed, as well as approximately 400 ft east of the proposed replacement pump station location. The MBARD's 2008 CEQA Air Quality Guidelines state that a project would have a significant impact to sensitive receptors if it would cause a violation of any CO, $PM_{10}$ or toxic air contaminant standards at an existing or reasonably foreseeable sensitive receptor.

As stated above in Response b, the proposed project would implement standard air quality BMPs and emissions of CO resulting from construction of the proposed project are below applicable MBARD thresholds of significance. The proposed project would not exceed any MBARD thresholds, including CO and $PM_{10}$. Compliance with applicable MBARD regulations also include,

but are not limited to, Rule 402,[2] which would minimize potential nuisance impacts to occupants of nearby land uses. For these reasons, construction activities would be considered to have a less-than-significant impact to sensitive receptors. Additionally, implementation of the proposed project would not result in the installation of any major stationary or mobile sources of emissions. Operational activities of the project would have a less-than-significant impact to nearby receptors as emission are minimal and consistent with the zoning of the property.

d) **Less-Than-Significant Impact**. There may be intermittent odors from construction associated with diesel exhaust and exposed sewer manholes that could be noticeable at times to residences in close proximity. However, given the limited construction duration, potential intermittent odors are not anticipated to result in odor complaints and would not affect a substantial number of people.

**Conclusion**: The proposed project would have a less-than-significant impact on air quality.

### *5.2.4 BIOLOGICAL RESOURCES*

#### Setting

The analysis presented in this section is from information contained in the Biological Resources Report prepared for the proposed project by Denise Duffy & Associates dated August 2019 (**Appendix A**). The Biological Resources Report describes existing biological resources within and surrounding the project, identifies any special-status species and sensitive habitats within and adjacent to the project site, assess potential impacts that may occur to biological resources, and recommends appropriate avoidance, minimization, and mitigation measures necessary to reduce those impacts to a less-than-significant level.

DD&A conducted surveys of the project site in May and June 2019. Details, methods and data sources used for the botanical survey and reconnaissance-level wildlife habitat surveys can be found in **Appendix A**. Data collected during the surveys were used to assess the environmental conditions of the project site and its surroundings, evaluate environmental constraints at the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts.

Two vegetation types were observed within the project site: dune scrub and ruderal/landscaped (**Figure 6**). In addition, a portion of the project site is developed. Dune scrub habitat is listed as sensitive on the California Department of Fish and Wildlife's (CDFW's) *California Natural Communities List* and may also be considered an Environmentally Sensitive Habitat Area (ESHA) under the California Coastal Act (CCA). A portion of the project site is also within designated critical habitat for Monterey spineflower; these areas may also be considered ESHA.

[2] MBARD Rule 402 "Nuisance" states, "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

Several special-status species are known or have the potential to occur within the project site based on observations, presence of appropriate habitat, and known occurrences within the vicinity (**Figure 7**). All other species evaluated have a low potential to occur, are assumed unlikely to occur, or were determined not present within the project site for the species-specific reasons presented in **Appendix A**.

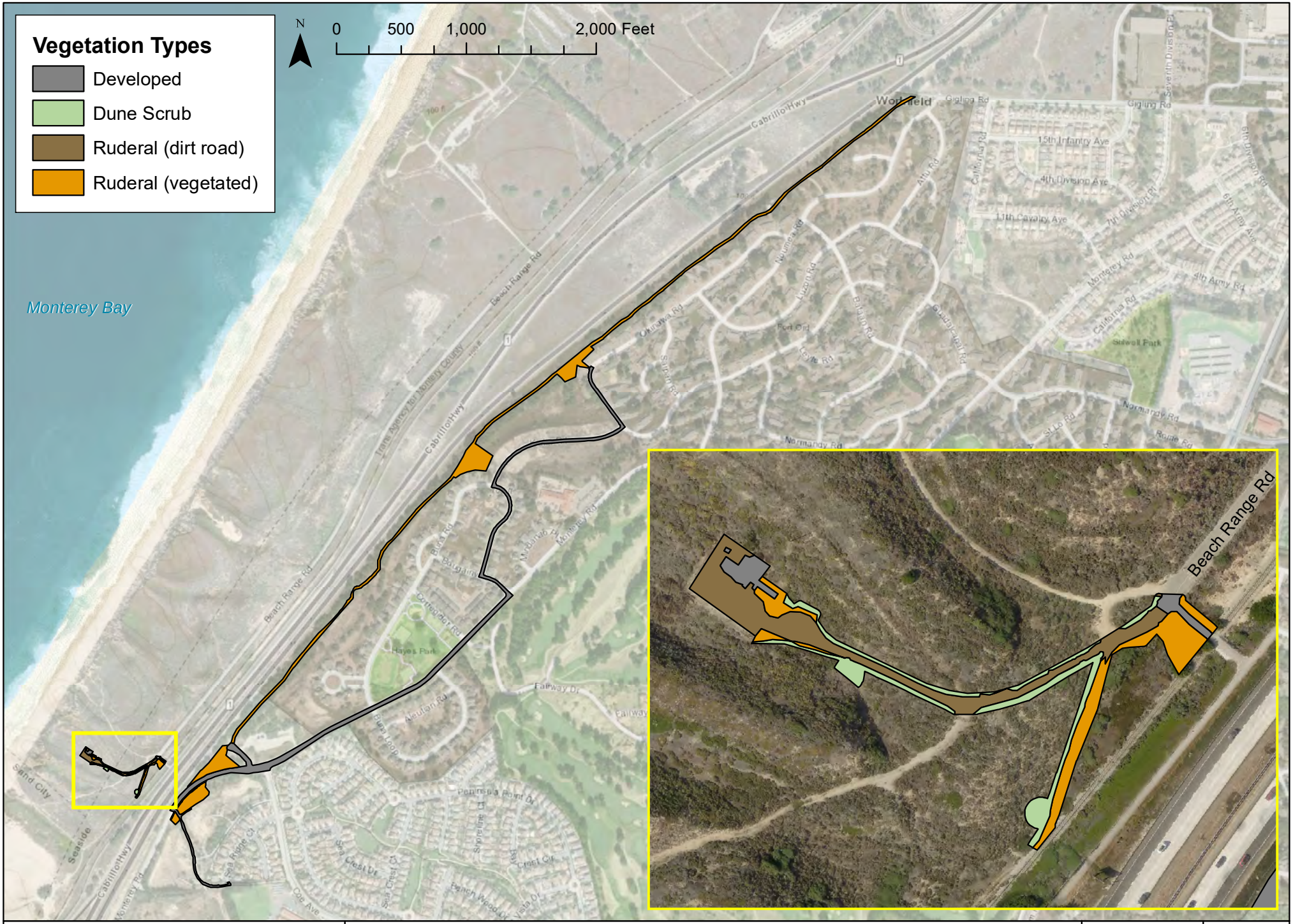
The following special-status wildlife species are known or have the potential to occur on the project site:

- Hoary bat (*Lasiurus cinereus*) – CNDDB,[3]
- Monterey dusky-footed woodrat (*Neotoma macrotis luciana*) – CSC,
- Northern California legless lizard (*Anniella pulchra*) – CSC/HMP,
- Coast horned lizard (*Phrynosoma blainvillii*) – CSC,
- Globose dune beetle (*Coelus globosus*) – CNDDB,
- Smith's blue butterfly (SBB; *Euphilotes enoptes smithi*) – FE/HMP (**Figure 8**), and
- Nesting raptors and other protected avian species, including:
  - Cooper's hawk (*Accipiter cooperii*) – CNDDB,
  - Oak titmouse (*Baeolophus inornatus*) – BCC,
  - Wrentit (*Chamaea fasciata*) – BCC,
  - Spotted towhee (*Pipilo maculatus*) – BCC, and
  - Allen's hummingbird (*Selasphorus sasin*) – BCC.

One special-status plant species is known to occur within the project site:

- Monterey spineflower (*Chorizanthe pungens* var. *pungens*) – FT/1B/HM (**Figure 9**)

[3] Status Definitions – FT: Federally threatened; CSC: California Species of Concern; CFP: California Fully Protected Species; BCC: USFWS Bird of Conservation Concern; HMP: Fort Ord Habitat Management Plan Species; CRPR 1B: California Rare Plant Rank (CRPR) 1B; CNDDB: animal species on the CNDDB "Special Animals" list that are not assigned any of the other status designations but the CDFW considers to be those of greatest conservation need, regardless of their legal or protection status.




**Denise Duffy and Associates, Inc.**
Planning and Environmental Consulting

# Vegetation Types Map

Date: 7/18/2019
Scale: 1 in = 944 ft
Figure: 6

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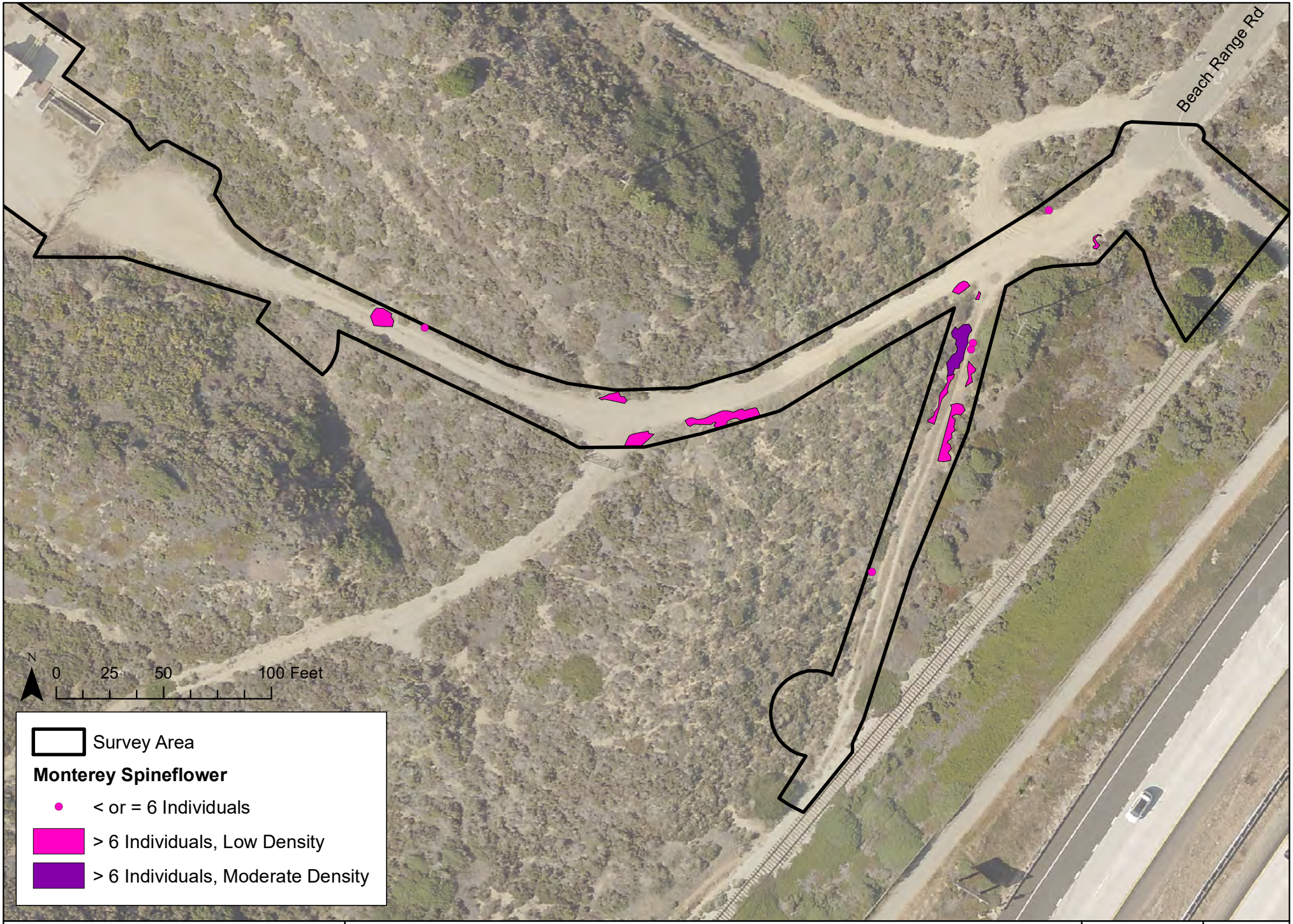



Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

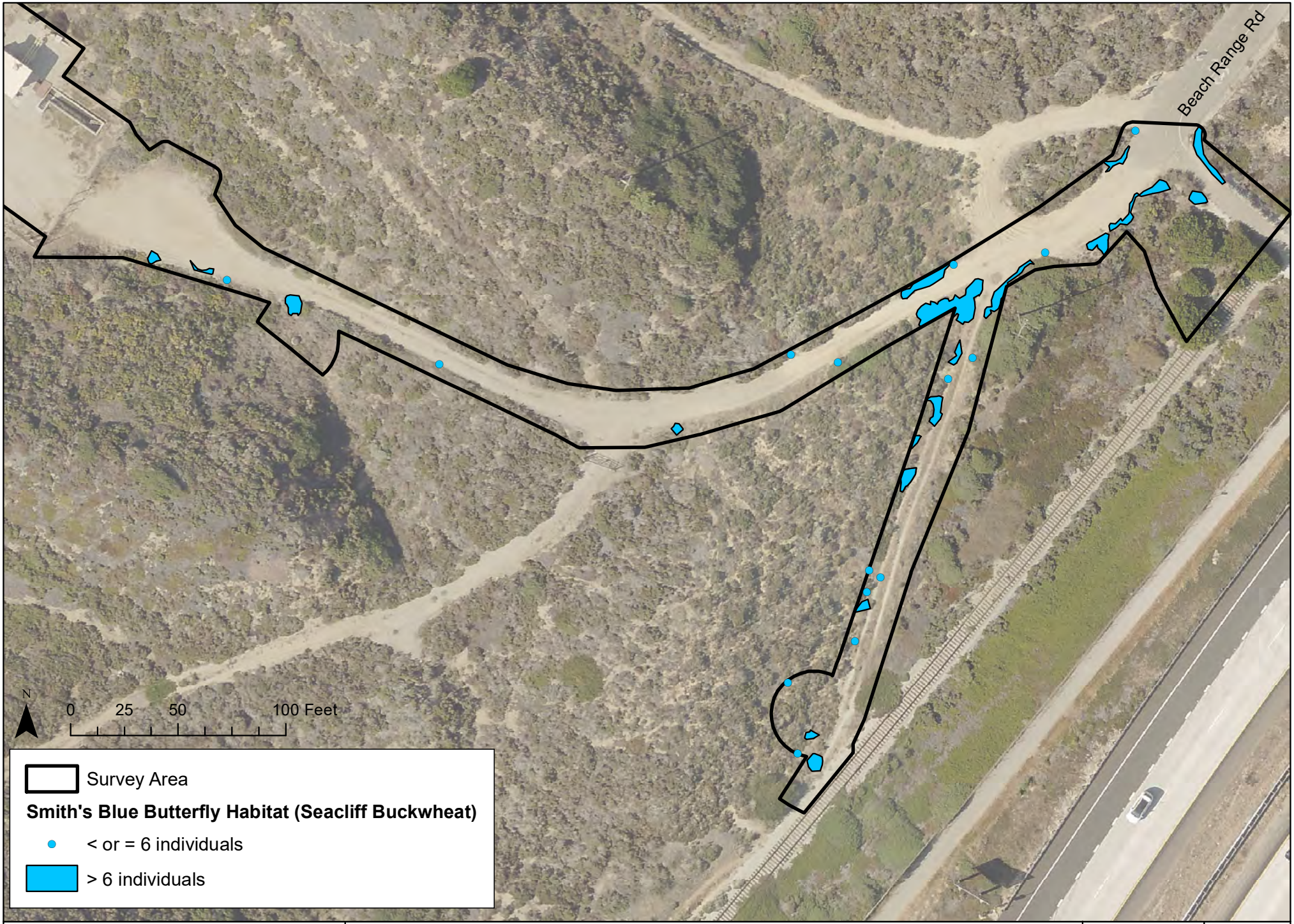
# Special-Status Plant Species Map

Date
7/18/2019

Scale
1 in = 57 ft

Figure
7

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Special Status Plant Species Map.mxd




Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

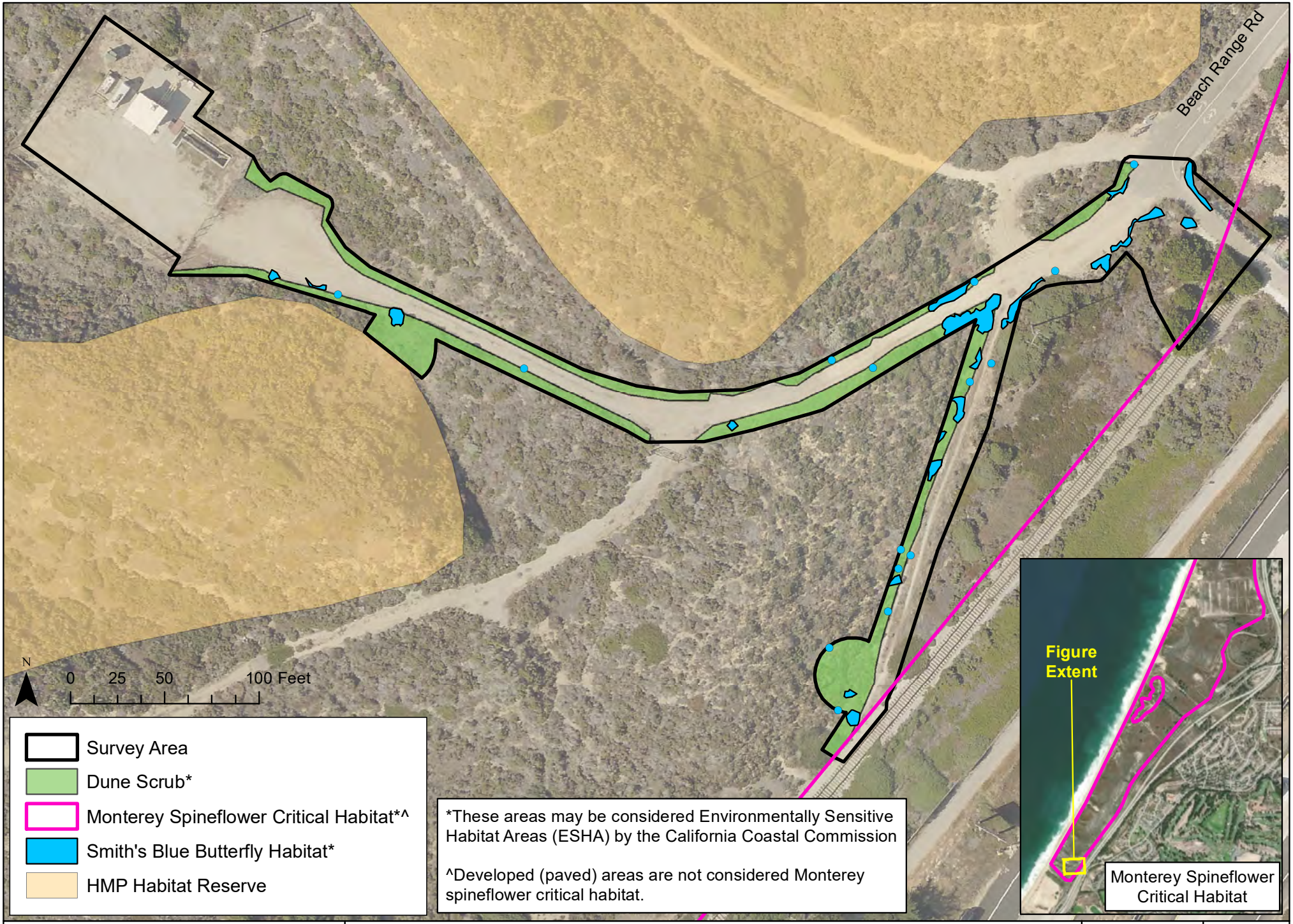
# Smith's Blue Butterfly Habitat Map

Date
7/18/2019

Scale
1 in = 57 ft

Figure
8

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\SBB Habitat Map Map.mxd




Denise Duffy and Associates, Inc.
Planning and Environmental Consulting

# Sensitive Habitats Map

Date: 9/4/2019
Scale: 1 in = 65 ft
Figure: 9

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Sensitive Habitats Map.mxd

## CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| BIOLOGICAL RESOURCES. Would the project: | | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | X | | | 1, 2, 9 |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | | X | | | 1, 2, 9 |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | X | 1, 2, 9 |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | | X | | 1, 2, 9 |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | X | 1, 2, 9 |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | X | | | 1, 2, 9 |

### Approach to Analysis

The project site is located within parcels designated under the HMP as "development" and "development with reserve areas or development with restrictions." Through implementation of the HMP, impacts to HMP species and habitats occurring within the designated development parcels were anticipated and mitigated through the establishment of habitat reserves and corridors and the implementation of habitat management requirements within habitat reserve parcels on former Fort Ord. Parcels designated as "development" have no management restrictions. However, the 2017 Programmatic Biological Opinion (BO) and HMP require the identification of sensitive botanical resources within these parcels that may be salvaged for use in restoration activities in reserve areas (USFWS, 2017b and ACOE, 1997). Additional management restrictions are identified for parcels designated as "development with reserve areas or development with restrictions" within the HMP. [4]

The HMP species that are known or have a moderate to high potential to occur within the proposed project site include Monterey spineflower, Northern California legless lizard, and SBB. With the designated habitat reserves and corridors and habitat management requirements of the HMP in place, the loss of these species is not expected to jeopardize the long-term viability of these species and their populations on the former

[4] Please refer to **Appendix A** for additional information regarding the approach to analysis as it relates to the HMP.

Fort Ord (USFWS, 1993). This is such because the recipients of disposed land with restrictions or management guidelines designated by the HMP will be obligated to implement those specific measures through the HMP and deed covenants. In addition to the HMP species identified, impacts to sensitive dune scrub habitat are also addressed in the HMP and, therefore, impacts to this habitat are also considered mitigated through the implementation of the HMP based on the same conclusions. The proposed project is:

1. Located within designated "development" or "development with reserve areas or restrictions" parcels;

2. Required to comply with the habitat management restrictions identified in the HMP; and

3. Would not result in any additional impacts to HMP species and habitats beyond those anticipated in the HMP.

Therefore, no additional mitigation measures for these HMP species or dune scrub habitat are required. However, the HMP does not exempt existing or future land recipients from the federal and state requirements of ESA and CESA. Of the three HMP species known or with a potential to occur within the project site, one federally listed wildlife species, SBB, has a moderate potential to be impacted by the project and may require take authorization from the USFWS. Additionally, Monterey spineflower, a federally listed plant species, is present within the project site west of Highway 1. As described in Section 3.5 "Regulatory Setting," if there is the potential for incidental take of a federally listed fish or wildlife species, take of the listed species can be authorized through either the Section 7 consultation process for federal actions, or a Section 10 incidental take permit process for non-federal actions. This analysis assumes that the project will be required to comply with Section 10 of the ESA. The ESA does not prohibit incidental take of federally listed plant species.

It is also important to note that SBB is a covered species in the Draft Fort Ord HCP, which is currently in progress. If the HCP is approved and the ESA incidental take permit is issued, the incidental take of this species resulting in covered activities (including, but not limited to, development in designated development areas) would be authorized base-wide, and project-specific permits would not be required. It is anticipated that these base-wide federal and state permits will be issued in early 2020. In the event that base-wide permits are not issued, impacts resulting in incidental take of SBB would need to be authorized by the USFWS through Section 10 consultation with the USFWS to avoid violation of the ESA.

Where suitable habitat exists within the project site, the proposed project has the potential to impact special-status species that were not addressed in the HMP. The non-HMP species that are known or have a moderate to high potential to occur within and be impacted by the project include hoary bat, Monterey dusky-footed woodrat, coast horned lizard, globose dune beetle, and nesting raptors and other protected avian species (including, but not limited to, Cooper's hawk, oak titmouse, wrentit, spotted towhee, and Allen's hummingbird).

## Explanation

a) **Less-Than-Significant Impact with Mitigation.**

*HMP Special-Status Species*

Implementation of the project could result in impacts to the following HMP species: SBB, Northern California legless lizard, and Monterey spineflower. As described above, impacts within development parcels to special-status plant and wildlife species addressed in the HMP are considered less than significant. However, Monterey spineflower and habitat for SBB occur in the DHZ on parcels designated as "development with reserve areas or restrictions." As described in the HMP, the DHZ is intended for the preservation of restored coastal dunes habitats and for visitor service facilities but also includes access for minor improvements to existing utilities and infrastructure.

While not required to reduce a significant impact, **Mitigation Measure BIO-1** would be implemented to further reduce impacts to SBB. This measure would require that SBB habitat be avoided and if avoidance is not feasible, that compliance with the ESA and/or CESA occurs in advance of construction. In the absence of an approved based-wide incidental take permit, impacts to species listed as threatened or endangered by the USFWS may also require agency consultation and/or incidental take permits. Therefore, although SBB is an HMP species, **Mitigation Measure BIO-1** acknowledges that the take of this species is prohibited under the ESA and may require Section 10 consultation or other authorization. Impacts resulting in take of SBB would need to be authorized by the USFWS through the issuance of an incidental take permit from the USFWS to avoid violation of ESA.

**Mitigation Measures BIO-2, BIO-3,** and **BIO-4** have been identified to reduce potentially significant impacts to non-HMP special-status species and habitat; however, HMP special-status species and habitats would also benefit from the implementation of these measures. These measures would reduce construction-related impacts through a combination of protective measures during construction, education, monitoring, and invasive species controls. Please see the **Non-HMP Special-Status Species** discussion below for details regarding these measures.

The HMP and the 2017 Programmatic BO require salvage of HMP species if feasible to support reseeding and restoration efforts on- or off-site in habitat reserve areas. Monterey spineflower occurs along the margin of the access routes to the manholes and existing lift station areas of the project site. Monterey spineflower individuals may be temporarily impacted by construction traffic; however, no ground disturbance would occur. As such, seed and topsoil salvage in these areas is unnecessary as the seedbank would remain intact. However, while not required to reduce a significant impact, **Mitigation Measure BIO-5** would be implemented to further reduce impacts to Monterey spineflower by avoiding areas known to support this species to the greatest extent feasible.

Therefore, potential impacts to HMP special-status species and habitat resulting from implementation of the project are less than significant. Implementation of **Mitigation Measures BIO-1** through **BIO-5** would further reduce impacts to these species.

*Non-HMP Special-Status Wildlife Species*

Suitable habitat for several non-HMP special-status wildlife species is present within the project site. The non-HMP wildlife species that are known or have a moderate to high potential to occur within and be impacted by the project include hoary bat, Monterey dusky-footed woodrat, globose dune beetle, coast horned lizard, and nesting raptors and other protected avian species (including, but not limited to, Cooper's hawk, oak titmouse, wrentit, spotted towhee, and Allen's hummingbird). **Mitigation Measures BIO-2, BIO-4,** and **BIO-6** through **BIO-8** have been identified to reduce potentially significant impacts to non-HMP special-status species and habitat. These measures would reduce construction-related impacts through a combination of protective measures during all phases of construction by providing construction crew education, construction-phase monitoring, and invasive species controls.

The project site contains suitable habitat for the coast horned lizard and globose dune beetle (i.e., within dune scrub). Project implementation could result in direct impacts to individuals and loss of habitat. This is a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4**, which avoid and minimize impacts through implementing construction best management practices, construction-phase monitoring, and invasive species controls, would reduce potentially significant impacts to the coast horned lizard and globose dune beetle to a less-than-significant level.

The project site contains trees that may provide roosting habitat for hoary bat. Trimming of trees, construction noise, dust, and vibration adjacent to large trees could cause direct and indirect impacts to hoary bats, including roost abandonment and death of young. It is unlikely that hoary bats birth and rear young in California. As a result, this species would not be breeding within the vicinity of the project site. However, impacts to individuals and roosting habitat would be a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-6** would reduce potentially significant impacts to hoary bats to a less-than-significant level through a combination of: implementing protective measures during construction; construction crew education; pre-construction monitoring; avoidance, preservation, and protection of hoary bat, as identified during pre-construction surveys for potential roost sites, if feasible; and replacement of roost sites if avoidance is not feasible.

The project site contains suitable habitat for the Monterey dusky-footed woodrat (i.e., dune scrub and portions of the ruderal areas) and project implementation could result in direct impacts to individuals and loss of habitat. Construction noise, dust, and vibration adjacent to large trees could cause indirect impacts to Monterey dusky-footed woodrat such as nest abandonment and death of young. This is a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-7** would reduce potentially significant impacts to Monterey dusky-footed woodrat to a less-than-significant level through a combination of: implementing protective measures during construction; education; pre-construction monitoring; and avoidance, preservation, and protection of active nests, as identified during pre-construction woodrat nest surveys.

Large trees within the project site provide suitable nesting habitat for tree-nesting raptors, including the special-status Cooper's hawk, and other nesting birds. In addition, other protected avian species may nest or forage within the site, including oak titmouse (trees within ruderal areas), wrentit (dune

scrub), and spotted towhee and Allen's hummingbird (all undeveloped areas of the site). Construction-related activities (e.g., trimming and removal of vegetation, and equipment noise, vibration) that result in harm, injury, or death of individuals, or abandonment of an active nest would be a significant impact. Construction activities that adversely affect the nesting success of raptors or result in mortality of individual birds constitute a violation of California law and would be a significant impact under CEQA. This is a potentially significant impact that would be reduced to a less-than-significant level with implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-8**, which includes surveys to identify the presence of active nests prior to construction and measures to avoid active nests if found.

Therefore, potentially significant impacts to non-HMP special-status wildlife species would be reduced to a less-than-significant level with implementation of **Mitigation Measures BIO-2** through **BIO-4** and **BIO-6** through **BIO-8**.

*Special-Status Species Habitat*

Implementation of the project would result in impacts to approximately 6.7 acres of potential habitat for special-status species. As discussed in the "Regulatory Setting" section, the Fort Ord HMP establishes guidelines for the conservation and management of species and habitats on former Fort Ord lands by identifying lands that are available for development, lands that have some restrictions with development, and habitat reserve areas. The intent of the plan is to establish large, contiguous habitat conservation areas and wildlife corridors to compensate for future development in other areas of the former base. The HMP identifies what type of activities can occur on each parcel at former Fort Ord and parcels are designated as "development with no restrictions," "development with reserve area or restrictions," or "habitat reserve." The HMP sets the standards to assure the long-term viability of former Fort Ord's biological resources in the context of base reuse so that no further mitigation should be necessary for impacts to species and habitats considered in the HMP. This plan has been approved by USFWS; the HMP, deed restrictions, and Memoranda of Agreement between the U.S. Army and various land recipients provide the legal mechanism to assure HMP implementation. It is a legally binding document, and all recipients of former Fort Ord lands are required to abide by its management requirements and procedures.

The HMP anticipates some losses to special-status species and sensitive habitats as a result of redevelopment of the former Fort Ord. With the designated reserves and corridors and habitat management requirements in place, the losses of individuals of species and sensitive habitats considered in the HMP are not expected to jeopardize the long-term viability of those species, their populations, or sensitive habitats on former Fort Ord. Recipients of disposed land with restrictions or management guidelines designated by the HMP would be obligated to implement those specific measures through the HMP and through deed covenants. Approximately 18,500 acres of the former Fort Ord would be preserved in permanent open space through implementation of the HMP.

The project is proposed within designated development and development with reserve areas or restrictions parcels. Therefore, implementation of the project would not have a significant impact on special-status species habitat, particularly when taken into context with the over 18,500 acres of preserved habitat for special-status species within the former Fort Ord. This is a less-than-significant impact. No mitigation is required.

**Mitigation Measure**

**MM BIO-1*:* Smith's Blue Butterfly**

SBB habitat (i.e. seacliff buckwheat) shall be avoided to the greatest extent feasible. SBB habitat that will not be impacted by the project shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

If all SBB habitat is avoided, no additional mitigation is necessary. If the project will impact SBB habitat, compliance with the ESA shall occur in advance of construction:

With Approved Base-Wide HCP and Permits:

As described above, impacts to SBB and its habitat would be authorized under the base-wide incidental take permit issued by USFWS. The MCWD shall comply with the avoidance and minimization measures and mitigation measures in the approved HCP. No additional mitigation is required.

Without Approved Base-Wide HCP and Permits:

The MCWD will comply with the ESA and obtain necessary authorizations prior to construction due to the assumed presence of the federally listed SBB. The MCWD shall be required to initiate consultation with the USFWS to receive take authorization. Take authorization would be granted through the issuance of an individual, project-specific incidental take permit, which requires preparation and implementation of an HCP. Mitigation for take likely would require restoration at a 3:1 ratio of impacted habitat. Buckwheat plants and/or seed salvage may also be required prior to ground disturbing activities.

**MM BIO-2: Construction Best Management Practices**

The following best management practices will be implemented during all identified phases of construction (i.e., pre-, during, and post-) to reduce impacts to special-status plant and wildlife species:

- A qualified biologist will conduct an Employee Education Program for the construction crew prior to any construction activities. The qualified biologist will meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by USFWS and CDFW; and 6) the proper procedures if a special-status species is encountered within the project site.
- Trees and vegetation not planned for removal or trimming will be protected prior to and during construction to the maximum possible through the use of exclusionary fencing,

such as hay bales for herbaceous and shrubby vegetation, and protective wood barriers for trees. Only certified weed-free straw will be used to avoid the introduction of non-native, invasive species. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.

- Following construction, disturbed areas will be restored to pre-project contours to the maximum extent possible and revegetated using locally-occurring native species and native erosion control seed mix, per the recommendations of a qualified biologist. Any revegetation on State Park property shall be conducted in coordination with State Parks.
- Grading, excavating, and other activities that involve substantial soil disturbance will be planned and implemented in consultation with a qualified hydrologist, engineer, or erosion control specialist, and will utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation (pre-, during, and post-construction).
- No firearms will be allowed on the project site at any time.
- All food-related and other trash will be disposed of in closed containers and removed from the project area at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel will not feed or otherwise attract wildlife to the area.

**MM BIO-3: Construction-Phase Monitoring**

The MCWD will retain a qualified biologist to monitor all ground disturbing construction activities (i.e., vegetation removal, grading, excavation, or similar activities) to protect any special-status species encountered. Any handling and relocation protocols of special-status wildlife species will be determined in coordination with CDFW prior to any ground disturbing activities, and will be conducted by a qualified biologist with appropriate scientific collection permit. After ground disturbing project activities are complete, the qualified biologist will train an individual from the construction crew to act as the on-site construction biological monitor. The construction biological monitor will be the contact for any special-status wildlife species encounters, will conduct daily inspections of equipment and materials stored on site and any holes or trenches prior to the commencement of work, and will ensure that all installed fencing stays in place throughout the construction period. The qualified biologist will then conduct regular scheduled and unscheduled visits to ensure the construction biological monitor is satisfactorily implementing all appropriate mitigation protocols. Both the qualified biologist and the construction biological monitor have the ability cease construction contractor work and/or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project. The qualified biologist and the construction monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration of the project. The log will also include any special-status wildlife species observed and relocated.

**MM BIO-4: Non-Native, Invasive Species Controls**

The following measures will be implemented to reduce the introduction and spread of non-native, invasive species:

- Any landscaping or replanting required for the project will not use species listed as noxious by the California Department of Food and Agriculture (CDFA) or invasive by the California Invasive Plant Council (Cal-IPC).
- Bare and disturbed soil will be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion on noxious weeds in the project site. Species to be seeded or planted within State Parks property shall be approved by State Parks prior to planting.
- Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds, before mobilizing to arrive at the construction site and before leaving the construction site.
- All non-native, invasive plant species will be removed from disturbed areas prior to replanting.

**MM BIO-5: Special-Status Plant Species Avoidance**

Monterey spineflower shall be avoided to the greatest extent feasible. Areas of Monterey spineflower that will not be impacted by the project shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

**MM BIO-6: Pre-Construction Surveys for Hoary Bat**

To avoid and reduce impacts to hoary bat, the MCWD will retain a qualified bat specialist or wildlife biologist to conduct site surveys to characterize bat utilization of the site and potential species present (techniques utilized to be determined by the biologist) prior to any tree removal or trimming. Based on the results of these initial surveys, one or more of the following will occur:

- If it is determined that hoary bats are not present at the site, no additional mitigation is required.
- If it is determined that hoary bats are utilizing the site and may be impacted by the proposed project, pre-construction surveys will be conducted within 100 feet of construction limits no more than 30 days prior to any tree removal. If, according to the bat specialist, no hoary bats or bat signs are observed in the course of the pre-construction surveys, tree removal may proceed. If hoary bats and/or hoary bat signs are observed during the pre-construction surveys, removal or trimming of trees may proceed after the bats have been safely excluded from the roost. Exclusion techniques will be determined by the biologist and depend on the roost type; the biologist will prepare a mitigation plan for provision of alternative habitat to be approved by CDFW.

**MM BIO-7: Pre-Construction Surveys for Monterey Dusky-Footed Woodrat**

Not more than thirty (30) days prior to the start of construction (including vegetation removal), a qualified biologist shall conduct a survey of the project site to locate existing Monterey dusky-footed woodrat nests. All Monterey dusky-footed woodrat nests shall be mapped and flagged for avoidance. Graphics depicting all Monterey dusky-footed woodrat nests shall be provided to the

construction contractor. Any Monterey dusky-footed woodrat nests that cannot be avoided shall be relocated according to the following procedures:

Each active nest shall be disturbed by the qualified biologist to the degree that the woodrats leave the nest and seek refuge elsewhere. After the nests have been disturbed, the nest sticks shall be removed from the impact areas and placed outside of areas planned for impacts. Nests shall be dismantled during the non-breeding season (between October 1 and December 31), if possible. If a litter of young is found or suspected, nest material shall be replaced and the nest left alone for two to three weeks, after this time the nest will be rechecked to verify that young are capable of independent survival before proceeding with nest dismantling.

**MM BIO-8: Pre-Construction Surveys for Protected Avian Species**

Construction activities that may directly (e.g., vegetation removal) or indirectly (e.g., noise/ground disturbance) affect protected nesting avian species will be timed to avoid the breeding and nesting season. Specifically, vegetation and/or tree removal can be scheduled after September 16 and before January 31. Alternatively, a qualified biologist will be retained by the MCWD to conduct pre-construction surveys for nesting raptors and other protected avian species within 500 feet of proposed construction activities if construction occurs between February 1 and September 15. Pre-construction surveys will be conducted no more than 14 days prior to the start of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). Because some bird species nest early in spring and others nest later in summer, surveys for nesting birds may be required to continue during construction to address new arrivals, and because some species breed multiple times in a season. The necessity and timing of these continued surveys will be determined by the qualified biologist based on review of the final construction plans and in coordination with the CDFW, as needed.

If raptors or other protected avian species nests are identified during the pre-construction surveys, the qualified biologist will notify the MCWD and an appropriate no-disturbance buffer will be imposed within which no construction activities or disturbance should take place (generally 500 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.

b) **Less-Than-Significant Impact with Mitigation.** Habitats occurring within the project site that are listed as sensitive on the CDFW's *California Natural Communities List* include dune scrub. Approximately 0.2-acre of dune scrub occurs within the project site and may be impacted by the project. Dune scrub adjacent to, but outside of the project site may be impacted if work occur outside of the project boundaries.

As stated in the "Approach to Analysis," the implementation of the HMP mitigates for the loss of dune scrub by preserving this habitat within the habitat reserve areas on the former Fort Ord. The HMP requires an analysis to determine if seed and topsoil salvage is feasible to support reseeding and restoration efforts on- or off-site in habitat reserve areas. Dune scrub vegetation occurs around two of the manholes that would be abandoned and along the margins of the access routes to the existing lift station and manhole locations. The vegetation may be removed around the manholes

during construction; however, this would be a temporary impact and no ground disturbance would occur. As such, seed and topsoil salvage in these areas is unnecessary.

However, dune scrub vegetation may be considered ESHA by the CCC. As such, impacts to dune scrub could be considered a potentially significant impact. Therefore, **Mitigation Measure BIO-9** would be implemented to reduce impacts to dune scrub vegetation. This measure would require that dune scrub be avoided to the greatest extent feasible and that any dune scrub vegetation removed be replanted at a 2:1 ratio.

Approximately 0.7-acre of Monterey spineflower critical habitat is present within the project site west of Highway 1. Monterey spineflower critical habitat may also be considered ESHA by the CCC. The majority of the Monterey spineflower critical habitat area that occurs within the project site is currently degraded as a result of ongoing use and maintenance within the existing lift station fence and the access road. However, areas of dune scrub within the project site represent more intact Monterey spineflower critical habitat. Temporary impacts may include vegetation removal for access to manholes, construction traffic, and ground disturbance during demolition of the existing lift station. However, no new structures would be constructed within Monterey spineflower critical habitat and no permanent loss of Monterey spineflower critical habitat would occur. Conversely, demolition of the existing lift station is likely to increase the available area of critical habitat for Monterey spineflower. This would be considered a beneficial impact and no mitigation is necessary.

**Mitigation Measure**

**MM BIO-9: Dune Scrub**

Dune scrub vegetation shall be avoided to the greatest extent feasible. Dune scrub vegetation not planned for removal shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

Dune scrub that cannot be avoided shall be quantified prior to construction and replanted at a 2:1 ratio for the area removed. A restoration plan shall be prepared by a qualified biologist and shall be implemented by the MCWD or a contracted entity. The restoration plan shall be prepared in coordination and compliance with State Parks restoration guidelines and shall include:

a) A planting palette of only locally-occurring native species collected from the Project vicinity or acquired from approved local suppliers.

b) Procedures to control non-native species invasion.

c) Provisions to ensure compliance with the requirements of the plan.

d) A detailed description of seeding and planting specifications.

e) A description of a monitoring program, including specific methods of vegetation monitoring, data collection and analysis, goals and objectives, success criteria, adaptive management if the criteria are not met, reporting protocols, and a funding mechanism.

c) **No Impact.** There are no state or federally protected wetlands present on site or adjacent to the site. There is not impact.

d) **Less-Than-Significant Impact.** Wildlife movement corridors are pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or man-made factors, such as urbanization. The fragmentation of natural habitat creates isolated "islands" of vegetation that may not provide sufficient area or resources to accommodate sustainable populations for a number of species, and, therefore, adversely affect both genetic and species diversity. Corridors often partially or largely mitigate the adverse effects of fragmentation by 1) allowing animals to move between remaining habitats to replenish depleted populations and increase the gene pool available; 2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (e.g., fire and disease) would result in population or species extinction; and 3) serving as travel paths for individual animals moving throughout their home range in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

The 2010 Monterey County General Plan EIR identified a number of significant wildlife movement corridors and linkages within the vicinity of the former Fort Ord, including Linkage 308: Fort Ord – Ventana; Linkage 322: Highway 68 Western Crossing; Linkage 350: Sierra de Salinas – Toro Peak; Linkage 339: Salinas Valley Floor; and Linkage 378: Salinas River – Pinnacles National Monument (County of Monterey, 2010). Of particular importance for wildlife movement from the former Fort Ord lands to outlying areas are Linkages 308 and 322. Specifically, Linkage 322 runs along El Toro Creek in the southeastern portion of former Fort Ord and through a large, bridge undercrossing Highway 68. This corridor has been identified as a significant wildlife corridor for mammals, amphibians, and reptiles moving between former Fort Ord lands and connecting to the Sierra de Salinas and Santa Lucia Ranges.

The HMP considered conservation area connectivity as an essential component of the design of the conservation areas and corridors within the former Fort Ord. The HMP created conservation areas and corridors with the purpose of linking the plant and animal populations in the northern portion of the former base at the Marina Municipal Airport to the populations in the south to the Fort Ord National Monument and the El Toro Creek undercrossing of Highway 68. The implementation of the HMP preserves over 18,500 acres of a variety of habitats supporting a variety of common and special-status plant species, and maintains a north-south wildlife corridor across the former Fort Ord lands to connect with the primary, significant wildlife linkages.

The project site is located in the western portion of the former Fort Ord. East of Highway 1, the project is adjacent to existing developed areas. West of Highway 1, the project site is surrounded by open space associated with the FODSP and, further west, the Monterey Bay. As discussed in the "Results" section, the project site is partially in undeveloped land that is comprised of two vegetation units (dune and ruderal/disturbed/landscaped); however, portions of the site are also developed area (paved roads and structures). The implementation of the proposed project would involve impacts to these habitat types; however, the project site also supports wildlife movement, as there are various vegetative communities, vegetative cover, and the adjacency of open space areas with high quality wildlife habitat.

Chain-link fencing is currently in place surrounding the existing lift station and along the Highway 1 boundary. Following construction, the fencing surrounding the existing lift station would be removed, which would improve wildlife movement and use of the area. Fencing would be installed around the electrical equipment associated with the new pump station; however, the fencing is not considered a significant structure that would impede wildlife movement as the enclosed area is not very large and the habitat value in the area is low. In addition, the site is surrounded by some undeveloped lands, which can be utilized by wildlife. Therefore, habitat within the project site supports species movement on-site and would not substantially interfere with wildlife movement across the site. The proposed project would impact only a small percentage of wildlife habitat within the former Fort Ord. The HMP preserves approximately 18,500 acres of large, contiguous areas of wildlife habitat that will remain on the former Fort Ord and will be preserved in perpetuity. As a result, the development of the project, would not disconnect, fragment, or otherwise impeded wildlife movement in the primary, significant wildlife movement corridors between the former Fort Ord lands and other lands. This is a less-than-significant impact. No mitigation is required.

e) **No Impact**. The Project would be required to comply with all applicable guidelines in the FODSP General Plan and Seaside General Plan, as well as mitigation measures contained in the FODSP General Plan EIR and Seaside General Plan EIR to the extent they are applicable. Applicable guidelines in the FODSP General Plan include: BIO-1, BIO-2, BIO-4, BIO-5, BIO-8, BIO-10, and BIO-17. These policies generally promote identifying, protecting, and ensuring perpetuation of park plant and wildlife species populations. Applicable mitigation measures in the FODSP General Plan EIR include: Mitigation Measure BIO-1 and Mitigation Measure BIO-2. These measures address potential impacts to native habitats and species, including special-status species. Implementation Plan COS-4.1.1 of the Seaside General Plan is applicable to the project, which requires the use of proper land use planning and environmental review to minimize the impacts of urban development of sensitive ecological and biological resources. There are no biological measures in the Seaside General Plan EIR applicable to the project. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources. No impact would occur and no mitigation is required.

f) **Less-Than-Significant Impact with Mitigation.** The project site is not located within an approved HCP or Natural Community Conservation Planning (NCCP) area. However, it is located within the Fort Ord HMP boundaries and the plan area associated with the Draft HCP. The project site is designated for development (with no restrictions) in the HMP for Fort Ord and is located within a designated development area in the Draft HCP. As described in the "Approach to Analysis," the proposed project is consistent with the approved HMP. This is a less-than-significant impact. No mitigation is required.

A portion of the project site is located adjacent to a parcel designated as "habitat reserve" in the HMP. Impacts to the habitat reserve parcel would be considered a significant impact if work were to be conducted outside of the project boundaries. Therefore, **Mitigation Measure BIO-10** would be implemented to avoid impacts to habitat reserve areas and reduce the impact to less than significant.

**Mitigation Measure**

**MM BIO-10: Habitat Reserve**

No work shall occur within areas designated as habitat reserve by the Fort Ord HMP. Habitat reserve areas shall be protected prior to and during construction through the use of exclusionary fencing. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.

**Conclusion**: The project would have a less-than-significant impact with mitigation incorporated on biological resources.

### *5.2.5 CULTURAL RESOURCES*

#### Setting

An Archaeological Literature Review was prepared by BASIN Research Associates in June 2019 to determine if significant cultural resources could be affected as defined by CEQA. The review effort included a records search, a literature review and consulting archival materials on file at BASIN for the former Fort Ord.[5]

The project's Area of Potential Effects (APE) for archaeological resources is commensurate with the footprint of the proposed project which includes demolition of the Fort Ord Village Lift Station west of Highway 1, the construction of the new pump lift station, installation of new pipe to Okinawa Road, and the termination of the new pipe with the SSFM at the Okinawa Road termination. The vertical APE for the proposed project extends from the ground surface to 20 feet for the pump lift station and from the surface to 10 feet for the pipeline(s). Research suggests a low potential for the presence of subsurface prehistoric and/or historic deposits either within or adjacent to the APE except for the Fort Ord Village Lift Station which is located within a dune area identified as a "high probability area" for archaeological resources.[6] However, the disturbance caused by the installation of the lift station and surrounding area appears to resulted in considerable surface and subsurface impacts.

A prehistoric and historic site record and literature search was completed by the California Historical Resources Information System, Northwest Information Center, Sonoma State University, Rohnert Park (CHRIS/NWIC File No. 18-2203 dated 6/5/2019 by Hagel). The CHRIS/NWIC records review noted four cultural resources studies within or adjacent to the proposed project alignment. The four studies were negative for cultural resources. No recorded prehistoric and/or historic era archaeological sites are within or adjacent to the APE. One reported prehistoric archaeological site, CA-MNT-280/P-27-00385, without

[5] A field inventory was not completed due to the extensive disturbance of both the horizontal and vertical APE by the installation of hardscape, the lift station west of Highway 1, percolation ponds and sewer and natural gas pipelines. The existing setting does not appear to have native sediment available for inspection due to prior disturbance and the presence of paved trails, roads and residential streets.

[6] Previous research completed for the Ford Ord Reuse Plan in the 1990s later resulted in the identification of prehistoric archaeological sensitivity zones based on the presence/absence of sites and selected topographic features. High probability areas include all terraces and benches adjacent to the Salinas River and El Toro Creek, the peripheries of the wet cycle lakes, areas adjacent to Bureau of Land Management land (southeast section of the former Fort Ord property) and the coastal beaches. All other lands within the former military reservation were assigned either a low or medium potential for archaeological resources.

a definite location has been mapped as including the beach and dunes, Fort Ord Village and other surrounding areas including the APE. The resource was recorded in 1950 based on information reported to the University of California Archaeological Survey with its location provided as "on the Fort Ord Military Reservation." The site form notes that the resource was destroyed by bulldozing in ca. 1940. No Native American villages, traditional use areas or contemporary use areas or other features of significance have been previously identified in or adjacent to the proposed project APE. No Hispanic era features have been identified in or adjacent to the proposed APE. No American Period archaeological sites have been recorded, reported, or identified in or adjacent to the proposed project APE.

## CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| CULTURAL RESOURCES. Would the project: | | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA 15064.5? | | | | X | 1, 2, 10 |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA 15064.5? | | X | | | 1, 2, 10 |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | | X | | | 1, 2, 10 |

## Explanation

a) **No Impact.** No listed or known potential National Register of Historic Places and/or California Register of Historical Resources are located in or adjacent to the proposed APE. No other significant or potentially significant local, state or federal cultural resources/historic properties, landmarks, points of interest, etc. have been identified in or adjacent to the project APE. Therefore, no impacts would result to historical resources as defined in CEQA 15064.5.

b, c) **Less-Than-Significant Impact with Mitigation.** The Archaeological Literature Review found no archaeologically, historically, or architecturally significant sites, structures, landmarks, or points of interest in or immediately adjacent to the project APE. No known archaeological resources or human remains have been documented in the APE. However, no subsurface testing for buried archaeological resources was completed, and, therefore, there is the possibility of inadvertently uncovering human remains during construction. The potential inadvertent discovery of archaeological resources and/or human remains and potential inadvertent damage or disturbance during construction is considered a potentially significant impact. This impact can be mitigated to a less-than-significant level with the implementation of **Mitigation Measure CR-1**.

**Mitigation Measure**

**MM CR-1: Cultural Resources Protection Measures**

Protection measures will be required, consistent with the recommendations listed in the Archaeological Literature Review conducted by BASIN Research Associates June 2019:

(a) The project proponent shall note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources including prehistoric Native American burials.

(b) The project proponent shall retain a Professional Archaeologist on an "on-call" basis during ground disturbing construction to review, identify and evaluate prehistoric or historic cultural resources that may be inadvertently exposed during construction.[7] The archaeologist shall review and evaluate any discoveries to determine if they are historical resource(s) and/or unique archaeological resources under CEQA.

(c) If the Professional Archaeologist determines that any cultural resources exposed during construction constitute a historical resource and/or unique archaeological resource under CEQA, he/she shall notify the project proponent and other appropriate parties of the evaluation and recommend mitigation measures to mitigate to a less-than significant impact in accordance with California Public Resources Code Section 15064.5. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing and data recovery among other options. The completion of a formal *Archaeological Monitoring Plan* (AMP) and/or *Archaeological Treatment Plan* (ATP) that may include data recovery may be recommended by the Professional Archaeologist if significant archaeological deposits are exposed during ground disturbing construction. Development and implementation of the AMP and ATP and treatment of significant cultural resources will be determined by the project proponent in consultation with any regulatory agencies.

(d) The treatment of human remains and any associated or unassociated funerary objects discovered during any soil-disturbing activity within the APE shall comply with applicable state laws in regard to Native American burials (Chapter 1492, Section 7050.5 to the Health and Safety Code, Sections 5097.94, 5097.98 and 5097.99 of the Public Resources Code).

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[7]. Significant prehistoric cultural resources are defined as human burials, features or other clusterings of finds made, modified or used by Native American peoples in the past. The prehistoric and protohistoric indicators of prior cultural occupation by Native Americans include artifacts and human bone, as well as soil discoloration, shell, animal bone, sandstone cobbles, ashy areas, and baked or vitrified clays. Prehistoric materials may include:

a. Human bone - either isolated or intact burials.
b. Habitation (occupation or ceremonial structures as interpreted from rock rings/features, distinct ground depressions, differences in compaction (e.g., house floors).
c. Artifacts including chipped stone objects such as projectile points and bifaces; groundstone artifacts such as manos, metates, mortars, pestles, grinding stones, pitted hammerstones; and, shell and bone artifacts including ornaments and beads.
d. Various features and samples including hearths (fire-cracked rock; baked and vitrified clay), artifact caches, faunal and shellfish remains (which permit dietary reconstruction), distinctive changes in soil stratigraphy indicative of prehistoric activities.
e Isolated artifacts.

Historic cultural materials may include finds from the late 19th through early 20th centuries. Objects and features associated with the Historic Period can include.

a. Structural remains or portions of foundations (bricks, cobbles/boulders, stacked field stone, postholes, etc.).
b. Trash pits, privies, wells and associated artifacts.
c. Isolated artifacts or isolated clusters of manufactured artifacts (e.g., glass bottles, metal cans, manufactured wood items, etc.).
d. Human remains.

In addition, cultural materials including both artifacts and structures that can be attributed to Hispanic, Asian and other ethnic or racial groups are potentially significant. Such features or clusters of artifacts and samples include remains of structures, trash pits, and privies.

This shall include immediate notification of the appropriate county Coroner/Medical Examiner and the project proponent.

(e) A *Monitoring Closure Report* shall be filed with the project proponent at the conclusion of ground disturbing construction if archaeological and Native American monitoring of excavation was undertaken.

**Conclusion**: The project would have a less-than-significant impact on cultural resources after incorporation of the mitigation measure identified above.

### *5.2.6 ENERGY*

#### Setting

Starting in 2018, all PG&E customers within Monterey, San Benito, and Santa Cruz Counties were automatically enrolled in Monterey Bay Community Power (MBCP). MBCP is a locally-controlled public agency providing carbon-free electricity to residents and businesses. Formed in February 2017, MBCP is a joint powers authority, and is based on a local energy model called community choice energy. MBCP partners with PG&E, which continues to provide billing, power transmission and distribution, customer service, grid maintenance services and natural gas services to Monterey County. MBCP's standard electricity offering, is carbon free and is classified as 30 percent renewable. Of the electricity provided by MBCP in 2018, 40 percent was hydroelectric, and 30 percent was solar and wind (eligible renewables) (MBCP, 2019).

#### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| 6. ENERGY. Would the project: | | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | X | | 1, 2 |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | | | X | | 1, 2 |

#### Explanation

a) **Less-Than-Significant Impact**. Since the proposed project would involve a replacement lift station and wastewater pipeline, the energy use consumed by the proposed project would be consistent with the previous usage of the existing Fort Ord Village Lift Station. Energy use was estimated based on the 2018 usage of the Fort Ord Village Lift Station (Andy Sterbenz, personal communication, August 2019). The replacement system would only consist of and electricity consumption; no natural gas usage is proposed. A discussion of the project's effect on energy use is presented below.

*Operational.* Operation of the proposed replacement lift station would consume energy primarily for operation of the pumps and lighting. **Table 2** summarizes the estimated energy use of the proposed project.

**Table 2**
**Estimated Annual Energy Use of Proposed Project**

| Proposed Project | Electricity Use (kWh) | Natural Gas Use (kBtu) |
|---|---|---|
| Replacement Lift Station | 44,285 | Not applicable |
| Source: Personal communication, Andy Sterbenz, 2019 | | |

The proposed project would not result in an increase in traffic to/from the site as traffic required for maintenance activities associated with the proposed project would be consistent with the existing usage. Therefore, implementation of the proposed project would not result in a substantial increase on transportation-related energy use.

*Construction.* The anticipated construction schedule assumes that the project would be completed over a period of approximately nine months. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., excavation, and grading), and the actual construction of project components Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks. The construction energy use has not been determined at this time. However, the project would not cause inefficient, wasteful, or unnecessary consumption of energy as the construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. Equipment and fuel are not typically used wastefully during construction due to the added expenses associated with renting, maintaining, and fueling the equipment. Hand tools would be used when possible in order to avoid use of heavy machinery. Furthermore, energy used required to complete construction would be limited and short-term.

Based on the discussion above, the project would not result in potentially significant environmental impact, during operation or construction, due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

b) **Less-Than-Significant Impact**. The construction and operation of the proposed project would have a less-than-significant impact due to energy usage and efficiency and, thus, would not conflict with local or state plans for energy efficiency. Furthermore, design of the proposed replacement lift station would use minimal energy (i.e., no natural gas and minimal electricity for pumps and lighting). As a result, the project would comply with existing state energy standards and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

**Conclusion**: The project would have less-than-significant impacts related to energy use.

### *5.2.7 GEOLOGY AND SOILS*

#### Setting

Soils at the project site are mostly disturbed. Elevation at the existing Fort Ord Village Lift Station is 60 ft above mean sea level; the proposed replacement lift station is about 75 ft above mean sea level. At the highest point, the pipeline replacement alignment reaches 185 ft above mean sea level (Google Earth, 2019).

Current and historic ground disturbance are due mostly to grading for access roads and residential development. The Monterey County Soil Survey indicates several mapping units within the project area, including:

- Baywood sand, two to 15 percent slopes (BbC) characterizes the project site east of Highway 1, which is a majority of the site. Baywood soils are prevalent on Fort Ord and used for military trainings maneuvers, they have limited use for grazing and wildlife. The BbC consists of gently sloping to rolling soils on stabilized sand dunes. Runoff is slow to medium, and the erosion hazard is slight to moderate.
- Areas west of Highway 1 are characterized by Dune Land (Df). Df soils consists of gently sloping to steep areas of loose wide-deposited quartz and feldspar sand on hummocks, mounds, and hills. Some dunes are partially stabilized by coastal or inland vegetation, and other dunes are blowing, shifting, and encroaching onto adjacent lands. Drainage is excessive, and permeability is rapid. Runoff is slow, and soil blowing hazard is high to very high. This land is used mostly for recreation and some wildlife habitat, some stabilized dune locations are used for golf courses and building sites. (NRCS, 1978)

The project site is located within a seismically-active area. The largest earthquake fault in the region is the San Andreas, a major active fault located about 21 miles west of the project site. The Ord Terrace fault lies 0.3 miles west of the project site, the Seaside-Chupines fault is 1 mile west, and the Navy fault is 2.73 miles west. No major earthquakes have occurred on these faults during the past 100 years (Monterey County, 2007).

## CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| GEOLOGY AND SOILS. Would the project: | | | | | |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | | X | 1, 2, 4 |
| ii) Strong seismic ground shaking? | | | X | | 1, 2, 3, 4 |
| iii) Seismic-related ground failure, including liquefaction? | | | X | | 1, 2, 3, 4 |
| iv) Landslides? | | | X | | 1, 2, 3, 4 |
| b) Result in substantial soil erosion or the loss of topsoil? | | | X | | 1, 2 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | | X | | 1, 2, 3, 4 |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | | | X | | 1, 2, 3, 4 |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | | | | X | 1, 2 |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | | X | 1, 2, 4, 10 |

## Explanation

ai) **No Impact**. The site is not located within a State of California Earthquake Fault Hazard Zone and no known active faults cross the site. The project site is not mapped within an Alquist-Priolo Earthquake Fault Zone. Therefore, no impact would occur.

aii) **Less-Than-Significant Impact**. Although the proposed project is not located within a State of California Earthquake Fault Hazard Zone and no known active faults cross the site the project is located in a seismically active region. As part of the grading permit (pursuant City of Seaside Municipal Code Section 15.32.090), engineering reports would be required as deemed necessary by the city engineer, these include soil and/or civil engineering reports and/or engineering geology reports. These reports would be required prior to construction to identify potential geotechnical hazards and provide recommendations to minimize these hazards. Furthermore, the project would be constructed to standard engineering and seismic safety design techniques. The project would be designed and constructed in accordance with all state, federal, and other laws, rules, regulations to avoid or minimize potential direct or indirect damage from seismic ground shaking. In addition, the proposed project does not include habitable structures thereby further reducing the risk of loss, injury, or death. This is considered a less-than-significant impact.

aiii) **Less-Than-Significant Impact**. The project site is located in an area of low to medium liquefaction potential. As described above, the project site may be subject to strong ground shaking in the event of a major earthquake and would be required to incorporate the recommendations provided during geotechnical evaluation as required by the City of Seaside grading permit (pursuant City of Seaside Municipal Code Section 15.32.090). The project would be designed and constructed in accordance with all state, federal, and other laws, rules, regulations to avoid or minimize potential direct or indirect damage from seismic related ground failure, including liquefaction. This is considered a less-than-significant impact.

aiv) **Less-than-Significant Impact**. The project site has no appreciable vertical relief and is mapped by the Seaside General Plan as in an area of low landslide potential. The potential for landslides is low and this is considered a less-than-significant impact. See also aiii) above.

b) **Less-Than-Significant Impact**. The project site has a moderate to high susceptibility for erosion. Specifically, lands west of Highway 1 have a higher susceptibility for soil erosion than lands on the west side of Highway 1, where most of the development would occur. Development of the project would require grading of 10,500 cubic yards of fill and 10,500 cubic yards of cut, which could result in a temporary increase in erosion. As described in aiii) above, the project would be required to obtain a grading permit from the City of Seaside which would require submittal of an erosion control plan and drainage plan prior to issuance of a grading permit.

Furthermore, the proposed project would also be subject to the requirements of the NPDES Program General Storm Water Permit, which includes the preparation of a SWPPP, as outlined in *Section 5.2.10 Hydrology and Water Quality* for construction activities disturbing one acre or more. Any temporary erosion related to construction would be minimized through the implementation of standard construction phase BMPs related to erosion. Erosion control measures and associated BMPs would be consistent with the recommended measures contained in the California Stormwater Best Management Practices Handbooks. Applicable measures may include the following:

- Stockpiling and disposing of demolition debris, concrete, and soil.
- Protecting existing storm drain inlets and stabilizing disturbed areas.
- Hydroseeding/re-vegetating disturbed areas.
- Minimizing areas of impervious surfaces.
- Implementing runoff controls (e.g., percolation basins and drainage facilities).
- Properly managing construction materials.
- Managing waste, aggressively controlling litter, and implementing sediment controls.
- Limiting grading to the minimum area necessary for construction and operation of the project.

Compliance with City and state requirements, and the above BMPs would ensure that construction activities associated with the project would not cause substantial soil erosion under CEQA and potential erosion related impacts would be reduced to a less-than-significant level.

c) **Less-Than-Significant Impact**. The project may contain soil and geologic hazards that could result in lateral spreading, subsidence, or liquefaction, which could damage proposed structures. Impacts associated with these soil and geotechnical hazards would be minimized by applying appropriate engineering and construction techniques. Engineering studies would be required as part of the City of Seaside grading permit process to provide recommendations to minimize these hazards as described in aiii) above. This would reduce any potentially significant geotechnical impacts to a less-than-significant level.

d) **Less-Than-Significant Impact**. The project may contain expansive soils, which could damage proposed structures on the site. Impacts associated with expansive soils or other soil hazards would be minimized by applying appropriate engineering and construction techniques. Engineering studies would be required as part of the City of Seaside grading permit process would be prepared to provide recommendations to minimize these hazards as described in aiii) above. This would reduce any potentially significant geotechnical impacts to a less-than-significant level.

e) **No Impact**. The project is a replacement lift station and pipeline and does not propose any septic tanks or alternative wastewater disposal system.

f) **No Impact**. There are no known paleontological resources or unique geologic features on the project site. The project site is not listed within an area identified as containing paleontological resources nor is it located in close proximity to any known paleontological resources. The project would not impact any paleontological resources, since none are known in the project area.

**Conclusion**: The project would have a less-than-significant impact on geology and soils with implementation of identified standard permit conditions.

### *5.2.8 GREENHOUSE GAS EMISSIONS*

#### Setting

Various gases in the earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, the radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect, or climate change, are carbon dioxide ($CO_2$), methane ($CH_4$), $O_3$, water vapor, nitrous oxide ($N_2O$), and chlorofluorocarbons (CFCs). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for enhancing the greenhouse effect. In California, the transportation sector is the largest emitter of GHGs.

#### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| GREENHOUSE GAS EMISSIONS. Would the project: | | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | X | | 1, 2, 7, 8 |
| b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | X | | 1, 2, 7, 8 |

#### Explanation

a) **Less-Than-Significant Impact**. Implementation of the proposed project would contribute GHG emissions that are associated with global climate change. GHG emissions attributable to future development would be primarily associated with increases of $CO_2$ and, to a lesser extent, other GHG pollutants, such as $CH_4$ and $N_2O$. The major sources of GHG emissions associated with the project include, emission during construction and mobile sources.

The project is located in the NCCAB, where air quality is regulated by MBARD. Neither the state, MBARD, Monterey County, nor the City of Seaside have adopted GHG emissions thresholds or a GHG emissions reduction plan that would apply to the project. However, it is important to note, that other air districts within the State of California have adopted recommended CEQA significance thresholds for GHG emissions. For instance, on March 28, 2012 the San Luis Obispo Air Pollution Control District (SLOAPCD) approved thresholds of significance for the evaluation of project-related increases of GHG emissions. The SLOAPCD's significance thresholds include both qualitative and quantitative threshold options, which include a qualitative threshold that is consistent with the AB 32 scoping plan measures and goals and a quantitative bright-line threshold of 1,150 metric tons of carbon dioxide equivalent (MTCO2e) per year. The GHG significance thresholds are based on AB 32 GHG emission reduction goals, which take into consideration the emission reduction strategies outlined in the California Air Resources Board's Scoping Plan. Development projects located within these jurisdictions that would exceed these thresholds would be considered to have a potentially significant impact on the environment which could conflict with applicable GHG-reduction plans, policies and regulations. Projects with GHG emissions that do not exceed the applicable threshold would be considered to have a less-than-significant impact on the environment and would not be anticipated to conflict with AB 32 GHG emission reduction goals. Given that the MBARD has not yet adopted recommended GHG significance thresholds, the above thresholds were relied upon for evaluation of the proposed project.

As discussed in *Section 5.2.3 Air Quality*, above, operation and construction of the proposed project would not exceed established thresholds for air quality emissions. The proposed project would replace the existing lift station and pipeline and would not increase operational energy demand beyond existing use. The project would generate temporary construction-related GHG emissions, with most of the emissions generated during the grading phase of construction, which would be minimal and is not anticipated to generate GHG emissions in excess of the above thresholds. Construction would generate an estimated six round trip truck trips per day for 100 working days, and two round-trip truck trips for equipment delivery for 50 days. An additional 10 one-way vehicle trips per day for worker commutes. As such, the project would not generate substantial new or altered sources of GHGs emissions. Any potential impacts from GHG generation during construction would be short-term and temporary. As a result, the project is not anticipated to generate GHG, either directly or indirectly, that may have a significant impact on the environment.

b) **Less-Than-Significant Impact**. Neither the state, MBARD, Monterey County, nor the City of Seaside have adopted GHG emissions thresholds or a GHG emissions reduction plan that would apply to the project. However, as shown above, the project is not expected to generate GHG emissions that would exceed applicable thresholds. The proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases as described above. This represents a less-than-significant impact.

**Conclusion**: The project would have a less-than-significant impact related to GHG emissions.

## *5.2.9 HAZARDS AND HAZARDOUS MATERIALS*

### Setting

Hazardous materials, as defined by the CCR, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. Hazardous materials and waste can result in public health hazards if improperly handled, released into the soil or groundwater, or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer.

The proposed project would replace an existing lift station and wastewater pipeline. It would not create new hazards, nor would it handle or release hazardous materials. The project site is located within a residential area on a parcel owned by the City of Seaside, and the facilities proposed for decommission are owned by the State Parks. Neither area is within the vicinity of hazardous waste facilities. Although the project site is not specifically identified, the entire former Fort Ord is included on the Federal National Priority List (NPL), also known as the Superfund list. Fort Ord was established in 1917 and closed in 1994.

The project site is comprised of multiple former U.S. Army parcels. The existing Fort Ord Village Lift Station is located within U.S. Army parcel number S3.1.2, and was transferred to State Parks. The proposed pump station (L29), proposed pipeline (L.13.2), and access easement (L30) have been transferred to the City of Seaside. U.S. Army Parcel F2.2, where the northern half of the pipeline would be placed and connect to the SSMH C6, was retained by the Department of Defense (DoD). Multiple groundwater plumes exist within the former military base from multiple source areas and consist of chlorinated VOCs. However, no groundwater plumes exist under the proposed project site. The plumes have been evaluated, monitored, and remediated.

### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| HAZARDS AND HAZARDOUS MATERIALS. Would the project: | | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | X | | | 1, 2 |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | X | | | 1, 2 |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school? | | X | | | 1, 2 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | X | | | 1, 2 |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | | | | X | 1, 2 |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X | 1, 2 |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | | | X | | 1, 2, 11 |

## Explanation

a, b) **Less-Than-Significant Impact with Mitigation.** Construction and operation of the project would not create a significant impact due to routine transport, use, or disposal of hazardous materials. No hazardous materials are anticipated to be stored on site during operation of the proposed project. Construction activities would, however, require the temporary use of hazardous substances, such as fuel for construction equipment, oil, solvents, or paints. In addition, there is also low possibility of a wastewater spill during construction. As a result, the project could result in the exposure of persons and/or the environment to an adverse environmental impact due to the accidental release of a hazardous material. These materials would be handled and stored in compliance with all local, state, and federal regulations pertaining to hazardous materials. In addition, the following mitigation would minimize potential impacts to less than significant.

### Mitigation

**MM HAZ-1: Spill Prevention and Control Plan**

Prior to commencement of construction-related activities, the MCWD or Contractor shall prepare a Spill Prevention and Control Plan that addresses potential impacts associated with hazardous material usage during construction and operation. The Spill Prevention and Control Plan shall, at a minimum, consist of the following:

- Identify applicable safety and clean-up procedures in the event of a spill.
- Designate construction staging areas where hazardous materials may be stored. All staging areas shall be located outside of sensitive biological areas. Staging areas shall be designed to contain runoff to prevent contaminants (e.g., oil, grease, fuel products, etc.) from draining towards receiving waters and sensitive areas.
- Identify appropriate emergency notification procedures and emergency contacts.

- Designated location where a spill kit shall be maintained on-site throughout the project.
- Identify dedicated storage areas where hazardous material may be stored and/or used during construction

The MCWD or Contractor will be responsible for implementing the Spill Prevention and Control Plan on-site for the duration of construction, and all personnel working on the site would be notified of its location.

With the incorporation of the above Mitigation Measure, as well as local, state, and federal regulations and agreements, impacts related to accidental release of a hazardous materials would be less than significant.

c) **Less-Than-Significant Impact with Mitigation**. The proposed pump station site is located within ¼ mile of a school (Seaside High School to the south). However, the project is a replacement sewer project and would not routinely emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Any impacts due to accidental release during construction would be reduced to a less-than-significant level with **Mitigation Measure HAZ-1** described above. See also Response a, above.

d) **Less-Than-Significant Impact with Mitigation**. The proposed project is located on the former Fort Ord, which is included on a hazardous materials site compiled pursuant to Government Code Section 65962.5. Due to the sites historical use as part of a former military installation, construction activities within this area have the potential to encounter unexploded ordnance which, if not identified and properly handled, could cause injury or death to construction workers.

The proposed project components east of Highway 1 have already undergone remediation actions and either have been transferred or retained by the DoD. In order for any ground disturbance activities to commence, the MCWD and its contractors must comply with the FORA Right-of-Entry process and the City of Seaside Municipal Code Chapter 15.34 (i.e., the "Ordnance Remediation District Regulations of the City" in Ordinance 924). This ordinance establishes special standards and procedures for digging and excavation on those properties in the former Fort Ord military base which are suspected of containing ordnance and explosives (also called munitions and explosives of concern). This ordinance requires that a permit be obtained from the City for any excavation, digging, development, or ground disturbance of any type involving the displacement of ten cubic yards or more of soil. The permit requirements include providing each site worker a copy of the Ordnance and Explosives Safety Alert; complying with all requirements placed on the property by an agreement between the City, FORA, and Department of Toxic Substances Control (DTSC); obtaining ordnance and explosives construction support; ceasing soil disturbance activities upon discovery of suspected ordnance and notifying the Seaside Police department, the Presidio law enforcement, the U.S. Army and DTSC; coordinating appropriate response actions with the U.S. Army and DTSC; and reporting of project findings. Compliance with existing regulations for construction work at the former Fort Ord would reduce the potential impact of encountering unexploded ordnance by construction workers to less than significant.

The project site located west of Highway 1 on the FODSP has been transferred to the State Parks. It has been identified at this location that there is the potential for residual hazards due to former military use. The U.S. Army identified that the project site could contain Munitions and Explosives

of Concern (MEC), lead-based paint (LBP), and asbestos containing material (ACM). As a result, the project could result in additional impacts due to historical hazardous material contamination on the site. According to the U.S. Army, the project could expose construction personnel or future site occupants to existing hazards, including MEC related hazards and the presence of LBP, and ACM in existing structures.[8] The demolition of the existing Fort Ord Village Lift Station could, therefore, expose construction personnel and future site occupants to potential hazards. Mitigation measures are necessary to ensure that impacts due to historical contamination are less than significant.

Due to potential concerns related to residual hazards, State Parks and DTSC entered into a memorandum of understanding (MOU) that specifies additional safety precautions (e.g. safety training, soil management, etc.). This MOU is in addition to the requirements of the transfer deed, which stipulates additional restrictions related to residential land uses and groundwater use in specified areas of the FODSP, consistent with the MOU. Any activities proposed within the "restricted area" are subject to specific soil management requirements contained in the MOU, the project site proposed for decommission is within the "restricted area."

Consistent with the requirements of the MOU, transfer deed, FODSP policies, this IS/MND includes mitigation to minimize potential residual hazards (e.g. LBP, ACM, MEC, etc.) associated with former military use. The incorporation of these requirements as mitigation would reduce impacts to a less-than-significant level by ensuring that adequate measures are in place to remediate potential hazards (if present), provide appropriate safety training, and implement necessary safety precautions in accordance with applicable regulatory requirements. The following mitigation measures are consistent with the requirements of the MOU and transfer deed, as well as mitigation contained in the FODSP General Plan EIR. Implementation of the following mitigation would minimize impacts to a less-than-significant level.

**Mitigation**

**MM HAZ-2: Survey of Existing Buildings for Asbestos**

In order to reduce human health risks to construction personnel and future site occupants due to the potential presence of ACM at the existing Fort Ord Village Lift Station, the MCWD or Contractor will retain a qualified consultant to survey all buildings for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition or subsequent reuse. Asbestos removal activities will be conducted by a California-licensed asbestos abatement contractor, and appropriate notifications to the state Occupational Health and Safety Administration and Central Coast Air Quality Management District shall occur if ACM are present. The MCWD or the Contractor will dispose of renovation or demolition wastes in accordance with federal and

[8] The FOST also identified that groundwater underlying the site may be contaminated by volatile organic compounds (VOCs), primarily trichloroethene (TCE). Base activities resulted in the presence of organic compounds in the groundwater beneath Fort Ord. Organic contaminants, most commonly TCE, formed a groundwater plume in the various aquifers underlying the former Fort Ord near the former landfill. Efforts are currently being undertaken by the U.S. Army to address groundwater contamination. Historical groundwater contamination would not affect the proposed project; land use restrictions, as part of the land transfer process, prohibit the use of groundwater underlying the site. All potable water would be from existing municipal supplies, which are not affected by the TCE plume.

state waste disposal requirements and will follow all federal and state Occupational Health and Safety Administration requirements.

**MM HAZ-3: Survey of Existing Buildings for LBP**

In order to reduce human health risks to construction personnel and future site occupants due to the potential presence of LBP at the existing Fort Ord Village Lift Station, the MCWD or Contractor will retain a qualified consultant to conduct a lead-based paint survey to evaluate the presence of lead-based paint prior to demolition or renovation of existing on-site structures. If lead-based paint is observed within existing buildings and the surrounding area, the MCWD or the Contractor will remove and dispose of all peeling and flaking lead-based paint separately from building debris, in accordance with current DTSC policies. All site soils contaminated by lead-based paint will be removed and properly disposed prior to any construction activities.

**MM HAZ-4: MEC Safety Measures**

In order to minimize potential health and safety risks due to the exposure to MEC, prior to the commencement of any ground disturbing activity proposed, the MCWD or the Contractor, will coordinate with the State Parks to develop a safety program that specifies protocols relative to MEC in accordance with State Parks, Cal-OSHA, and U.S. Army regulations. In the event that MEC are uncovered during the course of construction and other site disturbing activities, all work will cease and the MCWD or Contractor will notify the State Parks and Presidio Police. Work will not commence until the ordnance has been removed from the site and the surrounding site soils have been sampled and remediated to acceptable levels if soil sampling reveals lead or other soil contamination has occurred due to the presence of munitions.

**MM HAZ-5: MEC Safety Training**

In order to minimize potential health and safety risks due to the exposure to MEC, all construction personnel will attend a U.S. Army sponsored MEC safety debriefing, prior to the any ground-disturbing activities. This briefing will identify the variety of MEC that is expected to exist on the former Fort Ord and the necessary actions to be taken if a suspicious item is discovered during the course of project construction.

With the incorporation of the above mitigation measures, as well as local, state, and federal regulations and agreements, impacts related to hazardous materials sites would be less than significant.

e) **No Impact**. The project site is located approximately 2.5 miles northwest of the Monterey Regional Airport. The project site is not located within an airport land use plan or within two miles of a public airport or public use airport and would not result in a safety hazard or be exposed to excessive noise due to airport operations.

f) **No Impact.** The project would not impede emergency response or evacuation plans, as it is not part of vehicular transportation network used by emergency vehicles.

g) **Less-Than-Significant Impact**. The project site is surrounded by residential development and is not located within a state responsibility area, as designated by the California Department of Forestry and Fire Protection (Cal Fire). Due to the project's residential location and lack of interface with any natural areas susceptible to wildfire this is a less-than-significant impact (also see *Section 5.2.20 Wildfire*).

**Conclusion**: The project would have a less-than-significant impact related to hazards and hazardous materials with incorporated mitigation measures identified above.

## *5.2.10 HYDROLOGY AND WATER QUALITY*

### Setting

The site is currently open space with an existing drainage basin. Runoff from the site flows into the adjacent City drainage basin. The project site does not contain any natural drainages or waterways. The Flood Insurance Rate Maps issued by the Federal Emergency Management Agency (FEMA) indicate that a majority of the project site, east of Highway 1, is located within Zone X (shaded); the area west of Highway 1 is located within Zone X (unshaded). Zone X is defined as an area of moderate and minimal flood risk. Shaded areas are characterized as moderate risk within the 0.2-percent-annula-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. Unshaded areas are characterized as moderate risk areas outside the 1-percent and 0.2-percent-annual-chance floodplains. No base flood elevations or base flood depths are shown within these zones.

### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| HYDROLOGY AND WATER QUALITY. Would the project: | | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | | | X | | 1, 2 |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | | | X | | 1, 2 |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | X | | 1, 2 |
| i) Result in substantial erosion or siltation on- or off-site; | | | X | | 1, 2 |
| ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | | | X | | 1, 2 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | | | X | | 1, 2 |
| iv) impede or redirect flood flows? | | | X | | 1, 2 |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | X | | 1, 2 |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | X | | 1, 2 |

## Explanation

a) **Less-Than-Significant Impact**. The proposed project is located in an urban environment and operations would not utilize materials that would significantly harm water quality. Furthermore, the project would comply with applicable regulations and laws to ensure proper discharge into the City's stormwater and sanitary infrastructure as described below.

b) **Less-Than-Significant Impact**. The depth of groundwater in the site vicinity is expected to be at sea level. The project proposes grading to 20 ft for the pump station and 10 ft at the bottom of the trench for pipeline installation. Since the lowest point of the proposed project (the location of the proposed pump station) sits at 75 ft above sea level, the proposed project would not decrease groundwater supplies or interfere substantially with groundwater recharge (such that the project may impede sustainable groundwater management of the basin) because it would not access groundwater.

ci) **Less-Than-Significant Impact**. Construction of the project would require grading activities that could result in a temporary increase in erosion affecting the quality of storm water runoff. The project would be required to obtain a grading permit through the City of Seaside as well as comply with the SWRCB's NPDES General Construction Activities Permit. The MCWD would develop, implement and maintain a SWPPP to control the discharge of stormwater pollutants including sediments associated with construction activities. This stormwater permit would be administered by the SWRCB.

As part of the NPDES permit and Grading Permit, the project shall incorporate BMPs into the project to control the discharge of stormwater pollutants including sediments associated with construction activities. Examples of BMPs include preventing spills and leaks, cleaning up spills immediately after they happen, storing materials under cover, and covering and maintaining dumpsters. Prior to the issuance of a grading permit, MCWD may be required to submit an Erosion Control Plan to the Department of Public Works (pursuant City of Seaside Municipal Code Section 15.32.180).

When construction is complete, a Notice of Termination (NOT) for the General Permit for Construction shall be filed with the SWRCB. The NOT shall document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of,

and a post-construction stormwater management plan is in place as described in the SWPPP for the site.

The project would somewhat increase impervious surfaces on the proposed replacement lift station site and slightly modify the drainage pattern on-site. Consistent with the regulations and policies described above, the project would follow the standard permit conditions associated with the NPDES and City Grading Permit.

In conclusion, the project would not substantially alter existing drainage patterns, cause alteration of streams or rivers, or result in substantial erosion or siltation on or off site by complying with the state's Construction Stormwater Permit and the City's Grading Ordinance.

cii) **Less-Than-Significant Impact**. The project would result in an increase of 1,600 SF of impervious surface at the proposed replacement lift station site compared to existing developed conditions. The project would implement a stormwater control plan to manage runoff from the site. Runoff would be collected in the adjacent stormwater detention basin. As a result, the proposed project would have a less-than-significant impact associated with flooding on- or off-site due to increased surface runoff.

ciii) **Less-Than-Significant Impact**. The project proposes to connect to the existing detention basin adjacent to the proposed pump station. The proposed pipelines would be underground and, therefore, would not provide a source of polluted runoff. The project is not expected to contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems or result in substantial additional sources of polluted runoff. See also Response ci, above.

civ) **Less-Than-Significant Impact**. The project is located outside the 100-year floodplain, as mapped by FEMA (site is within Flood Zone X) and would not significantly impede or redirect flood flows.

d) **Less-Than-Significant Impact**. As described above, the project is not located within a 100-year floodplain or flood hazard zone. In addition, the project site is not located in an area subject to significant seiche or release of pollutants due to project inundation. The project site is located two miles away from Roberts Lake and Laguna Grande Lake, which are identified in the Seaside General Plan Safety Element as susceptible to flooding and other impacts from seiches. These lakes would not create a large enough seiche that would put the project site at risk of inundation. Therefore, the risk associated with possible seiche waves is not considered a potential constraint or a potentially significant impact of the proposed project. In addition, although the project site is located adjacent to Monterey Bay, according to the Tsunami Inundation Map for Emergency Planning for the Seaside Quadrangle (2009), the project site is not located within the Tsunami inundation zone. The risk associated with tsunamis is, therefore, not considered a potential hazard or a potentially significant impact.

e) **Less-Than-Significant Impact**. The project consists of development in a residential area. The proposed project would be required to comply with the City Grading Permit standard permit conditions, as well as standard BMPs during construction. As described above, the project would not result in significant water quality or groundwater quality impacts that would conflict or obstruct

implementation of a water quality control or sustainable groundwater management plan since, as outlined above.

**Conclusion**: The project would have a less-than-significant impact on hydrology and water quality.

### *5.2.11 LAND USE*

#### Setting

A majority of the project is located on the east side of Highway 1 within the City of Seaside limits. The portion of the project proposed for demolition on the west side of Highway 1 is within State Parks land. The site of the proposed pump station is currently within a residential area and contains a detention basin. The proposed pipelines would run through residential neighborhoods in the existing right-of-way. The project site is surrounded by the following uses:

- North: Residential;
- East: Residential;
- South: Residential; and
- West: Monterey Road, Highway 1, State Parks, and the Pacific Ocean.

The applicable planning document for the proposed pump station and pipeline is the City of Seaside General Plans. The proposed new lift station area is designated and zoned Community Commercial (CC). The new pipeline would occur within existing roadways. The existing Fort Ord Village Lift Station is located in an easement on State Parks lands within the FODSP, which is governed by the FODSP General Plan. The FODSP General Plan identifies the project site as a natural resource management zone. In addition, the existing Fort Ord Village Lift Station is located within the California Coastal Zone and is subject to the requirements of the California Coastal Act of 1976, as amended.

The entire project site lies within the former Fort Ord and is subject to the requirements of the HMP. The existing lift station site is designated by the HMP as "development with reserve areas or development with restrictions," and the proposed replacement pump station and pipeline are located within areas designated as "development."

#### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| LAND USE AND PLANNING. Would the project: | | | | | |
| a) Physically divide an established community? | | | | X | 1, 2, 3 |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | X | | 1, 2, 3, 4 |

### Explanation

a) **No Impact**. The project is the replacement of the existing Fort Ord Village Lift Station, force main, and associated wastewater system, therefore, it would not physically divide an established community.

b) **Less-Than-Significant Impact**. The project would not conflict with any applicable land use plan, policy, or regulation adopted for the purposes of avoiding and/or mitigating an adverse environmental effect. A consistency analysis was performed to ensure the proposed project would be consistent with all relevant plans, policies, and regulations (e.g. FODSP, City of Seaside General Plan, California Coastal Act, HMP). In addition to the proposed project being consistent with relevant planning documents, the replacement of the existing Fort Ord Village Lift Station, force main, and associated wastewater system would be consistent with current zoning and land use designations. The proposed project would be required to obtain a number of approvals and permits, listed in *Section 2.6 Project Approval and Permits*, which would further ensure consistency with applicable regulations. Furthermore, the proposed project is located within the plan area of the HMP and proposed HCP for former Fort Ord; this is addressed in *Section 5.2.4 Biological Resources* (checklist item f) and the proposed project was determined to be consistent with these plans. Where appropriate, this IS/MND has identified a number of mitigation measures to further ensure that potentially significant impacts would be reduced to a less-than-significant. As a result, the proposed project is not anticipated to conflict with any policies adopted for the purposes of avoiding and/or substantially lessening an adverse impact.

**Conclusion**: The project would have a less-than-significant impact on land use and planning.

## *5.2.12 MINERAL RESOURCES*

### Setting

In accordance with the Surface Mining and Reclamation Act of 1975 (SMARA), the California Geological Survey (CGS) maps the regional significance of mineral resources throughout the state, with priority given to areas where future mineral resource extraction could be precluded by incompatible land use or to mineral resources likely to be mined during the 50-year period following their classification. The CGS delineates Mineral Resource Zones (MRZs) based on their mineral resource potential.

The proposed project site is classified MRZ-2 which applies to areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists of their presence.

### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| MINERAL RESOURCES. Would the project: | | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | | | X | | 1, 2, 3, 4 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | | | X | | 1, 2, 3, 4 |

**Explanation**

a, b) **Less-Than-Significant Impact**. Although the project site is classified MRZ-2 by the CGS, the proposed project is located in an already disturbed residential area and is consistent the zoning designation. Further, implementation of the proposed project would not result in any large-scale development or other activities requiring significant removal of the mineral deposits present. This is considered a less-than-significant impact.

**Conclusion**: The project would have a less-than-significant impact on mineral resources.

### *5.2.13 NOISE*

**Setting**

In the context of this document, "noise" is defined as unwanted sound. The primary source of existing noise in the proposed project area is traffic on adjacent roadways.

The project site is located in a residential area east of Highway 1 and on State Parks land west of Highway 1. Policies in the City of Seaside General Plan identify noise standards to avoid conflicts between noise-sensitive uses and noise source contributors. In addition, FODSP General Plan includes a number of guidelines to address potential noise-related impacts; applicable guidelines include NOI-1 through NOI-3. These guidelines generally require that State Parks: 1) include setbacks from SR 1 to minimize traffic noise (NOI-1); 2) reduce noise generated from new uses (NOI-2); and, 3) implement noise abatement measures as part of new projects (NOI-3).The only significant source of noise in the project area is from traffic along the local roadways.

Sensitive noise receptors in the vicinity of the project consist of existing residences surrounding the areas proposed for the replacement lift station and pipeline as well as Seaside High School, which lies approximately 0.25 mile south from the proposed replacement lift station. The nearest residences are located approximately 400 ft from the proposed replacement lift station, and residences occur adjacent to the roads proposed for pipeline installation.

The City has adopted a noise ordinance (Chapter 9.12 of the Municipal Code), which seeks to control noise by determining time periods when activities are allowed or prohibited. For example, excessive unnecessary or unusually loud construction noise activity before 7:00 a.m. or after 7:00 p.m. daily (except Saturday, Sunday, and holidays when the hours are before 9:00 a.m. and after 7:00 p.m.) are prohibited. The City's Municipal Code does not contain quantitative noise limits.

## CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| NOISE. Would the project result in | | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | X | | | 1, 2, 3 |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | | | X | | 1, 2, 3, 5 |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | | X | 1, 2, 3 |

## Explanation

a) **Less-Than-Significant Impact with Mitigation**. The project includes the replacement of an existing lift station, which would result in the relocation of an existing permanent noise source. The primary source of noise associated with the replacement lift station is the associated pumps. However, the proposed lift station is located adjacent to Monterey Road and Highway 1 and the noise generated by pumps associated with the lift station would be minimal compared to the existing traffic noise. The replacement lift station would not result in an increase in the ambient noise levels within the vicinity, and this is considered a less-than-significant impact. An emergency generator would be on-site, but would include a sound enclosure.

Construction of the project would result in short-term noise increases in the project vicinity. Noise impacts from construction activities depend on the type of construction equipment used, the timing and length of activities, the distance between the noise generating construction activities and receptors, and shielding. Demolition of the existing lift station is estimated to take four weeks, pipeline construction is anticipated to require eight weeks, and lift station construction is anticipated to require four months. Construction equipment would include, but would not be limited to, tracked excavator, backhoe, water truck, concrete trucks, dump trucks, flat-bed delivery trucks, vibratory compacters, asphalt paving equipment, and trailer-mounted bypass pumps.

Typical hourly average construction noise levels could be as loud as 75 - 80 decibels at a distance of $\pm$100ft from the construction area during active construction periods (DOT, 2006). Noise associated with the construction of the project would be temporary and intermittent, and would be limited to weekdays between the hours of 8:00 a.m. and 4:00 p.m. City of Seaside Municipal Code exempts noise level impacts when construction work occurs between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday and between the hours of 7:00 p.m. and 9:00 a.m. on weekends and holidays. This exemption recognizes that construction activity is typically short-term in duration and a normal part of the daytime urban environment.

However, one night of night-time construction would be required for the system switch-over from existing to new at the proposed replacement lift station. In order to safely switch over to the new system, construction is required at night as this is the time of the lowest flow. The closest sensitive receptors to proposed nighttime construction are single-family residences located approximately 400 ft east from the proposed replacement lift station site. This is considered a potentially significant impact that can be mitigated to a less-than-significant level with implementation of **MM NOISE-1** below.

**Mitigation**

**MM NOISE-1: Night-time Construction Notification**

Residents and other sensitive receptors within 900 ft of nighttime construction shall be notified of the construction location, nature of activities, and schedule, in writing, at least 14 days prior to the commencement of nighttime construction activities. The notice shall also be posted at the proposed replacement lift station location. As a part of the notification process the MCWD and/or its Contractor shall designate a construction disturbance coordinator who would be responsible for responding to nighttime construction complaints. The MCWD and/or its Contractor shall return all calls within 24 hours to answer noise questions and handle complaints. A contact number for the construction disturbance coordinator shall be conspicuously placed at the proposed replacement pump station and included in the notice. Prior to distributing the notice to nearby residences, the MCWD or the Contractor shall first submit the notice to the City of Seaside Planning Department for review and approval.

With incorporation of **MM NOISE-1** above, temporary construction noise impacts would be less than significant.

b) **Less-Than-Significant Impact**. Construction of the project would generate temporary groundborne vibration. Construction activities would include site clearing and vegetation removal, demolition of the existing Fort Ord Village Lift Station, excavation, grading and trenching, site preparation work, and project construction.

Vibration amplitudes are usually expressed as peak particle velocity (PPV) or the velocity of a parcel (real or imaged) in a medium as it transmits a wave. The Federal Transit Authority has published standard vibration levels and peak particle velocities for construction equipment. As stated previously, sensitive receptors in the vicinity of the project consist of single-family residences located approximately 400 ft east from the proposed pump station site. As well as additional single-family houses surround the residential streets the pipeline would be built under, which could be as close as 50 ft from installation of the pipeline. **Table 3** identifies anticipated approximate velocity level at 25 ft and PPV for each type of equipment at a distance of 25, 50, and 400 ft.

| Table 3<br>Vibration Velocities for Construction Equipment | | | | |
|---|---|---|---|---|
| **Equipment** | **Approximate Velocity Level at 25ft (VdB)** | **Approximate PPV at 25ft (inches/second)** | **Approximate PPV at 50ft (inches/second)** | **Approximate PPV at 400ft (inches/second)** |
| Pile Driving (sonic) | 104 | 0.644 | N/A[1] | 0.006 |
| Pile Driver (impact) | 112 | 1.518 | N/A[1] | 0.015 |
| Large Bulldozers | 87 | 0.089 | 0.031 | 0.001 |
| Small Bulldozer | 58 | 0.003 | 0.001 | 0.000 |
| Loaded Trucks | 86 | 0.076 | 0.027 | 0.001 |
| Jackhammer | 79 | 0.035 | N/A[1] | 0.000 |
| Note: Data reflects typical vibration level.<br>Source: U.S. Department of Transportation, *Transportation and Construction Vibration Guidance Manual,* September 2013. | | | | |

The City of Seaside does not have any policies regulating construction vibration, therefore, for purposes of this analysis, excessive groundborne vibration would be 0.3 PPV (as derived from the California Department of Transportation, 2013. *Transportation and Construction Vibration Guidance Manual*).[9] Ground disturbing activities associated with project grading could involve the operation of large and small bulldozers, vibratory compactors, and loaded trucks. As shown above, the vibration level associated with these types of equipment would attenuate to a maximum of approximately 0.003 inches per second at 25 ft, which would be barely perceptible and would be well under the threshold of 0.3 inches per second. Moreover, sheet-pile shoring may be installed around the lift station excavation using vibratory equipment. As such, vibration associated with the construction of the proposed project would not be excessive. For these reasons, this represents a less-than-significant impact.

c) **No Impact**. The project is not located within an airport land use plan, public airport, or private airstrip.

**Conclusion**: With incorporation of the mitigation measure above identified, the proposed project would result in a less-than-significant noise impact.

### *5.2.14 POPULATION AND HOUSING*

#### Setting

The proposed project would demolish the existing Fort Ord Village Force Main and construct a replacement lift station and wastewater pipeline. The project is located adjacent to residential neighborhoods on a parcel owned by the City of Seaside and would not displace any existing housing.

[9] While the proposed project is not subject to Caltrans regulations these groundborne vibration and noise thresholds are commonly used for projects in the State of California.

### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| POPULATION AND HOUSING. Would the project: | | | | | |
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | X | 1, 2 |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | | | | X | 1, 2 |

### Explanation

a, b) **No Impact**. The proposed project consists of the construction of a replacement lift station and wastewater pipeline, and is located in an undeveloped parcel or within existing roadways. The project would not constitute a change which would induce substantial population growth in the area, nor would the project affect housing availability, or displace residents. Therefore, no impact to population and housing would occur.

**Conclusion**: The project would have no impact on population and housing.

## *5.2.15 PUBLIC SERVICES*

### Setting

*Fire Protection*: Fire protection services are provided to the replacement lift station project site by the Seaside Fire Department. The City operates one fire station located at 1635 Broadway Avenue that is located approximately 2.5 miles from the project site by way of surface streets.

Cal Fire is responsible for providing fire protection services within FODSP. Emergency response is provided from the Carmel Hill fire station, which is located in Pebble Beach. This station is staffed 24 hours a day, seven days a week, with eight persons and one Battalion Chief. Fire protection services are also provided via mutual aid agreements with the Presidio of Monterey Fire Department and the City of Seaside Fire Department.

*Police Protection*: Police protection services are provided to the replacement lift station project site by the Seaside Police Department. The City operates one police station which is located at 440 Harcourt Avenue, which is located approximately 2.5 miles from the project site by way of surface streets.

Law enforcement and emergency medical response services within the FODSP are the responsibility of State Parks. Park Rangers and Lifeguards are responsible for providing police protection services. Department Rangers and Lifeguards have the primary public safety and law enforcement responsibility for the FODSP property; the Monterey County Sheriff Department and Seaside Police Department have concurrent jurisdiction with support from other law enforcement agencies.

*Schools:* There are numerous educational facilities in proximity to proposed project, including schools located in the cities of Marina and Seaside. The proposed project is located within the Seaside School District. The schools in the Seaside School District serving the project are as follows: Gearhart and Heights Elementary School, Broadway Middle School, and Seaside High School. In addition, the California State University Monterey Bay (CSUMB), which is located in the former Fort Ord, is also in close proximity to the proposed project.

*Parks*: The existing Fort Ord Village Lift Station, proposed for demolition, is located within the FODSP, and is adjacent to the Monterey Bay Coastal Recreational Trail.

## CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: | | | | | |
| a) Fire protection? | | | X | | 1, 2, 3 |
| b) Police protection? | | | X | | 1, 2, 3 |
| c) Schools? | | | | X | 1, 2, 3 |
| d) Parks? | | | X | | 1, 2, 3 |
| e) Other public facilities? | | | | X | 1, 2, 3 |

## Explanation

a, b) **Less-Than-Significant Impact**. The proposed project consists of a replacement lift station and wastewater pipeline and is consistent with the existing use and zoning of the parcel, it would have no post-construction impact on police or fire services. Although unlikely, City of Seaside Police or Fire could be required to respond to potential construction-related emergency. Pipeline construction is anticipated to require eight weeks, and lift station construction is anticipated to require four months. The limited construction duration would not significantly impact fire protection or police protection services or require the construction of new or remodeled facilities.

c, e) **No Impact**. Since the project is a replacement lift station and wastewater pipeline, and consistent with the current use and zoning of the parcel, it would not be considered a project that could induce population growth that would generate new students or impact other public facilities, such as libraries. As a result, the project would have no physical impact on schools or other public facilities and would not require the construction of new or remodeled facilities.

d) **Less-Than-Significant Impact**. The existing Fort Ord Village Lift Station is located on the FODSP and adjacent to the Monterey Bay Coastal Recreational Trail. However, construction of the project would not interfere with any potential or ongoing park activities or trails. Moreover,

these impacts would be temporary. See *Section 5.2.15 Recreation*, for further discussion. This is a less-than-significant impact.

**Conclusion**: The project would have a less-than-significant impact on public services.

### *5.2.16 RECREATION*

#### Setting

The portion of the project proposed for demolition is within the FODSP. The City of Seaside, where a majority of the project is proposed, owns and/or maintains 28 park and recreation areas totaling 50.71 acres (City of Seaside, 2005).

#### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| RECREATION. Would the project: | | | | | |
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | X | 1, 2 |
| b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? | | | | X | 1, 2 |

#### Explanation

a, b) **No Impact**. The existing Fort Ord Village Lift Station is within the FODSP; however, demolition of these facilities would not impact park operations. Furthermore, the proposed replacement lift station and pipeline proposed on the east side of Highway 1 would not increase the use of existing neighborhood parks or require the construction of additional facilities. The proposed project is consistent with the current use and would not induce population growth that would generate new park users. Therefore, no impact to recreational facilities would occur.

**Conclusion**: The project would have no impact on recreational facilities.

### *5.2.17 TRANSPORTATION*

#### Setting

Regional access to the project site is provided from Highway 1 onto surface streets. The proposed replacement lift station would be accessed via Monterey Road, a two-lane arterial roadway with sidewalks but no bike lanes or parking spots. During construction, the existing force main would be accessed via an unpaved road along the pipeline easement starting at the west end of Gigling Road, and the existing Fort Ord Village Lift Station would be accessed from the bike lane/paved maintenance road through the FODSP.

The City of Seaside maintains Level of Service (LOS) standards that define the minimum acceptable operating characteristics for intersections and streets. LOS is a standard measure of traffic service along a roadway or at an intersection. It ranges from A to F, where LOS A is best and LOS F is worst. The City considers LOS C to be the upper limit of satisfactory operations for signalized intersections. For unsignalized intersections, the City considers LOS E for two-way stop-controlled intersections, and LOS C for all-way stop-controlled intersections.

The project would require excavation within City of Seaside right-of-way. The MCWD would be responsible for obtaining an encroachment permit from the City of Seaside prior to the start of construction. The encroachment permit would require a traffic control plan.

## CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| TRANSPORTATION/TRAFFIC. Would the project: | | | | | |
| a) Conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | | | X | | 1, 2, 3 |
| b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? | | | X | | 1, 2, 3 |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | X | | 1, 2, 3 |
| d) Result in inadequate emergency access? | | | X | | 1, 2, 3 |

## Explanation

a) **Less-Than-Significant Impact**. The proposed replacement lift station and wastewater pipeline would have no post-construction impacts on traffic and transportation. The proposed project would require minimal maintenance trips; however, these would not be in excess of maintenance trips associated with the existing system and would not constitute a significant impact. The project would result in a temporary increase in traffic during construction. Construction would generate an estimated six round trip truck trips per day for 100 working days, and two round-trip truck trips for equipment delivery for 50 days. An additional 10 one-way vehicle trips per day for worker commutes. These impacts would be temporary and relatively low. Additionally, work within roads would require traffic control and flagmen. As a result, traffic increases would constitute a less-than-significant impact.

b) **Less-Than-Significant Impact**. The proposed project consists of a replacement lift station and wastewater pipeline to support an existing system and would not generate additional vehicle miles traveled (VMT) as defined by Guidelines Section 15064.3, subdivision (b). Furthermore, as stated above, the City of Seaside utilize LOS as the primary measures of traffic impacts and has not adopted threshold for Guidelines Section 15064.3, subdivision (b) which uses vehicle miles traveled (VMT) as the metric to assess transportation impacts from new development under CEQA.

Therefore, the project would not conflict with CEQA Guidelines Section 15064.3(b), which calls for evaluation of a project's transportation impacts based on VMT. As a result, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

c) **Less-Than-Significant Impact**. The replacement lift station and pipeline would not substantially increase hazards due to a design feature (for example, sharp curves or dangerous intersections) or incompatible uses. Overall, the site plan shows adequate access to the site and operational issues associated with maintenance trips. No additional roads or design features are required.

d) **Less-Than-Significant Impact**. The proposed replacement lift station would only require minimal maintenance trips. The MCWD would work with the City to assure that emergency vehicle and firefighter access are adequately addressed in the final project design. The impacts to emergency access would, therefore, be less than significant.

**Conclusion**: The project would have a less-than-significant impact on transportation.

### *5.2.18 TRIBAL CULTURAL RESOURCES*

#### Setting

California Assembly Bill (AB) 52, in effect since July 2015, provides CEQA protections for tribal cultural resources. All lead agencies approving projects under CEQA are required, if formally requested by a culturally affiliated California Native American Tribe, to consult with such tribe regarding the potential impact of a project on tribal cultural resources before releasing an environmental document. Under California Public Resources Code §21074, tribal cultural resources include site features, places, cultural landscapes, sacred places, or objects that are of cultural value to a tribe and that are eligible for or listed on the California Register of Historical Resources (CRHR) or a local historic register, or that the lead agency has determined to be of significant tribal cultural value.

The Native American Heritage Commission (NAHC) was contacted for a review of the Sacred Lands Files, which yielded negative results for the project site. Furthermore, the MCWD has not been notified under AB 52 to any tribes for consultation. Mr. Michael Wegley, the MCWD District Engineer, contacted NAHC and was provided a list of Native American tribes and individuals for further consultation (Gayle Totton, personal communication, May 2019).

#### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| TRIBAL CULTURAL RESOURCES. Would the project: | | | | | |
| Cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | | 1, 2 |

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| a) Listed or eligible for listing in the California Register of Historic Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | | | X | | 1, 2 |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | | | X | | 1, 2 |

**Explanation**

a) **Less-Than-Significant Impact**. As indicated above in *Section 5.2.17 Cultural Resources,* the proposed project would not result in any adverse impacts to historical resources within the proposed project area.

b) **Less-Than-Significant Impact**. The NAHC review of their Sacred Lands Files did not yield any results for the project site. Furthermore, no tribal cultural resources or Native American resources have been identified to date, and findings of these resources are unlikely. In addition, pursuant Public Resources Code Section 21080.3.1, Native American Tribes are required to request notification by the District of potential projects. If consultation is requested, the District shall provide formal written notification to the California Native American tribe or tribes that are traditionally and culturally affiliated with the project area. The tribe has 30 days of the notification to request consultation to determine if the project may have a significant effect on a tribal cultural resource. Since the District has not received a request for notification by any Native American tribes and the sacred lands search yielded a negative finding, this is considered a less-than-significant impact.

### *5.2.19 UTILITIES AND SERVICE SYSTEMS*

**Setting**

Utilities and services are furnished to the project site by the following providers:

- Wastewater Treatment: MCWD;
- Water Service: MCWD;
- Solid Waste: Monterey Regional Waste Management District; and
- Natural Gas & Electricity: MBCP & PG&E.

## CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| UTILITIES AND SERVICE SYSTEMS. Would the project: | | | | | |
| a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | | X | | | 1, 2, 3 |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | | | X | | 1, 2 |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | X | | 1, 2 |
| d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | | | X | | 1, 2 |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | | | X | | 1, 2 |

## Explanation

a) **Less-Than-Significant Impact with Mitigation**. The existing Fort Ord Village Lift Station and force main have exceeded their service life and require replacement. The proposed project involves the demolition and replacement of this system. In addition, PG&E would install a new underground electrical service to the replacement lift station from an existing service pole on Monterey Road. Further, a hose bib would be installed at the replacement lift station for minimal water usage associated with the proposed project. However, all these services would be a replacement of the existing services and would not expand water, wastewater, storm water, or electric power usage beyond that which is already being used. The proposed project would not generate any natural gas or require telecommunication facilities. However, the proposed project does consist of the relocation of wastewater facilities, which may result in potentially significant impacts. Mitigation measures have been identified throughout this Initial Study to reduce any potential impacts due to wastewater relocation to a less-than-significant level.

b) **Less-Than-Significant Impact**. As stated above, the project would require minimal water services to the replacement pump station (i.e. hose bib would be installed for minimal water usage). However, this use is consistent with the use at the existing Fort Ord Village Lift Station, this represents a less-than-significant impact to water supplies.

c) **Less-Than-Significant Impact**. The proposed project involves the replacement of the existing Fort Ord Village Lift Station and force main and would not require additional wastewater treatment

beyond that which is already being provided for the existing system. This represents a less-than-significant impact to wastewater systems.

d, e) **Less-Than-Significant Impact**. The proposed project would result in a less-than-significant impact in terms of solid waste generation. Deconstruction of the existing Fort Ord Village Lift Station would include relocating the pumps to the replacement lift station location and salvaging metals for recycling. Any trash would be hauled to the Monterey Regional Waste Management District facility north of the City of Marina. The proposed project involves a replacement lift station and pipeline and is not anticipated to generate additional waste beyond the current use. The project would comply with all federal, state, and local statutes and regulations related to solid waste.

**Conclusion**: The project would have a less-than-significant impact on utilities and service systems.

## *5.2.20 WILDFIRE*

### Setting

The project site is surrounded by residential development and is not located within or near a state responsibility areas, as designated by Cal Fire (Cal Fire, Fire Hazard Severity Maps, 2007, 2008).

### CEQA Thresholds

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | | | X | | 3, 11 |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | | | | X | 11 |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | | | | X | 2, 11 |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | | | | X | 1, 11 |

### Explanation

a) **Less-Than-Significant Impact**. As stated above in *Section 5.2.9 Hazards and Hazardous Materials*, the project would not create any barriers to emergency or other vehicle movement as it is not part of vehicular transportation network used by emergency vehicles. Work within roads during construction would require traffic control and flagmen. Furthermore, final design would

incorporate all Fire Code requirements. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

b) **No Impact**. The project would not exacerbate wildfire risks due to slope, prevailing winds, and other factors due to the project's urbanized location away from natural areas susceptible to wildfire. The project site is not located within an area of moderate, high, or very high Fire Hazard Severity for the Local Responsibility Area nor does it contain any areas of moderate, high, or very high Fire Hazard Severity for the state responsibility area.

c) **No Impact**. Due to the project's urbanized location and lack of interface with any natural areas susceptible to wildfire, the project would not require the installation or maintenance of associated fire suppression or related infrastructure.

d) **No Impact**. The project would not expose people or structures to significant wildfire risks given its highly urban location away from natural areas susceptible to wildfire.

**Conclusion**: The project would result in a less-than-significant impact related to wildfire.

### *5.2.21 MANDATORY FINDINGS OF SIGNIFICANCE*

| ENVIRONMENTAL IMPACTS | Potentially Significant Issues | Less-Than-Significant Impact with Mitigation | Less-Than-Significant Impact | No Impact | Checklist Source(s) |
|---|---|---|---|---|---|
| MANDATORY FINDINGS OF SIGNIFICANCE. Does the project: | | | | | |
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | X | | | 1-12 |
| b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects. | | X | | | 1-12 |
| c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | | | X | | 1-12 |

**Explanation**

a) **Less-Than-Significant Impact with Mitigation**. Based on the analysis provided in this Initial Study, the proposed project would not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or

eliminate important examples of the major periods of California history or prehistory. Mitigation measures and standard permit conditions are identified for potential impacts of the project on biological and cultural resources, hazards, noise, and utilities impacts to reduce these effects to a less-than-significant level.

b) **Less-Than-Significant Impact with Mitigation**. Based on the analysis provided in this Initial Study, the proposed project would not significantly contribute to cumulative impacts since the project is a replacement of an existing wastewater system. The project impacts identified throughout the document would be minimized by implementation of standard permit conditions and mitigation, and would not significantly contribute to cumulative impacts in the area.

c) **Less-Than-Significant Impact**. Based on the analysis provided in this Initial Study, the proposed project would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

**Conclusion**: The project would have a less-than-significant impact on the environment with the incorporation of mitigation measures and standard permit conditions identified in this document.

# 6. DOCUMENT PREPARATION & REFERENCES

## LEAD AGENCY

**Marina Coast Wastewater District**
Mike Wegley, District Engineer

## REPORT PREPARATION

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Erin Harwayne, AICP, Senior Project Manager
Ashley Quackenbush, Associate Planner
Jami Davis, Senior Environmental Scientist
Robyn Simpson, Editor

## CHECKLIST SOURCES

1. CEQA Guidelines and professional expertise of consultant
2. Project Plan and site review
3. City of Seaside General Plan & FEIR, 2003 & 2004
4. FODSP General Plan & Initial Study, 2004
5. Transportation and Construction Vibration Guidance Manual, 2013
6. Monterey County Important Farmlands Map, 2016
7. MBARD CEQA Guidelines, 2008
8. MBARD 2012-2015 Air Quality Management Plan, 2017
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# Appendix A

# Fort Ord Village Lift Station & Force Main Replacement Project Biological Resources Report

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# Ord Village
# Force Main Replacement Project

# DRAFT
# BIOLOGICAL RESOURCES REPORT

**September 2019**

*Prepared by*

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# TABLE OF CONTENTS

## Figures

# 1.0 PROJECT SUMMARY

The Marina Coast Water District (MCWD or District) is proposing to implement the Ord Village Force Main Replacement Project (project or proposed project), located in the City of Seaside, Monterey County, California (**Figure 1**). The existing force main pipe has exceeded its service life and has deteriorated structurally, requiring emergency repairs six times in the past ten years. The MCWD has planned for the replacement of these facilities by allocating funds to improve these facilities in the 2018-19 Five Year Capital Improvements Plan. The project proposes to construct a replacement lift station on the east side of Highway 1, and a replacement force main pipeline within existing roadways, eliminating the need for 1,600 linear feet (LF) of existing gravity and force main pipelines and two highway crossings (**Figure 2**). The former Ord Village Lift Station west of Highway 1 would be demolished and removed. Work would be conducted within the currently disturbed area at this location. Pipelines and manholes outside the site would be abandoned in place. Pipeline construction is anticipated to require 8 weeks, and lift station site construction is anticipated to require 4 months. Construction is anticipated to occur between January 1 and September 30, 2020.

## 1.1 Summary of Results

Two vegetation types were observed within the project site: dune scrub and ruderal/landscaped. In addition, a portion of the project site is developed. Dune scrub habitat is listed as sensitive on the California Department of Fish and Wildlife's (CDFW's) *California Natural Communities List* and may also be considered an Environmentally Sensitive Habitat Area (ESHA) under the California Coastal Act (CCA). A portion of the project site is also within designated critical habitat for Monterey spineflower; these areas may also be considered ESHA.

Several special-status species are known or have the potential to occur within the project site based on observations, presence of appropriate habitat, and known occurrences within the vicinity. All other species evaluated have a low potential to occur, are assumed unlikely to occur, or were determined not present within the project site for the species-specific reasons presented in **Appendix A**.

The following special-status wildlife species are known or have the potential to occur on the project site:

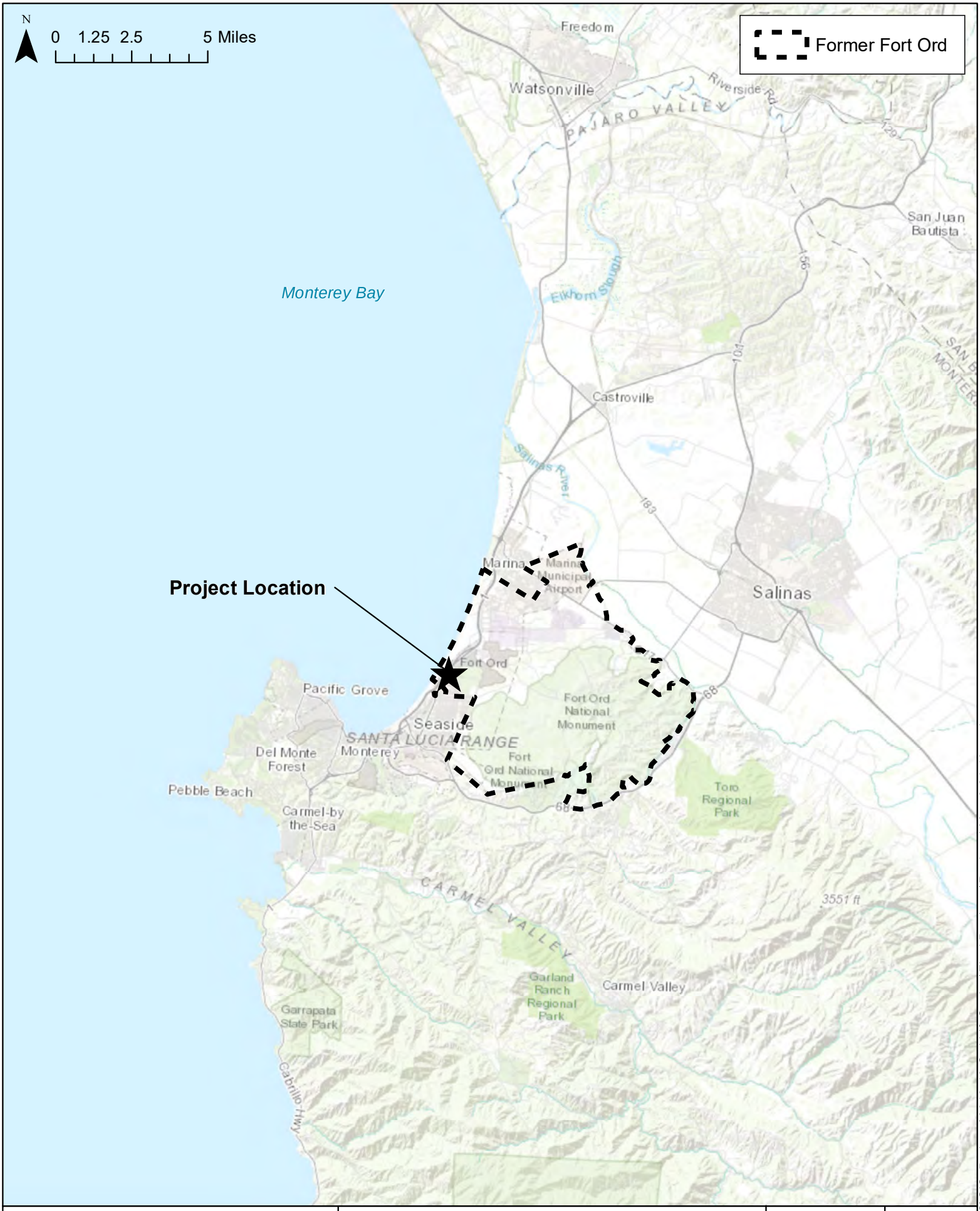
- Hoary bat (*Lasiurus cinereus*) – CNDDB[1],
- Monterey dusky-footed woodrat (*Neotoma macrotis luciana*) – CSC,
- Northern California legless lizard (*Anniella pulchra*) – CSC/HMP,
- Coast horned lizard (*Phrynosoma blainvillii*) – CSC,
- Globose dune beetle (*Coelus globosus*) – CNDDB,
- Smith's blue butterfly (SBB; *Euphilotes enoptes smithi*) – FE/HMP, and

[1] Status Definitions – FT: Federally threatened; CSC: California Species of Concern; CFP: California Fully Protected Species; BCC: USFWS Bird of Conservation Concern; HMP: Fort Ord Habitat Management Plan Species; CRPR 1B: California Rare Plant Rank (CRPR) 1B; CNDDB: animal species on the CNDDB "Special Animals" list that are not assigned any of the other status designations but the CDFW considers to be those of greatest conservation need, regardless of their legal or protection status.

- Nesting raptors and other protected avian species, including:
  - Cooper's hawk (*Accipiter cooperii*) – CNDDB,
  - Oak titmouse (*Baeolophus inornatus*) – BCC,
  - Wrentit (*Chamaea fasciata*) – BCC,
  - Spotted towhee (*Pipilo maculatus*) – BCC, and
  - Allen's hummingbird (*Selasphorus sasin*) – BCC.

One special-status plant species is known to occur within the project site:

- Monterey spineflower (*Chorizanthe pungens* var. *pungens*) – FT/1B/HMP

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# Vicinity Map

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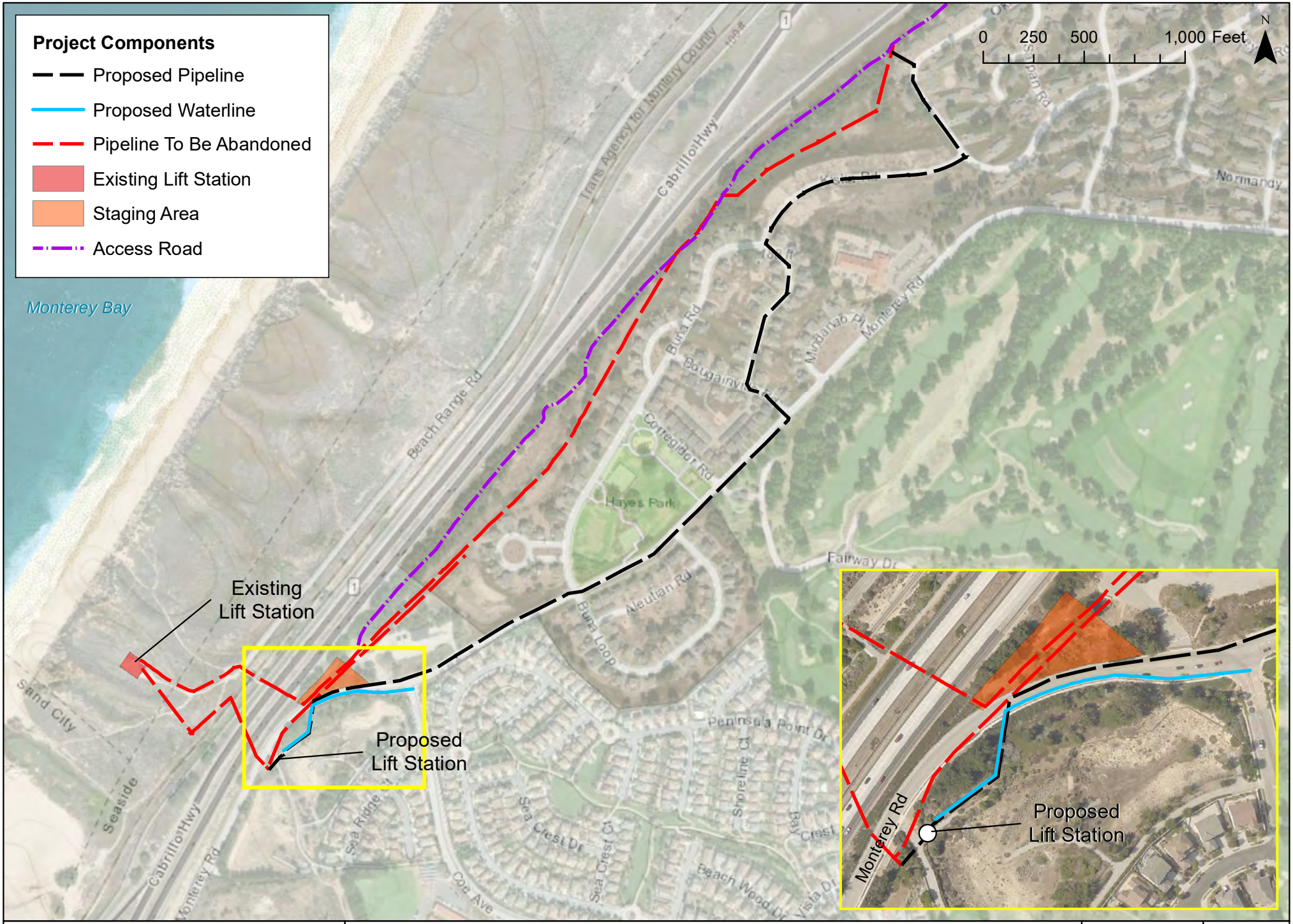


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# Project Site Map

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# 2.0 INTRODUCTION

The MCWD is proposing to implement the Ord Village Force Main Replacement Project (project or proposed project), located in the City of Seaside, Monterey County, California (**Figure 1**). This report presents the findings of a biological resource assessment conducted by Denise Duffy & Associates, Inc. (DD&A) for the proposed project. The emphasis of this study is to describe existing biological resources within and surrounding the project, identify any special-status species and sensitive habitats within and adjacent to the project site, assess potential impacts that may occur to biological resources, and recommend appropriate avoidance, minimization, and mitigation measures necessary to reduce those impacts to a less-than-significant level in accordance with the California Environmental Quality Act (CEQA).

## 2.1 Project Background

The MCWD is a County Water District organized and operating under the County Water District Law, Water Code §30000. The MCWD is located on the coast of Monterey Bay at the northwest end of the Salinas Valley and occupies an area of about 4.5 square miles. The District was formed in 1960 and provides potable water, wastewater collection, and reclaimed water services within the City of Marina and the Ord Community. In 1992 the District joined the Monterey Regional Water Pollution Control Agency, now Monterey One Water (M1W), and connected to the Regional Treatment Plant. In 2018, the District conveyed approximately 2,200 acre-feet of sewage to M1W for treatment.

In 2001, the U.S. Army conveyed ownership of the water and wastewater infrastructure on the former Fort Ord through the Fort Ord Reuse Authority (FORA) to the MCWD.[2] As part of this transfer of ownership, the MCWD was conveyed the Ord Village Lift Station. The Ord Village Lift Station was originally a small wastewater treatment plant serving the housing areas along Coe Avenue. When the Army built the main wastewater treatment plant located at 10th Street, the Ord Village wastewater treatment plant was converted into a sewer lift station, with a force main running north toward the main plant. When the M1W Regional Treatment Plant was constructed, the U.S. Army retired their treatment plant and now the sewage enters the M1W wastewater interceptor by gravity at the old plant site. In the 1970's, Del Monte Road was widened into the current Highway 1, separating the Ord Village Lift Station from the area it serves.

The existing force main pipeline is 10-inch diameter steel pipe. The pipeline runs east from the lift station, crosses Highway 1 and turns north, running outside the highway right-of-way to a high point near the corner of Buna and Kiska Roads. At that point is continues as a gravity sewer, running north to the Gigling Lift Station. The steel pipeline has broken six times in the past ten years, requiring emergency shut-downs and repairs. A large-diameter Pacific Gas & Electric (PG&E) gas main runs parallel to the force main, limiting the available space for a parallel replacement force main. The District would like to replace this pipeline before a break occurs within the Highway 1 corridor. The Ord Village Lift Station is configured as a wet-pit/dry-pit station, requiring confined space entry controls for routine maintenance work. The District would like to replace this with a submersible pump lift station to eliminate that risk. The electrical equipment at the site is also experiencing corrosion due to the close proximity to the ocean.

[2] Assignment of Easements on Former Fort Ord and Ord Military Community, County of Monterey, and Quitclaim Deed for Water and Wastewater Systems, as and between FORA and MCWD, dated October 24, 2001.

### 2.2 Project Location and Area

The project site is located within the within the City of Seaside in Monterey County, California (**Figures 1 and 2**). The existing Ord Village Lift Station is located on a disturbed site on the west side of Highway 1, on assessor parcel number (APN) 031-051-001-000. The proposed replacement lift station would be located along Monterey Road on the edge of a City of Seaside percolation pond, next to the existing gravity sewer on APN 031-051-023-000. The existing force main would be accessed via an unpaved road along the pipeline easement, starting at the west end of Gigling Road within APNs 031-141-004-000 and 031-141-002-000. Staging areas for construction would also be contained within APN 031-141-004-000 as well.

The new sanitary sewer force main (SSFM) is proposed to go under Monterey Road from the new lift station to the existing gravity sewer, connecting near the MCWD's Sanitary Sewer Manhole (SSMH) C6. Specifically, the new SSFM would follow Monterey Road, then turn into the Army housing area at Bougainville Road, turn onto Buna Road, then Kiska Road, and finally turn onto Okinawa Road where it would reconnect to the MCWD's gravity sewer.

### 2.3 Project Description

The existing Ord Village Lift Station and Force Main have exceeded their service life and require replacement. The existing lift station is located on the west side of Highway 1 within the FODSP, but the area served and the majority of the force main alignment are on the east side of Highway 1. The project proposes to construct a replacement lift station on the east side of Highway 1, and a replacement force main pipeline within existing roadways, eliminating the need for 1,600 LF of existing gravity and force main pipelines and two highway crossings. The proposed replacement lift station site would be 1,600 square feet (SF) (40 feet by 40 feet). The total length of the proposed pipeline is approximately 5,600 LF from the new lift station to where it connects to the existing gravity sewer. The proposed pipeline would include approximately 4,100 LF of pressurized force main, 1,500 LF of gravity sewer, and eight new manholes. The former Ord Village Lift Station west of Highway 1 would be demolished and removed. Approximately 6,200 LF of pipelines and manholes outside the site would be abandoned in place.

For the existing Ord Village system, sewage flows through gravity pipes west under Highway 1 to the pump station, then east under Highway 1 in a pressure pipeline. The pipeline follows the west edge of the Army housing area, and connects to a gravity pipeline at a high point near the corner of Buna and Kiska Roads. The existing force main pipe has exceeded its service life and has deteriorated structurally, requiring emergency repairs six times in the past ten years. The MCWD has planned for the replacement of these facilities by allocating funds to improve these facilities in the 2018-19 Five Year Capital Improvements Plan.

Various alignments were considered for relocating the force main, many of which required tree removal and/or continued access through the open space corridor for pipeline maintenance. The proposed alignment was selected as it provides all-weather maintenance access and eliminates future maintenance work next to the existing PG&E gas pipeline.

Due to poor existing conditions and design considerations, the MCWD proposes to replace the existing lift station at a new location. The proposed replacement lift station would be located at the edge of a City of seaside percolation pond along Monterey Road, at the point where the gravity sewers converge before

crossing Highway 1. The proposed replacement lift station would consist of a wet well and valve vault (below grade), electrical control panel and an emergency generator, enclosed with a chain-link fence.

The existing Ord Village Lift Station west of Highway 1 would be demolished and removed after the proposed replacement lift station is completed and operating. Work would be conducted within the currently disturbed area at this location. Pipelines and manholes outside the site would be abandoned in place. The following discussion provides a more detailed description of key project elements, including grading requirements, construction activities, operation, and schedule.

### 2.3.1 Grading

The proposed project involves approximately 10,500 cubic yards of fill and 10,500 cubic yards of cut. The majority of that is trench excavation and backfill, which would be cut and backfilled in the same day. Grading for the pipeline and pipeline connections would be limited to areas already disturbed.

### 2.3.2 Construction

Land disturbance for construction of the proposed replacement lift station would be approximately 0.4 acres and 1.4 acres for pipeline trenching. Construction activities would include excavation to install the precast concrete manholes, wet well, valve vault, and pipelines; pavement cutting for pipeline trenches, pipeline installation using lifting equipment and trench boxes, trench and excavation backfilling and compaction, cast-in-place concrete work for manhole bases and equipment pads, and street paving. PG&E would install a new underground electrical service to the proposed replacement lift station from an existing service pole on Monterey Road. The system transition would require installing a line stop on the existing force main and pumping the force main contents into a nearby gravity sewer. Construction equipment would include, but would not be limited to, tracked excavator, backhoe, water truck, concrete trucks, dump trucks, flat-bed delivery trucks, vibratory compacters, asphalt paving equipment and trailer-mounted bypass pumps. Sheet-pile shoring may be installed around the lift station excavation using vibratory equipment. Work within roads would require traffic control and flagmen.

No separate construction access roads would be needed; existing roads will be used to access the existing and replacement pump stations and an unpaved road along the pipeline easement will be used to access the force main. No separate construction access roads would be needed. During construction 6 round trip truck trips per day for 100 working days, and 2 roundtrip truck trips for equipment delivery for 50 days, are expected. Up to 10 employees are expected on the construction site per day.

Deconstruction of the existing Ord Village Lift Station would include relocating the pumps to the proposed replacement lift station, salvaging metals for recycling, removing the concrete building and surface improvements within the 0.9 acre site, abandoning pipelines by flushing with clean water and setting grout plugs at the ends, abandoning manholes by removing the upper cone, and filling the manhole with clean sand. PG&E may choose to remove the existing pole line serving the existing lift station. Site equipment would include excavators, dump trucks, water trucks and concrete trucks. Reseeding of the site would be coordinated with California State Parks staff. Deconstruction is anticipated to take up to 4 weeks following start-up and commissioning of the new pump station.

### 2.3.3 Project Schedule

Construction activities would be limited to weekdays between the hours of 8:00 AM to 4:00 PM. Night-time construction would be required for the system switch-over from existing to new, which would be a single night. Pipeline construction is anticipated to require 8 weeks, and lift station site construction is anticipated to require 4 months. Construction is anticipated to occur between January 1 and September 30, 2020.

# 3.0 METHODS

## 3.1 Personnel and Survey Dates

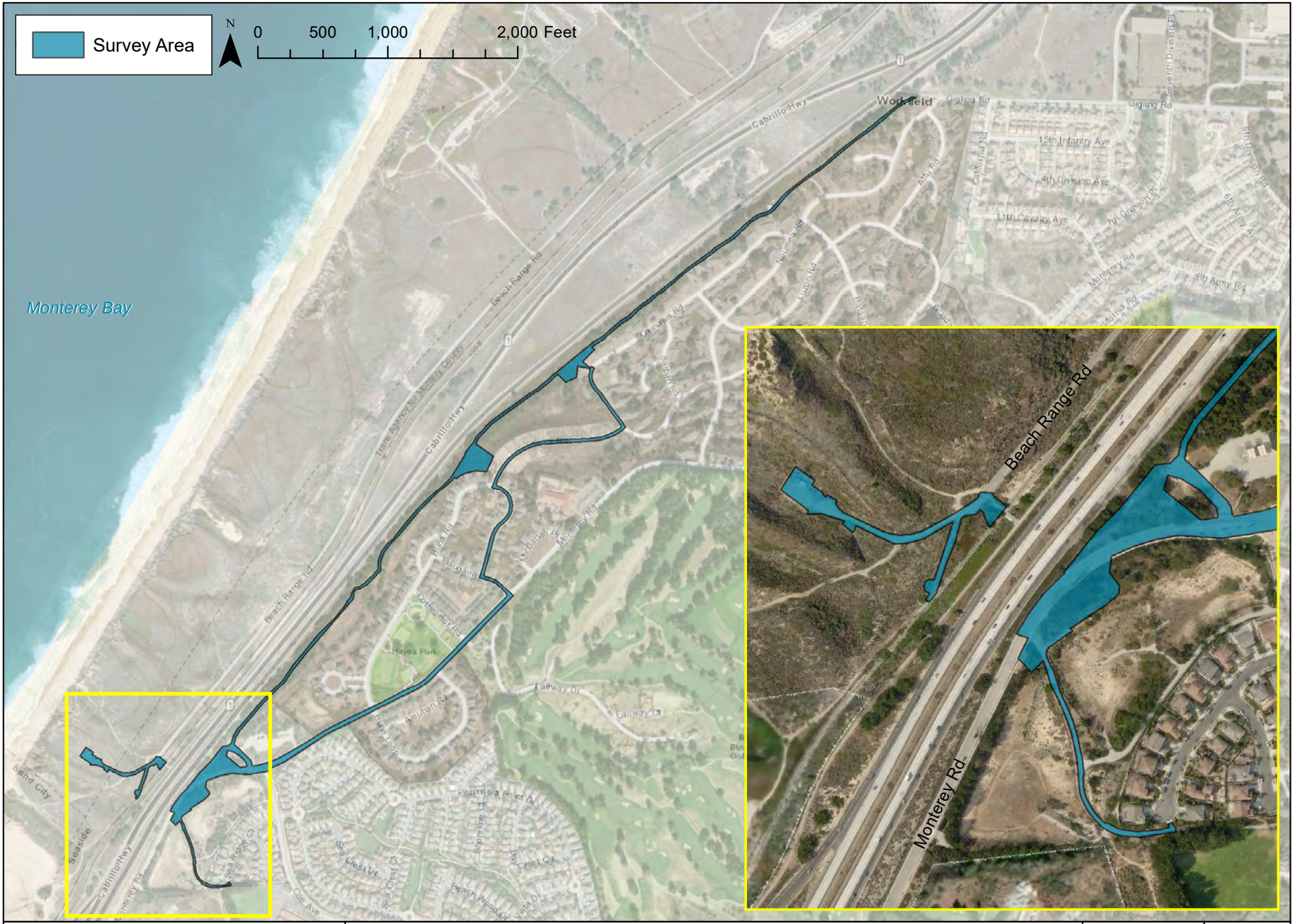
DD&A conducted surveys of the project site in May and June 2019. The survey area was defined by placing buffers around project components based on data provided by Schaaf & Wheeler and GPS data collected of manhole locations, and identifying staging and access areas using aerial imagery (Figure 3). Botanical survey methods included walking the survey area and using aerial maps to identify general vegetation types and potential sensitive vegetation types, and conducting focused surveys for special-status plant species. Concurrently, reconnaissance-level wildlife habitat surveys were conducted to identify suitable habitat and observe any special-status wildlife species. Data collected during the surveys were used to assess the environmental conditions of the project site and its surroundings, evaluate environmental constraints at the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts.

The project site was surveyed for botanical resources following the applicable guidelines outlined in: *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (U.S. Fish and Wildlife Service [USFWS], 2000), *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW, 2018c), and *CNPS Botanical Survey Guidelines* (CNPS, 2001). All special-status plant species identified were mapped using a Trimble Pro XH GPS unit. Populations of plants with greater than six individuals were mapped as a polygon and the density of the population was documented. Densities were recorded as low (1-33% cover), medium (34-66% cover), and high (67-100% cover). Individual plants or populations of less than six individuals were mapped as a point and a count of the number of individual plants was documented. Populations included all individuals within approximately three feet of another individual; individual plants further than three feet apart were mapped as a separate polygon or point. General and sensitive vegetation types were also mapped during the survey effort using a combination of GPS and hand drawing on aerial maps, which were later digitized using ArcGIS software.

## 3.2 Special-Status Species

Special-status species are those plants and animals that have been formally listed or proposed for listing as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA). Listed species are afforded legal protection under the ESA and CESA. Species that meet the definition of rare or endangered under the CEQA Section 15380 are also considered special-status species. Animals on the CDFW's list of "species of special concern" (most of which are species whose breeding populations in California may face extirpation if current population trends continue) and avian species on USFWS's "Birds of Conservation Concern" list (birds that, without additional conservation actions, are likely to become candidates for listing under ESA) meet this definition and are typically provided management consideration through the CEQA process, although they are not legally protected under the ESA or CESA. Additionally, the CDFW also includes some animal species that are not assigned any of the other status designations in the CNDDB "Special Animals" list; however, these species have no legal or protection status.

Plants listed as rare under the California Native Plant Protection Act (CNPPA) or included in California Native Plant Society (CNPS) California Rare Plant Ranks (CRPR; formerly known as CNPS Lists) 1A, 1B, 2A, and 2B are also treated as special-status species as they meet the definitions of Sections 2062 and 2067

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Planning and Environmental Consulting

# Survey Area Map

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of the CESA and in accordance with CEQA Guidelines Section 15380.[3] In general, the CDFW requires that plant species on CRPR 1A (Plants presumed extirpated in California and Either Rare or Extinct Elsewhere), CRPR 1B (Plants rare, threatened, or endangered in California and elsewhere), CRPR 2A (Plants presumed extirpated in California, but more common elsewhere); and CRPR 2B (Plants rare, threatened, or endangered in California, but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2019) be fully considered during the preparation of environmental documents relating to CEQA.[4] In addition, species of vascular plants, bryophytes, and lichens listed as having special-status by the CDFW are considered special-status plant species (CDFW, 2018a). CNPS CRPR 4 species (plants of limited distribution) may, but generally do not, meet the definitions of Sections 2062 and 2067 of CESA, and are not typically considered in environmental documents relating to CEQA. While other species (i.e., CRPR 3 or 4 species) are sometimes found in database searches or within the literature, these were not included within the analysis as they did not meet the definitions of Section 2062 and 2067 of CESA.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected in California under Fish and Game Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto."

In addition, fully protected species under the Fish and Game Code Section 3511 (birds), Section 4700 (mammals), Section 5515 (fish), and Section 5050 (reptiles and amphibians) are also considered special-status animal species. Species with no formal special-status designation but thought by experts to be rare or in serious decline may also be considered special-status animal species in some cases, depending on project-specific analysis and relevant, localized conservation needs or precedence.

### 3.3 Sensitive Habitats

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, and unusual or regionally restricted vegetation types. Vegetation types considered sensitive include those listed on the CDFW's *California Natural Communities List* (i.e., those habitats that are rare or endangered within the borders of California) (CDFW, 2018b), those that are occupied by species listed under ESA or are critical habitat in accordance with ESA, and those that are defined as ESHA under the CCA. Specific habitats may also be identified as sensitive in city or county general plans or ordinances. Sensitive habitats are regulated under federal regulations (such as the Clean Water Act [CWA] and Executive Order [EO] 11990 – Protection of Wetlands), state regulations (such as CEQA and the CDFW Streambed Alteration Program), or local ordinances or policies (such as city or county tree ordinances and general plan policies).

### 3.4 Data Sources

The primary literature and data sources reviewed in order to determine the occurrence or potential for occurrence of special-status species at the project site are as follows:

[3] CNPS initially created five CRPR to categorize degrees of concern; however, to better define and categorize rarity in California's flora, the CNPS Rare Plant Program and Rare Plant Program Committee have developed the new CRPR 2A and CRPR 2B.

[4] CRPR 3 species (Plants about which we need more information - a review list) and CRPR 4 species (Plants of limited distribution - a watch list) may, but generally do not, meet the definitions of Sections 2062 and 2067 of CESA, and are not typically considered in environmental documents relating to CEQA.

- Current agency status information from USFWS and CDFW for species listed, proposed for listing, or candidates for listing as threatened or endangered under ESA or CESA, and those considered CDFW "species of special concern", including:
    - CNDDB occurrences reports from the Marina quadrangle and the six surrounding quadrangles, including Monterey, Moss Landing, Prunedale, Salinas, Seaside, and Spreckels (CDFW, 2019; **Appendix B**); and
    - USFWS IPaC Resource List (USFWS, 2019; **Appendix C**).
- CDFW's Special Animals List (CDFW, 2018a);
- The CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2019);
- The *Flora and Fauna Baseline Study of Fort Ord* (U.S. Army Corps of Engineers [ACOE], 1992); and
- The *Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord* (HMP) (ACOE, 1997).

From these resources, a list of special-status plant and wildlife species known or with the potential to occur in the vicinity of the project site was created (**Appendix A**). This list presents these species along with their legal status, habitat requirements, and a brief statement of the likelihood to occur.

### 3.4.1 Botany

Vegetation types identified in *A Manual of California Vegetation* (Sawyer et.al., 2009) were utilized to determine if vegetation types identified as sensitive on CDFW's *California Natural Communities List* (CDFW, 2018b) are present within the project site. Information regarding the distribution and habitats of local and state vascular plants was also reviewed (Howitt and Howell, 1964 and 1973; Munz and Keck, 1973; Baldwin et al., 2012; Matthews and Mitchell, 2015; Jepson Flora Project, 2019). All plants observed within the project site during the surveys were identified to species or intraspecific taxon necessary to eliminate them as being special-status species using keys and descriptions in *The Jepson Manual: Vascular Plants of California, Edition 2* (Baldwin et al., 2012) and *The Plants of Monterey County an Illustrated Field Key* (Matthews and Mitchell, 2015). Scientific nomenclature for plant species identified within this document follows Baldwin, et. al, (2012); common names follow Matthews and Mitchell (2015). A full botanical inventory was recorded for the project site and the dominant species within each habitat were noted. Dominant plant species are those which are more numerous than its competitors in an ecological community or makes up more of the biomass; generally, the species that are most abundant. Most ecological communities are defined by their dominant species.

The California Invasive Plant Council (Cal-IPC) Inventory (Cal-IPC, 2019) was reviewed to determine if any invasive plant species are present within the project site.

### 3.4.2 Wildlife

The following literature and data sources were reviewed: CDFW reports on special-status wildlife (Remsen, 1978; Williams, 1986; Jennings and Hayes, 1994; Thelander, 1994; Thomson et. al, 2016); California Wildlife Habitat Relationships Program species-habitat models (Zeiner et al., 1988 and 1990); and general wildlife references (Stebbins, 1972, 1985, and 2003).

## 3.5 Regulatory Setting

The following regulatory discussion describes the major laws that may be applicable to the project.

### 3.5.1 Federal Regulations

*Federal Endangered Species Act*

Provisions of the ESA of 1973 (16 USC 1532 et seq., as amended) protect federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register. The ESA is administered by USFWS or National Oceanic and Atmospheric Administration Marine Fisheries Service (NMFS). In general, the NMFS is responsible for the protection of ESA-listed marine species and anadromous fish, whereas other listed species are under USFWS jurisdiction.

The U.S. Army's decision to close and dispose of the Fort Ord military base was considered a major federal action that could affect listed species under the ESA. USFWS issued a Final Biological Opinion (BO) on the disposal and reuse of former Fort Ord on October 19, 1993. USFWS issued five additional BOs and one amendment between 1999 and 2014 as a result of consultation reinitiated by the Army. On May 28, 2015, USFWS issued a Programmatic BO that superseded the previous BOs. Then on June 7, 2017, USFWS issued a reinitiated Programmatic BO that supersedes the 2015 Programmatic BO. The 2017 Programmatic BO is the current and relevant BO for activities at the former Fort Ord; the 2017 Programmatic BO contains additional conservation measures and recommendations relating to environmental cleanup actions at former Fort Ord cleanup sites.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the fish or wildlife…including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife." In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites not under federal jurisdiction. If there is the potential for incidental take of a federally listed fish or wildlife species, take of listed species can be authorized through either the Section 7 consultation process for federal actions or a Section 10 incidental take permit process for non-federal actions. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

*Recovery Plans*

The ultimate goal of the ESA is the recovery (and subsequent conservation) of endangered and threatened species and the ecosystems on which they depend. A variety of methods and procedures are used to recover listed species, such as protective measures to prevent extinction or further decline, consultation to avoid adverse impacts of federal activities, habitat acquisition and restoration, and other on-the-ground activities for managing and monitoring endangered and threatened species. The collaborative efforts of USFWS and its many partners (federal, state, and local agencies, tribal governments, conservation organizations, the business community, landowners, and other concerned citizens) are critical to the recovery of listed species.

Two recovery plans have been prepared for listed species known or with the potential to occur within the Project site:

- Smith's Blue Butterfly Recovery Plan (USFWS, 1984), and
- Seven Coastal Plants and the Myrtle's Silverspot Butterfly Recovery Plan (USFWS, 1998a).

*Executive Order 13112 - Invasive Species*

EO 13112 - Invasive Species requires the prevention of introduction and spread of invasive species. Invasive species are defined as "alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health." Each federal agency whose actions may affect the status of invasive species on a project site shall, to the extent practicable and permitted by law, subject to the availability of appropriations, use relevant programs and authorities to: 1) prevent the introduction of invasive species; 2) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; 3) monitor invasive species populations accurately and reliably; 4) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; 5) conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and 6) promote public education on invasive species and the means to address them. A national invasive species management plan was prepared by the National Invasive Species Council and the Invasive Species Advisory Committee (ISAC) that recommends objectives and measures to implement the EO.

### 3.5.2 State Regulations

*California Endangered Species Act*

The CESA was enacted in 1984. The California Code of Regulations (Title 14, §670.5) lists animal species considered endangered or threatened by the state. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." A Section 2081 Incidental Take Permit from the CDFW may be obtained to authorize "take" of any state listed species.

*California Fish and Game Code*

***Birds.*** Section 3503 of the Fish and Game Code states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Section 3503.5 prohibits the killing, possession, or destruction of any birds in the orders Falconiformes or Strigiformes (birds-of-prey). Section 3511 prohibits take or possession of fully protected birds. Section 3513 prohibits the take or possession of any migratory nongame birds designated under the federal MBTA. Section 3800 prohibits take of nongame birds.

***Fully Protected Species.*** The classification of fully protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (§5515), mammals (§4700), amphibians and reptiles (§5050), and birds (§3511). Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully protected species may not be taken or possessed at any time

and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

***Species of Special Concern.*** As noted above, the CDFW also maintains a list of animal "species of special concern." Although these species have no legal status, the CDFW recommends considering these species during analysis of project impacts to protect declining populations and avoid the need to list them as endangered in the future.

*Native Plant Protection Act*

The CNPPA of 1977 directed the CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in the state." The CNPPA prohibits importing rare and endangered plants into California, taking rare and endangered plants, and selling rare and endangered plants. The CESA and CNPPA authorized the Fish and Game Commission to designate endangered, threatened and rare species and to regulate the taking of these species (§2050-2098, Fish and Game Code). Plants listed as rare under the CNPPA are not protected under CESA.

*California Coastal Act*

The California Coastal Commission (CCC) was established by voter initiative in 1972 (Proposition 20) and later made permanent by the California State Legislature through adoption of the CCA of 1976. The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. California's coastal zone generally extends 1,000 yards inland from the mean high tide line. In significant coastal estuarine habitat and recreational areas, it extends inland to the first major ridgeline or five miles from the mean high tide line, whichever is less. In developed urban areas, the boundary is generally less than 1,000 yards. Development activities, which are broadly defined by the CCA to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a Coastal Development Permit (CDP) from either the CCC or the local government if a Local Coastal Program (LCP) has been certified. After certification of a LCP, coastal development permit authority is delegated to the appropriate local government, but the CCC retains original permit jurisdiction over certain specified lands (such as tidelands and public trust lands). The Commission also has appellate authority over development approved by local governments in specified geographic areas as well as certain other developments. A CDP is required in addition to any other permit required from resource agencies.

The CCC or the local government may designate areas of rare or unique biological value, such as wetland and riparian habitat and habitats for special-status species, as ESHA. Section 30107.5 of the CCA defines an "environmentally sensitive area" as any area in which plant or animal life or their habitat are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Development is restricted within the coastal zone and prohibited within designated ESHA, unless the development is coastal dependent and does not have a significant effect on the resources. Section 30240 of the CCA states that "environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." This section also states that "development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and

designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas."

The project site area west of Highway 1 is under original jurisdiction of the CCA and is regulated by the CCC. The remainder of the project site is not within the coastal zone.

### 3.5.3 Local Regulations

*Fort Ord Dunes State Park General Plan and EIR*

The former Ord Village Lift Station is located in an easement on State Parks Lands within Fort Ord Dunes State Park (FODSP), which is governed by the FODSP General Plan. The FODSP General Plan identifies the project site as a resource management zone.

The FODSP General Plan evaluated the potential impacts of utilities construction and management within the Park at a programmatic-level and requires that specific facilities and plans be reviewed at the time they are proposed for implementation to determine the potential for project-specific impacts and to identify appropriate mitigation measures. The FODSP General Plan identified guidelines to address potential biological resources concerns within the Park and to minimize potential impacts to biological resources in connection with the implementation of the General Plan. The FODSP General Plan also contains a number of management guidelines to address potential concerns related to biological resources. Applicable guidelines include: BIO-1, BIO-2, BIO-4, BIO-5, BIO-8, BIO-10, and BIO-17. These policies generally promote identifying, protecting, and ensuring perpetuation of park plant and wildlife species populations.

The FODSP General Plan EIR considered potential impacts associated with the implementation of the FODSP General Plan at a programmatic-level. Where appropriate, the FODSP General EIR identified potential mitigation measures for future projects. The FODSP General Plan EIR determined that potential impacts would be less than significant with the implementation of mitigation measures. Applicable mitigation measures include Mitigation Measure Bio-1 and Mitigation Measure Bio-2, which address potential impacts to native habitats and species, including special-status species. These mitigation measures are in addition to applicable guidelines intended to address biological resources constraints. The Project would be required to comply with all applicable guidelines, as well as mitigation measures contained in the FODSP General Plan EIR to the extent they are applicable. Additional, project-specific mitigation has been identified below.

*Fort Ord Habitat Management Plan*

The U.S. Army's decision to close and dispose of the Fort Ord military base was considered a major federal action that could affect listed species under the ESA. In 1993, USFWS issued a BO on the disposal and reuse of former Fort Ord requiring that a HMP be developed and implemented to reduce the incidental take of listed species and loss of habitat that supports these species (USFWS, 1993, updated to USFWS, 2017b). The HMP was prepared to assess impacts on vegetation and wildlife resources and provide mitigation for their loss associated with the disposal and reuse of former Fort Ord (ACOE, 1997).

The HMP establishes guidelines for the conservation and management of species and habitats on former Fort Ord lands by identifying lands that are available for development, lands that have some restrictions with development, and habitat reserve areas. The intent of the plan is to establish large, contiguous habitat conservation areas and corridors to compensate for future development in other areas of the former base.

The HMP identifies what type of activities can occur on each parcel at former Fort Ord; parcels are designated as "development with no restrictions," "habitat reserves with management requirements," or "habitat reserves with development restrictions." The HMP sets the standards to assure the long-term viability of former Fort Ord's biological resources in the context of base reuse so that no further mitigation should be necessary for impacts to species and habitats considered in the HMP. This plan has been approved by USFWS; the HMP, deed restrictions, and Memoranda of Agreement between the Army and various land recipients provide the legal mechanism to assure HMP implementation. It is a legally binding document, and all recipients of former Fort Ord lands are required to abide by its management requirements and procedures.

The HMP anticipates some losses to special-status species and sensitive habitats as a result of redevelopment of the former Fort Ord. With the designated reserves and corridors and habitat management requirements in place, the losses of individuals of species and sensitive habitats considered in the HMP are not expected to jeopardize the long-term viability of those species, their populations, or sensitive habitats on former Fort Ord. Recipients of disposed land with restrictions or management guidelines designated by the HMP will be obligated to implement those specific measures through the HMP and through deed covenants.

However, the HMP does not provide specific authorization for incidental take of federal or state listed species to existing or future non-federal land recipients under the ESA or CESA. In compliance with the ESA and CESA, FORA is currently in the process of obtaining a Section 10(a)(1)(B) Incidental Take Permit from USFWS and Section 2081 Incidental Take Permit from CDFW, which will provide base-wide coverage for the take of federal and state listed wildlife and plant species to all non-federal entities receiving land on the former Fort Ord. This process involves the preparation of a Habitat Conservation Plan (HCP). The Draft Fort Ord HCP (ICF International, Inc., 2017) is currently in draft form and being reviewed by the resource agencies. The base-wide incidental take permits are expected to be issued by USFWS and CDFW by the end of 2019.

The project site is located within designated "development" parcels and "development within reserve areas or development with restrictions" parcels. Parcels designated as "development" have no management restrictions. However, the 2017 Programmatic BO and HMP require the identification of sensitive botanical resources within the development parcels that may be salvaged for use in restoration activities in reserve areas (USFWS, 2017b and ACOE, 1997). Within the "development within reserve areas or development with restrictions" parcels, the HMP requires preservation and restoration of native vegetation and HMP species habitat outside of areas identified for development.

*City of Seaside General Plan*

Along with the applicable HMP designations, the proposed pump station and pipeline is within the jurisdiction of the City of Seaside General Plans. The proposed new lift station area is designated and zoned Community Commercial (CC). The new pipeline would be within existing roadways.

*Habitat Conservation Plans or NCCP*

There are no adopted HCPs or Natural Community Conservation Plans (NCCP) associated with the project site. Please refer to the discussion of the Draft HCP currently in progress in the Fort Ord HMP section above.

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# 4.0 RESULTS

## 4.1 Vegetation Types

Two vegetation units were mapped within the project site: dune scrub and ruderal/landscaped (**Figure 4**). Additionally, a portion of the project site is developed (paved road and the existing lift station). A brief description of each vegetation type can be found below along with a statement of the presence or potential presence of special-status species within each. In addition, each vegetation type description identifies the vegetation classification from *A Manual of California Vegetation* (Sawyer et al., 2009) and whether the vegetation type is identified as sensitive on CDFW's *California Natural Communities List* (CDFW, 2018b).

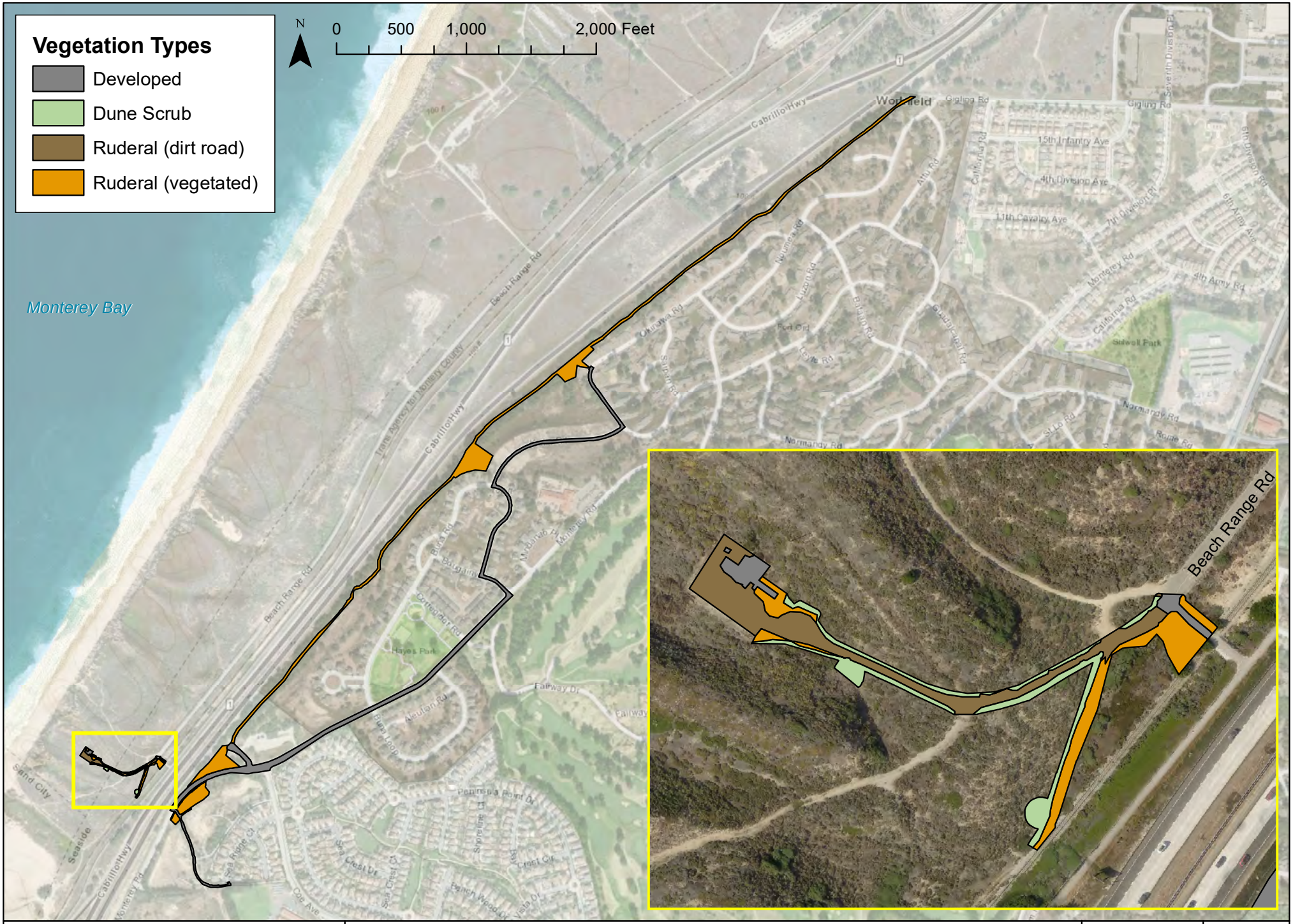
4.1.3 Dune Scrub

- *A Manual of California Vegetation* classifications: Silver dune lupine-mock heather scrub (*Lupinus chamissonis - Ericameria ericoides* shrubland alliance)
- CDFW's *California Natural Communities List*: sensitive

Dune scrub occurs along the California coast, typically in more exposed settings, such as active dunes. Mock heather (*Ericameria ericoides*) is the dominant shrub species within the project site; however, other shrub and subshrub species present include coastal sagewort (*Artemisia pycnocephala*), seacliff buckwheat (*Eriogonum parvifolium*), and golden yarrow (*Eriophyllum confertiflorum*). Annual species occurring between the shrubs include fiddleneck (*Amsinckia* sp.), common phacelia (*Phacelia distans*), and California poppy (*Escholzia* california), California cudweed (*Pseudognaphalium californicum*). Within the project site, the margins of this vegetation type are disturbed associated with the adjacent roadway/trail and includes annual grass and herbaceous species such as rattail fescue (*Festuca myuros*), ripgut brome (*Bromus diandrus*), sandmat (*Cardionema ramosissimum*), telegraph weed (*Heterotheca grandiflora*), bur clover (*Medicago polymorpha*), and Monterey spineflower. Approximately 0.2 acre of dune scrub is present within the project site.

Dune scrub communities provide cover and food for a number of wildlife species, including songbirds, snakes, lizards, rodents, and other small mammals. Common species that may occur within dune scrub include western scrub jay (*Aphelocoma californica*), California quail (*Callipepla californica*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia melodia*), coast range fence lizard (*Sceloporus occidentalis bocourtii*), San Francisco alligator lizard (*Elgaria coerulea coerulea*), gopher snake (*Pituophis catenifer catenifer*), deer mouse (*Peromyscus maniculatus*), and California ground squirrel (*Otospermophilus beecheyi*).

Monterey spineflower was the only special-status plant species identified within this vegetation type during focused botanical surveys in May and June 2019 (**Figure 5**).

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# Vegetation Types Map

Date: 7/18/2019
Scale: 1 in = 944 ft
Figure: 4

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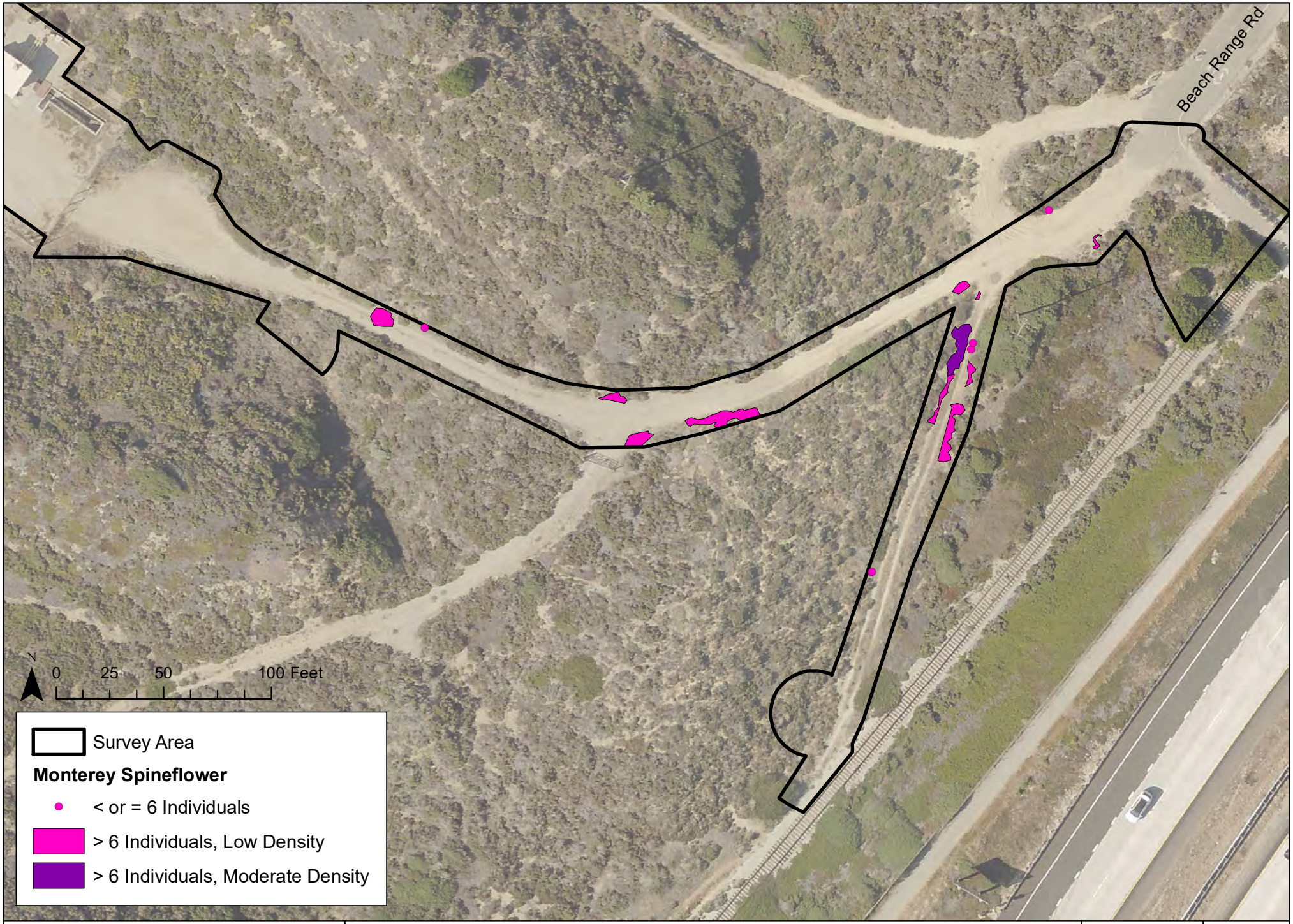


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# Special-Status Plant Species Map

Date
7/18/2019

Scale
1 in = 57 ft

Figure
5

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No special-status wildlife species were observed within this vegetation type; however, the host plant species for SBB (seacliff buckwheat) was observed (**Figure 6**) and a CNDDB reports and occurrence of this species within this portion of the project site. As such, SBB is assumed present within the dune scrub habitat where its host plant species occurs. In addition, suitable habitat is present for Monterey dusky-footed woodrat, Northern California legless lizard, coast horned lizard, and globose dune beetle. The spotted towhee, wrentit, and Allen's hummingbird may nest within this vegetation type, and the hoary bat and Cooper's hawk may use this vegetation type for foraging and/or cover.

4.1.5 Ruderal/Landscaped

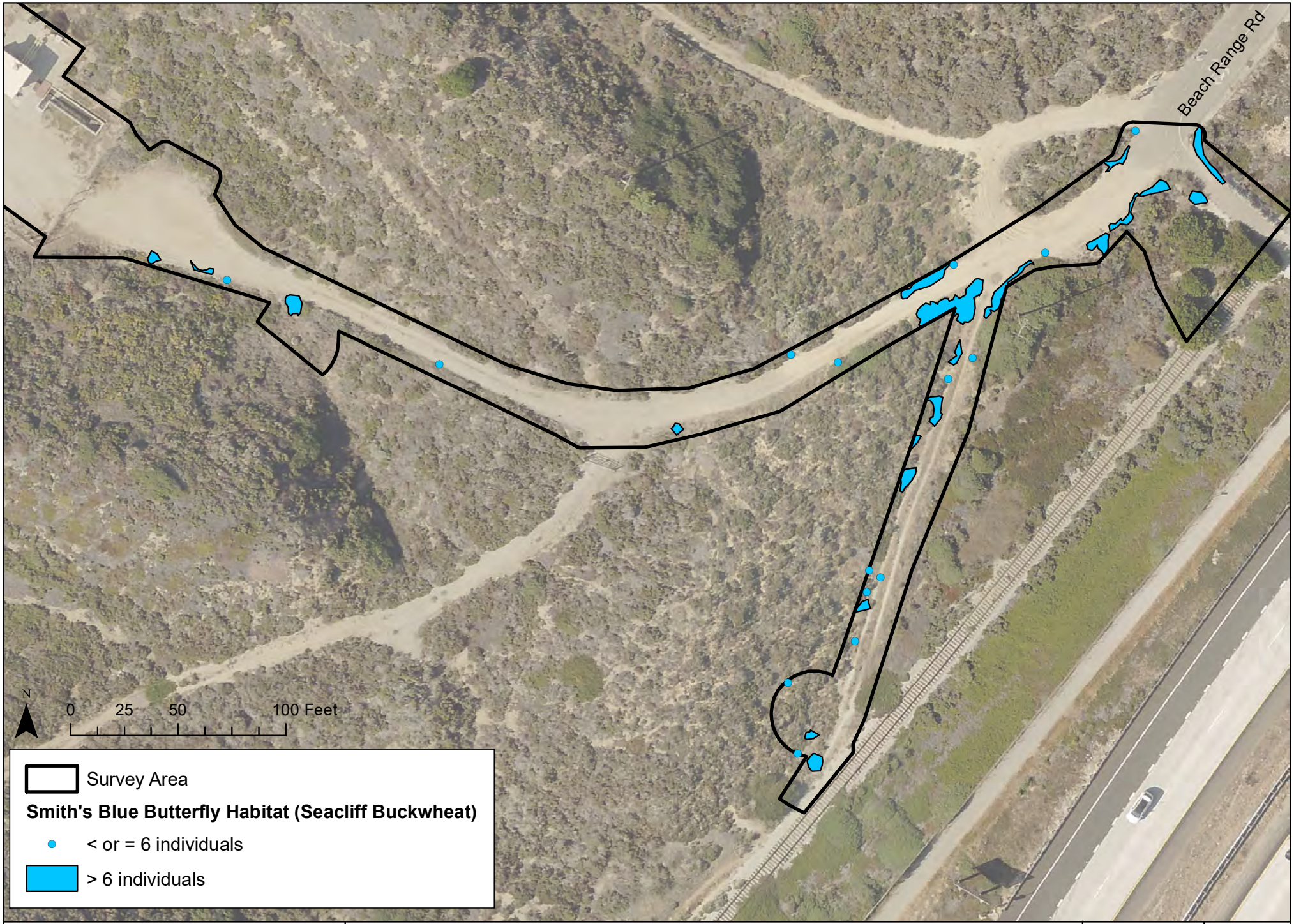
- *A Manual of California Vegetation* classifications: None
- CDFW's *California Natural Communities List*: Not listed

Ruderal areas are those areas which have been disturbed by human activities and are dominated by non-native annual grasses and other "weedy" species. Landscaped areas are also included within this vegetation type (**Figure 4**). Ruderal areas within the project site include vegetation dominated by Monterey cypress (*Cupressus macrocarpa*), hottentot fig (*Carpobrotus* sp.), acacia (*Acacia* sp.), ripgut brome, slender oat (*Aventa barbata*), Bermuda buttercup (*Oxalis pes-capre*), miner's lettuce (*Claytonia* sp.) summer mustard (*Hirschfeldia incana*), yellow sweet clover (*Melilotus officinalis*), and telegraphweed. Approximately 6.5 acres of ruderal/landscaped areas are present within the project site.

This vegetation type is considered to have low biological value as it is generally dominated by non-native plant species and consists of relatively low-quality habitat from a wildlife perspective. However, common wildlife species which do well in urbanized and disturbed areas, such as the American crow (*Corvus brachyrhynchos*), California ground squirrel, raccoon, striped skunk (*Mephitis mephitis*), western scrub jay, European starling (*Sturnus vulgaris*), coast range fence lizard, and rock pigeon (*Columba livia*), may forage within this vegetation type.

Monterey spineflower was the only special-status plant species identified within this vegetation type during focused botanical surveys in May and June 2019 (**Figure 5**).

Although ruderal areas represent relatively low-quality wildlife habitat, some special-status wildlife species may occur: Northern California legless lizard may occur where loose, sandy soils are present; Monterey dusky-footed woodrat may build stick nests under shrubs and trees; hoary bat may forage and use trees for night roosts; and the Cooper's hawk, spotted towhee, wrentit, oak titmouse, and Allen's hummingbird may forage or nest within this vegetation type. Additionally, the host plant species for SBB (seacliff buckwheat) was observed (**Figure 6**) and a CNDDB reports and occurrence of this species within this portion of the project site. As such, SBB is assumed present within the ruderal areas where its host plant species occurs.

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# Smith's Blue Butterfly Habitat Map

Date
7/18/2019

Scale
1 in = 57 ft

Figure
6

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4.1.6 Developed

- *A Manual of California Vegetation* classifications: None
- CDFW's *California Natural Communities List*: Not listed

Approximately 4.7 acres of the project site is developed. Developed areas within the project site include paved roads and the existing lift station (**Figure 4**). No vegetation is present within these areas and they are considered to have little biological value. However, some common wildlife species that do well in urbanized areas, including American crow, California ground squirrel, raccoon, striped skunk, western scrub jay, European starling, and rock pigeon, may be found foraging within developed areas.

No special-status plant or wildlife species were observed within developed areas during biological surveys of the project site in May and June 2019 and none are expected to occur based on lack of suitable habitat.

## 4.2 Special-Status Species

Published occurrence data within the project area and surrounding USGS quadrangles were evaluated to compile a table of special-status species known to occur in the vicinity of the project site (see "Methods" and **Appendix A**). Each of these species was evaluated for their likelihood to occur within and immediately adjacent to the project site (**Appendix A**). The special-status species that are known to or have been determined to have a moderate or high potential to occur within or immediately adjacent the project site are discussed below. All other species are assumed unlikely to occur or have a low potential to occur based on the species-specific reasons presented in **Appendix A**, are therefore unlikely to be impacted by the project, and are not discussed further.

4.2.1 Special-Status Wildlife Species

*Hoary Bat*

The hoary bat is included on CDFW's "Special Animals" list. This species has the broadest range of any North American bat, occurring from Northern Canada to South America, and may be found anywhere in California. This species winters in California and Mexico and often migrates towards summer quarters in the north and east during the spring (Cryan, 2003). Spring migration is typically February to May, while fall migration typically occurs September through November. Hoary bats are a solitary species except during migration when larger groups are often formed or when mothers are rearing their young (Tuttle, 1995); however, unlike other bat species, hoary bats do not form maternity colonies. Hoary bats mate in fall or winter and sperm is stored over winter. Fertilization occurs in early spring and gestation is 80 to 90 days. One to four young are born in late May to late June. As such, parturition occurs at summer quarters and there is little evidence that females give birth and raise young in California (Cryan, 2003; Findley and Jones, 1964). Unlike many other bat species that often roost in buildings, hoary bats are seldom found in urban settings (Tuttle, 1995). The hoary bat typically roosts 10-15 feet above ground in the branches/foliage of medium to large deciduous and coniferous trees. Individuals wintering in cold climates hibernate, but may be active on warm winter days. This species is nocturnal, emerging late in the evening with peak activity varying with season and location, but usually three to five hours after sunset. The hoary bat hunts above canopy level, in clearings, and over water. This species has also been known to set up foraging territories at bright lights where insects congregate.

The CNDDB reports two occurrences of hoary bat within the seven quadrangles reviewed, the nearest of which is reported approximately five miles from the project site. Suitable foraging habitat is present within all undeveloped areas of the project site and day and night roost habitat is present within ruderal areas where trees are present; however, the project site is outside the known breeding range of this species.

*Monterey Dusky-Footed Woodrat*

The Monterey dusky-footed woodrat is a CDFW species of special concern. This is a subspecies of the dusky-footed woodrat *(Neotoma macrotis)*, which is common to oak woodlands and other forest types throughout California. Dusky-footed woodrats are frequently found in forest habitats with moderate canopy cover and a moderate to dense understory, including riparian forests; however, they may also be found in chaparral communities. Relatively large nests are constructed of grass, leaves, sticks, and feathers and are built in protected spots, such as rocky outcrops or dense brambles of blackberry and/or poison oak. Typical food sources for this species include leaves, flowers, nuts, berries, and truffles. Dusky-footed woodrats may be a significant food source for small- to medium-sized predators. Populations of this species may be limited by the availability of nest material. Within suitable habitat, nests are often found in close proximity to each other.

The CNDDB does not report any occurrences of Monterey dusky-footed woodrat within the seven quadrangles reviewed. However, this species is known to occur throughout the former Fort Ord and suitable habitat is present within the dune scrub and ruderal vegetation types.

*Northern California Legless Lizard*

The Northern California legless lizard is a CDFW species of special concern, as well as an HMP species.[5] This fossorial (burrowing) species typically inhabits sandy or loose (friable) soils. Habitats known to support Northern California legless lizard include (but are not limited to) coastal dunes, valley and foothill grasslands, chaparral, and coastal scrub at elevations from near sea level to approximately 1800 meters (6000 feet). The Northern California legless lizard forages on invertebrates beneath the leaf litter or duff layer at the base of bushes and trees or under wood, rocks, and slash in appropriate habitats. The diet of this species likely overlaps to some extent with that of juvenile alligator lizards and perhaps some other salamanders. This species may be preyed upon by alligator lizards, snakes, birds, and small mammals. Little is known about the specific habitat requirements for courtship and breeding; however, the mating season for this species is believed to begin late spring or early summer, with one to four live young born between September and November.

The CNDDB reports 56 occurrences of Northern California legless lizard within the seven quadrangles reviewed, including an occurrence that overlaps with a portion of the project site, and this species is known

[5] The HMP identifies this species as black-legless lizard (*Anniella pulchra* ssp. *nigra*) in order to differentiate it from the previously identified silvery-legless lizard (*A. p.* ssp. *pulchra*). These subspecies are based primarily on phenotypic differences (black-legless lizard being much darker, having fewer scales on the back, and a relatively shorter tail) and very limited genetic work. Further, the range of the black-legless lizard has historically been classified as "restricted to coastal and interior dune sand other areas of sandy soils in the vicinity of Monterey Bay and the Monterey Peninsula" (USFWS, 1998b), while the range of silvery-legless lizard has been classified as widespread throughout central California (Parham and Papenfuss, 2008). However, recent genetic studies have revealed five lineages of this species that correspond with different geographic areas of California (Parham and Papenfuss, 2008). These studies do not, however, identify the legless lizards occurring on the coast of Monterey Bay (i.e. the currently designated black-legless lizard) as a separate lineage. Currently, CDFW identifies both subspecies as the Northern California legless lizard and this document, therefore, follows the current regulatory identification.

to occur in several areas of Fort Ord. Suitable habitat for Northern California legless lizard is present throughout all undeveloped areas of the project site where appropriate soil conditions occur. Therefore, there is a high potential for the Northern California legless lizard to occur within the project site.

*Coast Horned Lizard*

The coast horned lizard is a CDFW species of special concern. Horned lizards occur in valley-foothill hardwood, conifer, and riparian habitats, as well as in pine-cypress, juniper, chaparral, and annual grass habitats. This species generally inhabits open country, especially sandy areas, washes, flood plains, and wind-blown deposits in a wide variety of habitats. Coast horned lizards rely on camouflage for protection and will often lay motionless when approached. Horned lizards often bask in the early morning on the ground or on elevated objects such as low boulders or rocks. Predators and extreme heat are avoided by burrowing into loose soil. Periods of inactivity and winter hibernation are spent burrowed into the soil or under surface objects. Little is known about the habitat requirements for breeding and egg-laying of this species. Prey species include ants, beetles, wasps, grasshoppers, flies, and caterpillars.

The CNDDB reports five occurrences of the coast horned lizard within the seven quadrangles reviewed, the nearest of which is approximately 2.8 miles northeast of the project site. Additionally, this species has been observed throughout Fort Ord by DD&A biologists. Suitable habitat for this species is present within the project site within the dune scrub vegetation type.

*Smith's Blue Butterfly*

The SBB was listed as a federally Endangered species on June 1, 1976 (41 FR 22041 22044). SBB is also an HMP species. This species historically ranged along the California coast from Monterey Bay south through Big Sur to near Point Gorda, occurring in scattered populations in association with coastal dune, coastal scrub, chaparral, and grassland habitats. The primary limiting factor for SBB populations is the occurrence of their host plants, seacliff buckwheat and coast buckwheat (*Eriogonum latifolium*), in which they are associated with for their entire life span. There is also a potential for SBB to use naked buckwheat (E. nudum) within a range of the obligate host species (pers. comm. Dave Dixon, California State Parks). The presence of the host plant, however, is not always an indication of the occurrence of the butterfly, as the host plant distribution is much more extensive than that of the butterfly.

Individual adult males and females live approximately one week. Adult emergence and seasonal activity is synchronized with the blooming period of the particular buckwheat used at a given site. Dispersal data from capture-recapture studies (Arnold, 1983) indicate that most adults are quite sedentary, with home ranges no more than a few acres. SBB has only one generation per year. Females lay single eggs into buckwheat flower heads, which hatch in approximately one week. Caterpillars mature over a span of approximately three to four weeks, feeding on petals and seeds of the buckwheat plant. Chrysalis formation then takes place in the buckwheat flower head and the chrysalis eventually falls into the leaf litter and topsoil beneath the plant where it remains for approximately 47 weeks until the cycle begins again (Dixon, 1999).

The CNDDB reports 14 occurrences of the SBB within the seven quadrangles reviewed, including an occurrence that overlaps with a portion of the project site. Approximately 0.03 acre and nine individuals of seacliff buckwheat was identified within the dune scrub vegetation west of Highway 1 during botanical surveys in May 2019 (**Figure 6**). As such, this species is assumed present where its host plant occurs.

*Globose Dune Beetle*

The globose dune beetle is included on CDFW's "Special Animals" list. The globose dune beetle inhabits of California's coastal dune system. The species is widely distributed throughout California, in spite of the fact that the adults lack functional wings, and has also colonized the California Channel Islands. Though in some areas this beetle is still relatively abundant, it has been proposed for listing in order to call attention to the fact that its habitat, coastal dune is itself disappearing. Globose dune beetles are primarily subterranean, tunneling through sand underneath dune vegetation. These beetles feed on below-ground plant structures and detritus, and are also known to emerge from the sand to feed on the plants above ground at night. They feed preferentially on native plants, avoiding invasive exotics such as hottentot fig.

The CNDDB reports five occurrences of the globose dune beetle within the seven quadrangles reviewed, the nearest of which is approximately 0.5 mile from the project site. Suitable habitat for this species is present within the project site within dune scrub vegetation type.

*Nesting Raptors and Other Protected Avian Species*

Raptors, their nests, and other nesting birds are protected under California Fish and Game Code. While the life histories of these species vary, overlapping nesting (approximately February through August) and foraging similarities allow for their concurrent discussion. Most raptors are breeding residents throughout most of the wooded portions of the state. Stands of live oak, riparian deciduous, or other forest habitats, as well as open grasslands, are used most frequently for nesting. Breeding occurs February through August, with peak activity May through July. Prey for these species includes small birds, small mammals, and some reptiles and amphibians. Many raptor species hunt in open woodland and habitat edges.

Various species of raptors, such as red-tailed hawk, red-shouldered hawk, great horned owl, American kestrel, and turkey vulture, have a potential to nest within any of the large trees present within the project site. In addition, suitable nesting and foraging habitat is present for the Cooper's hawk, oak titmouse, wrentit, Allen's hummingbird, and spotted towhee.

4.2.2 Special-Status Plant Species

*Monterey Spineflower*

Monterey spineflower and is a federally threatened, CNPS CRPR 1B, and HMP species. It is a small, prostrate annual herb in the Polygonaceae family that blooms from April to June. Monterey spineflower typically occurs on open sandy or gravelly soils on relic dunes in coastal dune, coastal scrub, and maritime chaparral habitats, though it can also be associated with cismontane woodlands and valley and foothill grasslands, within a range of 3-450 meters in elevation.

The CNDDB reports an occurrence of this species that includes most of the project site. Approximately 0.02 acre and nine individuals of Monterey spineflower was identified within the project site west of Highway 1 during botanical surveys in May and June 2019 (**Figure 5**).

### 4.3 Sensitive Habitats

The project site was evaluated for the presence of sensitive habitats. Two sensitive habitats, dune scrub and Monterey spineflower critical habitat, were identified (**Figure 7**). These areas may also be considered ESHA by the CCC.

4.3.1 Dune Scrub

Dune scrub vegetation, as discussed above, is identified as a sensitive habitat on the CDFW's *California Natural Communities List* (CDFW, 2018b), in the HMP, and may also be considered ESHA by the CCC. Approximately 0.2 acre of dune scrub occurs within the project site west of Highway 1 (**Figure 7**).

4.3.2 Monterey Spineflower Critical Habitat

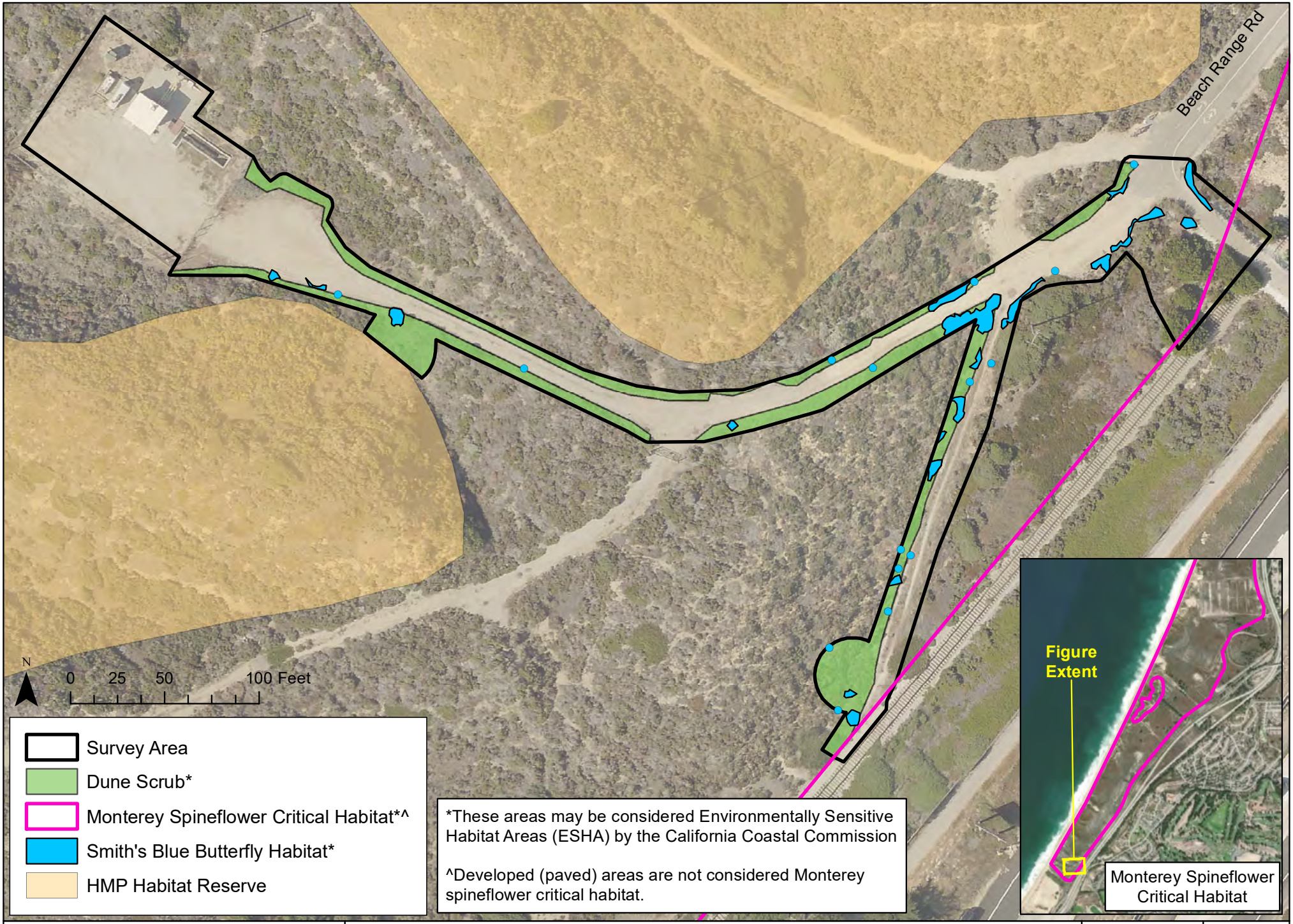
Approximately 0.7 acre of the project site, located west of Highway 1, is within designated critical habitat for Monterey spineflower. This area may also be considered ESHA by the CCC (**Figure 7**). This area contains the primary constituent elements for Monterey spineflower:

- Sandy soils associated with active coastal dunes, coastal bluffs with a deposition of windblown sand, inland sites with sandy soils, and interior floodplain dunes;
- Plant communities that support associated species, including coastal dune, coastal scrub, grassland, maritime chaparral, oak woodland, and interior floodplain dune communities, and have a structure with openings between the dominant elements (e.g., scrub, shrub, oak trees, clumps of herbaceous vegetation);
- No or little cover by non-native species which compete for resources available for growth and reproduction of Monterey spineflower; and
- Physical processes, such as occasional soil disturbance, that support natural dune dynamics along coastal areas.

The majority of the Monterey spineflower critical habitat area that occurs within the project site is currently degraded as a result of ongoing use and maintenance within the existing lift station fence and the access road. However, areas of dune scrub, as described above, represent more intact Monterey spineflower critical habitat.

4.3.2 HMP Habitat Reserve

The project site is not located within an approved HCP or NCCP area. However, it is located within the Fort Ord HMP boundaries and the plan area associated with the Draft HCP. The project site is designated for development (with no restrictions) in the HMP for Fort Ord and is located within a designated development area in the Draft HCP. However, a portion of the project site is located immediately adjacent to a parcel designated as "habitat reserve" in the HMP (**Figure 7**).

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# Sensitive Habitats Map

Date: 9/4/2019
Scale: 1 in = 65 ft
Figure: 7

Path: C:\GIS\GIS_Projects\2019-10 Ord Lift Station\Final Products\Bio Report Maps\Sensitive Habitats Map.mxd

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# 5.0 IMPACTS AND MITIGATION MEASURES

## 5.1 Thresholds of Significance

For the purposes of this analysis, an impact is considered to be significant and require mitigation if it would result in any of the following:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS;
c. Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling hydrological interruption, or other means;
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites;
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

## 5.2 Approach to Analysis

The following impact analysis addresses direct and indirect impacts that may result from the construction and operation of the proposed project. Direct impacts are those effects of a project that occur at the same time and place of project implementation, such as removal of habitat from ground disturbance. Indirect impacts are those effects of a project that occur either later in time or at a distance from the project location but are reasonably foreseeable, such as loss of aquatic species from upstream effects on water quality. Direct and indirect impacts can also vary in duration and result in temporary, short-term, and long-term effects on biological resources. A temporary effect would occur only during the activity. A short-term effect would last from the time an activity ceases to some intermediate period of approximately one to five years (i.e., repopulation of habitat following restoration). A long-term or permanent effect would last longer than five years after an activity ceases. Long-term effects may include the ongoing maintenance and operation of a project, or may result in a permanent change in the condition of a resource, in which case it could be considered a permanent impact.

The project site is located within parcels designated as "development" and "development within reserve areas or development with restrictions." Through implementation of the HMP, impacts to HMP species and habitats occurring within the designated development parcels were anticipated and mitigated through the establishment of habitat reserves and corridors and the implementation of habitat management requirements within habitat reserve parcels on former Fort Ord. As described above, parcels designated as "development" have no management restrictions. However, the 2017 Programmatic BO and HMP require the identification of sensitive botanical resources within these parcels that may be salvaged for use in restoration activities in reserve areas (USFWS, 2017b and ACOE, 1997). Additional management restrictions are identified parcels

designated as "development within reserve areas or development with restrictions" are also included in the HMP.

The HMP identifies two zones and four parcels on the west side of SR 1 as the responsibility of State Parks: the Coastal Dune Zone (CDZ) (parcel S3.1.2), the Disturbed Habitat Zone (DHZ) (parcels S3.1.1 and S3.1.3) and one development parcel (S3.1.4). The Project is located within one of the DHZ parcels (S3.1.1), which is designated for development with reserve areas and restrictions to accommodate State Parks future plans and also includes access for minor improvements to existing utilities and infrastructure. The HMP identifies management requirements and development restrictions within the DHZ parcel. The remainder of the project site is located within parcels designated as Development (L13.2, L29, L30, F2.2, and E15.2).

As described above, parcels designated as "development" have no management restrictions. However, the 2017 Programmatic BO requires the identification of sensitive botanical resources within these parcels that may be salvaged for use in restoration activities in reserve areas. Within the DHZ parcel, the HMP requires preservation and restoration of native vegetation and HMP species habitat outside of areas identified for development.

As a result of implementing the HMP, impacts to HMP species and habitats occurring within these parcels were anticipated and mitigated through the establishment of habitat reserves and corridors and the implementation of habitat management requirements within habitat reserve parcels on the former Fort Ord, including the 468-acre CDZ habitat reserve parcel within FODSP directly adjacent to the Project Site. The HMP species that are known or have a moderate to high potential to occur within the proposed project site include Monterey spineflower, Northern California legless lizard, and SBB. With the designated habitat reserves and corridors and habitat management requirements of the HMP in place, the loss of these species is not expected to jeopardize the long-term viability of these species and their populations on the former Fort Ord (USFWS, 1993). This is such because the recipients of disposed land with restrictions or management guidelines designated by the HMP will be obligated to implement those specific measures through the HMP and deed covenants. In addition to the HMP species identified, impacts to sensitive dune scrub habitat are also addressed in the HMP and, therefore, impacts to this habitat are also considered mitigated through the implementation of the HMP based on the same conclusions. The proposed project is:

1. Located within designated "development" or "development with reserve areas or restrictions" parcels;
2. Required to comply with the habitat management restrictions identified in the HMP; and
3. Would not result in any additional impacts to HMP species and habitats beyond those anticipated in the HMP.

Therefore, no additional mitigation measures for these HMP species or dune scrub habitat are required. Impacts to these special-status species and dune scrub are considered less than significant. The HMP and 2017 Programmatic BO require the identification of sensitive botanical resources within development parcels that may be avoided or salvaged for use in restoration activities in habitat reserve areas. The MCWD is required to implement HMP requirements in accordance with the deed covenants, which apply to parcels within the project site. Therefore, this analysis assumes that HMP species will be avoided to the greatest extent feasible and, if not feasible, salvage of HMP species will be conducted in accordance with this requirement.

However, as described above, the HMP does not exempt existing or future land recipients from the federal and state requirements of ESA and CESA. Of the three HMP species known or with a potential to occur within the project site, one federally listed wildlife species, SBB, has a moderate potential to be impacted by the project and may require take authorization from USFWS. Additionally, Monterey spineflower, a federally listed plant species, is present within the project site west of Highway 1. As described in Section 3.5 "Regulatory Setting," if there is the potential for incidental take of a federally listed fish or wildlife species, take of the listed species can be authorized through either the Section 7 consultation process for federal actions, or a Section 10 incidental take permit process for non-federal actions. This analysis assumes that the project would be required to comply with Section 10 of the ESA. The ESA does not prohibit incidental take of federally listed plant species.

It is also important to note that SBB is covered species in the Draft Fort Ord HCP. When the HCP is approved and the ESA incidental take permit is issued, the incidental take of this species resulting in covered activities (including but not limited to development in designated development areas) would be authorized base-wide, and project-specific permits would not be required. It is anticipated that these base-wide federal and state permits will be issued in early 2020. In the event that base-wide permits are not issued, impacts resulting in incidental take of SBB would need to be authorized by the USFWS through Section 10 consultation with the USFWS to avoid violation of the ESA.

Where suitable habitat exists within the project site, the proposed project has the potential to impact special-status species that were not addressed in the HMP. The non-HMP species that are known or have a moderate to high potential to occur within and be impacted by the project include hoary bat, Monterey dusky-footed woodrat, coast horned lizard, globose dune beetle, and nesting raptors and other protected avian species (including, but not limited to, Cooper's hawk, oak titmouse, wrentit, spotted towhee, and Allen's hummingbird).

### 5.3 Areas of No Impact

Criterion "c" is not evaluated for construction or operational impacts to State or Federally protected wetlands as there are none present within or adjacent the project site, and thus, would not be impacted by the proposed project.

### 5.4 Impacts and Mitigation Measures

***Impact BIO-1:*** *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.*

*HMP Special-Status Species*

Implementation of the project could result in impacts to the following HMP species: SBB, Northern California legless lizard, and Monterey spineflower. As described in the **Approach to Analysis**, impacts within development parcels to special-status plant and wildlife species addressed in the HMP are considered less than significant. However, Monterey spineflower and habitat for SBB occur in the DHZ on parcels designated as "development with reserve areas or restrictions." As described in the HMP, the DHZ is intended for the preservation of restored coastal dunes habitats and for visitor service facilities but also includes access for minor improvements to existing utilities and infrastructure.

The HMP and the 2017 Programmatic BO require an analysis to determine if seed and topsoil salvage is feasible to support reseeding and restoration efforts on- or off-site. Monterey spineflower occurs along the margin of the access routes to the manholes and existing lift station areas of the project site. Monterey spineflower individuals may be temporarily impacted by construction traffic; however, no ground disturbance will occur. As such, seed and topsoil salvage in these areas is unnecessary as the seedbank will remain intact. However, while not required to reduce a significant impact, **Mitigation Measure BIO-8** will be implemented to further reduce impacts to Monterey spineflower by avoiding areas known to support this species to the greatest extent feasible.

While not required to reduce a significant impact, **Mitigation Measure BIO-1** will be implemented to further reduce impacts to SBB. This measure would require that SBB habitat be avoided and if avoidance is not feasible, that compliance with the ESA and/or CESA occurs in advance of construction. In the absence of an approved based-wide incidental take permit, impacts to species listed as threatened or endangered by CDFW and/or the USFWS may also require agency consultation and/or incidental take permits. Therefore, although SBB is an HMP species, **Mitigation Measure BIO-1** acknowledges that the take of this species is prohibited under the ESA and may require Section 10 consultation or other authorization. Impacts resulting in take of SBB would need to be authorized by the USFWS through the issuance of an incidental take permit from USFWS to avoid violation of ESA.

**Mitigation Measures BIO-2, BIO-3,** and **BIO-4** have been identified to reduce potentially significant impacts to non-HMP special-status species and habitat; however, HMP special-status species and habitats would also benefit from the implementation of these measures. These measures would reduce construction-related impacts through a combination of protective measures during construction, education, monitoring, and invasive species controls. Please see the **Non-HMP Special-Status Species** discussion below for details regarding these measures.

Therefore, potential impacts to HMP special-status species and habitat resulting from implementation of the project are less than significant. Implementation of **Mitigation Measures BIO-1** through **BIO-4** would further reduce impacts to these species.

*Non-HMP Special-Status Wildlife Species*

Suitable habitat for several non-HMP special-status wildlife species is present within the project site. The non-HMP wildlife species that are known or have a moderate to high potential to occur within and be impacted by the project include hoary bat, Monterey dusky-footed woodrat, globose dune beetle, coast horned lizard, and nesting raptors and other protected avian species (including, but not limited to, Cooper's hawk, oak titmouse, wrentit, spotted towhee, and Allen's hummingbird). **Mitigation Measures BIO-2, BIO-4,** and **BIO-5** have been identified to reduce potentially significant impacts to non-HMP special-status species and habitat. These measures would reduce construction-related impacts through a combination of protective measures during all phases of construction, education, monitoring, and invasive species controls.

The project site contains suitable habitat for the coast horned lizard and globose dune beetle (i.e., within dune scrub). Project implementation could result in direct impacts to individuals and loss of habitat. This is a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4**, which avoid and minimize impacts through implementing construction best management practices, monitoring,

and invasive species controls, would reduce potentially significant impacts to the coast horned lizard and globose dune beetle to a less-than-significant level.

The project site contains trees that may provide roosting habitat for hoary bat. Trimming of trees, construction noise, dust, and vibration adjacent to large trees could cause direct and indirect impacts to hoary bats, including roost abandonment and death of young. It is unlikely that hoary bats birth and rear young in California. As a result, this species will not be breeding within the vicinity of the project site. However, impacts to individuals and roosting habitat would be a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-5** will reduce potentially significant impacts to hoary bats to a less-than-significant level through a combination of implementing protective measures during construction; education; monitoring; avoidance, preservation, and protection of hoary bat, as identified during pre-construction surveys for potential roost sites, if feasible; and replacement of roost sites if avoidance is not feasible.

The project site contains suitable habitat for the Monterey dusky-footed woodrat (i.e., dune scrub and portions of the ruderal areas) and project implementation could result in direct impacts to individuals and loss of habitat. Construction noise, dust, and vibration adjacent to large trees could cause indirect impacts to Monterey dusky-footed woodrat such as nest abandonment and death of young. This is a potentially significant impact. Implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-6** will reduce potentially significant impacts to Monterey dusky-footed woodrat to a less-than-significant level through a combination of implementing protective measures during construction; education; monitoring; and avoidance, preservation, and protection of active nests, as identified during pre-construction woodrat nest surveys.

Large trees within the project site provide suitable nesting habitat for tree-nesting raptors, including the special-status Cooper's hawk, and other nesting birds. In addition, other protected avian species may nest or forage within the site, including oak titmouse (trees within ruderal areas), wrentit (dune scrub), and spotted towhee and Allen's hummingbird (all undeveloped areas of the site). Construction-related activities (e.g., trimming and removal of vegetation, and equipment noise, vibration) that result in harm, injury, or death of individuals, or abandonment of an active nest would be a significant impact. Construction activities that adversely affect the nesting success of raptors or result in mortality of individual birds constitute a violation of California law and would be a significant impact under CEQA. This is a potentially significant impact that would be reduced to a less-than-significant level with implementation of **Mitigation Measures BIO-2** through **BIO-4** and species-specific **Mitigation Measure BIO-7**, which includes surveys to identify the presence of active nests prior to construction and measures to avoid active nests if found.

Therefore, potentially significant impacts to non-HMP special-status wildlife species would be reduced to a less-than-significant level with implementation of **Mitigation Measures BIO-2** through **BIO-7**.

*Special-Status Species Habitat*

Implementation of the 2015 Master Plan would result in impacts to approximately 6.7 acres of potential habitat for special-status species. As discussed in the "Regulatory Setting" section, the Fort Ord HMP establishes guidelines for the conservation and management of species and habitats on former Fort Ord lands by identifying lands that are available for development, lands that have some restrictions with development, and habitat reserve areas. The intent of the plan is to establish large, contiguous habitat

conservation areas and wildlife corridors to compensate for future development in other areas of the former base. The HMP identifies what type of activities can occur on each parcel at former Fort Ord and parcels are designated as "development with no restrictions," "development with reserve area or restrictions," or "habitat reserve." The HMP sets the standards to assure the long-term viability of former Fort Ord's biological resources in the context of base reuse so that no further mitigation should be necessary for impacts to species and habitats considered in the HMP. This plan has been approved by USFWS; the HMP, deed restrictions, and Memoranda of Agreement between the Army and various land recipients provide the legal mechanism to assure HMP implementation. It is a legally binding document, and all recipients of former Fort Ord lands are required to abide by its management requirements and procedures.

The HMP anticipates some losses to special-status species and sensitive habitats as a result of redevelopment of the former Fort Ord. With the designated reserves and corridors and habitat management requirements in place, the losses of individuals of species and sensitive habitats considered in the HMP are not expected to jeopardize the long-term viability of those species, their populations, or sensitive habitats on former Fort Ord. Recipients of disposed land with restrictions or management guidelines designated by the HMP will be obligated to implement those specific measures through the HMP and through deed covenants. Approximately 18,500 acres of the former Fort Ord will be preserved in permanent open space through implementation of the HMP.

The project is proposed within designated development and development with reserve areas or restrictions parcels. Therefore, implementation of the project would not have a significant impact on special-status species habitat, particularly when taken into context with the over 18,500 acres of preserved habitat for special-status species within the former Fort Ord. This is a less than significant impact. No mitigation is required.

***Mitigation Measure BIO-1 Smith's Blue Butterfly***

SBB habitat (i.e. seacliff buckwheat) shall be avoided to the greatest extent feasible. SBB habitat that will not be impacted by the project shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

If all SBB habitat is avoided, no additional mitigation is necessary. If the project will impact SBB habitat, compliance with the ESA shall occur in advance of construction:

<u>With Approved Base-Wide HCP:</u>
As described above, impacts to SBB and its habitat would be authorized under the base-wide incidental take permit issued by USFWS. The MCWD shall comply with the avoidance and minimization measures and mitigation measures in the approved HCP. No additional mitigation is required.

<u>Without Approved Base-Wide HCP</u>:
The MCWD will comply with the ESA and obtain necessary authorizations prior to construction due to the assumed presence of the Federally listed SBB. The MCWD shall be required to initiate a Section 10 consultation with the USFWS to receive take authorization. Take authorization would

be granted through the issuance of an individual, project-specific incidental take permit, which requires preparation and implementation of an HCP. Mitigation for take likely would require restoration at a 3:1 ratio of impacted habitat. Buckwheat plants and/or seed salvage may also be required prior to ground disturbing activities.

***Mitigation Measure BIO-2: Construction Best Management Practices***

The following best management practices will be implemented during all identified phases of construction (i.e., pre-, during, and post-) to reduce impacts to special-status plant and wildlife species:

- A qualified biologist will conduct an Employee Education Program for the construction crew prior to any construction activities. The qualified biologist will meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by USFWS and CDFW; and 6) the proper procedures if a special-status species is encountered within the project site.
- Trees and vegetation not planned for removal or trimming will be protected prior to and during construction to the maximum possible through the use of exclusionary fencing, such as hay bales for herbaceous and shrubby vegetation, and protective wood barriers for trees. Only certified weed-free straw will be used to avoid the introduction of non-native, invasive species. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.
- Following construction, disturbed areas will be restored to pre-project contours to the maximum extent possible and revegetated using locally-occurring native species and native erosion control seed mix, per the recommendations of a qualified biologist. Any revegetation on State Park property shall be conducted in coordination with State Parks.
- Grading, excavating, and other activities that involve substantial soil disturbance will be planned and implemented in consultation with a qualified hydrologist, engineer, or erosion control specialist, and will utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation (pre-, during, and post-construction).
- No firearms will be allowed on the project site at any time.
- All food-related and other trash will be disposed of in closed containers and removed from the project area at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel will not feed or otherwise attract wildlife to the area.

***Mitigation Measure BIO-3: Construction-Phase Monitoring***

The MCWD will retain a qualified biologist to monitor all ground disturbing construction activities (i.e., vegetation removal, grading, excavation, or similar activities) to protect any special-status species encountered. Any handling and relocation protocols of special-status wildlife species will be determined in coordination with CDFW prior to any ground disturbing activities, and will be conducted by a qualified biologist with appropriate scientific collection permit. After ground disturbing project activities are complete, the qualified biologist will train an individual from the construction crew to act as the on-site construction biological monitor. The construction biological monitor will be the contact for any special-status wildlife species encounters, will conduct daily inspections of equipment and materials stored on site and any holes or trenches prior to the commencement of work, and will ensure that all installed fencing stays in place throughout the construction period. The qualified biologist will then conduct regular scheduled and unscheduled visits to ensure the construction biological monitor is satisfactorily implementing all appropriate mitigation protocols. Both the qualified biologist and the construction biological monitor have the ability cease construction contractor work and/or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project. The qualified biologist and the construction monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration of the project. The log will also include any special-status wildlife species observed and relocated.

***Mitigation Measure BIO-4: Non-Native, Invasive Species Controls***

The following measures will be implemented to reduce the introduction and spread of non-native, invasive species:

- Any landscaping or replanting required for the project will not use species listed as noxious by the California Department of Food and Agriculture (CDFA) or invasive by the California Invasive Plant Council (Cal-IPC).
- Bare and disturbed soil will be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion on noxious weeds in the project site. Species to be seeded or planted within State Parks property shall be approved by State Parks prior to planting.
- Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds, before mobilizing to arrive at the construction site and before leaving the construction site.
- All non-native, invasive plant species will be removed from disturbed areas prior to replanting.

***Mitigation Measure BIO-5: Pre-Construction Surveys for Hoary Bat***

To avoid and reduce impacts to hoary bat, the MCWD will retain a qualified bat specialist or wildlife biologist to conduct site surveys during the reproductive season (May 1 through September 15) to characterize bat utilization of the site and potential species present (techniques utilized to be determined by the biologist) prior to any tree removal or trimming. Based on the results of these initial surveys, one or more of the following will occur:

- If it is determined that hoary bats are not present at the site, no additional mitigation is required.
- If it is determined that hoary bats are utilizing the site and may be impacted by the proposed project, pre-construction surveys will be conducted within 100 feet of construction limits no more than 30 days prior to any tree removal. If, according to the bat specialist, no hoary bats or bat signs are observed in the course of the pre-construction surveys, tree removal may proceed. If hoary bats and/or bat signs are observed during the pre-construction surveys, the biologist will determine if disturbance will jeopardize the roost (i.e., maternity, foraging, day, or night).
- If a single bat and/or only adult bats are roosting, removal or trimming of trees may proceed after the bats have been safely excluded from the roost. Exclusion techniques will be determined by the biologist and depend on the roost type; the biologist will prepare a mitigation plan for provision of alternative habitat to be approved by CDFW.

***Mitigation Measure BIO-6: Pre-Construction Surveys for Monterey Dusky-Footed Woodrat***

Not more than thirty (30) days prior to the start of construction (including vegetation removal), a qualified biologist shall conduct a survey of the project site to locate existing Monterey dusky-footed woodrat nests. All Monterey dusky-footed woodrat nests shall be mapped and flagged for avoidance. Graphics depicting all Monterey dusky-footed woodrat nests shall be provided to the construction contractor. Any Monterey dusky-footed woodrat nests that cannot be avoided shall be relocated according to the following procedures:

Each active nest shall be disturbed by the qualified biologist to the degree that the woodrats leave the nest and seek refuge elsewhere. After the nests have been disturbed, the nest sticks shall be removed from the impact areas and placed outside of areas planned for impacts. Nests shall be dismantled during the non-breeding season (between October 1 and December 31), if possible. If a litter of young is found or suspected, nest material shall be replaced and the nest left alone for 2-3 weeks, after this time the nest will be rechecked to verify that young are capable of independent survival before proceeding with nest dismantling.

***Mitigation Measure BIO-7: Pre-Construction Surveys for Protected Avian Species***

Construction activities that may directly (e.g., vegetation removal) or indirectly (e.g., noise/ground disturbance) affect protected nesting avian species will be timed to avoid the breeding and nesting season. Specifically, vegetation and/or tree removal can be scheduled after September 16 and before January 31. Alternatively, a qualified biologist will be retained by the project applicant to conduct pre-construction surveys for nesting raptors and other protected avian species within 500 feet of proposed construction activities if construction occurs between February 1 and September 15. Pre-construction surveys will be conducted no more than 14 days prior to the start of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). Because some bird species nest early in spring and others nest later in summer, surveys for nesting birds may be required to continue during construction to address new arrivals, and because some species breed multiple times in a season. The necessity and timing

of these continued surveys will be determined by the qualified biologist based on review of the final construction plans and in coordination with the CDFW, as needed.

If raptors or other protected avian species nests are identified during the pre-construction surveys, the qualified biologist will notify the project applicant and an appropriate no-disturbance buffer will be imposed within which no construction activities or disturbance should take place (generally 500 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.

***Mitigation Measure BIO-8: Special-Status Plant Species Avoidance***

Monterey spineflower shall be avoided to the greatest extent feasible. Areas of Monterey spineflower that will not be impacted by the project shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

***Impact BIO-2:*** *Substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.*

Habitats occurring within the project site that are listed as sensitive on the CDFW's *California Natural Communities List* include dune scrub. Approximately 0.2 acre of dune scrub occurs within the project site and may be impacted by the project. Dune scrub adjacent to, but outside of the project site may be impacted if work occur outside of the project boundaries.

As stated in the "Approach to Analysis," the implementation of the HMP mitigates for the loss of dune scrub by preserving this habitat within the habitat reserve areas on the former Fort Ord. The HMP requires an analysis to determine if seed and topsoil salvage is feasible to support reseeding and restoration efforts on- or off-site. Dune scrub vegetation occurs around two of the manholes that will be abandoned and along the margins of the access routes to the existing lift station and manhole locations. The vegetation may be removed around the manholes during construction; however, this would be a temporary impact and no ground disturbance will occur. As such, seed and topsoil salvage in these areas is unnecessary.

However, dune scrub vegetation may be considered ESHA by the CCC. As such, impacts to dune scrub would be a potentially significant impact. Therefore, **Mitigation Measure BIO-9** will be implemented to reduce impacts to dune scrub vegetation. This measure would require that dune scrub be avoided to the greatest extent feasible and that any dune scrub vegetation removed be replanted at a 2:1 ratio.

Approximately 0.7 acre of Monterey spineflower critical habitat is present within the project site west of Highway 1. Monterey spineflower critical habitat may also be considered ESHA by the CCC. The majority of the Monterey spineflower critical habitat area that occurs within the project site is currently degraded as a result of ongoing use and maintenance within the existing lift station fence and the access road. However, areas of dune scrub within the project site represent more intact Monterey spineflower critical habitat. Temporary impacts may include vegetation removal for access to manholes, construction traffic, and

ground disturbance during demolition of the existing lift station. However, no new structures will be constructed within Monterey spineflower critical habitat and no permanent loss of Monterey spineflower critical habitat will occur. Conversely, demolition of the existing lift station is likely to increase the available area of critical habitat for Monterey spineflower. This would be considered a beneficial impact and no mitigation is necessary.

***Mitigation Measure BIO-9: Dune Scrub***

Dune scrub vegetation shall be avoided to the greatest extent feasible. Dune scrub vegetation not planned for removal shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.

Dune scrub that cannot be avoided shall be quantified prior to construction and replanted at a 2:1 ratio for the area removed. A restoration plan shall be prepared by a qualified biologist and shall be implemented by the MCWD or a contracted entity. The restoration plan shall be prepared in coordination and compliance with State Parks restoration guidelines and shall include:

- A planting palette of only locally-occurring native species collected from the Project vicinity or acquired from approved local suppliers.
- Procedures to control non-native species invasion.
- Provisions to ensure compliance with the requirements of the plan.
- A detailed description of seeding and planting specifications.
- A description of a monitoring program, including specific methods of vegetation monitoring, data collection and analysis, goals and objectives, success criteria, adaptive management if the criteria are not met, reporting protocols, and a funding mechanism.

*Impact BIO-3: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites.*

Wildlife movement corridors are pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or man-made factors, such as urbanization. The fragmentation of natural habitat creates isolated "islands" of vegetation that may not provide sufficient area or resources to accommodate sustainable populations for a number of species, and, therefore, adversely affect both genetic and species diversity. Corridors often partially or largely mitigate the adverse effects of fragmentation by 1) allowing animals to move between remaining habitats to replenish depleted populations and increase the gene pool available; 2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (e.g., fire and disease) will result in population or species extinction; and 3) serving as travel paths for individual animals moving throughout their home range in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

The 2010 Monterey County General Plan EIR identified a number of significant wildlife movement corridors and linkages within the vicinity of the former Fort Ord, including Linkage 308: Fort Ord – Ventana; Linkage 322: Highway 68 Western Crossing; Linkage 350: Sierra de Salinas – Toro Peak; Linkage 339: Salinas Valley Floor; and Linkage 378: Salinas River – Pinnacles National Monument (County of Monterey, 2010). Of particular importance for wildlife movement from the former Fort Ord lands to outlying areas are Linkages 308 and 322. Specifically, Linkage 322 runs along El Toro Creek in the southeastern portion of former Fort Ord and through a large, bridge undercrossing Highway 68. This corridor has been identified as a significant wildlife corridor for mammals, amphibians, and reptiles moving between former Fort Ord lands and connecting to the Sierra de Salinas and Santa Lucia Ranges.

The HMP considered conservation area connectivity as an essential component of the design of the conservation areas and corridors within the former Fort Ord. The HMP created conservation areas and corridors with the purpose of linking the plant and animal populations in the northern portion of the former base at the Marina Municipal Airport to the populations in the south to the Fort Ord National Monument and the El Toro Creek undercrossing of Highway 68. The implementation of the HMP preserves over 18,500 acres of a variety of habitats supporting a variety of common and special-status plant species, and maintains a north-south wildlife corridor across the former Fort Ord lands to connect with the primary, significant wildlife linkages.

The project site is located in the western portion of the former Fort Ord. East of Highway 1, the project is adjacent to existing developed areas. West of Highway 1, the project site is surrounded by open space associated with the FODSP and, further west, the Monterey Bay. As discussed in the "Results" section, the project site is partially in undeveloped land that is comprised of two vegetation units (dune and ruderal/disturbed/landscaped); however, portions of the site are also developed area (paved roads and structures). The implementation of the proposed project would involve impacts to these habitat types; however, the project site also supports wildlife movement, as there are various vegetative communities, vegetative cover, and the adjacency of open space areas with high quality wildlife habitat.

Chain-link fencing is currently in place surrounding the existing lift station and along the Highway 1 boundary. Following construction, the fencing surrounding the existing lift station will be removed, which would improve wildlife movement and use of the area. Fencing would be installed around the electrical equipment associated with the new pump station; however, the fencing is not considered a significant structure that would impede wildlife movement as the enclosed area is not very large and the habitat value in the area is low. In addition, the site is surrounded by some undeveloped lands, which can be utilized by wildlife. Therefore, habitat within the project site supports species movement on-site and would not substantially interfere with wildlife movement across the site. The proposed project would impact only a small percentage of wildlife habitat within the former Fort Ord. The HMP preserves approximately 18,500 acres of large, contiguous areas of wildlife habitat that will remain on the former Fort Ord and will be preserved in perpetuity. As a result, the development of the project, would not disconnect, fragment, or otherwise impeded wildlife movement in the primary, significant wildlife movement corridors between the former Fort Ord lands and other lands. This is a less than significant impact. No mitigation is required.

*Impact BIO-4: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

The Project would be required to comply with all applicable guidelines in the FODSP General Plan and Seaside General Plan, as well as mitigation measures contained in the FODSP General Plan EIR and Seaside General Plan EIR to the extent they are applicable. Applicable guidelines in the FODSP General Plan include: BIO-1, BIO-2, BIO-4, BIO-5, BIO-8, BIO-10, and BIO-17. These policies generally promote identifying, protecting, and ensuring perpetuation of park plant and wildlife species populations. Applicable mitigation measures in the FODSP General Plan EIR include: Mitigation Measure Bio-1 and Mitigation Measure Bio-2. These measures address potential impacts to native habitats and species, including special-status species. Implementation Plan COS-4.1.1 of the Seaside General Plan is applicable to the project, which requires the use of proper land use planning and environmental review to minimize the impacts of urban development of sensitive ecological and biological resources. There are no biological measures in the Seaside General Plan EIR applicable to the project. Therefore, the Project will not conflict with any local policies or ordinances protecting biological resources. No impact will occur and no mitigation is required.

*Impact BIO-5: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

The project site is not located within an approved HCP or NCCP area. However, it is located within the Fort Ord HMP boundaries and the plan area associated with the Draft HCP. The project site is designated for development (with no restrictions) in the HMP for Fort Ord and is located within a designated development area in the Draft HCP. As described in the "Approach to Analysis," the proposed project is consistent with the approved HMP. This is a less than significant impact. No mitigation is required.

A portion of the project site is located adjacent to a parcel designated as "habitat reserve" in the HMP. Impacts to the habitat reserve parcel would be considered a significant impact if work were to be conducted outside of the project boundaries. Therefore, **Mitigation Measure BIO-10** will be implemented to avoid impacts to habitat reserve areas and reduce the impact to less than significant.

> ***Mitigation Measure BIO-10: Habitat Reserve***
>
> No work shall occur within areas designated as habitat reserve by the Fort Ord HMP. Habitat reserve areas shall be protected prior to and during construction through the use of exclusionary fencing. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.

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# APPENDIX A

Special-Status Species Table

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## Special-Status Species Table

*Marina, Monterey, Moss Landing, Prunedale, Salinas, Seaside, and Spreckels Quadrangles*

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| **MAMMALS** | | | |
| *Corynorhinus townsendii* Townsend's big-eared bat | -- / CSC / -- | Found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Typically roost during the day in limestone caves, lava tubes, and mines, but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees. | **Low** Poor quality foraging and night roost habitat present the evaluation area. No maternity roosting habitat present within the evaluation area. The nearest occurrence is approximately 5 miles east of the project site. |
| *Lasiurus cinereus* Hoary bat | -- / CNDDB / -- | Prefers open habitats or habitat mosaics with access to trees for cover and open areas or edge for feeding. Generally roost in dense foliage of trees; does not use buildings for roosting. Winters in California and Mexico and often migrates towards summer quarters in the north and east during the spring. Young are born and reared in summer grounds, which is unlikely to occur in California. | **Moderate** Suitable foraging and night roost habitat present the evaluation area. Not known to breed in California. The nearest occurrence is approximately 3 miles southwest of the project site. |
| *Neotoma macrotis luciana* Monterey dusky-footed woodrat | -- / CSC / -- | Forest and oak woodland habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats. | **Moderate** Suitable habitat is present within the project site; however, no nests were observed within the project site during the May 2019 survey. |
| *Reithrodontomys megalotis distichlis* Salinas harvest mouse | -- / CNDDB / -- | Known only to occur from the Monterey Bay region. Occurs in fresh and brackish water wetlands and probably in the adjacent uplands around the mouth of the Salinas River. | **Unlikely** No suitable habitat is present within project site. Project site is out of the currently known range for this species. |
| ***Sorex ornatus salarius*** **Monterey ornate shrew** | -- / CSC / -- | Mostly moist or riparian woodland habitats and within chaparral, grassland, and emergent wetland habitats where there is a thick duff or downed logs. | **Unlikely** No suitable habitat is present within project site. |
| *Taxidea taxus* American badger | -- / CSC / -- | Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds. | **Unlikely** No suitable habitat is present within project site. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| **BIRDS** | | | |
| *Agelaius tricolor*<br>Tricolored blackbird (nesting colony) | -- / SC&CSC / -- | Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats. | **Unlikely**<br>No suitable habitat is present within project site. |
| *Asio flammeus*<br>Short-eared owl (nesting) | -- / CSC / -- | Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, meadows, dunes, irrigated lands, and saline and freshwater emergent marshes. Dense vegetation is required for roosting and nesting cover. This includes tall grasses, brush, ditches, and wetlands. Open, treeless areas containing elevated sites for perching, such as fence posts or small mounds, are also needed. Some individuals breed in northern California. | **Unlikely**<br>No suitable habitat is present within project site. |
| *Athene cunicularia*<br>Burrowing owl (burrow sites & some wintering sites) | -- / CSC / -- | Year-round resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Frequent open grasslands and shrublands with perches and burrows. Use rodent burrows (often California ground squirrel) for roosting and nesting cover. Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available. | **Unlikely**<br>No suitable habitat is present within project site. |
| *Brachyramphus marmoratus*<br>Marbled murrelet | FT / SE / -- | Occur year-round in marine subtidal and pelagic habitats from the Oregon border to Point Sal. Partial to coastlines with stands of mature redwood and Douglas-fir. Requires dense mature forests of redwood and/or Douglas-fir for breeding and nesting. | **Unlikely**<br>No suitable habitat is present within project site. |
| *Buteo regalis*<br>Ferruginous hawk (wintering) | -- / WL / -- | An uncommon winter resident and migrant at lower elevations and open grasslands in the Modoc Plateau, Central Valley, and Coast Ranges and a fairly common winter resident of grassland and agricultural areas in southwestern California. Frequent open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Does not breed in California. | **Unlikely**<br>No suitable habitat is present within project site. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| *Charadrius alexandrinus nivosus*<br>Western snowy plover | FT / CSC / -- | Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting. | **Unlikely**<br>No suitable habitat within the project site. This species is known to nest on the nearby sandy beach at Fort Ord Dunes State Park, but is unlikely to occur within the project site. |
| *Coturnicops noveboracensis*<br>Yellow rail | -- / CSC / -- | Wet meadows and coastal tidal marshes. Occurs year round in California, but in two primary seasonal roles: as a very local breeder in the northeastern interior and as a winter visitor (early Oct to mid-Apr) on the coast and in the Suisun Marsh region | **Unlikely**<br>No suitable habitat is present within project site. |
| *Cypseloides niger*<br>Black swift | -- / CSC / -- | Regularly nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons. Forages widely over many habitats. | **Unlikely**<br>No suitable habitat is present within project site. |
| *Elanus leucurus*<br>White-tailed kite (nesting) | -- / CFP / -- | Open groves, river valleys, marshes, and grasslands. Prefer such area with low roosts (fences etc.). Nest in shrubs and trees adjacent to grasslands. | **Low**<br>Poor quality nesting and foraging habitat is present within the project site. The nearest CNDDB occurrence is approximately 13 miles north of the project site; however, this species has been observed at Armstrong Ranch, located approximately 4 miles north of the project site. |
| *Empidonax traillii extimus*<br>Southwestern willow flycatcher | FE / SE / -- | Breeds in riparian habitat in areas ranging in elevation from sea level to over 2,600 meters. Builds nest in trees in densely vegetated areas. This species establishes nesting territories and builds, and forages in mosaics of relatively dense and expansive areas of trees and shrubs, near or adjacent to surface water or underlain by saturated soils. Not typically found nesting in areas without willows (*Salix sp*.), tamarisk (*Tamarix ramosissima*), or both. | **Unlikely**<br>No suitable habitat is present within project site. |
| *Eremophila alpestris actia*<br>California horned lark | -- / WL / -- | Variety of open habitats, usually where large trees and/or shrubs are absent. Found from grasslands along the coast to deserts at sea-level and alpine dwarf-shrub habitats are higher elevations. Builds open cup-like nests on the ground. | **Low**<br>Low quality nesting and foraging habitat is present within the open ruderal area of the project site. The nearest CNDDB occurrence is approximately 4 miles north the project site. |
| *Falco mexicanus*<br>Prairie falcon (nesting) | -- / WL / -- | Associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. Uses open terrain for foraging; nests in open terrain with canyons, cliffs, escarpments, and rock outcrops. | **Unlikely**<br>No suitable habitat is present within project site. |
| *Falco peregrinus anatum*<br>American peregrine falcon (nesting) | -- / CFP / -- | Forages for other birds over a variety of habitats. Breeds primarily on rocky cliffs. | **Unlikely**<br>No suitable habitat is present within project site. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| *Gymnogyps californianus* California condor | FE / SE /-- | Roosting sites in isolated rocky cliffs, rugged chaparral, and pine covered mountains 2000-6000 feet above sea level. Foraging area removed from nesting/roosting site (includes rangeland and coastal area - up to 19 mile commute one way). Nest sites in cliffs, crevices, potholes. | **Unlikely** No suitable habitat is present within project site. |
| *Laterallus jamaicensis coturniculus* California black rail | -- / ST&CFP / -- | Inhabits freshwater marshes, wet meadows & shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate during the year & dense vegetation for nesting habitat. | **Unlikely** No suitable habitat is present within project site. |
| *Pelecanus occidentalis californicus* California brown pelican | -- / CFP / -- | Found in estuarine, marine subtidal, and marine pelagic waters along the California coast. Usually rests on water or inaccessible rocks, but also uses mudflats, sandy beaches, wharfs, and jetties. | **Unlikely** No suitable habitat is present within project site. |
| *Rallus obsoletus obsoletus* California Ridgway's rail | FE / SE&CFP / -- | Salt and brackish marshes. | **Unlikely** No suitable habitat is present within project site. |
| *Riparia riparia* Bank swallow (nesting) | -- / ST / -- | Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes. | **Unlikely** No suitable habitat is present within project site. |
| *Sterna antillarum browni* California least tern | FE / SE / -- | Prefers undisturbed nest sites on open, sandy/gravelly shores near shallow-water feeding areas in estuaries. Sea beaches, bays, large rivers, bars. | **Unlikely** No suitable habitat is present within project site. |
| *Vireo bellii pusillus* Least Bell's Vireo | FE / SE / -- | Riparian areas and drainages. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage. | **Unlikely** No suitable habitat is present within project site. |
| **REPTILES AND AMPHIBIANS** | | | |
| ***Ambystoma californiense*** **California tiger salamander** | FT / ST /-- | Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources. | **Unlikely** No suitable breeding or upland habitat is present within the project site. The project site is outside of the known dispersal range of any known or potential breeding resources. |
| *Ambystoma macrodactylum croceum* Santa Cruz long-toed salamander | FE / SE&CFP /-- | Preferred habitats include ponderosa pine, montane hardwood-conifer, mixed conifer, montane riparian, red fir and wet meadows. Occurs in a small number of localities in Santa Cruz and Monterey Counties. Adults spend the majority of the time in underground burrows and beneath objects. Larvae prefer shallow water with clumps of vegetation. | **Unlikely** No suitable habitat is present within project site. Project site is south of the currently known range of this species. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| ***Anniella pulchra*** **Northern California legless lizard** (includes *A. p. nigra* as recognized by the HMP) | -- / CSC / -- | Requires moist, warm habitats with loose soil for burrowing and prostrate plant cover, often forages in leaf litter at plant bases; may be found on beaches, sandy washes, and in woodland, chaparral, and riparian areas. | **Assumed Present** This species is assumed present based on the presence of suitable habitat and a CNDDB occurrence within the project site. |
| *Emys marmorata* Western pond turtle | -- / CSC / -- | Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks. | **Unlikely** No suitable habitat is present within project site. |
| ***Phrynosoma blainvillii*** **Coast horned lizard** | -- / CSC / -- | Associated with open patches of sandy soils in washes, chaparral, scrub, and grasslands. | **High** Suitable habitat is present within the project site and this species is known to occur throughout the former Fort Ord. The nearest CNDDB occurrence is located approximately 2.8 miles northeast of the project site. |
| *Rana boylii* Foothill yellow-legged frog | -- / SC&CSC / -- | Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, including hardwood, pine, and riparian forests, scrub, chaparral, and wet meadows. Rarely encountered far from permanent water. | **Unlikely** No suitable habitat is present within project site. |
| ***Rana draytonii*** **California red-legged frog** | FT / CSC / -- | Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows. | **Unlikely** No suitable breeding or upland habitat is present within the project site. The project site is outside of the known dispersal range of any known or potential breeding resources. |
| *Taricha torosa* Coast range newt (Monterey County south only) | -- / CSC / -- | Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoirs. | **Unlikely** No suitable habitat is present within project site. |
| *Thamnophis hammondii* Two-striped garter snake | -- / CSC / -- | Associated with permanent or semi-permanent bodies of water bordered by dense vegetation in a variety of habitats from sea level to 2400m elevation. | **Unlikely** No suitable habitat is present within project site. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| **FISH** | | | |
| *Eucyclogobius newberryi*<br>Tidewater goby | FE / CSC / -- | Brackish water habitats, found in shallow lagoons and lower stream reaches. Tidewater gobies appear to be naturally absent (now and historically) from three large stretches of coastline where lagoons or estuaries are absent and steep topography or swift currents may prevent tidewater gobies from dispersing between adjacent localities. The southernmost large, natural gap occurs between the Salinas River in Monterey County and Arroyo del Oso in San Luis Obispo County. | **Not Present**<br>No suitable habitat is present within project site. |
| *Oncorhynchus mykiss irideus*<br>Steelhead<br>(south-central California coast DPS) | FT / -- / -- | Cold headwaters, creeks, and small to large rivers and lakes; anadromous in coastal streams. | **Not Present**<br>No suitable habitat is present within project site. |
| *Spirinchus thaleichthys*<br>Longfin smelt | FC / ST&CSC / -- | Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefers salinities of 15-30 PPT, but can be found in completely freshwater to almost pure seawater. | **Not Present**<br>No suitable habitat is present within project site. |
| **INVERTEBRATES** | | | |
| *Bombus caliginosus*<br>Obscure bumble bee | -- / CNDDB / -- | Native to the West Coast of the United States. Occurs primarily along the coast in grassy prairies and meadows within the Coast Range. This species can nest both under and above ground. When nesting above ground the species may utilize abandoned bird nests. Found in areas that are relatively humid including areas that are frequently foggy. | **Low**<br>Poor quality habitat is present within the project site. The nearest CNDDB occurrence is a historic non-specific occurrence (from the 1940s) located approximately 4 miles from the project site. |
| *Bombus occidentalis*<br>Western bumble bee | -- / CNDDB / -- | Occurs in open grassy areas, urban parks, urban gardens, chaparral, and meadows. This species generally nest underground. | **Low**<br>Poor quality habitat is present within the project site. The nearest CNDDB occurrence is a historic non-specific occurrence (from the 1930s) located approximately 3 miles from the project site. |
| *Branchinecta lynchi*<br>Vernal pool fairy shrimp | FT / -- / -- | Require ephemeral pools with no flow. Associated with vernal pool/grasslands from near Red Bluff (Shasta County), through the central valley, and into the South Coast Mountains Region.<br>Require ephemeral pools with no flow. | **Not Present**<br>No suitable habitat is present within project site. |
| *Coelus globosus*<br>Globose dune beetle | -- / CNDDB / -- | Coastal dunes. These beetles are primarily subterranean, tunneling through sand underneath dune vegetation. | **High**<br>Suitable habitat within the project site. The nearest CNDDB occurrence is approximately 0.5 mile from the project site. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| *Danaus plexippus*<br>Monarch butterfly | -- / CNDDB / -- | Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well. | **Unlikely**<br>No suitable habitat is present within the project site. Populations of this species have not been observed overwintering within the project site. |
| ***Euphilotes enoptes smithi***<br>**Smith's blue butterfly** | FE / -- / -- | Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are *Eriogonum latifolium* and *E. parvifolium*. | **Assumed Present**<br>This species is assumed present within the project site west of Highway 1 based on the presence of *E. parvifolium* populations and a CNDDB occurrence within the project site. |
| ***Linderiella occidentalis***<br>**California linderiella (fairy shrimp)** | -- / CNDDB / -- | Ephemeral ponds with no flow. Generally associated with hardpans. | **Not Present**<br>No suitable habitat within the project site. |
| *Tryonia imitator*<br>mimic tryonia (California brackishwater snail) | -- / CNDDB / -- | Inhabits coastal lagoons, estuaries and salt marshes. Found only in permanently submerged areas in a variety of sediment types. Tolerant of a wide range of salinities. | **Not Present**<br>No suitable habitat within the project site. |
| **PLANTS** | | | |
| *Agrostis lacuna-vernalis*<br>Vernal pool bent grass | -- / -- / 1B | Vernal pool Mima mounds at elevations of 115-145 meters. Annual herb in the Poaceae family; blooms April-May. Known only from Butterfly Valley and Machine Gun Flats of Ft. Ord National Monument. | **Not present**<br>No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019. |
| *Allium hickmanii*<br>Hickman's onion | -- / -- / 1B | Closed-cone coniferous forests, maritime chaparral, coastal prairie, coastal scrub, and valley and foothill grasslands at elevations of 5-200 meters. Bulbiferous perennial herb in the Alliaceae family; blooms March-May. | **Not present**<br>Not observed during the focused botanical survey in May 2019. |
| ***Arctostaphylos hookeri* ssp. *hookeri***<br>**Hooker's manzanita** | -- / -- / 1B | Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 85-536 meters. Evergreen shrub in the Ericaceae family; blooms January-June. | **Not present**<br>Not observed during the focused botanical survey in May 2019. |
| ***Arctostaphylos montereyensis***<br>**Toro manzanita** | -- / -- / 1B | Maritime chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 30-730 meters. Evergreen shrub in the Ericaceae family; blooms February-March. | **Not present**<br>Not observed during the focused botanical survey in May 2019. |
| *Arctostaphylos pajaroensis*<br>Pajaro manzanita | -- / -- / 1B | Chaparral on sandy soils at elevations of 30-760 meters. Evergreen shrub in the Ericaceae family; blooms December-March. | **Not present**<br>No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019. |
| ***Arctostaphylos pumila***<br>**Sandmat manzanita** | -- / -- / 1B | Openings of closed-cone coniferous forests, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 3-205 meters. Evergreen shrub in the Ericaceae family; blooms February-May. | **Not present**<br>Not observed during the focused botanical survey in May 2019. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| *Arenaria paludicola* Marsh sandwort | FE / SE / 1B | Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco Lake. Sandy openings of freshwater of brackish marshes and swamps at elevations of 3-170 meters. Stoloniferous perennial herb in the Caryophyllaceae family; blooms May-August. | **Not Present** No suitable habitat within the project site. The project site is outside of the currently known range for this species. Not observed during the focused botanical survey in May 2019. |
| *Astragalus tener* var. *tener* Alkali milk-vetch | -- / -- / 1B | Playas, valley and foothill grassland on adobe clay, and vernal pools on alkaline soils at elevations of 1-60 meters. Annual herb in the Fabaceae family; blooms March-June. | **Not present** No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019. |
| *Astragalus tener* var. *titi* Coastal dunes milk-vetch | FE / SE / 1B | Sandy soils in coastal bluff scrub, coastal dunes, coastal prairie (mesic); elevation 3-164 feet. Annual herb in the Fabaceae family; blooms March-May. | **Not present** Not observed during the focused botanical survey in May 2019. |
| *Bryoria spiralifera* Twisted horsehair lichen | -- / -- / 1B | California North Coast coniferous forest at elevations of 0–30 meters. Often found on conifers, including *Picea sitchensis*, *Pinus contorta* var. *contorta*, *Pseudotsuga menziesii*, *Abies grandis*, and *Tsuga heterophylla*. Fruticose lichen in the Parmeliaceae family. | **Not present** No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019. |
| *Castilleja ambigua var. insalutata* Pink Johnny-nip | -- / -- / 1B | Coastal prairie and coastal scrub at elevations of 0-100 meters. Annual herb in the Orobanchaceae family; blooms May-August. | **Not present** Not observed during the focused botanical survey in May 2019. |
| ***Ceanothus cuneatus* ssp. *rigidus*** **Monterey ceanothus** | -- / -- / List 4 | Closed cone coniferous forest, chaparral, and coastal scrub on sandy soils at elevations of 3-550 meters. Evergreen shrub in the Rhamnaceae family, blooms February-June. | **Not present** Not observed during the focused botanical survey in May 2019. |
| *Centromadia parryi* ssp. *congdonii* Congdon's tarplant | -- / -- / 1B | Valley and foothill grassland on heavy clay, saline, or alkaline soils at elevations of 0-230 meters. Annual herb in the Asteraceae family; blooms May-November. | **Not present** No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019. |
| *Chorizanthe minutiflora* Fort Ord spineflower | -- / -- / 1B | Sandy openings of maritime chaparral and coastal scrub at elevations of 55-150 meters. Only known occurrences on Fort Ord National Monument. Annual herb in the Polygonaceae family; blooms April-July. | **Not present** Not observed during the focused botanical survey in May 2019. |
| ***Chorizanthe pungens* var. *pungens*** **Monterey spineflower** | FT / -- / 1B | Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland on sandy soils at elevations of 3-450 meters. Annual herb in the Polygonaceae family; blooms April-July. | **Present** This species was observed within the project site west of Highway 1 during the focused botanical survey in May 2019. |
| ***Chorizanthe robusta* var. *robusta*** **Robust spineflower** | FE / -- / 1B | Openings in cismontane woodland, coastal dunes, maritime chaparral, and coastal scrub on sandy or gravelly soils at elevations of 3-300 meters. Annual herb in the Polygonaceae family; blooms April-September. | **Not present** Not observed during the focused botanical survey in May 2019. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| *Clarkia jolonensis*<br>Jolon clarkia | -- / -- / 1B | Cismontane woodland, chaparral, riparian woodland, and coastal scrub at elevations of 20-660 meters. Annual herb in the Onagraceae family; blooms April-June. | **Not present**<br>Not observed during the focused botanical survey in May 2019. |
| *Collinsia multicolor*<br>San Francisco collinsia | -- / -- / 1B | Closed-cone coniferous forest and coastal scrub, sometimes on serpentinite soils, at elevations of 30-250 meters. Annual herb in the Plantaginaceae family; blooms March-May. | **Not present**<br>Not observed during the focused botanical survey in May 2019. |
| ***Cordylanthus rigidus* ssp. *littoralis***<br>**Seaside bird's-beak** | -- / SE / 1B | Closed-cone coniferous forests, maritime chaparral, cismontane woodlands, coastal dunes, and coastal scrub on sandy soils, often on disturbed sites, at elevations of 0-425 meters. Annual hemi-parasitic herb in the Orobanchaceae family; blooms April-October. | **Not present**<br>Not observed within the project site during the focused botanical survey in June 2019. |
| *Delphinium californicum* ssp. *interius*<br>Hospital Canyon larkspur | -- / -- / 1B | Openings in chaparral, coastal scrub, and mesic areas of cismontane woodland at elevations of 230-1095 meters. Perennial herb in the Ranunculaceae family; blooms April-June. | **Not present**<br>Project site is below the known elevation range for this species. Not observed during the focused botanical survey in May 2019. |
| *Delphinium hutchinsoniae*<br>Hutchinson's larkspur | -- / -- / 1B | Broadleaved upland forest, chaparral, coastal scrub, and coastal prairie at elevations of 0-427 meters. Perennial herb in the Ranunculaceae family; blooms March-June. | **Not present**<br>Not observed during the focused botanical survey in May 2019. |
| *Delphinium umbraculorum*<br>Umbrella larkspur | -- / -- / 1B | Cismontane woodland at elevations of 400-1600 meters. Perennial herb in the Ranunculaceae family; blooms April-June. | **Not present**<br>No suitable habitat within the project site. Project site is below the known elevation range for this species. Not observed during the focused botanical survey in May 2019. |
| ***Ericameria fasciculata***<br>**Eastwood's goldenbush** | -- / -- / 1B | Openings in closed-cone coniferous forest, maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 30-275 meters. Evergreen shrub in the Asteraceae family; blooms July-October. | **Not present**<br>Not observed during the focused botanical survey in May 2019. |
| *Eriogonum nortonii*<br>Pinnacles buckwheat | -- / -- / 1B | Chaparral and valley and foothill grassland on sandy soils, often on recent burns, at elevations of 300-975 meters. Annual herb in the Polygonaceae family; blooms May-September. | **Not present**<br>No suitable habitat within the project site. Project site is below the known elevation range for this species. Not observed during the focused botanical survey in May 2019. |
| ***Erysimum ammophilum***<br>**Sand-loving wallflower** | -- / -- / 1B | Openings in maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 0-60 meters. Perennial herb in the Brassicaceae family; blooms February-June. | **Not present**<br>Not observed within the project site during the focused botanical survey in May 2019. |
| *Erysimum menziesii*<br>Menzies' wallflower | FE / SE / 1B | Coastal dunes at elevations of 0-35 meters. Perennial herb in the Brassicaceae family; blooms March-September. | **Not present**<br>Not observed within the project site during the focused botanical survey in May 2019. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| *Fritillaria liliacea*<br>Fragrant fritillary | -- / -- / 1B | Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often serpentinite, at elevations of 3-410 meters. Bulbiferous perennial herb in the Liliaceae family; blooms February-April. | **Not present**<br>No suitable habitat within the project site. Not observed during the focused botanical survey in May 2019. |
| ***Gilia tenuiflora* ssp. *arenaria***<br>**Monterey gilia** | FE / ST / 1B | Openings in maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 0-45 meters. Annual herb in the Polemoniaceae family; blooms April-June. | **Not present**<br>Not observed within the project site during the focused botanical survey in May 2019. |
| *Hesperocyparis goveniana*<br>Gowen cypress | FT / -- / 1B | Closed-cone coniferous forest and maritime chaparral at elevations of 30-300 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Point Lobos near Gibson Creek and the Huckleberry Hill Nature Preserve near Highway 68. | **Not Present**<br>No suitable habitat within the project site. Project site is outside of the currently known range for this species. Not identified during the focused botanical survey in May 2019. |
| *Hesperocyparis macrocarpa*<br>Monterey cypress | -- / -- / 1B | Closed-cone coniferous forest at elevations of 10-30 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Cypress Point in Pebble Beach and Point Lobos State Park; widely planted and naturalized elsewhere. | **Not Present**<br>Several Monterey cypress trees are present within the project site; however, the project site is outside of the currently known native range of this species. Individuals are from planted stock are therefore not considered special-status species. |
| *Holocarpha macradenia*<br>Santa Cruz tarplant | FT / SE / 1B | Coastal prairies and valley foothill grasslands, often clay or sandy soils, at elevations of 10-220 meters. Annual herb in the Asteraceae family; blooms June-October. | **Not Present**<br>No suitable habitat within the project site. Not observed within the project site during the focused botanical survey in June 2019. |
| *Horkelia cuneata* ssp. *sericea*<br>Kellogg's horkelia | -- / -- / 1B | Openings of closed-cone coniferous forests, maritime chaparral, coastal dunes, and coastal scrub on sandy or gravelly soils at elevations of 10-200 meters. Perennial herb in the Rosaceae family; blooms April-September. | **Not present**<br>Not observed within the project site during the focused botanical survey in May 2019. |
| *Horkelia marinensis*<br>Point Reyes horkelia | -- / -- / 1B | Coastal dunes, coastal prairie, and coastal scrub on sandy soils at elevations of 5-350 meters. Perennial herb in the Rosaceae family; blooms May-September. | **Not present**<br>Not observed within the project site during the focused botanical survey in May 2019. |
| *Lasthenia conjugens*<br>Contra Costa goldfields | FE / -- / 1B | Mesic areas of valley and foothill grassland, alkaline playas, cismontane woodland, and vernal pools at elevations of 0-470 meters. Annual herb in the Asteraceae family; blooms March-June. | **Not Present**<br>No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |
| *Layia carnosa*<br>Beach layia | FE / SE / 1B | Coastal dunes and coastal scrub on sandy soils at elevations of 0-60 meters. Annual herb in the Asteraceae family; blooms March-July. | **Not present**<br>Not observed within the project site during the focused botanical survey in May 2019. |
| *Legenere limosa*<br>Legenere | -- / -- / 1B | Vernal pools and wetlands at elevations of 1-880 meters. Annual herb in the Campanulaceae family; blooms April- June. | **Not Present**<br>No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| *Lupinus tidestromii*<br>Tidestrom's lupine | FE / SE / 1B | Coastal dunes at elevations of 0-100 meters. Perennial rhizomatous herb in the Fabaceae family; blooms April-June. | **Not present**<br>Not observed within the project site during the focused botanical survey in May 2019. |
| *Malacothamnus palmeri* var. *involucratus*<br>Carmel Valley bush-mallow | -- / -- / 1B | Chaparral, cismontane woodland, and coastal scrub at elevations of 30-1100 meters. Perennial deciduous shrub in the Malvaceae family; blooms May-October. | **Not present**<br>Not observed within the project site during the focused botanical survey in May 2019. |
| *Malacothrix saxatilis* var. *arachnoidea*<br>Carmel Valley malacothrix | -- / -- / 1B | Chaparral and coastal scrub on rocky soils at elevations of 25-1036 meters. Perennial rhizomatous herb in the Asteraceae family; blooms June-December. | **Not present**<br>No suitable habitat within the project site. Not observed within the project site during the focused botanical survey in June 2019. |
| *Meconella oregana*<br>Oregon meconella | -- / -- / 1B | Coastal prairie and coastal scrub at elevations of 250-620 meters. Annual herb in the Papaveraceae Family; blooms March-April. | **Not present**<br>Project site is below the known elevation range for this species. Not observed during the focused botanical survey in May 2019. |
| *Microseris paludosa*<br>Marsh microseris | -- / -- / 1B | Closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland at elevations of 5-300 meters. Perennial herb in the Asteraceae family; blooms April-July. | **Not present**<br>Not observed within the project site during the focused botanical survey in May 2019. |
| *Monardella sinuata* ssp. *nigrescens*<br>Northern curly-leaved monardella | -- / -- / 1B | Chaparral, coastal dunes, coastal scrub, and lower montane coniferous forest (ponderosa pine sandhills) on sandy soils at elevations of 0-300 meters. Annual herb in the Lamiaceae family; blooms April-September. | **Not present**<br>Not observed within the project site during the focused botanical survey in May 2019. |
| *Monolopia gracilens*<br>Woodland wollythreads | -- / -- / 1B | Openings of broadleaved upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland on serpentinite soils at elevations of 100-1200 meters. Annual herb in the Asteraceae family; blooms February-July. | **Not Present**<br>No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |
| *Pinus radiata*<br>Monterey pine | -- / -- / 1B | Closed-cone coniferous forest and cismontane woodland at elevations of 25-185 meters. Evergreen tree in the Pinaceae family. Only three native stands in CA at Ano Nuevo, Cambria, and the Monterey Peninsula; introduced in many areas. | **Not present**<br>Not observed within the project site during the focused botanical survey in May or June 2019. |
| ***Piperia yadonii***<br>**Yadon's rein orchid** | FE / -- / 1B | Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. Annual herb in the Orchidaceae family; blooms February-August. | **Not present**<br>Not observed within the project site during the focused botanical survey in May or June 2019. |
| *Plagiobothrys chorisianus* var. *chorisianus*<br>Choris' popcorn-flower | -- / -- / 1B | Mesic areas of chaparral, coastal prairie, and coastal scrub at elevations of 15-160 meters. Annual herb in the Boraginaceae family; blooms March-June. | **Not Present**<br>No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |

| Species | Status (Service/CDFW/CNPS) | General Habitat | Potential Occurrence within Project Site |
|---|---|---|---|
| *Potentilla hickmanii* Hickman's cinquefoil | FE / SE / 1B | Coastal bluff scrub, closed-cone coniferous forests, vernally mesic meadows and seeps, and freshwater marshes and swamps at elevations of 10-149 meters. Perennial herb in the Rosaceae family; blooms April-August. | **Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |
| *Ramalina thrausta* Angel's hair lichen | -- / -- / 2B | North coast coniferous forest on dead twigs and other lichens. Epiphytic fructose lichen in the Ramalinaceae family. In northern CA it is usually found on dead twigs, and has been found on *Alnus rubra*, *Calocedrus decurrens*, *Pseudotsuga menziesii*, *Quercus garryana*, and *Rubus spectabilis*. In Sonoma County it grows on and among dangling mats of *R. menziesii* and *Usnea* spp. | **Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |
| *Rosa pinetorum* Pine rose | -- / -- / 1B | Closed-cone coniferous forest at elevations of 2-300 meters. Perennial shrub in the Rosaceae family; blooms May-July. Possible hybrid of *R. spithamea*, *R. gymnocarpa*, or others; further study needed. | **Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |
| *Stebbinsoseris decipiens* Santa Cruz microseris | -- / -- / 1B | Broadleaved upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and openings in valley and foothill grassland, sometimes on serpentinite, at elevations of 10-500 meters. Annual herb in the Asteraceae family; blooms April-May. | **Not present** Not observed within the project site during the focused botanical survey in May 2019. |
| *Trifolium buckwestiorum* Santa Cruz clover | -- / -- / 1B | Gravelly margins of broadleaved upland forest, cismontane woodland, and coastal prairie at elevations of 105-610 meters. Annual herb in the Fabaceae family; blooms April-October. | **Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |
| *Trifolium hydrophilum* Saline clover | -- / -- / 1B | Marshes and swamps, mesic and alkaline valley and foothill grassland, and vernal pools at elevations of 0-300 meters. Annual herb in the Fabaceae family; blooms April-June. | **Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |
| *Trifolium polyodon* Pacific Grove clover | -- / SR / 1B | Mesic areas of closed-cone coniferous forest, coastal prairie, meadows and seeps, and valley and foothill grassland at elevations of 5-120 meters. Annual herb in the Fabaceae family; blooms April-July. | **Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |
| *Trifolium trichocalyx* Monterey clover | FE / SE / 1B | Sandy openings and burned areas of closed-cone coniferous forest at elevations of 30-240 meters. Annual herb in the Fabaceae family; blooms April-June. | **Not Present** No suitable habitat within the project site. Not identified during the focused botanical survey in May 2019. |

**STATUS DEFINITIONS**

**Federal**

FE = listed as Endangered under the federal Endangered Species Act
FT = listed as Threatened under the federal Endangered Species Act
FC = Candidate for listing under the federal Endangered Species Act
-- = no listing

**State**

SE = listed as Endangered under the California Endangered Species Act
ST = listed as Threatened under the California Endangered Species Act
SC = Candidate for listing under California Endangered Species Act
SR = listed as Rare under the California Endangered Species Act
CFP = California Fully Protected Species
CSC = CDFW Species of Concern
WL = CDFW Watch List
CNDDB = This designation is being assigned to animal species that are not assigned any of the other status designations defined in this table. These animal species are included in CDFW's CNDDB "Special Animals" list (2010), which includes all taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special-status species." The CDFW considers the taxa on this list to be those of greatest conservation need.
-- = no listing

**California Native Plant Society**

1B = California Rare Plant Rank 1B species; plants rare, threatened, or endangered in California and elsewhere
2B = California Rare Plant Rank 2B species; plants rare, threatened, or endangered in California, but more common elsewhere
4 = California Rare Plant Rank 4 species; plants of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly
-- = no listing

**Bold font indicates Fort Ord HMP Species**

**POTENTIAL TO OCCUR**

Present = known occurrence of species within the site; presence of suitable habitat conditions; or observed during field surveys
High = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of suitable habitat conditions
Moderate = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of marginal habitat conditions within the site
Low = species known to occur in the vicinity from the CNDDB or other documentation; lack of suitable habitat or poor quality
Unlikely = species not known to occur in the vicinity from the CNDDB or other documentation, no suitable habitat is present within the site
Not Present = species was not observed during surveys

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# APPENDIX B

CNDDB Rare Plant Report
(Marina, Monterey, Moss Landing, Prunedale, Salinas, Seaside, and Spreckels Quadrangles)

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# Selected Elements by Scientific Name

## California Department of Fish and Wildlife

## California Natural Diversity Database

**Query Criteria:** Quad IS (Marina (3612167) OR Monterey (3612158) OR Moss Landing (3612177) OR Prunedale (3612176) OR Salinas (3612166) OR Seaside (3612157) OR Spreckels (3612156))

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Agelaius tricolor*** tricolored blackbird | ABPBXB0020 | None | Candidate Endangered | G2G3 | S1S2 | SSC |
| ***Agrostis lacuna-vernalis*** vernal pool bent grass | PMPOA041N0 | None | None | G1 | S1 | 1B.1 |
| ***Allium hickmanii*** Hickman's onion | PMLIL02140 | None | None | G2 | S2 | 1B.2 |
| ***Ambystoma californiense*** California tiger salamander | AAAAA01180 | Threatened | Threatened | G2G3 | S2S3 | WL |
| ***Ambystoma macrodactylum croceum*** Santa Cruz long-toed salamander | AAAAA01082 | Endangered | Endangered | G5T1T2 | S1S2 | FP |
| ***Anniella pulchra*** northern California legless lizard | ARACC01020 | None | None | G3 | S3 | SSC |
| ***Arctostaphylos hookeri ssp. hookeri*** Hooker's manzanita | PDERI040J1 | None | None | G3T2 | S2 | 1B.2 |
| ***Arctostaphylos montereyensis*** Toro manzanita | PDERI040R0 | None | None | G2? | S2? | 1B.2 |
| ***Arctostaphylos pajaroensis*** Pajaro manzanita | PDERI04100 | None | None | G1 | S1 | 1B.1 |
| ***Arctostaphylos pumila*** sandmat manzanita | PDERI04180 | None | None | G1 | S1 | 1B.2 |
| ***Asio flammeus*** short-eared owl | ABNSB13040 | None | None | G5 | S3 | SSC |
| ***Astragalus tener var. tener*** alkali milk-vetch | PDFAB0F8R1 | None | None | G2T1 | S1 | 1B.2 |
| ***Astragalus tener var. titi*** coastal dunes milk-vetch | PDFAB0F8R2 | Endangered | Endangered | G2T1 | S1 | 1B.1 |
| ***Athene cunicularia*** burrowing owl | ABNSB10010 | None | None | G4 | S3 | SSC |
| ***Bombus caliginosus*** obscure bumble bee | IIHYM24380 | None | None | G4? | S1S2 | |
| ***Bombus occidentalis*** western bumble bee | IIHYM24250 | None | None | G2G3 | S1 | |
| ***Bryoria spiralifera*** twisted horsehair lichen | NLTEST5460 | None | None | G3 | S1S2 | 1B.1 |
| ***Buteo regalis*** ferruginous hawk | ABNKC19120 | None | None | G4 | S3S4 | WL |
| ***Castilleja ambigua var. insalutata*** pink Johnny-nip | PDSCR0D403 | None | None | G4T2 | S2 | 1B.1 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Central Dune Scrub*** | CTT21320CA | None | None | G2 | S2.2 | |
| Central Dune Scrub | | | | | | |
| ***Central Maritime Chaparral*** | CTT37C20CA | None | None | G2 | S2.2 | |
| Central Maritime Chaparral | | | | | | |
| ***Centromadia parryi ssp. congdonii*** | PDAST4R0P1 | None | None | G3T1T2 | S1S2 | 1B.1 |
| Congdon's tarplant | | | | | | |
| ***Charadrius alexandrinus nivosus*** | ABNNB03031 | Threatened | None | G3T3 | S2S3 | SSC |
| western snowy plover | | | | | | |
| ***Chorizanthe minutiflora*** | PDPGN04100 | None | None | G1 | S1 | 1B.2 |
| Fort Ord spineflower | | | | | | |
| ***Chorizanthe pungens var. pungens*** | PDPGN040M2 | Threatened | None | G2T2 | S2 | 1B.2 |
| Monterey spineflower | | | | | | |
| ***Chorizanthe robusta var. robusta*** | PDPGN040Q2 | Endangered | None | G2T1 | S1 | 1B.1 |
| robust spineflower | | | | | | |
| ***Clarkia jolonensis*** | PDONA050L0 | None | None | G2 | S2 | 1B.2 |
| Jolon clarkia | | | | | | |
| ***Coastal and Valley Freshwater Marsh*** | CTT52410CA | None | None | G3 | S2.1 | |
| Coastal and Valley Freshwater Marsh | | | | | | |
| ***Coastal Brackish Marsh*** | CTT52200CA | None | None | G2 | S2.1 | |
| Coastal Brackish Marsh | | | | | | |
| ***Coelus globosus*** | IICOL4A010 | None | None | G1G2 | S1S2 | |
| globose dune beetle | | | | | | |
| ***Collinsia multicolor*** | PDSCR0H0B0 | None | None | G2 | S2 | 1B.2 |
| San Francisco collinsia | | | | | | |
| ***Cordylanthus rigidus ssp. littoralis*** | PDSCR0J0P2 | None | Endangered | G5T2 | S2 | 1B.1 |
| seaside bird's-beak | | | | | | |
| ***Corynorhinus townsendii*** | AMACC08010 | None | None | G3G4 | S2 | SSC |
| Townsend's big-eared bat | | | | | | |
| ***Coturnicops noveboracensis*** | ABNME01010 | None | None | G4 | S1S2 | SSC |
| yellow rail | | | | | | |
| ***Cypseloides niger*** | ABNUA01010 | None | None | G4 | S2 | SSC |
| black swift | | | | | | |
| ***Danaus plexippus pop. 1*** | IILEPP2012 | None | None | G4T2T3 | S2S3 | |
| monarch - California overwintering population | | | | | | |
| ***Delphinium californicum ssp. interius*** | PDRAN0B0A2 | None | None | G3T3 | S3 | 1B.2 |
| Hospital Canyon larkspur | | | | | | |
| ***Delphinium hutchinsoniae*** | PDRAN0B0V0 | None | None | G2 | S2 | 1B.2 |
| Hutchinson's larkspur | | | | | | |
| ***Delphinium umbraculorum*** | PDRAN0B1W0 | None | None | G3 | S3 | 1B.3 |
| umbrella larkspur | | | | | | |
| ***Elanus leucurus*** | ABNKC06010 | None | None | G5 | S3S4 | FP |
| white-tailed kite | | | | | | |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Emys marmorata*** western pond turtle | ARAAD02030 | None | None | G3G4 | S3 | SSC |
| ***Eremophila alpestris actia*** California horned lark | ABPAT02011 | None | None | G5T4Q | S4 | WL |
| ***Ericameria fasciculata*** Eastwood's goldenbush | PDAST3L080 | None | None | G2 | S2 | 1B.1 |
| ***Eriogonum nortonii*** Pinnacles buckwheat | PDPGN08470 | None | None | G2 | S2 | 1B.3 |
| ***Erysimum ammophilum*** sand-loving wallflower | PDBRA16010 | None | None | G2 | S2 | 1B.2 |
| ***Erysimum menziesii*** Menzies' wallflower | PDBRA160R0 | Endangered | Endangered | G1 | S1 | 1B.1 |
| ***Eucyclogobius newberryi*** tidewater goby | AFCQN04010 | Endangered | None | G3 | S3 | SSC |
| ***Euphilotes enoptes smithi*** Smith's blue butterfly | IILEPG2026 | Endangered | None | G5T1T2 | S1S2 | |
| ***Falco mexicanus*** prairie falcon | ABNKD06090 | None | None | G5 | S4 | WL |
| ***Falco peregrinus anatum*** American peregrine falcon | ABNKD06071 | Delisted | Delisted | G4T4 | S3S4 | FP |
| ***Fritillaria liliacea*** fragrant fritillary | PMLIL0V0C0 | None | None | G2 | S2 | 1B.2 |
| ***Gilia tenuiflora ssp. arenaria*** Monterey gilia | PDPLM041P2 | Endangered | Threatened | G3G4T2 | S2 | 1B.2 |
| ***Hesperocyparis goveniana*** Gowen cypress | PGCUP04031 | Threatened | None | G1 | S1 | 1B.2 |
| ***Hesperocyparis macrocarpa*** Monterey cypress | PGCUP04060 | None | None | G1 | S1 | 1B.2 |
| ***Holocarpha macradenia*** Santa Cruz tarplant | PDAST4X020 | Threatened | Endangered | G1 | S1 | 1B.1 |
| ***Horkelia cuneata var. sericea*** Kellogg's horkelia | PDROS0W043 | None | None | G4T1? | S1? | 1B.1 |
| ***Horkelia marinensis*** Point Reyes horkelia | PDROS0W0B0 | None | None | G2 | S2 | 1B.2 |
| ***Lasiurus cinereus*** hoary bat | AMACC05030 | None | None | G5 | S4 | |
| ***Lasthenia conjugens*** Contra Costa goldfields | PDAST5L040 | Endangered | None | G1 | S1 | 1B.1 |
| ***Laterallus jamaicensis coturniculus*** California black rail | ABNME03041 | None | Threatened | G3G4T1 | S1 | FP |
| ***Layia carnosa*** beach layia | PDAST5N010 | Endangered | Endangered | G2 | S2 | 1B.1 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Legenere limosa*** legenere | PDCAM0C010 | None | None | G2 | S2 | 1B.1 |
| ***Linderiella occidentalis*** California linderiella | ICBRA06010 | None | None | G2G3 | S2S3 | |
| ***Lupinus tidestromii*** Tidestrom's lupine | PDFAB2B3Y0 | Endangered | Endangered | G1 | S1 | 1B.1 |
| ***Malacothamnus palmeri var. involucratus*** Carmel Valley bush-mallow | PDMAL0Q0B1 | None | None | G3T2Q | S2 | 1B.2 |
| ***Malacothrix saxatilis var. arachnoidea*** Carmel Valley malacothrix | PDAST660C2 | None | None | G5T2 | S2 | 1B.2 |
| ***Meconella oregana*** Oregon meconella | PDPAP0G030 | None | None | G2G3 | S2 | 1B.1 |
| ***Microseris paludosa*** marsh microseris | PDAST6E0D0 | None | None | G2 | S2 | 1B.2 |
| ***Monardella sinuata ssp. nigrescens*** northern curly-leaved monardella | PDLAM18162 | None | None | G3T2 | S2 | 1B.2 |
| ***Monolopia gracilens*** woodland woollythreads | PDAST6G010 | None | None | G3 | S3 | 1B.2 |
| ***Monterey Cypress Forest*** Monterey Cypress Forest | CTT83150CA | None | None | G1 | S1.2 | |
| ***Monterey Pine Forest*** Monterey Pine Forest | CTT83130CA | None | None | G1 | S1.1 | |
| ***Monterey Pygmy Cypress Forest*** Monterey Pygmy Cypress Forest | CTT83162CA | None | None | G1 | S1.1 | |
| ***Northern Bishop Pine Forest*** Northern Bishop Pine Forest | CTT83121CA | None | None | G2 | S2.2 | |
| ***Northern Coastal Salt Marsh*** Northern Coastal Salt Marsh | CTT52110CA | None | None | G3 | S3.2 | |
| ***Oncorhynchus mykiss irideus pop. 9*** steelhead - south-central California coast DPS | AFCHA0209H | Threatened | None | G5T2Q | S2 | |
| ***Pelecanus occidentalis californicus*** California brown pelican | ABNFC01021 | Delisted | Delisted | G4T3T4 | S3 | FP |
| ***Phrynosoma blainvillii*** coast horned lizard | ARACF12100 | None | None | G3G4 | S3S4 | SSC |
| ***Pinus radiata*** Monterey pine | PGPIN040V0 | None | None | G1 | S1 | 1B.1 |
| ***Piperia yadonii*** Yadon's rein orchid | PMORC1X070 | Endangered | None | G1 | S1 | 1B.1 |
| ***Plagiobothrys chorisianus var. chorisianus*** Choris' popcornflower | PDBOR0V061 | None | None | G3T1Q | S1 | 1B.2 |
| ***Potentilla hickmanii*** Hickman's cinquefoil | PDROS1B0U0 | Endangered | Endangered | G1 | S1 | 1B.1 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| ***Rallus obsoletus obsoletus*** California Ridgway's rail | ABNME05011 | Endangered | Endangered | G5T1 | S1 | FP |
| ***Ramalina thrausta*** angel's hair lichen | NLLEC3S340 | None | None | G5 | S2? | 2B.1 |
| ***Rana boylii*** foothill yellow-legged frog | AAABH01050 | None | Candidate Threatened | G3 | S3 | SSC |
| ***Rana draytonii*** California red-legged frog | AAABH01022 | Threatened | None | G2G3 | S2S3 | SSC |
| ***Reithrodontomys megalotis distichlis*** Salinas harvest mouse | AMAFF02032 | None | None | G5T1 | S1 | |
| ***Riparia riparia*** bank swallow | ABPAU08010 | None | Threatened | G5 | S2 | |
| ***Rosa pinetorum*** pine rose | PDROS1J0W0 | None | None | G2 | S2 | 1B.2 |
| ***Sidalcea malachroides*** maple-leaved checkerbloom | PDMAL110E0 | None | None | G3 | S3 | 4.2 |
| ***Spirinchus thaleichthys*** longfin smelt | AFCHB03010 | Candidate | Threatened | G5 | S1 | SSC |
| ***Stebbinsoseris decipiens*** Santa Cruz microseris | PDAST6E050 | None | None | G2 | S2 | 1B.2 |
| ***Taricha torosa*** Coast Range newt | AAAAF02032 | None | None | G4 | S4 | SSC |
| ***Taxidea taxus*** American badger | AMAJF04010 | None | None | G5 | S3 | SSC |
| ***Thamnophis hammondii*** two-striped gartersnake | ARADB36160 | None | None | G4 | S3S4 | SSC |
| ***Trifolium buckwestiorum*** Santa Cruz clover | PDFAB402W0 | None | None | G2 | S2 | 1B.1 |
| ***Trifolium hydrophilum*** saline clover | PDFAB400R5 | None | None | G2 | S2 | 1B.2 |
| ***Trifolium polyodon*** Pacific Grove clover | PDFAB402H0 | None | Rare | G1 | S1 | 1B.1 |
| ***Trifolium trichocalyx*** Monterey clover | PDFAB402J0 | Endangered | Endangered | G1 | S1 | 1B.1 |
| ***Tryonia imitator*** mimic tryonia (=California brackishwater snail) | IMGASJ7040 | None | None | G2 | S2 | |
| ***Valley Needlegrass Grassland*** Valley Needlegrass Grassland | CTT42110CA | None | None | G3 | S3.1 | |

**Record Count: 101**

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# APPENDIX C

IPaC Resource List

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**IPaC** **U.S. Fish & Wildlife Service**

# IPaC resource list

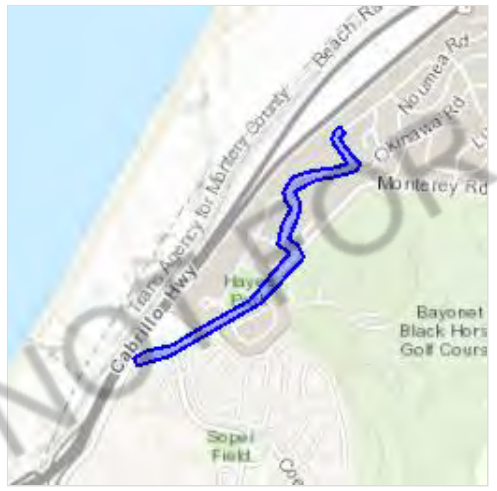
This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly aected by activities in the project area. However, determining the likelihood and extent of eects a project may have on trust resources typically requires gathering additional site-specic (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS oce(s) with jurisdiction in the dened project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.



## Location

Monterey County, California




## Local office

Ventura Fish And Wildlife Office

(805) 644-1766
(805) 644-3958

2493 Portola Road, Suite B
Ventura, CA 93003-7726

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of inuence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water ow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.



1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

| NAME | STATUS |
|---|---|

California Condor Gymnogyps californianus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8193

California Least Tern Sterna antillarum browni — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8104

Least Bell's Vireo Vireo bellii pusillus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/5945

Marbled Murrelet Brachyramphus marmoratus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/4467

Southwestern Willow Flycatcher Empidonax traillii extimus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/6749

Western Snowy Plover Charadrius nivosus nivosus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8035

# Amphibians

| NAME | STATUS |
|---|---|

California Red-legged Frog Rana draytonii — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/2891

California Tiger Salamander Ambystoma californiense — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/2076

Santa Cruz Long-toed Salamander Ambystoma macrodactylum croceum — Endangered
There is **proposed** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/7405

# Fishes

| NAME | STATUS |
|---|---|
| Tidewater Goby Eucyclogobius newberryi<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/57 | Endangered |

# Insects

| NAME | STATUS |
|---|---|
| Smith's Blue Butterfly Euphilotes enoptes smithi<br>There is **proposed** critical habitat for this species. The location of the critical habitat is not available.<br>https://ecos.fws.gov/ecp/species/4418 | Endangered |

# Crustaceans

| NAME | STATUS |
|---|---|
| Vernal Pool Fairy Shrimp Branchinecta lynchi<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/498 | Threatened |

# Flowering Plants

| NAME | STATUS |
|---|---|
| Contra Costa Goldfields Lasthenia conjugens<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>https://ecos.fws.gov/ecp/species/7058 | Endangered |
| Marsh Sandwort Arenaria paludicola<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/2229 | Endangered |
| Menzies' Wallflower Erysimum menziesii<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/2935 | Endangered |
| Monterey Gilia Gilia tenuiflora ssp. arenaria<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/856 | Endangered |

Monterey Spineflower Chorizanthe pungens var. pungens — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/396

Yadon's Piperia Piperia yadonii — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/4205

# Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.



# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip:

enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

| NAME | BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.) |
|---|---|
| Allen's Hummingbird Selasphorus sasin<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9637 | Breeds Feb 1 to Jul 15 |
| Black Oystercatcher Haematopus bachmani<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9591 | Breeds Apr 15 to Oct 31 |
| Clark's Grebe Aechmophorus clarkii<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. | Breeds Jan 1 to Dec 31 |
| Common Yellowthroat Geothlypis trichas sinuosa<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br>https://ecos.fws.gov/ecp/species/2084 | Breeds May 20 to Jul 31 |

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in o. shore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

| | |
|---|---|
| Spotted Towhee Pipilo maculatus clementae<br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br>https://ecos.fws.gov/ecp/species/4243 | Breeds Apr 15 to Jul 20 |
| Tricolored Blackbird Agelaius tricolor<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/3910 | Breeds Mar 15 to Aug 10 |
| Whimbrel Numenius phaeopus<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9483 | Breeds elsewhere |
| Willet Tringa semipalmata<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. | Breeds elsewhere |
| Wrentit Chamaea fasciata<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. | Breeds Mar 15 to Aug 10 |
| Yellow-billed Magpie Pica nuttalli<br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br>https://ecos.fws.gov/ecp/species/9726 | Breeds Apr 1 to Jul 31 |



# Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

**Probability of Presence (■)**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that

week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

**Breeding Season** (▬)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

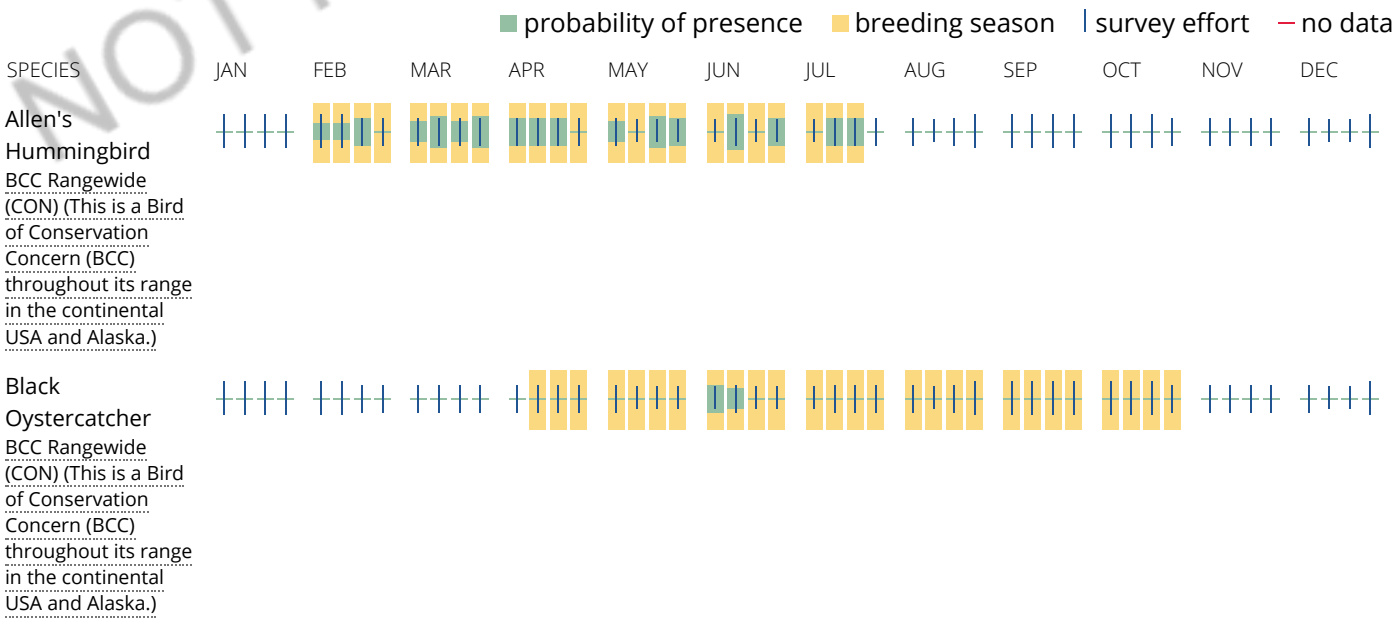
**Survey Effort** (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

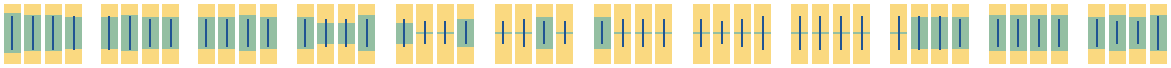
**No Data** (–)
A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

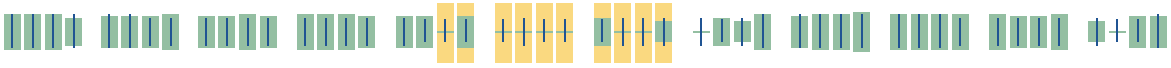




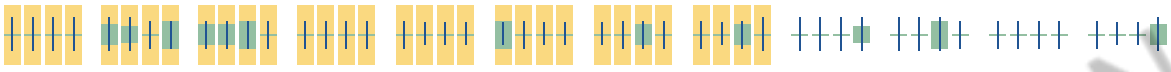
Clark's Grebe
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



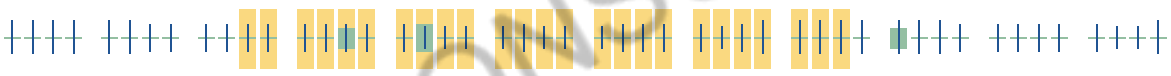
Common Yellowthroat
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Lawrence's Goldfinch
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Long-billed Curlew
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Marbled Godwit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

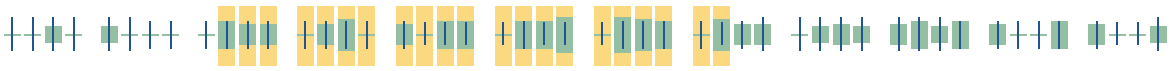
Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Tricolored Blackbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

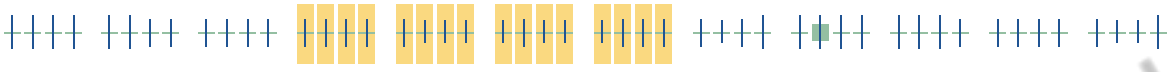
Whimbrel
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Yellow-billed Magpie
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)





**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

**Details about birds that are potentially a. ected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

**What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

**Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look

carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Facilities

## National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

## Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

# Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

**Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

**Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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# Final
# INITIAL STUDY/
# MITIGATED NEGATIVE DECLARATION

## for the

# FORT ORD VILLAGE LIFT STATION AND FORCE MAIN REPLACEMENT PROJECT

## SCH #2019099050

Prepared for:

Prepared by:


Marina Coast Water District

11 Reservation Road

Marina, CA 93933-2099

Denise Duffy & Associates

947 Cass Street, Suite 5

Monterey, CA 93940


## October 2019

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# Table of Contents

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# Chapter 1. Introduction

## 1.1 BACKGROUND

This document, together with the Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND), constitutes the Final Initial Study/Mitigated Negative Declaration (Final IS/MND) for the Fort Ord Village Lift Station and Force Main Replacement Project (proposed project). The Marina Coast Water District (MCWD) is the lead agency for the proposed project. The Final IS/MND consists of an introduction, comment letters received during the 30-day public review period, responses to comments, and revisions to the Draft IS/MND, if deemed applicable. The Draft IS/MND was prepared to inform the public of the potential environmental effects of the proposed project and identify possible ways to minimize potential project-related impacts.

## 1.2 PUBLIC PARTICIPATION

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15073(a), the Draft IS/MND was circulated for a 30-day review period during which comments could be submitted. On September 16, 2019, the Draft IS/MND was distributed for the public review period to responsible and trustee agencies, interested groups, and individuals. The review period ended on October 16, 2019. A MCWD Board of Supervisors meeting is scheduled for November 18, 2019, to consider the adoption of the Final IS/MND and approval of the proposed project.

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# Chapter 2. Response to Comments

## 2.1 INTRODUCTION

This chapter includes comments received from the public and public agencies during the circulation of the Draft IS/MND. This section contains all information available in the public record related to the Draft IS/MND as of October 29, 2019. **Section 2.3** below responds to comments received during and after the review period.

## 2.2 LIST OF COMMENT LETTERS

The following is a list of comment letters/email comments received on the Draft IS/MND and the dates these letters were received:

**Comment Letters**

| | | |
|---|---|---|
| A. | State Clearinghouse, Office of Planning and Research | October 16, 2019 |
| B. | Presidio of Monterey | October 17, 2019 |
| C. | California Coastal Commission | October 16, 2019 |
| D. | California Department of Transportation, District 5 | October 7, 2019 |
| E. | California Department of Parks and Recreation | September 30, 2019 |
| F. | Monterey Bay Air Resources District | October 16, 2019 |
| G. | Seaside Basin Watermaster | October 14, 2019 |

## 2.3 RESPONSE TO COMMENTS

Each letter received on the Draft IS/MND is presented in this chapter, as identified in **Section 2.2** above. Individual comments in each letter are numbered. Correspondingly numbered responses to each comment are provided in the discussion following the comment letter.

If comments raised environmental issues that required additions or deletions to the text, tables, or figures in the Draft IS/MND, a brief description of the change is provided, and the reader is directed to **Chapter 3, Revisions to the Draft IS/MND**. The comments received on the Draft IS/MND did not result in a "substantial revision" of the negative declaration, as defined by CEQA Guidelines §15073.5, and the new information added to the mitigated negative declaration merely clarifies, amplifies, or makes insignificant modifications to the IS/MND. No new significant effects were identified since the commencement of the public review period that would require mitigation measures or project revisions to be added in order to reduce the effects to less than significant.

Letter A

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Gavin Newsom
Governor

Kate Gordon
Director

October 16, 2019

Michael Wegley
Marina Coast Water District
11 Reservation Road
Marina, CA 93933

Subject: Fort Ord Village Lift Station and Force Main Replacement Project
SCH#: 2019099050

Dear Michael Wegley:

The State Clearinghouse submitted the above named MND to selected state agencies for review. The review period closed on 10/15/2019, and no state agencies submitted comments by that date. 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 visit: https://ceqanet.opr.ca.gov/2019099050/2 for full details about your project.

A-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

## Letter A: State Clearinghouse, Office of Planning and Research

**A-1:** The letter states that the State Clearinghouse submitted the Draft IS/MND to selected state agencies for review and identified that no state agencies submitted comments to the State Clearinghouse during the public review period. The letter further notes that the proposed project has complied with OPR review requirements for draft environmental documents. No further response is required.

**DEPARTMENT OF THE ARMY**
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, US ARMY GARRISON, PRESIDIO OF MONTEREY
1759 LEWIS ROAD, SUITE 210
MONTEREY, CA 93944-3223

17 October 2019

Office of the Garrison Commander

Marina Coast Water District
Attn: Michael Wegley, PE, District Engineer
2840 4th Avenue
Marina, CA 93933

Dear Mr. Wegley,

Thank you for the opportunity to comment on the Draft Initial Study/Mitigated Negative Declaration (IS/ND), for the Marina Coast Water District's Fort Ord Village Lift Station and Force Main Replacement Project, in Seaside, CA, which you prepared in compliance with the California Environmental Quality Act. As described in the Draft IS/ND, the proposed project would relocate the existing Fort Ord Village Lift Station to the east side of Highway 1 and realign approximately 5,600 linear feet of new pipeline. The existing Ord Village Lift Station west of Highway 1 would be demolished and removed.

A portion of the proposed action would be within the military family housing neighborhoods on the Ord Military Community. The proposed action would be conducted under an existing easement and requires analysis under the National Environmental Policy Act (NEPA) and Army approval prior to implementation.

Enclosed are the Army's comments on the Draft IS/ND.

The POC for this letter is Joelle Lobo at 831-242-7829 or joelle.l.lobo.civ@mail.mil

Sincerely,

Gregory J. Ford
Colonel, U.S. Army
Commanding

*Comment-1*

Proposed work within the military family housing neighborhoods on the Ord Military Community would require analysis under the NEPA and Federal implementing regulations. The analysis would be used during decision-making with regard to the proposed action.

B-1

*Comment-2*

The proposed action is required to comply with the National Historic Preservation Act (NHPA) IAW 36 CFR 800. Consultation with the State Historic Preservation Officer (SHPO) and federally recognized tribes will be needed prior to completion of the review under the NEPA.

B-2

*Comment-3*

Coordination with the Army will be required to ensure all of the Army's interests are addressed in the Traffic Control and Safety Assurance Plan, including Presidio Directorate of Public Works, Housing Office, Presidio Police and Fire, Safety, the Child Development Center, and other related interests.

B-3

## Letter B: Presidio of Monterey

**B-1:** The commenter notes that work performed in the Ord Military Community would require analysis under the National Environmental Protection Act (NEPA) and Federal implementing regulations. The comment is outside of the scope of the Draft IS/MND, as NEPA and Federal compliance will be completed as a separate process. The MCWD is already coordinating with the relevant Federal agencies, including the Presidio of Monterey (POM), to assist with the NEPA process and obtain Army approval. No further response is required.

**B-2:** The commenter notes under the NEPA review that the MCWD is required to comply with the National Historic Preservation Act (NHPA) and consult with the State Historic Preservation Officer and federally recognized tribes in the project area. As noted above in **Response B-1**, NEPA compliance is outside the scope of the Draft IS/MND and will be completed as a separate process. The MCWD is coordinating with POM to assist in NHPA compliance. The Draft IS/MND assesses environmental impacts relevant to historic and tribal cultural resources in **Section 5.2.5 Cultural Resources** and **Section 5.2.18 Tribal Cultural Resources**; all impacts were found to be less than significant with implementation of the identified mitigation measures and determined in accordance with CEQA Guidelines. There are no federally recognized tribes in the project vicinity. No further response is required.

**B-3:** The comment letter notes that the MCWD will be required to prepare a Traffic Control and Safety Assurance Plan and coordinate the details of this plan with various Army departments. The Draft IS/MND notes that work within roads would require traffic control and flagmen; this requirement would be outlined in a Traffic Control and Safety Assurance Plan and provided to POM. This clarification has been added to the Draft IS/MND, and these edits can be reviewed in **Chapter 3, Revisions to the Draft IS/MND**.

**From:** Watson, Michael@Coastal <Michael.Watson@coastal.ca.gov>
**Sent:** Wednesday, October 16, 2019 2:54 PM
**To:** Mike Wegley <MWegley@mcwd.org>
**Cc:** Watson, Michael@Coastal <Michael.Watson@coastal.ca.gov>
**Subject:** Fort Ord Village Lift Station & Force Main Replacement project and IS/MND (SCH# 2019099050)

Michael,

Thank you for the opportunity to comment on the above project and associated IS/MND. The location of the proposed facilities decommission is within unincorporated Monterey County where the Coastal Commission has retained coastal permitting jurisdiction. Accordingly, it will be necessary to obtain a coastal development permit from the Commission for the portion of the project within the coastal zone (ie, those elements generally west of Highway 1). C-1

The Commission has typically been supportive of projects that remove / relocate infrastructure away from hazards and/or out of sensitive areas such as this, especially when it can be achieved in a manner that is protective of surrounding resources and the area restored in accordance with an approved restoration plan. The entirety of the Fort Ord Dunes State Park dunes are considered to be environmentally sensitive habitat and many of the plant species currently occupying the dunes are state or federally protected sensitive species. The IS/MND acknowledges these realities and proposes mitigations appropriate to address project-related impacts such as implementing best management practices, undertaking pre-construction plant surveys, and preparation of a restoration plan. We encourage the District to prepare and submit detailed construction BMPs with the CDP application that identify the location of construction equipment staging, material storing, debris disposal, project area demarcation, etc., to ensure that adjacent dune habitat and sensitive species are appropriately protected during facilities removal. In addition, it will be necessary to prepare a detailed dune restoration plan that includes exotic plant removal, re-vegetation goals, plant palette, species density and distribution, maintenance requirements, monitoring, and contingencies for all disturbed areas and including those to be restored such as the footprint of the pump station and the access road to it. C-2

We anticipate that with appropriately detailed plans, that the project could be a candidate for an administrative approval or similar, greatly reducing the time needed for review and authorization. If you have any questions about the above comments or would like to talk about the permitting process, feel free to contact me at your convenience. Thank you again for the opportunity to comment on the Fort Ord village lift station removal and IS/MND. C-3

Mike Watson
Coastal Planner
California Coastal Commission
Central Coast District Office
725 Front Street, Suite 300
Santa Cruz, CA 95060
Direct: 831 427-4898
Office: 831 427-4863
Michael.watson@coastal.ca.gov

## Letter C: California Coastal Commission

**C-1:** The commenter notes that the portion of the proposed project site west of Highway 1 is within the California Coastal Commission (CCC) permitting jurisdiction and a Coastal Development Permit will be required. This comment is consistent with the Draft IS/MND **Section 2.6 Project Approvals and Permits**, which identifies that the CCC has permitting authority and a Coastal Development Permit may be deemed required. No further response is required.

**C-2:** The commenter recognizes the proposed project is located within environmentally sensitive habitat and acknowledges that the proposed mitigation measures are appropriate to mitigate impacts to environmentally sensitive habitat and plants to a less-than-significant level. The commenter recommends including a detailed description in the Coastal Development Permit application process of how the proposed project will implement Best Management Practices (BMPs) during construction, as well as a prepare a dune restoration plan. This comment is consistent with the Draft IS/MND **Section 5.2.4 Biological Resources**, which identifies BMPs and a dune scrub habitat restoration plan as mitigation to reduce environmental impacts to a less-than-significant level. The directions provided for application submittal have been referred to the lead agency; no further response is required.

**C-3:** The commenter recognizes that the proposed project is a candidate for administrative approval. This information has been referred to the lead agency; no further response is required.

**DEPARTMENT OF TRANSPORTATION**
CALTRANS DISTRICT 5
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3329
TTY 711
www.dot.ca.gov/dist05/

*Making Conservation a California Way of Life.*

October 7, 2019

SCr-1-81.181
SCH#2019099050

Michael Wegley
District Engineer
Marina Coast Water District
11 Reservation Road
Marina, CA 93933

Dear Mr. Wegley:

COMMENTS FOR THE MITIGATED NEGATIVE DECLARATION (MND)-FORT ORD VILLAGE LIFT STATION AND FORCE MAIN REPLACEMENT PROJECT, MARINA, CA

The California Department of Transportation (Caltrans), District 5, Development Review, has reviewed the Fort Ord Lift Station and Force Main Replacement Project that proposes to build a new lift station and 5,600 feet of new pipeline. Caltrans offers the following comments in response to the MND:

1. All work in, on, under, over, or affecting State highway right of way is subject to a Caltrans encroachment permit and will need to conform to the Caltrans Encroachment Permits Manual, Chapter 600. Additional utility installation requirements, which may apply, are found in Chapter 17 of the Project Development Procedures Manual. Deviations to Caltrans Encroachment Permit Policies may require an exception. This requirement and process will be outlined by the District Permit Engineer in your pre-submittal conference. D-1

2. All non-operational or vacated pipes shall be removed. The District Permit Engineer may grant waivers to this requirement based on an engineering evaluation. Plans shall conform to the Caltrans Plans Preparation Manual and Encroachment Permit Construction Plan Set outline. For more information regarding the encroachment permit process, please visit our Encroachment Permit Website at: http://www.dot.ca.gov/trafficops/ep/index.html. D-2

3. Caltrans datums shall be used and observed for the construction of the proposed improvements in State highway right of way. All plans shall be in US Feet, and follow the datums with the Vertical Basis set at NAVD 88 and Horizontal Basis set at NAD83 Zone 4 for Monterey County. D-3

Thank you for the opportunity to review and comment on the proposed project. If you have any questions, or need further clarification on items discussed above, please contact me at (805) 549-3157 or email christopher.bjornstad@dot.ca.gov.

Sincerely,

Chris Bjornstad

Chris Bjornstad
Associate Transportation Planner
District 5 Development Review

## Letter D: California Department of Transportation, District 5

**D-1:** The commenter outlines when a Caltrans encroachment permit will be required and when utility installation requirements would apply. This comment is consistent with the Draft IS/MND **Section 2.6 Project Approvals and Permits**, which identifies that Caltrans has permitting authority and a Caltrans encroachment permit may be required. No further response is required.

**D-2:** The commenter states that non-operational pipes shall be removed, or a waiver shall be granted as part of the encroachment permit process. As stated in the Draft IS/MND, the MCWD acknowledges that an encroachment permit will be required for the abandonment pipes. Decision of removal or a waiver will be required as a part of the encroachment permit process. The comment is noted; no further response is required.

**D-3:** The commenter notes that the Caltrans datum is to be used for construction within the State highway right-of-way. The comment is noted, however, there is no work proposed within the right-of-way. An easement for abandonment of pipes will be retained, and all related information will be provided in the noted datum. The comment is noted; no further response is required.

**From:** Bachman, Stephen@Parks <Stephen.Bachman@parks.ca.gov>
**Sent:** Monday, September 30, 2019 2:25 PM
**To:** Mike Wegley <MWegley@mcwd.org>
**Cc:** Bachman, Stephen@Parks <Stephen.Bachman@parks.ca.gov>; Poudrette, Jill@Parks <Jill.Poudrette@parks.ca.gov>
**Subject:** Fort Ord Lift Station MND

Hello Michael,

Attached below are my comment to the Fort Ord Village Lift Station and Force Main Replacement Project MND.

Subcontractors removing the lift station should adhere to the speed limit of 15 mph while driving in the state park unit and engage emergency blinkers while driving in the park. The beach range road is used by park visitors and public safety is a concern. MCWD shall work with state parks no less than 90 days in advance of an established project start date to obtain any necessary right-of-entry permits needed for any/all subcontractors. E-1 E-2

A pre-decommission assessment of the beach range road to be use used by heavy equipment should be conducted. Any damage to the beach range road caused by heavy equipment including but not limited to road edge fracturing, alligatoring of the road surface, pot holing etc. should be repaired prior to the project completion date or immediately thereafter. E-3

MCWD shall work with state park staff in quitclaiming the easement back to the state within two years of the project completion date. E-4

If you have any questions please feel free to contact me anytime.

Sincerely,

Stephen Bachman
Senior Park & Recreation Specialist
2211 Garden Road
Monterey, CA 93940
Phone (831) 649-2862
Cell (831) 277-3037

Stephen.bachman@parks.ca.gov

## Letter E: California State Parks and Recreation

**E-1:** The commenter is concerned with the safety of Fort Ord Dunes State Park patrons associated with traffic to and from the project site west of Highway 1. The comment is noted; construction contractors are require to adhere to the speed limit, as required by State law and noted in the construction specifications. In addition, the project will be required to prepare a Traffic Control and Safety Assurance Plan; please refer to **Response B-3**. No further response is required.

**E-2:** The commenter notes that a right-of-entry will be required no less than 90 days in advance of the proposed project's start date. This comment is consistent with the Draft IS/MND **Section 2.6 Project Approvals and Permits**, which identifies that State Parks has permitting authority and a State Parks encroachment permit may be required. No further response is required.

**E-3:** The commenter notes that an assessment of the condition of Beach Range Road will be required prior to start of construction and any damage caused to Beach Range Road will be the responsibility of MCWD to repair immediately after the proposed project completion date. The comment is noted. During the encroachment permit process, access to the site via Beach Range Road will be documented and the proper traffic controls will be put into place to ensure safety as well as the proper maintenance to the road is maintained and/or restored. No further response is required.

**E-4:** The comment notes the timeframe by which MCWD shall work with State Parks to quitclaim the project easement west of Highway 1 back to State Parks. The comment is noted; no further response is required.

Monterey Bay Air Resources District
Serving Monterey, San Benito, and Santa Cruz Counties

24580 Silver Cloud Court
Monterey, CA 93940
PHONE: (831) 647-9411 • FAX: (831) 647-8501

October 16, 2019

Michael Wegley, PE, District Engineer
MCWD
2840 4th Avenue
Marina, CA 93933

Email: MWegley@mcwd.org

SUBJECT: MND Fort Ord Village Lift Station and Force Main Replacement Project

Dear Mr. Wegley,

Thank you for providing the Monterey Bay Air Resources District (Air District) with the opportunity to comment on the above-referenced document.

The Air District has reviewed the document and has the following comments:

**5.2.4 Biological Resources**

- The Proposed Project would include the removal of dune scrub vegetation. In case the vegetation is disposed of via wood chipping, please make sure to contact the Air District's Engineering Division at (831) 647-9411 to discuss if a Portable Registration is necessary for the wood chipper being utilized for this project. F-1

**5.2.3 Air Quality**

- The Air District appreciates the implementation of Best Management Practices (BMPs) and insuring compliance with Section 17.30.080(E)(4) of the Seaside Municipal Code which requires implementation of dust suppression techniques. To further minimize fugitive dust, please consider adding the following mitigation measures to the list of dust suppression techniques:
  *MBARD CEQA Guidelines, (8.2) Mitigating Construction Emissions*
  - Haul trucks shall maintain **at least 2'0" of freeboard**
  - Cover inactive storage piles
  - Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydro seed area
  - Sweep streets if visible soil material is carried out from the construction site

  F-2

- In order to minimize potential public nuisance issues from fugitive dust and odor complaints, and to maintain compliance with Air District Rule 402 (Nuisance), please provide the Air District with contact information for the responsible staff that can immediately address any citizen complaints as well as provide access to any air monitoring data collected on site. If any devices are installed to control odors emitted from the lift station, and respective pipelines, please contact the Air District for permitting information. F-3
- Given the nearby proximity of sensitive receptors (residences directly adjacent to the streets in which the pipeline will be placed [400ft E of the pump station]), the Air District recommends using cleaner than required construction and tree remover equipment that conforms to ARB's Tier 3 or Tier 4 emission standards. We further recommend that whenever feasible, construction equipment use alternative fuels such as compressed natural gas (CNG), propane, electricity or biodiesel. This would have the added benefit of reducing diesel exhaust emissions. F-4

**5.2.9 Hazards and Hazardous Materials**

- The discussion on pages 53-57 should include reference to the potential hazard from asbestos containing materials in non-building structures, such as subsurface utility lines that could be disturbed during construction activities. F-5

For example, there are likely subsurface transite (asbestos cement) pipes or asbestos coated gas lines that would need abatement prior to starting construction activities. From the District's experience at the former Fort Ord site, the as-built drawings for the subsurface utilities in the area have not been accurate. F-5 Cont.

- The District recommends developing a Standard Operating Procedure to mitigate a situation where unknown subsurface asbestos containing utility lines are exposed during the course of construction work and need to be removed prior to continuing construction. F-6
- Please correct the Air District reference on page 56 to reflect the appropriate agency—**Monterey Bay Air Resources District** (not Central Coast Air Quality Management District). F-7
- Air District notification is required at least ten working days prior to renovation or demolition activities. If old underground piping or other asbestos containing construction materials are encountered during trenching activities, Rule 424 may also apply. Rule 424 can be found online at https://www.arb.ca.gov/drdb/mbu/cur.htm. Please contact Shawn Boyle, Air Quality Compliance Inspector, at (831) 718-8010, sboyle@mbard.org for more information regarding asbestos survey, notification requirements, and if subsurface transite pipe removal is going to be part of the project scope in the future. F-8

I appreciate the opportunity to comment on the MND for the Fort Ord Village Lift Station & Force Main Replacement Project. Please let me know if you have any questions. I can be reached at (831) 718-8021 or hmuegge@mbard.org.

Best Regards,

Hanna Muegge
Air Quality Planner

cc: Richard A. Stedman, Air Pollution Control Officer
David Frisbey, Planning & Air Monitoring Manager
Amy Clymo, Engineering & Compliance Manager
Shawn Boyle, Air Quality Compliance Inspector III

## Letter F: Monterey Bay Air Resources District

**F-1:** The commenter notes that if wood chipping is required as part of removal of dune scrub vegetation, a portable registration through the MBARD may be required. The comment is noted and referred to the lead agency for future reference. No further response is required.

**F-2:** The commenter appreciates the incorporation of the Draft IS/MND of BMPs and implementation of local jurisdictional requirements to minimize fugitive dust. The comment requests the incorporation of further dust suppression techniques into the Draft IS/MND. The comment is consistent with the dust suppression techniques listed in **Section 5.2.3 Air Quality.** The suggested BMPs have been added to the existing list in the Draft IS/MND, and these edits can be reviewed in **Chapter 3, Revisions to the Draft IS/MND**.

**F-3:** The commenter notes compliance with Rule 402. The comment is consistent with the Draft IS/MND, which notes in **Section 5.2.3 Air Quality** compliance with MBARD Rule 402. The comment is referred to the MCWD, who will hold the responsibility to notify the MBARD with a point of contact for any dust or odor related complaints. No further response is required.

**F-4:** The commenter recommends that due the proximity of sensitive receptors to the proposed project, clean construction equipment and alternative fuels should be utilized to reduce diesel exhaust emissions. **Section 5.2.3 Air Quality** of the Draft IS/MND addresses air quality impacts to sensitive receptors and finds that the proposed project will have a less-than-significant impact due to construction and operation of the proposed project. However, the comment is acknowledged, and a note will be added to the construction plans and construction specifications noting that wherever appropriate and feasible the construction contractor shall utilize equipment that conforms to the Air District Tier 3 and Tier 4 emission standards as well as utilize compressed natural gas, propane, electricity, or biodiesel consistent with the MBARD's request. No further response is required.

**F-5:** The commenter is concerned with the potential presence of asbestos in subsurface utility lines and suggests adding a discussion to the Draft IS/MND pertaining to this concern. The commenter specifically references the presence of asbestos in coated gas lines; it is important to clarify to the commenter that the proposed project does not include removal or alteration to any gas lines. However, the comment is noted, and a discussion has been added per the commenter recommendation to the Draft IS/MND, and these edits can be reviewed in **Chapter 3, Revisions to the Draft IS/MND**.

**F-6:** The commenter recommends developing a Standard Operating Procedure for exposure to subsurface asbestos. The MCWD has a Standard Operating Procedure for this type of work, and references to this procedure will be noted in the construction plans and specifications. In addition, consistent with **Response F-5** above, the Draft IS/MND mitigation measure that references asbestos has been edited to include subsurface utility lines.

**F-7:** The commenter noted a typographical error on page 56 of the Draft IS/MND. The typographical error has been corrected as the commenter suggests, and these edits can be reviewed in **Chapter 3, Revisions to the Draft IS/MND**.

**F-8:** The commenter explains that the MBARD should be notified at least 10 working days prior to renovation or demolition activities. The commenter further notes that Rule 424 would apply if asbestos is encountered during trenching activities. Notation of compliance to Rule 424 has been added to the Draft IS/MND and can be reviewed in **Chapter 3, Revisions to the Draft IS/MND**.

**Seaside Basin Watermaster**
**P.O. Box 51502**
**Pacific Grove, CA 93950**
**(831) 641-0113**

October14, 2019

Marina Coast Water District
Attention: Michael Wegley, District Engineer
11 Reservation Road
Marina, CA 93933-2099

**Subject: Draft Initial Study/Mitigated Negative Declaration for the Fort Ord Village Lift Station & Force Main Replacement Project**

Dear Mr. Wegley:

The Watermaster is the Court-appointed body responsible for ensuring that the Seaside Groundwater Basin is managed in accordance with the requirements set forth in the Seaside Basin Adjudication Order (Superior Court of the State of California in and for the County of Monterey, Case No. M66343).

One of the key activities of the Watermaster is to monitor for the possible intrusion of seawater from Monterey Bay into the aquifers of the Seaside Basin. A critical component of that effort has been the installation of, and the ongoing monitoring of water levels and water quality in, a set of four "Sentinel Wells" which are located near the coastline within the Seaside Basin. They are termed "sentinel wells" because they are closest to the Bay and will most likely be the first indicators of the intrusion of seawater from the Bay. G-1

One of these wells, identified as Sentinel Well No. 4 or SBWM-4, is located adjacent to MCWD's Ord Village Pump Station (OVPS). The attached aerial photo shows the approximate location of the well relative to the OVPS.

As mentioned above, the ongoing use of this well is critical to the Watermaster's efforts to determine whether or not seawater is beginning to intrude into the Basin. Consequently, it is imperative that this well remain in service and not be damaged by your demolition of the OVPS.

Our recommendations, as a minimum are that:

1. A large trench plate (minimum of 8'x4') be placed over the well by your demolition contractor prior to the start of any excavation, use of equipment, or demolition of the OVPS, and
2. That no excavation, driving of equipment, or demolition activities, occur within a minimum of 10 feet of the well during the course of the demolition portion of the project. G-2

Thank you for including and addressing these requests in your EIR for the project, and in the plans and specifications for the project.

If you have any questions regarding these comments, please contact the Watermaster's Technical Program Manager, Mr. Robert Jaques, at (831) 375-0517 or by his email at bobj83@comcast.net.

Sincerely,

Robert S. Jaques

Robert S. Jaques, PE
Technical Program Manager

# Location of SBWM MW #4

## Letter G: Seaside Basin Watermaster

**G-1:** The commenter outlines the role of the Seaside Basin Watermaster and states that one of the "sentinel wells" that are the responsibility of the Seaside Basin Watermaster is located within the proposed project area. The Seaside Basin Watermaster emphasizes the importance that these wells are not damaged by demolition activities associated with the proposed project. The Draft IS/MND has assessed the environmental impacts of the proposed project, including any potential environmental impacts associated with demolition activities, and, where appropriate, the Draft IS/MND has identified mitigation to minimize these environmental impacts to a less-than-significant level. As a result, the proposed project is not anticipated to have a significant impact on the environment due to demolition activities. However, a discussion has been added per the commenter's recommendation to the Draft IS/MND, and these edits can be reviewed in **Chapter 3, Revisions to the Draft IS/MND**.

**G-2**: The commenter provides a list of recommendations to protect the sentinel wells. The MCWD will protect the wells in place using a variety of recommended approaches. A discussion has been added per the commenter recommendation to the Draft IS/MND, and these edits can be reviewed in **Chapter 3, Revisions to the Draft IS/MND**.

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# Chapter 3 Revisions to the Draft IS/MND

The following section includes revisions to the text of the Draft IS/ND, in amendment form. The revisions are listed numerically by page number. All additions to the text are shown underlined and all deletions from the text are shown ~~stricken~~.

**Chapter 4. Initial Study Environmental Checklist**

**Page 24, Section 5.2.3 Air Quality** has been amended as follows:

> *Construction*. According to the MBARD's criteria for determining construction impacts, a project would result in a potentially significant impact if it would result in 8.1 acres of minimal earthmoving per day or 2.2 acres per day with major grading and excavation. The proposed project would include a maximum of up to a ¼ of an acre to be graded on any given day, and, therefore, the proposed project is below the threshold. In addition, the proposed project would also implement standard construction Best Management Practices (BMPs) related to dust suppression, which would include: 1) watering active construction areas; 2) prohibiting grading activities during periods of high wind (over 15 mph); 3) covering trucks hauling soil; ~~and,~~ 4) covering exposed stockpiles and inactive storage piles; 5) haul trucks shall maintain at least 2 ft. of freeboard; 6) apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydro seed area; and 7) sweep streets if visible soil materials is carried out from the construction site. The implementation of BMPs would further ensure that potential construction-related emissions would be minimized. A demolition permit will be required for a portion of the project. Since the proposed project is under the threshold for construction air quality impacts, this impact is considered to be less than significant.

**Page 55-57, Section 5.2.9 Hazards and Hazardous Materials** has been amended as follows:

d) **Less-Than-Significant Impact with Mitigation**. The proposed project is located on the former Fort Ord, which is included on a hazardous materials site compiled pursuant to Government Code Section 65962.5. Due to the sites historical use as part of a former military installation, construction activities within this area have the potential to encounter unexploded ordnance which, if not identified and properly handled, could cause injury or death to construction workers.

The proposed project components east of Highway 1 have already undergone remediation actions and either have been transferred or retained by the DoD. In order for any ground disturbance activities to commence, the MCWD and its contractors must comply with the FORA Right-of-Entry process and the City of Seaside Municipal Code Chapter 15.34 (i.e., the "Ordnance Remediation District Regulations of the City" in Ordinance 924). This ordinance establishes special standards and procedures for digging and excavation on those properties in the former Fort Ord military base which are suspected of containing ordnance and explosives (also called munitions and explosives of concern). This ordinance requires that a permit be obtained from the City for any excavation, digging, development, or ground disturbance of any type involving the displacement of ten cubic yards or more of soil. The permit requirements include providing each site worker a copy of the Ordnance and Explosives Safety Alert; complying with all requirements placed on the property by an agreement between the City, FORA, and Department of Toxic Substances Control (DTSC); obtaining ordnance and explosives construction support; ceasing soil

disturbance activities upon discovery of suspected ordnance and notifying the Seaside Police department, the Presidio law enforcement, the U.S. Army and DTSC; coordinating appropriate response actions with the U.S. Army and DTSC; and reporting of project findings. Compliance with existing regulations for construction work at the former Fort Ord would reduce the potential impact of encountering unexploded ordnance by construction workers to less than significant.

The project site located west of Highway 1 on the FODSP has been transferred to the State Parks. It has been identified at this location that there is the potential for residual hazards due to former military use. The U.S. Army identified that the project site could contain Munitions and Explosives of Concern (MEC), lead-based paint (LBP), and asbestos containing material (ACM). As a result, the project could result in additional impacts due to historical hazardous material contamination on the site. According to the U.S. Army, the project could expose construction personnel or future site occupants to existing hazards, including MEC related hazards and the presence of LBP, and ACM in existing structures.[1] Furthermore, there is the potential for ACM in subsurface utility lines. The demolition of the existing Fort Ord Village Lift Station and subsurface utility lines could, therefore, expose construction personnel and future site occupants to potential hazards. Mitigation measures are necessary to ensure that impacts due to historical contamination are less than significant.

Due to potential concerns related to residual hazards, State Parks and DTSC entered into a memorandum of understanding (MOU) that specifies additional safety precautions (e.g. safety training, soil management, etc.). This MOU is in addition to the requirements of the transfer deed, which stipulates additional restrictions related to residential land uses and groundwater use in specified areas of the FODSP, consistent with the MOU. Any activities proposed within the "restricted area" are subject to specific soil management requirements contained in the MOU, the project site proposed for decommission is within the "restricted area."

Consistent with the requirements of the MOU, transfer deed, FODSP policies, this IS/MND includes mitigation to minimize potential residual hazards (e.g. LBP, ACM, MEC, etc.) associated with former military use. The incorporation of these requirements as mitigation would reduce impacts to a less-than-significant level by ensuring that adequate measures are in place to remediate potential hazards (if present), provide appropriate safety training, and implement necessary safety precautions in accordance with applicable regulatory requirements. The following mitigation measures are consistent with the requirements of the MOU and transfer deed, as well as mitigation contained in the FODSP General Plan EIR. Implementation of the following mitigation would minimize impacts to a less-than-significant level.

[1] The FOST also identified that groundwater underlying the site may be contaminated by volatile organic compounds (VOCs), primarily trichloroethene (TCE). Base activities resulted in the presence of organic compounds in the groundwater beneath Fort Ord. Organic contaminants, most commonly TCE, formed a groundwater plume in the various aquifers underlying the former Fort Ord near the former landfill. Efforts are currently being undertaken by the U.S. Army to address groundwater contamination. Historical groundwater contamination would not affect the proposed project; land use restrictions, as part of the land transfer process, prohibit the use of groundwater underlying the site. All potable water would be from existing municipal supplies, which are not affected by the TCE plume.

**Mitigation**

**MM HAZ-2: Survey of Existing Buildings and Subsurface Utility Lines for Asbestos**

In order to reduce human health risks to construction personnel and future site occupants due to the potential presence of ACM at the existing Fort Ord Village Lift Station and within subsurface utility lines, the MCWD or Contractor will retain a qualified consultant to survey all buildings and subsurface utility lines for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition or subsequent reuse. Asbestos removal activities will be conducted by a California-licensed asbestos abatement contractor, in compliance with Rule 424, and appropriate notifications to the state Occupational Health and Safety Administration and ~~Central Coast Air Quality Management District~~ MBARD shall occur if ACM are present. The MCWD or the Contractor will dispose of renovation or demolition wastes in accordance with federal and state waste disposal requirements and will follow all federal and state Occupational Health and Safety Administration requirements.

**Page 59, Section 5.2.10 Hydrology** has been amended as follows:

b) **Less-Than-Significant Impact**. The depth of groundwater in the site vicinity is expected to be at sea level. The project proposes grading to 20 ft for the pump station and 10 ft at the bottom of the trench for pipeline installation. Since the lowest point of the proposed project (the location of the proposed pump station) sits at 75 ft above sea level, the proposed project would not decrease groundwater supplies or interfere substantially with groundwater recharge (such that the project may impede sustainable groundwater management of the basin) because it would not access groundwater.

In addition, the existing Fort Ord Village Lift Station is located within 20 feet of Sentinel Well No. 4, which is a critical component to monitoring seawater intrusion into the Seaside Basin. In order to avoid impacts to the well during demolition activities associated with the proposed project, MCWD will protect the Sentinel Well No. 4 in place by utilizing a number of protection measures. Protection measures include, but are not limited to, placing a large trench plate (minimum of 8 ft. by 4 ft.) over the well prior to demolition activities and limiting work within 10 ft. of the well during demolitions activities, where feasible.

**Page 70, Section 5.2.17 Transportation** has been amended as follows:

a) **Less-Than-Significant Impact**. The proposed replacement lift station and wastewater pipeline would have no post-construction impacts on traffic and transportation. The proposed project would require minimal maintenance trips; however, these would not be in excess of maintenance trips associated with the existing system and would not constitute a significant impact. The project would result in a temporary increase in traffic during construction. Construction would generate an estimated six round trip truck trips per day for 100 working days, and two round-trip truck trips for equipment delivery for 50 days. An additional 10 one-way vehicle trips per day for worker commutes. These impacts would be temporary and relatively low. Additionally, work within roads would require traffic control and flagmen, as outlined in a Traffic Control and Safety Assurance Plan and provided to the Presidio of Monterey. As a result, traffic increases would constitute a less-than-significant impact.

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# MITIGATION MONITORING AND REPORTING PROGRAM
# for the Fort Ord Village Lift Station and
# Force Main Replacement Project

The Mitigation Monitoring and Reporting Program (MMRP) is a CEQA required component of the Mitigated Negative Declaration (MND) process for the project (CEQA Guidelines §15074). Specifically, CEQA requires that lead agencies adopting MNDs take affirmative steps to determine that approved mitigation measures are implemented subsequent to project approval (CEQA Guidelines §15074(d)).

As part of the CEQA environmental review procedures, Public Resources Code §21081.6 requires a public agency to adopt a monitoring and reporting program to ensure efficacy and enforceability of any mitigation measures applied to a proposed project. The lead agency must adopt an MMRP for mitigation measures incorporated into the project or proposed as conditions of approval. The MMRP must be designed to ensure compliance during project implementation. As stated in §21081.6(a)(1):

> "The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program."

**Table 1** is the final MMRP matrix. The table lists each of the mitigation measures and specifies the agency responsible for implementation of the mitigation measure and the time period for the mitigation measure.

**MARINA COAST WATER DISTRICT (MCWD)**

**Project:** Fort Ord Village Lift Station and Force Main Replacement Project

**Location*:*** City of Seaside, Unincorporated Monterey County, and Fort Ord Dunes State Park (FODSP), CA

# Mitigation Monitoring and Reporting Plan

**APNs*:*** 031-051-001-000, 031-051-023-000, 031-141-002-000, 031-141-004-000

**Approval by:**_____ **Date:** _____

***Monitoring or Reporting refers to projects with an EIR or adopted Mitigated Negative Declaration per Section 21081.6 of the Public Resources Code.***

**Table 1. Mitigation Monitoring and/or Reporting Plan (MMRP) for the Fort Ord Village Lift Station and Force Main Replacement Project**

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| **5.2.4 Biological Resources** | | | | |
| Biological Resources: Impacts to special-status species & habitat | **Mitigation Measure BIO-1: Smith Blue Butterfly (SBB)**<br>SBB habitat (i.e. seacliff buckwheat) shall be avoided to the greatest extent feasible. SBB habitat that will not be impacted by the project shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact.<br><br>If all SBB habitat is avoided, no additional mitigation is necessary. If the project will impact SBB habitat, compliance with the Endangered Species Act (ESA) shall occur in advance of construction:<br><br>With Approved Base-Wide Habitat Conservation Plan (HCP): As described above, impacts to SBB and its habitat would be authorized under the base-wide incidental take permit issued by U.S. Fish and Wildlife Service (USFWS). The MCWD shall comply with the avoidance and minimization measures and mitigation measures in the approved HCP. No additional mitigation is required. | MCWD/Qualified Biologist | Prior to & during project construction | |

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| | Without Approved Base-Wide HCP: The MCWD will comply with the ESA and obtain necessary authorizations prior to construction due to the assumed presence of the federally listed SBB. The MCWD shall be required to initiate a consultation with the USFWS to receive take authorization. Take authorization would be granted through the issuance of an individual, project-specific incidental take permit, which requires preparation and implementation of an HCP. Mitigation for take likely would require restoration at a 3:1 ratio of impacted habitat. Buckwheat plants and/or seed salvage may also be required prior to ground disturbing activities. | | | |
| Biological Resources: Impacts to special-status species & habitat (continued) | **Mitigation Measure BIO-2: Construction Best Management Practices**<br>The following best management practices will be implemented during all identified phases of construction (i.e., pre-, during, and post-) to reduce impacts to special-status plant and wildlife species:<br>▪ A qualified biologist will conduct an Employee Education Program for the construction crew prior to any construction activities. The qualified biologist will meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by USFWS and California Department of Fish and Wildlife (CDFW); and 6) the proper procedures if a special-status species is encountered within the project site.<br>▪ Trees and vegetation not planned for removal or trimming will be protected prior to and during construction to the maximum possible through the use of exclusionary fencing, such as hay bales for herbaceous and shrubby vegetation, and protective wood barriers for trees. Only certified weed-free straw will be used to avoid the introduction of non-native, invasive species. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.<br>▪ Following construction, disturbed areas will be restored to pre-project contours to the maximum extent possible and revegetated using locally-occurring native species and native erosion control seed mix, per the | MCWD/Qualified Biologist | Prior to, during, & after project construction | |

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| | recommendations of a qualified biologist. Any revegetation on State Park property shall be conducted in coordination with State Parks.<br>▪ Grading, excavating, and other activities that involve substantial soil disturbance will be planned and implemented in consultation with a qualified hydrologist, engineer, or erosion control specialist, and will utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation (pre-, during, and post-construction).<br>▪ No firearms will be allowed on the project site at any time.<br>▪ All food-related and other trash will be disposed of in closed containers and removed from the project area at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel will not feed or otherwise attract wildlife to the area. | | | |
| Biological Resources: Impacts to special-status species & habitat (continued) | **Mitigation Measure BIO-3: Construction Phase Monitoring**<br>The MCWD will retain a qualified biologist to monitor all ground disturbing construction activities (i.e., vegetation removal, grading, excavation, or similar activities) to protect any special-status species encountered. Any handling and relocation protocols of special-status wildlife species will be determined in coordination with CDFW prior to any ground disturbing activities, and will be conducted by a qualified biologist with appropriate scientific collection permit. After ground disturbing project activities are complete, the qualified biologist will train an individual from the construction crew to act as the on-site construction biological monitor. The construction biological monitor will be the contact for any special-status wildlife species encounters, will conduct daily inspections of equipment and materials stored on site and any holes or trenches prior to the commencement of work, and will ensure that all installed fencing stays in place throughout the construction period. The qualified biologist will then conduct regular scheduled and unscheduled visits to ensure the construction biological monitor is satisfactorily implementing all appropriate mitigation protocols. Both the qualified biologist and the construction biological monitor have the ability cease construction contractor work and/or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project. The qualified biologist and the construction monitor shall complete a daily log summarizing activities and environmental compliance throughout the duration | MCWD/Qualified Biologist/Trained On-Site Construction Biological Monitor | During project construction | |

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| | of the project. The log will also include any special-status wildlife species observed and relocated. | | | |
| Biological Resources: Impacts to special-status species & habitat (continued) | **Mitigation Measure BIO-4: Non-Native, Invasive Species Controls**<br>The following measures will be implemented to reduce the introduction and spread of non-native, invasive species:<br>▪ Any landscaping or replanting required for the project will not use species listed as noxious by the California Department of Food and Agriculture (CDFA) or invasive by the California Invasive Plant Council (Cal-IPC).<br>▪ Bare and disturbed soil will be landscaped with CDFA recommended seed mix or plantings from locally adopted species to preclude the invasion on noxious weeds in the project site. Species to be seeded or planted within State Parks property shall be approved by State Parks prior to planting.<br>▪ Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds, before mobilizing to arrive at the construction site and before leaving the construction site.<br>▪ All non-native, invasive plant species will be removed from disturbed areas prior to replanting. | MCWD/Qualified Biologist | Prior to, during & after project construction | |
| Biological Resources: Impacts to special-status species & habitat (continued) | **Mitigation Measure BIO-5: Special-Status Plant Species Avoidance**<br>Monterey spineflower shall be avoided to the greatest extent feasible. Areas of Monterey spineflower that will not be impacted by the project shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact. | MCWD/Trained On-Site Construction Biological Monitor | Prior to & during project construction | |
| Biological Resources: Impacts to special-status species & habitat (continued) | **Mitigation Measure BIO-6: Pre-Construction Surveys for Hoary Bat**<br>To avoid and reduce impacts to hoary bat, the MCWD will retain a qualified bat specialist or wildlife biologist to conduct site surveys during the reproductive season (May 1 through September 15) to characterize bat utilization of the site and potential species present (techniques utilized to be determined by the biologist) prior to any tree removal or trimming. Based on the results of these initial surveys, one or more of the following will occur: | MCWD/Qualified Bat Specialist or Wildlife Biologist | Prior to any tree removal or trimming | |

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| | ▪ If it is determined that hoary bats are not present at the site, no additional mitigation is required.<br>▪ If it is determined that hoary bats are utilizing the site and may be impacted by the proposed project, pre-construction surveys will be conducted within 100 feet of construction limits no more than 30 days prior to any tree removal. If, according to the bat specialist, no hoary bats or bat signs are observed in the course of the pre-construction surveys, tree removal may proceed. If hoary bats and/or bat signs are observed during the pre-construction surveys, the biologist will determine if disturbance will jeopardize the roost. Exclusion techniques will be determined by the biologist and depend on the roost type; the biologist will prepare a mitigation plan for provision of alternative habitat to be approved by CDFW. | | | |
| Biological Resources: Impacts to special-status species & habitat (continued) | **Mitigation Measure BIO-7: Pre-Construction Surveys for Monterey Dusky-Footed Woodrat**<br>Not more than thirty (30) days prior to the start of construction (including vegetation removal), a qualified biologist shall conduct a survey of the project site to locate existing Monterey dusky-footed woodrat nests. All Monterey dusky-footed woodrat nests shall be mapped and flagged for avoidance. Graphics depicting all Monterey dusky-footed woodrat nests shall be provided to the construction contractor. Any Monterey dusky-footed woodrat nests that cannot be avoided shall be relocated according to the following procedures:<br><br>Each active nest shall be disturbed by the qualified biologist to the degree that the woodrats leave the nest and seek refuge elsewhere. After the nests have been disturbed, the nest sticks shall be removed from the impact areas and placed outside of areas planned for impacts. Nests shall be dismantled during the non-breeding season (between October 1 and December 31), if possible. If a litter of young is found or suspected, nest material shall be replaced and the nest left alone for two to three weeks, after this time the nest will be rechecked to verify that young are capable of independent survival before proceeding with nest dismantling. | MCWD/Qualified Biologist | Not more than thirty (30) days prior to the start of construction | |

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| Biological Resources: Impacts to special-status species & habitat (continued) | **Mitigation Measure BIO-8: Pre-Construction Surveys for Protected Avian Species**<br>Construction activities that may directly (e.g., vegetation removal) or indirectly (e.g., noise/ground disturbance) affect protected nesting avian species will be timed to avoid the breeding and nesting season. Specifically, vegetation and/or tree removal can be scheduled after September 16 and before January 31. Alternatively, a qualified biologist will be retained by the project applicant to conduct pre-construction surveys for nesting raptors and other protected avian species within 500 feet of proposed construction activities if construction occurs between February 1 and September 15. Pre-construction surveys will be conducted no more than 14 days prior to the start of construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). Because some bird species nest early in spring and others nest later in summer, surveys for nesting birds may be required to continue during construction to address new arrivals, and because some species breed multiple times in a season. The necessity and timing of these continued surveys will be determined by the qualified biologist based on review of the final construction plans and in coordination with the CDFW, as needed.<br><br>If raptors or other protected avian species nests are identified during the pre-construction surveys, the qualified biologist will notify the MCWD and an appropriate no-disturbance buffer will be imposed within which no construction activities or disturbance should take place (generally 500 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist. | MCWD/Qualified Biologist | Prior to & during project construction | |
| Biological Resources: Impacts to sensitive natural communities | **Mitigation Measure BIO-9: Dune Scrub**<br>Dune scrub vegetation shall be avoided to the greatest extent feasible. Dune scrub vegetation not planned for removal shall be protected prior to and during construction to the maximum possible through the use of exclusionary fencing and/or flagging. A biological monitor will supervise the installation of protective fencing/flagging and monitor at least once per week until construction is complete to ensure that the protective fencing/flagging remains intact. | MCWD/Qualified Biologist/Biological Monitor | Prior to & during project construction | |

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| | Dune scrub that cannot be avoided shall be quantified prior to construction and replanted at a 2:1 ratio for the area removed. A restoration plan shall be prepared by a qualified biologist and shall be implemented by the MCWD or a contracted entity. The restoration plan shall be prepared in coordination and compliance with State Parks restoration guidelines and shall include:<br>▪ A planting palette of only locally-occurring native species collected from the project vicinity or acquired from approved local suppliers.<br>▪ Procedures to control non-native species invasion.<br>▪ Provisions to ensure compliance with the requirements of the plan.<br>▪ A detailed description of seeding and planting specifications.<br>▪ A description of a monitoring program, including specific methods of vegetation monitoring, data collection and analysis, goals and objectives, success criteria, adaptive management if the criteria are not met, reporting protocols, and a funding mechanism. | | | |
| Biological Resources: Conflict with HCP/Habitat Management Plan (HMP) | **Mitigation Measure BIO-10: Habitat Reserve**<br>No work shall occur within areas designated as habitat reserve by the Fort Ord HMP. Habitat reserve areas shall be protected prior to and during construction through the use of exclusionary fencing. A biological monitor will supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact. | MCWD/Biological Monitor | Prior to & during project construction | |
| **5.2.5 Cultural Resources** | | | | |
| Cultural Resources: Unknown or subsurface archaeological resources or human remains | **Mitigation Measure CR-1: Cultural Resources Protection Measures**<br>Protection measures will be required, consistent with the recommendations listed in the Archaeological Literature Review conducted by BASIN Research Associates June 2019:<br>▪ The project proponent shall note on any plans that require ground disturbing excavation that there is a potential for exposing buried cultural resources including prehistoric Native American burials.<br>▪ The project proponent shall retain a Professional Archaeologist on an "on-call" basis during ground disturbing construction to review, identify and evaluate prehistoric or historic cultural resources that may be inadvertently | MCWD/Professional Archaeologist | Prior to & during project construction | |

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| | exposed during construction.[1] The archaeologist shall review and evaluate any discoveries to determine if they are historical resource(s) and/or unique archaeological resources under the CEQA.<br>▪ If the Professional Archaeologist determines that any cultural resources exposed during construction constitute a historical resource and/or unique archaeological resource under CEQA, he/she shall notify the project proponent and other appropriate parties of the evaluation and recommend mitigation measures to mitigate to a less-than-significant impact in accordance with California Public Resources Code Section 15064.5. Mitigation measures may include avoidance, preservation in-place, recordation, additional archaeological testing and data recovery among other options. The completion of a formal Archaeological Monitoring Plan (AMP) and/or Archaeological Treatment Plan (ATP) that may include data recovery may be recommended by the Professional Archaeologist if significant archaeological deposits are exposed during ground disturbing construction. Development and implementation of the AMP and ATP and treatment of significant cultural resources will be determined by the project proponent in consultation with any regulatory agencies.<br>▪ The treatment of human remains and any associated or unassociated funerary objects discovered during any soil-disturbing activity within the | | | |

[1] Significant prehistoric cultural resources are defined as human burials, features or other clusterings of finds made, modified or used by Native American peoples in the past. The prehistoric and protohistoric indicators of prior cultural occupation by Native Americans include artifacts and human bone, as well as soil discoloration, shell, animal bone, sandstone cobbles, ashy areas, and baked or vitrified clays. Prehistoric materials may include:

a. Human bone - either isolated or intact burials.
b. Habitation (occupation or ceremonial structures as interpreted from rock rings/features, distinct ground depressions, differences in compaction (e.g., house floors).
c. Artifacts including chipped stone objects such as projectile points and bifaces; groundstone artifacts such as manos, metates, mortars, pestles, grinding stones, pitted hammerstones; and, shell and bone artifacts including ornaments and beads.
d. Various features and samples including hearths (fire-cracked rock; baked and vitrified clay), artifact caches, faunal and shellfish remains (which permit dietary reconstruction), distinctive changes in soil stratigraphy indicative of prehistoric activities.
e Isolated artifacts.

Historic cultural materials may include finds from the late 19th through early 20th centuries. Objects and features associated with the Historic Period can include.

a. Structural remains or portions of foundations (bricks, cobbles/boulders, stacked field stone, postholes, etc.).
b. Trash pits, privies, wells and associated artifacts.
c. Isolated artifacts or isolated clusters of manufactured artifacts (e.g., glass bottles, metal cans, manufactured wood items, etc.).
d. Human remains.

In addition, cultural materials including both artifacts and structures that can be attributed to Hispanic, Asian and other ethnic or racial groups are potentially significant. Such features or clusters of artifacts and samples include remains of structures, trash pits, and privies.

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| | APE shall comply with applicable State laws in regard to Native American burials (Chapter 1492, Section 7050.5 to the Health and Safety Code, Sections 5097.94, 5097.98 and 5097.99 of the Public Resources Code). This shall include immediate notification of the appropriate county Coroner/Medical Examiner and the project proponent.<br>▪ A Monitoring Closure Report shall be filed with the project proponent at the conclusion of ground disturbing construction if archaeological and Native American monitoring of excavation was undertaken. | | | |
| **5.2.9 Hazards and Hazardous Materials** | | | | |
| Hazards and Hazardous Materials: Accidental Release of Hazardous Materials | **Mitigation Measure HAZ-1: Spill Prevention and Control Plan**<br>Prior to commencement of construction-related activities, MCWD or Contractor shall prepare a Spill Prevention and Control Plan that addresses potential impacts associated with hazardous material usage during construction and operation. The Spill Prevention and Control Plan shall, at a minimum, consist of the following:<br>▪ Identify applicable safety and clean-up procedures in the event of a spill.<br>▪ Designate construction staging areas where hazardous materials may be stored. All staging areas shall be located outside of sensitive biological areas. Staging areas shall be designed to contain runoff to prevent contaminants (e.g., oil, grease, fuel products, etc.) from draining towards receiving waters and sensitive areas.<br>▪ Identify appropriate emergency notification procedures and emergency contacts<br>▪ Designated location where a spill kit shall be maintained on-site throughout the project.<br>▪ Identify dedicated storage areas where hazardous material may be stored and/or used during construction<br>MCWD or the Contract entity would be responsible for implementing the Spill Prevention and Control Plan on-site for the duration of construction, and all personnel working on the site would be notified of its location. | MCWD or Contractor | Prior to & during project construction | |
| Hazards and Hazardous Materials: Reduced Health and Safety Risks | **Mitigation Measure HAZ-2: Survey of Existing Buildings and Subsurface Utility Lines for Asbestos**<br>In order to reduce human health risks to construction personnel and future site occupants due to the potential presence of asbestos containing material (ACM) at the existing Fort Ord Village Lift Station and within subsurface utility lines, the | MCWD/Qualified Consultant | Prior to demolition or subsequent reuse | |

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| | MCWD or Contractor will retain a qualified consultant to survey all buildings and within subsurface utility lines for asbestos under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to demolition or subsequent reuse. Asbestos removal activities will be conducted by a California-licensed asbestos abatement contractor, in compliance with Rule 424, and appropriate notifications to the state Occupational Health and Safety Administration and Monterey Bay Air Resources District shall occur if ACM are present. MCWD or the Contractor will dispose of renovation or demolition wastes in accordance with federal and state waste disposal requirements and will follow all federal and state Occupational Health and Safety Administration requirements. | | | |
| Hazards and Hazardous Materials: Reduced Health and Safety Risks | **Mitigation Measure HAZ-3: Survey of Existing Buildings for Lead Based Paint** In order to reduce human health risks to construction personnel and future site occupants due to the potential presence of LBP at the existing Fort Ord Village Lift Station, the MCWD or Contractor will retain a qualified consultant to conduct a lead-based paint survey to evaluate the presence of lead-based paint prior to demolition or renovation of existing on-site structures. If lead-based paint is observed within existing buildings and the surrounding area, MCWD or the Contractor will remove and dispose of all peeling and flaking lead-based paint separately from building debris, in accordance with current Department of Toxic Substances (DTSC) polices. All site soils contaminated by lead-based paint will be removed and properly disposed prior to any construction activities. | MCWD/Qualified Consultant | Prior to demolition of existing structures | |
| Hazards and Hazardous Materials: Reduced Health and Safety Risks | **Mitigation Measure HAZ-4: Munitions and Explosives of Concern (MEC) Safety Measures** In order to minimize potential health and safety risks due to the exposure to MEC, prior to the commencement of any ground disturbing activity proposed, the MCWD or the Contractor, will coordinate with the State Parks to develop a safety program that specifies protocols relative to MEC in accordance with State Parks, state Occupational Health and Safety Administration, and U.S. Army regulations. In the event that MEC are uncovered during the course of construction and other site disturbing activities, all work will cease and MCWD or the Contractor will notify the State Parks and Presidio Police. Work will not commence until the ordnance has been removed from the site and the surrounding site soils have been sampled and remediated to acceptable levels if soil sampling reveals lead or other soil contamination has occurred due to the presence of munitions. | MCWD/Contractor/State Parks | Prior to project construction | |

| Environmental Impact | Mitigation Measures | Responsible Party | Timing | Verification (name/date) |
|---|---|---|---|---|
| Hazards and Hazardous Materials: Reduced Health and Safety Risks | **Mitigation Measure HAZ-5: MEC Safety Training**<br>In order to minimize potential health and safety risks due to the exposure to MEC, all construction personnel will attend a U.S. Army sponsored MEC safety debriefing, prior to the any ground-disturbing activities. This briefing will identify the variety of MEC that is expected to exist on the former Fort Ord and the necessary actions to be taken if a suspicious item is discovered during the course of project construction. | MCWD/Contractor | Prior to project construction | |
| **5.2.13 Noise** | | | | |
| Noise: Exceedance of Noise Standards | **Mitigation Measure NOISE-1: Night-time Construction Notification**<br>Residents and other sensitive receptors within 900 feet of nighttime construction shall be notified of the construction location, nature of activities, and schedule, in writing, at least 14 days prior to the commencement of nighttime construction activities. The notice shall also be posted at the proposed replacement lift station location. As a part of the notification process MCWD and/or its Contractor shall designate a construction disturbance coordinator who would be responsible for responding to nighttime construction complaints. MCWD and/or its Contractor shall return all calls within 24 hours to answer noise questions and handle complaints. A contact number for the construction disturbance coordinator shall be conspicuously placed at the proposed replacement pump station and included in the notice. Prior to distributing the notice to nearby residences, MCWD or the Contractor shall first submit the notice to the City of Seaside Planning Department for review and approval. | MCWD/Contractor | Prior to & during project construction | |

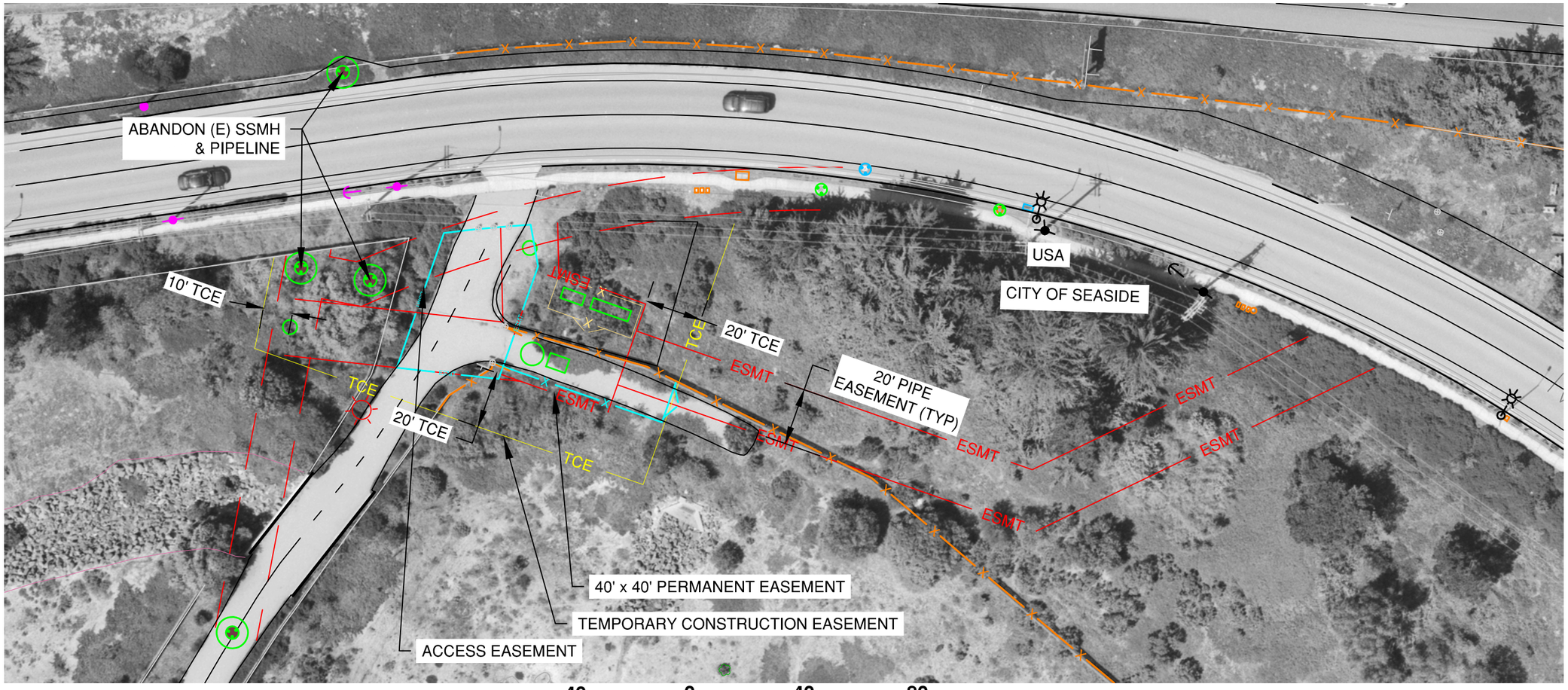

**Marina Coast Water District**
11 Reservation Road
Marina, CA 93933
mcwd.org

Ord Village Lift Station

*Drawn By:*
J.Hollida

*Date:*
9/9/2019

Figure 1: MCWD ORD VILLAGE SITE PLAN (AERIAL PHOTO)




40 0 40 80

**SCALE: 1 INCH = 40 FEET**

LEGEND:

| | |
|---|---|
| ESMT | EASEMENT |
| TCE | TEMPORARY CONSTRUCTION EASEMENT |
| X | (E) WOOD FENCE |
| X | (N) WOOD FENCE |
| X | (N) CHAIN LINK FENCE |
| | (E) UTILITY EASEMENT |
| ESMT ESMT | ACCESS EASEMENT |

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 10-C

Meeting Date: November 18, 2019

Prepared By: Don Wilcox
Reviewed By: Michael Wegley

Approved By: Keith Van Der Maaten

Agenda Title: Consider Adoption of Resolution No. 2019-84 to Approve a Water, Sewer and Recycled Water Infrastructure Agreement between Marina Coast Water District and Monterey Military Housing, LLC for the Lower Stilwell Neighborhood, Phase 1 Project

Staff Recommendation: The Board of Directors adopt Resolution No. 2019-84 approving a Water, Sewer and Recycled Water Infrastructure Agreement between Marina Coast Water District and Monterey Military Housing, LLC for the Lower Stilwell Neighborhood, Phase 1 Project.

Background: *5-Year Strategic Plan, Element No. 2 Infrastructure – Our objective is to provide a high quality water distribution system and an efficiently operating wastewater collection system to serve existing and future customers. Through the master planning process, our infrastructure strategy is to carefully maintain our existing systems and ensure future additions and replacements will meet District standards.*

Detailed Description: Monterey Bay Military Housing, LLC (MBMH), a Delaware limited liability company, previously entered into an Infrastructure Agreement with Marina Coast Water District in 2012 for their Kidney at Fort Ord Phase 2 Development. MBMH is now preparing to begin their Lower Stilwell Neighborhood, Phase 1 Project and desire to enter into a Water, Sewer and Recycled Water Infrastructure Agreement (IA) with the District for this new project. Exhibit C to the IA shows the site plan, existing infrastructure, sanitary sewer and domestic water of the proposed development.

MBMH's Lower Stilwell residential neighborhood is located west of Monterey Road and south of Gigling Road on the former Fort Ord. The first phase of the development will occur on approximately 55 acres and will include 151 new units replacing 180 existing units of military housing. Streets, water, and sewer infrastructure within the development area will be replaced. The Developer is requesting MCWD to enter into this IA because the water and sewer infrastructure needing to be installed or replaced with the redevelopment will most appropriately be owned, operated and maintained by MCWD.

The overall development is divided into two phases. Future Phase 2 of the development, covering an area of approximately 40 acres to the south of Phase 1, will replace approximately 143 existing units of military housing with 124 new units, for a project total of 323 existing units to be replaced by 275 new units.

MBMH asked for some minor changes to the District's IA form that were not considered substantive as described below, and staff negotiated the recommended edits below. These changes are included in the IA form being recommended for approval:

1. MNBH requested that "*domestic water, sewer and recycled water*" be added to the facilities description throughout the document.
2. MBMH and District staff negotiated minor edits to the sentence below in section 15.2 to provide clarity that it is not the District's intent to bring suit against a developer if an entity has warranty time left past the developer's warranty expiration:
   - Original text - *In the event any warranty under this section has expired, the District may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty*.
   - Negotiated change - *In the event the developer's warranty and associated liability under this section has expired, the District may bring suit at its expense to enforce any subcontractor's, manufacturer's or supplier's remaining warranty*.
3. Add "CONSTRUCTION AND TRANSFER" to the title of the agreement.
4. Add "if determined to be required" to section 5.1 regarding capacity charges since the development is decreasing the number of EDU's from existing.

Discussion/Analysis: The new infrastructure being transferred to the District will be constructed within the public right-of-way, public utility easements or within easements provided to MCWD by the Developer. The specific infrastructure proposed for transfer includes PVC potable water pipelines, PVC gravity sewer pipelines, associated sewer manholes, water valves, fire-hydrants and other water and sewer appurtenances. An Engineer's Estimation of Probable Construction Costs, to serve as a basis for preparing the Performance and Labor and Materials Bonds specified by this Infrastructure Agreement, will be provided as an initial step in the planning and design process.

The planned development project proposes a decrease in intensity in use of water and sewer, so no new Capacity Charges are anticipated. In addition, in the service agreement between the Army and MCWD, this neighborhood is on the list of occupied neighborhoods and facilities that are not subject to Capacity Charges, water or sewer, in the event there is no increased intensity of water or sewer use. In the future, should the number of EDU's within the neighborhood increase from the current level, capacity charges would be assessed on the difference between the new number of EDU's and the current number of EDU's, so the IA does include language specifying that the Developer agrees to pay capacity charges in effect at the time of providing services, if determined to be required. Exhibit A to the IA provides water allocation documentation and staff has confirmed that Army use is well under their allocation (26%) and that water and sewer capacity is available.

The Board of Directors is requested to approve this Infrastructure Agreement for the Lower Stilwell Neighborhood, Phase 1 Project.

Environmental Review Compliance: This Infrastructure Agreement is not a "project" under the California Environmental Quality Act (CEQA); this action is categorically exempt.

Financial Impact: _____ Yes __X__ No Funding Source/Recap: There is no financial impact.

Other Considerations: The Board may desire to consider other alternatives to adopting the motion as recommended by staff including:

1. Modifying or conditioning the action; or,
2. Direct further staff work; or,
3. Deny the action.

Material Included for Information/Consideration: Resolution No. 2019-84; and Attachment 1 - Draft Infrastructure Agreement.

Action Required: ___X___Resolution _____Motion _____Review
(Roll call vote is required.)

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Board Action

Motion By_____ Seconded By_____ No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

November 18, 2019

Resolution No. 2019-84
Resolution of the Board of Directors
Marina Coast Water District
Approving a Water, Sewer, and Recycled Water Infrastructure Agreement Between Marina Coast Water District and Monterey Military Housing, LLC for the Lower Stilwell Neighborhood, Phase 1 Project

RESOLVED by the Board of Directors ("Directors") of the Marina Coast Water District ("District"), at a regular meeting duly called and held on November 18, 2019, at 211 Hillcrest Avenue, Marina, California as follows:

WHEREAS, Monterey Bay Military Housing, LLC (MBMH), a Delaware limited liability company ("Developer") has coordinated with the District on their Lower Stilwell Neighborhood, Phase 1 Project, consisting of new construction and related infrastructure, located within the former Fort Ord portion of the City of Seaside; and,

WHEREAS, the Fort Ord Reuse Authority, has allocated by Memorandum of Agreement, water supply for incorporated former Fort Ord lands; and,

WHEREAS, the District and the Developer, are working cooperatively regarding proposed water, sewer and recycled water system improvements; and,

WHEREAS, the District and the Developer have agreed upon the proposed Water, Sewer and Recycled Water Infrastructure Agreement and desire to enter into same.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Marina Coast Water District does hereby authorize the General Manager to execute the Water, Sewer and Recycled Water Infrastructure and Reimbursement Agreements between the Marina Coast Water District and Monterey Bay Military Housing, LLC, a Delaware limited liability company, for the Lower Stilwell Neighborhood, Phase 1 development project and to take all actions and execute all documents as may be necessary or appropriate to give effect to this resolution.

PASSED AND ADOPTED on November 18, 2019, by the Board of Directors of the Marina Coast Water District by the following roll call vote:

Ayes: Directors_____

Noes: Directors_____

Absent: Directors_____

Abstained: Directors_____

_____
Thomas P Moore, President

ATTEST:

_____
Keith Van Der Maaten, Secretary

CERTIFICATE OF SECRETARY

The undersigned Secretary of the Board of the Marina Coast Water District hereby certifies that the foregoing is a full, true and correct copy of Resolution No. 2019-84 adopted November 18, 2019.

_____
Keith Van Der Maaten, Secretary

# MARINA COAST WATER DISTRICT

# Construction and Transfer of Water, Sewer and Recycled Water Infrastructure Agreement

# for

# Lower Stilwell Neighborhood Phase 1

# CONSTRUCTION AND TRANSFER OF WATER, SEWER AND RECYCLED WATER INFRASTRUCTURE AGREEMENT

## TABLE OF CONTENTS

## Exhibits

**EXHIBIT A – WATER ALLOCATION DOCUMENTATION**

**EXHIBIT B -- LEGAL DESCRIPTION**

**EXHIBIT C -- MAP OF DEVELOPMENT**

**EXHIBIT D -- INDEMINIFCATION AND INSURANCE REQUIREMENTS**

# CONSTRUCTION AND TRANSFER OF WATER, SEWER AND RECYCLED WATER INFRASTRUCTURE AGREEMENT

This Agreement made and entered into this 28th_Day of October 2019_("Effective Date"), between **Marina Coast Water District**, 11 Reservation Road, Marina, CA, 93933, hereinafter called "District", and **Monterey Bay Military Housing, LLC**, a Delaware limited liability company, with its principal offices at 328 Hatten Rd, Seaside, CA 93955, hereinafter called the "Developer" (collectively, the "parties") The name of the Developer's development that is the subject of this Agreement, is Lower Stilwell Neighborhood – Phase 1.

## 1. Definitions; District's Role; Term of this Agreement.

1.1 Definitions, whenever used in this Agreement, the following terms shall have the following respective meanings:

a. "Agreement" means this Water, Sewer and Recycled Water Infrastructure Agreement as it may be amended from time to time in accordance with the terms and conditions hereof.

b. "City" means the City of [5]/ and/or the appropriate Agency of Land Use Jurisdiction.

c. "Contractor" means any contractor with which the Developer has a direct contractual relationship to perform any work under this Agreement.

d. "Development" means that certain property located at [6] and legally described in Exhibit "B" and shown on the map at Exhibit "C."

e. "Facilities" shall mean those certain infrastructure improvements and system provided for in this Agreement and as approved by District as part of its review of the Development plans. Facilities shall include, but not be limited to, pipes, pumps, electrical and instrumentation and controls.

f. "Procedures" means the District's *Procedure Guidelines and Design Requirements*.

g. 'Standards" means the District's *Standard Plans and Specifications for Construction of Domestic Water, Sewer, and Recycled Water Facilities*.

h. "Water Allocation" means the total water allocated by the City/Land Use Jurisdiction for the Development as documented in Exhibit "A" and described in Exhibits "B" and "C".

i. "FORA" means Fort Ord Reuse Authority.

1.2 Allocation of Water Capacity for the Development. The parties hereto expressly agree that as a condition precedent for the performance of the District's obligations hereunder, Developer must provide proof to the satisfaction of the District that the City has approved the allocation of

water capacity for the Development from the water and recycled water capacity allocated to the City by the Fort Ord Reuse Authority (FORA). Notwithstanding, neither the City nor the District may approve water allocations that exceed the allocations set by FORA or other appropriate agency of land use jurisdiction.

1.3 Sewer Capacity. The District provides sewer collection from customers and conveyance of those sewer flows to the Monterey Regional Water Pollution Control Agency's (MRWPCA) Regional Interceptor System which discharges to the MRWPCA Wastewater Treatment Plant (WWTP). Capacity within the WWTP for the Development must be coordinated with MRWPCA. To the extent possible, the District will allocate its existing pre-paid WWTP Capacity to the Development. If additional WWTP Capacity is required for the Development, the Developer shall purchase the capacity from the MRWPCA at the Developer's sole expense, and shall provide proof of payment for that capacity right to the District at the time the sewer infrastructure is conveyed. Furthermore, the Developer understands and agrees that nothing herein shall be construed as a representation of future sewer capacity by either City or District other than as currently established by the type and density of development as included in the FORA Consistency Determinations or other appropriate agency of land use jurisdiction.

1.4 District's Role. The District's role in the Development is to approve the plans for domestic water, sewer, and recycled water facilities, inspect the construction of the domestic water, sewer, and recycled water facilities, accept the transfer of the title to the domestic water, sewer, and recycled water facilities, to maintain and operate the systems, and to bill customers for water and sewer service at rates set for the District's Ord Service Area from time to time.

1.5 Term. This Agreement commences upon the above Effective Date and shall expire (a) two (2) years thereafter or (b) upon completion by the Developer and acceptance by the District of all domestic water, sewer, and recycled water facilities required by this Agreement and the required warranty period, whichever occurs first, unless terminated sooner as provided in section 17 of this Agreement.

## 2. Design and Construction Requirements

2.1 The domestic water, sewer, and recycled water facilities shall be designed, constructed and be operable in strict accordance with the District's requirements, which shall be a condition of the District's acceptance of the system domestic water, sewer, and recycled water facilities under this Agreement. The District's requirements include, but are not limited to the following:

2.1.1 Developer shall design and construct the domestic water, sewer, and recycled water facilities in strict accordance with the District's most recent Procedures and Standards in effect at the time of construction, (contained in updated Procedures) and any other applicable State Regulatory Agency requirements, whichever are most stringent. Any conflict in Development requirements shall be addressed during the plan review process or at such other times as any such conflict is discovered. A licensed civil engineer registered in the State of California shall prepare all plans and specifications for the Developer.

2.1.2 The Developer shall comply with the District's most recent Procedures and the District's most recent Standards in effect at the time of construction when submitting project plans and specifications to the District for review and consideration for approval. District's review shall commence after the District determines compliance with District's

Procedures regarding the submittals and any other applicable State Regulatory Agency requirements, whichever are most stringent. District review of the Development's plans and specifications shall commence after receipt of the initial deposit (see Paragraph 2.1.7). District may approve plans concurrent with the City's approval.

2.1.3 The Developer shall comply with most recent District Code in effect at the time of construction including, but not limited to, section 4.28 *Recycled Water*. More specifically, section 4.28.010 *Applicability* states that "[T]his chapter applies to publicly owned properties, to commercial, industrial and business properties, and to other such properties as may be specified from time to time by Marina Coast Water District … " Section 4.28 does not require the use of recycled water for irrigation to privately owned residential lots. Improvement plans for the Development must contain recycled water lines to serve common areas and other non-residential lot irrigation within the Development. The Developer and the District will cooperatively identify recycled water turnout location(s). The Developer will also install the lateral lines from each turnout. The Developer, or its successors or assignees (such as an owner's association), will assist MCWD to obtain all required permits for the on-site use of recycled water. This shall include but is not limited to, complying with the California Department of Health Services, the State of California Regional Water Quality Control Board and other regulatory agency requirements prior to constructing any recycled water facilities.

2.1.4 The District shall have the right to inspect the construction of the domestic water, sewer, and recycled water facilities and verify that construction conforms to the Development plans and specifications. District's right to inspect extends to five (5) feet from the building exterior at the point where the utility enters the structure. The District shall also have the right to inspect special fixtures including, zero water use urinals, hot water recirculation systems, etc. The District's right to inspect does not in any way eliminate or supersede any inspection obligations by the City. The District will inform the Developer of required field changes. The Developer shall be responsible for obtaining all easements outside publicly dedicated rights of way. Upon receipt of recorded private easements to serve the Development in accordance with the plans and specifications approved by the District, the District will quitclaim any easements not required to serve the Development and not required by the District.

2.1.5 All domestic water, sewer, and recycled water facilities shall be tested to meet District requirements. No domestic water, sewer, and recycled water facilities or portion thereof will be accepted without meeting all District test requirements. The District shall have the right to inspect work in progress in the construction of either in-tract or out-of-tract domestic water, recycled water and sewer infrastructure facilities or special fixtures, as described above.

2.1.6 Plan Review Fees. The Developer, on a phased basis, agrees to pay all fees and charges, including additional plan check fees and construction inspection fees as required by the District for the Development. These fees will be determined by the District at the time the fees are due and payable. The District may also require a prepaid fee to cover staff time before preliminary level or concept level plan check begins. (See *Procedures* section 100.6.2) If the District Engineer determines consultant assistance is required for plan check review or portion thereof, the Developer agrees to prepay the additional plan check fees if that cost exceeds the balance on the initial deposit. The District shall obtain

the Developer's written approval for any costs in excess of this amount, for which approval shall not be unreasonably withheld. Upon the execution of this Agreement by both parties, the Developer shall deposit with the District the applicable administration and plan check fees. Any surplus fees shall be returned to the Developer, or at Developer's request, held by the District and used to pay subsequent fees, e.g., construction inspection fees.

2.1.7 Construction Inspection Fees. On a phased basis, the District shall require the construction inspection fee before undertaking a construction inspection review of the proposed domestic water, sewer, and recycled water facilities. As a condition precedent to the District's obligation to undertake a construction inspection review of the proposed domestic water, sewer, and recycled water facilities, the Developer shall provide to the District the construction inspection fee, which is currently five hundred dollars ($500.00) per unit plus three percent (3%) of domestic water, sewer, and recycled water facilities construction costs, pursuant to Developer's Engineer's estimate. (See *Procedures* section 200.3.2) Any surplus inspection fees shall be returned to Developer.

## 3. Existing Water and Sewer Infrastructure

3.1 The Developer will comply with the District's *In-Tract Policy* regarding any water, recycled water and sewer mains or appurtenances within the Development. Developer, or its successors or assignees, shall assume all responsibility, and will hold District harmless, for all water/sewer infrastructures within the Development boundaries that will be removed or abandoned by Developer. Abandonment-in-place requires written approval by the District. The Developer shall be solely responsible for repair, replacement and maintenance of existing water and sewer facilities to remain within the Development boundaries during the construction of the Development, regardless of whether the facilities are for the benefit of the Development.

## 4. District to Serve Development

4.1 District will deliver water, recycled water and provide sewer service to the Development after final Board Acceptance of the conveyance of the domestic water, sewer, and recycled water facilities and final Board Acceptance of the domestic water, sewer, and recycled water facilities (see *Procedures* section 300.25). Thereafter, the District will bill and serve the end-user(s) directly. The Developer shall pay the prepayment of applicable meter fees and Capacity Charges (if required), cross connection charges, and all other applicable fees and charges for service on the former Fort Ord (or City, as the case may be). Once the applicable fees and charges are determined and paid in full, the District will immediately begin water service with the installation of the water meter(s). The District shall provide domestic water and sewer service upon installation of water meters and payment of all applicable fees. The District's obligations in this section are subject to District's rules, regulations, policies and ordinances, which may be updated from time to time.

## 5. Capacity Charge

5.1 If determined to be required, the current capacity charges, as of 2013 for water and sewer services are $8,010 per EDU and $3,322 per EDU, respectively. These charges are due prior the installation of water meters. The District Board of Directors reserves its right to review and revise these charges from time to time subject to applicable law and the District's approval procedures for such charges. Developer agrees to pay the capacity charge in effect at the time of providing services.

## 6. Provision for Non-Potable Water Use

6.1 Based upon existing studies, the District does not have sufficient existing firm water supplies to meet the water demands of projected developments within the District's service area. The District has investigated a recycled water project, a desalination project, and a combination of those projects to meet future water demands within the District. Therefore, improvement plans must be compatible with and anticipate the availability of a non-potable water supply to serve common area open spaces within the Development, as permitted by applicable laws and regulations.

6.2 Developer, and its successors or assignees (such as an owner's association), agrees to take recycled water for non-potable use if and when it becomes available. The District shall establish a separate cost for recycled water in the same manner that it establishes the cost of potable water. Developer, or its successors or assignees agree that the District-established cost will be paid by the recycled water customers.

## 7. Licensed Contractor

7.1 The Developer, or his authorized representative (contractor, or subcontractors as the case may be) performing the work, shall be licensed under the provisions of the Business and Professions Code of the State of California to perform the specified work required for the Development. District reserves the right to waive this requirement at its sole discretion where permitted under state statute.

7.2 The Developer, or its contractor, shall be skilled and regularly engaged in the installation of water, recycled and sewer systems. The District may request evidence that the constructing party has satisfactorily installed other projects of like magnitude or comparable difficulty. Upon request, contractors must furnish evidence of their qualifications to do the work in a form suitable to the District prior to the commencement of any work on the domestic water, sewer, and recycled water facilities.

## 8. Permits, Easements, and Related Costs

8.1 Except as otherwise provided in this Agreement, the Developer shall obtain all necessary local, county and state permits (including encroachment permits) and conform to requirements thereof. Developer shall obtain all easements (excluding easements within existing public rights of way) necessary for ingress and egress to and from the domestic water, sewer, and recycled water facilities for the purpose of installation, operation, maintenance, replacement and removal of said domestic water, sewer, and recycled water facilities and for the location of the domestic water, sewer, and recycled water facilities. Pipeline easements shall be 20 feet in width or as otherwise agreed by the District Engineer and Developer. Easements shall be in a form approved by the District and it shall be the Developer's responsibility to have the approved easements recorded. Developer shall provide proof of recordation of the easements, in a form satisfactory to the District, prior to the District's obligation to provide any of the services contemplated by this Agreement.

## 9. Final Inspection and Reimbursement of District Costs

9.1 The District's Engineer must inspect completed domestic water, sewer, and recycled water facilities, or portion thereof. The District will not accept any facility until its Engineer has given written approval that it satisfies the District's requirements. Developer shall be responsible for all

costs incurred by the District that are associated with interim and final inspection, completion, additional construction, and testing of the domestic water, sewer, and recycled water facilities, subject to the limitations set forth in Paragraph 2 *Design and Construction* Requirements. Developer shall reimburse District for costs to correct any damages to domestic water, sewer, and recycled water facilities related to the construction of the Development caused by the Developer or any authorized representative (developer's contractor). This reimbursement obligation is limited to the warranty period described in paragraph 15 *Warranties*. Developer shall remit to District prior to the conveyance of the domestic water, sewer, and recycled water facilities to the District, payment of all costs due and unpaid under this Agreement over and above deposits previously paid to the District. If there are surplus deposit funds or any refunds due Developer, then District shall return to Developer the amount of such surplus or refunds upon acceptance by the District of all domestic water, sewer, and recycled water facilities required to be constructed under this Agreement.

## 10. District's Non-responsibility for Acts or Omissions of Developer, etc.; Developer Responsible for Verifying Underground Utility Lines and Surface Obstructions

10.1 The District is not responsible for, and does not assume any responsibility or liability whatsoever for, acts and omissions of the Developer, Developer's contractors or any contractor's subcontractors or suppliers at any tier during the design and construction of the domestic water, sewer, and recycled water facilities. Any location of underground utility lines or surface obstructions given to the Developer or placed on the project drawing by District are for the Developer's convenience and must be verified by Developer in the field. The District assumes no responsibility for the sufficiency or accuracy of such information, lines, or obstructions.

## 11. As-Built Plans, Specifications, Values, Etc.

11.1 Developer shall, as a condition of District's acceptance of the domestic water, sewer, and recycled water facilities, provide to the District in accordance with Section 400.13 of the *Procedures* the following:

11.1.1 One set each of Mylar drawing prints and AutoCAD digitized files of the improvement plans, which show all of the domestic water, sewer, and recycled water facilities, and one hardcopy and one electronic copy of the specifications, and one hardcopy and one electronic copy of any contract documents used for the construction of the water, sewer and recycled water system facilities. Scanned and signed copies in Adobe Acrobat format are also required.

11.1.2 One hardcopy and one electronic copy of a complete, detailed statement of account, the form and content to be provided by the District at the time of conveyance, of the amounts expended for the installation and construction of the domestic water, sewer, and recycled water facilities, with values applicable to the various components thereof, together with a list of any other materials and equipment (and their values) being transferred.

11.1.3 Any other documents required by Section 400.13 of the *Procedures*.

## 12. Indemnity, Insurance, and Sureties

12.1 Indemnity and Insurance - The Developer agrees to have every Contractor performing work on the domestic water, sewer, and recycled water Facilities fully comply with the all of the requirements in Exhibit D. To the extent that any indemnity or insurance coverage provided by any such Contractor does not fully indemnify the District for any and all claims as defined in Exhibit D, Developer agrees to indemnify, hold harmless, and defend the District, its directors, officers, employees, representatives, and authorized volunteers. Coverages required by Exhibit D shall be maintained throughout the term of this Agreement. Every Contractor shall file with the District prior to the commencement of any work under this Agreement, and as policy renewals occur, Certificates of Insurance evidencing that the insurance coverages required herein have been obtained and are currently in full force and effect.

12.2 Performance and Payment Surety - Developer or its Contractor, as the case may be, shall furnish the District with a surety to secure the completion of and payment for the domestic water, sewer, and recycled water facilities. The amount of the performance surety shall not be less than 100% of the District's estimate of the total cost to construct all of the domestic water, sewer, and recycled water facilities required under this Agreement. The amount of the payment surety shall not be less than 100% of the District's estimate of the total cost to construct all of the domestic water, sewer, and recycled water facilities required under this Agreement. The surety instrument shall be in a form satisfactory to the District such as a performance and payment bond, irrevocable letter of credit, cash deposit, or irrevocable construction "set-aside" letter. Such surety may include evidence that it was submitted to another public agency of an equivalent or greater amount covering the work to be done under this Agreement. Each surety must be authorized in the State of California to issue the surety instrument provided. All surety instruments signed by an agent must be accompanied by a certified copy of the agent's authority to act.

12.3 Developer shall furnish the District with a Warranty bond or other surety instrument satisfactory to the District in the amount equal to twenty percent (20%) of the actual construction costs to secure the Developer's performance under Section 15, Warranties.

12.4 Submittal of Insurance Certificates and Surety - The required insurance certificates shall be delivered prior to commencement of construction. The required performance and payment surety shall be delivered to the District prior to District approval of plans and specifications. No work may be commenced under this Agreement unless and until all required insurance certificates and performance and payment sureties are submitted to and approved by the District. The Warranty surety shall be provided prior to the District's acceptance of the domestic water, sewer, and recycled water facilities, and shall remain in effect for the duration specified in Section 15.1.

12.5 The performance surety shall remain in effect until final acceptance of the domestic water, sewer, and recycled water facilities by the District in accordance with Section 13.1. The payment surety shall remain in effect until the last of the following occur: (i) the statutory time has expired to commence a legal action on the payment surety and no legal action was filed, (ii) satisfaction of all judgments against the payment surety, and (iii) as otherwise provided by law. The warranty surety shall remain in effect until all warranties under this Agreement have expired.

## 13. Transfer of System Domestic Water, Sewer, and Recycled Water Facilities to District after Completion

13.1 Developer shall execute and obtain all signatures of all other parties having any interest (including any Deed of Trust) and deliver a conveyance satisfactory in form and content to District. This conveyance shall transfer unencumbered ownership of all domestic water, sewer, and

recycled water facilities required by this Agreement to the District together with all real property, interests in real property, easements and rights-of-ways (including any off-site easements or real property) other than those contained in public rights of way, and all overlying and other underground water rights that are a part of, appurtenant to, or belonging to the Development now or hereafter served by the water, sewer and recycled water system facilities that are necessary or appropriate in the opinion of the District for the ownership and operation of the domestic water, sewer, and recycled water facilities. Provided all conditions set forth in this Agreement are satisfied, the District shall accept the conveyance. All costs of construction of the domestic water, sewer, and recycled water facilities, for which the Developer is responsible, shall have been paid for by Developer, the time for release of the payment surety under Section 12.5 shall have expired (or Developer shall provide other security acceptable to the District), and the title to all of the domestic water, sewer, and recycled water facilities and the interests in real property transferred shall be good, clear and marketable title, free and clear of all encumbrances, liens or charges. Developer shall pay costs of any title insurance deemed necessary by the District and is reasonable and customary for the insured transaction type. All construction, including final inspection punch list items must be completed prior to transfer, and the transfer shall not be completed until the conveyance transferring the water, sewer and recycled water system facilities has been formally accepted by the District. After transfer, the District shall own and be free in every respect to operate and manage the domestic water, sewer, and recycled water facilities and to expand or improve, or interconnect the domestic water, sewer, and recycled water facilities with other adjacent facilities, as the District deems appropriate in its sole discretion.

## 14. Developer Assistance

14.1 Developer shall, both before and after the transfer, secure and provide any information or data reasonably needed by District to take over the ownership, operation and maintenance of the domestic water, sewer, and recycled water facilities.

## 15. Warranties

15.1 Developer hereby warrants that as of the time of the District's acceptance of the conveyance of the domestic water, sewer, and recycled water facilities (or when Developer thereafter completes the installation of any works or components subsequently installed, repaired, or replaced) the domestic water, sewer, and recycled water facilities and all components thereof, will be in satisfactory working order and quality and free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier; and that the domestic water, sewer, and recycled water facilities and all components thereof have been constructed and installed in compliance with all approved specifications and as-built plans being provided to the District, and in accordance with applicable requirements of the District and any other governmental agency having jurisdiction. Developer also warrants that as of the time of the District's acceptance of the conveyance of the domestic water, sewer, and recycled water facilities (or when Developer thereafter completes the installation of any works or components subsequently installed, repaired, or replaced) the domestic water, sewer, and recycled water facilities will operate in good and sufficient manner for the purposes intended for (a) one (1) year after the latter of (i) the date of acceptance, (ii) the expiration of all lien enforcement periods, or (iii) proof of conveyance of domestic water, sewer, and recycled water facilities, or (b) 180-days from the date new domestic water, sewer, and recycled water facilities are subsequently re-installed, repaired, or replaced and inspected and accepted by the District (hereafter *replacement*

domestic water, sewer, and recycled water *facilities*), whichever of (a) or (b) occurs last. The Developer shall remedy at the Developer's expense any failure to conform with any applicable requirement of the District, by any Contractor or any subcontractor or supplier at any tier, or any defect. If the Developer fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice by the District or any other person or entity, the District shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Developer's expense and the Developer shall indemnify District for all such costs (including District's own labor costs) incurred.

15.2 With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this Agreement, the Contractor shall:

(1) Obtain all warranties that would be given in normal commercial practice;

(2) Require all warranties to be executed, in writing, for the benefit of the District, if directed by the District; and

(3) Enforce all warranties for the benefit of the District, if directed by the District.

In the event the developer's warranty and associated liability under this section has expired, the District may bring suit at its expense to enforce any subcontractor's, manufacturer's or supplier's remaining warranty.

15.3 This Section 15 shall not limit the District's rights under the law with respect to latent defects, gross mistakes, or fraud.

## 16. No Water, Recycled Water and Sewer Service Prior to Completion and Transfer

16.1 The Developer shall not allow any occupant or person to commence operations or use of any part of the domestic water, sewer, and recycled water facilities without the express written consent of the District. Such consent may not be unreasonably withheld. District may impose conditions or restrictions upon any consent to such prior service, such as posting a surety bond. District recognizes that the Development, and hence the domestic water, sewer, and recycled water facilities, may be built, accepted and transferred in multiple phases. Notwithstanding any of the foregoing, Developer may use the domestic water, sewer, and recycled water facilities before they are accepted for fire protection and construction purposes in all phases, subject to satisfaction of applicable testing.

## 17. Performance

17.1 Developer agrees to promptly design and construct the domestic water, sewer, and recycled water facilities and, transfer the same to the District in accordance with the terms of this Agreement. If construction of the domestic water, sewer, and recycled water facilities have not been completed and accepted by District within twenty four (24) months from the date of execution of this Agreement (such date may be extended for delays beyond Developer's control and without the fault or negligence or of the Developer or any Contractor or subcontractor or supplier at any tier, but in no event shall such delay exceed twelve (12) additional months), the District shall have the option to terminate this Agreement. If construction on any phase is not complete within twenty-four months or as extended as provided above, then an Amendment to this Agreement will be necessary to address each such phase, which shall incorporate the policies, fees and charges of

the District then in effect as of the effective date of said Amendment. Subsequent phases also may at District's discretion be addressed by Amendment(s) to this Agreement.

17.2 Responsibility for Work - Until the completion and final acceptance by the District of all the work under and implied by this Agreement, the Developer will require the work to be under the Contractor's responsible care and charge. The Contractor shall rebuild, repair, restore and make good all injuries, damages, re-erections, and repairs occasioned or rendered necessary by causes of any nature whatsoever.

## 18. Assignment

18.1 Neither party may assign their rights or obligations under this Agreement within its term without the written consent of the other party.

18.2 Provisions of water delivery, recycled water delivery, and sewer service will be deemed assigned to each property owner upon acquisition of his/her commercial and/or residential unit in the Development. Upon assignment, the Developer's responsibilities relating to recycled water facilities, use and approvals will become the assignee's responsibility. This provision will cease to have any effect when the District accepts title to the water facilities, or the Agreement is terminated.

## 19. Dispute Resolution Procedure

19.1 Disputes arising under this Agreement shall be resolved as provided in this section.

19.2 Prevention of Disputes/Meet and confer - The parties agree that they share an interest in preventing misunderstandings that could become claims against one another under this agreement. The parties agree to attempt to identify and discuss in advance any areas of potential misunderstanding that could lead to a dispute. If either party identifies an issue of disagreement, the parties agree to engage in a face-to-face discussion of the matter within three (3) calendar days of the initial request. If the dispute cannot be negotiated between the parties, the matter shall first be brought to the attention of the District's Board of Directors at the first available regularly scheduled Board Meeting. As a contract dispute, the matter shall be considered by the District Board of Directors in closed session under the Brown Act without the Developer or Contractor in attendance. If any disagreement remains unresolved for ten (10) days after consideration by the District Board of Directors, the parties agree to submit it to mediation as provided in Section 19.3 below.

19.3 Mediation - Either party may demand, and shall be entitled to, mediation of any dispute arising under this agreement at any time after completing the meet and confer process described in subsection 19.2 Mediation shall commence not more than ten (10) days after the initial mediation demand and must be concluded not more than thirty (30) days after the date of the first mediation demand. If mediation is not concluded within that time, then either party may demand arbitration as set forth in Section 19.4.

Mediation shall be submitted first to a mediator with at least ten years experience with the issues in dispute. The mediator shall be selected by mutual agreement of the parties. Failing such mutual agreement, a mediator shall be selected by the presiding judge of the Monterey County Superior Court. In the interest of promoting resolution of the dispute, nothing said, done or produced by

either party at the mediation may be discussed or repeated outside of the mediation or offered as evidence in any subsequent proceeding. The parties acknowledge the confidentiality of mediation as required by Evidence Code 1152.5.

No mediator shall submit, and no arbitrator or court shall consider, any mediator recommendations, declarations, or findings unless the parties give their written consent to the proposed mediator statement.

19.4 Arbitration - If mediation fails to resolve the dispute, the parties shall select an arbitrator by mutual agreement. Failing such agreement, the arbitrator shall be selected by the Presiding Judge of the Superior Court. The decision of the arbitrator shall be final and not subject to judicial litigation.

Arbitration shall be commenced within thirty (30) days of the arbitration demand and concluded within 60 days of arbitration demand.

Arbitration shall follow the so-called "baseball arbitration" rule in which the arbitrator is required to select an award from among the final offers presented by the contending parties. The arbitrator may not render an award that compromises between the final offers.

Unless the arbitrator selects another set of rules, the arbitration shall be conducted under the J.A.M.S. Endispute Streamlined Arbitration Rules and Procedures, but not necessarily under the auspices of J.A.M.S. Upon mutual agreement, the parties may agree to arbitrate under an alternative scheme or statute. The Arbitrator may award damages according to proof. Judgment may be entered on the arbitrator's award in any court of competent jurisdiction.

**NOTICE: IN AGREEING TO THE FOREGOING PROVISION, YOU ARE WAIVING YOUR RIGHT TO HAVE YOUR RIGHTS UNDER THIS AGREEMENT TRIED IN A COURT OF LAW OR EQUITY. THAT MEANS YOU ARE GIVING UP YOUR RIGHT TO TRIAL BY JUDGE OR JURY. YOU ARE ALSO GIVING UP YOUR RIGHT TO DISCOVERY AND APPEAL EXCEPT AS PROVIDED IN THE ARBITRATION RULES. IF YOU REFUSE TO ARBITRATE YOUR DISPUTE AFTER A PROPER DEMAND FOR ARBITRATION HAS BEEN MADE, YOU CAN BE FORCED TO ARBITRATE OR HAVE AN AWARD ENTERED AGAINST YOU BY DEFAULT. YOUR AGREEMENT TO ARBITRATE IS VOLUNTARY.**

**BY INITIALING THIS PROVISION BELOW, THE PARTIES AFFIRM THAT THEY HAVE READ AND UNDERSTOOD THE FOREGOING ARBITRATION PROVISIONS AND AGREE TO SUBMIT ANY DISPUTES UNDER THIS AGREEMENT TO NEUTRAL BINDING ARBITRATION AS PROVIDED IN THIS AGREEMENT**.

MCWD's INITIALS_____ MBMH's: INITIALS_____

## 20. Waiver of Rights

20.1 Waiver. No waiver of any breach or default by either party shall be considered to be a

waiver of any other breach or default. The waiver by any party for the time for performing any act shall not constitute a waiver of the time for performing any other act or an identical act to be performed at a later time. None of the covenants or other provisions in this Agreement can be waived except by written consent of the waiving party.

## 21. Notices

21.1 All notices, demands, or other communications, which this Agreement contemplates or authorizes, shall be in writing and shall be personally delivered, or mailed by certified mail, return receipt requested, or delivered by reliable overnight courier, to the respective party as follows:

**To District:**
Marina Coast Water District
**Attn: General Manager**
11 Reservation Road
Marina, California 93933

**To Developer:**
Monterey Bay Military Housing, LLC c/o Clark Realty Capital, LLC
328 Hatten Road
Seaside, CA 93955
Attn: Fran Coen

Monterey Bay Military Housing, LLC
c/o Office of the Garrison Commander
DLIFLC & POM
ATZP-GC
1759 Lewis Road, Suite 210
Monterey, CA 93944-3223

With a copy to:
Office of the General Counsel
7500 Old Georgetown Road, 15th Floor
Bethesda, MD 20814

And a copy to:
W. Cleve Johnson
Clark Realty Capital, LLC
4401 Wilson Boulevard
Suite 600
Arlington, VA 22203

21.2 The address to which notice may be sent may be changed by written notification of each party to the other as above provided.

## 22. Severability

22.1 If any term or provision of this Agreement is determined to be illegal, unenforceable, or invalid in whole or in part for any reason, such illegal, unenforceable, or invalid provisions or part thereof shall be stricken from this Agreement. Stricken provisions shall not affect the legality, enforceability, or validity of the remainder of this Agreement so long as the stricken

provision is replaced with a legal, enforceable and valid provision that conforms with the allocation of benefits and burdens to the respective parties and intent of the parties as expressed herein.

## 23. Paragraph Headings

23.1 Paragraph headings are for convenience only and are not to be construed as limiting or amplifying the terms of this Agreement in any way.

## 24. Successors and Assignees

24.1 This Agreement shall be binding on and benefit the assignees or successors to this Agreement in the same manner as the original parties hereto.

## 25. Integrated Agreement

25.1 This Agreement integrates and supersedes all prior and contemporaneous Agreements and understandings concerning the subject matter herein. This Agreement constitutes the sole agreement of the parties and correctly sets forth the rights, duties and obligations of each to the others. Future amendments must be in writing signed by the parties. Any prior agreements, promises, negotiations or representations not expressly set forth in this Agreement are of no force and effect.

## 26. Negotiated Agreement

26.1 This Agreement has been arrived at through negotiation between the parties. Neither party is deemed the party that prepared the Agreement within the meaning of Civil Code Section 1654.

## 27. Attorney's Fees

27.1 If arbitration or suit is brought to enforce or interpret any part of this Agreement, the prevailing party shall be entitled to recover as an element of costs of suit, and not as damages, a reasonable attorneys' fee to be fixed by the arbitrator or Court, in addition to any other relief granted. The "prevailing party" shall be the party entitled to recover costs of suit, whether or not the suit proceeds to arbitrator's award or judgment. A party not entitled to recover costs shall not recover attorneys' fees. No sum for attorneys' fees shall be counted in calculating the amount of an award or judgment for purposes of determining whether a party is entitled to recover costs or attorneys' fees.

27.2 If either party initiates litigation without first participating in good faith in the alternative forms of dispute resolution specified in this Agreement, that party shall not be entitled to recover any amount as attorneys' fees or costs of suit even if such entitlement is established by statute.

## 28. Exhibits

28.1 All exhibits referred to in this Agreement and attached to this Agreement are incorporated in this Agreement by reference.

## 29. Disclaimer/Indemnity Regarding Public Works

29.1 District has not determined whether the project would be considered a "Public Works" project for the purposes of California law, and makes no warranties or representations to Developer about whether the project would be considered a "Public Works" project. Developer is aware that if the project is considered a "Public Works" project, then Developer would have to pay "prevailing wages" under California Labor Code section 1771. If Developer fails to pay such prevailing wages, Developer acknowledges that it will be liable to, among other things, pay any shortfall owed as well as any penalties that might be assessed for failure to comply with the law. If Developer does not pay prevailing wages, and an action or proceeding of any kind or nature is brought against the District based on such failure, Developer will defend and indemnify District in the action or proceeding. District agrees to reasonably cooperate and assist Developer in any the defense of any such action.

## 30. No Third Party Beneficiaries

30.1 There are no intended third party beneficiaries to this Agreement.

## 31. Compliance with Laws

31.1 Developer will comply with all laws, rules and regulations in carrying out its obligations under this Agreement.

## 32. Counterparts

32.1 This Agreement may be executed in counterparts, and each fully executed counterpart shall be deemed an original document.

**By: Monterey Bay Military Housing, LLC., a Delaware Limited Liability Company**

**By: CRC Monterey Bay LLC., a California limited liability company, Manager**

**By: Clark Realty Capital, LLC., a Delaware limited liability company, Manager**

By: _____
Fran Coen, Title: Managing Director
Date:

By: _____
Jose R. Cruz, Title: Development Associate
Date:

**By** MARINA COAST WATER DISTRICT

_____
General Manager
Marina Coast Water District
Date:

# EXHIBIT A

## WATER ALLOCATION DOCUMENTATION

**EXHIBIT B**

**LEGAL DESCRIPTION**

**EXHIBIT C**

**MAP OF DEVELOPMENT**

**EXHIBIT D**

# INDEMNIFICATION AND INSURANCE REQUIREMENTS for Infrastructure Agreements

**1. Workers' Compensation and Employer's Liability Insurance –**

a. The Developer shall require every Contractor to certify that it and all of its subcontractors are aware of the provisions of Section 3700 of the California Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing the performance of any work under this Agreement.

b. The Developer shall require every Contractor and all sub-contractors to insure (or be a qualified self-insured) under the applicable laws relating to workers' compensation insurance, all of their employees working on or about the construction site, in accordance with the "Workers' Compensation and Insurance Act," Division IV of the Labor Code of the State of California and any Acts amendatory thereof.

c. The Contractor shall provide employer's liability insurance in the amount of at least $1,000,000 per accident for bodily injury and disease.

**2. Definitions** – For purposes of this Exhibit, the following terms shall have the following respective meanings:
**"Claim"** - shall be used collectively to refer to and include any and all claims, demands, causes of action, damages, costs, attorneys' fees, expert fees, court costs, expenses, penalties, losses or liabilities, in law or in equity, of every kind and nature whatsoever.

**3. Indemnification -** To the fullest extent permitted by law, the Developer will require every Contractor to indemnify, hold harmless, and defend District, its directors, officers, employees, representatives, and authorized volunteers (collectively, the "indemnitees"), and each of them from and against:

a. Any claim, including, but not limited to, injury to or death of any person including District and/or Contractor, or any directors, officers, employees, or authorized volunteers of District or Contractor, and damages to or destruction of property of any person, including but not limited to, District and/or Contractor or their directors, officers, employees, or authorized volunteers, arising out of or in any manner directly or indirectly connected with the work to be performed under this agreement, however caused, regardless of any negligence of District or its directors, officers, employees, or authorized volunteers, except to the extent caused by the sole negligence or willful misconduct or active negligence of District or its directors, officers, employees, or authorized volunteers;

b. Any claim arising out of, resulting from, or relating in any way to a violation of any governmental law or regulation, compliance with which is the responsibility of the

Contractor;

c. Any claims (including damages to the work itself), attorneys' fees, and other costs, including all costs of defense, which any indemnitee may incur with respect to the failure, neglect, or refusal of Contractor to faithfully perform the work and all of the Contractor's obligations to the Developer for work to be performed under this Agreement. Such costs, expenses, and damages shall include all costs, including attorneys' fees, expert fees, and court costs, incurred by an indemnitee in any lawsuit to which the indemnitee is a party.

d. Contractor acknowledges and understands that the area in and around which the work will be performed has been identified as a possible location of munitions and explosives of concern ("MEC"). All indemnification obligations of Contractor under this Agreement shall specifically include any claim involving, arising out of or related to MEC.

The Developer will require their Contractor to pay and satisfy any judgment, award or decree that may be rendered against District or its directors, officers, employees, or authorized volunteers, relating to any claim.

The Developer will require their Contractor to reimburse District or its directors, officers, employees, or authorized volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.

Contractor's indemnification obligation shall not be limited to the proceeds, if any, received by the District, or its directors, officers, employees or authorized volunteers from any insurance required to be provided under this Agreement.

**4. Commercial General Liability and Automobile Liability Insurance -** The Developer will require their Contractor to provide and maintain the following commercial general liability and automobile liability insurance:

**Coverage -** Coverage for commercial general liability and automobile liability insurance shall be at least as broad as the following:

1. Insurance Services Office Commercial ***General Liability*** Coverage (Occurrence Form CG 0001)

2. Insurance Services Office ***Automobile Liability*** Coverage (Form CA 0001), covering Symbol 1 (any auto) (owned, non-owned and hired automobiles)

**Limits -** The Consultant shall maintain limits no less than the following:

1. ***General Liability*** - Two million dollars ($2,000,000) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit or products-completed operations aggregate limit is used, either the general aggregate limit shall apply separately to the project/location (with the ISO CG 2503, or ISO CG 2504, or insurer's equivalent endorsement provided to

the District) or the general aggregate limit and products-completed operations aggregate limit shall be twice the required occurrence limit.

2. ***Automobile Liability*** - One million dollars ($1,000,000) for bodily injury and property damage each accident limit.

**Required Provisions -** The general liability and automobile liability policies are to contain, or be endorsed to contain the following provisions:

1. The District, its directors, officers, employees, or authorized volunteers are to be given insured status (via ISO endorsement CG 2010, CG 2033, or insurer's equivalent for general liability coverage) as respects: liability arising out of activities performed by or on behalf of the Contractors; products and completed operations of the Contractor; premises owned, occupied or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the District, its directors, officers, employees, or authorized volunteers.

2. For any claims related to this project, the Contractor's insurance shall be primary insurance as respects the District, its directors, officers, employees, or authorized volunteers. Any insurance, self-insurance, or other coverage maintained by the District, its directors, officers, employees, or authorized volunteers shall not contribute to it.

3. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the District, its directors, officers, employees, or authorized volunteers.

4. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5. Each insurance policy required by this clause shall state or be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days (10 days for non-payment of premium) prior written notice by U.S. mail has been given to the District.

Such liability insurance shall indemnify the Contractor and his/her sub-contractors against loss from liability imposed by law upon, or assumed under contract by, the Contractor or his/her sub-contractors for damages on account of such bodily injury (including death), property damage, personal injury and completed operations and products liability.

The general liability policy shall cover bodily injury and property damage liability, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, underground excavation and removal of lateral support.

The automobile liability policy shall cover all owned, non-owned, and hired automobiles.

All of the insurance shall be provided on policy forms and through companies satisfactory to the District.

**5. Deductibles and Self-Insured Retentions -** Any deductible or self-insured retention must be disclosed in writing to and approved by the District.

**6. Acceptability of Insurers -** Insurance is to be placed with insurers having a current A.M. Best rating of no less than A-:VII or equivalent or as otherwise approved by the District.

**7. Munitions and Explosives Coverage (MEC)** - The Developer will require their Contractor to maintain insurance that includes coverage for services and work in or around MEC, or claims, damage or injury related in any way to this Agreement which arise from MEC. The Marina Coast Water District, its officers, directors and employees and any of its authorized representatives and volunteers shall be named as additional insureds under all insurance maintained by Contractor related in any way to work performed by it on behalf of the Marina Coast Water District.

**8. Builder's Risk Insurance** - The Developer or the Developer's Contractor will provide and maintain builder's risk insurance (or installation floater) covering all risks of direct physical loss, damage or destruction to the work in the amount specified by the District, to insure against such losses until final acceptance of the work by the District. Such insurance shall include[1] explosion, collapse, underground excavation and removal of lateral support. The District shall be a named insured on any such policy. The making of progress payments to the Contractor by the Developer shall not be construed as creating an insurable interest by or for the District or be construed as relieving the Contractor or his/her subcontractors of responsibility for loss from any direct physical loss, damage or destruction occurring prior to final acceptance of the work by the District.

**9. Waiver of Rights of Subrogation** - The Developer will require their Contractor's insurer to waive all rights of subrogation against the District, its directors, officers, employees, or authorized volunteers.

**10. Evidences of Insurance -** Prior to the commencement of construction activities under this Agreement, the Developer will require their Contractor to file with the District a certificate of insurance (Acord Form 25-S or equivalent) signed by the insurer's representative. Such evidence shall include an original copy of the additional insured endorsement signed by the insurer's representative. Such evidence shall also include confirmation that coverage includes or has been modified to include Required Provisions 1-5.

The Developer will require their Contractor, upon demand of the District, to deliver to the District such policy or policies of insurance and the receipts for payment of premiums thereon.

All insurance correspondence, certificates, binders, etc., shall be mailed to:

Marina Coast Water District
11 Reservation Road
Marina, CA 93933
Attn: Management Services Administrator

**11. Sub-Contractors' Required Insurance Requirements -** In the event that the Contractor employs sub-contractors as part of the work to be performed under this Agreement, it shall be the Developer's responsibility to require and confirm that every Contractor requires each of its sub-contractor to meet the same minimum insurance requirements specified in this Exhibit for every Contractor.

EXHIBIT A

**WATER ALLOCATION DOCUMENTATION**

WHEN RECORDED MAIL TO:

FORT ORD REUSE AUTHORITY

100 12th STREET - BUILDING 2880

MARINA, CA 93933

ATTN: MICHAEL HOULEMARD, JR.

0600-BT

Jos ph F. Pitta
Monterey County Recorder
Recorded at the request of
**Stewart Title**

CRKATHLEEN
6/23/2000
8:00:00

DOCUMENT: 2000040124

Titles: 1/ Pages: 105

Fees ...
Taxes .
Other...
AMT PAID

*2000040124*

THIS SPACE FOR RECORDER'S USE ONLY

# TITLE OF DOCUMENT

MEMORANDUM OF AGREEMENT

This instrument filed for record by Stewart Title Company as an accommodation only. It has not been examined as to it's execution or as to it's effect upon the title.

DACA05-9-99-593
KR EXECUTION VERSION
6/7/00

# MEMORANDUM OF AGREEMENT
# BETWEEN

# THE UNITED STATES OF AMERICA,
# ACTING BY AND THROUGH
# THE SECRETARY OF THE ARMY,
# UNITED STATES DEPARTMENT OF THE ARMY

# AND

# THE FORT ORD REUSE AUTHORITY

# FOR THE SALE OF
# PORTIONS OF THE FORMER FORT ORD
# LOCATED IN
# MONTEREY COUNTY, CALIFORNIA

**MEMORANDUM OF AGREEMENT**
**BETWEEN**
**THE UNITED STATES OF AMERICA, ACTING BY AND THROUGH THE SECRETARY OF THE ARMY, UNITED STATES DEPARTMENT OF THE ARMY**
**AND**
**THE FORT ORD REUSE AUTHORITY**
**FOR THE SALE OF PORTIONS OF THE FORMER FORT ORD**
**LOCATED IN MONTEREY COUNTY, CALIFORNIA**

**INDEX**

## EXHIBITS

# MEMORANDUM OF AGREEMENT
# BETWEEN
# THE UNITED STATES OF AMERICA, ACTING BY AND THROUGH THE SECRETARY OF THE ARMY, UNITED STATES DEPARTMENT OF THE ARMY
# AND
# THE FORT ORD REUSE AUTHORITY
# FOR THE SALE OF PORTIONS OF THE FORMER FORT ORD LOCATED IN MONTEREY COUNTY, CALIFORNIA

**THIS MEMORANDUM OF AGREEMENT** ("Agreement") is made as of the 20th day of June, 2000 by and between the **United States of America**, acting by and through the Secretary of the Army (hereinafter referred to as "Government"), and the **Fort Ord Reuse Authority**, created under Title 7.85 of the California Government Code, Chapters 1 through 7, inclusive, commencing with Section 67650, *et seq.*, and selected provisions of the California Redevelopment Law, including Division 24 of the California Health and Safety Code, Part 1, Chapter 4.5, Article 1, commencing with Section 33492, *et seq.*, and Article 4, commencing with Section 33492.70, *et seq.*, and recognized as the Local Redevelopment Authority (hereinafter referred to as "Authority") by the Office of Economic Adjustment on behalf of the Secretary of Defense (collectively the "Parties").

## RECITALS:

**WHEREAS:**

a. The Government is the owner of a portion of certain real property, improvements and other rights appurtenant thereto together with all personal property thereon, located in Monterey County, California, and commonly referred to as the former Fort Ord, which was utilized as a military installation.

b. The former Fort Ord was closed on September 30, 1994 pursuant to and in accordance with the Defense Base Closure and Realignment Act of 1990, as amended (Public Law 101-510; hereinafter referred to as the "Base Closure Act").

c. In accordance with Section 2905(b)(4) of the Base Closure Act, as amended by Section 2821 of the Defense Authorization Act for Fiscal Year 2000, Pub. L. No. 106-65 (1999), and the implementing regulations of the Department of Defense (32 CFR Parts 90 and 91), the Government desires to convey and the Authority desires to acquire portions of the former Fort Ord consisting of approximately five thousand two hundred (5,200) acres of land, including all buildings, personal property, appurtenances, rights-of-way, and drainage areas (the "Property" as hereinafter defined), upon and subject to the terms and conditions set forth herein.

d. As soon as the Property, or discrete parcels thereof, may be conveyed consistent with the requirements of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"; 42 U.S.C. 9620[h]), as amended, and other legal and policy requirements, the Government intends to convey to the Authority by one or more quitclaim deeds the Property or parcels thereof, subject to any necessary restrictions, reservations, conditions, and exceptions at no cost, as set forth below.

## AGREEMENTS

**NOW, THEREFORE**, in consideration of the foregoing premises and the respective representations, agreements, covenants and conditions herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Government and the Authority agree as follows:

### ARTICLE 1. DEFINITIONS:

When used herein, the following terms shall have the respective meanings set forth opposite each such term:

1.01. Agreement. This Memorandum of Agreement, including the Exhibits attached hereto which are incorporated herein by reference and made a part of this Agreement.

1.02. Adjusted Gross Proceeds. All revenues received by the Authority or the Authority member jurisdictions from a sale, lease, or equivalent use of the Property (licenses, permits, concession agreements, etc.) or portions of the Property to a Bona Fide Purchaser or Lessor minus Direct Expenses as hereinafter defined.

1.03. Bona Fide Purchaser or Lessor. A non-governmental purchaser or Lessor of the Property from the Authority or an Authority member jurisdiction.

1.04. Claims. Any and all losses, costs, liability, judgment, claims, proceedings, demands, actions, fines, penalties, expenses, damages, or other fees.

1.05. Closing. The transactions during which portions of the Property transfer documents, along with other documents, are executed and delivered by the Government and the Authority, and the Government transfers a portion of the Property to the Authority. The Parties contemplate that there will be multiple closings.

1.06. Closing Documents. Those documents required to be delivered by the Parties at Closing as required herein.

ARTICLE 4. PERSONAL PROPERTY:

4.01. Personal Property. In addition to the conveyance of the Real Property, the Government shall transfer to the Authority the Personal Property which the Parties agree is related to and necessary to use the Real Property, as specified and identified in and pursuant to the terms and conditions in the Bill of Sale substantially in the form set forth in Exhibit G.

**ARTICLE 5. WATER AND SEWER RIGHTS:**

5.01. Marina Coast Water District. Immediately following the execution of this Agreement, the Government shall transfer to the Marina Coast Water District (the "District") the water and wastewater collection systems on the Property and the Presidio of Monterey Annex, including their respective water rights and wastewater discharge rights as defined in and pursuant to a no cost Public Benefit Conveyance ("PBC") in response to the application filed by the District dated August 26, 1997.

5.02. Government. The Authority understands that in the assignment of the water rights to the District, the Government reserves 1729 acre feet per year ("afy") of water exclusively for Government use ("Government Water Rights"). Also, the Government will retain ownership of 1.08 million gallons per day ("mgd") of wastewater discharge rights ("Government Wastewater Discharge Rights"). If the Authority or any other entity, at its own cost and expense, installs water conservation devices on the property not transferred to the Authority, resulting in decreased Government requirements for water or wastewater discharge, or the Government does not utilize all of the Government Water Rights or Government Wastewater Discharge Rights, the Authority shall have the right to negotiate with the Government for use of the Government Water Rights or Government Wastewater Discharge Rights not utilized by the Government (collectively "Unutilized Government Water/Wastewater Rights"). The Government and the Authority agree to meet and confer regarding the Unutilized Government Water/Wastewater Rights two (2) years following the completion of the installation of water meters at the Presidio of Monterey Annex ("POMA"). The Government shall determine the amounts of unutilized Government Water/Wastewater Rights on an annual basis and will consult with the Authority regarding this determination on an annual basis. In the event of a proposed transfer of Government Water Rights or Government Wastewater Discharge Rights to a third party, the Authority shall have the first right of refusal to any such transfer rights.

5.03. Equitable Allocation of Water. The Authority, and its successors and assigns, shall cooperate with the Marina Coast Water District, Monterey County Water Resources Agency and grantees of former Fort Ord Property to establish and apply a fair process to ensure that all grantees of former Fort Ord property will be provided an equitable supply of the water at the former Fort Ord.

5.04. Wastewater Discharge Rights. The Authority, and its successors and assigns, shall cooperate with the Marina Coast Water District, the Monterey Regional Water Pollution Control Agency and grantees of former Fort Ord Property to establish and apply a fair process to ensure that all grantees of former Fort Ord property will enjoy equitable utilization of the existing sewage treatment capacity, including existing connections to the former Fort Ord sewage collection system.

## ARTICLE 6. LEASE IN FURTHERANCE OF CONVEYANCE:

6.01. Lease. In furtherance of and pending conveyance of the Property, at the Authority's request and to the extent the Government can honor such request, the Government agrees to lease the Property, in whole or in part, to the Authority, and the Authority agrees to accept such lease or leases in furtherance of conveyance, pursuant to the terms, covenants, and conditions mutually agreed to by the Parties as provided for in the FOSL. The Lease shall be executed by the Government and the Authority as soon as the Agreement and a FOSL are executed.

## ARTICLE 7. EFFECT OF TRANSFER OF TITLE AND CONTINUING OBLIGATIONS OF THE GOVERNMENT:

7.01. Effects of Deeds. The delivery of the executed Deeds pursuant to this Agreement from the Government to the Authority shall be deemed full performance by the Government of its obligations hereunder with regard to the portions of the Property conveyed by each Deed other than any obligations of the Government which are required by this Agreement or by law (including without limitation any obligations under CERCLA Section 120(h) and under Section 330 of the Department of Defense Authorization Act of 1993) to be performed after the delivery of each such Deed.

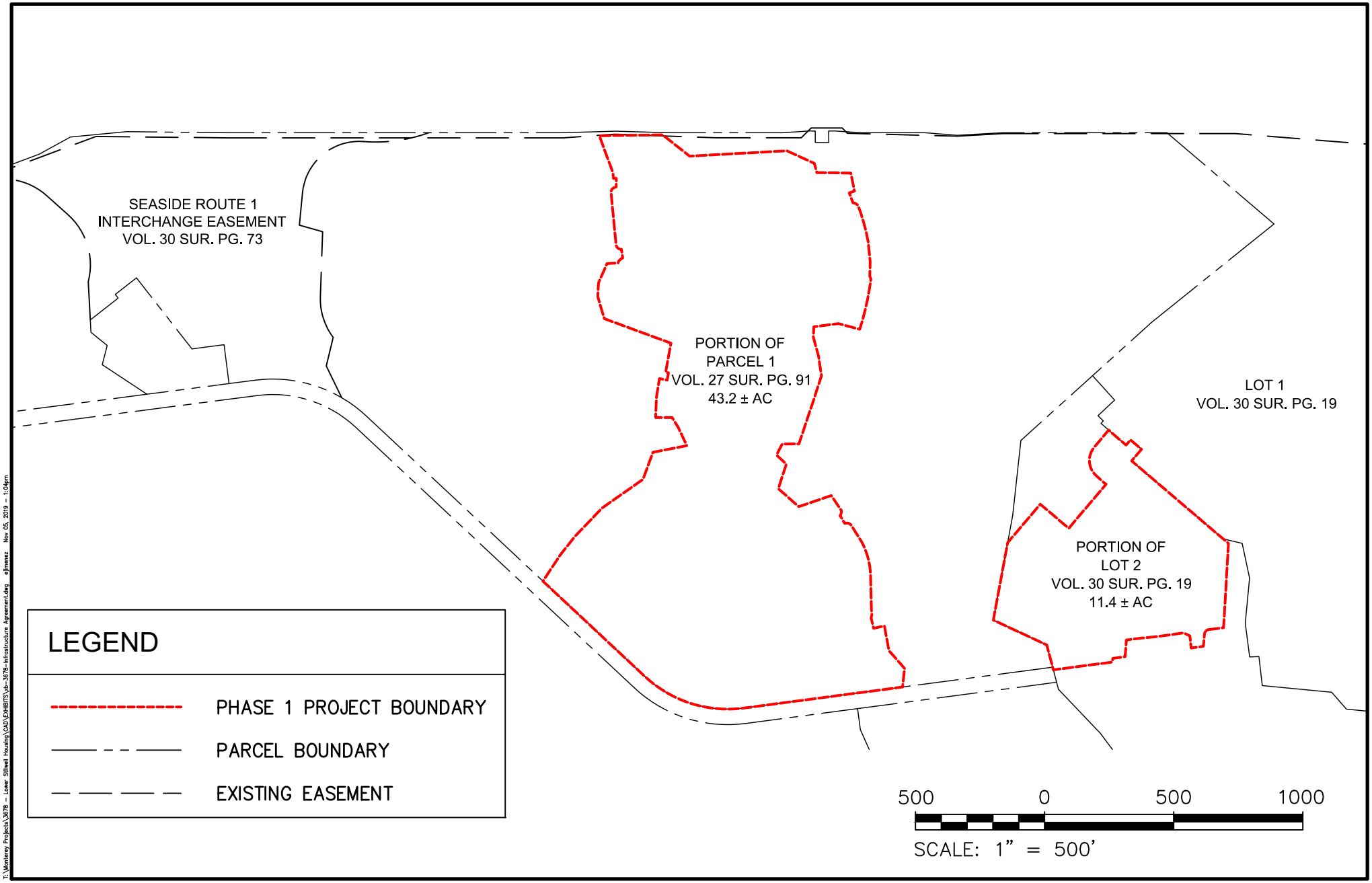
7.02. As-is, Where-is. Except as provided herein, all of the Property conveyed or leased hereunder will be in an "as-is where-is" condition and without any representation or warranty whatsoever and without any obligation on the part of the United States of America except as expressly provided for by law or in this Agreement.

7.03. Liabilities.

A. The Government shall remain responsible for all liabilities, claims, demands, judgments, suits, litigation, amounts payable (collectively, "Pre-Closing Obligations") against the Government or the Property attributable to Government activity on the Property, including activities of the Government's contractors, lessees, licenses and others acting under Government authority, prior to the conveyance or lease of each parcel of the Property to the Authority. The Authority shall notify the Government of the existence or occurrence of any such Pre-Closing Obligations and shall cooperate with the Government in the payment, settlement and disposition thereof.

**EXHIBIT B**

**LEGAL DESCRIPTION**




T:\Monterey Projects\3678 - Lower Stilwell Housing\CAD\EXHIBITS\vb-3678-Infrastructure Agreement.dwg ejimenez Nov 05, 2019 - 1:04pm

# PLAT MAP EXHIBIT - PHASE 1

# LOWER STILWELL NEIGHBORHOOD

## SEASIDE, CALIFORNIA

11/5/2019
Project No.:3678.00

Whitson ENGINEERS
Civil Engineering
Land Surveying
6 Harris Court
Monterey, California
831.649.5225
whitsonengineers.com

EXHIBIT B

# EXHIBIT "A"

## LEGAL DESCRIPTION

Order No.: 18000481377
Escrow No.: 18000481377

The land referred to herein is situated in the State of California, County of Monterey, City of Seaside and described as follows:

That portion of the former Fort Ord, in the City of Seaside, County of Monterey, State of California described as follows:

A portion of Parcel 2 as per map recorded in Volume 21, Page 83 of Surveys in the Office of the County Recorder of said county, more particularly described as follows:

Beginning at a point on the Northerly boundary of Parcel 2, as per said map, designated and shown as point thirty-seven (37) on page 3 of 9 thereon; thence along the boundary of said Parcel 2

1) South 87°33'00" East, 544.69 feet; thence
2) South 13°15'27" West, 607.99 feet; thence
3) South 09°58'35" West, 682.28 feet; thence
4) South 31°43'17" East, 291.49 feet; thence
5) South 27°27'31" East, 412.82 feet; thence
6) North 76°59'04" East, 228.07 feet; thence
7) South 52°45'18" East, 88.95 feet; thence
8) South 44°30'36" West, 1206.66 feet to the beginning of a curve concave to the North having a radius of 470.00 feet; thence
9) Westerly 415.30 feet along said curve through a central angle of 50°37'38"; thence
10) North 84°51'47" West, 1476.58 feet to the begining of a curve concave to the South having a radius of 530.00 feet; thence
11) Westerly 466.97 feet along said curve through a central angle of 50°28'54"; thence
12) South 44°39'19" West, 101.70 feet; thence leaving said Parcel 2
13) North 45°20'41" West, 151.71 feet; thence
14) North 44°39'19" West, 125.00 feet; thence
15) North 76°00'00" West, 349.00 feet; thence
16) South 14°00'00" West, 104.00 feet; thence
17) South 76°00'00" East, 18.00 feet; thence
18) South 14°00'00" West, 137.00 feet; thence
19) South 41°00'00" East, 48.00 feet; thence
20) South 89°00'00" East, 81.00 feet; thence
21) South 23°30'00" East, 77.00 feet; thence
22) North 85°30'00" East, 207.40 feet to a point of the boundary of said Parcel 2
23) South 44°39'19" West, 1,666.02 feet to the beginning of a curve concave to the Northwest having a radius of 470.00 feet; thence
24) Southwesterly 153.85 feet along said curve through a central angle of 18°45'16"; thence
25) South 63°24'35" West, 649.45 feet to the beginning of a curve concave to the Southeast having a radius of 1,830.00 feet; thence
26) Southwesterly 167.69 feet along said curve through a central angle of 05°15'00"; thence
27) South 58°09'35" West, 39.73 feet; thence
28) North 50°59'15" West, 491.14 feet; thence
29) North 39°00'45" East, 390.30 feet; thence
30) North 45°32'23" East, 348.53 feet to the beginning of a curve concave to the Northwest having a radius of 1,482.69 feet; thence
31) Northeasterly 103.62 feet along said curve through a central angle of 04°00'15" to the beginning of a

compound curve concave to the Northwest having a radius of 766.78 feet; thence
32) Northeasterly 308.05 feet along said curve through a central angle of 23°01'06"; thence
33) North 39°00’12” East, 367.50 feet; thence
34) North 50°19’23” East, 50.99 feet; thence
35) North 39°00’45" East, 300.02 feet; thence
36) North 47°43’17" East, 350.06 feet; thence
37) North 31°39'28” East, 189.42 feet; thence
38) North 23°09’43” East, 138.18 feet; thence
39) North 46°39’34” East, 218.63 feet; thence
40) North 52°39’53” East, 390.67 feet; thence
41) North 52°03’31" East, 1,298.08 feet; thence
42) North 50°20’24” East, 200.10 feet; thence
43) North 52°03’39” East, 10.00 feet; thence
44) North 53°46'37" East, 200.10 feet; thence
45) North 52°03'30” East, 442.02 feet; thence
46) North 48°03’15” East, 100.26 feet; thence
47) North 52°03’31” East, 25.48 feet; thence leaving the boundary of said Parcel 2
48) South 38°00'00" East, 44.87 feet; thence
49) North 52°00'00" East, 52.00 feet; thence
50) North 38°00’00" West, 44.82 feet to a point of the boundary of said Parcel 2; thence
51) North 52°03’31” East, 25.53 feet; thence
52) North 56°03'47" East, 100.25 feet; thence
53) North 52°03’31" East, 247.02 feet; thence
54) North 56°37'58" East, 125.41 feet; thence
55) North 48°47’17" East, 175.30 feet; thence
56) North 52°03’31” East, 637.04 feet to the Point of Beginning.

Containing 195.97 acres, more or less.

APN: 031-141-002 (Portion)

(End of Legal Description)

## Legal Description of Lot 2

That portion of the former Fort Ord Military Reservation in Rancho Noche Buena, in the City of Seaside, County of Monterey, State of California described as follows:

Being a portion of that parcel of land designated as "Seaside II", containing 101.75 acres", as shown on the map filed in Volume 23, Page 78 of Surveys, and also shown on the map filed in Volume 29, Page 54 of Surveys, both maps being recorded in the Office of the Monterey County Recorder, more particularly described as follows:

**Beginning** at the most northerly corner of that parcel of land designated as Parcel 4, as per map filed in Volume 19, Page 22 of Surveys recorded in the Office of the Monterey County Recorder and designated as point number 8 per said map; thence along the northwesterly boundary of said Parcel 4

1) South 23°14'55" West, 714.36 feet; thence leaving said northwesterly boundary of said Parcel 4 and along the northerly boundary of PARCEL 2 as per map filed in Volume 27, Page 91 of Surveys recorded in the Office of the Monterey County Recorder the following three (3) courses
2) North 74°30'00" West, 618.15 feet; thence
3) North 81°32'49" West, 235.35 feet; thence
4) North 52°45'18" West, 28.51 feet to a point on the southeasterly boundary of the road commonly known as Monterey Road and the most northerly corner of said PARCEL 2; thence leaving said boundary of said PARCEL 2
5) North 52°45'18" West, 60.49 feet to a point on the northwesterly boundary of said Monterey Road, said point being on the easterly boundary of PARCEL 1 as per said map filed in said Volume 27, Page 91 of Surveys; thence along said easterly boundary of said PARCEL 1 and also along the southerly and westerly boundary of said parcel of land designated as "Seaside II", the following five (5) courses
6) North 52°45'18" West, 88.95 feet
7) South 76°59'04" West, 228.07 feet; thence
8) North 27°27'31" West, 412.82 feet; thence
9) North 31°43'17" West, 291.49 feet; thence
10) North 09°58'35" East, 374.23 feet, thence leaving said easterly boundary of said PARCEL 1 and said westerly boundary of said parcel of land "Seaside II"
11) South 80°00'00" East, 127.50 feet
12) South 09°00'00" West, 88.50 feet; thence
13) South 84°00'00" East , 28.78 feet; thence
14) South 06°00'00" West , 13.35 feet; thence
15) South 87°00'00" East, 128.41 feet; thence
16) North 03°00'00" East, 26.59 feet; thence
17) South 87°30'00" East, 56.00 feet; thence
18) South 02°30'00" West, 59.00 feet; thence

19) South 87°30'00" East, 466.00 feet; thence

20) North 65°00'00" East, 75.00 feet; thence

21) South 50°00'00" East, 138.00 feet; thence

22) South 32°30'00" East, 175.74 feet; thence

23) South 45°30'00" East, 131.45 feet; thence

24) North 49°00'00" East, 35.61 feet; thence

25) South 44°30'00" East, 113.50 feet; thence

26) North 57°30'00" East, 270.00 feet; thence

27) South 79°00'00" East, 87.00 feet; thence

28) North 57°30'00" East, 77.41 feet; thence

29) South 61°00'00" East, 86.58 feet; thence

30) South 85°00'00" East, 28.24 feet; thence

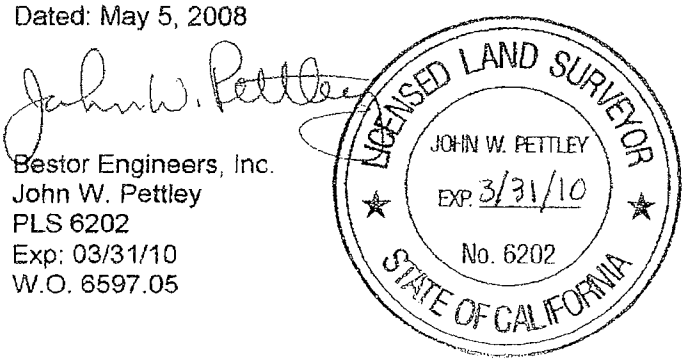
31) South 77°00'00" East, 68.47 feet; thence

32) South 19°00'00" West, 158.79 feet to the **POINT OF BEGINNING.**

Containing 29.46 acres, more or less.

The bearing of North 74°30'00" West along the northeasterly boundary of Parcel 4 as per Volume 19, Page 22 of Surveys, records of Monterey County, California, is the basis of bearings for this description.

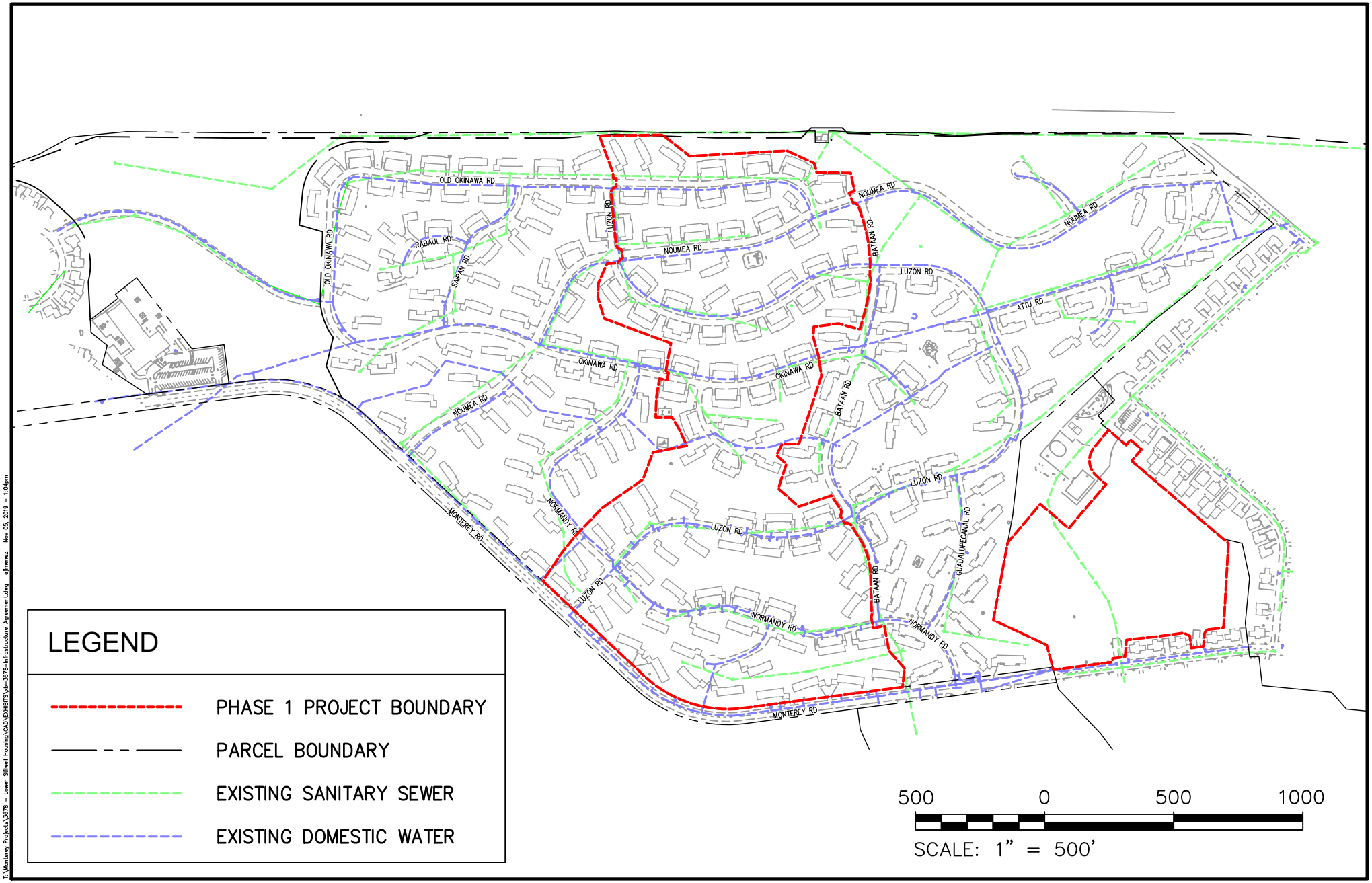
Dated: May 5, 2008




Bestor Engineers, Inc.
John W. Pettley
PLS 6202
Exp: 03/31/10
W.O. 6597.05

**EXHIBIT C**

**MAP OF DEVELOPMENT**

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# EXISTING INFRASTRUCTURE - PHASE 1

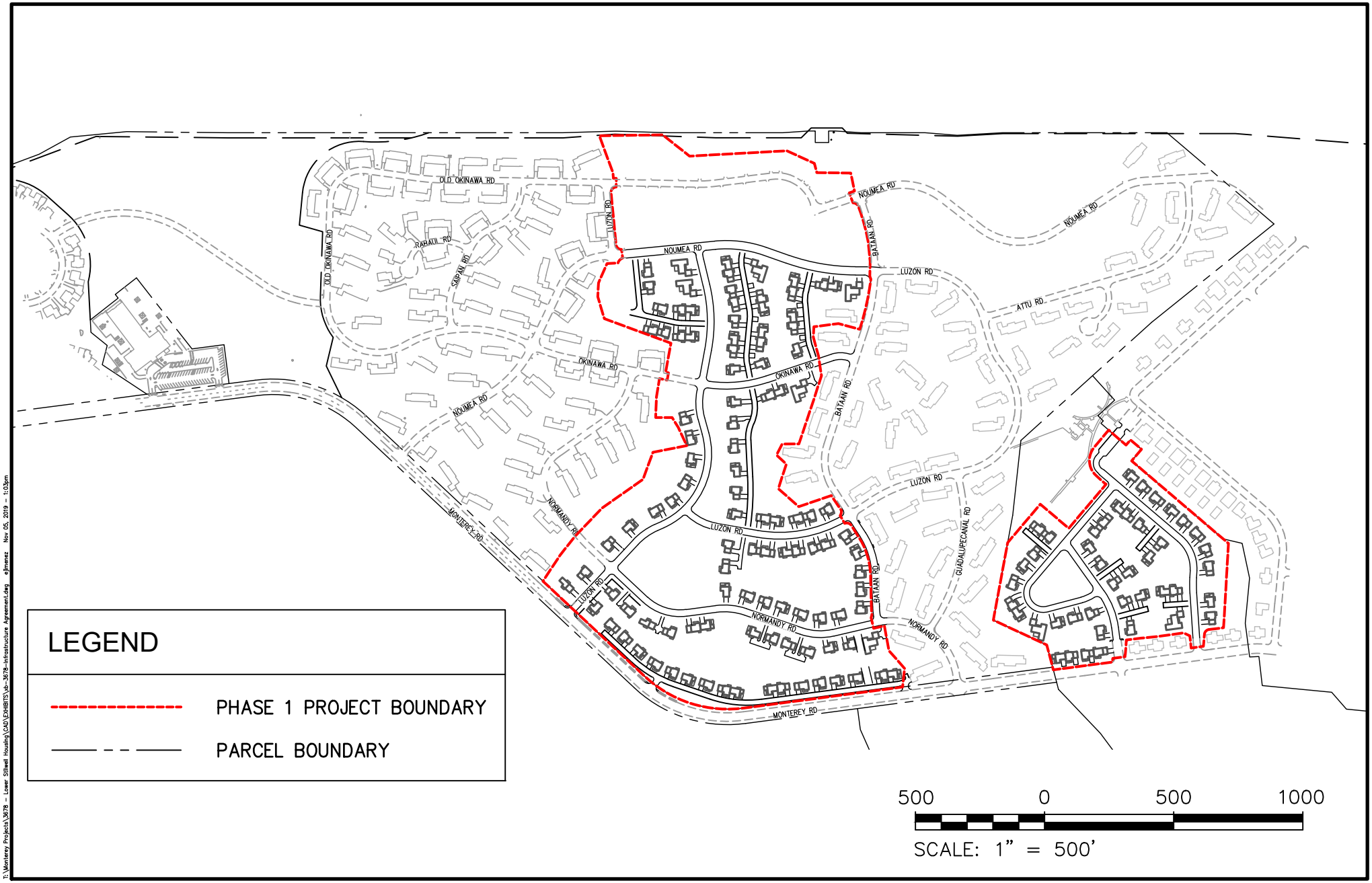
# LOWER STILWELL NEIGHBORHOOD

## SEASIDE, CALIFORNIA

11/4/2019
Project No.:3678.00

Whitson ENGINEERS
Civil Engineering
Land Surveying
6 Harris Court
Monterey, California
831.649.5225
whitsonengineers.com

EXHIBIT C1

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# PROPOSED SITE PLAN - PHASE 1

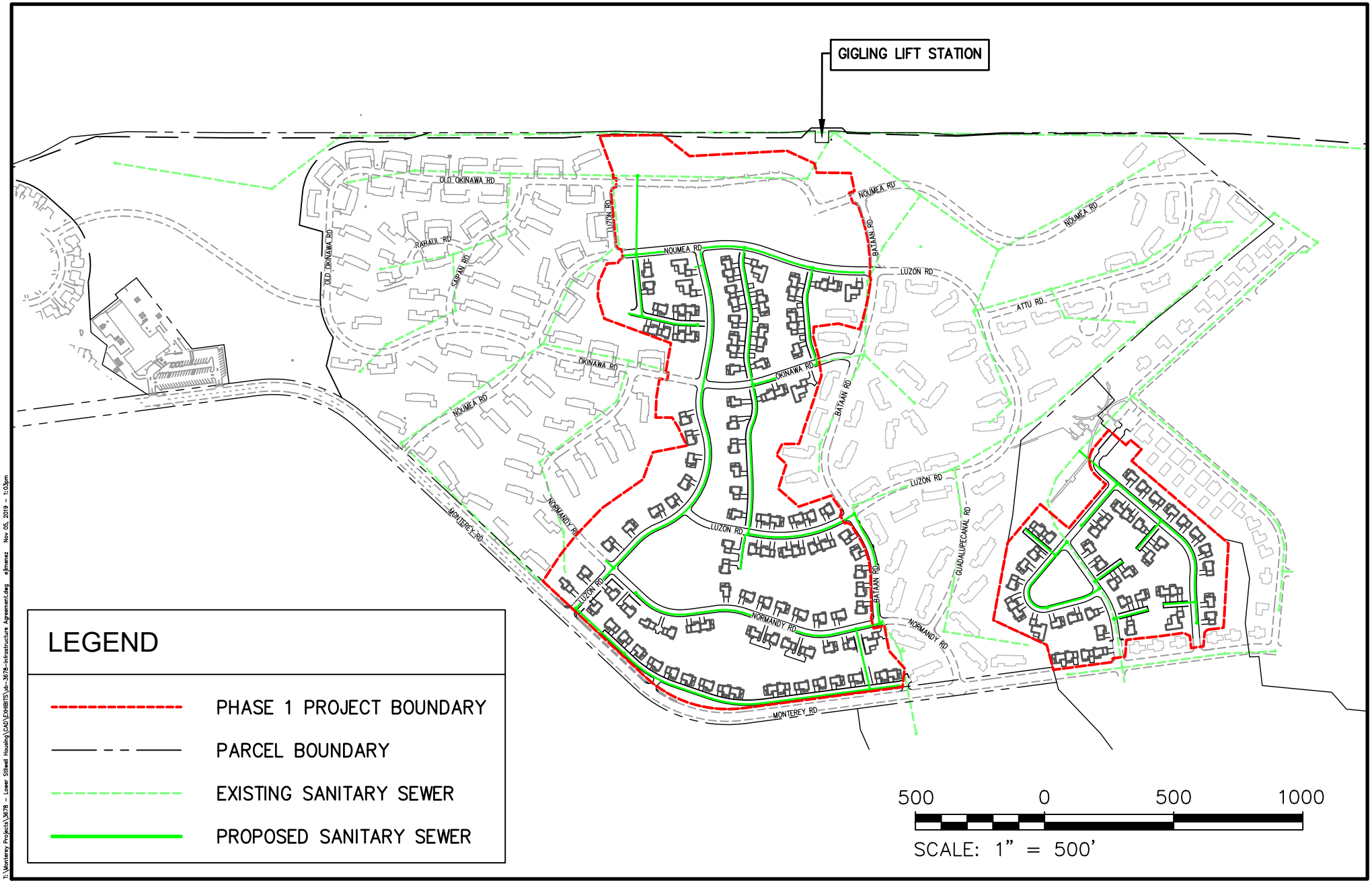
# LOWER STILWELL NEIGHBORHOOD

## SEASIDE, CALIFORNIA

11/4/2019
Project No.:3678.00

Whitson ENGINEERS
Civil Engineering
Land Surveying
6 Harris Court
Monterey, California
831.649.5225
whitsonengineers.com

EXHIBIT C2

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## SANITARY SEWER INFRASTRUCTURE - PHASE 1

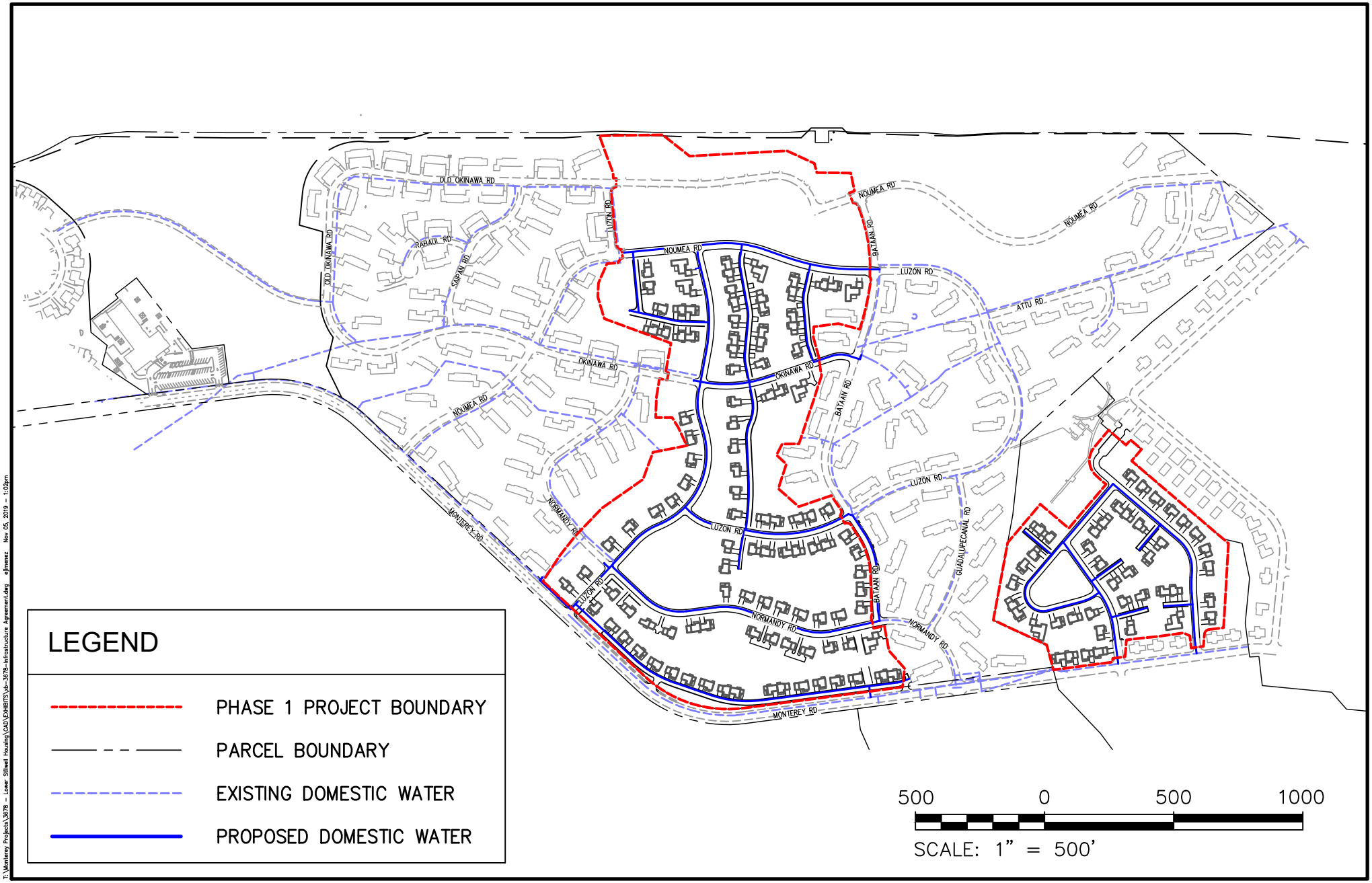
# LOWER STILWELL NEIGHBORHOOD

## SEASIDE, CALIFORNIA

11/4/2019
Project No.:3678.00

Whitson ENGINEERS
Civil Engineering
Land Surveying
6 Harris Court
Monterey, California
831.649.5225
whitsonengineers.com

EXHIBIT C3

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# DOMESTIC WATER INFRASTRUCTURE - PHASE 1

# LOWER STILWELL NEIGHBORHOOD

## SEASIDE, CALIFORNIA

11/4/2019
Project No.:3678.00

Whitson ENGINEERS
Civil Engineering
Land Surveying
6 Harris Court
Monterey, California
831.649.5225
whitsonengineers.com

EXHIBIT C4

Return to Agenda

Marina Coast Water District
Agenda Transmittal

Agenda Item: 10-D Meeting Date: November 18, 2019

Prepared By: Keith Van Der Maaten Approved By: Keith Van Der Maaten

Agenda Title: Consider Adoption of Resolution No. 2019-76 to Approve Funding for Director Le to Attend the Association of California Water Agencies (ACWA) Fall Conference in San Diego; and, Consider Appointing a Voting Representative to Vote for ACWA President and Vice President for the 2020-2021 Term

Staff Recommendation: Staff recommends the Board of Directors review the conference request and decide on whether to approve the travel request from Director Le.

Background: *5-Year Strategic Plan, Objective 6.3, Encourage Board Development – Provide Board members with opportunities to engage in training to promote better decision and policy making to the District's benefit.*

A written request from Director Le to attend the Association of California Water Agencies (ACWA) conference in San Diego from December 3rd to December 5th was given to the acting General Manger, Derek Cray via email on October 7, 2019 in accordance to the Board Procedures Manual. Director Le requested full conference registration and hotel accommodations. Director Le stated he would pay for his own fuel and provide his own vehicle for the conference to reduce District costs. Derek Cray replied to Director Le he would review the budget and respond accordingly.

This item was discussed at the October 21, 2019 Board meeting. One Director was absent and Director Le recused himself from the chambers for the discussion and vote. The resulting motion did not receive a majority affirmative vote. President Moore asked that it be returned to the next meeting when all Directors will be present.

Discussion/Analysis: After review of the budget account for conferences for the Board of Directors (0X-01-040-019), it was found that only $683.70 was left out of the budgeted amount of $2,500.00. Therefore, Director Le was notified of the shortage amount. Due to the shortage, Director Le requested to have this item put on the agenda to be brought before the Board for approval to fund the conference as per the Board Procedures Manual.

The full conference registration, with hotel for four nights and meals would cost approximately $1,800. Since this is over the amount left in the Board of Directors Conferences account, the rest of the funds, approximately $1,116 would need to come from another account. The District's Education Training account (0X-01-040-020) was budgeted for a total of $19,391.00 for this fiscal year. As of October 9th there is approximately $14,991.00 left for this fiscal year in the Education Training account. There is enough left in this account to fund Director Le's request for travel if the Board approves.

Staff is asking that the Board review the conference request and make a decision on whether to approve or deny Director Le's request to attend the ACWA conference in San Diego.

ACWA sent notice of a General Session Membership meeting being held at the Fall Conference where a District's designated voting representative must be present to vote for the ACWA President and Vice President. The ACWA Nominating Committee's slate recomments Steven LaMar for ACWA President and Sarah Palmer for ACWA Vice President.

Staff is asking that the Board review the Notice of General Session Membership meeting and make a decision on whether to designate a voting representative to be present to vote at the ACWA Conference and a recommendation on which nominee's to vote for.

Environmental Review Compliance: None required.

Financial Impact: ___X___ Yes _____No Funding Source/Recap: Funding would come from the following two accounts: $683.70 from account 0X-01-040-019 and the remainder of approximately $1,116 from account 0X-01-040-020.

Other Considerations: None.

Material Included for Information/Consideration: Resolution No. 2019-76; ACWA Conference agenda and pricing sheet; and ACWA Memorandum.

Action Required: ___X___Resolution _____Motion _____Review
(Roll call vote is required.)

---

Board Action

Motion By_____ Seconded By_____ No Action Taken_____

Ayes_____ Abstained_____

Noes_____ Absent_____

November 18, 2019

Resolution No. 2019-76
Resolution of the Board of Directors
Marina Coast Water District
Approve Funding for Director Le to Attend the
Association of California Water Agencies Conference in San Diego

RESOLVED by the Board of Directors ("Directors") of the Marina Coast Water District ("District" or "MCWD"), at a regular meeting duly called and held on November 18, 2019 at 211 Hillcrest Avenue, Marina, California as follows:

WHEREAS, Director Le requested to attend the Association of California Water Agencies (ACWA) conference in San Diego from December 3rd to December 5th; and,

WHEREAS, Director Le, will use his own vehicle and gas to travel to the conference; and,

WHEREAS, the full conference registration, with hotel for four nights and meals would cost approximately $1,800.00; and,

WHEREAS, there is currently $683.70 left out of the budgeted amount of $2,500.00 for conferences and travel budget for the Board of Directors; and,

WHEREAS, the District's Education Training account has enough funds to cover the difference of $1,116 needed to send Director Le to the conference.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Marina Coast Water District hereby adopt Resolution No. 2019-76 to approve using the additional Education Training funds to send Director Le to the ACWA conference in San Diego.

PASSED AND ADOPTED on November 18, 2019, by the Board of Directors of the Marina Coast Water District by the following roll call vote:

Ayes: Directors_____

Noes: Directors_____

Absent: Directors_____

Abstained: Directors_____

_____
Thomas P. Moore, President

ATTEST:

_____
Keith Van Der Maaten, Secretary

CERTIFICATE OF SECRETARY

The undersigned Secretary of the Board of the Marina Coast Water District hereby certifies that the foregoing is a full, true and correct copy of Resolution No. 2019-76 adopted November 18, 2019.

_____

Keith Van Der Maaten, Secretary

ACWA
Association of California Water Agencies

# MEMORANDUM

**TO:** ACWA Member Agency Board Presidents and General Managers

**CC:** ACWA Board of Directors

**FROM:** Dave Eggerton, ACWA Executive Director

**DATE:** October 4, 2019

**SUBJECT:** Notice of General Session Membership Meeting at ACWA 2019 Fall Conference

There will be a General Session Membership Meeting at the 2019 Fall Conference in San Diego, California, on **Wednesday, December 4.** The purpose of this meeting is to formally nominate and elect ACWA's President and Vice President for the 2020-2021 term. The General Session Membership Meeting will convene at 1:15 p.m., immediately following the Wednesday luncheon program, which will be located in the Harbor Ballroom A-F, Manchester Grand Hyatt.

## Election / Voting Process

The ACWA Nominating Committee has announced a 2020-2021 slate that recommends current **Vice President Steven LaMar for ACWA President** and current **Region 5 Vice Chair Sarah Palmer for ACWA Vice President.**

As provided by ACWA's Bylaws (Article 9, Section 9) nominations from the floor will be accepted prior to the vote. The Bylaws require that floor nominations and seconds be made by a member of the Association and must be supported by a resolution of the governing body of the member making and seconding such nomination. The member agency on whose board the nominee serves shall submit a resolution of support if they are not the agency making the floor nomination or second. **(See attached for detailed General Session/Election Procedures.)**

ACWA will issue one proxy voting card to each member agency's designated voting representative (delegate) as identified by the member agency on the attached proxy designation form. The designated voting representative must be **present** at the General Session Membership Meeting and must sign-in as the delegate to receive the proxy voting card. Proxy voting cards will **only** be available for pick-up on **Wednesday, December 4,** between **9:00 a.m. and 12:00 p.m.** at the **ACWA General Session Desk** in the **Harbor Foyer,** Manchester Grand Hyatt. Proxy voting cards will not be issued before or after these hours.

To expedite the sign-in process at the **ACWA General Session Desk**, please indicate your voting delegate in advance on the enclosed proxy designation form and return it by email **(donnap@acwa.com)** or fax

# GENERAL SESSION/ELECTION PROCEDURES FOR ACWA 2019 FALL CONFERENCE

The following information is provided to inform the ACWA member agency delegates attending the 2019 Fall Conference of the procedures to be used pertaining to the nomination and election of ACWA officers during the General Session Membership Meeting.

## PROXY VOTING CARDS – (REQUIRED FOR VOTING)

ACWA will issue one proxy voting card each member agency's designated voting representative (delegate) as officially identified by the member agency. In order to vote during the General Session Membership Meeting, the designated voting representative must be **present** at the General Session Membership Meeting and must sign-in as the delegate to receive the proxy voting card no later than **12:00 p.m. on Wednesday, December 4.** Upon sign-in, the voting delegate will receive the required proxy voting cards. Proxy voting cards will **only** be available for pick-up on **Wednesday, December 4, between 9:00 a.m. and 12:00 p.m.** at the **ACWA General Session Desk** in the **Harbor Foyer,** Manchester Grand Hyatt. Proxy voting cards will not be issued before or after these hours. The luncheon and General Session Membership Meeting will be held in the Harbor Ballroom A-F.

## GENERAL SESSION MEMBERSHIP MEETING, WEDNESDAY, DEC. 4 (DOORS OPEN AT 1:05 P.M.)

1. The General Session Membership Meeting will be called to order at 1:15 p.m. and a quorum will be determined. The presence of 50 authorized voting representatives is required to establish a quorum for transacting business.
2. Legal Affairs Committee Chair Jennifer Buckman will provide an overview of the agenda and election procedures.
3. Nominating Committee Chair DeAna Verbeke will present the committee's report and announce the candidate for ACWA President.
4. President Brent Hastey will call for floor nominations for ACWA President.
5. If there are no floor nominations for President, the election will proceed. President Hastey will close the nominations and delegates will vote by holding up their "Yes" or "No" proxy voting cards.
6. If there **are** floor nominations for President, the nomination will follow the procedures established by Article 9 of ACWA's Bylaws, stating that floor nominations and seconds shall be made by a member of the Association and must be supported by a resolution of the governing body of the member making and seconding such nomination. The member agency on whose board the nominee serves shall submit a resolution of support if they are not the agency making the floor nomination or second.
    a. Ballots will be distributed to the voting delegates.
    b. Delegates will complete their ballots and place them in the ballot box, which will be centrally located in the Harbor Ballroom A-F meeting room.
    c. Tellers' Committee will count the ballots. President Hastey has appointed the following staff members to serve as the Tellers' Committee: Clerk of the Board Donna Pangborn; Director of Business Development & Events Paula Currie; and Executive Assistant Lili Vogelsang.
    d. Legal Affairs Committee Chair Jennifer Buckman will serve as the proctor to oversee the ballot counting process.
    e. Candidates are welcome to designate an observer to be present during the ballot counting process.

# PROXY DESIGNATION FORM

## ASSOCIATION OF CALIFORNIA WATER AGENCIES
## GENERAL SESSION MEMBERSHIP MEETING(S)

### WEDNESDAY, DECEMBER 4, 2019 AT 1:15 PM
### THURSDAY, DECEMBER 5, 2019 AT 1:15PM (IF NEEDED)

**TO:** **Donna Pangborn, Clerk of the Board**

**EMAIL:** **donnap@acwa.com**

**FAX:** **916-325-4857**

The person designated below will be attending the ACWA General Session Membership Meeting(s) on **Wednesday, December 4, 2019 (and December 5, 2019 if necessary)** as our voting delegate.

| | |
|---|---|
| *MEMBER AGENCY'S NAME* | *AGENCY'S TELEPHONE No.* |
| *MEMBER AGENCY'S AUTHORIZED SIGNATORY (print)* | *SIGNATURE* |
| *DELEGATE'S NAME (print)* | *SIGNATURE* |
| *DELEGATE'S EMAIL* | *DELEGATE'S TELEPHONE No.* |
| *DELEGATE'S AFFILIATON (if different from assigning agency)*[1] | *DATE* |

[1] If your agency designates a delegate from another entity to serve as its authorized voting representative, please indicate the delegate's entity in the appropriate space above. Note: Delegates need to sign the proxy form indicating they have accepted the responsibility of carrying the proxy.

**REMINDER:** Proxy voting cards will **only** be available for pick up on **Wednesday, December 4,** between **9:00 a.m.** and **12:00 p.m.** at the **ACWA General Session Desk** in the **Harbor Foyer,** Manchester Grand Hyatt. The luncheon and General Session Membership Meeting will be held in the Harbor Ballroom A-F.

Irvine Ranch
WATER DISTRICT

October 14, 2019

Board of Directors
Marina Coast Water District
11 Reservation Road
Marina, CA 93933

Dear President and Members of the Board:

I am pleased to share with you that the Association of California Water Agencies (ACWA) Nominating Committee has selected me as their recommended candidate to serve in the role of ACWA President for the 2020-2021 term. I am excited about having the continued opportunity to play a leadership role in ACWA and represent your water agency and the other 457 ACWA member agencies in addressing California's increasingly complex water issues. I am writing to respectfully request your agency's support for my candidacy during the ACWA Officer Election at our fall conference.

My experience in serving as the ACWA Vice President the past two years, in addition to participating on various ACWA committees and in numerous events over the years, has shown me that it is the people that make the difference in the success of our statewide organization. The diversity among water agencies – north/south, east/west, large/small, ag/urban, coastal/mountain, desert/forest – provides a stellar example of the value of collaboration. Statewide, ACWA member agencies have the expertise to solve almost any water issue when given the opportunity. One of the things I enjoy most about being a part of ACWA is being able to learn from water experts from each of our regions. Together we are a mighty force throughout California and together we can solve difficult issues to the benefit of all Californians.

I have attached a brief summary of my experience. While this experience is indeed important, what I treasure most is having the support of people whom I respect within ACWA – past presidents, fellow ACWA Board members, friends from other water agency boards, general managers and district staff.

Many agencies have already indicated support for my candidacy, and I am very grateful for their early votes of confidence. I respectfully ask for an opportunity to represent the best interests of water agencies throughout California and ask for your agency's vote. I look forward to seeing you at our fall conference in San Diego. Thank you in advance for your support. Please contact me if you have any questions about my candidacy at 714-227-2869.

Respectfully,

Steven E. LaMar
Director

Enclosure: Statement of Qualifications

## STEVEN E. LAMAR

**Statement of Qualifications for President**
**Association of California Water Agencies**

- Inclusive Leadership
- Active Advocacy
- Strong Commitment to the Water Community

"Seeing things from all perspectives and working together to make a difference. This is not only the best way to forge alliances and make tough policy decisions, it's essential for good governance."

**Inclusive Leadership: Experience that Counts**

Steve LaMar has been a member of the Irvine Ranch Water District (IRWD) Board of Directors since early 2009, serving multiple terms as Board President. In past elections, he received support and endorsements from both the business community (e.g., Orange County Business Council, Building Industry Association) and environmental groups (e.g., Orange County League of Conservation Voters, Sierra Club).

Mr. LaMar has also served in leadership roles for the Association of California Water Agencies (ACWA). He is currently Vice President, past Chair of the ACWA Federal Affairs Committee, and a member of ACWA's Executive Committee. He is a past Chair of ACWA's Headwaters Task Force. Mr. LaMar has served on the board of directors of several other water-related organizations, including the National Water Resources Association (representing 17 Western states), the Southern California Water Coalition, CalDesal, and the National Water Research Institute.

Beyond his water industry involvement, Steve has held leadership positions at a wide range of organizations, such as President of the Natural Communities Coalition of Orange County, a nonprofit organization responsible for implementing California's first natural community conservation plan and for protecting 37,000 acres of habitat. He was a past leader in the California Building Industry Association, where he chaired both the Water Resources Committee and the Government Affairs Committee.

**Active Advocacy: Not Just Words**

Mr. LaMar has a history of advocating for ACWA's policies and initiatives in his current role as an ACWA officer and through service on numerous ACWA committees. He currently chairs ACWA's Water Resilience Portfolio Working Group to develop ACWA's recommendations to the Newsom Administration and the ACWA Board Steering Committee to draft ACWA's first five-year strategic plan.

**A Long-Term Commitment to the Water Community: Live What You Believe**

Steve's commitment to the water community pre-dates his joining the Board of IRWD. He worked on the Delta Vision Stakeholders Coordinating Group as a business representative, the AB 2717 Landscape Task Force as the chair of the Economics Work Group, the 2005 and 2009 Advisory Committees for the California Water Plan, the State Water Desalination Task Force, and Governor Davis' Drought Advisory Panel.

Serving on the Board of IRWD has provided Mr. LaMar with the knowledge and understanding of what goes into providing retail water service to a broad and diverse community. He has a Bachelor of Arts in Political Science from Pittsburg State University and an Environmental Management Institute Certificate from the U.S. Environmental Protection Agency.

*Irvine Ranch Water District is a large retail water and sewer agency in Orange County, California serving over 400,000 residents in a 180-square-mile area, with approximately 115,000 water and sewer service connections.*

# *Sarah Palmer, Zone 7 Water Agency Director*

# *Seeks Your Support as ACWA Vice President*

I am pleased and excited to be selected by ACWA's Nominating Committee to be on the official slate as Vice President. The election is on December 4th at the San Diego Fall Conference and I am asking for your support.

As you may know, I have been on the Board of Directors of Zone 7 Water Agency for more than 13 years, serving 3 terms as President. I am active in ACWA by being the Region 5 Vice Chair, an active ACWA Board member, and serving on the ACWA Water Quality, Water Management, and Agriculture Committees. I am also active on the PFAS/PFOA workgroup, the Direct Potable Reuse workgroup (just formed), and the ACWA Board Steering Committee. Learning from these groups has reinforced the fact that we all must work together. With the diverse challenges facing California water, we cannot afford to silo ourselves. ACWA gives us the opportunity and means to find our common ground and advocate on behalf of each other and our environment.

I have a Ph.D. in Cell Physiology and Biochemistry from the University of Toronto and a B.A. in Biology and Political Science from New York University. This background in science, with subsequent research and teaching careers, has led to opportunities for communicating complex concepts to both professional and lay groups. My work with Zone 7 has given me the opportunity to become well acquainted with the issues facing both urban and agricultural stakeholders.

I believe in a vision for California that will integrate all aspects of water: urban, rural, and agricultural. In California, all regions depend on one another. We already have one of the most highly engineered water systems in the world. We must manage it in such a way that we are stewards of both the human made infrastructure and the natural environment. We must think long-term. The world is changing more rapidly than we have yet to understand. We must be prepared to meet those challenges together.

I am increasingly concerned with the issues facing agriculture in California. Agriculture is about 20% of my agency Zone 7's water sales. California agriculture is a national treasure. Its welfare goes beyond the 3% of California's economy. Protecting our agricultural community, and its water, is a matter of food security, even of national security. One of the missions of ACWA should be to find a way to protect our agricultural resources, to make the issues of SGMA work for the Central Valley at least as well as it has for my agency's wineries. With the need for new conveyances and storage of water for our state and their resulting rising costs, we cannot allow more than one million acres of California farmland to go permanently fallow. The social and food security issues are dire under that scenario. Urban and agricultural interests must partner in their common dependence on one another.

I support an "all -of-the-above" approach to managing our state water portfolio. Groundwater banking, new conveyance, potable and non-potable reuse, desalination, increased storage, headwater/forest management all add up to a hefty price tag. There is no one solution or one size fits all. Each region will find its best fit but in such a way that it integrates with other regions. The challenges of present and pending climate change and the ever-present threats of earthquake and fire demand it.

My involvement with the Delta Conveyance, while understandably controversial, has given me a broad insight into the issues of providing water for 24 million people in the Bay Area and beyond as well as the valid and deep concerns of the Delta stakeholders and that fragile estuary on which so many species rely. The "reset" of the project by the Newsom administration should not be a setback, but rather a new opportunity to engage with Delta communities to identify and address their legitimate concerns. I will be chairing a Delta Stakeholder Engagement advisory committee to incorporate Delta perspectives into the logistics and locale of the new alternative. Environmental needs and local cultural heritage must be considered.

I will work to expand ACWA's membership. Representing and advocating to balance all regional issues in the state will make us stronger and allow more perspectives to be heard. The ACWA JPIA is a strong incentive for joining. My agency joined the JPIA this past year with the unanimous approval by our Board of Directors.

I look forward to working with the ACWA team. The staff is among the best I have seen, the executives are visionary. My ability to work with and understand up-to-date and science-based decision making, my experience along with my strengths of listening, learning, communicating, and adapting make me an ideal candidate for the office of Vice President of ACWA. Again, I ask for your support so that we may work together.

Sincerely,
Sarah Palmer, Ph.D.
More information can be found at:
www.linkedin.com/in/sarahlpalmerh2o

## *Sarah Palmer's Goals for ACWA In Brief*

- Build on existing partnerships while expanding connections with urban, agricultural, academic, heritage and environmental interests
- Minimize "silo-ing" while respecting regional differences
- Increase stakeholder engagement through communication and education
- Advocate for the universal right to clean water
- Improve Association financial strength through increased membership and non-dues funding sources
- Promote a resilient, robust and diverse water portfolio that will serve California for generations to come

## Resolution in Support of Sarah Palmer for ACWA Vice President

Now that the ACWA Nominating committee has set a slate for the positions of President and Vice President to be voted on at the ACWA Fall Conference in San Diego including Steve LaMar for President and Sarah Palmer as Vice President, I respectfully ask if your Board can lend me your support. I have included a sample Resolution if you choose to use it!

Thank you for your consideration,

Sarah

# Resolution of the Board of Directors of

_____

## In Support of Sarah Palmer for the position of ACWA Vice President

WHEREAS, ACWA has announced that the nominating committee has selected the slate for President and Vice President of ACWA

WHEREAS, Sarah Palmer has been selected for the slate as Vice President

WHEREAS, Sarah Palmer has a working knowledge of water industry issues and concerns, possesses strength of character and leadership capabilities, and is experienced in matters related to the performance of the duties of the office of Vice President; and

WHEREAS, Sarah Palmer can provide the dedication of time and energy to effectively serve in the capacity; and

WHEREAS, Sarah Palmer has served in a leadership role as a member of the Zone 7 Water Agency Board of Directors since 2006, 3 terms as President, has served on the Administrative, Finance, Tri-Valley Liaison, and Water Resources Committees of Zone 7 Water Agency; and

WHEREAS, Sarah Palmer serves as the Vice-Chair of ACWA Region 5 Board of Directors and as a Board member of ACWA

WHEREAS, Sarah Palmer serves as a member of the ACWA Agriculture, Water Management, and Water Quality Committees and as a member of the Water Quality Committee PFOS/PFAS subcommittee; and

WHEREAS, Sarah Palmer serves on the ACWA Board Steering Committee; and

WHEREAS, Sarah Palmer has demonstrated outstanding effort and support of local and regional water issues, including public information workshops and presentations; and

WHEREAS, it is the opinion of the ACWA Nominating Committee that Sarah Palmer possesses all the qualities needed to fulfill the duties of the office of ACWA Vice President.

NOW, THEREFORE, BE IT RESOLVED THAT THE BOARD OF DIRECTORS OF _____ does hereby support Sarah Palmer for the office of ACWA Vice President.

PASSED AND ADOPTED by the _____ Board of Directors at a regular meeting held on _____.

AYES:

NOES:

ABSENT:

P.O. Box 2157 | 9935 Auburn Folsom Road | Granite Bay, CA 95746 | 916-791-0115 | sjwd.org

SAN JUAN WATER
SINCE 1854

Pamela Tobin, Director

Board Chair/President
Marina Coast Water District
11 Reservation Road
Marina, CA 93933

October 18, 2019

Dear ACWA Member Agency Board Chairs and Presidents:

I wanted to inform you that I will be nominated from the floor for the office of ACWA Vice President during the General Session Membership Meeting on December 4th, at the ACWA Fall Conference.

I feel strongly that I am the best candidate to bring the ***experience and leadership*** needed to help ACWA fulfill its vision and mission. Consequently, I believe I have an obligation to the ACWA membership to continue to offer myself to serve in this important role.

**GO TO THE FOLLOWING WEB ADDRESS TO ACCESS MY STATEMENT OF QUALIFICATIONS, CURRICULUM VITAE, AND MY PRIORITIES FOR ACWA:** https://www.sjwd.org/pam-tobin-for-acwa-vp

Many ACWA members across the State -- north and south, ag and urban –have also encouraged me to continue my bid for ACWA Vice President. Among those urging me to continue my candidacy are ***former ACWA Presidents: Jerry Gladbach and Bette Boatmun***. They and others have told me that they value my 15 years of experience in California water, the leadership roles I have played and my active participation in ACWA and ACWA-JPIA over the last several years.

I would appreciate **YOUR AGENCY'S VOTE** at conference in support of my candidacy for ACWA Vice President. **PLEASE BE SURE TO DESIGNATE AND DIRECT YOUR DELEGATE TO CAST YOUR VOTE FOR ME.**

Information regarding the voting process, the delegate designation form, and a facsimile of the ballot your delegate will receive at conference may also be found at the web address above.

I would be pleased to speak to you and your Board colleagues to provide more information about myself or answer any questions you might have. I welcome and invite such a conversation.

Thank you for your consideration.

Sincerely,

Pam Tobin
Director, San Juan Water District
Chair, ACWA Region 4; Director, ACWA-JPIA
916-275-0875 | petpyrs@surewest.net

cc: ACWA Member Agency General Managers

ACWA
Association of California Water Agencies

# ACWA 2019 Fall Conference & Exhibition
# PRELIMINARY AGENDA
December 3 – 6, 2019 • San Diego

## ACWA JPIA - MONDAY, DEC. 2

**8:30 – 10:00 AM**
- ACWA JPIA Program Committee

**10:15 – 11:15 AM**
- ACWA JPIA Executive Committee

**1:30 – 4:00 PM**
- ACWA JPIA Board of Directors

**4:00 – 5:00 PM**
- ACWA JPIA Town Hall

**5:00 – 6:00 PM**
- ACWA JPIA Reception

## TUESDAY, DEC. 3

**8:00 AM – 9:45 AM**
- Agriculture Committee

**8:00 AM – 6:00 PM**
- Registration

**8:30 AM – Noon**
- ACWA JPIA Seminars

**9:00 AM – 5:00 PM**
- ACWA Legal Briefing & CLE Workshop

**10:00 – 11:45 AM**
- Groundwater Committee
- Local Government Committee

**11:00 AM – Noon**
- Outreach Task Force

**Noon – 2:00 PM**
- ACWA 101 & Luncheon
- Committee Lunch Break

**1:00 – 2:45 PM**
- Energy Committee
- Finance Committee
- Scholarship & Awards Subcommittee
- Water Management Committee

**1:00 – 3:00 PM**
- ACWA JPIA: Sexual Harassment Prevention for Board Members & Managers (AB 1825)

**3:00 – 4:45 PM**
- Communications Committee
- Federal Affairs Committee
- Membership Committee
- Water Quality Committee

**5:00 – 6:30 PM**
- Welcome Reception in the Exhibit Hall

## WEDNESDAY, DEC. 4

**7:30 AM – 5 PM**
- Registration

**8:00 – 9:45 AM**
- Opening Breakfast *(Ticket Required)*

**8:30 AM – Noon & 1:30 – 6:00 PM**
- Exhibit Hall

**10:00 – 11:30 AM**
- Attorneys Program
- Energy Committee Program
- Exhibitor Demos
- Finance Program
- Region Issue Forum
- Statewide Issue Forum
- Water Industry Trends Program

**11:30 – 11:45 AM**
- Networking in the Exhibit Hall

**11:45 AM – 2:00 PM**
- General Session Luncheon *(Ticket Required)*

**2:15 – 3:30 PM**
- Attorney Program
- Communications Committee Program
- Energy Committee Program
- Exhibitor Case Study
- Region Program
- Statewide Issue Forum
- Water Industry Trends Program

**3:45 – 5:00 PM**
- Ag/Water Quality Committee
- Aquatic Resources Subcommittee
- Exhibitor Case Study
- Finance Program
- Local Government Committee
- Statewide Issue Forums
- Water Industry Trends Program

**3:30 – 5:30 PM**
- Legal Affairs Committee

**5:00 – 6:00 PM**
- Prize Drawing Fiesta Night in the Exhibit Hall

**5:30 – 7:00 PM**
- CalDesal Hosted Mixer
- Jacobs Hosted Reception

## THURSDAY, DEC. 5

**7:30 AM – 4 PM**
- Registration

**7:45 – 9:15 AM**
- Regions 1–5 Membership Meetings

**8:00 AM – Noon**
- Exhibit Hall

**8:00 – 9:15 AM**
- Networking Continental Breakfast, Exhibit Hall *(Ticket Required)*

**8:30 - 10:45 AM**
- Ethics Training (AB 1234) - *Limited Seating*

**9:30 – 11:00 AM**
- Attorneys Program
- Exhibitor Demos
- Finance Program
- Region Issue Forum
- Statewide Issue Forum
- Water Industry Trends Program

**11:00 – 11:30 AM**
- Prize Drawings in the Exhibit Hall

**11:45 AM – 2:00 PM**
- General Session Luncheon *(Ticket Required)*

**2:15 – 3:15 PM**
- Attorneys Program
- Exhibitor Case Studies
- Federal Issues Forum
- Statewide Issue Forum
- Water Industry Trends Program

**3:30 – 5 PM**
- Regions 6–10 Membership Meetings

**6:00 – 7:00 PM**
- Outreach Reception

**7:00 – 10:00 PM**
- Dinner & Entertainment *(Ticket Required)*

## FRIDAY, DEC. 6

**8:00 – 9:30 AM**
- Registration

**8:30 – 10:00 AM**
- ACWA's Hans Doe Past Presidents' Breakfast in Partnership with ACWA JPIA *(Ticket Required)*

## OTHER EVENTS

### THURSDAY, DEC. 5

**6:45 – 8:30 AM**
- San Joaquin Valley Agricultural Water Committee

All conference programs are subject to change.

*Last modified: June 6, 2019*

# ACWA 2019 Fall Conference & Exhibition

December 3 – 6, 2019 | Manchester Grand Hyatt San Diego

## REGISTRATION, MEALS AND HOTEL PRICING SHEET

### REGISTER ONLINE

Register online by **November 8, 2019** at **www.acwa.com** to take advantage of the advance pricing.

### REGISTER ON SOMEONE'S BEHALF

Select from a list of people affiliated with your company in your account. If the registrant is not listed, you will need to create a Portal profile for the registrant before registering.

| REGISTRATION OPTIONS<br>***Advantage*** *pricing applies to ACWA public agency members, associates & affiliates.*<br>***Standard*** *pricing applies to non-members of ACWA.* | ADVANCE<br>DEADLINE: 11/8/19 | | ONSITE | |
|---|---|---|---|---|
| | ADVANTAGE | STANDARD | ADVANTAGE | STANDARD |
| Full Conference Registration & Meals Package | $725 | N/A | N/A | N/A |
| Full Conference Registration Only (meals sold separately) | $580 | $870 | $600 | $890 |
| One-Day Conference Registration (meals sold separately)<br>**Wednesday:** Registration includes Welcome Reception on Tuesday evening **–OR–**<br>**Thursday:** Registration includes ability to purchase a ticket for Friday breakfast | $345 | $520 | $365 | $540 |
| Guest Conference Registration (meals sold separately)<br>Guest registration is not available to anyone with a professional reason to attend. | $75 | $75 | $75 | $75 |

| MEAL FUNCTIONS | ADVANCE | ONSITE |
|---|---|---|
| Wednesday Opening Breakfast – December 4 | $50 | $55 |
| Wednesday Luncheon – December 4 | $55 | $60 |
| Thursday Networking Continental Breakfast – December 5 | $40 | $45 |
| Thursday Luncheon –December 5 | $55 | $60 |
| Thursday Dinner – December 5 | $70 | $75 |
| Friday Breakfast – December 6 | $50 | $55 |

## HOTEL INFORMATION

You must be registered for the ACWA conference in order to receive hotel reservation information and conference special room rate. **Conference special rate is available August 19 – November 8**, based on availability.

### HOTEL

Manchester Grand Hyatt San Diego
1 Market Place, San Diego, CA 92101

### ROOM RATES

Single/Double $209 per night*
Triple $234 per night*

* Subject to the following taxes & fees:
10.5% occupancy tax, 2% SD Assessment and $0.65 CA tourism assessment

**Deadline for group rate is November 8, 2019**

### IMPORTANT DATES

**The conference hotel room block opens on August 19.**

For those **registering for conference prior to August 19**, information on how to reserve your hotel room will be provided via e-mail on August 19.

For those registering for conference from **August 19 to November 8**, your **confirmation e-mail** will include the information on how to reserve your hotel room and an opportunity to receive a conference special hotel rate.

QUESTIONS?
Contact us at (888) 666-2292

**Cancellation deadline: November 8, 2019 4:30 p.m. (PST)**
Conference terms and conditions available at acwa.com in the event section.

Return to Agenda

YOUR BEST PROTECTION

October 15, 2019

Marina Coast Water District (M013)
11 Reservation Road
Marina, CA 93933-2099

Keith:

Each year at Fall Conference, the JPIA recognizes members that have a Loss Ratio of 20% or less in either of the Liability, Property, or Workers' Compensation programs (loss ratio = total losses / total premiums).

The members with this distinction receive the **"President's Special Recognition Award"** certificate for each Program that they qualify in.

The JPIA is extremely pleased to present Marina Coast Water District (M013) with this special recognition and commends the District on the hard work in reducing claims.

Congratulations to you, your staff, Board, and District. Keep up the good work!

The JPIA wishes you the best in 2020.

Sincerely,

Jerry Gladbach

E.G. "Jerry" Gladbach
President

Enclosure: President's Special Recognition Award(s)


ACWA JPIA

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claims fax
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www.acwajpia.com

# President's Special Recognition Award

*The President of the*

*ACWA JPIA*

*hereby gives Special Recognition to*

# Marina Coast Water District

*for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"*
*in the Liability Program for the period 10/01/2015 - 09/30/2018*
*announced at the Board of Directors' Meeting in San Diego.*

E. G. "Jerry" Gladbach

*E. G. "Jerry" Gladbach, President*

*December 02, 2019*



LITHO IN U.S.A.

# President's Special Recognition Award

*The President of the*

*ACWA JPIA*

*hereby gives Special Recognition to*

# Marina Coast Water District

*for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"*
*in the Property Program for the period 04/01/2015 - 03/31/2018*
*announced at the Board of Directors' Meeting in San Diego.*

*E. G. "Jerry" Gladbach, President*

*December 02, 2019*



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