



FALLBROOK PUBLIC UTILITY DISTRICT
BOARD OF DIRECTORS
REGULAR BOARD MEETING

AGENDA - REV. 1

MONDAY, SEPTEMBER 26, 2016
4:00 P.M.

FALLBROOK PUBLIC UTILITY DISTRICT
990 E. MISSION RD., FALLBROOK, CA 92028
PHONE: (760) 728-1125

If you have a disability and need an accommodation to participate in the meeting, please call the Secretary at (760) 728-1125, ext. 1130 for assistance so the necessary arrangements can be made.

Writings that are public records and are distributed during a public meeting are available for public inspection at the meeting if prepared by the local agency or a member of its legislative body or after the meeting if prepared by some other person.

I. PRELIMINARY FUNCTIONS

CALL TO ORDER / ROLL CALL / ESTABLISH A QUORUM

PLEDGE OF ALLEGIANCE

ADDITIONS TO AGENDA PER GC § 54954.2(b)

APPROVAL OF AGENDA

PUBLIC COMMENT

Members of the public are invited to address the Board of Directors on any item that is within the subject matter jurisdiction of the legislative body. The Board President may limit comments to three (3) minutes.

II. CONSENT CALENDAR----- (ITEMS A – B)

All items appearing on the Consent Calendar may be disposed of by a single motion. Items shall be removed from the Consent Calendar if any member of the Board of Directors or the public requests removal prior to a vote on a motion to approve the items. Such items shall be considered separately for action by the Board.

A. CONSIDER APPROVING MINUTES

- 1. Special Board Meeting of August 17, 2016
- 2. Regular Board Meeting of August 22, 2016
- 3. Special Board Meeting of September 7, 2016

Recommendation: The Board approve the minutes of the aforementioned meeting(s) of the Board of Directors of the Fallbrook Public Utility District.

B. CONSIDER ADVANCE APPROVAL TO ATTEND MEETINGS

Recommendation: That the Board authorize Directors' attendance to Ensuring the Financial Health of Your Utility After California's Historic Drought, How to Be an Effective New Board Member, and Advanced Water Purification: The Road to Resilience.

III. INFORMATION ----- (ITEMS C – D)

C. CAPITAL PROGRAM SUMMARY FOR FISCAL YEAR 2016-17

Presented by: Jack Bebee, Assistant General Manager

**D. SAN DIEGO COUNTY LOCAL AGENCY FORMATION COMMISSION (LAFCO):
DISTRICT LATENT POWERS ACTIVATION, EXPANSION, AND/OR
DIVESTITURE**

IV. ACTION CALENDAR ----- (ITEMS E – L)

**E. CONSIDER CUSTOMER REQUEST TO ADDRESS BOARD REGARDING
WATER BILL**

Recommendation: That the Board review the customer bill and provide a one-time adjustment of \$82.81 as a result of the unanticipated equipment failure in accordance with District Policy.

F. CONSIDER CLAIM FOR DAMAGES

Recommendation: Staff recommends denying the Claim and forwarding to the ACWA / JPIA for resolution.

**G. CONSIDER APPROVING AGREEMENT FOR GENERAL COUNSEL LEGAL
SERVICES BETWEEN FALLBROOK PUBLIC UTILITY DISTRICT AND BEST
BEST & KRIEGER LLP**

Recommendation: That the Board approve the Agreement for General Counsel Legal Services between Fallbrook Public Utility District and Best Best & Krieger LLP and authorize the General Manager to execute said Agreement and the conflict waiver letter relative to BB&K's representation of Rancho California Water District as provided for by Resolution No. 4889.

**H. CONSIDER CREATING A PARS 115 TRUST FOR OPEB AND PENSION
LIABILITIES
RESOLUTION NO. 4891**

Recommendation: That the Board approve creation of an irrevocable 115 Combination Trust with PARS using existing funds set aside by the board and adopt Resolution No. 4891. The trust will provide a better return on the funds and provide long term rate

stability to offset anticipated funding shortfalls from CalPERS and establish an OPEB trust to fund retiree medical benefits.

I. CONSIDER IMPLEMENTATION OF RATE STUDY AND LONG-TERM FINANCIAL PLAN

Recommendation: That the Board authorize the award of the attached contract with Raffelis Financial Consultants, Inc. for an amount not-to-exceed \$105,162 for completion of a rate study and a 10-year financial plan for the District to help ensure long-term financial stability for ratepayers and authorize up to \$30,000 for additional short-term staffing support for the effort if necessary.

J. CONSIDER APPROVING FINAL BUDGET FOR FY 16-17

Recommendation: That the Board approve the final FY 16-17 budget now that the updated summary is prepared and the process in place to prepare a completely revised budget approach and format for FY 17-18.

K. CONSIDER IMPLEMENTATION OF KEY PERFORMANCE INDICATORS FOR ENGINEERING AND OPERATIONS

Recommendation: That the Board authorize the award of the attached contract with Westin Engineering, Inc. for an amount not-to-exceed \$80,000 for development of key performance metrics for engineering and operations to help the District monitor and continuously improve performance.

L. CONSIDER SANTA MARGARITA CONJUNCTIVE USE APPROVAL OF ENVIRONMENTAL IMPACT REPORT / ENVIRONMENTAL IMPACT STATEMENT AND APPROVAL OF DESIGN AMENDMENT 2
RESOLUTION NO. 4890

Recommendation: That the Board certify the Final EIR, approve the California Environmental Quality Act (CEQA) Findings of Fact, and adopt the Mitigation Monitoring and Reporting Program (MMRP) to complete the CEQA process for the Santa Margarita Conjunctive Use Project (SMRCUP) per Resolution No 4890. That the Board approve design Amendment No. 2 to improve the operation of the SMRCUP facility and reduce operating costs and any impacts to adjacent residents and provide additional consulting services to complete associated permitting and reduce unknowns and associated costs during construction.

V. **ORAL / WRITTEN REPORTS**----- (ITEMS 1 – 6)

1. General Legal Counsel
2. SDCWA Representative / General Manager
3. Administrative Services Manager / Treasurer
4. Assistant General Manager

5. Public Affairs Specialist
6. Director Comments/Reports on Meetings Attended

ADJOURN TO CLOSED SESSION

VI. CLOSED SESSION

1. PUBLIC EMPLOYEE PERFORMANCE EVALUATION PER GC § 54957 (b) (1): TITLE – GENERAL MANAGER

RECONVENE TO OPEN SESSION

REPORT FROM CLOSED SESSION (*As Necessary*)

VII. ADJOURNMENT OF MEETING

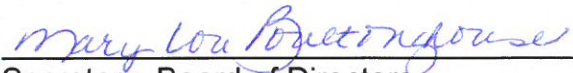
* * * * *

DECLARATION OF POSTING

I, Mary Lou Boultinghouse, Secretary of the Board of Directors of the Fallbrook Public Utility District, do hereby declare that I posted a copy of the foregoing agenda in the glass case at the entrance of the District Office located at 990 East Mission Road, Fallbrook, California, at least 72 hours prior to the meeting in accordance with Government Code § 54954.2(a).

I, Mary Lou Boultinghouse, further declare under penalty of perjury under the laws of the State of California, that the foregoing is true and correct.

September 22, 2016
Dated / Fallbrook, CA


Secretary, Board of Directors

MEMO

TO: Board of Directors
FROM: Mary Lou Boultinghouse, Secretary *MLB*
DATE: September 26, 2016
SUBJECT: Consider Approving Minutes

Recommendation

The Board approve the minutes of the following board meeting(s) of the Board of Directors of the Fallbrook Public Utility District:

1. Special Board Meeting of August 17, 2016
2. Regular Board Meeting of August 22, 2016
3. Special Board Meeting of September 7, 2016

Minutes of the
Special Board Meeting
for August 17, 2016

**FALLBROOK PUBLIC UTILITY DISTRICT
BOARD OF DIRECTORS
SPECIAL BOARD MEETING**

MINUTES

WEDNESDAY, AUGUST 17, 2016
3:00 P.M.

FALLBROOK PUBLIC UTILITY DISTRICT
990 E. MISSION RD., FALLBROOK, CA 92028
PHONE: (760) 728-1125

I. PRELIMINARY FUNCTIONS

CALL TO ORDER / ROLL CALL / ESTABLISH A QUORUM

President Davies called the Special Meeting of the Board of Directors of the Fallbrook Public Utility District (FPUD) to order at 3:00 p.m. A quorum was established with the following members present:

Board of Directors

Present: Bob Anderson, Member
Milt Davies, Member / President
Al Gebhart, Member
Don McDougal, Member
Charley Wolk, Member / Vice President

Absent: None

District Staff

Present: Robert James, General Counsel
Brian J. Brady, General Manager
Mary Lou Boultinghouse, Secretary

Also present were others, including, but not limited to: Helene Brazier.

PLEDGE OF ALLEGIANCE

President Davies led the Pledge of Allegiance.

APPROVAL OF AGENDA

MOTION: Director McDougal moved to approve the agenda as submitted; Director Gebhart seconded. Motion carried; VOTE:

AYES: Directors Anderson, Davies, Gebhart, McDougal, and Wolk
NOES: None
ABSTAIN: None
ABSENT: None

PUBLIC COMMENT

Members of the public are invited to address the Board of Directors on any item that is within the subject matter jurisdiction of the legislative body. The Board President may limit comments to three (3) minutes.

There were no comments from members of the public.

ADJOURN TO CLOSED SESSION

The Board adjourned to Closed Session at 3:01 p.m.

II. CLOSED SESSION

1. PUBLIC EMPLOYEE PERFORMANCE EVALUATION PER GC § 54957(b)(1): TITLE – GENERAL MANAGER
2. PUBLIC EMPLOYEE APPOINTMENT PER GC § 54957: TITLE: GENERAL COUNSEL

RECONVENE TO OPEN SESSION

The Board returned from Closed Session and reconvened to Open Session at 5:54 p.m.

REPORT FROM CLOSED SESSION (As Necessary)

President Davies announced there was no reportable action on Closed Session Item 1. In regard to Closed Session Item 2, President Davies further announced upon a motion by Director Anderson and seconded by Director Wolk, and a 5-0 vote and unanimously carried, the Board of Directors of the Fallbrook Public Utility District adopted Resolution No. 4889 appointing Paula de Sousa Mills of the law firm Best Best & Krieger (BB&K) as District General Legal Counsel effective upon Board approval of an Agreement for Legal Services with BB&K.

III. ADJOURNMENT OF MEETING

There being no further business to discuss, President Davies adjourned the Special Meeting of the Board of Directors of the Fallbrook Public Utility District at 5:55 p.m.

President, Board of Directors

ATTEST:

Secretary, Board of Directors

Minutes of the
Regular Board Meeting
for August 22, 2016

**FALLBROOK PUBLIC UTILITY DISTRICT
BOARD OF DIRECTORS
REGULAR BOARD MEETING**

MINUTES

**MONDAY, AUGUST 22, 2016
BEGIN: 4:00 P.M.**

**FALLBROOK PUBLIC UTILITY DISTRICT
990 E. MISSION RD., FALLBROOK, CA 92028
PHONE: (760) 728-1125**

I. PRELIMINARY FUNCTIONS

CALL TO ORDER / ROLL CALL / ESTABLISH A QUORUM

President Davies called the Regular Meeting of the Board of Directors of the Fallbrook Public Utility District to order at 4:02 p.m. A quorum was established with attendance as follows:

Board of Directors

Present: Bob Anderson, Member
Milt Davies, Member / President
Al Gebhart, Member
Don McDougal, Member (*left at 5:29 p.m.*)
Charley Wolk, Member / Vice-President

Absent: None

District Staff

Present: Robert James, General Legal Counsel
Steve Lopardo, Special Legal Counsel (*left at 5:00 p.m.*)
Jack Bebee, Assistant General Manager and Acting General Manager
Mary Lou Boultinghouse, Secretary
Jason Cavender, System Operations Manager
Soleil Develle, Engineering Technician III
Kyle Drake, Collection Supervisor
Marcie Eilers, Administrative Services Manager / Treasurer
Jeff Marchand, Engineering Supervisor
Larry Ragsdale, Safety & Risk Administrator

Also present were others, including, but not limited to: Helene Brazier, Peter Colby, Jennifer DeMeo, Lee DeMeo, Donna Gebhart, Bert Hayden, Marilee Lowe, Patricia McPhee, Paul Melzer, and Lita Tabish.

PLEDGE OF ALLEGIANCE

Bert Hayden, former member of the Board of Directors, led the Pledge of Allegiance at the request of President Davies.

ADDITIONS TO AGENDA PER GC § 54954.2(b)

There were no additions to the agenda.

APPROVAL OF AGENDA

MOTION: Director McDougal moved to approve the agenda as presented; Director Gebhart seconded. Motion carried; VOTE:

AYES: Directors Anderson, Davies, Gebhart, McDougal, and Wolk
NOES: None
ABSTAIN: None
ABSENT: None

PUBLIC COMMENT

Members of the public are invited to address the Board of Directors on any item that is within the subject matter jurisdiction of the legislative body. The Board President may limit comments to three (3) minutes.

A member of the public stepped to the podium and stated the acoustics in the boardroom were awful. She requested that Board Members and staff speak into their microphones so audience members could hear what was being.

President Davies acknowledged her concerns and stated the District is in the process of upgrading its audio-visual equipment.

A. EMPLOYEE OF THE QUARTER FOR AUGUST 2016
1. Austin Wendt

President Davies announced that Austin Wendt was unable to attend the board meeting due to work commitments and would be recognized as the Employee of the Quarter for August 2016 at the next regular board meeting.

II. **CONSENT CALENDAR**-----**(ITEMS B - C)**

All items appearing on the Consent Calendar may be disposed of by a single motion. Items shall be removed from the Consent Calendar if any member of the Board of Directors or the public requests removal prior to a vote on a motion to approve the items. Such items shall be considered separately for action by the Board.

B. CONSIDER APPROVING MINUTES
1. Regular Board Meeting / Public Hearing of June 27, 2016
2. Special Board Meeting / Public Hearing of July 14, 2016
3. Regular Board Meeting of July 25, 2016

Recommendation: The Board approve the minutes of the aforementioned meeting(s) of the Board of Directors of the Fallbrook Public Utility District.

C. CONSIDER ADVANCE APPROVAL TO ATTEND MEETINGS

Recommendation: That the Board authorize Directors' attendance to the California Special District's Association '16 CSDA Annual Conference for October 10-13, 2016, in San Diego, California.

Director Wolk requested that the minutes of the Regular Board Meeting / Public Hearing of June 27, 2016, be pulled for discussion.

MOTION: Director McDougal moved to approve the Consent Calendar as revised to exclude approval of the June 27, 2016 minutes; Director Gebhart seconded. Motion carried; VOTE:

AYES: Directors Anderson, Davies, Gebhart, McDougal, and Wolk
NOES: None
ABSTAIN: None
ABSENT: None

Director Wolk stated the initial motion made for Item K was not recorded accurately in the June 27, 2016 minutes. Director Wolk clarified the motion was made to adopt summary minutes for board meetings, which he seconded. Following the motion and second, a question arose concerning how long the recordings would be kept. At that point, the motion was modified to add the recordings be kept for one year, which is when Director Wolk withdrew his second. Director Wolk requested that the minutes be corrected to accurately reflect the motion and second.

Brief discussion ensued, and the Board directed the Secretary to make the corrections as requested.

MOTION: Director McDougal moved to approve the minutes of June 27, 2016, to be revised by the Secretary with the corrections requested by Director Wolk; Director Gebhart seconded. Motion carried; VOTE:

AYES: Directors Anderson, Davies, Gebhart, McDougal, and Wolk
NOES: None
ABSTAIN: None
ABSENT: None

III. INFORMATION ----- (ITEMS D – F)

D. STATUS REPORT ON PARCELS WITH DEFERRED WATER AVAILABILITY /
STANDBY CHARGES

E. STATUS REPORT ON COMMUNITY SERVICE WATER USAGE

Mr. Bebee provided a brief overview of Items D and E. President Davies remarked that both items were reported to the Board on an annual basis.

F. SAN DIEGO COUNTY LOCAL AGENCY FORMATION COMMISSION (LAFCO):
DISTRICT LATENT POWERS ACTIVATION, EXPANSION, AND/OR
DIVESTITURE

Mr. Bebee reported that a meeting has been scheduled in September with the Director of Parks and Recreation for the County of San Diego and an update would most likely be provided following that meeting.

President Davies announced that Item G would be considered next. Following the announcement, Director Gebhart read the following statement out loud:

"Because I have a conflict of interest under the Political Reform Act (Government Code section 87100) and under Government Code section 1090 with respect to Item G, Consider Finalizing the Recreational Trails Easement for the Santa Margarita River Property, I am recusing myself from participating in any way during the discussion and any action taken on that agenda item."

Following his statement of recusal, Director Gebhart left the room at 4:11 p.m.

IV. ACTION CALENDAR -----(ITEMS G – K)

G. CONSIDER FINALIZING THE RECREATIONAL TRAILS EASEMENT FOR THE
SANTA MARGARITA RIVER PROPERTY

Recommendation: That the Board instruct staff to continue to negotiate the Long Term Steward Agreement consistent with Option (2) as required under the PSA. Option (2) will, of course, require (i) further ongoing negotiations with Western, The Wildlands Conservancy, and The Fallbrook Trails Council, and (ii) written mutual agreement of all four parties before the Close of Escrow.

Mr. Bebee reported that Western Rivers Conservancy identified the long term steward and the parties are forming an approach that will (1) get value from the property for the ratepayers, (2) bring in a long term partner that plans to enhance the property, and (3) provide some local control by having a trails easement record and transfer to the Fallbrook Trails Council.

Director McDougal asked General Legal Counsel if Director Gebhart was required to leave the room while recused, and Mr. James advised it was preferable.

Mr. Lopardo stated that at the last meeting, Mr. Colby set forth the proposal by Western Rivers Conservancy (Western Rivers) that provides for the property to be sold for the value of the contract and to retain equestrian use forever. Mr. Lopardo further stated that all parties--the District, Western Rivers Conservancy, The Wildlands Conservancy, and the Fallbrook Trails Council--must mutually agree to the proposal and the proposal would be finalized through a series of recordable documents and contracts.

Mr. Bebee noted if an easement were recorded before the Camp Pendleton easement, the valuation of the property and Camp Pendleton's funding would be reduced. Mr. Bebee stated the current proposal preserves the valuation and allows finalization through a single escrow. The District had previously discussed unilaterally placing an easement on the property prior to the close of escrow, but elected to proceed with an approach to obtain the easement as part of the long term stewardship agreement.

Mr. Lopardo cautioned that the District entered into a contract with Western Rivers for the sale of the property and has no business recording an easement during the pendency of the contract. Mr. Lopardo asserted that the contract states an easement cannot be recorded on the property without the consent of the buyer and Western Rivers would not consent to an easement.

Mr. Bebee explained that pursuant to the contract, the District will receive \$9.975 million from the sale of the property and Western Rivers will be required to find funding for the purchase and will receive roughly half from Camp Pendleton and the remainder from other sources. Mr. Bebee added that if Western Rivers were unable to pay the contract amount, the sale would not move forward and the District will keep the earnest money.

Discussion ensued concerning Camp Pendleton's funding, and Mr. Bebee stated that Camp Pendleton has time restrictions on its funding from the Department of Defense and there would be a point in time when the money would no longer be allocated.

Mr. Bebee emphasized that the Santa Margarita River Conjunctive Use Project (SMRCUP) and the sale of the Santa Margarita River property were not interdependent. The current idea is to use the property sale proceeds to offset the cost of construction; however, the Board could choose to not use the sale proceeds to offset the cost and fully fund the project through other sources. Or, the Board could choose to not move forward with the SMRCUP and still sell the property. Brief discussion followed concerning the District's water rights permits and that if the District did not move forward with the SMRCUP in a timely manner, the permits could be revoked.

Peter Colby of Western Rivers Conservancy stepped to the podium and represented that Western Rivers was comfortable with the proposal discussed by Mr.

Lopardo and would continue to negotiate along the path that has been taken with the easement at the back end of the transaction.

President Davies asked a number of questions of Mr. Colby relative to improving the property, expanding the trails, and identifying a floating trails system.

Mr. Colby stated discussions with Camp Pendleton have included a proposal to make minor improvements to the property and to add a residence for a full-time staffer and that Camp Pendleton was not opposed to minor improvements but was uncertain if a residence could be placed on the property. Mr. Colby added that the Fallbrook Trails Council (Trails Council) and The Wildlands Conservancy (Wildlands) are currently working together on developing the map for the trails system.

President Davies asked if there would be a problem riding on the south side of the river, and Mr. Colby responded that Western Rivers did not have a conflict. Mr. Colby mentioned the new appraisal was finalized and set the value of the property at \$10.5 million, which was the same amount set in the previous appraisal.

Paul Melzer stepped to the podium and stated he represented The Wildlands Conservancy and worked in mission advancement. Mr. Melzer discussed other properties owned by Wildlands and emphasized that those properties were open to the public and included equestrian use. Mr. Melzer remarked that the trails easement fit perfectly with their organization.

At the request of President Davies, Mr. Melzer provided a brief overview of The Wildlands Conservancy and its history. Mr. Melzer stated that David Myers is the executive director and co-founder and that Wildlands recently celebrated its 20th anniversary as California's largest non-profit land conservancy. Wildlands stewards approximately 150,000 acres throughout the state, which includes 15 preserves and reserves. Mr. Melzer emphasized that the founding members recognized the importance of providing outdoor educational opportunities for children and passive recreational use for the public.

Marilee Lowe stepped to the podium and stated she is a candidate for the Board of the Directors, has been a community volunteer for over 32 years, and is an avid equestrian. Mrs. Lowe expressed concern over the sale of the Santa Margarita property and the future of the trails and suggested keeping a close eye on things as they move forward.

Donna Gebhart stepped to the podium and provided an update from the Fallbrook Trails Council as follows:

- The Trails Council met with Wildlands, Western Rivers, and Camp Pendleton last week concerning questions the Trails Council had.

- The Wildlands Conservancy appears to be a great fit with the Trails Council and both share the common goal of providing opportunities in recreation, education, and conservation.
- Mr. Lopardo suggested including a public access plan as part of the long term steward agreement and the plan should be all encompassing and include a floating trails easement to the Trails Council.
- Mr. Lopardo also suggested the Trails Council include a successor non-profit in the final documents in order to keep the easements in the event the Trails Council ceased to exist.
- The Trails Council will be responsible for maintaining the trails, and Wildlands would help if needed.
- The Trails Council informed Wildlands they will not be able to police the trails or enforce rules.
- The Trails Council and Wildlands will do a site visit of the trails to discuss future planning.
- District staff has been working with the Trails Council to create a map of the trail system.
- Wildlands has plans to enter the trails system into a Geographic Information System that will be accessible by the North County Fire Protection District in the event of an emergency.

Mrs. Gebhart requested there be full disclosure in advance of any restrictions that may be placed on the property.

Lita Tabish stepped to the podium and stated she is a resident of Fallbrook, a citizen of the community, part of the Trails Council, and on the Board of the Live Oak Park Coalition. Mrs. Tabish represented she speaks on behalf of over 2,000 people that signed a petition in favor of the trails and requested the trails easement record concurrently with closing.

Director Wolk suggested substituting the term "equestrian trail" with "recreational trail" in everything that is done because the trails are for use by hikers, non-motorized cycles, and horses.

MOTION: Director Wolk moved to write a letter to Western Rivers signed by the President that asks specifically for an explanation of (1) why the value of the property would be diminished because of a trails easement and (2) what is the rationale that impairs the ability of Western Rivers to solicit funds because a trails easement is on the property; President Davies seconded.

Mr. Bebee explained that the valuation and funding concerns were relative to the Camp Pendleton easement and the Department of Defense's appraisal process would have reflected the trails easement as an encumbrance on the property. In accordance with the federal process, the easement would have devalued the property in an amount

determined by the appraiser and would have reduced the amount Camp Pendleton could contribute.

President Davies asked if there were any further questions and hearing none, called for the vote.

Motion failed; VOTE:

AYES: Directors Davies and Wolk
NOES: Director McDougal
ABSTAIN: Director Anderson
ABSENT: Director Gebhart

President Davies stated the motion passed and directed staff to prepare the letter for his signature.

Director McDougal called a Point of Order and noted there must be three Ayes in order to move forward.

President Davies requested that District General Legal Counsel research an abstention and that it was to the affirmative. Mr. James opined it depended on the rules of operation. President Davies suggested the Board revote if needed following Mr. James' opinion.

MOTION: Director McDougal moved to continue on with the agreement that is in place; Director Anderson seconded. Motion carried; VOTE:

AYES: Directors Anderson, Davies, McDougal, and Wolk
NOES: None
ABSTAIN: None
ABSENT: Director Gebhart

At 5:00 p.m., President Davies announced the Board would take a recess, and Mr. Lopardo left the meeting.

The Board returned from recess and reconvened to Open Session at 5:08 p.m.

Director Gebhart returned to the meeting at 5:09 p.m.

H. CONSIDER AWARD OF CORROSION CONTROL SYSTEM FOR SACHSE TANK

Recommendation: That the Board authorize award of the Corrosion Control System to GMC Electric Inc., the lowest bidder, for \$24,103 at the Sachse Tank.

Mr. Cavender reported that as part of the coating and corrosion control inspection program, staff determined that many of the components were not functioning in the system. A Request for Proposals was issued; and in response, the District received two proposals and the lowest bid was submitted by GMC Electric, Inc.

MOTION: Director McDougal moved to approve staff's recommendation; Director Anderson seconded. Motion carried; VOTE:

AYES: Directors Anderson, Davies, Gebhart, McDougal, and Wolk
NOES: None
ABSTAIN: None
ABSENT: None

I. CONSIDER AS-NEEDED SCADA SUPPORT SERVICES

Recommendation: That the Board authorize the General Manager to enter into the attached three year agreement with SCADA Integrations at \$75,000 per year to provide necessary SCADA support services to facilitate continued reliable operation of the water and wastewater systems.

Mr. Cavender reported the request is for as-needed SCADA support services and proposes a three-year contract for an amount not-to-exceed \$75,000 per year. Mr. Cavender explained that the District has one internal position that provides SCADA support and due to increased automation processes and recent upgrades to the wastewater treatment plant, the demands for SCADA support have increased. The additional support would provide emergency assistance and technical expertise on an as-needed basis.

MOTION: Director McDougal moved to approve staff's recommendation; Director Anderson seconded. Motion carried; VOTE:

AYES: Directors Anderson, Davies, Gebhart, McDougal, and Wolk.
NOES: None
ABSTAIN: None
ABSENT: None

J. CONSIDER AS-NEEDED WATER RECLAMATION PLANT OPERATIONS SUPPORT SERVICES

Recommendation: That the Board authorize the General Manager to enter into the attached agreement with Black and Veatch for not to exceed amount of \$40,000 to provide Operational support at the Water Reclamation Plant to reduce long-term operating costs.

Mr. Bebee reported that processes have changed at the wastewater treatment plant following the recent upgrades and as a result, energy usage has increased. Black

and Veatch would provide support services to develop protocols to reduce energy usage and optimize operations. Mr. Bebee added that Black and Veatch is currently working with staff and this would expand those services.

MOTION: Director McDougal moved to approve staff's recommendation; Director Anderson seconded.

Mr. Bebee explained the District spends approximately \$360,000 per year in energy and \$120,000 per year in chemicals and if those amounts were reduced by \$40,000 per year over the life of the facility, the District would save money.

Director McDougal remarked that technology constantly changes and the need to bring in outside technical assistance makes sense. Director Wolk suggested that staff report to the Board quarterly on the status of the work performed.

AMENDED

MOTION: Director Gebhart moved to amend Director McDougal's motion to approve staff's recommendation to add that staff report to the Board on a quarterly basis of the work performed under the contract; Director Anderson seconded. Motion carried; VOTE:

AYES: Directors Anderson, Davies, Gebhart, McDougal, and Wolk
NOES: None
ABSTAIN: None
ABSENT: None

K. CONSIDER APPOINTING MEMBER TO THE AD HOC CONSERVATION COMMITTEE

Recommendation: Staff supports the Board's direction.

President Davies announced that Director Gebhart was unable to serve on the ad hoc Conservation Committee due to time constraints and asked if there were any volunteers to fill the vacancy left by Director Gebhart's resignation. There were no volunteers, and the position remained unfilled.

Director McDougal left the meeting at 5:29 p.m.

V. ORAL / WRITTEN REPORTS----- (ITEMS 1 – 6)

1. General Legal Counsel
2. SDCWA Representative / General Manager
3. Administrative Services Manager / Treasurer
 - Mrs. Eilers distributed handouts and provided a brief overview of each.
 - Mrs. Eilers reported the Fiscal Policy & Insurance Committee will meet in September to discuss the format of financial reports.

4. Assistant General Manager
 - Mr. Bebee reported that paving on South Mission Road was to begin the following week and the school districts were notified, an article would be in the newspaper to notify the public, and an electronic sign would be on display to alert motorists.
 - Mr. Bebee reported that Camp Pendleton has the environmental documents for the Santa Margarita Conjunctive Use Project and as a result, the EIR / EIS will be presented to the Board in September for adoption.
5. Public Affairs Specialist
6. Director Comments/Reports on Meetings Attended
 - Director Wolk requested the following items be agendaized for September: (1) the 5-year capital budget and (2) the status of tree removal in the medians.
 - President Davies introduced Jennifer DeMeo as a new Member on the Board of Directors for next term beginning in December.

•
ADJOURN TO CLOSED SESSION

The Board adjourned to Closed Session at 6:00 p.m.

VI. CLOSED SESSION

1. PUBLIC EMPLOYEE PERFORMANCE EVALUATION PER GC § 54957 (b) (1): TITLE – GENERAL MANAGER

RECONVENE TO OPEN SESSION

The Board returned from Closed Session and reconvened to Open Session at 7:22 p.m.

REPORT FROM CLOSED SESSION (*As Necessary*)

The Board took no reportable action in Closed Session.

VII. ADJOURNMENT OF MEETING

There being no further business to discuss, President Davies adjourned the Regular Meeting of the Board of Directors of the Fallbrook Public Utility District at 7:23 p.m.

President, Board of Directors

ATTEST:

Secretary, Board of Directors

Minutes of the
Special Board Meeting
for September 7, 2016

**FALLBROOK PUBLIC UTILITY DISTRICT
BOARD OF DIRECTORS
SPECIAL BOARD MEETING**

MINUTES

WEDNESDAY, SEPTEMBER 7, 2016
2:00 P.M.

FALLBROOK PUBLIC UTILITY DISTRICT
990 E. MISSION RD., FALLBROOK, CA 92028
PHONE: (760) 728-1125

I. PRELIMINARY FUNCTIONS

CALL TO ORDER / ROLL CALL / ESTABLISH A QUORUM

President Davies called the Special Meeting of the Board of Directors of the Fallbrook Public Utility District to order at 2:01 p.m. A quorum was established with attendance as follows:

Board of Directors

Present: Bob Anderson, Member
Milt Davies, Member / President
Al Gebhart, Member
Don McDougal, Member
Charley Wolk, Member / Vice-President

Absent: None

District Staff

Present: Robert James, General Legal Counsel
Brian J. Brady, General Manager
Mary Lou Boultinghouse, Secretary (*left at 2:05 p.m.*)

Also present were others, including, but not limited to: There were no others present.

PLEDGE OF ALLEGIANCE

President Davies led the Pledge of Allegiance.

ADDITIONS TO AGENDA PER GC § 54954.2(b)

There were no additions to the agenda.

APPROVAL OF AGENDA

MOTION: Director Gebhart moved to approve the agenda as presented; Director McDougal seconded. Motion carried; VOTE:

AYES: Directors Anderson, Davies, Gebhart, McDougal, and Wolk
NOES: None
ABSTAIN: None
ABSENT: None

PUBLIC COMMENT

Members of the public are invited to address the Board of Directors on any item that is within the subject matter jurisdiction of the legislative body. The Board President may limit comments to three (3) minutes.

There were no public comments.

ADJOURN TO CLOSED SESSION

The Board adjourned to Closed Session at 2:05 p.m.

II. CLOSED SESSION

1. PUBLIC EMPLOYEE PERFORMANCE EVALUATION PER GC § 54957(B)(1)

Title: General Manager

RECONVENE TO OPEN SESSION

The Board returned from Closed Session and reconvened to Open Session at 2:40 p.m.

REPORT FROM CLOSED SESSION (As Necessary)

There was no reportable action taken in Closed Session.

III. ADJOURNMENT OF MEETING

There being no further business to discuss, President Davies adjourned the Special Meeting of the Board of Directors of the Fallbrook Public Utility District at 2:41 p.m.

President, Board of Directors

ATTEST:

Secretary, Board of Directors

M E M O

TO: Board of Directors
FROM: Mary Lou Boultinghouse, Secretary *mlb*
DATE: September 26, 2016
SUBJECT: Consider Advance Approval to Attend Meetings

Purpose

To authorize Directors' attendance, travel, and expenses to an event requiring advance approval by the Board of Directors.

Summary

Compensation for attendance and reimbursement for expenses at other occasions, events, or meetings related to District business, other than those listed in Article 2.12 of the Administrative Code, shall be determined by the Board of Directors in advance.

In addition, Article 12.1.3(1) provides that travel associated with the attendance of meetings or functions for Directors shall be approved in advance by the Board of Directors at a regular meeting with the item agendaized under "Advance Approval to Attend Meetings."

The following events require advance approval:

1. *Ensuring the Financial Health of Your Utility after California's Historic Drought*

- **When:** Thursday, October 6, 2016
- **Where:** Vallecitos Water District
201 Vallecitos de Oro, San Marcos, California
Price: \$40 for early-bird; \$50 after September 23, 2016

2. *Advanced Water Purification: The Road to Resilience*

- When:** Friday, October 28, 2016
Where: Vista Irrigation District, Vista, California
Price: \$62 (*includes tour of Carlsbad Desalination Plant*)

3. *How to Be an Effective New Board Member*

- **When:** Tuesday, December 6, 2016
- **Where:** Fallbrook Public Utility District
990 East Mission Road, Fallbrook, California
Price: \$100

Recommended Action

That the Board authorize Directors' attendance to *Ensuring the Financial Health of Your Utility After California's Historic Drought, How to Be an Effective New Board Member, and Advanced Water Purification: The Road to Resilience*.

ENSURING THE FINANCIAL HEALTH OF YOUR UTILITY AFTER CALIFORNIA'S HISTORIC DROUGHT

HOSTED BY
RAFTELIS FINANCIAL CONSULTANTS, INC.

As agencies recover from a period of reduced water sales revenues as a result of California's historic drought, several questions remain as to what to expect going forward.

RFC will be offering three workshops to help California utilities learn how to develop sustainable financial plans and prepare for California's next drought. Come learn from industry experts:

- » How to generate sufficient revenue with uncertain sales projections
- » A step-by-step approach to developing defensible, cost of service-based rates
- » How to be financially prepared for California's next drought



The sessions will be led by **Sanjay Gaur, Vice President at Raftelis Financial Consultants, Inc.**, one of the nation's largest utility financial and management consulting practices. Sanjay has 18+ years of water and wastewater rate-setting experience with agencies throughout California.



The San Diego and Oakland sessions will feature **Kelly Salt of Best, Best & Krieger (BB&K)**. One of California's most well-known experts on ratemaking law, Kelly works with public agencies on bond and municipal finance matters, rate setting and compliance with Propositions 218 and 26, and drought management and water conservation programs. The Los Angeles session will feature another member of BB&K's legal staff, knowledgeable on the subject of Propositions 218 and 26 compliance.

REGISTRATION: \$40 early-bird, \$50 general admission (early-bird ends September 23 for Los Angeles and San Diego, and October 28 for Oakland).

Attendees can choose to attend one of three sessions being offered. Please select the appropriate location/date below to register.

LOS ANGELES

Date: Wednesday, October 5

Time: 9:30 am to 3:30 pm

Location: Union Bank Plaza, 445 S. Figueroa Street, Los Angeles, CA 90071

Room: Coral Tree Pavilion

Register: <http://bit.ly/2bWaijP>

This session is limited to the first 25 registrants. Ticket sales will end Monday, October 3. Parking is available for \$9 at the World Trade Center parking garage located at 350 S. Figueroa Street. The building is also located within walking distance to the Pershing Square and 7th Street Metro stations.

SAN DIEGO AREA

Date: Thursday, October 6

Time: 9:30 am to 3:30 pm

Location: Vallecitos Water District, 201 Vallecitos de Oro, San Marcos, CA 92069

Room: Training Room

Register: <http://bit.ly/2c7qRXh>

This session is limited to the first 30 registrants. Ticket sales will end Monday, October 3.

OAKLAND

Date: Thursday, January 12

Time: 9:30 am to 3:30 pm

Location: East Bay Municipal Utility District, 375 11th Street, Oakland, CA 94607

Room: Large Training Room

Register: <http://bit.ly/2c7qZX3>

This session is limited to the first 35 registrants. Ticket sales will end Thursday, January 5.



RAFTELIS
FINANCIAL CONSULTANTS, INC.

QUESTIONS
Contact Akbar Alikhan at Raftelis Financial Consultants
at aalikhana@raftelis.com or by phone at 213.262.9311.

026



**California Special
Districts Association**
Districts Stronger Together

CSDA Workshop!

How to Be an Effective New Board Member

DECEMBER 6, 2016 – SAN DIEGO AREA

Earn SDRMA Credit Incentive Points

This course qualifies for six hours of governance training toward the Special District Leadership Foundation District of Distinction Accreditation. It also meets the AB1234 Ethics Training requirement. Leading a special district as an experienced or newly elected/appointed official is both exciting and challenging. You have accepted the responsibility of representing your constituents and customers in the most effective and professional manner possible. This will demand that you acquire or maintain the necessary skills to govern a special district. The How to Be an Effective New Board Member training has been designed specifically for special district board members and board chairs/presidents in order to provide the tools, background and overall knowledge necessary to help navigate the first year of governing a special district.

COSTS

SDRMA member	FREE
CSDA member	\$100
Non-member	\$150

AGENDA

8:30 – 9:00 a.m.
9:00 a.m. – 4:00 p.m.

Registration
Workshop
*Lunch sponsored by Special District Risk
Management Authority (12:00 - 1:00pm)*

Mail – CSDA, 1112 I Street, Suite 200, Sacramento, CA 95814 or **Fax** – 916.520.2465 • **Questions?** Call – 877.924.2732

How to Be an Effective New Board Member

DECEMBER 6, 2016 – SAN DIEGO AREA
Fallbrook Public Utility District, 990 E. Mission Road, Fallbrook, CA 92088

NAME/TITLE:		
DISTRICT:		
ADDRESS:		
CITY:	STATE:	ZIP:
PHONE:	FAX:	
EMAIL:		
PAYMENT		
<input type="checkbox"/> CHECK <input type="checkbox"/> VISA <input type="checkbox"/> MASTERCARD <input type="checkbox"/> DISCOVER <input type="checkbox"/> AMERICAN EXPRESS		
ACCT. NAME:	ACCT. NUMBER:	
EXPIRATION DATE:	AUTHORIZED SIGNATURE:	
Cancellations must be made IN WRITING and received via fax or mail no later than three days prior to the seminar. All cancellations made within the specified time will be refunded less a \$25 processing fee.		



[Login](#) | [Text Only Version](#)

Enter keywords here

- [Home](#)
- [About ACWA](#)
- [Member Services](#)
- [News](#)
- [Advocacy](#)
- [Water Information](#)
- [ACWA Spotlight](#)
- [Contact Us](#)
- [My ACWA](#)

Share / Save

About ACWA

- ▶ [ACWA Board of Directors](#)
- ▶ [ACWA Leadership](#)
- ▶ [ACWA Committees](#)
- ▶ [ACWA Regions](#)
- ▶ [Calendar](#)
- ▶ [FAQ](#)
- ▶ [How to Join](#)
- ▶ [Member and Staff Directory](#)

[Home](#)

ACWA Region 10 Program and Tour - October 28

in [Region 10](#) [Regional Event](#)

Fri, 10/28/2016

Location: Vista, CA

ACWA Region 10 Presents:

Advanced Water Purification: The Road to Resilience

Friday, October 28, 2016

8:30 a.m. to 12:30 p.m.

Vista Irrigation District

1391 Engineer Street

Vista, CA 92081

ACWA Region 10 invites you to a one-day program to discuss and hear from experts on advanced water purification and water supply reliability. The program will feature two panel discussions on indirect and direct potable reuse projects as well as an interactive town hall forum. The program will also include an ACWA policy update. An optional tour of the Carlsbad Desalination Plant will follow the program at 1pm. [Preliminary Agenda](#) [HERE](#).

Registration is available until October 21:

<https://portal.acwa.com>

ACWA Member Pre-Registration Fee: \$50

Non-Member Pre-Registration Fee: \$75

Tour of Carlsbad Desalination Plant Fee: \$12

A \$5 fee will be added to onsite registrations. Onsite registrations will be accommodated as space permits.

Registration fee includes parking, continental breakfast, lunch, refreshments and materials.

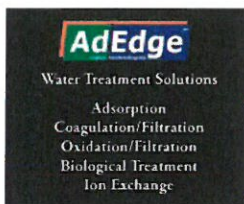
Tour participants are required to sign an [ACWA Voluntary Release and Waiver](#)

Online registration deadline is October 21, 2016 or until space is full. Onsite registrations will be accommodated as space permits. Cancellations must be received in writing by 5 p.m. on October 21, 2016, in order to cancel a registration and receive reimbursement. Substitutions can be made by requesting it in writing by October 21, 2016. After that date, substitutions can be handled onsite at the event. Event details are subject to change and registrants will be notified by e-mail if changes occur.

Questions? Contact Regional Affairs Representative Brandon Ida at brandoni@acwa.com or Regional & Member Services Specialist II Ana Torres at anat@acwa.com or call (916) 441-4545.

Attachment	Size
Region 10 Preliminary Agenda	212.34 KB

[Calendar](#)



Relevant Content

You might also be interested in these...

- [ACWA Region 10 Spring Conference Membership Meeting](#)
- [ACWA Region 10 Board Meeting 2.2.2016](#)

- ACWA Region 10 Fall 2015
Conference Membership Meeting,
Indian Wells
- ACWA Region 10 Program, August
14 - Carlsbad, CA
- ACWA Region 10 Program, August
14 - Carlsbad, CA
- ACWA Region 10 Board Meeting -
April 1, 2015
- ACWA Region 10 Fall Conference
2015 Membership Meeting - San
Diego, CA
- ACWA Region 10 San Diego County
Call for Candidates
- Regions 8, 9 and 10 Address "Local
Paths to Reliability"
- ACWA Regions 8, 9, & 10 Hosted
Program & Tour - October 26 & 27
- Del Mar, CA

ACWA eNews

Stay informed with our ACWA
Enews!

Email: *

- Subscribe
 Unsubscribe

Save



About ACWA

ACWA Board of Directors
ACWA Leadership
ACWA Committees
ACWA Regions
Calendar
FAQ
How to Join
Member and Staff
Directory

Member Services

Benefits & Insurance
ACWA Conferences and
Events
Preferred Providers
Products & Publications
Awards
Scholarships
Classified Ads
Translated Tier 1 Notices

News

Water News
News Releases
ACWA eNews
Digital ACWA News
Voices on Water
Photo Gallery
Member-Sourced News

Advocacy

Current Issues
Federal Relations
ACWA Policy Principles
ACWA's Outreach
Program

Water Information

Climate Change
Conservation
The Delta
Energy
Groundwater
Water Quality
Water Recycling
Water Supply Challenges
Find your Local Water
Agency
Web Resources

ACWA Spotlight

Water for Tomorrow
Save Our Water
California's Water
No Time to Waste
Value of Water

Contact Us

Map and Directions
Staff Directory
Email Us

M E M O

TO: Board of Directors
FROM: Mary Lou Boultinghouse, Secretary *mlb*
DATE: September 26, 2016
SUBJECT: Consider Advance Approval to Attend Meetings

Purpose

To authorize Directors' attendance, travel, and expenses to an event requiring advance approval by the Board of Directors.

Summary

Compensation for attendance and reimbursement for expenses at other occasions, events, or meetings related to District business, other than those listed in Article 2.12 of the Administrative Code, shall be determined by the Board of Directors in advance.

In addition, Article 12.1.3(1) provides that travel associated with the attendance of meetings or functions for Directors shall be approved in advance by the Board of Directors at a regular meeting with the item agendaized under "Advance Approval to Attend Meetings."

The following events require advance approval:

1. *Ensuring the Financial Health of Your Utility after California's Historic Drought*

- **When:** Thursday, October 6, 2016
- **Where:** Vallecitos Water District
201 Vallecitos de Oro, San Marcos, California
Price: \$40 for early-bird; \$50 after September 23, 2016

2. *Advanced Water Purification: The Road to Resilience*

- When:** Friday, October 28, 2016
Where: Vista Irrigation District, Vista, California
Price: \$62 (*includes tour of Carlsbad Desalination Plant*)

3. *How to Be an Effective New Board Member*

- **When:** Tuesday, December 6, 2016
- **Where:** Fallbrook Public Utility District
990 East Mission Road, Fallbrook, California
Price: \$100

Recommended Action

That the Board authorize Directors' attendance to *Ensuring the Financial Health of Your Utility After California's Historic Drought, How to Be an Effective New Board Member, and Advanced Water Purification: The Road to Resilience*.

ENSURING THE FINANCIAL HEALTH OF YOUR UTILITY AFTER CALIFORNIA'S HISTORIC DROUGHT

HOSTED BY
RAFTELIS FINANCIAL CONSULTANTS, INC.

As agencies recover from a period of reduced water sales revenues as a result of California's historic drought, several questions remain as to what to expect going forward.

RFC will be offering three workshops to help California utilities learn how to develop sustainable financial plans and prepare for California's next drought. Come learn from industry experts:

- » How to generate sufficient revenue with uncertain sales projections
- » A step-by-step approach to developing defensible, cost of service-based rates
- » How to be financially prepared for California's next drought



The sessions will be led by **Sanjay Gaur, Vice President at Raftelis Financial Consultants, Inc.**, one of the nation's largest utility financial and management consulting practices. Sanjay has 18+ years of water and wastewater rate-setting experience with agencies throughout California.



The San Diego and Oakland sessions will feature **Kelly Salt of Best, Best & Krieger (BB&K)**. One of California's most well-known experts on ratemaking law, Kelly works with public agencies on bond and municipal finance matters, rate setting and compliance with Propositions 218 and 26, and drought management and water conservation programs. The Los Angeles session will feature another member of BB&K's legal staff, knowledgeable on the subject of Propositions 218 and 26 compliance.

REGISTRATION: \$40 early-bird, \$50 general admission (early-bird ends September 23 for Los Angeles and San Diego, and October 28 for Oakland).

Attendees can choose to attend one of three sessions being offered. Please select the appropriate location/date below to register.

LOS ANGELES

Date: Wednesday, October 5

Time: 9:30 am to 3:30 pm

Location: Union Bank Plaza, 445 S. Figueroa Street, Los Angeles, CA 90071

Room: Coral Tree Pavilion

Register: <http://bit.ly/2bWaijP>

This session is limited to the first 25 registrants. Ticket sales will end Monday, October 3. Parking is available for \$9 at the World Trade Center parking garage located at 350 S. Figueroa Street. The building is also located within walking distance to the Pershing Square and 7th Street Metro stations.

SAN DIEGO AREA

Date: Thursday, October 6

Time: 9:30 am to 3:30 pm

Location: Vallecitos Water District, 201 Vallecitos de Oro, San Marcos, CA 92069

Room: Training Room

Register: <http://bit.ly/2c7qRXh>

This session is limited to the first 30 registrants. Ticket sales will end Monday, October 3.

OAKLAND

Date: Thursday, January 12

Time: 9:30 am to 3:30 pm

Location: East Bay Municipal Utility District, 375 11th Street, Oakland, CA 94607

Room: Large Training Room

Register: <http://bit.ly/2c7qZX3>

This session is limited to the first 35 registrants. Ticket sales will end Thursday, January 5.



RAFTELIS
FINANCIAL CONSULTANTS, INC.

QUESTIONS
Contact Akbar Alikhan at Raftelis Financial Consultants
at aalikh@raftelis.com or by phone at 213.262.9311.

032



**California Special
Districts Association**
Districts Stronger Together

CSDA Workshop!

How to Be an Effective New Board Member

DECEMBER 6, 2016 – SAN DIEGO AREA

Earn SDRMA Credit Incentive Points

This course qualifies for six hours of governance training toward the Special District Leadership Foundation District of Distinction Accreditation. It also meets the AB1234 Ethics Training requirement. Leading a special district as an experienced or newly elected/appointed official is both exciting and challenging. You have accepted the responsibility of representing your constituents and customers in the most effective and professional manner possible. This will demand that you acquire or maintain the necessary skills to govern a special district. The How to Be an Effective New Board Member training has been designed specifically for special district board members and board chairs/presidents in order to provide the tools, background and overall knowledge necessary to help navigate the first year of governing a special district.

COSTS

SDRMA member	FREE
CSDA member	\$100
Non-member	\$150

AGENDA

8:30 – 9:00 a.m.
9:00 a.m. – 4:00 p.m.

Registration
Workshop

*Lunch sponsored by Special District Risk
Management Authority (12:00 - 1:00pm)*

Mail – CSDA, 1112 I Street, Suite 200, Sacramento, CA 95814 or **Fax** – 916.520.2465 • **Questions?** Call – 877.924.2732

How to Be an Effective New Board Member

DECEMBER 6, 2016 – SAN DIEGO AREA
Fallbrook Public Utility District, 990 E. Mission Road, Fallbrook, CA 92088

NAME/TITLE:		
DISTRICT:		
ADDRESS:		
CITY:	STATE:	ZIP:
PHONE:	FAX:	
EMAIL:		
PAYMENT		
<input type="checkbox"/> CHECK <input type="checkbox"/> VISA <input type="checkbox"/> MASTERCARD <input type="checkbox"/> DISCOVER <input type="checkbox"/> AMERICAN EXPRESS		
ACCT. NAME:	ACCT. NUMBER:	
EXPIRATION DATE:	AUTHORIZED SIGNATURE:	
Cancellations must be made IN WRITING and received via fax or mail no later than three days prior to the seminar. All cancellations made within the specified time will be refunded less a \$25 processing fee.		



[Login](#) | [Text Only Version](#)

Enter keywords here

- [Home](#)
 - [About ACWA](#)
 - [Member Services](#)
 - [News](#)
 - [Advocacy](#)
 - [Water Information](#)
 - [ACWA Spotlight](#)
 - [Contact Us](#)
 - [My ACWA](#)
- [ACWA Board of Directors](#)
[ACWA Leadership](#)
[ACWA Committees](#)
[ACWA Regions](#)
[Calendar](#)
[FAQ](#)
[How to Join](#)
[Member and Staff Directory](#)

Share / Save

About ACWA

- ▶ [ACWA Board of Directors](#)
- ▶ [ACWA Leadership](#)
- ▶ [ACWA Committees](#)
- ▶ [ACWA Regions](#)
- ▶ [Calendar](#)
- ▶ [FAQ](#)
- ▶ [How to Join](#)
- ▶ [Member and Staff Directory](#)

[Home](#)

ACWA Region 10 Program and Tour - October 28

in [Region 10](#) [Regional Event](#)

Fri, 10/28/2016

Location: Vista, CA

ACWA Region 10 Presents:

Advanced Water Purification: The Road to Resilience

Friday, October 28, 2016

8:30 a.m. to 12:30 p.m.

Vista Irrigation District

1391 Engineer Street

Vista, CA 92081

ACWA Region 10 invites you to a one-day program to discuss and hear from experts on advanced water purification and water supply reliability. The program will feature two panel discussions on indirect and direct potable reuse projects as well as an interactive town hall forum. The program will also include an ACWA policy update. An optional tour of the Carlsbad Desalination Plant will follow the program at 1pm. [Preliminary Agenda](#) [HERE](#).

Registration is available until October 21:

<https://portal.acwa.com>

ACWA Member Pre-Registration Fee: \$50

Non-Member Pre-Registration Fee: \$75

Tour of Carlsbad Desalination Plant Fee: \$12

A \$5 fee will be added to onsite registrations. Onsite registrations will be accommodated as space permits.

Registration fee includes parking, continental breakfast, lunch, refreshments and materials.

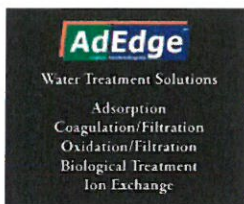
Tour participants are required to sign an [ACWA Voluntary Release and Waiver](#)

Online registration deadline is October 21, 2016 or until space is full. Onsite registrations will be accommodated as space permits. Cancellations must be received in writing by 5 p.m. on October 21, 2016, in order to cancel a registration and receive reimbursement. Substitutions can be made by requesting it in writing by October 21, 2016. After that date, substitutions can be handled onsite at the event. Event details are subject to change and registrants will be notified by e-mail if changes occur.

Questions? Contact Regional Affairs Representative Brandon Ida at brandoni@acwa.com or Regional & Member Services Specialist II Ana Torres at anat@acwa.com or call (916) 441-4545.

Attachment	Size
Region 10 Preliminary Agenda	212.34 KB

[Calendar](#)



Relevant Content

You might also be interested in these...

- [ACWA Region 10 Spring Conference Membership Meeting](#)
- [ACWA Region 10 Board Meeting 2.2.2016](#)

- ACWA Region 10 Fall 2015
Conference Membership Meeting,
Indian Wells
- ACWA Region 10 Program, August
14 - Carlsbad, CA
- ACWA Region 10 Program, August
14 - Carlsbad, CA
- ACWA Region 10 Board Meeting -
April 1, 2015
- ACWA Region 10 Fall Conference
2015 Membership Meeting - San
Diego, CA
- ACWA Region 10 San Diego County
Call for Candidates
- Regions 8, 9 and 10 Address "Local
Paths to Reliability"
- ACWA Regions 8, 9, & 10 Hosted
Program & Tour - October 26 & 27
- Del Mar, CA

ACWA eNews

Stay informed with our ACWA
Enews!

Email: *

- Subscribe
 Unsubscribe

Save



About ACWA

ACWA Board of Directors
ACWA Leadership
ACWA Committees
ACWA Regions
Calendar
FAQ
How to Join
Member and Staff
Directory

Member Services

Benefits & Insurance
ACWA Conferences and
Events
Preferred Providers
Products & Publications
Awards
Scholarships
Classified Ads
Translated Tier 1 Notices

News

Water News
News Releases
ACWA eNews
Digital ACWA News
Voices on Water
Photo Gallery
Member-Sourced News

Advocacy

Current Issues
Federal Relations
ACWA Policy Principles
ACWA's Outreach
Program

Water Information

Climate Change
Conservation
The Delta
Energy
Groundwater
Water Quality
Water Recycling
Water Supply Challenges
Find your Local Water
Agency
Web Resources

ACWA Spotlight

Water for Tomorrow
Save Our Water
California's Water
No Time to Waste
Value of Water

Contact Us

Map and Directions
Staff Directory
Email Us

This page intentionally left blank.

This page intentionally left blank.

M E M O

TO: Board of Directors
FROM: Mick Cothran, Drought Coordinator *mc*
DATE: 9/26/2016
SUBJECT: Customer to address board regarding water bill

Purpose

FPUD customer Pat Bennie has requested to address the board regarding the water rate structure.

Summary

Mrs. Bennie feels that inclining block rates are causing undue financial hardship to homeowners like herself by making landscaping and domestic fruit trees excessively expensive to irrigate. The customer had Mission Resource perform a landscape survey several years ago. Recently, there have been several issues with irrigation valves on her property that led to excessive water use and two elevated water bills.

The Drought Coordinator met with Mrs. Bennie after her initial inquiry. The customer was made aware that in some circumstances special review by the FPUD financial department may warrant a one-time adjustment to a bill as a result of an unanticipated equipment failure.

Recommendation

Review of the customer bill and provide a one-time adjustment of \$82.81 as a result of the unanticipated equipment failure in accordance with district policy.

mc

INQUIRE		WATER USAGE (x 1000 gallons)				
Meter # 2589		Service address [REDACTED]				
FISCAL YEAR END	2017	2016	2015	2014	2013	
July	112	66	83	69	73	
August	117	60	102	78	141	
September	0	79	75	68	88	
October	0	47	90	75	103	
November	0	53	71	56	90	
December	0	52	43	17	37	
January	0	4	3	16	3	
February	0	10	11	59	12	
March	0	34	29	48	9	
April	0	32	63	21	43	
May	0	42	51	74	81	
June	0	69	39	86	75	
TOTALS	229	548	660	667	755	


SECOND SCREEN	THIRD SCREEN	ACCOUNT DETAIL	MORE USG HISTORY	COMMENTS	PRINT	MORE OPTIONS	NEXT ACCOUNT
---------------	--------------	----------------	------------------	----------	-------	--------------	--------------

Rice Fire Relief Calculator

	Meter #	5548					
	Prior usage	138					
	Current usage	229					
If under, no discount	Over/(Under)	91	0	0	91	0	0
			T1	T2	T3	T4	T5
	Rate Charged	5.13	4.62	5.13	5.65	5.65	5.65
	Discount to wholesale	0.86	-0.12	0.39	0.91	0.91	0.91
	Credit to Customer	82.81	-	0	82.81	-	-

2 Month credit

M E M O

TO: Board of Directors
FROM: Larry Ragsdale, Safety & Risk Administrator 
DATE: September 26, 2016
SUBJECT: Consider Claim for Damages

Purpose

To review the Claim for Damages filed by Candice Gunther and received by the District on August 15, 2016.

Summary

The Customer is alleging that damage to her wooden floor was due to water overflow from the dishwasher after the water was shut off as more fully described in the attached.

On July 18, 2016, District staff replaced the existing meter with a new meter at the customer's home as part of the District's Meter Exchange Program. At that time, all meters in that service area were being replaced with new meters.

Prior to making the replacement, staff observed the angle stop was in the off position on the existing meter and a meter wrench was in the meter box. In addition, staff knocked on the door and rang the bell several times to inform the homeowner they would be replacing their meter, however, no one answered. Staff exchanged meters and left the new meter in the off position, which was the position they encountered on the meter that had been replaced.

Recommended Action

Staff recommends denying the Claim and forwarding to the ACWA/JPIA for resolution.

GENERAL INCIDENT INFORMATION

Property Incident Other

Event ID: 16-305 Name of Party: Candice Gunther
 DOI: 7/18/2016 Contact # [REDACTED]
 Event Type: Property Parties Address: [REDACTED] Fallbrook, CA 92028
 Company: Property Claim **Timeliness of Claim:** 0 Year(s) 0 Month(s) 28 Days

Type of Incident: Water Damage		Nature of Incident: Meter change out
Incident Description: Claimant is stating that damage to wooden floor was due to water overflow from dishwasher after water was shut off		
Location of Incident: [REDACTED]		
Date Claim Received	8/15/2016	
Status of Claim	Open	
Incident Reported to JPIA		
Date Closed		
Settlement		
Release Signed		

DATE	ISSUE/REMARKS	COMMENTS
8/23/16	Called JPIA	Claimant called for status & process involved on customer side & that generally not covered. Also indicated that water was off. * Claimant indicated water was on. Requested a State for the claim
8/26/16		Received Statement from Claimant

Claimants indicate the floor was flooded by the dishwasher when the water was shut off. Claimant also indicates they did not receive notice that the water would be shut off.

Claimant speculates that water was fed continuously into the dishwasher because the hot water heater located on the opposite wall is elevated higher than the dishwasher. Claimant states that the dishwasher valve activates only when there is high pressure.

It is possible that a low pressure situation occurred when the water was shut off causing the armature needle to not seat properly and causing the water to seep in.

Claimant claim and workers' statements are contradictory.

Review of Service Order 162668:

On 7/18/2016 meter was exchanged.

Work performed was in compliance of the 2016/2017 Meter Exchange Program in which all meters in that service area were to be changed/upgraded.

Utility Workers' Statement:

Mr. Jose Mendoza's statement indicated that the meter was turned off previous to work being performed and that within the meter box was a meter wrench. This statement was supported by Mr. Josh Hargrove who was working with Mr. Mendoza. Mr. Mendoza also indicated that upon completion of the task he left the meter in the same off condition as he found it.

Mr. Josh Hargrove's statement indicated that as he was setting up the site for the meter exchange he noticed the wrench and also that the angle stop was in the off position. He stated that he knocked on the door to inform the homeowner however no one answered. Additionally, Mr. Hargrove stated that he told Mr. Mendoza to exchange the meter and leave it in the off position.

Recommendation: Damage occurred on the customer's side of the meter and in accordance with the District Admin Code the claim should be denied and sent to JPIA.

Admin Code:

Sec. 19.16 Meter Area Clean and Consumer Line Free from Leaks

Every consumer of water must keep his service pipes, valves, fixtures, and all other apparatus beyond that belonging to and serviced by the District in good repair and free from leakage at his own expense and he will be responsible for all damages which may result from failure to comply with this rule.

Sec. 19.19 Temporary Discontinuance of Service for Repairs, etc.

The District reserves the right at any time to discontinue the service of water from its mains to water consumers for the purpose of making repairs or extensions to all parts of the system under the operation and control of the District or for any other purpose which may be found necessary by the District in order to properly maintain its system. In such case, the District will, if practicable, give notice to the consumer of such interruption in service.

Sec. 19.13 Customer Valve

There shall be a stopcock or wheel valve in every attachment between the meter and the main next to the meter which said stopcock or wheel valve and the meter and other devices and fittings, including the meter box supplied by the District, shall be for the exclusive use and under the control of the District.

There shall be a stopcock or wheel valve in each service connection located on the consumer's side of the meter, at a point to be designated by the District, which stopcock or wheel valve shall be for the use of the consumer and shall be referred to as the "customer valve."

The District has responsibility to repair or replace facilities up to and including the customer shut off valve. Repair and maintenance of facilities beyond the customer valve is the responsibility of the customer.

The District is not responsible for water loss due to leaks or other problems on the property side of the customer valve.

If there is an emergency, the District, at its discretion, can make temporary repairs and charge the customer a minimum of \$50. However, the District is under no obligation to repair leaks beyond the customer valve and assumes no long term liability for those repairs. It is recommended that the customer obtain the services of a licensed plumber to make permanent repairs.

Claim Form

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

NAME OF DISTRICT:

1

Claimant name, address (mailing address if different), phone number, social security number, and date of birth.

Name: Candice Gunther

Phone Number: [REDACTED]

Address(es): [REDACTED]

Social Security: [REDACTED] Date of Birth: [REDACTED]

2

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

Name: Michael Gunther

Address: [REDACTED] Fallbrook, CA 92028

Phone Number: [REDACTED]

3

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

Date: 7-18-16 Time: 9:00 P.M. Place: Kitchen

Tell What Happened (give complete information): We came home to our dishwasher flooding the kitchen floor. After we cleaned up what we could we noticed ^{eventually} the water was shut off @ the main. We were baffled how it could leak w/ the main off. Every time we stepped on the wood water would seep out of the floor in multiple places. We were never informed that our water would be turned off. Either pressure & the hot water heater which is elevated and higher than the dishwasher (on other side of wall in garage) it kept feeding into the dishwasher. The dishwasher valve only activates ^{there is} when high pressure.

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

4

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

Water still may be in a pocket under the wood floor & cabinet. Only way to know is if we pull up the glued floors. The floors were put in on top ^{under} of the cabinet. Half the kitchen floor is now circled and the joints are lifted up. There is a gap now where the cabinet meets the floor. I am concerned there might be mold forming where the pocket is under the floor. The floors run from kitchen through the hallway.

5

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

whoever came to replace our meter that day never turned the water back on. Thus being off for that long caused the leak. If we had known it would be turned off we could have

6

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

Attached is an estimate from Serpro. Serpro informed me if I go through USAA it might cost more & will take longer to fix. USAA uses Serpro for their claims. I would rather not if possible. They came out on the 3rd estimate on the 11th

Date: 8/15/16 Time: 2:00 pm Signature: [Signature]

ANSWER ALL QUESTIONS. OMITTING INFORMATION COULD MAKE YOUR CLAIM LEGALLY INSUFFICIENT!

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message

Hello Larry,

As per our conversation, you stated that the main was shut off when the fpu workers arrived. They had seen our tool laying near the water meter. I can say that that day I was home with my children and I would not be without water. I also do not even know how to turn the main off on the street. I had left to go to work and meet my husband at his work in Escondido that day so he could watch the kids. When we returned that evening he was puzzled that it was off. My husband was turning the water off briefly that week to fix a leaky valve in the back yard. That is why the tool was there. He didn't notice the new meter until the next evening after work when he went to work on the leaky valve. We also did not have a notice of the meter being changed and the water being shut off. We have a friend who changes meters out as a private contractor and he did tell us he turns the main off and gives notice to the homeowners two weeks prior and door posts 24 hour minimum. The late sending of this claim is due to the fact that we thought our water being turned off was a joke from a neighbor. They all said they did not do this. We finally heard from one neighbor that he saw fpu on our street changing the meters that day. Maybe with two people servicing the meter they could have thought the other had turned it back on. Or thought it was off since they saw the tool laying there. I can also say that our water heater is pretty new, around three years old maybe less. Our dishwasher works fine and our water pressure and valves are all in working order. I would be fine with a neutral party coming to test everything on our end. We tested the dishwasher when he was working on the sprinkler valve in the back yard. We noticed the dishwasher having water leak in. We have never seen this because we do not turn our street main off for long periods of time. The evening this happened my husband did have to manually drain the dishwasher. I am not worried about the buckling floors but I am extremely nervous of mold growing under the floors. Servpro said we should have this fixed with in 30 days to avoid mold and health issues. With the floors buckling I am nervous of the mold getting out from under them every time we step on the floor and my kids and dogs crawling on them. We also cannot afford for this project at the moment as well as any increase to our insurance. We had a small auto claim three weeks ago cannot afford one penny from our budget at the moment on incidentals. I am also taking care of my father in laws affairs at the moment and this is not something extra we can take on at the moment. If I could afford to have Servpro come out and rip out the floors so they can service the water or mold I would. Unfortunately, we do not have the money for just that portion of the repair. I am hoping that there can be a timely decision made so we can have the mold issue addressed.

Thank you for your honesty and information regarding my claim,
Candice
R. Gunther

Jose Mendloza 474

8-17-16

On 7-18-16 I was assigned to exchange meters Job #3001. When I arrived at address [REDACTED] to exchange meter water was already off. Customer had his own angle stop wrench. I exchanged meter and left water off just like I found it.

JMeyn #474

Josh Hargrove also witnessed this
Toos Lange 8/17/16

Witness Statement Form

Name: JOSHUA HARGROVE
Address: [REDACTED] FALLBROOK, CA 92028
Telephone #: [REDACTED]
Job Title: Utility Worker I
Name of Injured Worker(s): NA
Date of Accident: 7/18/2016 Time: unknown
Location of Accident: [REDACTED] Fallbrook, CA 92028
Your position at the time of the incident: Utility Worker I
Did you witness the incident occurring? Yes No

STATEMENT

Describe in detail any knowledge you have of the incident which occurred:

Jose Mendoza & I were exchanging meters on Buena Flores. I was going ahead and doing all the paperwork and setting new meters. When I came to this address I noticed a wrench for turning the A/S off. I noticed it was in the off position. I tried to get ahold of anybody that was home several times by knocking on door and ringing doorbell. Could not find anyone. When Jose got to that meter I told him to exchange and leave it off and make sure no water was going through meter.

The information I have provided in this report is true and correct to the best of my knowledge. The information report contains everything I can recall about this collision.

8/23/2016
Date

[Signature]
Witness Signature

Appendix C

Larry Ragsdale

From: Todd Lange
Sent: Wednesday, August 17, 2016 8:03 AM
To: Larry Ragsdale
Subject: Claim

Meter was exchanged during the "Fiscal Year 16-17 Meter Exchange Program"

All meters in that area are being exchanged/upgraded

TODD LANGE
FALLBROOK PUBLIC UTILITY DISTRICT
SYSTEM SERVICE/SHOP SUPERVISOR
[REDACTED]
760-728-1125 EXT 1129
TODD@FPUD.COM

FALLBROOK PUBLIC UTILITY DIST
SERVICE ORDER NUMBER 162668

ckw
JUL 20 2016

DATE: 03/03/16
TIME: 08:36:43
BY: JEPFE

REQUESTED BY: GUNTHER, MICHAEL & CANDICE
TELEPHONE: [REDACTED] (Home)
[REDACTED] (Cell)

ISSUED TO:
METER NUMBER: 4251
METER SIZE: 3/4 ✓
MANUFACTURER: HERS
DIAL S/N: 06737918
ERT ID #1: 57758866
GPS LAT: 33.346872
GPS LONG: -117.237873
MAP PAGE:
CYCLE: 03
USER/RATE: D/D
PSI: 0

ACCOUNT NUMBER: 56-1520006
ACCOUNT NAME: GUNTHER, MICHAEL & CANDICE
SERVICE ADDRESS: [REDACTED]
GATE CODE:
METER LOCATION:
PREVIOUS READ: 933 ON 02/23/16

SERVICE CODE: EXCH > EXCHANGE METER

DESCRIPTION:

SCHEDULED DATE: 03/03/16
TIME:

PRIORITY:

USAGE: 4 FEB'16 4 NOV'15 6 AUG'15 6 MAY'15 3 FEB'15
4 JAN'16 4 OCT'15 4 JUL'15 6 APR'15 4 JAN'15
3 DEC'15 6 SEP'15 6 JUN'15 5 MAR'15 3 DEC'14

[] READ/REREAD: 970

[] CLOSING READ: _____

WORK PERFORMED/NOTES:

CLOSING DATE: _____

Exchange meter + est

LEAK INDICATOR MOVING ? [] YES [] NO
METER MISREAD ? [] YES [] NO
LUSH LANDSCAPE OR PLANTED ACREAGE ? [] YES [] NO 11  79056756 **E**

DATE	EMPLOYEE	HOURS	EQUIPMENT	HOURS
7-16-16	<i>Jm</i>	.25	1013	.25

ACCURACY TEST: [] PASS [] FAIL
100 GAL @ _____ GPM = _____ GAL
10 GAL @ _____ GPM = _____ GAL
TOTAL = _____ GAL / 110 GAL = _____
PASSING RANGE IS 98.5% to 101.5%

EXCHANGED METER: *ckw*
MFG BDDP
DIAL S/N 15144917
ERT ID# 79056756
% OR 970
NR Q
JUL 20 2016



COMPLETED BY

7-16-16

DATE

APPROVED BY

DATE

SET # OF DIALS TO

10

JUL 19 2016

DEPT. 5

050

16 Comt
 17 Service Address:
 [REDACTED]
 House# [REDACTED] & [REDACTED] Dir City 34 Lock Date
 Street [REDACTED] FLBK 35 Pymt Plan N
 Zip 92028-4512 DP 12 CR C012 36 Effect Date 37 Review Date

Pymt 08/12/16
 MtrRead 07/22/16
 BillDue 08/20/16
 48 Hr 08/11/16
 LockOff
 Ageing 08/01/16
 Maint 07/20/16

-> SERVICE ORDERS BY ACCOUNT NUMBER <<

S/O #	DTE TAKE	DTE CLSD	CODE	DESCRIPTION	ENTER BY	MOD BY
73346	03/03/08	03/07/08	OPEN	OPENING SERVICE REQUESTED	CHERYL	
				OPENING READ: 19		
162668	03/03/16	07/18/16	EXCH	EXCHANGE METER	JEFFE	CAROLINE
				OP: CL: EXCHANGED METER & ERT		

SRVC ORDR DETAIL	DISP S/O BY MTR#	ADD STOP- START S/O	ADD MAINT S/O	ADD STOP S/O ONLY	ADD START S/O ONLY	MORE OPTIONS	NEXT ACCOUNT
---------------------	---------------------	------------------------	------------------	----------------------	-----------------------	-----------------	-----------------

Larry Ragsdale

From: Joshua Couveau
Sent: Monday, August 22, 2016 8:01 AM
To: Larry Ragsdale
Subject: [REDACTED]

There were no shutdowns performed in the area of address [REDACTED] or on the Rattlesnake Pressure Zone on the date of monday 7-18-16 for maintenance or emergency repairs.

Sent from my Verizon, Samsung Galaxy smartphone

Fallbrook Public Utility District

To: Larry Ragsdale

From: Jeff Evans

Date: 8/23/2016

Re: [REDACTED]

No afterhours water shutdowns were performed in the area of [REDACTED] on the date of 7-18-16.

Candice,

Attached is the estimate to remove and replace the floors while drying out the home. I would suggest acting on this in a timely manner. Antimicrobial spores (mold) form within 24-48 hours after water settles in so it may be a rough site once the floor is up. While the floor has most of the microbial spores trapped, please note that mold spores are more thin than pollen spores so time is of the essence.

Please let me know if you have any questions.

-Randy

Randy Vance |President |Customer Relations
SERVPRO of Fallbrook/S. Oceanside
www.servprofallbrooksouthoceanside.com
215 W ASH ST., FALLBROOK, CA 92028
o: 760.451.0600 | m: 760.828.6480 | f: 760.451.0200|

1468527016859_pgatoursponsorship.jpg

Client: candice gunther
Property: [REDACTED]
Falbrook, CA 92028

Operator: SERVPRO9

Type of Estimate: <NONE>
Date Entered: 8/10/2016 Date Assigned:
Date Est. Completed: 8/10/2016 Date Job Completed:

Price List: CASD8X_JUL16
Labor Efficiency: Restoration/Service/Remodel
Estimate: GUNTHER

GUNTHER

GUNTHER

DESCRIPTION	QTY	REMOVE	REPLACE	TAX	O&P	TOTAL
1. Neg. air fan/Air scrub.-Large (per 24 hr period)-No monit. this is 2 units for 5 days	10.00 DA	0.00	124.54	0.00	205.49	1,450.89
2. Dehumidifier (per 24 hour period) - Large - No monitoring this is two units for 5 days	10.00 EA	0.00	79.52	0.00	131.21	926.41
3. Content Manipulation charge - per hour	12.00 HR	0.00	47.37	0.00	93.79	662.23
5. Haul debris - per pickup truck load - including dump fees	2.00 EA	127.15	0.00	0.00	41.96	296.26
6. R&R Glass tile	99.00 SF	1.42	22.45	123.71	410.34	2,897.18
8. Containment Barrier/Airlock/Decon. Chamber	192.00 SF	0.00	0.80	1.08	25.52	180.20
10. Peel & seal zipper - heavy duty	1.00 EA	0.00	13.26	0.77	2.32	16.35
11. Containment Barrier - tension post - per day	30.00 DA	0.00	3.30	0.00	16.34	115.34
12. Bubble Wrap - Add-on cost for fragile items	350.00 LF	0.00	0.19	5.32	11.85	83.67
13. Evaluate pack & inventory misc items - per Med box	10.00 EA	0.00	11.69	2.30	19.67	138.87
15. Apply anti-microbial agent	300.00 SF	0.00	0.25	0.48	12.46	87.94
16. Air mover (per 24 hour period) - No monitoring	36.00 EA	0.00	26.63	0.00	158.18	1,116.86
17. Tear out non-salv solid/eng. wood flr & bag for disposal this is for removal of flooring in kitchen	99.00 SF	3.55	0.00	0.55	58.09	410.09
18. R&R Engineered wood flooring this is for removal and install of new floor in the entry way	43.24 SF	2.80	8.75	20.17	85.74	605.33
20. R&R Engineered wood flooring this is for removal of hallway floor and install of new floor	49.91 SF	2.80	8.75	23.28	98.96	698.70
21. R&R Engineered wood flooring this is removal and install in a small offset of the hallway	9.90 SF	2.80	8.75	4.62	19.62	138.59
22. R&R Engineered wood flooring this is removal and install for the hallway closet	7.50 SF	2.80	8.75	3.50	14.88	105.01
Total: GUNTHER				185.78	1,406.42	9,929.92
Labor Minimums Applied						
DESCRIPTION	QTY	REMOVE	REPLACE	TAX	O&P	TOTAL
14. Cleaning labor minimum	1.00 EA	0.00	5.86	0.00	0.97	6.83

CONTINUED - Labor Minimums Applied

DESCRIPTION	QTY	REMOVE	REPLACE	TAX	O&P	TOTAL
Totals: Labor Minimums Applied				0.00	0.97	6.83
Line Item Totals: GUNTHER				185.78	1,407.39	9,936.75

Coverage	Item Total	%	ACV Total	%
Dwelling	9,707.38	97.69%	9,707.38	97.69%
Other Structures	0.00	0.00%	0.00	0.00%
Contents	229.37	2.31%	229.37	2.31%
Total	9,936.75	100.00%	9,936.75	100.00%

Summary for Dwelling

Line Item Total	8,154.32
Material Sales Tax	178.16
Subtotal	8,332.48
Overhead	833.28
Profit	541.62
Replacement Cost Value	\$9,707.38
Net Claim	\$9,707.38

Summary for Contents

Line Item Total	189.26
Material Sales Tax	7.62
Subtotal	196.88
Overhead	19.69
Profit	12.80
Replacement Cost Value	\$229.37
Net Claim	\$229.37

Recap of Taxes, Overhead and Profit

	Overhead (10%)	Profit (6.5%)	Material Sales Tax (8%)	Storage Rental Tax (8%)
Line Items	852.97	554.42	185.78	0.00
Total	852.97	554.42	185.78	0.00

Recap by Room

Estimate: GUNTHER		8,337.72	99.93%
Coverage: Dwelling	97.80% =	8,154.32	
Coverage: Contents	2.20% =	183.40	
Labor Minimums Applied		5.86	0.07%
Coverage: Contents	100.00% =	5.86	
<hr/>		<hr/>	
Subtotal of Areas		8,343.58	100.00%
Coverage: Dwelling	97.73% =	8,154.32	
Coverage: Contents	2.27% =	189.26	
<hr/>		<hr/>	
Total		8,343.58	100.00%

Recap by Category

O&P Items			Total	%
CLEANING			5.86	0.06%
Coverage: Contents	@	100.00% =	5.86	
CONTENT MANIPULATION			568.44	5.72%
Coverage: Dwelling	@	100.00% =	568.44	
CONT: PACKING,HANDLNG,STORAGE			183.40	1.85%
Coverage: Contents	@	100.00% =	183.40	
GENERAL DEMOLITION			1,055.87	10.63%
Coverage: Dwelling	@	100.00% =	1,055.87	
FLOOR COVERING - WOOD			967.32	9.73%
Coverage: Dwelling	@	100.00% =	967.32	
TILE			2,222.55	22.37%
Coverage: Dwelling	@	100.00% =	2,222.55	
WATER EXTRACTION & REMEDIATION			3,340.14	33.61%
Coverage: Dwelling	@	100.00% =	3,340.14	
O&P Items Subtotal			8,343.58	83.97%
Material Sales Tax			185.78	1.87%
Coverage: Dwelling	@	95.90% =	178.16	
Coverage: Contents	@	4.10% =	7.62	
Overhead			852.97	8.58%
Coverage: Dwelling	@	97.69% =	833.28	
Coverage: Contents	@	2.31% =	19.69	
Profit			554.42	5.58%
Coverage: Dwelling	@	97.69% =	541.62	
Coverage: Contents	@	2.31% =	12.80	
Total			9,936.75	100.00%



Cost to Install a Tile Floor

Updated: June 2016

Tile Floor Installation Cost Calculator

Random numbers pulled from online estimate for just flooring

Item	Zip Code	Square Feet*	Update	
	92028	1000	Quantity	Low High
Tile Flooring Cost Non-discounted retail pricing for: Residential grade glazed ceramic tile 12" x 12". Moderate to heavy traffic. Quantity includes typical waste overage, material for repair and local delivery.		1069 square feet	\$1,462.00	\$1,925.30
Tile Flooring Labor - Basic Basic labor estimate to install tile floor. Measure, fabricate and secure backer board. Layout tile pattern. Fabricate and install with thinset mortar. Grout and clean surface. Includes planning, equipment and material acquisition, area preparation and protection, setup and cleanup.		125.4 hrs	\$9,016.16	\$17,455.19
Tile Flooring Materials and Supplies Cost of related materials and supplies typically required to install tile floor including: fabrication and polishing disposables, manufacturer recommended underlayment, fasteners, adhesives and surface sealants.		1000 square feet	\$935.60	\$1,064.30
Tile Flooring Equipment Allowance Job related costs of specialty equipment used for job quality and efficiency, including: 10" diameter diamond wet tile and stone saw, mortar box and power mortar mixer.			\$52.50	\$78.75
Totals - Cost to Install Tile Floor - 1000 square feet			\$11,466.26	\$20,523.54
Average Cost Per Square Foot			\$11.47	\$20.52

Get an INSTANT, detailed estimate of the cost to Install a Tile Floor! Our free calculator uses up-to-date, trusted data to estimate typical subcontractor costs for a Tile Floor Installation project. For a basic 120 square feet project in zip code 47474, the benchmark cost to Install a Tile Floor ranges between \$10.81 - \$19.02 per square foot* .

LocalFlooringQuotes.com

Compare Flooring Costs... [Compare more >](#)

[Hardwood](#) [Laminate](#) [Tile](#) [Carpet](#)

Cost to Install a Wood Floor

Updated: June 2016

*Random
online estimate
for just flooring*

Hardwood Flooring Installation Cost Calculator

Zip Code

92028

Square Feet*

1000

[Update](#)

Item

Quantity

Low

High

Wood Flooring Cost

Non-discounted retail pricing for: Residential, above-grade solid wood flooring. 25 yr limited warranty. UV resistant 7 coat AIO satin finish. For nail down installation. Quantity includes typical waste overage, material for repair and local delivery.

1069 square feet

\$4,286.40

\$5,644.50

Wood Flooring Labor - Basic

Basic labor estimate to install wood floor. Install underlayment on clean, level subfloor. Acclimate, cull and blend flooring. Blind nail wood flooring. Includes planning, equipment and material acquisition, area preparation and protection, setup and cleanup.

55.7 hrs

\$3,987.20

\$7,507.86

Wood Flooring Materials and Supplies

Cost of related materials and supplies typically required to install wood floor including: manufacturer recommended underlayment, fasteners, adhesives and surface sealants.

1000 square feet

\$425.30

\$483.80

Wood Flooring Equipment Allowance

Job related costs of specialty equipment used for job quality and efficiency, including: pneumatic nailer for 1 1/2" to 2" nails and up to 3/4" thick flooring.

\$37.50

\$55.50

Totals - Cost to Install Wood Floor - 1000 square feet

\$8,736.40

\$13,691.66

Average Cost Per Square Foot

\$8.74

\$13.69

Get an INSTANT, detailed estimate of the cost to Install a Wood Floor! Our free calculator uses up-to-date, trusted data to estimate typical subcontractor costs for a Hardwood Flooring Installation project. For a basic 120 square feet project in zip code 47474, the benchmark cost to Install a Wood Floor ranges between \$8.65 - \$13.37 per square foot* .

M E M O

TO: Board of Directors
FROM: Brian Brady, General Manager
DATE: September 26, 2016
SUBJECT: Consider Approving Agreement for General Counsel Legal Services between Fallbrook Public Utility District and Best Best & Krieger LLP

Purpose

To approve the final Agreement for General Counsel Legal Services between Fallbrook Public Utility District and Best Best & Krieger LLP.

Summary

On August 17, 2016, the Board of Directors unanimously approved Resolution No. 4889 appointing Paula de Sousa Mills of the law firm Best Best & Krieger (BB&K) to the position of District General Legal Counsel effective upon Board approval of an Agreement for Legal Services with BB&K. Furthermore, Resolution No. 4889 authorizes the General Manager (1) to negotiate a final Agreement for Legal Services with BB&K and bring it back for Board approval and (2) to finalize a conflict waiver upon the Board's approval of the Agreement for Legal Services.

The terms and conditions as set forth in the attached Agreement for General Counsel Legal Services between Fallbrook Public Utility District and Best Best & Krieger LLP (Agreement) have been negotiated by the General Manager and the finalized Agreement is being presented to the Board for approval. Upon Board approval of the Agreement, a renewed and expanded conflict waiver letter relative to BB&K's representation of Rancho California Water District (Rancho) as General Legal Counsel, including representation of Rancho and not the District on specific matters, and to contemplate the change of BB&K's services from special counsel to District General will be executed by the General Manager.

Recommended Action

That the Board approve the Agreement for General Counsel Legal Services between Fallbrook Public Utility District and Best Best & Krieger LLP and authorize the General Manager to execute said Agreement and the conflict waiver letter relative to BB&K's representation of Rancho California Water District as provided for by Resolution No. 4889.

**AGREEMENT FOR GENERAL COUNSEL LEGAL SERVICES
BETWEEN
FALLBROOK PUBLIC UTILITY DISTRICT
AND
BEST BEST & KRIEGER LLP**

THIS AGREEMENT is made and entered into as of the ____ day of _____, 2016, by and between the Fallbrook Public Utility District, a Public Utility District existing and operating pursuant to the Public Utility District Act, Public Utilities Code section 15501 et seq. ("District") and Best Best & Krieger LLP, a limited liability partnership engaged in the practice of law ("BB&K"). The District and BB&K are sometimes referred to in this Agreement individually as a "Party" and collectively as the "Parties."

RECITALS

- A. The District is a Public Utility District of the State of California and is in need of General Legal Counsel Services;
- B. The District issued a Request for Proposal to Provide District General Counsel Legal Services on March 9, 2016;
- C. BB&K submitted its Proposal to Provide General Counsel Legal Services to the District on April 15, 2016;
- D. The District Board of Directors evaluated the various proposals submitted and based on those evaluations, selected and appointed BB&K as General Counsel in light of BB&K's depth and breadth of experience, knowledge, capabilities, capacity, track record in meeting the wide and varied range of legal needs of the District, and familiarity with the District, subject to negotiation and approval of an Agreement for General Legal Counsel Services; and
- E. The District and BB&K desire to enter into this Agreement for the purpose of setting forth the terms and conditions upon which BB&K will provide General Legal Counsel Services to the District.

NOW, THEREFORE, in consideration of the terms and conditions set forth in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties set forth their mutual covenants and understandings as follows:

AGREEMENT

- 1. **Term.** The term of this Agreement shall commence on October 1, 2016, and shall continue in full force and effect until terminated in accordance with Section 14 of this Agreement.

2. **Designated General Counsel.** Paula C. P. de Sousa Mills shall be designated as General Counsel and shall be responsible for the performance of all Services under this Agreement, including the supervision of Services performed by other members of BB&K. Steven G. Martin shall be designated Assistant General Counsel. No change in these assignments shall be made without the consent of the District.
3. **Services.** BB&K shall serve as General Counsel and shall perform legal services (“Services”) as may be required from time to time by the District as set forth by this Agreement, unless otherwise agreed to by the District and BB&K.

- a. **Basic General Counsel Services.**

As part of the Services to be performed hereunder, BB&K shall be responsible for the following Basic General Counsel Services at the rates set out in Section 4 of this Agreement:

- i. Advice to the Board of Directors and District management staff on matters of law including, but not limited to, the Brown Act, Government Code, Public Records Act, Public Utility Code, Water Code, conflict of interest issues, the Political Reform Act, and parliamentary procedures.
- ii. Seek advice from regulatory agencies such as the Fair Political Practices Commission as requested by the Board or management staff.
- iii. Attend all regular, adjourned and special Board meetings unless excused by the President or the General Manager. Regular Board Meetings are held at 4:00 pm on the 4th Monday of each month unless the meeting is cancelled for the lack of business or Board quorum, or if the Monday is a recognized holiday of the District, then the meeting rescheduled. Regular Board Meeting dates can be amended by the Board of Directors, from time to time, in accordance with applicable law.
- iv. Attend other meetings as requested by the Board of Directors, General Manager, or other designee.
- v. Provide regular updates on items of specific legal concern of the District as well as on current general topics of interest, including but not limited to federal and state water and environmental policy developments, DWR, SWP, MWD, Bay-Delta, Colorado River Basin, SDCWA-MWD Litigation, QSA-IID Water Transfer, Seawater Desalination, IPR, Brackish Groundwater Desalination, as well as regulatory issues involving the SWRCB, RWQCB, CDPH and other topics which might be of interest or importance to the District Board and staff.
- vi. Advice to the Board of Directors and District management staff on commencement or defense of litigation to protect the District’s interests and litigation of such issues as directed.

- vii. Prepare and/or review ordinances, resolutions, board packets as well as contracts, joint powers agreements, memoranda of understanding and other agreements and contracts entered into by the District as requested by the General Manager.
- viii. Provide written updates on new State and Federal regulations legislation and judicial decisions or other activities impacting or having the potential to impact the District and suggest actions to affect the outcome of those activities or once implemented, changes needed in District policies, procedures and operations to ensure compliance.
- ix. Research and interpret laws, court decisions and other authorities in order to prepare legal opinions to advise the Board and staff on legal matters pertaining to District interests.
- x. Promptly return all calls and emails from the Board of Directors and District staff.

b. **Special Counsel Services.**

Notwithstanding the above listing of Basic General Counsel Services, as part of the Services to be performed hereunder, BB&K shall be responsible for the following Special Counsel Services at the rates set out in Section 4 of this Agreement:

- i. **Environmental Matters:** Provide legal assistance and consultation to General Manager or designee as requested on matters of environmental compliance, including CEQA, NEPA, ESA, etc. as they pertain to actions being contemplated by the District; and provide assistance on legal issues related to toxic substances (e.g., CERCLA, RCRA).
- ii. **Real Property Matters:** Provide legal assistance and consultation to General Manager or designee as requested on matters of property acquisition and disposal, eminent domain, property rights and property management, trespass, encroachment, lessee obligations, easements, and inholder access.
- iii. **Construction and Other Contracts/Disputes:** Review construction and other contracts and agreements, bid specifications, and purchasing documents for the purposes of legal and policy compliance, appropriate risk avoidance and transfer, and manufacturer's defect protection. Provide advice on non-routine contract negotiation matters (including non-BB&K model agreements)
- iv. **Labor Relations and Employment Matters:** Consult with the General Manager on personnel, labor relations, retirement, forced staff reductions, litigation, worker's compensation, and other matters concerning District business as requested.

- v. **Water Quality, Water Rights and Water Supply Planning Matters:** Provide legal assistance regarding compliance with regulatory issues under state and federal water quality statutes and regulations; provide legal assistance regarding water rights and water supply planning issues, at the direction of the General Manager.
- vi. **Fees and Taxes, Including Propositions 218 and 26:** Provide legal services related to revenue matters associated with the adoption, imposition, levy, collection and defense of fees and taxes. Provide consultation and prepare required legal notices at the direction of the General Manager.
- vii. **Renewable Energy Matters:** Provide legal assistance and consultation on a range of energy related matters including the review of power purchase agreements, net metering agreements, and energy rate setting proceedings before the CPUC.
- viii. **IT Access/ Privacy Policy Matters:** Providing assistance regarding IT access, privacy and use policy development and implementation.
- ix. **Telecommunications Lease, License Agreement, and Related Matters:** Provide assistance in developing cell site lease agreements with communications providers and assistance in responding to FCC rule making.
- x. **Litigation and Formal Administrative Hearing Matters/ Enforcement of District Ordinances and/or Regulations:** In addition to litigation and administrative hearing representation on matters listed above in this Section 3 (b), BB&K shall represent the District in all litigation and formal administrative matters; enforce District ordinances and regulations through administrative and judicial actions as requested by the General Manager; provide legal assistance in pursuing civil remedies related to customer bankruptcy, foreclosures, property liens, tax liens and collections as well as criminal and civil procedures regarding utility theft; and provide assistance in processing Tort Liability claims by third parties against the District.

c. **Miscellaneous Services.**

BB&K will provide the following Services at the request of the District.

i. **Public Policy and Ethics Program.**

The District may choose to become a participant in BB&K Public Law Update Program upon request. BB&K's optional Public Policy and Ethics ("PP&E") Program provides participants with memoranda on laws that directly affect public agencies, such as the Political Reform Act, Fair Political Practices Commission Regulations, the Brown Act, and the Public Records Act. The Program also provides participants with updates on new legislation and judicial decisions affecting local governments. Additional information regarding the BB&K Public Law Update Program and fees for participation is included in Exhibit "A," attached hereto and by this reference incorporated herein.

ii. **Public Finance Legal Services.**

BB&K will provide bond counsel, special counsel or disclosure counsel services at the request of the District. Such bond counsel and special counsel services include the preparation of all legislative approvals and legal documentation relating to the appropriate sale and delivery of the bonds, notes or other obligations. BB&K will also prepare such closing certificates and legal opinions necessary for the delivery of the bonds. As disclosure counsel, we will prepare the disclosure documents for the District and conduct the necessary due diligence related to the transaction. Our fees will be determined based upon the type of financing and the expected involvement of the attorneys involved and will be subject to the mutual agreement of the District and BB&K. We will provide the District with a detailed description of our services and our fees and reimbursable costs upon the District's request. Notwithstanding the foregoing, in those cases where the fees are reimbursable by a third party, at BB&K's option BB&K may, with the District's concurrence, proceed on an hourly basis based on our then current BB&K third party reimburseable rates including with respect to services rendered for the formation of, or annexation to, an assessment district or a community facilities district (of either the District or other local public agency), as well as the negotiation and preparation of funding agreements and joint financing agreements. Legal services related to the District's compliance with its continuing disclosure covenants and provide such necessary advice on the District's compliance shall be billed as Special Counsel Services as set out in Section 4, below.

iii. **CEQA Project (Project 5 Program).**

The District may choose to become a participant in BB&K's optional CEQA Project ("Project 5 Program"). The Project 5 Program provides participants with memoranda summarizing new changes in case law under the California Environmental Quality Act ("CEQA"), an annually updated set of CEQA notices and forms to aid participants in meeting CEQA's requirements, an annually updated set of Local CEQA Guidelines and a draft Resolution for adopting Local CEQA Guidelines, memoranda summarizing pending and recently passed CEQA legislation, and other CEQA resources and materials. Memoranda, forms, and guidelines are provided to participating agencies via the CEQA Guidelines Client Portal, a secure website providing an on-demand and continually updating library of CEQA resources.

If the District chooses to participate in the BB&K Project 5 Program, the District fees are based on the dividing the overall cost of the services provided with a large pool of BB&K client participants. The District's share of the cost of the Project 5 Program will be based on hourly rates for Basic General Counsel Services as established in Section 4 below.

4. **Compensation.** BB&K shall render and bill for Basic General Counsel Services, Special Counsel Services, and other miscellaneous services at the following rates, in accordance with the BB&K Billing Policies attached hereto as Exhibit "B" and incorporated herein by reference.

a. **Rates for Basic General Counsel Services.**

The District shall pay for Basic General Counsel Services at the following rates:

Partners/Of Counsel	\$255 per hour
Associate Attorneys	\$230 per hour
Paralegals	\$155 per hour

Notwithstanding the above rates, the Parties agree that BB&K shall only charge the above applicable rate for one-way travel time for General Counsel and/or Assistant General Counsel attendance at District Board meetings.

b. **Rates for Special Counsel Services.**

The District shall pay for Special Counsel Services at the following rates:

Partners/Of Counsel	\$285 per hour
Associate Attorneys	\$260 per hour
Paralegals	\$165 per hour

c. **Annual Adjustments; Other Mutual Adjustments.** On July 1, 2017 and every July 1st thereafter during the term of this Agreement, the rates specified in Sections 4(a), and 4(b) above, shall be subject to an increase equal to the percentage change in the Consumer Price Index (All Urban Consumers Index, San Diego County), for the prior calendar year (e.g., Calendar Year, 2016 on July 1, 2017). Adjustments for the Public Policy and Ethics program are as established in Exhibit "A." In addition to the automatic rate adjustments, either BB&K or the District may initiate consideration of a rate increase at any time; provided, however, that such an additional rate increase shall not occur without the express written consent of the District.

5. **Cost Reimbursement.** Reimbursement of costs advanced by BB&K on behalf of the District will be billed in addition to the rates set out in Section 4, above. Authorized reimbursable expenses shall include, but are not limited to automobile mileage expenses at the rate allowed by the Internal Revenue Service, actual expenses incurred while away on District business, long distance telephone, photocopy charges currently set at \$0.17/page, and any costs of producing or reproducing photographs, documents, and other items necessary for legal representation. Travel costs will be billed from portal to portal. Additionally computerized research time (e.g. Lexis or Westlaw), research services performed by BB&K's library staff on behalf of the District, extraordinary mail or delivery costs (e.g. courier, overnight and express delivery), court fees and similar costs relating to the Services, are generally chargeable to a District. However, no separate charge shall be made by BB&K for secretarial or other administrative charges. The rates specified in Section 4, above, include all routine word processing, secretarial and office costs associated with the provision of legal services, including facsimile transmittals and voicemails.

6. **Billing.** BB&K shall submit monthly to the District a detailed statement of account for Services. The District shall review BB&K's monthly statements and pay BB&K for Services rendered and costs incurred, as provided for in this Agreement, on a monthly basis.

7. **Annual Reviews.**

The District and BB&K agree that a review of performance and the compensation amounts referenced in this Agreement should occur at least annually.

8. **Time of Performance.**

The Services of BB&K shall be performed expeditiously in the time frames and as directed by the District.

9. **Assistance.**

The District agrees to provide all information and documents necessary for the attorneys at BB&K to perform their obligations under this Agreement.

10. Independent Contractor.

BB&K shall perform all legal services required under this Agreement as an independent contractor of the District and shall remain, at all times as to the District, a wholly independent contractor with only such obligations as are required under this Agreement. Neither the District, nor any of its employees, shall have any control over the manner, mode or means by which BB&K, its agents or employees, render the legal services required under this Agreement, except as otherwise set forth. The District shall have no voice in the selection, discharge, supervision or control of BB&K's employees, representatives or agents, or in fixing their number, compensation, or hours of service.

11. Insurance.

BB&K shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work by BB&K, its agents, representatives, employees or subcontractors, pursuant to BB&K's proposal or any subsequent contract entered into with the District. Insurance shall be of the type, in the amounts, and subject to the provisions described below.

- Commercial General Liability coverage with a limit of not less than \$2,000,000 per occurrence. If the insurance includes a general aggregate limit, that limit shall apply separately to this contract or it shall be at least twice the required per occurrence limit.
- Professional Liability, and Errors and Omissions Insurance with a limit not less than two million dollars (\$2,000,000) per occurrence, and five million dollars (\$5,000,000) in aggregate.

All insurance coverage shall be provided by insurers authorized by the California Insurance Commissioner to transact insurance business in California and with a rating of "A" or better in the Best's Key Rating Guide.

a. **Evidence of coverage.**

- i. Prior to commencement of work under any contract, or within 14 days notification of award of the contract, whichever is shorter, BB&K shall file certificates of insurance and original endorsements evidencing coverage in compliance with this contract and in a form acceptable to the District.
- ii. During the term of this agreement, BB&K shall maintain current valid proof of insurance coverage with District at all times. Proof of renewals shall be filed prior to expiration of any required coverage.
- iii. In the event BB&K does not maintain current, valid evidence of insurance on file with District, District may, at its option, withhold payment of any

moneys owed to BB&K, or which it subsequently owes to BB&K, until proper proof is filed.

b. **Additional Insureds.**

All coverage noted, except for Workers' Compensation and professional liability, shall name the District and its respective officers, employees, agents and volunteers as additional insureds.

c. **General Insurance Provisions.**

Each policy of liability insurance, except workers' compensation insurance and professional liability insurance, shall contain the following endorsement provisions as provided in District's standard endorsement forms:

- i. The District and its respective officers, employees, agents, and volunteers are additional insureds ("Above-Named Additional Insureds") under the policy in relation to those activities described generally above with regard to operations performed by or on behalf of BB&K ("Named Insured"). The Above Named Additional Insureds have no liability for the payment of any premiums or assessments under the policy.
- ii. The insurance coverage afforded the above-Named Additional Insureds under the policy shall be primary insurance, and no other insurance maintained by the Above-Named Additional Insureds shall be called upon to contribute with the insurance coverages provided by the Policy.
- iii. The noted coverage, except Workers' Compensation and professional liability, shall contain a Severability of Interests (Cross Liability) clause that stipulates that it is agreed that the insurance afforded by the Policy shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the company's liability.
- iv. The insurance afforded by the policy for contractual liability insurance (subject to the terms, conditions and exclusions applicable to such insurance) includes liability assumed by the Named Insured under the indemnification and/or hold harmless provision(s) contained in, or executed in conjunction with the written agreement(s) or permit(s) designated above, between the Named Insured and the Above-Named Additional Insureds.
- v. The policy to which this endorsement is attached shall not be subject to cancellation, change in coverage, reduction of limits (except as the result of the payment of claims), or non-renewal except after written notice to District, by certified mail, return receipt requested, not less than thirty (30) days prior to the effective date thereof. In the event of BB&K's failure to comply with this notice provision, the policy as initially drafted will

continue in full force and effect until compliance with this noticing requirement.

- vi. BB&K hereby waives all rights of subrogation and contribution against the Above Named Additional Insureds, while acting within the scope of their duties, from all claims, losses and liabilities arising out of the Named Insured's negligence with regard to operations performed by or on behalf of the Named Insured regardless of any prior, concurrent, or subsequent active or passive negligence by the Above-Named Additional Insureds and does not apply to the Above-Named Insured's sole negligence or willful misconduct.

12. **Attorney-Client Privilege.** Confidential communication between the District and BB&K shall be covered by the attorney-client privilege. As used in this article, "confidential communication" means information transmitted between the District and BB&K in the course of the relationship covered by this Agreement and in confidence by a means which, so far as the District is aware, discloses the information to no third persons other than those who are present to further the interests of the District in the consultation or those to whom disclosure is reasonably necessary for the transmission of the information or the accomplishment of the purpose for which BB&K is consulted, and includes any legal opinion formed and advice given by BB&K in the course of this relationship.

13. **Indemnification.** BB&K shall indemnify, hold harmless and defend the District, the Board of Directors, its officers, employees, and agents, from any and all liability or financial loss including legal expenses and costs of expert witnesses and consultants, resulting from any suits, claims, losses or actions brought by any person or persons, by reasons of injury resulting from the negligent actions or omissions of BB&K, including its officers, agents, employees, or any person employed by BB&K, in the performance of this Agreement. BB&K agrees that BB&K's covenant under this Section 13 shall survive the termination of this Agreement.

14. **Termination of Agreement and Legal Services.** This Agreement and the Services rendered under it may be terminated at any time upon thirty (30) days prior written notice from either party, with or without cause. In the event of such termination, BB&K shall be paid for all Services authorized by the District and performed up through and including the effective date of termination. BB&K shall also be reimbursed for all costs associated with transitioning any files or other data or documents to a new law firm or returning them to the District.

15. **Entire Agreement.**

This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements.

16. Governing Law.

This Agreement shall be governed by the laws of the State of California. Venue shall be in San Diego County.

17. Amendment; Modification.

No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both parties.

18. Waiver.

No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a party shall give the other party any contractual rights by custom, estoppel, or otherwise.

19. Invalidity; Severability.

If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

20. Counterparts.

This Agreement may be signed in counterparts, each of which shall constitute an original.

21. Delivery of Notices.

All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

District: Fallbrook Public Utility District
990 East Mission Road
Fallbrook, CA 92088-2290
Attention: Brian J. Brady, General Manager

BB&K: Best Best & Krieger LLP
655 West Broadway, 15th Floor
San Diego, CA 92101
Attention: Paula C. P. de Sousa Mills

Such notices shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

IN WITNESS WHEREOF, the District and BB&K have executed this Agreement for General Counsel Legal Services as of the date first written above.

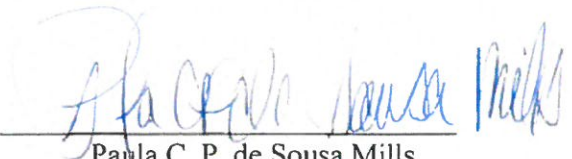
FALLBROOK PUBLIC UTILITY DISTRICT

BEST BEST & KRIEGER LLP

By:

Brian J. Brady
General Manager

By:



Paula C. P. de Sousa Mills
Partner

Attest:

Mary Lou Boultinghouse
Secretary, Board of Directors

EXHIBIT "A"

PUBLIC POLICY AND ETHICS PROGRAM

By providing our Public Policy and Ethics Program updates to a large pool of participants, BB&K is able to divide the overall cost of the products among all participants and charge only a fraction of the total costs to the individual client agencies.

For the District, BB&K would charge an annual fee on July 1 of each year for all of the services provided under the Program. As of July 1, 2016, annual costs for the fiscal year are \$3,300. The annual fee covers the following services under the Program:

- Written legal advice concerning matters that affect local government such as new legislation, regulations, court decisions and Attorney General opinions. This service includes monitoring significant developments that may affect the agencies, legal research, and drafting memoranda for those developments.
- Annual updates on the Brown Act, the Public Records Act, the Political Reform Act, and other conflict of interest laws.
- In addition, clients who participate in the Program are offered the following legal services at a discounted rate in addition of the annual fee:
 - Customized, on-site training regarding Statements of Economic Interests (Form 700s). Statements of Economic Interests are building blocks for transparency and good governance. Our Form 700 training covers the different types of reportable interests, avoiding over-disclosure, completing a Form 700, and amending a filed statement. This training is for officials and employee positions listed in the District's Conflict of Interest Code. As of July 1, 2016 the usual cost is \$2,500, but is billed to Program participants for \$800, plus costs.
 - BB&K-hosted presentations related to the Political Reform Act and the client's role as: (1) the Filing Officer and/or Filing Official receiving and filing Statements of Economic Interests (Form 700s); and (2) the creators and enforcers of the Agency's Conflicts of Interest Code. As of July 1, 2016 the usual cost is \$125 per attendee, but is billed to Program participants for \$75 per attendee.
 - Customized, on-site training certifying attendees for compliance with State "general ethics principles and ethics laws" required under AB 1234. As of July 1, 2016 the usual cost is \$2,000 for six attendees, but is billed to Program participants for \$1,200 for six attendees and \$75 for each additional attendee.

As new and existing laws develop and become more complex, public scrutiny intensifies, and expectations for the role of legal counsel change. Our legal updates are critical, and in some cases, required for our local government clients.

EXHIBIT "B"

BEST BEST & KRIEGER LLP'S BILLING POLICIES

Our century of experience has shown that the attorney-client relationship works best when there is mutual understanding about fees, expenses, billing and payment terms. Therefore, this statement is intended to explain our billing policies and procedures. Clients are encouraged to discuss with us any questions they have about these policies and procedures. Clients may direct specific questions about a bill to the attorney with whom the client works or to our Accounts Receivable Department. Any specific billing arrangements different from those set forth below will be confirmed in a separate written agreement between the client and the firm.

Fees for Professional Services

Unless a flat fee is set forth in our engagement letter with a client, our fees for the legal work we will undertake will be based in substantial part on time spent by personnel in our office on that client's behalf. In special circumstances which will be discussed with the client and agreed upon in writing, fees will be based upon the novelty or difficulty of the matter, or the time or other special limitations imposed by the client.

Hourly rates are set to reflect the skill and experience of the attorney or other legal personnel rendering services on the client's behalf. Time is accrued on an incremental basis for such matters as telephone calls (minimum .3 hour) and letters (minimum .5 hour), and on an actual basis for all other work. Our attorneys are currently billed at rates from \$245 to \$750 per hour, and our administrative assistants, law clerks, litigation analysts, research analysts, and paralegals are billed at rates from \$160 to \$290 per hour. These hourly rates are reviewed annually to accommodate rising firm costs and to reflect changes in attorney status as lawyers attain new levels of legal experience. Any increases resulting from such reviews will be instituted automatically and will apply to each affected client, after advance notice.

Non-Attorney Personnel: BBK may employ the services of non-attorney personnel under the supervision of a BBK attorney in order to perform services called for in the legal services agreement. The most common non-attorney personnel utilized are

paralegals. Other types of non-attorney personnel include, but are not limited to, case clerks, IT analysts, and specialty consultants. The client agrees that BBK may use such non-attorney personnel to perform its services when it is reasonably necessary in the judgment of the responsible BBK attorney. Hourly fees for non-attorney personnel will be charged at the rate then in effect for such personnel. A copy of BBK's current rates and titles for non-attorney personnel will be provided upon request. Except for paralegals, BBK will not incur more than \$525 in fees for a non-attorney's work on a client matter without first confirming by email or written correspondence with the client the intended use of the non-attorney and the hourly rate for that person.

Fees For Other Services, Costs and Expenses

We attempt to serve all our clients with the most effective support systems available. Therefore, in addition to fees for professional legal services, we also charge separately for some other services and expenses to the extent of their use by individual clients. These charges include but are not limited to, mileage at the current IRS approved rate per mile, extraordinary telephone and document delivery charges, copying charges, computerized research, court filing fees and other court-related expenditures including court reporter and transcription fees. No separate charge is made for secretarial or word processing services; those costs are included within the above hourly rates.

ESI: BBK provides Electronically Stored Information ("ESI") services for matters requiring ESI support – typically litigation or threatened litigation matters. BBK shall receive payment for ESI support, if needed, at BBK's then current rates. A copy of BBK's current rates for such services will be provided upon request. BBK shall not incur costs for ESI support on a particular matter without first confirming by email or written correspondence with the client that the client agrees such services are necessary for the matter at hand.

We may need to advance costs and incur expenses on your behalf on an ongoing basis. These items are separate and apart from attorneys' fees and, as they are

out-of-pocket charges, we need to have sufficient funds on hand from you to pay them when due. We will advise the client from time to time when we expect items of significant cost to be incurred, and it is required that the client send us advances to cover those costs before they are due.

Advance Deposit Toward Fees And Costs

Because new client matters involve both a substantial undertaking by our firm and the establishment of client credit with our accounting office, we require an advance payment from clients. The amount of this advance deposit is determined on a case-by-case basis discussed first with the client, and is specified in our engagement letter.

Upon receipt, the advance deposit will be deposited into the firm's client trust account. Our monthly billings will reflect such applications of the advance deposit to costs and not to attorney's fees (unless otherwise noted in our accompanying engagement letter). At the end of engagement, we will apply any remaining balance first to costs and then to fees. We also reserve the right to require increases or renewals of these advanced deposits.

By signing the initial engagement letter, each client is agreeing that trust account balances may be withdrawn and applied to costs as they are incurred and to our billings, when we issue our invoice to the client. If we succeed in resolving your matter before the amounts deposited are used, any balance will be promptly refunded.

Monthly Invoices and Payment

Best Best & Krieger LLP provides our clients with monthly invoices for legal services performed and expenses incurred. Invoices are due and payable upon receipt.

Each monthly invoice reflects both professional and other fees for services rendered through the end of the prior month, as well as expenses incurred on the client's behalf that have been processed by the end of the prior month. Processing of some expenses is delayed until the next month and billed thereafter.

Our fees are not contingent upon any aspect of the matter and are due upon receipt. All billings are due and payable within ten days of presentation unless the

full amount is covered by the balance of an advance held in our trust account. If a bill is not paid within 30 days, a late charge of one percent per month on the unpaid invoice shall be added to the balance owed, commencing with the next statement and continuing until paid.

It is our policy to treat every question about a bill promptly and fairly. It is also our policy that if a client does not pay an invoice within 60 days of mailing, we assume the client is, for whatever reason, refusing to pay. We reserve the right to terminate our engagement and withdraw as attorney of record whenever our invoices are not paid. If an invoice is 60 days late, however, we may advise the client by letter that the client must pay the invoice within 14 days or the firm will take appropriate steps to withdraw as attorney of record. If the delay is caused by a problem in the invoice, we must rely upon the client to raise that with us during the 14-day period. This same policy applies to fee arrangements which require the client to replenish fee deposits or make deposits for anticipated costs.

From time to time clients have questions about the format of the bill or description of work performed. If you have any such questions, please ask them when you receive the bill so we may address them on a current basis.

Changes in Fee Arrangements and Budgets

It may be necessary under certain circumstances for a client to increase the size of required advances for fees after the commencement of our engagement and depending upon the scope of the work. For example, prior to a protracted trial or hearing, the firm may require a further advance payment to the firm's trust account sufficient to cover expected fees. Any such changes in fee arrangements will be discussed with the client and mutually agreed in writing.

Because of the uncertainties involved, any estimates of anticipated fees that we provide at the request of a client for budgeting purposes, or otherwise, can only be an approximation of potential fees.

BEST BEST & KRIEGER LLP

M E M O

TO: Board of Directors
FROM: Fiscal Policy and Insurance Committee
DATE: September 26, 2016
SUBJECT: PARS 115 Trust for OPEB and Pension liabilities
Resolution No. 4891

Purpose

To create an irrevocable 115 Trust for Other Post Employment Benefits (OPEB) and unfunded CalPERS pension liabilities. 115 Trust to be established by PARS as an IRS approved combination trust. The trust will provide a better return on the funds and provide long term rate stability to offset anticipated funding shortfalls from CalPERS.

Summary

The Final Policy and Insurance committee met Monday September 19, 2016. During the meeting, Mitch Barker of PARS made a presentation to the committee regarding the creation of a 115 Trust. By creating a 115 Trust, the District will be able to pre-fund a portion of the CalPERS unfunded pension liability in a fund that can achieve higher return to help off-set upcoming costs from CalPERS. The Board passed the FY 16-17 budget with \$100,000 budgeted to begin pre-funding some of the future CalPERS liability.

Additionally, the District has set aside \$586,000 over the past six years for retiree medical premiums in accordance with the actuarial study, which is updated every three years. The newest study will be completed in approximately sixty days. The IRS has ruled that funds placed in 115 trusts can be used to directly offset the liability the District must carry on the books. These funds are currently set aside in a CD and earning limited returns.

The funds within the 115 trust are available to the District at any time, but the use is limited to pension liability and OPEB. PARS has been IRS approved to create a combination 115 trust with two "buckets" to fund the pension liability and the OPEB liability separately.

Per Government Code section 53216.1, assets held in an irrevocable trust can be invested with more diversity than the limitations placed on general fund investments. Should the full board approve the creation of the combination 115 trust, the committee will meet again with PARS to determine the investment strategy they feel most comfortable with.

Fees for the trust are 60 basis points, or .6% of the value of the portfolio. PARS has waived the \$300 monthly minimum for the District.

Recommended Action

That the Board approve creation of an irrevocable 115 Combination Trust with PARS using existing funds set aside by the board and adopt Resolution No. 4891. The trust will provide a better return on the funds and provide long term rate stability to offset anticipated funding shortfalls from CalPERS and establish an OPEB trust to fund retiree medical benefits.

RESOLUTION NO. 4891

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
FALLBROOK PUBLIC UTILITY DISTRICT APPROVING THE
ADOPTION OF THE
PUBLIC AGENCIES POST-EMPLOYMENT BENEFITS TRUST
ADMINISTERED BY PUBLIC AGENCY RETIREMENT SERVICES
(PARS)**

* * * * *

WHEREAS, PARS has made available the PARS Public Agencies Post-Employment Benefits Trust and unfunded CalPERS pension liabilities (the "Program") for the purpose of pre-funding pension obligations and/or OPEB obligations; and

WHEREAS, the Fallbrook Public Utility District ("District") is eligible to participate in the Program, a tax-exempt trust performing an essential governmental function within the meaning of Section 115 of the Internal Revenue Code, as amended, and the Regulations issued there under, and is a tax-exempt trust under the relevant statutory provisions of the State of California; and

WHEREAS, the District's adoption and operation of the Program has no effect on any current or former employee's entitlement to post-employment benefits; and

WHEREAS, the terms and conditions of post-employment benefit entitlement, if any, are governed by contracts separate from and independent of the Program; and

WHEREAS, the District's funding of the Program does not, and is not intended to, create any new vested right to any benefit nor strengthen any existing vested right; and

WHEREAS, the District reserves the right to make contributions, if any, to the Program.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Fallbrook Public Utility District that:

1. The Governing Board hereby appoints the General Manager, or his/her successor or his/her designee, as the District's Plan Administrator for the Program; and
2. The District's Plan Administrator is hereby authorized to execute the PARS legal and administrative documents on behalf of the District and to take whatever additional actions are necessary to maintain the District's participation in the Program and to maintain compliance of any relevant regulation issued or as may be issued; therefore, authorizing him/her to take whatever additional actions are required to administer the District's Program.

PASSED AND ADOPTED by the Board of Directors of the Fallbrook Public Utility District at a regular meeting of the Board held on the 26th day of September, 2016, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

President, Board of Directors

ATTEST:

Secretary, Board of Directors

STATE OF CALIFORNIA
COUNTY OF SAN DIEGO

I, Mary Lou Boultinghouse, the Secretary of the Governing Board of Directors of the Fallbrook Public Utility District hereby certifies that the above foregoing resolution was duly and regularly adopted by said District at a regular meeting thereof held on the _____, and passed by a _____ vote of said Board.

IN WITNESS WHEREOF I have hereunto set my hand and seal this _____, 2016.

Secretary of the Governing Board

MEMO

TO: Board of Directors
FROM: Fiscal Policy & Insurance Committee
DATE: September 26, 2016
SUBJECT: Implementation of Rate Study and Long-Term Financial Plan

Purpose

To request for Board approval award of a contract with Raftelis Financial Consultants, Inc. to assist staff with development of a rate study and a 10-year financial plan for the District.

Summary

District staff has been working to address items raised by the Board and update the budget format. The Board required that staff bring a revised budget back to the Board by October 2016. Staff is continuing to work on updating the budget in order to meet this deadline.

In addition, as part of revising the budget, staff and the finance committee has determined that a more comprehensive financial planning effort and cost of service study is necessary.

While staff will focus on addressing the immediate concerns and preparing a revised budget format, additional resources are necessary to help complete the other tasks to do a more comprehensive evaluation of underlying rate setting and reserve policy and complete the cost of service study to ensure compliance with Proposition 218 in the overall rate design.

The additional analysis will also help the District prepare a financial strategy for both the construction funding and operation of the Santa Margarita Conjunctive Use project construction.

Staff reached out to Raftelis Financial Consultants given their expertise in this area and requested that they prepare a scope and fee for the services. Staff and the finance committee reviewed the scope and fee and determined it was appropriate for the services required to ensure long-term financial stability for district ratepayers.

The expected cost of the consultant work is \$105,162 per the attached. In addition, the committee recommends allocating additional funds in case additional short-term staffing resources are needed to provide the necessary information to complete the project. An allowance of \$30,000 was established to cover this contingency.

The project would be funded from water, wastewater, and recycled capital funds. The project was not budgeted and either the overall capital expenditures will be adjusted or the project will be funded from capital reserves.

Recommended Action

That the Board authorize the award of the attached contract with Raftelis Financial Consultants, Inc. for an amount not-to-exceed \$105,162 for completion of a rate study and a 10-year financial plan for the District to help ensure long-term financial stability for ratepayers and authorize up to \$30,000 for additional short-term staffing support for the effort if necessary.



445 S. Figueroa Street
Suite #2270
Los Angeles, CA 90071

Phone 213.327.4405
Fax 626.583.1411

www.raftelis.com

September 21, 2016

Jack Bebee
Assistant General Manager
Fallbrook Public Utility District
990 E Mission Rd,
Fallbrook, CA 92028

Subject: Proposal for 2016 Water, Wastewater and Recycled Water Rate Study

Dear Mr. Bebee:

Raftelis Financial Consultants, Inc. (RFC) is pleased to submit this proposal to assist the Fallbrook Public Utility District (District) in conducting a comprehensive rate study for its Water, Wastewater (WW) and Recycled Water (RW) Enterprises. RFC has a broad range of experience in the areas of interest to the District, including conducting conservation rate studies, cost of service studies, and long-term financial plans. RFC has the largest water and wastewater rate consulting practice in California and the nation. We have assisted numerous utilities throughout California and across the U.S. conducting thousands of such studies.

Cost-Based Methodology

Our rate setting methodology is based on principles set forth by the ***Manual M1: Principles of Water Rates, Fees and Charges, 6th Edition*** (Manual M1) published by the American Water Works Association (AWWA). As stated in Manual M1, the AWWA Rates and Charges Subcommittee believes that “the costs of water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers.” RFC will use five major steps to develop water rates that comply with Proposition 218 (a.k.a. California Constitution Article 13D), industry standards while meeting other emerging goals and objectives of the utility.

1. Policy Review and Framework Development

RFC will start the rate-making process with a due diligence phase to understand the underlying reason and/or goals for the rate study. This includes a kick-off meeting with staff to ascertain goals and objectives. We will review your policies prior to the kick-off meeting; such as reserve policies and debt service covenants to understand the financial constraints with which to build a

financial plan. As part of the kick-off meeting, RFC will conduct Policy and Rate Setting Framework Workshop session with District Staff to discuss and develop the associated policies and framework to be used for the Study. RFC will then present this Framework to the Board receive any comments / feedback.

2. Financial Plan Development

We then determine future revenue requirements to sufficiently fund the utility's operation and maintenance (O&M) and capital replacement and refurbishment (R&R) program. To preserve the District's financial integrity, we also evaluate current and projected revenues, water usage, expenses including water purchase costs (if warranted), and the appropriate use of debt. We will incorporate the recent water usage cutbacks due to the drought, which will affect the District's revenue and water purchase and treatment costs. Major capital projects are typically financed with a combination of long-term debt and equity (cash from reserves). The District's long-term capital R&R program will be included in the financial plan to fully fund its capital needs throughout the planning horizon.

3. Cost of Service Analysis

The annual costs of providing water services should be allocated among customer classes commensurate with their service requirements – i.e., how they use the water, wastewater, and recycled systems. In this step, costs are identified and allocated to functional cost components and distributed to respective customer classes according to the industry standards provided in AWWA's *Manual M1* for water related services and the Water Environment Federation's (WEF) *Manual of Practice No.27, Financing and Charges for Wastewater Systems* for wastewater-related services.

4. Rate Design

Rates do more than simply recover costs. Properly designed rates should support and optimize a blend of various utility objectives, such as affordability for essential needs, fairness and equity, revenue sufficiency and stability, and ease of implementation. RFC considers the rate development process a public information tool in communicating the District's objectives to its customers. In this step, RFC will design rates according to industry standards that meet the District's rate-setting objectives and are defensible in light of recent court cases. RFC will develop a customized rate model to assess different rate alternative customer impacts to facilitate informed decision making. The results are summarized in both an easy-to-understand graphical format and a tabular format to ease communications with stakeholders and elected officials.

5. Rate Adoption

In the last step of the rate-making process, to comply with Proposition 218 requirements, the results of the analyses are documented in a study report to help educate the public about the proposed changes, the rationale and justifications behind the changes, and their anticipated financial impacts in layman's terms. This will serve as the administrative record to justify the proposed rate structure. At a public hearing, 45 days after sending out the public notices, RFC can present our recommendations to assist the District's adoption of the new water rates.

Scope of Services

The utility industry consistently seeks RFC as advisor to lead the national discourse concerning rate structures. RFC adds value to the rate design process not only through the high level of technical expertise that results from deep experience, but the ability to glean the best ideas and strategies through the collaborative process. In evaluating and updating the District's utility rates and rate structure, RFC will use industry-accepted practices to ensure a robust and defensible rate structure. That being said, every agency exhibits different characteristics and faces different issues.

The following sections outline the tasks that we believe will be involved to complete a Water, Wastewater and Recycled Water rate study that accomplishes the District's goals. While tasks are listed consecutively, elements of tasks may be done concurrently with other tasks.

Task 1 – Project Initiation, Kick-off Workshop and Project Management

A productive kick-off workshop is the most effective way to begin a study of this nature. The purpose of this meeting is to provide a forum to discuss goals, objectives, policy, and methodologies, as well as finalize the work schedule.

The kick-off workshop will cover:

- Key financial challenges confronting the District;
- Primary goals and objectives of the Study;
- Proposition 218 and the legal environment of rate setting;
- Financial policies and associated reserve levels; and
- Rate setting policies such as usage tier justifications, agriculture rates, and revenue stability, etc.

The kick-off workshop provides a solid foundation for the project and ensures that project participants are in mutual agreement as to the project goals, expectations, and other important issues for the District. RFC will develop a project initiation package that contains the meeting agenda and presentation materials to guide the discussion. RFC will work closely with District

staff to identify the policy options to be presented at the Policy Framework Workshop with District Board (Task 2). This approach will facilitate informed decision making and ensure early buy-in of stakeholders.

Prior to the kick-off workshop, we will prepare a detailed data request list that will identify the information needed to complete the various analyses. Information that is typically required to perform a water rate study includes recent Comprehensive Annual Financial Reports (CAFR); recent and current budgets; current and historical water production and customer individual billing data; and a long-term capital improvement program. Some of this information will be readily available whereas other components may require more detailed analyses.

This task also includes ongoing project management. Management responsibilities include general administrative duties such as client correspondence, billing, project documentation, and administration of the study control plan.

Meeting(s): One (1) on-site kick-off workshop with District staff

Deliverables: Data request list, presentation materials and meeting minutes for Kick-off workshop

Task 2 – Policy Framework Workshop with District Fiscal Policy and Insurance Committee and District Board

It is important that the stakeholders are involved in the process of rate design and development and are informed about different potential policy options and the associated implications of each policy option. Based on the discussion with District staff during the Kick-Off Meeting, RFC will conduct the Policy Framework Workshop with the Fiscal Policy and Insurance Committee and then the District Board. The workshop will begin with a review of the evolution of rate structures and the benefits and challenges associated with each structure. RFC will discuss with the District Board to the rate setting framework to be used for the Study, and solicit Board input on items such as reserve policy and water setting framework and principles.

Meeting(s): One (1) policy workshop with Fiscal Policy and Insurance Committee and One (1) policy workshop with District Board

Deliverable(s): presentation

Task 3 – 10-Year Financial Plan Development and Financial Plan Workshop Webinars

This task will include the projection of budget items, such as annual costs related to: source of water supply, labor, power, materials, capital expenditures, plant investment, operating and maintenance (O&M) expenses, reserve contributions, and debt service using assumptions based on different economic factors and growth trends.

RFC will develop a forecast of water, WW, and RW revenue requirements over the planning horizon. This will include an estimate of revenues based on current rates, usage characteristics, and other non-operating revenues. Revenue requirements will be projected based on historical results, the current budget, capital improvement plans (CIP), existing debt service, other obligations and current economic trends as well as the proposed impact of development of a new groundwater supply and associated treatment facilities. Rates, debt, grants, government subsidies, or infrastructure bank loans will be provided as options for capital cost financing. Projecting revenue adjustments over a longer planning horizon can illustrate future rate impacts and potential challenges to the District's financial situation and allow the District to make adjustments to expenses, reserve balances or capital projects scheduling to smooth rate impacts and to maintain financial stability.

For each enterprise, RFC will develop a multi-year cash flow analysis to determine revenue adjustments needed to meet projected revenue requirements for the planning period, while minimizing sharp rate fluctuations and debt coverage requirements. Revenue requirements will be calculated for each year in the forecast period and adjusted to provide a smooth forecast of revenue adjustments. For example, changes in the timing of capital expenditures and the use of reserve funds to mitigate short-term rate impacts are two ways to address revenue smoothing. The objective is to minimize the magnitude of customer impacts while still achieving long-term revenue objectives. RFC will also review reserves policies to recommend appropriate reserves balances (operating, capital, rate stabilization, etc.) consistent with industry standards and the District's priorities.

At the heart of any successful financial assessment is the computer model that is used to develop revenue requirements, perform financial planning, and calculate rates. RFC will develop a Financial Plan Model (FPM) to meet District's specific needs and rising challenges and issues. RFC builds each client's Model from the ground up, carefully tailored to individual needs and preferences.

The financial plans will be presented in an easy-to-understand format on an interactive 'Dashboard' which shows the impacts of various assumptions so that decisions regarding revenue adjustments, capital financing through pay-go or debt, and reserve balances can all be made quickly and efficiently.

Several features of the FPM include:

- Inputs for key variables (item #1 in Dashboard shown below) including revenue adjustments, drought revenue requirement (item #2), water demand scenario (item #3), selections for capital program scenarios (item #4) and funding sources.
- Graphical presentations of projected operating costs and revenue streams, reserve balances and target levels according to District policies, different funding sources of CIP

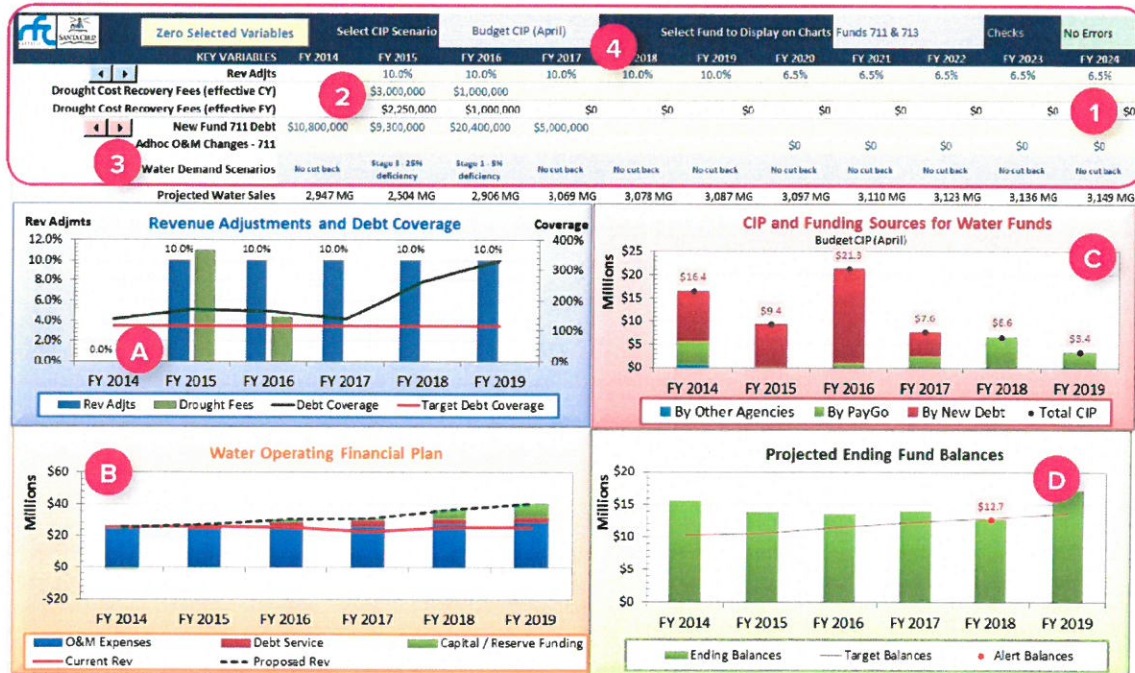
(PAYGO or debt financed) with flagging features for insufficiency and errors within the Model (items A-E in Dashboard below).

- Numerical results summarized in Pro-forma format.

The Dashboard is the graphical interface which displays the FPM’s results in an easily understandable format. As denoted with corresponding letters in the figure below, the Dashboard contains several features, including the ability to show or indicate:

- Revenue adjustments required for the next five (or more) years in order to meet debt coverage and target reserve balance(s) (blue bars in the Revenue Adjustments and Debt Coverage chart)
- Projected operating costs and revenue streams (shown in the Water Operating Financial Plan chart)
- Different funding sources of CIP, PAYGO, or debt financed (shown in the CIP and Funding Sources for Water Funds chart)
- Reserve balances and target levels according to District policies (shown in the Projected Ending Fund Balances) with flagging features when projected balances fall below target levels.

Figure 1: Sample Financial Plan Dashboard



Upon the completion of the FPM, RFC will hold two web-based workshops with District staff to review the model and the assumptions for appropriateness, and finalize the financial plans for the Water, WW, and RW Enterprises to be used for the rate design model.

Meeting(s): Two (2) web-based Financial Plan Workshops with District staff

Deliverable(s): presentation materials in Microsoft PowerPoint™ 2013 or later and Draft Financial Plan Model in Microsoft Excel™ 2013 or later

Task 4 – Cost of Service Analyses for Water, WW and RW Services

Following the development of the financial plan, RFC will begin to conduct cost of service (COS) analyses for the District's water, WW, and RW services. The cost of service is often viewed as a compliance measure for regulations such as Proposition 218 and Proposition 26. In another perspective, the COS provides the District with the defensibility needed for Proposition 218 compliance.

The COS study will be performed based on industry standards and methodologies approved by the AWWA *Manual M1* and the WEF's *Manual of Practice No.27, Financing and Charges for Wastewater Systems* for wastewater-related services. I, Sanjay Gaur, the proposed Project Manager, have co-authored a chapter on the conservation rate structure in the M1 Rate Manual, 6th edition published by AWWA in early 2012.

RFC staff include professional engineers and financial specialists that understand utility operations and finance. Therefore, RFC is confident in our cost allocations which are part of the cost of service analysis. The cost of service analysis will be conducted according to the following process:

Step 1 – Review Customer Class Usage Patterns and Determine Customer Classifications

RFC will review and analyze historical consumption, revenue records, and billing summaries to determine water usage and peaking characteristics by customer class or subclass.

Step 2 – Allocate Costs to Functional Cost Categories

RFC will functionalize the costs into main functions such as supply, transmission & distribution, storage, etc. These costs will then be allocated to cost components such as commodity, maximum hour, maximum day, customer accounting, meter capacity, etc. to determine the unit cost for each cost component.

Step 3 – Allocate Cost Components to Customer Classes

Next, the costs associated with the cost components are allocated to the various customer classifications on the basis of the relative responsibility of each class.

Similar to water, RFC will also conduct a cost of service analysis for the District's recycled water and wastewater services to ensure equitable and fair cost recovery for operational and capital expenditures of the recycled water and wastewater systems.

Throughout the cost allocation process, RFC will comply with the District's policy considerations, procedures, and guidelines applicable to charges for water, WW, and RW services to ensure that proposed rates are in compliance with Proposition 218, Proposition 26, and other regulations.

Meeting(s): Up to two (2) webinars with District staff

Deliverable(s): Draft Cost of Service Analyses in Microsoft Excel 2013 or later

Task 5 – Rate Model Development

The District currently collects 80% of the fixed costs to run the Water Operations from the Operation Charges, including monthly service charges, MWD¹ Readiness-to-Serve Charge (RTS), SDCWA² Infrastructure Access Charge (IAC) and Capital Improvement Charges³ varied by meter size. The remaining costs are collected on the tiered rates that vary by customer class and tier usage. In addition to tiered rates, the Deluz High Pressure Service Area and Toyon Heights are assessed pumping charges to recover the electricity costs and allocated capital improvements for the associated service area. Recycled water services are assessed the same monthly service charges as those for potable meters and all usage is charged a uniform rate.

The wastewater rates consist of a capital improvement charge per Equivalent Dwelling Unit (EDU), a fixed charge based on meter size, and a commodity rate per 1,000 gallons of sewage based on customer class. Residential sewage is determined by lowest one-month winter water use from the prior fiscal year for the period through November to March with a 90% return factor⁴. Non-residential sewage is estimated using water usage and schedule of Return to Sewer Factors published in the District's Sewer Rate.

RFC will develop a Water Rate Model with the flexibility to revise the tier widths based on customer class. The Rate Model will have the following features:

- A. **Usage Analysis Module.** The Module will have the ability to revise and redefine current inclining tiers. The key variables and results of the usage analysis are displayed in

¹ MWD: Metropolitan Water District of Southern California

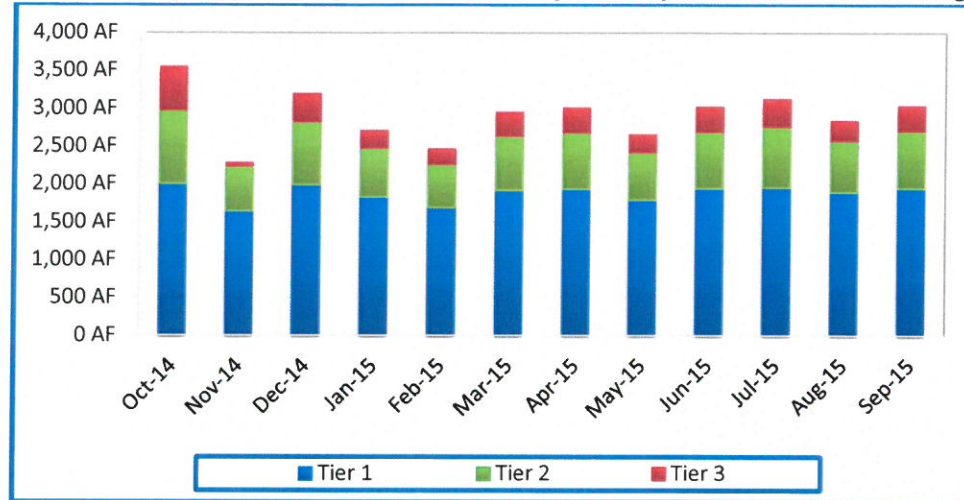
² SDCWA: San Diego County Water Authority

³ To partially fund the design and build-out of the UV treatment facility at the Red Mountain Reservoir and to fund pipeline replacement projects.

⁴ Water usage returned to sewer

Dashboard format. The peaking characteristics of usage in each tier are illustrated as part of the results as shown in **Figure 2** below.

Figure 2: Sample of Peaking Characteristics of Monthly Residential Water Usage



Rate Calculations. The model determines the revenues recovered in each tier and the associated price for each tier. The Model will also have the flexibility to evaluate different fixed/variable revenue structures to enhance revenue stability. The Rate Design Dashboard (sample Dashboard shown in **Figure 3** below), which displays key variables and results in real-time on screen, will facilitate discussion to reach a consensus quickly.

Key Variables

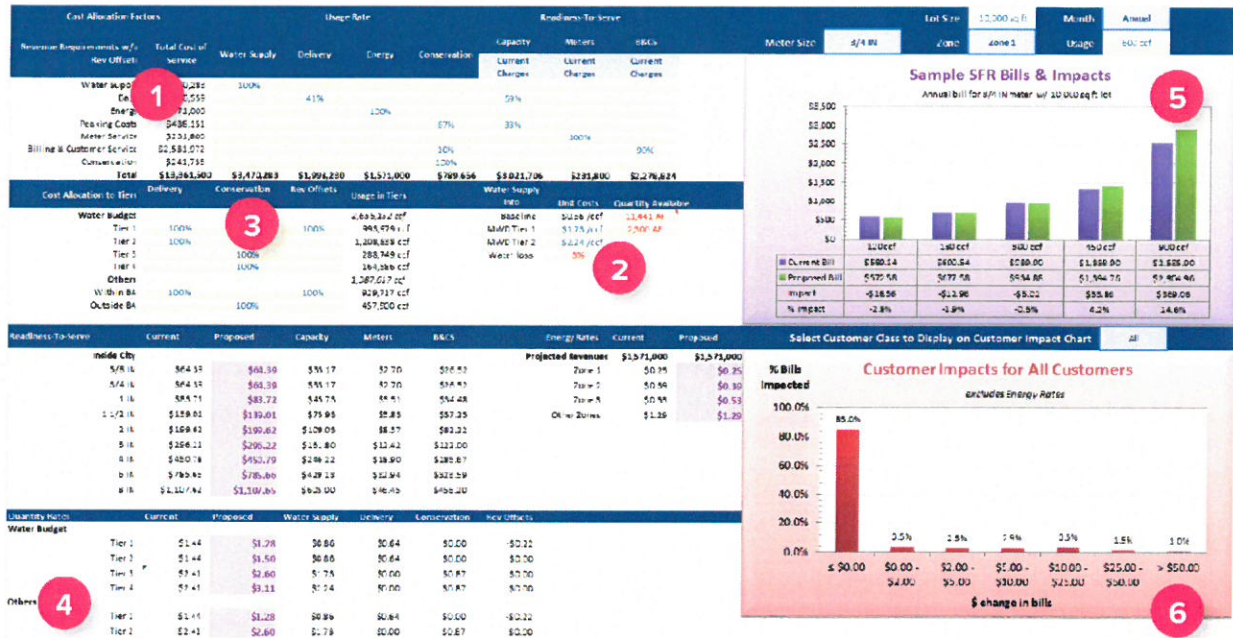
1. Cost allocations to different rate components — the total revenue requirement is distributed amongst the various costs such as water supply, pumping, treatment, etc.
2. Water Supply Costs information for Incremental / Marginal Water Supply Rate Components — the supply costs for the next available source of water supply which is a primary driver of pricing for higher tier usage.
3. Cost recovery in tiers — how the costs to provide service are distributed between tiers.

Results

4. Resulting Proposed Rates — the proposed rates based on the parameters set with the key variables.
5. Sample SFR bills impacts at various usage levels — a graphical representation of how the proposed rate structure will impact customers' bills. Note the ability to change the meter size, lot size, zone and the billing period for the bill calculations. This tool has proven particularly useful for public outreach campaigns and during the Proposition 218 process.

- Overall customer impact — a summary of how customers will see changes in their bills if the proposed rate structure is adopted. This is an invaluable tool to facilitate informed decision making.

Figure 3: Rate Design Dashboard



To help communicate with customers about the drivers and rationale behind the proposed rates, the water rates will have several cost components, including water supply costs, delivery of the District’s fixed peaking costs, conservation costs, and revenue offsets from other unrestricted revenue sources to provide affordability for essential use. An example of this type of structuring is reflected in the rates developed for El Toro Water District, as shown below. Water supply rates are associated with imported water costs, and recycled water program costs are assigned to Tiers 3 and 4 as the next marginal water supply source. The conservation program is funded through the consumption in higher tiers. This exercise showing the cost components for each tier will be performed regardless of the rate structure selected.

Figure 4: Sample Tiered Rates by Rate Components

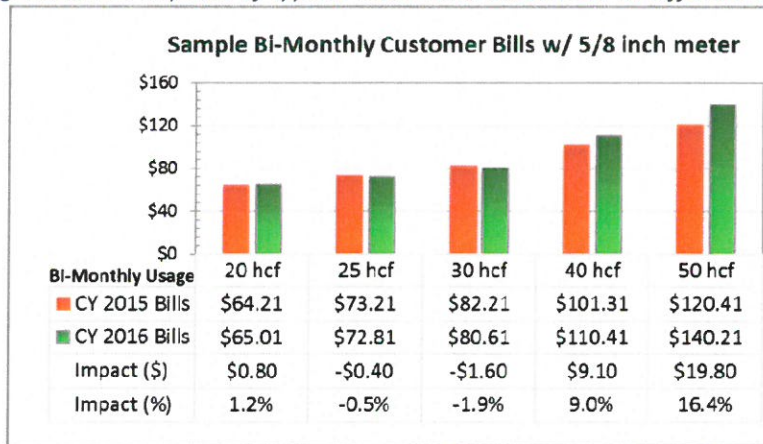
Water Rates (\$/ccf)	Current	FY 2015	Water Supply	Delivery and Peaking	Conservation	Recycled Water	Rev Offset
Tier 1	\$2.19	\$2.34	\$2.38	\$0.15	\$0.00	\$0.00	(\$0.19)
Tier 2	\$2.59	\$2.68	\$2.38	\$0.30	\$0.00	\$0.00	\$0.00
Tier 3	\$4.91	\$5.04	\$2.38	\$0.45	\$0.35	\$1.86	\$0.00
Tier 4	\$6.47	\$7.04	\$2.38	\$0.60	\$0.35	\$3.71	\$0.00
Uniform – CII	\$2.42	\$2.63	\$2.38	\$0.17	\$0.04	\$0.19	(\$0.15)

B. **Customer Impact Analysis.** To help facilitate informed decision making, the Model will also include a summary of financial impacts on customers resulting from the proposed rate structure. The Impact Analysis charts are a great tool to measure a rate structure’s effect on customer bills and has proven particularly useful during the community outreach stage of an upcoming rate adjustment.

- a. **Sample SFR bills impacts at various usage levels (Figure 5):** The figure below is a graphical representation of how the proposed rate structure will impact customers’ bills. The Model will have the ability to select a particular meter size and see how bills are affected at different usage levels. This tool has proven particularly useful for public outreach campaigns and during the Proposition 218 process. The illustrative chart shown in **Figure 5**, prepared for San Gabriel County Water District, shows bill impacts for new rates for a typical residential customer with 5/8-inch meter at the usage levels ranged from 20 to 50 billing units (1 billing unit = 100 cubic feet = 748 gallons).

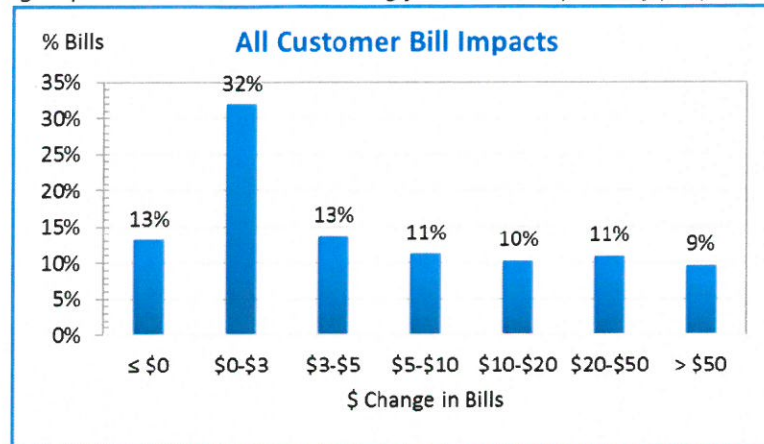
Figure 5: Sample Single Family Customer Bills

Illustrating customer impacts of typical residential customers at different usage levels



- b. **Overall customer impact (Figure 6):** Figure 6 illustrates how District customers will see changes in their bills if the proposed rate structure is adopted. For example, approximately 45% of the customers (32 + 13 percent) will see minor increases of less than \$5 in their water bills. Approximately 13% of the customers will see no change or some reduction in the bills. This chart has proven to be an invaluable tool to facilitate informed decision making.

Figure 6: Customer Bill Impact
Illustrating impacts on customer resulting from the adoption of proposed rates



RFC will similarly calculate the appropriate recycled water and wastewater rates to equitably recover the required costs of service determined in Task 4. It is assumed that the current wastewater and recycled water rate structure will be retained.

Meeting(s): Up to two (2) webinars with District staff

Deliverable(s): Rate Model in Microsoft Excel™ 2013 or later for Water, RW and WW services

Task 6 – Rate Design Workshops with District Staff, and District Board

Task 6.1 – Rate Design Workshop with District Staff

Following the completion of the Rate Model, RFC will hold up to two webinars with District staff to develop different rate scenarios. The goal of these conference calls is to identify the water rates that will be presented at the rate workshop with the District Board. RFC will conduct a half-day Rate Workshop with District Staff/Management. RFC will present the interim proposed rates and discuss the benefits and challenges associated with each proposed rate alternative, as demonstrated in the Rate Model. Changes and suggestions from District staff will be incorporated into the analyses prior to presenting the results to the Board.

Task 6.2 – Rate Design Workshops with District Fiscal Policy and Insurance Committee and District Board

Upon incorporating District staff comments from the workshop in Task 6.1, RFC will present the results of the Study during one working session with the District Fiscal Policy and Insurance Committee and then the District Board. The presentation will discuss the recommended reserve and fund levels, proposed ten-year financial plan, the proposed rate structure and rates, and the resulting customer impact analysis. If necessary, RFC will use the models to address any

concerns raised regarding the results. Any changes, comments, and feedback will then be incorporated into the final models.

I often work with industry associations such as AWWA and ACWA to explain to elected officials the complex issues associated with alternative rate structures and have extensive experience presenting to utilities' governing bodies. The presentation will highlight the collaborative process used to identify and prioritize the important issues facing the District. The proposed rates will be presented along with other recommendations resulting from the Study.

Meeting(s): Two (2) webinars with District staff, three (3) on-site Rate Design Workshops with District staff, Fiscal Policy and Insurance Committee and District Board

Deliverable(s): Presentation materials for the Workshops in Microsoft PowerPoint™ 2013 or later

Task 7 – Report Development

The process for developing the proposed rates will be described in a draft report. This draft report will include an executive summary highlighting the major issues and decisions and an overview of operations, CIP, the financial plan and the final rates resulting from the Study. The discussion on rate structure selection from the report developed in Phase 1 will be presented as a comprehensive section on the rate design assumptions and methodologies used to develop the user-rate calculations and financial planning. Comments from District staff will be incorporated into the Final Report as appropriate, and the Model will be refined to reflect appropriate issues or concerns raised by stakeholders. The Final Report will be submitted to the District and will include appropriate supporting data from the Model to address the requirements of Proposition 218.

Recent court cases decisions have emphasized the importance for a thorough administrative record and defensible methodology of the final rates for service. As a means to ensure that the study includes a thorough administrative record, the Final Report will include an exhibit listing all rate design assumptions and methodologies used to develop the financial plan and rates. Comments from District staff will be incorporated into the Final Report and the Model will be refined to reflect appropriate issues or concerns raised.

It is imperative that the Report clearly shows the nexus between the proposed charges for service and the cost to provide said service. The Report will lead the reader through RFC's methodology to arrive at rates that are equitable, reflect the District's policies and values, and are driven by the District's revenue requirements. The Report's ability to explain the rate development process and in a clear and understandable manner will promote financial transparency, heighten legal defensibility, and uphold the District's strong reputation with the public.

Meeting(s): One (1) webinar with District staff

Deliverable(s): Draft Report, Final Report in Microsoft Word™ 2013 or later and pdf

Task 8 – Public Hearing and Prop 218 Notice Assistance

RFC will assist the District in the preparation of the Proposition 218 notice for the District to mail within the required 45-day noticing period prior to holding the Public Hearing. The notice will outline the proposed rate changes and explain the right to challenge the rates and will meet and comply with all noticing requirements of Proposition 218. RFC recognizes the meeting of Proposition 218 requirements as a legal issue and will work with the District attorney, as we have with numerous agencies, to ensure compliant notification materials. Finally, RFC will be present at the Public Hearing to adopt the recommended rates and will be available to answer any questions. RFC has assisted numerous agencies all over California with the adoption of conservation rate structures. Recent examples include the City of San Juan Capistrano, Las Virgenes Municipal Water District, Alameda County Water District, Yorba Linda Water District, and Trabuco Canyon Water District.

Meeting(s): One (1) Public Hearing

Deliverable(s): Proposition 218 notice in Microsoft Word™ 2013 or later, presentation materials for Public Hearing in Microsoft PowerPoint™ 2013 or later

Task 9 – District’s Budget Format Review and Enhancement

RFC will work closely with District staff to review the District’s budget documents for format enhancements to enhance communication with stakeholders. RFC has allocated 20 hours to this task. RFC will notify the District if more hours are needed.

Meeting(s): Up to three (3) webinars with District staff

Deliverable(s): Revised Format for Budget Documents in Microsoft Excel™ 2013 or later

Task 10 (Optional) – Additional Public Meetings

At the request of the District, RFC will conduct additional public meetings to discuss about the Study. The presentation will be in Microsoft PowerPoint format and include the relevant information from the Study associated with the meeting intention or targeted audience. RFC estimates effort of 16 hours per meeting including preparation, travel, and meeting time.

Meeting(s): TBD

Deliverable(s): Presentation materials in Microsoft PowerPoint™ 2013 or later

Project Schedule / Staff Effort

Below is a tentative schedule and level of staff effort to complete this study. Schedule will be finalized at the kick-off meeting.

Task	Task Descriptions	Schedule	Staff Efforts
1	Project Initiation, Kick-off Workshop and Project Management	Early / Mid Oct 2016	Attend meeting & providing data (20hrs)
2	Policy Framework Workshop with Fiscal Policy and Insurance Committee and District Board	Oct - Nov 2016	Review Board presentations (4hrs)
3	10-Year Financial Plan Development and Financial Plan Workshop Webinars	Nov - Dec 2016	Webinars to discuss financial plan (8 hrs)
4	Cost of Service Analyses for Water, WW and RW Services	Dec 2016 - Jan 2017	Conference calls as needed basis (4hrs)
5	Rate Model Development	Dec 2016 - Jan 2017	Webinars and conference calls to discuss preliminary results (8hrs)
6	Rate Design Workshops with District Staff, Fiscal Policy and Insurance Committee and District Board	Feb - Mar 2017	Review presentations (6-9 hrs)
7	Report Development	Mar - April 2017	Review Report (10hrs)
8	Public Hearing and Prop 218 Notice Assistance	End of May 2017	Review presentation and prepare Prop 218 notice (10hrs)
9	District's Budget Format Review and Enhancement	June 2017	Discussion with RFC and review RFC's proposed format enhancement (8hrs)

Project Fees

RFC will complete the above scope of services for a not-to-exceed amount of \$105,162 (as shown in the table below). RFC will invoice the District monthly based on time and materials.

Task	Task Descriptions	No of Webinars	No of Meetings	Hours Requirements			Total Fees & Expenses
				SG	FC	Total	
HOURLY RATES				\$275	\$195		
1	Project Initiation, Kick-off Workshop and Project Management		1	12	14	26	\$6,616
2	Policy Framework Workshop with Fiscal Policy and Insurance Committee and District Board		2	24	8	32	\$9,132
3	10-Year Financial Plan Development and Financial Plan Workshop Webinars	2		16	65	81	\$17,885
4	Cost of Service Analyses for Water, WW and RW Services	2		12	45	57	\$12,645
5	Rate Model Development	2		20	80	100	\$22,100
6	Rate Design Workshops with District Staff, Fiscal Policy and Insurance Committee and District Board	2	3	30	18	48	\$13,218
7	Report Development	1		10	60	70	\$15,150
8	Public Hearing and Prop 218 Notice Assistance		1	10	4	14	\$3,996
9	District's Budget Format Review and Enhancement	3		4	16	20	\$4,420
10	Additional Public Meetings (Optional) - Per Meeting		1	12	4	16	\$4,566
TOTAL ESTIMATED MEETINGS / HOURS		12	7	138	310	448	
PROFESSIONAL FEES				\$37,950	\$60,450	\$98,400	
Total Fees (Tasks 1-9)						\$98,400	
Total Expenses						\$6,762	
TOTAL FEES & EXPENSES (TASKS 1-9)						\$105,162	

We are delighted to have this opportunity to provide assistance to the District. If you agree with the proposed fees and expenses documented in this letter, please sign in the space on the following page and return one copy for our files. Please call me at (213) 327-4405 if you have any questions.

Sincerely yours,
 RAFTELIS FINANCIAL CONSULTANTS, INC.



Sanjay Gaur
 Vice President

We accept the terms of this engagement letter:

_____	_____
Signature	Name of authorized agent
_____	_____
Date	Title

MEMO

TO: Board of Directors
FROM: Marcie Eilers, Assistant Services Manager/Treasurer *ME*
DATE: September 26, 2016
SUBJECT: Approve Final Budget for FY 16-17

Purpose

To request that the Board approve the final FY 16-17 budget.

Summary

The final FY 16-17 budget was approved on July 14, 2016 with three contingencies. Staff has been working with the Fiscal Policy and Insurance Committee to resolve the budget concerns.

One contingency was to bring back four to five examples of new budget formats in 30 days, which has been completed. Another was to close the FY 15-16 budget within 90 days. Staff is working on closing within 90 days, as the annual audit will begin on October 10, 2016. The third was for staff to prepare a 5-year business plan, which is addressed in the proposed contract with Raftelis Financial Consultants which has been brought to the board for approval.

In addition the Fiscal Policy and Insurance Committee has worked with staff to provide the attached budget summary and report which will be included in the budget and provided as an update.

Recommended Action

That the Board approve the final FY 16-17 budget now that the updated summary is prepared and the process in place to prepare a completely revised budget approach and format for FY 17-18.

**Fallbrook Public Utility District
2016-17 Budget Overview-Through 8/31/16**

	2016-2017 Adopted Budget	2016-2017 Actual YTD	2016-17 Projected	Change from Projected to Adopted Budget	Percent Change from Prior Budget
REVENUES:					
Water Sales	9,000	2,187	8,892	(108)	-1.2%
Operating Revenues:					
Water Sales	15,650,735	3,673,046	15,304,359	(346,376)	-2.2%
Meter Service Charges	5,338,784	896,766	5,380,596	41,812	0.8%
Wastewater Service Charges	5,804,379	927,980	5,567,880	(236,499)	-4.1%
Overuse Penalties	0			-	0.0%
Sundry Other Revenue	306,100	54,705	328,229	22,129	7.2%
CWA Rebates	148,000	46,420	188,699	40,699	27.5%
Total Operating Revenue	27,247,998	5,598,917	26,769,763	(478,235)	-1.8%
Non Operating Revenues:					
Capital Improvement Charge	2,282,000	373,710	2,242,260	(39,740)	-1.7%
Property Taxes	1,814,077	28,807	1,814,077	-	0.0%
Water Standby/Availability Charge	203,000	0	203,000	-	0.0%
Water/Wastewater Capacity Charges	107,315	89,329	107,315	-	0.0%
Portfolio Interest	175,000	30,067	175,000	-	0.0%
Pumping Charge	60,000	5,000	60,000	-	0.0%
Prop 84 & 50 Funds	0	180,657	180,657	180,657	0.0%
SRF Loan Proceeds	0	0	0	-	0.0%
CSI Rebate	251,362	81,207	251,362	-	0.0%
Facility Rents	255,000	28,399	170,394	(84,606)	-33.2%
Total Non Operating Revenues	5,147,754	817,176	5,204,065	56,311	1.1%
Total Budgeted Revenues	32,395,752	6,416,093	31,973,828	(421,924)	-1.3%
EXPENDITURES:					
Operating Expenses:					
Purchased Water Expense	13,060,217	3,634,297	14,595,569	1,535,352	11.8%
Production-Water Quality & Treatment	1,270,610	203,251	1,219,504	(51,106)	-4.0%
Distribution	2,047,562	214,698	1,932,278	(115,284)	-5.6%
Customer Service	1,290,347	207,330	1,243,979	(46,368)	-3.6%
General Administration	5,182,798	861,097	5,166,582	(16,216)	-0.3%
Collection, Treatment & Disposal	2,818,664	448,103	2,688,618	(130,046)	-4.6%
Total Operating Expenses	25,670,198	5,568,775	26,846,530	1,176,332	4.6%
Capital Project Expenses	5,966,928 *	506,234	5,966,928	-	0.0%
Debt Service Expenses	2,105,240 **	62,989	2,105,240	-	0.0%
Total Budgeted Expenditures	33,742,366	6,137,998	34,918,698	1,176,332	3.5%
NET REVENUES & EXPENDITURES	(1,346,614)	278,095	(2,944,869)	(1,598,255)	118.7%
Estimated Reserves as of 7/1/16	15,308,265				
FUNDING FROM (TO) RESERVES	1,346,614	(278,095)	2,944,869	1,598,255	118.7%
	0	0	0	0	0.0%

* See attached description of Capital items

** Large payment of \$800,000 due in December

Capital Project Expenses Occurred in FY 16-17 (YTD)

Job	Description	Amount (YTD FY 16-17)
2985	District Yard Paving	\$ 5,328.66
3009	Admin Building Improvements	\$ 20,444.54
2965	Springbrook	\$ 2,463.50
2949	Reclaimed Waterline Extension East	\$ 2,490.00
910	Sewer Laterals	\$ 4,041.41
2969	Ammunition Sewer Creek Crossing	\$ 18,054.04
2971	Plant 2 Force Main Replacement	\$ 133,510.86
3008	N. Brandon Sewer Replacement	\$ 4,546.94
2982	Outfall Air-Vac Installation	\$ 4,860.22
2933	WRP Improvements	\$ 51,145.80
3002	Major Equipment Overhaul	\$ 8,093.90
2999	Water Facility Security/Telemetry	\$ 3,213.66
9XX	Water Meter Installation (Reimbursed)	\$ 13,443.41
3001	Meter Replacement FY 16-17	\$ 6,242.67
2980	Beaver Creek Pipeline	\$ 9,360.84
2996	Hawthorne St 6" Valve Replacement	\$ 32,400.32
3003	Brook & Stage 8" Pipeline Replacement	\$ 12,746.45
3005	Valve Replacement 16-17	\$ 62,393.49
3006	Silver Spring 6" Pipeline Replacement	\$ 2,912.45
2894	Daily Pump Station Improvement	\$ 2,650.79
2979	Deluz PRV	\$ 1,315.84
2977	Toyon and 2 MG Coating	\$ 3,479.17
3007	1 MG Reservoir Painting	\$ 4,121.16
2744	Santa Margarita CUP	\$ 62,783.15
2998	Red Mountain UV Facility FY 16-17	\$ 3,035.64
	Chlorine Scrubber Pump	\$ 12,779.59
	Fleet Vehicle	\$ 16,333.27
	Misc Projects	\$ 2,042.84
Total Expenses YTD FY 16-17 (As on 9/1/2016)		\$ 506,234.61

M E M O

TO: Board of Directors
FROM: Jack Bebee, Assistant General Manager, JRB
DATE: September 26, 2016
SUBJECT: Implementation of Key Performance Indicators for Engineering and Operations

Purpose

To request for Board approval for award of a contract with Westin to assist staff with development of Key Performance Indicators (KPIs) for engineering and operations to help better monitor, track, and improve performance.

Summary

Currently, the District reports metrics for each department, but they don't always provide a useful representation of overall performance. The District has been modifying some of the performance measures to be more consistent with nationally utilized standards where applicable. The District also recently participated in a national benchmarking survey last year conducted by the American Water Works Association who is developing some universal benchmarking criteria to measure performance. During completion of this survey, it became clear that the District is not collecting all information to report some important performance metrics. Staff is looking to improve our reporting and tracking so we can better improve performance and eventually track performance versus other similar entities.

Now that the District is transitioning to a more accessible accounting system, it will be possible to begin to track and report some of these additional performance measures that will provide a better assessment of the overall effectiveness of different departments. In addition, there will need to be some new systems put in place to help collect more operational performance data. In order to ensure the approach and criteria are in accordance with best industry practices, staff prepared a Request for Proposals to obtain outside expertise to help develop the metrics and develop a plan to implement the systems to track the necessary information.

The District issued the Request for Proposals to the following four firms with specialized experience in this area:

1. Westin Engineering, Inc.
2. Carollo Engineers
3. Raftelis Financial Consultants
4. Hanson Associates

The proposals were reviewed and rated by the General Manager, Assistant General Manager, System Operations Manager, and Human Resources Manager.

Westin Engineering, Inc. was determined to be the most qualified followed by Raftelis Financial Consultants. Westin Engineering also had a thorough scope at a lower price of \$80,000.

The approved budget had \$150,000 allocated to this effort as well as an effort to review and update the District's asset management planning approach.

Recommended Action

That the Board authorize the award of the attached contract with Westin Engineering, Inc. for an amount not-to-exceed \$80,000 for development of key performance metrics for engineering and operations to help the District monitor and continuously improve performance.

PROFESSIONAL SERVICES CONTRACT

1. PARTIES:

The parties to this contract are the FALLBROOK PUBLIC UTILITY DISTRICT (FPUD), a local public agency and WESTIN ENGINEERING, a California Corporation (Contractor).

2. SCOPE OF SERVICES:

The services to be provided by Contractor are: providing professional consulting services as described fully in Attachment A.

3. PAYMENT:

(a) Payment for services. FPUD shall pay for services performed in accordance with this contract according to the payment and fee schedule contained in Attachment B.

(b) Reimbursement of expenses. Contractor will be reimbursed for actual, reasonable and necessary expenses incurred in the performance of services in accordance with the expense reimbursement schedule included in Attachment B.

(c) Maximum payment. The maximum payment under this contract for services and, if authorized, reimbursement of expenses shall not exceed \$79,955.

(d) Invoices. All invoices for services will be submitted on a monthly basis to the Contract Manager. The FPUD generally will process and pay bills within thirty (30) days from receipt. Each bill shall include an invoice showing the amount of services rendered during the billing period and the fee for such services. If reimbursement of expenses is authorized, Contractor shall submit monthly invoices for such expenses, including full documentation of each expense incurred. Payments are subject to a final audit upon completion of services or other termination of this contract.

(e) Audit of Records. Contractor shall maintain complete and accurate records of all payrolls, expenditures, disbursements and other cost items charged to FPUD establishing the basis for an invoice, for a minimum of four (4) years from the date of final payment to Contractor. All such records shall be clearly identifiable. Contractor shall allow a FPUD representative to inspect, examine, copy and audit such records during regular business hours upon 24 hours' notice.

4. TIME FOR PERFORMANCE:

(a) Contractor will provide as-needed consulting services for the term of this contract. The work shall be completed within 9 months of notice to proceed.

Contractor shall not proceed from one phase or increment to the next without written authorization from the Contract Manager.

(b) Extension of time for unforeseen circumstances. In the event that the Contractor is unable to meet the completion date or schedule of services, if any, due to circumstances beyond Contractor's reasonable control, such as war, riots, strikes, lockouts, work slow down or stoppage, except strikes, lockouts, or work slow down or stoppage of Contractor's employees or subcontractors, acts of God, such as floods or earthquakes, and electrical blackouts or brownouts, Contractor shall inform the Contract Manager of the additional time required to perform the work and the Contract Manager may adjust the schedule.

5. STANDARD OF PERFORMANCE:

Contractor's services shall be performed in accordance with generally accepted professional practices and principles and in a manner consistent with the level of care and skill ordinarily exercised by members of Contractor's profession currently practicing under similar conditions. Whenever the scope of work requires or permits approval by the FPUD, it is understood to be approval solely for the purposes of conforming to the requirements of the scope of work and not acceptance of any professional or other responsibility for the work. Such approval does not relieve the Contractor of responsibility for complying with the standard of performance or laws, regulations, industry standards, or from liability for damages caused by negligent acts, errors, omissions, noncompliance with industry standards, or the willful misconduct of Contractor or its subcontractors. By delivery of completed work, Contractor certifies that the work conforms to the requirements of this contract and all applicable federal, state and local laws. If Contractor is retained to perform services requiring a license, certification, registration or other similar requirement under California law, Contractor shall maintain that license, certification, registration or other similar requirement throughout the term of this Contract.

6. INDEPENDENT CONTRACTOR:

Contractor is an independent contractor. Neither Contractor nor any of Contractor's officers, employees, agents or subcontractors, if any, is an employee of FPUD by virtue of this contract or performance of any work under this contract.

7. ASSIGNMENT:

Contractor shall not assign or transfer voluntarily or involuntarily any of its rights, duties, or obligations under this contract without the express written consent of FPUD in each instance.

8. CONTRACTOR'S EMPLOYEES:

(a) Immigration Reform and Control Act of 1986. Contractor is aware of the requirements of the Immigration Reform and Control Act of 1986 and shall comply with those requirements, including, but not limited to, verifying the eligibility for employment of all of Contractor's agents, employees, 'subcontractors and Contractors that are included in this contract.

(b) **Limitation of FPUD.** The payment made to Contractor pursuant to this contract shall be the full and complete compensation to which Contractor and Contractor's officers, employees, agents and subcontractors are entitled for: performance of any work under this contract. Neither Contractor nor Contractor's officers or employees are entitled to any salary or wages, or retirement, health, leave or other fringe benefits applicable to employees of FPUD. FPUD will not make any federal or state tax withholdings on behalf of Contractor. FPUD shall not be required to pay any workers' compensation insurance on behalf of Contractor.

(c) **Indemnification for Employee Payments.** Contractor agrees to defend and indemnify FPUD for any obligation, claim, suit or demand for tax, retirement contribution including my contribution to the Public Employees Retirement System (PERS), social security, salary or wages, overtime payment, or workers' compensation payment which FPUD may be required to make on behalf of Contractor or any employee of Contractor, or any employee of Contractor construed to be an employee of FPUD, for work done under this contract. This is a continuing obligation that survives the termination of this contract.

9. FAIR EMPLOYMENT PRACTICES:

(a) Contractor acknowledges and agrees to abide by the following policy of FPUD that states:

"(a) It is the policy of FPUD to protect and safeguard the right and opportunity of all persons to seek, obtain, and hold employment without discrimination or abridgment on account of race, color, ethnicity, national origin, ancestry, religion, creed, veteran status, physical disability, mental disability, medical condition, marital status, sex, sexual orientation, age, or other status protected from workplace discrimination by state or federal law.

"(b) This section shall be interpreted in a manner that is consistent with the California and United States Constitutions and applicable state and federal statutes governing workplace discrimination. The terms used in this section shall have the same meaning as defined in state statutes governing the same subject matter.

"(c) Nothing in this section shall be interpreted as prohibiting bona fide occupational qualifications consistent with applicable state and federal law and reasonably necessary to the normal operation of FPUD employment or contracting. Nothing in this section shall be interpreted as prohibiting regulations and policies to prevent nepotism or conflicts of interest.

"(d) Nothing in this section shall be interpreted as prohibiting action taken to establish or maintain eligibility for any federal program, where ineligibility would result in a loss of federal funds to FPUD."

(b) **Civil Rights Act** Contractor agrees to comply with Title VII of the Civil Rights Act of

1964, as amended, the California Fair Employment Practices Act, the Americans with Disabilities Act of 1990, any other applicable federal and state laws and regulations hereinafter enacted.

(c) FPUD Discrimination/Harassment Policy. Contractor and its officers, employees, agents and subcontractors shall comply with FPUD Discrimination/Harassment Prohibition Policy in performance of this contract.

(d) Indemnification. To the fullest extent permitted by law and without limitation by the provisions of Section 19 relating to insurance, the Contractor shall also indemnify, defend and hold harmless FPUD, and its directors, officers, employees and agents from and against all liability (including without limitation all claims, damages, penalties, fines, and judgments, associated investigation and administrative expenses, and defense costs, including but not limited to reasonable attorneys' fees, court costs, and costs of alternative dispute resolution) resulting from any claim of discrimination or harassment, including but not limited to sexual harassment, arising from the conduct of the Contractor or any of the Contractor's officers, employees, agents, licensees, or subcontractors. In the event of a discrimination or harassment complaint against any employee, agent, licensee or subcontractor of the Contractor or its subcontractors, the Contractor shall take immediate and appropriate action in response to such complaint, 'including, but not limited to termination or appropriate discipline of any responsible employee, agent, licensee or subcontractor. The provisions of this Section survive completion of the services or termination of the Contract.

10. WORKPLACE CONDUCT AND BEHAVIOR:

Contractor and Contractor's officers, employees, agents and subcontractors shall comply with FPUD's Substance-free Work Place Policy, Information and Communications Systems Policy, and other roles and regulations governing work place safety, conduct and behavior, for any portion of the work performed on the premises of FPUD or using FPUD's facilities or equipment.

11. OWNERSHIP OF WORK PRODUCT:

Upon delivery, the work product, including without limitation, all original reports, writings, recordings, drawings, files, and detailed calculations developed under this contract are the property of FPUD. Contractor agrees that all copyrights which arise from creation of the work pursuant to this contract shall be vested in FPUD and waives and relinquishes all claims to copyright or other intellectual property rights in favor of FPUD. FPUD acknowledges that its use of the work product is limited to the purposes contemplated by the scope of work and that the Contractor makes no representation of the suitability of the work product for use in or application to circumstances not contemplated by the scope of work. Contractor will notify the District prior to performing any specialized proprietary work.

12. CHANGES IN WORK:

No payment for changed or additional work shall be made unless the changed or additional work has first been approved in writing by the Contract Manager and the parties have agreed upon the appropriate adjustment, if any, to the payment schedule and maximum payment amount for the changed or additional work. The Contract Manager may order changes or additions to the scope of work. Whether a change or addition to the scope of work is proposed by the Contractor or ordered by the Contract Manager, the parties shall in good faith negotiate an appropriate adjustment, if any, to the payment schedule and maximum payment for the changed or additional work. An approved change or addition, along with the payment adjustment, if any, will be effective upon an amendment to this contract executed by both parties. The amendment shall not render ineffective or invalidate unaffected portions of this contract.

13. CONFIDENTIALITY:

(a) Confidential Nature of Information. Contractor shall treat all information obtained from FPUD in the performance of this contract as confidential and proprietary to FPUD. Contractor shall treat all records and work product prepared or maintained by Contractor in the performance of this contract as confidential.

(b) Limitation on use and disclosure. Contractor agrees that it will not use any information obtained as a consequence of the performance of work for any purpose other than fulfillment of Contractor's scope of work. Contractor will not disclose any information prepared for FPUD, or obtained from FPUD or obtained as a consequence of the performance of work to any person other than FPUD, or its own employees, agents or subcontractors who have a need for the information for the performance of work under this contract unless such disclosure is specifically authorized in writing by FPUD.

(c) Survival. Contractor's obligations under this paragraph shall survive the termination of this contract.

14. PROHIBITED INTEREST:

No official or employee of FPUD who is authorized in such capacity on behalf of FPUD to negotiate, make, accept, or approve, or take part in negotiating, making, accepting, or approving this contract, shall become directly or indirectly interested in this contract or in any part thereof. No officer or employee of FPUD who is authorized in such capacity and on behalf of FPUD to exercise any executive, supervisory, or similar functions in connection with the performance of this contract shall become directly or indirectly interested personally in this contract or any part thereof.

15. CONFLICT OF INTEREST:

(a) Local Conflict of Interest Code Compliance. FPUD has determined, based on the scope of the services to be provided by Contractor under this contract, that this contract does not confer on Contractor or any of Contractor's, employees the status of a "designated employee" or "Consultant" of FPUD for the purposes of FPUD's Local Conflict of Interest Code and the California Political Reform Act.

(b) Disqualification. Contractor shall not make or participate in making or in any way attempt to use Contractor's position to influence a governmental decision in which Contractor knows or has reason to know Contractor has a direct or indirect financial interest other than the compensation promised by this contract. Contractor will not have such interest during the term of this contract. Contractor will immediately advise the General Counsel of FPUD if Contractor learns of a financial interest of Contractor's during the term of this contract. If Contractor's participation in another FPUD project would create an actual or potential conflict of interest, in the opinion of FPUD, FPUD may disqualify Contractor from participation in such other project during the term of this Contract.

(c) The Contractor may respond to FPUD public procurement request without restriction during the course of this Contract subject to all the following restrictions:

1. The Contractor shall be disqualified from performing any work, the design or specification of which was reviewed by the Contractor pursuant to this contract.
2. Full compliance with the provisions of Prohibited Interest, Paragraph 16.
3. Officers, employees, agents and subcontractors of the Contractor under this Contract, shall not participate in any manner in any other FPUD project with respect to which the Contractor or subcontractors has an actual or potential direct or indirect economic interest.

16. INDEMNIFICATION:

To the fullest extent permitted by law, the Contractor shall indemnify, defend (with independent counsel approved by FPUD) and hold harmless FPUD, and its directors, officers, and employees from and against all liabilities (including without limitation all claims, losses, damages, penalties, fines, and judgments, associated investigation and administrative expenses, and defense costs, including but not limited to reasonable attorneys' fees, court costs and costs of alternative dispute resolution) regardless of nature or type arising out of or resulting from any error or negligent or wrongful act or omission of the Contractor or Contractor's officers, employees, agents, or subcontractors. The Contractor's obligations apply regardless of whether or not a liability is caused or contributed to by the negligence (including passive negligence) or other act or omission of FPUD or any party indemnified under this Section. However, to the extent that liability is caused by the active negligence or willful misconduct of an indemnified party, the contractor's indemnification obligation shall be reduced in proportion to the indemnified party's share of liability for its active negligence or willful misconduct, if any, but, the acceptance or approval of the Contractor's work or work: product by FPUD or any of its directors, officers or employees shall not relieve or reduce the Contractor's liability. The provisions of this paragraph survive completion of the services or the termination of this Contract. The provisions of this Section are not limited by the provisions of Section 17 relating to insurance.

17. INSURANCE:

(a) Requirement. Contractor shall procure and maintain during the period of performance of this contract and for 24 months following completion, insurance from insurance companies authorized to do business in the State of California, as set forth in this section. These policies shall be primary insurance as to FPUD so that any other coverage held by FPUD shall not contribute to any loss under. Contractor's insurance.

General liability: (with coverage at least as broad as ISO form CO 00 01 10 01) coverage in an amount not less than \$1,000,000 general aggregate and \$1,000,000 per occurrence for general liability, bodily injury, personal injury, and property damage.

Automobile liability: (with coverage at least as broad as ISO form CA 00 01 10 01, for "any auto") coverage in an amount not less than \$1,000,000 per accident for personal injury, including death, and property damage.

Product liability: (errors and omissions) for damage alleged to be as a result of errors, omissions or negligent acts of Contractor's production of software/programming/product coverage in an amount not less than \$1,000,000 per claim with a \$2,000,000 aggregate.

Workers' compensation and employer's liability: coverage shall comply with the laws of the State of California, but not less than an employer's liability limit of \$1,000,000.

A deductible or retention maybe utilized, subject to approval by FPUD.

(b) Endorsements. The insurance policies shall be endorsed as follows:

For the commercial general liability insurance, FPUD (including its directors, officers, employees, and agents) shall be named as additional insured, and the policy shall be endorsed with a form equivalent to ISO form CO 20. 10 10 93, that contain the provisions required by this contract.

Contractor's insurance is primary to any other insurance available to FPUD with respect to any claim arising out of this Agreement. Any insurance maintained by FPUD shall be excess of the Contractor's insurance and shall not contribute with it. The Contractor's endorsement of insurance shall include a waiver of any rights of subrogation against FPUD, and its directors, officers, employees and agents.

Contractor's insurance will not be canceled, limited, amended, reduced in coverage amount, or allowed to expire without renewal until after thirty (30) days' written notice has been given to FPUD, or after ten (10) days' written notice in the case of cancellation for non-payment of premium.

(c) Qualifications of Insurer. The insurance shall be provided by an acceptable insurance provider, as determined by FPUD, which satisfies the following minimum requirements: An insurance carrier admitted to do business in California and maintaining an agent for process within the state. Such insurance carrier shall maintain a current A.M. Best rating classification of "A-" or better and a financial size of "\$10 million to \$24 million (Class V) or better", or A

Lloyds of London program provided by syndicates of Lloyds of London and other London insurance carriers, providing all participants are qualified to do business in California and the policy provides for an agent for process in the state. Workers' Compensation and Employer's Liability shall be provided by an A-V rated carrier or by the California State Compensation Fund. If provided by a carrier other than California State Compensation Fund, Contractor shall provide proof of the carrier's A-V rating to FPUD.

(d) Provision of Insurance Prior to Commencement of Services. Before commencing any services, Contractor shall furnish certificates of insurance and endorsements affecting coverage on forms provided by FPUD, or on equivalent ISO forms that contain provisions required by this contract.

18. ACCIDENT REPORT:

Contractor shall immediately report (as soon as feasible, but not more than 24 hours) to FPUD any accident or other occurrence causing injury to persons or property during the performance of this Contract. If required by FPUD's Risk Manager, the report shall be made in writing and shall include, at 3 minimum: (a) the names, addresses, and telephone numbers of the persons involved, (b) the names, addresses and telephone numbers of any known witnesses, (c) the date, time and description of the accident or other occurrence.

19. COVENANT AGAINST CONTINGENT FEES:

Contractor agrees that its firm has not employed or retained any company or person, other than a bona fide employee working for Contractor, to solicit or secure this contract, and that Contractor has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration contingent upon, or resulting from, the award or making of this contract. For breach or violation of this provision, FPUD shall have the right to terminate this contract without liability, or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fees, gift, or contingent fee.

20. TERMINATION OR ABANDONMENT:

(a) FPUD's Rights. FPUD has the right to terminate or abandon any portion or all of the work by giving ten (10) days' written notice. Upon receipt of a notice of termination, Contractor shall perform no further work except as specified in the notice. Before the date of termination, Contractor shall deliver to FPUD all work product, whether completed or not, as of the date of termination and not otherwise previously delivered. FPUD shall pay Contractor for services performed in accordance with this contract before the date of termination. If this contract provides for payment of a lump sum for all services or by task and termination occurs before completion of the work or any defined task which according to the performance schedule was commenced before the notice of termination, the fee for services performed shall be based on an amount mutually agreed to by FPUD and Contractor for the portion of work: completed in conformance with this contract before the date of termination: In addition, FPUD will reimburse Contractor for authorized expenses incurred and not previously reimbursed. FPUD shall not be

liable for any fees or costs associated for the termination or abandonment except for the fees, and reimbursement of authorized expenses, payable pursuant to this section.

(b) Contractor's Rights. Contractor, if Contractor is not in default or breach, may terminate Contractor's obligation to provide further services under this contract upon thirty (30) days' written notice only in the event of a material default by FPUD, which default has not been cured within thirty (30) days following the written notice.

21. SUCCESSORS OR ASSIGNS:

All terms, conditions, and provisions of this contract shall apply to and bind the respective heirs, executors, administrators, successors, and assigns of the parties. Nothing in this paragraph is intended to affect the limitation on assignment.

22. DAMAGE OR LOSS OF EQUIPMENT OR FACILITIES:

General Obligation. Contractor shall pay to FPUD the replacement cost of any equipment or repair cost of any facilities provided by FPUD for Contractor's use in performance of services that is lost or damaged by Contractor or Contractor's officers, employees, agents or subcontractors.

23. ELECTRONIC COMMUNICATIONS:

During the course of this contract, communications may occur through sending, receiving or exchanging electronic versions of documents and e-mails using commercially available computer software and Internet access. Contractor and FPUD acknowledge that the Internet is occasionally victimized by the creation and dissemination of so-called viruses, or similar destructive electronic programs. Contractor and FPUD view the issues raised by these viruses seriously and have invested in document and e-mail scanning software that identifies and reject files containing known viruses. Contractor agrees to update its system with the software vendor's most current releases at regular intervals. Because of the virus scanning software, the respective computer systems of the parties may occasionally reject a communication. The parties acknowledge that this occurrence is to be expected as part of the ordinary course of business. Because the virus protection industry is generally one or two steps behind new viruses, neither party can guarantee that its respective communications and documents will be virus free. Occasionally, a virus will escape and go undetected as it is passed from system to system. Although each party will use all reasonable efforts to assure that its communications are virus-free, neither party warrants that its documents will be virus free. Each party agrees to advise the other if it discovers a virus in its respective system that may have been communicated to the other party.

24. LAWS AND VENUE:

This contract and disputes arising out of or relating to the contract or the parties' relationship are governed by the laws of the State of California. Any action or proceeding arising out of or

relating to the contract or the parties' relationship shall be brought in a state or federal court situated in the County of San Diego, State of California.

25. ADMINISTRATION:

(a) Contractor's principal place of business and agent for service of process. Contractor's principal place of business is Rancho Cordova, California. Contractor's agent for service of process is Doug Spiers, President.

(b) FPUD's Representative. FPUD's representative for administration of this contract is JACK BEBEE, who is the designated Contract Manager. FPUD may change the Contract Manager at any time upon notice to the Contractor.

(c) Contractor's Representative. The Contractor's representative for administration of this contract is Doug Spiers, who is designated as the Project Manager. The Contractor may change the Project Manager upon written notice to and approval by the Contract Manager.

(d) Notices. Any notice or instrument required to be given or delivered by law or this contract shall be effective upon receipt thereof and shall be by personal service or delivered by depositing the same in any United States Post Office, registered or certified, postage prepaid, addressed to:

FALLBROOK PUBLIC UTILITY DISTRICT
PO Box 2290
990 E. Mission Road
Fallbrook CA 92028
Attn: JACK BEBEE, Assistant General Manager

Contractor: Westin Engineering
Location: 3100 Zinfandel Drive, Suite 300 Rancho Cordova, CA 95670
Attn: Doug Spiers, President

Either party may change the address or identity of the person for notices under this paragraph by written notice to the other delivered in accordance with this paragraph.

(e) Routine Administrative Communications. Routine administrative communication required to be in writing may be by personal delivery, mail, facsimile transmission or electronic mail as agreed between the Contractor and Contract Manager.

26. INTEGRATION AND MODIFICATION:

This contract represents the entire understanding of FPUD and Contractor as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This contract may not be modified, amended, or altered except in writing signed by FPUD and Contractor.

27. ADVICE OF COUNSEL:

The parties agree that they are aware that they have the right to be advised by counsel with respect to the negotiations, terms, and conditions of this contract, and that the decision of whether or not to seek the advice of counsel with respect to this contract is a decision which is the sole responsibility of each of the parties hereto. This contract shall not be construed in favor or against either party by reason of the extent to which each party participated in the drafting of the contract.

28. INDEPENDENT REVIEW:

Each party hereto declares and represents that in entering this contract it has relied and is relying solely upon its own judgment, belief and knowledge of the nature, extent, effect and consequence relating thereto. Each party further declares and represents that this contract is being made without reliance upon any statement or representation not contained herein of any other party, or any representative, agent, or attorney of any other party.

29. TIME:

Time is of the essence in this contract. Any reference to days means calendar days unless otherwise specifically stated.

30. TAXES:

The Contractor shall pay all applicable federal, state, and local excise, sales, consumer use, and other similar taxes required by law for the execution of the work.

31. SIGNATURES:

The individuals executing this contract represent and warrant that they have the legal capacity and authority to do so on behalf of their respective legal entities.

IN WITNESS WHEREOF, the parties have executed this contract on the following date.

DATED: _____, 2016

Fallbrook Public Utility District

By: _____
BRIAN BRADY, General Manager

Westin Engineering

By: _____

Approved as to form:
ROBERT H. JAMES
General Counsel
Fallbrook Public Utility District

By: _____

Attachment A**SCOPE OF WORK**

The work shall include the following:

1. Assess Current Conditions for Engineering and Operations
 - a. Project Management - Westin's Project Management approach ensures on-time, on-budget and on-target engagements. Westin's Project Manager will conduct monthly face-to-face progress meetings with the District's Project Champion to review progress, discuss upcoming logistics, and note any items requiring further discussion. Our QA/QC Manager will independently review all deliverables for completeness.
 - b. Project Kickoff Meeting | Westin will facilitate a Project Kickoff Meeting with the District's Project Champion to establish key project milestones, clarify expectations and develop a unified project vision. We will jointly determine the key interviewees, schedule all foreseeable on-site activities, and discuss any preliminary areas of concern. Additionally, Westin would like to discuss the following items:
 - What are the desired unwritten outcomes for the District's Performance Management Program?
 - What are the foreseeable challenges?
 - What were the specific challenges in conducting the AWWA Benchmarking Survey?

Westin will summarize the results of the Project Kickoff Meeting in a brief Technical Memorandum.
 - c. Document Request and Review | At the Project Kickoff Meeting, Westin will request an initial set of documents for review (written plans, new initiatives, prior assessments, etc.). Westin will review each document prior to beginning our on-site activities.
 - d. Individual Interviews | Westin will facilitate up to 12 one-on-one interviews with District employees from the 6 participating Engineering and Operations Departments to gather the following information:
 - What are each Department's top level strategies?
 - What are the most important work processes within each Department?
 - What are the perceived Department's strengths and areas for improvement?
 - What Department reports are currently being generated and how?

These Interviews will be specifically designed to efficiently gather the requisite information to understand the culture, strategies, inter-departmental communications, and how metrics are currently tracked. Westin's stringent policy of strict confidentiality allows for open and honest discussions.
 - e. Facility Site Tours and Ride-Alongs: Westin will conduct up to two days of facility site tours and ride-alongs with select crews within the 6 participating

departments to gain a personal perspective of the District's existing culture and work processes.

- f. **SWOT Workshop:** To maximize organizational buy-in, Westin will facilitate a 3-hour Strengths, Weaknesses, Opportunities and Threats (SWOT) Workshop with select District management and staff. We have found that the more inclusive we are, the greater success the District will have when rolling out its program. Accordingly, we envision that up to 20 employees will participate in the SWOT Workshop. Westin utilizes a proven SWOT methodology to efficiently gather the following information:
 - The identified areas for improvement
 - Consensus on the top priorities and critical issues
 - How success can be measured in the future
- g. **Draft Assessment Report:** Westin will document the findings, observations, foreseeable barriers and initial recommendations in a Draft Assessment Report. The Draft Assessment Report will document the baseline condition of the District against industry best practices, as well as prioritize areas that could most benefit from new goal setting and/or associated metrics.
- h. **Final Assessment Report:** Westin will then facilitate a Validation Meeting with the District's Project Champion to discuss and review the findings and observations for accuracy. All significant input from this meeting will be included in Westin's Final Assessment Report.

2. Develop Initial KPIs for Engineering and Operations

The objective of this Task is to guide the initial development of a set of appropriate metrics to support governance, informed decision-making and resource prioritization.

- a. **Performance Measurement Best Practices Workshop:** Westin will facilitate a Best Practices Workshop with all of the participating departments' management team. We will openly discuss the pros and cons of all metrics and performance reports currently in use, as well their appropriateness and relative use in the industry. Westin will introduce its proven Performance Management Scorecard Template and also present the requisite elements for a sustainable Performance Management Program. This will include the proper selection and use of business intelligence tools.
- b. **Performance Area Workshops:** Westin will conduct a series of Performance Area Workshops to reach agreement on the top level goals of each Engineering and Operations Department. This effort is critical to identify which goals, outcomes and processes need to be measured.
 - What issues are likely to have the greatest impact on performance?
 - What appears to be the factors causing this to be an issue for the organization?
- c. **Metric Development Workshops:** Westin will facilitate follow-up meetings with each of the participating departments to present recommended measures for each prioritized area. Westin will discuss the rationale for the initial measures and begin to identify the appropriate data sources. For example, in the Operations

departments, many of the metrics will rely on SCADA data. Westin will provide examples from what other similar agencies are doing and measuring in each of these areas.

3. KPI Development and KPI Implementation Plan for Engineering and Operations

- a. Measure Refinement Workshops: Westin will work with each department to finalize the set of metrics:
 - Identify the metrics that can be implemented immediately and those that require additional effort.
 - Define each metric's description, accountability, numerator, denominator, and reporting frequency.
 - Work with the District to gather historical performance data for the past 3 years for each metric.
 - Fill in the Performance Scorecard Templates including a graph with an initial performance target.
- b. Implementation Plan Development: This effort includes the requisite data gathering and reporting tools and procedures for effective and efficient performance management program rollout including recommendations for a future BI reporting tool and software interfaces with other District systems, including Maintenance Connection, Springbrook, and SCADA. The Implementation Plan will include a process for effective reporting, an overall schedule, planning level budget, District resource needs, estimated level of use of outside support, and data quality control processes. Westin will include all relevant District comments in the Final Implementation Plan.
- c. Integrated Measures Workshop and Program Roll-Out: To gain final buy-in, Westin will facilitate a workshop with the District's participants to present the suite of measures from each department demonstrating a logical connection to the desired outcomes. Westin will also present the details of the Implementation Plan and the logical next steps for effective and efficient program roll-out.
- d. Draft and Final Performance Management Program Report: Westin will prepare a draft report including the approach to develop the metrics, the completed Performance Scorecards for each metric and the Implementation Plan for the development and utilization of future metrics. Westin will include all pertinent District comments in a Final Performance Management Program Report.
- e. Board Presentation: If needed, Westin will prepare a presentation for the District's Board of Directors to outline the process, present the Implementation Plan and discuss the overall benefits of the program.

SCHEDULE

The work shall be completed within 9 months of notice to proceed.

Attachment B

The following table identifies the costs for services. The work done shall not exceed \$79,955. ODC's shall be at cost plus 5%. Mileage shall be at latest IRS rate.

Activity	Doug	Albair	Rod	Glenn	Denise	Total Fees	ODCs	Total
	\$ 250	\$250	\$240	\$ 225	\$150			
Task 1 – Assess Current Conditions for Engineering and Operations								
Project Management	5				6	\$2,150	\$ 300	\$2,450
Project Kickoff Meeting	3		3			\$1,470	\$400	\$1,870
Document Request and Review	2		6		4	\$2,540		\$2,540
Individual Interviews (12 @ 1 hour each)	16		16			\$7,840	\$1,500	\$9,340
Facility Site Tours and Ride Alongs (2 Days)	4		16			\$4,840	\$400	\$5,240
SWOT Workshop	4		4			\$1,960	\$500	\$2,460
Draft Assessment Report	4	3	24			\$7,510		\$7,510
Final Assessment Report	2		6			\$1,940		\$1,940
Subtotal Hours	40	3	75	0	10	\$30,250	\$3,100	\$33,350
Task 2 – Develop Initial KPIs for Engineering and Operations								
Performance Measurement Best Practices Workshop	8		4			\$ 2,960	\$150	\$3,110
Performance Area Workshops (6 at 2 hours each)	4		14			\$ 4,360	\$600	\$4,960
Metric Development Workshops (6 at 3 hours each)	4		20			\$5,800	\$600	\$6,400

Subtotal Hours	16	0	38	0	0	\$13,120	\$1,350	\$14,470
Task 3 – KPI Development and KPI Implementation Plan								
Measure Refinement Workshops (6 at 3 hours each)	6		24			\$ 7,260	\$1,410	\$8,670
Implementation Plan Development	8	3	24	12		\$11,210		\$11,210
Integrated Measures Workshop and Program Roll-Out	4		8			\$2,920	\$555	\$3,475
Draft Performance Management Program Report	2	3	12			\$ 4,130	\$200	\$4,330
Final Performance Management Program Report	2		6			\$ 1,940	\$200	\$2,140
Board Presentation	3		4			\$1,710	\$600	\$2,310
Subtotal Hours	25	6	78	12	0	\$29,170	\$2,965	\$32,135
Total Cost						\$72,540	\$7,415	\$79,955

M E M O

TO: Board of Directors
FROM: Jack Bebee, Assistant General Manager, JAB
DATE: September 26, 2016
SUBJECT: Santa Margarita Conjunctive Use Approval of Environmental Impact Report / Environmental Impact Statement and Approval of Design Amendment 2

Purpose

To adopt resolution No 4890, which entails:

- 1) Certifying the California Environmental Quality Act (CEQA) Environmental Impact Report (EIR)
- 2) Adopting the CEQA Findings of Fact
- 3) Adoption of the Mitigation Monitoring and Reporting Requirements (MMRP)
- 4) Approve the Santa Margarita Conjunctive Use Project

To approve the Design Amendment 2 to improve the operation of the SMRCUP facility and reduce any impacts to adjacent residents and provide additional consulting services including associated permitting and additional analysis to reduce uncertainties and associated costs during construction.

Summary

A joint Environmental Impact Report (EIR) / Environmental Impact Statement (EIS) to satisfy both California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA) requirements was completed. The District served as the CEQA Lead Agency and the U.S. Department of Defense served as the NEPA Lead Agency. The EIR/EIS was released for a public review period from May 9, 2014, to August 5, 2014. The consultations for effects to special-status species with both NOAA fisheries and the U.S. Fish and Wildlife Services have been completed.

The final EIR/EIS has been prepared to address the results of the consultations and the final EIR/EIS document and response to comments is posted on the FPUD website. Board approval of the CEQA Findings of Fact and adoption of the Mitigation Monitoring and Reporting Program is a major step in resolving the longstanding water rights litigation between Camp Pendleton. Approval allows the District to move forward in securing a local water supply and a buffer from escalating imported water costs.

The CEQA Findings of Fact and MMRP are Exhibits A and B, respectively, and the Notice of Determination (NOD) is Exhibit C in Resolution No. 4890. Board approval allows the water rights and settlement process to move towards completion and for the

District to move closer to settle the outstanding litigation related to the United States versus FPUD case of 1951.

Camp Pendleton has completed the design of their facilities and is in the process of awarding construction. The Camp Pendleton facilities will complete the piping to deliver the water to the boundary of the Naval Weapons Station and Fallbrook behind the District's solar facilities' site on Alturas Road. Construction of the facilities from this location is the responsibility of the District.

The design process is also near completion for these District facilities that will treat the water at the Alturas Road location and deliver it into the District's distribution system. The 100% design was completed and comments are being addressed to produce the final design. There are some additional design services required to complete the final design and associated permitting. The services include design changes to improve the operation and reduce noise and operating costs and also additional permitting services and analysis to reduce unknown conditions during construction and associated costs (see Attachment 1). The original contract amount for the project was \$3,205,140. The contract was reduced by \$158,131 to \$3,047,009 by Amendment 1 by reducing some of the piping for the project and associated design costs. Due to additional design services, an additional amount of \$160,750 is necessary per attached Amendment 2 to complete the design and permitting for a total contract amount of \$3,207,759.

District staff is in the process of evaluating funding options for the District facilities. Staff has submitted an initial State Revolving Funds (SRF) application and is working through their funding process. Staff is also exploring other state and federal funding options as well as options for a public debt issuance. As part of this process staff will prepare for the Board a detailed funding plan with a range of parameters and summary of the long-term risks and benefits to the District of completing this project and developing a local water supply versus continuing to be almost completely reliant on the San Diego County Water Authority and Metropolitan Water District for our water supplies.

Recommended Action

That the Board certify the Final EIR, approve the California Environmental Quality Act (CEQA) Findings of Fact, and adopt the Mitigation Monitoring and Reporting Program (MMRP) to complete the CEQA process for the Santa Margarita Conjunctive Use Project (SMRCUP) per Resolution No 4890. That the Board approve design Amendment No. 2 to improve the operation of the SMRCUP facility and reduce operating costs and any impacts to adjacent residents and provide additional consulting services to complete associated permitting and reduce unknowns and associated costs during construction.

Attachment 1

**Professional Services Contract
Amendment No. 2**

The following amends the contract between the FALLBROOK PUBLIC UTILITY DISTRICT (FPUD), a local public agency and Infrastructure Engineering Corporation, dated November 22, 2014.

Scope of Services:

This amendment modifies the original contract by adding the following tasks to Task 300 in Attachment A:

- Include the following additional design improvements and modifications to the project design
 - Add a chlorine contact pipe to free up clearwell volume
 - Enclose the product water pumps station to reduce noise
 - Add a second sodium hypochlorite tank
 - Add fluoride facilities as an optional bid item
 - Elevate the IM waste washwater recovery tank to minimize pumping
- Provide the following additional design services
 - Provide a fire consultant to address Fire Department comments
 - Provide NPDES permitting assistance for brine discharge
 - Complete additional seismic refraction analysis to verify subsurface conditions
 - Perform additional hydraulic transient analysis to confirm no transient impacts at RMR UV Facility
 - Provide Operations and Maintenance costs for the facility.

Fee Schedule:

This amendment adds the following additional Fee schedule breakdown in Attachment B for Task 300:

Item	Additional Effort (\$)
Add chlorine contact pipe	\$26,300
Enclose Product Water Pump Station for Noise Mitigation	\$43,400
Add a redundant sodium hypochlorite tank	\$20,000
Add fluoride facilities as an optional bid item	\$20,400
Elevate the IM waste washwater tank to minimize pumping	\$22,000
Provide fire consultant services	\$7,350
Provide NPDES Permitting assistance	\$5,000
Complete additional Seismic Refraction analysis	\$4,300
Perform additional hydraulic transient analysis	\$6,500
Provide O&M Costs for the facilities	\$5,500
Total	\$160,750

Budget:

This amendment increases the budget by \$160,750 from \$3,047,009 to \$3,207,759.

Signatures:

The individuals executing this contract represent and warrant that they have legal capacity and authority to do so on behalf of their respective legal entities.

IN WITNESS WHEREOF, the parties have executed this contract amendment on the following date.

DATED: _____, 2015

Fallbrook Public Utility District

By: _____
Brian Brady, General Manager

Cardno ENTRIX

By: _____
Rob Weber, President

Approved as to form:
ROBERT H. JAMES
General Counsel
Fallbrook Public Utility District

By: _____

RESOLUTION NO. 4890

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
FALLBROOK PUBLIC UTILITY DISTRICT CERTIFYING THE FINAL
ENVIRONMENTAL IMPACT REPORT / ENVIRONMENTAL IMPACT
STATEMENT, ADOPTING THE PROJECT MITIGATION MONITORING
AND REPORTING PROGRAM AND FINDINGS OF FACT AND
APPROVING THE SANTA MARGARITA CONJUNCTIVE USE
PROJECT**

* * * * *

WHEREAS, the Fallbrook Public Utility District (District) has undertaken the review of a project to complete the piping to deliver a supplemental source of water in an effort of resolving a long-standing water rights dispute dating back to 1951; and

WHEREAS, the California Environmental Quality Act of 1970 (CEQA) requires state, local and other agencies to evaluate and reduce, when feasible, the significant environmental impacts of their respective projects; and

WHEREAS, the District has caused to be prepared a Final EIR for the proposed project in accordance with the requirements of CEQA; and

WHEREAS, consistent with CEQA the District evaluated project alternatives, and

WHEREAS, the Final EIR deemed Alternative 1 to be the environmentally superior alternative to the Project;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the District hereby certifies that:

1. The above recitals are true and correct.
2. The Final EIR has been completed in compliance with CEQA.
3. The Final EIR reflects the independent judgment and analysis of the District.
4. The Final EIR was presented to the Board of Directors of the District, which reviewed and considered the information in the Final EIR before approving the proposed project.
5. The Final EIR adequately identifies all of the environmental impacts of the proposed project. Potentially significant impacts were identified and conditions of approval have been included or changes or alterations have been required in, or incorporated into the project to mitigate all impacts to less than significant levels. Findings of Fact concerning conditions of approval, changes, or alterations which have been incorporated into the project which will mitigate all other impacts are set forth in the Final EIR and Exhibit A, "Findings of Fact", attached hereto and incorporated herein by this

reference. Due to the lack of significant unavoidable impacts, a Statement of Overriding Considerations is not necessary.

6. Pursuant to section 21081.6 of the Public Resources Code, a Mitigation Monitoring and Reporting Program (MMRP) for the project has been prepared to mitigate or avoid potential significant impacts on the environment, which attached hereto as Exhibit B, and incorporated herein by this reference. The mitigation measures incorporated therein are fully enforceable conditions of the Project. The Board of Directors hereby approves and adopts the MMRP prepared for the project attached hereto as Exhibit B.
7. The documents and other materials which constitute the record of proceedings upon which the decision of the Board of Directors is based are located at the office of the District, 990 East Mission Road, Fallbrook, California 92028, and the Secretary to the Board is the custodian thereof. This information is provided in compliance with Public Resources Code 21081.6(a)(2) and 14 Cal Code Regs 15091(e).
8. The Board of Directors hereby approves the proposed project.
9. The Board Secretary is hereby authorized to file a Notice of Determination, a copy of which is attached as Exhibit C, with the Office of the County Clerk of the County of San Diego and State Clearinghouse.

PASSED AND ADOPTED by the Board of Directors of the Fallbrook Public Utility District at a regular meeting of the Board held on the 26th day of September, 2016, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

President, Board of Directors

ATTEST:

Secretary, Board of Directors

Exhibit A

**Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)**

I. INTRODUCTION

The U.S. Marine Corps (USMC), U.S. Department of the Interior, Bureau of Reclamation (Reclamation), and the Fallbrook Public Utility District (FPUD) have prepared a Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the proposed Santa Margarita River (SMR) Conjunctive Use Project (CUP) (proposed project) in compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

The FPUD is the CEQA lead agency for the proposed project, and these CEQA Findings of Fact are intended to fulfill the responsibility of the FPUD under CEQA for its approval of Alternative 1 of the proposed project. CEQA provides that no public agency shall approve a project or program as proposed, if it would result in significant environmental effects as identified in an EIR, unless it adopts and incorporated feasible mitigation to avoid and reduce such effects and adopt appropriate findings. Section 21081 of the Public Resource Code provides as follows:

CEQA provides that when an EIR identifies any significant environmental effects that would occur if the project is approved or carried out, the agency must make a finding or findings for each of the identified significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

- Finding 1 Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.
- Finding 2 Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
- Finding 3 Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

These findings include a description of Alternative 1 (preferred alternative) for the proposed project, findings concerning potentially significant environmental impacts and mitigation to address such impacts, a discussion of cumulative and growth-inducing impacts. These findings do not include a statement of overriding consideration because there are no significant effects identified in the Final EIS/EIR that are significant and unavoidable.

II. DESCRIPTION OF PROJECT

The U.S. Marine Corps (USMC), U.S. Department of the Interior, Bureau of Reclamation (Reclamation), and the FPUD are proposing to construct and operate the proposed project. The

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

proposed project would enhance groundwater recharge and recovery capacity within the Lower SMR Basin and develop a conjunctive use program that would increase available water supplies for the benefit of Marine Corps Base (MCB) Camp Pendleton and FPUD.

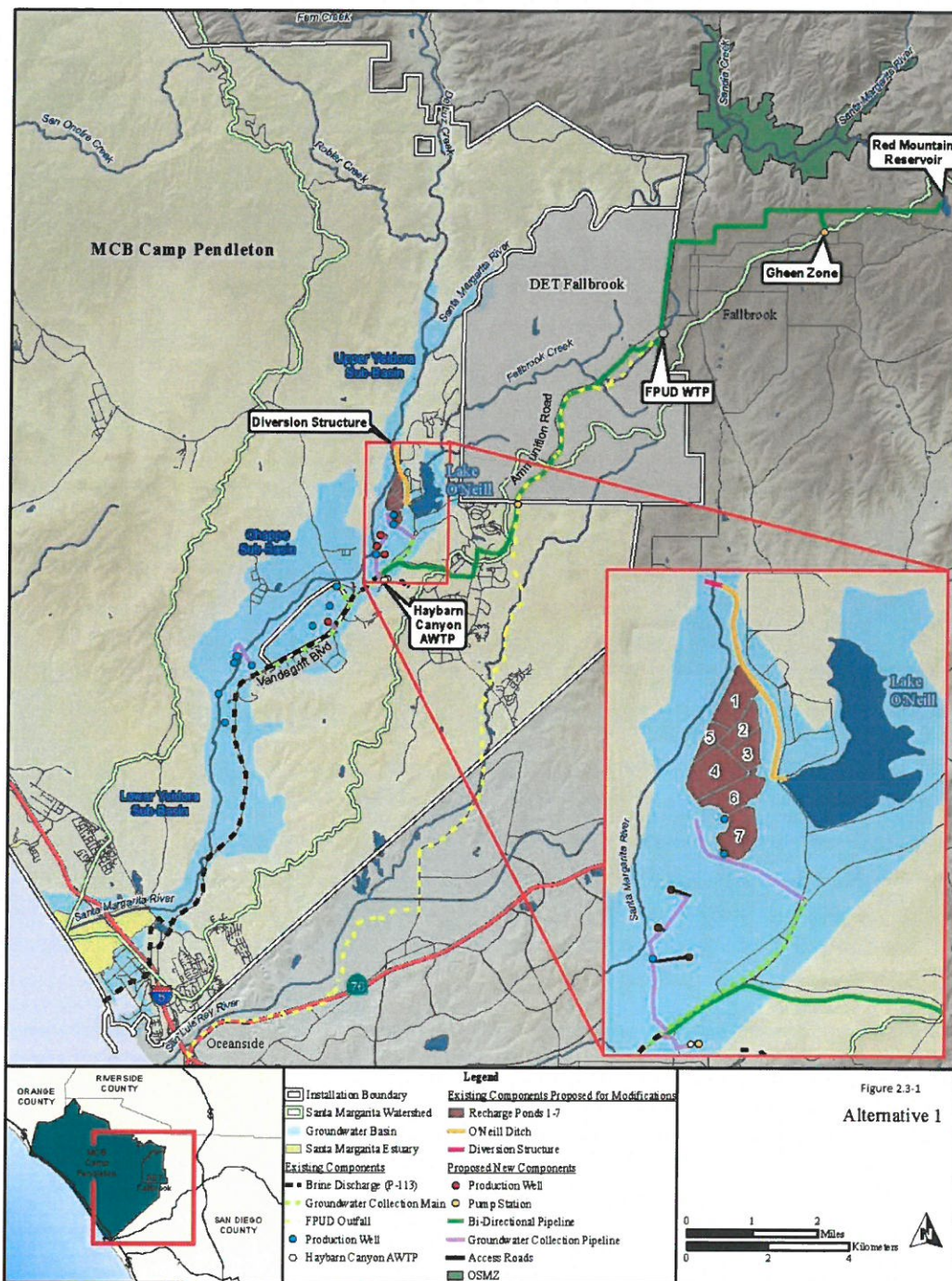
The proposed project is located in the northwest corner of San Diego County, on the southwest coast of California. The proposed project area includes the geographic boundaries of MCB Camp Pendleton, Naval Weapons Station Seal Beach Detachment (DET) Fallbrook, and the FPUD service area. The proposed project includes the construction and use of facilities primarily within the boundaries of the SMR watershed.

The proposed project would construct facilities within the lower SMR Basin to capture additional surface runoff during high streamflow events that currently flows out to the Pacific Ocean. This surface water would be used to recharge groundwater through existing groundwater percolation ponds and stored or “banked” in groundwater basins during wet years and used to augment water supplies during dry years, reducing reliance on imported water. Specifically included are improvements to the diversion works and increased capacity of the headgate and the O’Neill Ditch; improvements to seven existing percolation ponds; installation of new groundwater production wells and gallery wells; treatment of water at an existing, expanded, or new water treatment plant (WTP); and a bidirectional pipeline to deliver water to FPUD and provide MCB Camp Pendleton with an off-base water supply during drier than normal conditions or emergency situations. The majority of improvements would occur on MCB Camp Pendleton.

Chapter 2 of the proposed project Final EIR/EIS identifies Alternative 1 as the preferred alternative. The following describes the components of Alternative 1. This alternative would include diversion system upgrades, groundwater recharge, and groundwater production. Raw groundwater would then be delivered to Haybarn Canyon for delivery to MCB Camp Pendleton and FPUD. Raw groundwater delivered to MCB Camp Pendleton would be treated at the Haybarn Canyon AWTP; while water would be delivered to FPUD via a new bi-directional pipeline for treatment in a new WTP operated by FPUD. Project components associated with Alternative 1 are depicted in Figure 1 and described in detail below.

Findings of Fact Santa Margarita River Conjunctive Use Project (State Clearinghouse No. 2004121068)

Figure 1. Alternative



1

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Project components associated with Alternative 1 are described in detail below.

Improvements to Existing Facilities

Alternative 1 includes improvements and/or replacement of the existing structures discussed below.

Replacement of Existing Sheet Pile Diversion with Inflatable Weir Diversion Structure

The existing sheet pile diversion structure on the SMR would be replaced by a new four section inflatable weir diversion structure consisting of rubber bladders and steel plates (Figure 2.3-2). The new inflatable weir would allow increased diversions up to 200 cfs of surface flow from the SMR, while also providing the opportunity of being deflated during stormwater runoff events. Fully lowering the weir would restore a more natural sediment transport regime, thereby reducing the recurrent costs of removing sediment accumulated behind the weir, in front of the diversion headwall and headgate, and within O'Neill Ditch.

Water diverted at the proposed inflatable weir diversion structure would be conveyed to Lake O'Neill, the recharge ponds, or bypassed back to the SMR.

New Inflatable Weir Diversion Structure

Prior to the construction of the new weir, the existing sheet pile weir would be cut off at ground level (about 5 feet below the top of the sheet piles) and the remaining underground portion would be capped by a concrete slab foundation for the new structure. The concrete foundation would span the entire 250 ft (76 m) width of the SMR and would be 2 feet thick. The concrete slab would extend 12 feet downstream from the capped sheet piles for the entire width of the structure.

The four-section inflatable weir has been design to accommodate velocity and depth requirements for upstream fish passage, as well as protect juvenile steelhead during downstream migration periods. Each section of the weir has been designed to deflate sequentially as flows increase to 2,000 cfs in order to meet fish passage requirements as described below and shown in Figure 2.3-2.

- Long weir section (width = 200 ft): long weir section would remain inflated during most operational conditions. The long weir section would deflate only during large storm events (i.e. events when the depth of water will be 1 foot greater than the crest elevation – approximately 2,000 cfs).
- Sluiceway 2 (width = 19.0 ft): short weir section 2 would provide fish passage when flows exceed the flow capacity of the fish ladder and Sluiceway 1 sections.
- Fish ladder (width = 16.0 ft): pool and chute fish ladder would provide fish passage for flows between 60 and 200 cfs.
- Sluiceway 1 (width = 9.5 ft): short weir section that would provide fish passage when flows exceed the capacity of the fish ladder. Sluiceway 1 will also act as means to flush sediment in front of fish screens.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

The design includes a low-flow vertical gate sluiceway adjacent to the inflatable weir sections, which would convey riparian maintenance bypass flows at lower flow rates. Water would be diverted to O'Neill ditch through fish screens or a screen bypass sluiceway located perpendicular to the weir. The screens would be placed in front of a sand trap and headgates, which control flow to O'Neill ditch. The screen bypass sluiceway may be operated during times of the year in when migration is not occurring.

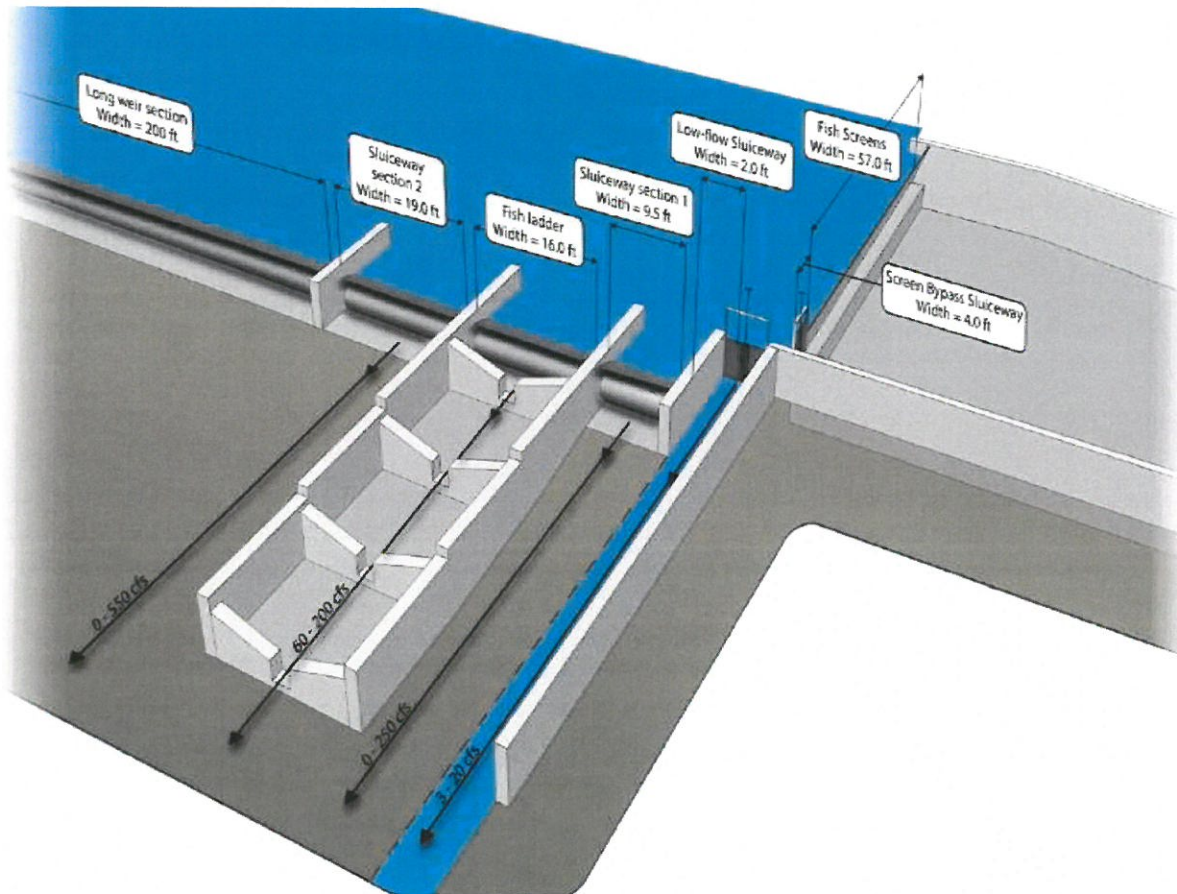


Figure 1. Conceptual Design of the Four Inflatable Sections of the Proposed Weir and Fish Passage Facility.

The weir gates would be hinged to the concrete slab on the upstream side; inflation of the bladders would raise the gates (Figure 2.3-3). The maximum height of both sections of the dam would be approximately 4.5 feet above the height of the concrete foundation. A small (4-foot wide), vertical sluice gate for minimum bypass flows would be installed between the eastern side of the short gate section and the headgate structure (described below) near the east bank of the river. The intake and outlet for the vertical sluice gate would be separated from inflatable sluiceway 1 by a narrow concrete wall.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

The reinforced concrete fish ladder would be designed in accordance with CDFW's 2009 California Salmonid Stream Habitat Restoration Manual and for a minimum flow of 60 cubic feet per second (cfs). The fish ladder would be designed to drop the water surface elevation from 118.5 feet to 114.5 feet, which requires four step pools in order to drop the water surface elevation at 1-foot increments between each pool. Each pool length shall be 45-50% of the pool width. Preliminary sizing is for the fish ladder/pool width to be 16 feet and the pool length between weirs is 8 feet.

Fish Screen, Sand Trap, and Appurtenant Facilities

A total of six fish screens, totaling almost 60 feet in length, would protect juvenile and adult steelhead from being entrained in O'Neill Ditch. A trash rack and automatic rake system would protect the screens from large debris and clogging, respectively. The automatic rake system would convey material from the screens to a conveyor system that disposes of material in a dumpster located in a staging area. These facilities, as well as a control building for compressors and electrical equipment, are shown in Figure 2.3- 3 Diversion Facility Overview.

Water would be diverted to O'Neill Ditch through fish screens or a screen bypass sluiceway located perpendicular to the weir. The screens would be placed in front of a sand trap and Obermeyer control gate, which control flow to O'Neill Ditch. The fish screen would be designed and constructed in accordance with NOAA Fisheries Southwest Region Fish Screening Criteria for Anadromous Salmonids, January 1997.

The target fish species and life stage would be juvenile- sized salmonids. The screen face would be generally parallel to the flow and aligned with the adjacent SMR bank line, with ¼ inch screen openings as required by NOAA Fisheries criteria. The submerged screen area required by NOAA FISHERIES and CDFG Criteria for the 0.8 fps approach velocity criterion is 250 sq ft (excluding the area of structural components). The height of the fish screen would 4.5 feet, which is the same height of the long-section Obermeyer weir. The fish screen shall be sloped at an angle 25° off vertical to improve debris removal capability and per manufacturer recommendations. Based on required screen area, screen height, and screen angle, there would be six screen sections, each with a width of 9.5 feet, for a total width of 57 feet.

Each fish screen would be cleaned by a separate automatic cleaning apparatus that scrapes the debris up onto a conveyor belt located at the horizontal reinforced concrete deck which is set at 1.5 feet above the top of the Obermeyer weir. The conveyor belt transports debris to a dumpster adjacent to the sand trap. For this application, the automatic cleaning system would consist of separate units, one for each of the fish screen bays of the diversion facility.

A debris boom would also be provided that consists of floating, cylindrical rubber segments attached by wire. The boom would be anchored to the reinforced concrete intake structure on both the upstream and downstream ends. The boom would extend 4 feet out into the channel to block floating debris from approaching the trash racks and fish screen.

Findings of Fact Santa Margarita River Conjunctive Use Project (State Clearinghouse No. 2004121068)

The fish screen bypass gate would be controlled by a 4 ft wide by 4 ft high manual slide gate to divert up to 25 cfs into the O'Neill Ditch during low flows when the fish screens are not required to be operating.

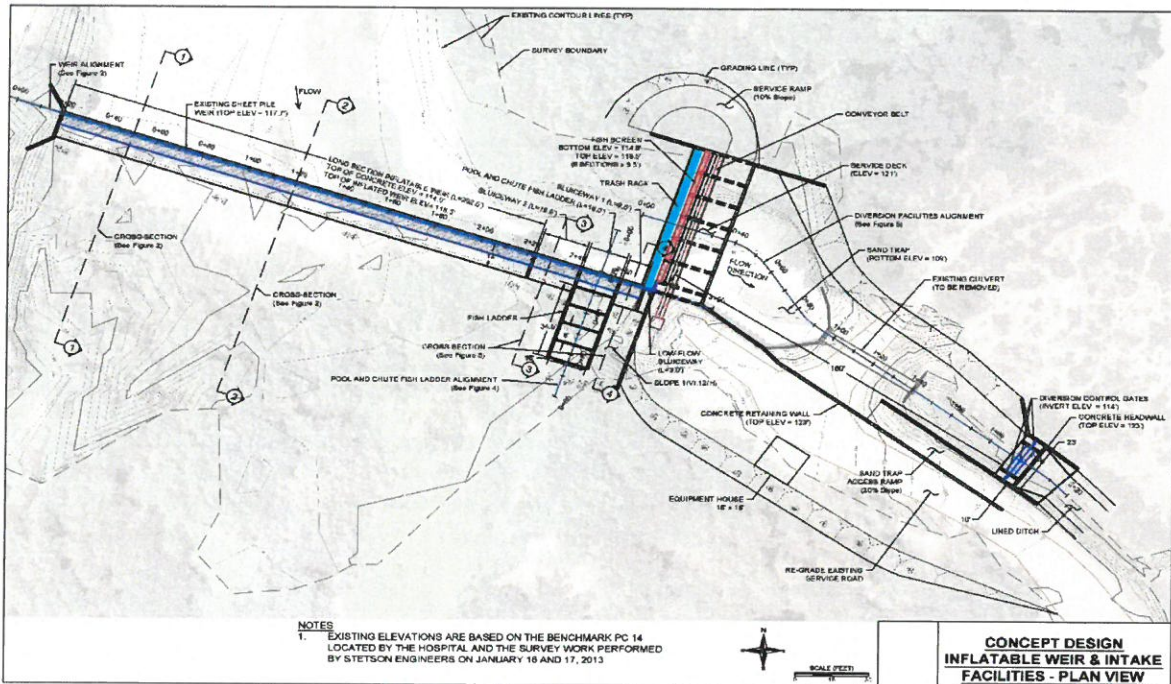


Figure 2.3-3. Concept Design for Proposed Weir and Intake Facilities

The sand trap would be sized to allow for settling of fine sand (1/8 mm – 1/4 mm) and coarser material. A basin with a width of 40 feet and a length of 160 feet would remove 100% of the fine sand particles. Since the fish screen is longer than 40 feet, the sand trap would be tapered, with an initial width matching the fish screen. The minimum width near the control gates would be less than 40 feet based on the location of the bedrock slope. The bottom depth of the sand trap would be at elevation 109 feet to allow for 5 feet depth of sand without interfering with the flow in the ditch. A reinforced concrete retaining wall would be constructed to form the western edge of the sand trap, adjacent to the access road. The top of the retaining wall would be 1 foot higher than the access road. The sand trap would have a natural bottom (elevation 109 feet) and natural (bedrock) eastern edge.

The new access road would be constructed adjacent to the sand trap at elevation 122 feet sloping at 2% away from the sand trap with 2-inch crushed rock surface to provide access to the diversion facility and channel bottom for repair and maintenance.

A reinforced concrete deck would be constructed over the top of the sand trap at elevation 120 feet.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

A 14 foot by 20 foot equipment house shall be located on the east bank of the channel near the fish screens to house ancillary equipment for monitoring and controlling inflation/deflation of the Obermeyer weir, and monitoring and controlling pool water level and diversion flow. The ventilated metal building would be raised on steel columns bolted to reinforced concrete slab similar to the existing well pump building constructed for well number 26003.

A small building would be required to shelter air compressors and system control equipment for the inflatable weir structure. The proposed building would be a maximum of 12 ft by 15 ft (4 m by 5 m), prefabricated, and installed on a concrete base on the east bank of the river near the headgate. Elevation for this building base slab would be about 127 ft (39 m). Power would be supplied by a drop from existing lines serving the old Naval hospital. Air piping would cross the sluiceway and run in a channel in the concrete apron.

Construction

The inflatable weir diversion structure would take about six months to construct and would be coordinated with improvements to the headgate and O'Neill Ditch (described below). All in-channel construction would occur during the dry season when surface flows in the SMR are low. These flows would be bypassed around the construction activities to minimize impacts to riparian habitat. Sediment (upstream and downstream) and riprap (downstream) of the existing weir would be removed to access the existing sheet pile structure for demolition. About 350 cubic yards of accumulated sediment, 500 cubic yards of streambed sediment, and 200 cubic yards of imported rip-rap will be removed prior to demolition of the existing weir and construction of the new weir.

After removing the upper part of the sheet piles, temporary diversion of the SMR to one side of the river channel may be required. Although exact details of the diversion are not known, likely methods (e.g., coffer dams, temporary diversion channels, culverts, and shallow wells) would divert flows to one side of the channel while work is occurring on the other side. The temporary diversion would convey surface and shallow subsurface water around the construction area downstream into the existing channel, avoiding loss of flow below the construction area. Construction of the diversion structure would occur within the overall footprint of weir construction, with access by existing roads.

Operations Inflatable Weir, Headgate Structure, O'Neill Ditch and Recharge Ponds

The inflatable weir diversion structure would allow water diversion to O'Neill Ditch to increase from a maximum of 60 cfs to 200 cfs and would typically operate in a manner consistent with existing operations. The increase in diversion capacity would mostly increase the capacity to divert more water during higher than normal flood flows associated with high rain storm events. Normal non-flood stream flows, which are typically well below 60 cfs, would continue to be diverted in a manner consistent with existing operations.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

A bypass flow and diversion schedule for a 200-cfs diversion structure at the POD is described in Table 2.3-2 for any given range of flows occurring in the Santa Margarita River. The diversion schedule is broken into three seasons:

- December 1 through February 28/29 – Upstream Migration Period
- March 1 through May 31 – Upstream and Downstream Migration Period
- June 1 through November 30 – Non-Migration Period

The bypass requirement changes between the periods based on whether migration of adults and/or juveniles is expected to occur. A fish bypass requirement is not provided during the non-migration season between June 1st and November 30th, although a minimum bypass flow of 3 cfs is maintained year-round to support riparian habitat and maintain a wetted channel at the POD.

The diversion table has been developed such that bypass flows (second column) are always given first priority of available water in the river once fish passage criteria is met (150 cfs on the rising limb of the hydrograph), then diversions are then based on remaining flow. The third column of the table represents the maximum amount of water that can be diverted from the river, expressed as a percent of remaining flows, after bypass flows have occurred. The fourth column provides the typical range of diversions, expressed in cubic feet per second (cfs), given physical limitations of recharge pond capacity and infiltration rates.

Upstream Adult Migration Season (Dec 1 – Feb 28). During the upstream migration season, the fish passage priority bypass is 150 cfs. If flow in the river is greater than 150 cfs, the minimum bypass is 150 cfs through the pool and chute. If flow in the river is less than 150 cfs, the minimum bypass is 3 cfs following a three-day ramp down period. The ramp down occurs on the falling limb of the hydrograph to avoid abrupt changes in flow and to match the slope of the natural hydrograph as closely as possible. When the hydrograph is falling and reaches 150 cfs, diversions are limited to 20% of flow in the river for 3 days or until the flow in the river drops to 60cfs. On Day 4, diversions resume at 100% of flow in the river, less the 3-cfs riparian bypass requirement. Days (i.e. “Day 1”, “Day 2”, etc.) are referenced to the point on the hydrograph when 150 cfs is reached.

Upstream Adult and Downstream Juvenile Migration Season (March 1 – May 31). When downstream migration is likely to occur, additional bypass flows have been added on the falling limb of the hydrograph to support downstream emigration. As in the upstream passage season, the fish passage priority bypass is triggered when flow in the river is greater than 150 cfs on the rising limb of the hydrograph. When the flow reaches 150 cfs, then a minimum 150 cfs bypass is maintained through the pool and chute. The falling limb of the hydrograph between 150 cfs and 60 cfs is treated similarly as in the upstream passage season: to avoid abrupt changes in flow, and to match the slope of the natural hydrograph as closely as possible, a ramp down schedule is also utilized. Allowable diversion percentages are reduced so that bypass flows are increased: when the hydrograph is falling and reaches 150 cfs, diversions are limited to 20% of flow in the river

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

until flow in the river reaches 60 cfs. This extends the period during which bypass flows are provided so that downstream migration is supported. Note that as flows decrease toward 60 cfs, a diversion rate of 20% may mean bypass flows are less than 60 cfs (i.e. if flow in the river is 70 cfs, diversions are 14 cfs and bypass flow is 56 cfs). Though this bypass flow is less than 60 cfs, the flow in the river is supportive of downstream migration due to the gaining nature of the stream during these springtime events. When flows are less than 60 cfs, the riparian maintenance flow of 3 cfs occurs at all times based on availability of streamflow.

Non-fish-passage season (June 1 through November 30). During the non-fish-passage season, a 3-cfs riparian bypass is maintained. Once flows exceed 3 cfs, 100% of the flow is available for diversion.

Other operational activities would include the implementation of Best Management Practices (BMPs) to maintain the capacity in the ditch and water quality in the aquifer. The weir would be operated to allow for occasional water diversions that clean debris and sediment from O'Neill Ditch, typically at the beginning of the rainy season, by opening the bypass structure at the end of O'Neill Ditch. The short inflatable sluiceway 1 gate may occasionally be lowered to allow bypass flows that exceed the capacity of the sluice gate in order to maintain groundwater quality. High intensity flushing events associated with the first rains of the season may be bypassed in this manner to prevent the diversion of contaminants to either Lake O'Neill or the recharge ponds.

The diversion headgate would be operated to allow flow into the O'Neill Ditch following the schedule outlined in Table 2.3-2

Headgate Replacement and O'Neill Ditch Improvement

An inflatable-type diversion headgate would be installed at the end of the sand trap to control the water diversion into O'Neill Ditch and maintain the water level in the sand trap and pool behind weir and fish screens. This inflatable weir would be 250 ft long across the channel of the SMR, have a concrete slab foundation extending 12 ft downstream, and have elevations of 114 ft msl (deflated) and 118.5 ft msl (inflated) (. The inflatable weir will be designed to divert up to 200 cfs in the fully inflated position.

The O'Neill Ditch and groundwater recharge pond improvements consist of modifications to the headworks to increase the diversion capacity from 60 cfs to 200 cfs, concrete lining the O'Neill Ditch, replacement of culverts to accommodate higher flow diversions, and improvement of flow control structures between the seven recharge ponds in the Upper Ysidora Sub-basin. Improvements to the ditch and recharge ponds assure that these facilities are compatible with the diversion capacity of the new inflatable-type weir and headgate structure.

The O'Neill Ditch would be improved using reinforced concrete lining with a 10-foot bottom width with a 1:1 slope designed to pass 200 cfs for the Upper Ditch and a 7-foot bottom width with a 1:1 slope designed to pass 50 cfs for the Lower Ditch. A drain swale would be installed

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

adjacent to the new ditch liner to prevent groundwater buoyant uplift forces from undermining or displacing the ditch lining. Ditch design would include escape ramps with a 3:1 slope for amphibians and mammals to exit on either side of lined ditch upstream of the Upper Road Crossing, Pond Turnout, Lower Road Crossing, and Lake O'Neill Turnout.

The Upper Parshall Flume would be moved to a location immediately downstream of the O'Neill Ditch headgate and be monitored by the inflatable weir control panel. The two 24-inch culverts in the upper road crossing would be removed and replaced with a reinforced concrete box culvert designed to pass 200 cfs. The existing turnout structure at the head of Pond 1 would be replaced with a reinforced concrete box culvert approximately 9 feet wide by 4 feet tall intended to pass 200 cfs to pond 1 with a 4-foot wide slide gate. The turnout structure would also be equipped with a second 4-foot wide slide gate to control flow to Lake O'Neill, allowing up to 50 cfs to pass to Lake O'Neill. Spillway gates on the weir diversion structure; turnouts to the perolation ponds and Lake O'Neill; production and monitoring wells; flow measurement; and pumping plants would be designed for remote operation and or data acquisition using a SCADA system. The Lower Parshall Flume would remain in its existing location immediately downstream of the Upper Turnout Structure at Pond 1 and would measure diversions to Lake O'Neill. The lower road crossing would be removed and replaced with a reinforced concrete box culvert designed to pass 50 cfs.

Lining O'Neill Ditch with concrete would improve the water transfer efficiency and reduce seepage and losses. Prior to lining with concrete, a backhoe would be used to move existing ditch material (soil, rock, etc.) to adjust ditch elevations and construct the bed for the ditch lining. No import or export of soil is expected during these modifications. Ditch lining would apply shotcrete (sprayed concrete) over leveled and engineered soil; wire matting would be used to reinforce concrete instead of rebar. These modifications would result in side slopes of the lined ditch that would be shallower than the existing earthen ditch.

While the width and depth of the newly lined ditch would be reduced from current dimensions, the lined ditch would provide increased capacity by increasing water velocity. No improvements would be made to existing ditches downstream from the control structure directing O'Neill Ditch flows to Lake O'Neill1.

Replacement of constrictive road crossings over O'Neill Ditch would include excavation of overlying material, removal of culverts, replacement with larger capacity culverts, and replacement of removed material back on top of new culverts. Construction of Parshall flumes and control structures would consist of form construction; rebar placement; and pouring concrete. All new construction would occur within the footprint of the existing ditch.

Construction

As stated earlier, construction of the headgate structure (including the sediment trap and fish screen) and O'Neill Ditch would occur concurrently with construction of the new inflatable weir and is expected to be completed within six months. If necessary, installations of fish screens, motors, and other devices may occur after the three month period.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

This project element would require the following: initial site preparation; demolition of existing facilities; filling and compaction; installing/constructing new structures; and concrete lining the canal. Initial site preparation would consist of clearing and grubbing the canal, and removing vegetation and debris to prepare the site for fill material and the correct compaction of the sub-grade. The material would be placed in Ponds 6 and/or 7 for dewatering and then used as topsoil or hauled off to Las Pulgas Landfill. Construction would also include replacement of existing undersized road crossing culverts, Parshall flumes, and control gates.

Operations

The diversion headgate would be operated to allow flow into the O'Neill Ditch following the schedule outlined in Table 2.3-2. The proposed design includes a fish screen to protect steelhead from entrainment in the ditch during downstream migration. In addition to the operation plan outlined in Table 2.3-2, operations of the headgate and O'Neill Ditch would be based on AMP/FOP guidelines and procedures as described in Section 2.3.1.4 of the EIS/EIR, Special Conservation Measures.

Improvements to Recharge Ponds 1-7

The recharge pond improvements would consist of low flow control structures and high flow control structures. During periods of low flow, the rate of flow from one pond to another would be controlled and measured using sliding weir gates that allow flows to pass through culverts interconnecting the ponds. The new low flow structures would be constructed at the interfaces between each adjoining recharge pond. The low flow structures would include three 8-foot wide sliding weir gates that allow water to pass over the gates and into a reinforced concrete box structure connected to three 36-inch diameter culverts. Weir gates allow for accurate flow measurement and can be adjusted to maintain desired upstream pondwater levels, allowing up to 50 cfs to pass from one pond to another. Each low flow structure would also be equipped with 2-foot wide low level sluice gate to allow for draining of a pond. The sliding weir gates and sluice gate would be manually operated and would include walkways and guardrails for access from the top of the levees.

High flow overflow spillways would be constructed between ponds to allow for a maximum of 200 cfs to flow from one pond to another in the following sequence: 1, 2, 3, 4, 6, 7. Due to the small volume of Pond 5, there would be no high-flow control structure between Ponds 1 and 5 and it would be filled via the low flow structure as other ponds fill via overflow spillways. Each overflow spillway would be configured to flow over a low point in the roadway on the crest of the pond levee. This configuration, also known as an "Arizona Crossing", would allow vehicles to drive along the top of the pond levee across the spillway when no flows are passing over the spillway. A high-flow spillway would be installed in Pond 7 to allow for emergency spills to occur from Pond 7 to the O'Neill Spill bypass ditch.

Additional improvements may include the use of remote-controlled floating dredges for cleaning of one or more of the recharge ponds. Historically, fine sediments suspended in flows diverted to the recharge ponds have consolidated on the bottom into a hardened crust layer that reduces the

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

infiltration capacity of the ponds. Automatic silt removal equipment of this type is currently being tested by the Orange County Water District and the results may be used to make recommendations for use in MCB Camp Pendleton's recharge ponds. Future use of this type of equipment is considered in this document.

Construction

All construction activities associated with pond upgrades would be conducted concurrently with construction on the inflatable weir, headgate, and O'Neill Ditch.

Operations

Under Alternative 1, Ponds 1-7 would be operated and maintained to provide continued infiltration capacity. Operation of the recharge ponds would be based on AMP/FOP guidelines and procedures as described in Section 2.3.1.4, Special Conservation Measures.

Proposed New Facilities

Groundwater Production Wells and Associated Collection System Infrastructure

After recharge into the aquifer, raw groundwater would be pumped from the aquifer and conveyed via a collection pipeline to the Haybarn Canyon area. Four new groundwater production wells would be installed in the Lower SMR Basin2 downstream from the new weir (three in the Upper Ysidora Sub-basin, one in the Chappo Sub-basin), along with collection pipelines, power lines, and access roads (refer to Section 1.6.1.1 for a description of existing wells). These four new wells will augment the existing twelve production wells within the Lower SMR Basin. The new production wells would have the combined maximum capacity to extract up to 10 cfs of water and increase the operational flexibility of groundwater extractions. Temporary construction impacts at each well would require ground disturbance of about 240 ft x240 ft, permanent impacts would be substantially less and may be 120ft x 120 ft.

Placement locations for the new groundwater production wells are located within the Lower SMR Basin and downstream of the existing percolation recharge ponds. New 12-inch pipelines would be constructed to connect the four wells to the main distribution trunk line that delivers groundwater to the Advanced Water Treatment Plant in Haybarn Canyon. Pipeline segments within the existing system that cause hydraulic constraints would be identified and replaced; most of these segments are expected to occur underneath existing roadways (both paved and dirt). Raw water lateral lines would be installed underground through trenching to connect the wells with the existing raw water collection system. Collection system pipeline construction would occur within a 50-foot wide construction buffer corridor centered on the pipeline alignment. These potable water pipelines would be vertically or horizontally separated from sewer pipelines. In addition, sections of MCB Camp Pendleton's existing raw water collection system would be repaired and/or expanded to handle additional capacity. The raw water lateral lines and collection system pipelines would convey groundwater and be subject to requirements for potable water pipelines (refer to Section 2.3.1.4 for special conservation measures [SCMs] specific to potable water pipelines).

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Access to the three new groundwater production wells in the Upper Ysidora Sub-basin would be provided by a new graded dirt access road off of the existing access roads in the well basin. The new roads would be 12 ft (4 m) wide and may be covered with gravel. The roads would be bordered on both sides by a 20 ft (6 m) wide buffer that would be used to accommodate power poles, overhead power lines, and a collection pipeline. The power pole centerline would be approximately 4 ft (1.2 m) off the road edge, with power poles located approximately every 100 ft (30 m). Access to the one new groundwater production well in the Chappo Sub-basin would be provided by existing roads and no access road is needed.

Pipeline construction would occur within only a portion of the 50 ft wide construction buffer. Wells and/or pipelines and access roads would be sited to avoid known cultural resources. Whenever practicable, impacts on riparian vegetation and any sensitive species would be avoided or mitigated through measures developed through coordination of MCB Camp Pendleton Environmental Security (ES) with USFWS. The locations of the proposed production wells were selected to achieve the necessary aquifer storage and to minimize potential adverse impacts on riparian vegetation resulting from the periodic lowering of groundwater levels in the aquifer.

Placement of the proposed new production wells would also require coordination and approval by MCB Camp Pendleton's Federal Facilities Agreement (FFA) team, which consists of the San Diego RWQCB, the USEPA (Region IX), the California Environmental Protection Agency (Cal EPA) Department of Toxic Substances Control (DTSC), DON, and MCB Camp Pendleton. MCB Camp Pendleton's FFA team makes joint decisions on Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) cleanup actions at MCB Camp Pendleton. A number of former and active sites identified under the CERCLA and petroleum cleanup programs exist in the Lower SMR groundwater basin; if unaccounted for, drinking water wells located in the groundwater basin have the potential to draw in contaminated groundwater from some of these sites if situated too close or down-gradient. Groundwater modeling utilized to locate proposed new SMR CUP well sites relied on the best available information on contaminant plumes provided by the FFA team. The proposed four new well locations depicted in Figure 2.3-3 have been sited, using available data and models, to avoid adverse impacts from known contaminant plumes. Based on the dynamic nature of contaminant transport in the aquifer, and currently undiscovered plumes that may exist, measures would be taken in the AMP/FOP to avoid production of contaminated groundwater as new data become available.

Operations

The groundwater available for pumping fluctuates seasonally and varies by hydrologic condition. Operation of existing and new production wells would be based on AMP/FOP guidelines and procedures as described in Section 2.3.1.4, Special Conservation Measures. The pumping schedule would be designed to optimize groundwater levels during the winter to create storage in the aquifer, capture wintertime flow events, and minimize groundwater mounding at the recharge ponds. The operation and management of groundwater production under Alternative 1 would be constrained by: (1) maintenance of groundwater levels within their historical range, (2) no

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

aquifer compaction, and (3) no seawater intrusion. Pumping rates would be managed during the summer to reduce potential impacts to riparian habitat. Pumping would also be reduced during dry years to prevent seawater intrusion and protect riparian habitat by maintaining minimum groundwater levels. During consecutive below normal water years, pumping rates would be further reduced, with restricted groundwater production continuing until wetter hydrologic conditions occur.

The groundwater produced from existing and new groundwater production wells operated and maintained by MCB Camp Pendleton would be collected via new and existing conveyance pipelines connected to the existing raw water collection system. The collection main conveys water to the Haybarn Canyon area and has a flow capacity of approximately 20 cfs to handle the existing and new groundwater well capacity.

Where undersized, the collection main would be replaced or enlarged within its existing footprint to convey the maximum groundwater pumping capacity to Haybarn Canyon. The collection pipelines would be installed by trenching. Well operations would follow the facility operation plan (FOP). Wells would be turned on or off according to water demands and the monitored groundwater table levels in the aquifers.

Typical annual operational activities associated with pipeline systems would include painting aboveground storage tanks, monitoring pressure, repairing occasional pipe breaks, exercising valves, and corrosion monitoring. Pumps and motors have life spans of about 20 to 30 years, depending on water quality. Typical operational activities would include occasional replacement of parts and other minor repairs.

Water Conveyance/Distribution System, including Bi-Directional Pipeline from MCB Camp Pendleton to new FPUD Water Treatment Plant

Raw groundwater would be pumped from the aquifer and conveyed to the Haybarn Canyon area on MCB Camp Pendleton. The water delivered to MCB Camp Pendleton would be treated at the existing Haybarn Canyon AWTP (P-113). Raw groundwater would be delivered to FPUD via a new bi-directional pipeline and then would be treated at the new FPUD WTP. MCB Camp Pendleton would continue to process water for its own use at the existing Haybarn Canyon AWTP (P-113) (refer to description of the Water Treatment Facilities in Section 1.6.1.1) and FPUD would treat its portion of the project water at a new FPUD WTP (see detailed description below). Raw groundwater delivered to FPUD would average 3,100 AFY and would not exceed 800 AF in any given month. However, total volumes of raw water deliveries to FPUD would vary annually, depending upon multiple factors including, but not limited to, precipitation, river surface flows, surface diversions, and environmental considerations (refer to Replacement of Existing Sheet Pile Diversion with Inflatable Weir Diversion Structure in Section 2.3.1.1 for details on the operation plan). Treated imported water from SDCWA would also be delivered through the same bi-directional facility from FPUD to MCB Camp Pendleton, if and when needed.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Construction

From Haybarn Canyon, a new pump station would lift raw groundwater through a new bi-directional pipeline to the new FPUD WTP. The new pump station would be located in either a disturbed area across from the existing Haybarn Canyon AWTP (P-113) that was used as a laydown and staging area for construction of the Haybarn Canyon AWTP (P-113) (Option 1; preferred option) or just to the west of the Haybarn Canyon AWTP (P-113) in a previously disturbed area (Option 2).

The pipeline alignment would run north from Haybarn Canyon along Vandegrift Boulevard, then turn east and follow Rattlesnake Canyon Road to Vandegrift Boulevard (Vandegrift Boulevard makes a loop around a ridgeline and circles back). At Vandegrift Boulevard, the pipe would turn north along the road to the intersection with 19th Street. The pipe would then turn east and follow 19th Street, which becomes Fallbrook Street on MCB Camp Pendleton, and then Ammunition Road on the DET Fallbrook. A booster pump station would be located along the pipe alignment on the east side of Fallbrook Road at the boundary of MCB Camp Pendleton and the DET Fallbrook; the pump station would require associated electrical power drops. The pipe alignment would exit the pump station, continuing northeast on Ammunition Road and crossing Fallbrook Creek. Near the intersection of Ammunition Road and Redeye Road, the pipe would turn east, then northeast around an existing storage yard, and then turn east again, crossing Fallbrook Creek and continuing across the boundary of DET Fallbrook to a connection with the new FPUD WTP. At the two Fallbrook Creek crossings, the bi-directional pipeline would be trenched through the stream channel, with the Fallbrook Creek crossing nearest to the FPUD WTP being increased to accommodate a restoration footprint.

The total length of the pipeline from Haybarn Canyon to the Fallbrook WTP would be 36,818 ft (11,222 m) of which 17,000 ft (5,182 m) would be located on MCB Camp Pendleton and 19,818 ft (6,041 m) on DET Fallbrook.

The total length of the pipeline within DET Fallbrook, from the Fallbrook WTP to the Fallbrook service area, would be 7,380 ft (2,249 m). At the Fallbrook WTP a new lift station will lift the water into the Gheen zone elevation. Piping will be constructed east along Merida Lane and then Palomino Street to an existing pipeline at Palomino and McDonald which will convey water to the Gheen Reservoir site. At this site a new clearwell and pump station will be constructed to lift water to the Red Mountain zone and Red Mountain reservoir through existing piping. Some limited piping will be constructed north to Mission Road and south to Gumtree Lane from Gheen reservoir to connect to existing pipeline into the Red Mountain zone. All construction by FPUD would be conducted within already disturbed areas.

Red Mountain Reservoir has an existing connection to receive water from the San Diego County Aqueduct.

The bi-directional pipeline would be installed in a Type 1 flexible pipe trench by trenching with at least 2 ft (0.6 m), and on average 4 ft (1.2 m) of cover over the pipe. Construction within Fallbrook would follow San Diego County guidelines. The pipe would be cement mortar lined

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

and coated. The bidirectional pipeline would be subject to requirements for potable water pipelines (refer to Section 2.3.1.4 for SCMs specific to potable water pipelines).

Operations

The rate of raw water pumped from Haybarn Canyon to the FPUD WTP would vary based on hydrologic conditions. Maximum pumping would occur during the winter months of very wet years while minimum pumping would occur during drier conditions. During the driest years, project groundwater would not be delivered to FPUD. Normal daily operations would be at a rate that would be dependent upon the hydrologic relationship between groundwater levels, aquifer volumes, and predicted incoming flows in the SMR.

The bi-directional pipeline between FPUD and MCB Camp Pendleton would also allow imported water to be delivered to MCB Camp Pendleton from the SDCWA Aqueduct during drought periods when groundwater is insufficient to meet demands or during emergency situations. Delivery of imported water would be based on the AMP/FOP that triggers the curtailment of groundwater pumping if physical and environmental constraints are not being met (refer to SCM in Section 2.3.1.4 for guidelines and procedures outlined in the AMP/FOP). The average annual delivery of imported water to MCP Camp Pendleton would be anticipated to be 500 AFY.

Flow metering would occur upstream of the pump station at Haybarn Canyon, where meters would measure the total raw water made available under Alternative 1; and downstream of the pump station at Haybarn Canyon where meters would measure the flow going to FPUD. Alternately, for bypass flow, the meters would measure flow conveyed to MCB Camp Pendleton from FPUD.

Typical annual operational activities associated with pipeline systems would include painting aboveground storage tanks, monitoring pressure, repairing occasional pipe breaks, exercising valves, and corrosion monitoring. Pumps and motors have life spans of about 20 to 30 years, depending on water quality. Typical operational activities would include occasional replacement of parts and other minor repairs.

Fallbrook Public Utilities District Water Treatment Plant

A new FPUD WTP would be constructed on FPUD property adjacent to DET Fallbrook (Figure 2.3-3). The new FPUD WTP would be located on the same property as the existing FPUD wastewater treatment plant and would retrofit some of the existing solids drying beds. The FPUD WTP would use a treatment facility designed to provide potable water and would include an iron and manganese removal and demineralization plant. The FPUD WTP would have the capacity to treat a maximum of 800 AF per month. The average annual raw water delivery to the FPUD WTP would be 3,100 AFY. The FPUD WTP would be connected to and controlled by the existing FPUD SCADA system.

Pretreatment/Iron and Manganese Removal

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Groundwater delivered from MCB Camp Pendleton via the bi-directional pipeline would enter an equalization tank. The groundwater would first undergo pretreatment oxidation with sodium hypochlorite (NaOCl) and then the iron and manganese filters would remove 97% of the iron and manganese in the system, reducing the effluent iron and manganese concentrations to below 0.3 mg/L and 0.05 mg/L, respectively. Iron and manganese system reject streams would flow to reclaim tanks for solids separation. The liquid would be decanted and returned to the start of the iron and manganese process for treatment. The remaining solids would be pumped to existing sludge drying beds at the facility. Decant from the drying beds would be pumped to the sewer and remaining dry solids would be removed for disposal at a landfill. The volumetric product from the iron and manganese plant is expected to be 99.7% of the feed flow.

Demineralization

The feed water for the plant would have relatively low salinity based on water quality data from existing production wells in the Lower SMR Basin. Therefore, to maximize the RO treatment process efficiency, the effluent from the iron and manganese plant would be split into two lines prior to demineralization. The first split line would be the RO bypass line which would feed directly into the clearwell and receive no further treatment until the post-treatment disinfection. The volumetric flow of this line would be 4.27 MGD (6.6 cfs) or 49% based on the RO unit salt rejection and recovery to ensure that the blended flow in the clearwell achieves a TDS concentration of 500 mg/L.

The second line would feed the RO demineralization process at a maximum flow of 4.46 MGD (6.9 cfs). Sodium bisulfite would be added prior to contact with the RO system for membrane protection from chlorine. Antiscalant would also be added to the RO feed. Treated flows from the RO plant would be neutralized with sodium hydroxide with maximum flows of 3.81 MGD (5.9 cfs). Concentrate flows (i.e., brine) from the RO unit would be discharged to the Pacific Ocean via Fallbrook's Oceanside Ocean Outfall with a maximum flow of about 0.65 MGD (1.0 cfs) and a TDS concentration of 5,816 mg/L based on the 900 mg/L design TDS feed concentration.

Post-treatment

The RO feed water product and the RO bypass line would be blended in the clearwell to achieve the target TDS of 500 mg/L. NaOCl would be added for primary disinfection and ammonia hydroxide would be added last to form a chloramine residual in the pipeline. The maximum treated flow for the FPUD

AWTP is estimated to be about 8.01 MGD (12.4 cfs), or 92% of the feed groundwater flow based on cumulative process recoveries in the system. Treated water from the clearwell would be transported to the Gheen Tank.

Brine Discharge to Fallbrook's Oceanside Ocean Outfall

Brine from the FPUD WTP would be discharged to the Pacific Ocean via FPUD's Fallbrook Outfall pipeline to the Oceanside Ocean Outfall (Figure 2-1). FPUD's existing National Pollutant Discharge Elimination System (NPDES) Permit (CA0108031) would be amended to allow for

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

the inclusion of the additional brine from the project. The existing FPUD NPDES Permit currently has a permitted average annual discharge of 2.4 MGD.

SCADA System

A Supervisory Control and Data Acquisition (SCADA) system would be included in the project. The spillway gates on the inflatable weir diversion structure, turnouts to the recharge ponds and Lake O'Neill, production and monitoring wells, flow measurement, and pumping plants would be designed for remote operation and/or data acquisition. These facilities would be connected to a control room for the SCADA via existing utility poles. The control room would be located in Building 1142 and operated by OWR personnel (Note: The FPUD WTP would be connected to and controlled by the existing FPUD SCADA system).

Open Space Management Zone

A framework would be established by FPUD to permanently preserve 1,392 acres (563 hectares) of riparian open-space land that was acquired by FPUD in 1958 for water supply development purposes. Under Alternative 1, all or most of the OSMZ is intended to be placed in conservation management to preserve open space and riparian values that currently exist on the site, as well as preserve current passive recreation uses. Conservation approaches currently being considered by FPUD include, but are not limited to: (1) purchase and management of the OSMZ by Reclamation, MCB Camp Pendleton, or another agency or conservation related organization; (2) continued ownership of the property by FPUD subject to a conservation easement purchased by a third party that restricts future development; or (3) management of the property as a mitigation bank by FPUD or its designee.

Whichever conservation approach is ultimately selected FPUD would comply with guidelines developed to implement Senate Bill 1148, and any other applicable federal, state, and local regulations and policies. Senate Bill 1148 authorizes private and public conservation and mitigation banks to serve an important function of managing the mitigation provided by private applicants when aquatic or terrestrial mitigation is required as a condition of a permit from a public agency. Should the site be established as a mitigation bank, FPUD would mitigation credits to proponents of other projects within San Diego and Riverside counties having mitigation responsibilities that require compensation for impacts to wetlands, threatened or endangered species, and other sensitive resources, but the intended approach under Alt 1 is for the open space status of the 1,392 acres (563 hectares) to be maintained.

The OSMZ would continue to serve as a critical parcel for ensuring a healthy watershed in the community of Fallbrook. It would also have the effect of protecting downstream water quality and preventing development of riparian water rights within the OSMZ that, if developed, would decrease in-stream flows reaching MCB Camp Pendleton and the SMR Estuary.

General Construction Methods

New facilities associated with the project would be located in roadways, existing rights-of-way, and other disturbed areas as much as possible to minimize impacts to existing environmental resources. It is assumed, unless otherwise noted, that the direct impact area for proposed new

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

facilities (e.g., pump stations, groundwater production wells, and treatment facilities) would include the following: a 30-ft (9-m) perimeter for parking/facility access, a fence surrounding the facility at the edge of the 30-ft (9-m) perimeter, and a 10-ft (3 m) wide firebreak outside and surrounding the fence line (i.e., a permanent impact area of 98 ft by 98 ft [30 m by 30 m] for each new groundwater production well and pump station). For the purpose of this analysis, it is assumed that construction-related activity and temporary disturbance may also occur within a 50-ft (15-m) wide “buffer” around these areas.

Pipeline Construction

Pipeline construction would be similar to previous projects in northern San Diego County. The descriptions below are expected to be equivalent to construction methods for SMR CUP. For the purposes of analysis in this EIS/EIR, an approximately 50-ft (15-m) wide construction buffer corridor has been identified for the conveyance pipeline from the wells and an approximately 100-ft (30-m) wide construction buffer corridor has been identified for the bi-directional pipeline. The construction buffer corridor is centered on the anticipated pipeline alignment and has been identified for impact analysis. For the conveyance pipeline, construction would occur within the entire 50-ft (15-m) wide corridor (impacted temporarily for pipeline burial). For the bi-directional pipeline, construction would occur within a 50-ft (15-m) wide corridor (impacted temporarily for pipeline burial) situated within the 100-ft (30-m) wide construction buffer corridor to avoid significant biological/cultural resources and drainages, as feasible. For some areas where bends occur along the conveyance and bi-directional pipelines, an additional 75-ft (23-m) wide by 150-ft (46-m) long area (centered on the bend) would be needed to accommodate pipeline construction (impacted temporarily during pipeline construction). Potable water pipelines, including groundwater collection system pipelines and the bi-directional pipeline, would be vertically or horizontally separated from sewer pipelines.

The 50-ft (15-m) wide corridor would be cleared and grubbed prior to construction. A typical pipe trench would be approximately 3 to 5 ft (1 to 1.5 m) wider than the outside diameter of the pipe. Pipelines would be placed at typical depth to ensure a minimum of 2-3 ft (0.6-1 m) of cover over the pipe. Accordingly, the trench for the 18- to 24-in (46- to 61 cm) diameter bi-directional pipeline to the community of Fallbrook would be 4 ft (1.2 m) wide and 7 ft (2 m) deep, with up to a maximum depth of 10 ft (3 m) below ground surface at road crossings, where 5 ft (1.5 m) of cover fill above the pipe would be used. Shallower trenches would be used for the 12-in (30-cm) diameter groundwater collection pipeline system. Trenches would be excavated using common excavating equipment (i.e., trenchers and track backhoes).

An exception to the mechanical excavation would be hand-digging to locate buried utilities, such as other pipelines, cables, water mains, and sewers. No blasting would be required. The trench would be excavated and backfilled incrementally as pipeline assembly progresses. After placement of pipelines, the trench would be backfilled, the original ground contours would be restored, and, where applicable, the roadway would be repaved to match existing roadway. There would be little or no export of materials from the trenches or import of backfill for the pipe sections since the material would be suitable for backfill into the trenches. Pipeline excavations would occur above the groundwater table; however, dewatering may be necessary if perched

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

groundwater is encountered during wet months (refer to SCMs listed in Section 2.3.1.4 for measures taken when groundwater is encountered). Pipeline would be installed on the surface in locations where trenching is infeasible. In locations where the pipeline would be on the surface, it would be elevated sufficiently to allow high-water flows and wildlife to pass underneath. Surface laid pipe would be secured to ground with anchors. If feasibility design determines that pipeline construction would differ significantly than as described below, additional analysis would be necessary.

Pipe Handling

Pipe-stringing trucks would be used to transport the pipe from the shipment point or storage yards to the pipeline construction area. Trucks would carry the line pipe along the pipeline construction area, and sideboom tractors would unload the joints of pipe from the stringing trucks and lay them end to end beside the ditch line for future line-up and assembly. The pipe joints would be rubber gasketed and would be tested for leaks during construction. The entire pipeline would be hydrostatically tested before being used to convey water under pressure.

Lowering and Backfilling

The pipe would be lifted and lowered into the ditch by two side-boom tractors spaced so that the weight of unsupported pipe would not cause mechanical damage. Cradles with rubber rollers or padded slings would be used so the tractors could lower the pipe without damage as they travel along the ditch line.

Backfill material would be obtained from excavation ditch spoils. Spoils would generally be returned to the ditch within one week of trenching. Spoils would be screened as the material is returned to the ditch using standard construction screening equipment, as required. The pipe would be covered along the sides with a maximum of 6 in (15 cm) of native fill free of rocks, and then covered on top with a minimum of 12 in (30 cm) of backfill free of rocks. This zone is referred to as the pipeline padding and shading. In certain areas where damage might occur to the pipe coating from abrasive soils, clean sand or gravel backfill would be used to pad the pipeline. Any required padding material would be obtained from local commercial sources. The backfill in the remainder of the trench above the padding would be native material excavated during trenching. At the time of backfilling, a colored warning tape and/or locator wire would be buried approximately 18 in (46 cm) above the pipeline to indicate the presence of a buried pipeline to future third-party excavators. In roadways, the backfilled soil would be compacted using a roller or hydraulic tamper before paving or sand slurry. Any excess ditch spoils generated during construction would be spread along the construction right-of-way, used as topsoil, or hauled off to Las Pulgas landfill.

Water Course Crossings

The SMR, Fallbrook Creek, and Lake O'Neill overflow outlet are the major waters of the U.S. that would be crossed by pipelines, while several smaller drainage channels, tributaries, and wetlands would also need to be crossed. The SMR and Lake O'Neill overflow outlet would be crossed by conveyance pipelines from the production wells. Where possible, the conveyance

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

pipelines would be installed through pipe-bursting and/or trenchless construction in areas with sensitive water resources and wetlands.

Trenchless construction refers to the installation of underground pipelines with minimal surface disturbance by avoiding the use of open-trench construction. Methods of trenchless construction that would be used include bore-and-jack or horizontal directional drilling. Trenchless construction would involve the use of boring and receiving pit sites that would be filled and restored after construction is completed. The boring and receiving pit sites would be located within a 100-ft by 100-ft (30-m by 30-m) construction area on either side of the stream/river crossing and outside any jurisdictional wetlands or waters of the U.S. or any other sensitive habitats.

Where it is not feasible to conduct trenchless construction crossings may be open trench-cut and cover. The process entails creating an open cut at minimum 3 feet of cover; installing the pipe and associated hardware; installing slope protection; encasing the pipe in concrete; and replacing in-kind any material removed. Design stipulated a requirement on the construction contractor of less than 24 hour turn around for the cut and cover, meaning that the construction contractor is required to cut the trench, lay aside the top soil, and replace the top soil and be out of the trench in 24 hours or less. The 2 exceptions to this requirement are on NWS, within Fallbrook Creek. The first of which is steep and rocky and will likely require longer than 24 hours to complete, but will be required to be completed with the same cut and cover requirements as the 24 hour sites. The second exception is also on NWS, within Fallbrook Creek MCB Camp Pendleton in coordination with the NWS Det Fallbrook is proposing to restore approximately 300 linear feet of channel and riparian habitat. This will be utilized to off set any impacts related to construction within the jurisdictional Waters of the U.S.

Road Crossings

The proposed pipeline would be constructed along or parallel to Vandegrift Boulevard, Ammunition Road, and roads within the community of Fallbrook. Where road crossings are necessary, surface preparation would include breaking and removing pavement with concrete saws, pavement breakers, and, where necessary, jack hammers. Once traffic control measures are in place, ditching operations would begin. Typically, the excavated trench depth would be enough to provide 5 ft (1.5 m) of cover over sections of pipe located under roads. The trench would be excavated using backhoes and trackhoes. An exception to the mechanical excavation would be hand-digging to locate buried utilities, such as other pipelines, cables, water mains, and sewers. The crossings would occur during non-peak traffic periods, as determined by the contractor.

Equipment and Material

Most of the heavy construction equipment would be delivered to staging areas on lowboy trucks or trailers. Mobile cranes and dump trucks would be driven in from existing local contractors' yards. Construction equipment would be left overnight at the site as feasible, at the contractor yards, or at other existing storage yards in the area. All construction materials would be taken to the staging/laydown areas by truck on existing roadways.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

The construction contractor would be required to implement approved safety measures for lane closures or other disruptions in traffic. Construction in corridors would be designed to allow at least one lane of traffic wherever feasible. Appropriate warning signs would be placed at strategic locations to warn drivers of closed lanes. Flagmen may also be used at particularly busy intersections or roadways.

The construction equipment that would be utilized would include bulldozers, excavators, loaders, a bore-and-jack machine, and dump trucks. All construction equipment would be fitted with appropriate mufflers and all engines would be maintained regularly according to manufacturers' specifications.

The major material component of the project would be ductile iron, welded-steel, or high-density polyethylene (HDPE) pipe. It would be stored at a vendor's coating yard or existing storage yards until it is unloaded along the pipeline route. Aggregate, asphalt, sand, and slurry materials would be purchased locally and storage would be provided by local suppliers until it is unloaded along the route. During all phases of construction, refueling and lubrication of construction equipment would occur in areas designated by MCB Camp Pendleton ES, DET Fallbrook Public Works, or FPUD, as applicable.

Construction Access, Staging, and Storage Areas

During construction, existing roads would be used to provide access from public streets to staging areas, laydown and storage areas, and work zones. Preference would be given to utilizing existing roads over developing new roads.

Excavation spoils from construction would be stored in either construction laydown areas or exported from the construction site to a location approved by the Facilities Engineering and Acquisition Division (FEAD) or FPUD, as applicable. The staging, laydown, and storage areas include heavy use recreation areas with a high percentage of bare ground, areas that are currently paved or otherwise disturbed, and road shoulders. Staging area locations on MCB Camp Pendleton and DET Fallbrook would be approved by MCB Camp Pendleton ES, DET Fallbrook's Department of Public Works and Conservation Program Manager in coordination with a biological monitor, if needed, prior to the start of construction related activities.

For construction on MCB Camp Pendleton and DET Fallbrook, the construction contract would require the contractor to identify all MCB Camp Pendleton and DET Fallbrook laydown and storage areas on construction plans and to have all laydown and storage areas approved by MCB Camp Pendleton ES, DET Fallbrook's Department of Public Works and Conservation Program Manager, and the FEAD, with final approval by the FEAD.

Tentative Schedule

Construction is contingent on Congressional appropriations and would follow a ROD, local approvals, and issuance of necessary permits. Construction of the project is estimated to take 36 months, assuming that some project components would be constructed concurrently when feasible. Pipeline construction would proceed at approximately 100-150 ft (30-46 m) per day.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Within FPUD, construction would take approximately 18 months; MCB Camp Pendleton construction would take approximately 30 months, and DET Fallbrook construction would take approximately 12 months. Construction activities would be anticipated to occur during normal working hours between 7:00 am and 4:30 pm, Monday through Friday.

Special Conservation Measures

Implementation of Alternative 1 would incorporate the SCMs identified below, as part of project development to avoid or minimize any potential environmental impacts. The operations SCMs (i.e., the AMP/FOP) has been provided first, including those specified in the Section 7 ESA consultations with the resource agencies; followed by general construction SCMs that apply to multiple resource areas, and then resource-specific construction SCMs

Adaptive Management Plan/Facility Operation Plan

As part of the proposed action, an Adaptive Management Plan (AMP), followed by a separate Facility Operation Plan (FOP) will be developed by MCBCP to manage project diversion, recharge, production, and delivery facilities. The AMP is a managerial decision making process used to operate water facilities within physical, environmental, and legal constraints based on pre-established AMP goals (Table 2.3-3). The AMP employs the adaptive management process to manage water resources through monitoring, learning, and changing operations to meet evolving environmental and physical constraints. Managerial decisions using the AMP are then translated into the FOP, which provides the instructions for the operators on MCBCP for facility operations.

The AMP/FOP manages water diversion, recharge, production, and delivery facilities to assure sufficient water is available to meet water demands while minimizing or avoiding impacts to the riparian system. The adaptive management plan defines how management goals, such as protection of the aquifer and minimizing operational effects, are achieved through a systematic and cyclic process of observations and predictions; while the Facilities Operation Plan (FOP) defines how project facilities are operated to satisfy legal, environmental and physical constraints. Real-time, near real-time, and seasonal monitoring of hydrological and biological data are used to continually update the AMP and FOP as our understanding of hydrologic-environmental relationships improves. Operations can be adapted if necessary, and improvements in future management may occur over time.

Table 2.3-3. AMP Goals

1. Fulfill Settlement Agreement Requirements. Ensure sufficient water is available to meet CPEN and FPUD water demands, as stipulated in the Settlement Agreement.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

2. Protect the SMR Aquifer. Modulate pumping locations and maintain groundwater at levels in order to prevent aquifer compaction and seawater intrusion.

3. Minimize Operational Effects. Ensure operational impacts to the riparian wetlands, native riparian vegetation and wildlife do not exceed the maximum impacts described in the Final EIS (Chapter 4 Environmental Consequences) and associated ESA Section 7 consultation documents (USFWS and NOAA Fisheries BO).

MCBCP will meet the AMP goals by following a set of triggers, thresholds, and action items to ensure project related impacts remain within the physical, environmental, and legal constraints (Table 2.3-4). Triggers are based on parameters such as groundwater and streamflow levels, as well as operational concerns such as planned or unplanned maintenance. Other important triggers are based on environmental data, including project-related BO requirements for riparian vegetation and species. Legal triggers are associated with water rights and settlement obligation responsibilities.

Thresholds are numerical values placed on those triggers, resulting in execution of action items if those thresholds are met. For example, if a groundwater level (trigger) drops below a minimum elevation (threshold), then pumping is shifted to alternative wells (action item). These triggers, thresholds, and action items are the decision support matrix of the AMP to ensure physical, environmental, and legal compliance.

Table 1 AMP Constraints

Constraint Type	Types of Triggers to be Developed
1. Environmental	Riparian Vegetation
	Aquatic Habitat
	Estuarine Habitat
	Water Quality Habitat
	Water Quality Drinking
2. Physical	Operation of Diversion Structure

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

	Aquifer Recharge Management
	Groundwater in Storage
	Infrastructure
3. Legal	Water Rights Compliance
	Settlement Compliance

The hydrologic condition that establishes how the goals and objectives of the AMP/FOP will be met is determined on May 1st of each year following the October through April winter-time streamflow events (Table 2.3-5). The hydrologic condition will be categorized as Extremely Dry, Very Dry, Below Normal, Above Normal, or Very Wet based on the winter-time streamflow. Based on the hydrologic condition, the operation of the water diversion facilities, and the total quantity of groundwater that may be produced during the next 12 months, will be outlined in the FOP issued no later than June 1st of each year following quantification of the winter-time streamflow. Subsequent adjustments may be made if the AMP determines environmental, physical, or legal constraints are not being met. The AMP will be reviewed continuously and updated as required such that managers may adjust the FOP throughout the May 1st through April 30th pumping year to meet constraints. The following table outlines the annual AMP/FOP schedule.

Table 2 AMP/FOP Annual Schedule

Date	Event/Action Item
October 1 st – April 30 th	Winter-time streamflow data collection
May 1 st	Determine hydrologic condition Issue Initial FOP
June 1 st	Issue FOP
June 1 st – April 30 th	Perform AMP process and implement changes through updates to FOP if necessary.

Note: Initial FOP outlines interim groundwater pumping schedule for May 1st through May 31st until FOP for current year is released on or before June 1st. Project Pumping Year is from May 1st to April 30th of the following year.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

The FOP's directives of the proposed facility operations and groundwater production are based on simulation of future conditions using the AMP Groundwater Model on May 1st of each year. Based on the recent streamflow and recharge, the future groundwater conditions throughout the Lower SMR Basin are simulated during the next 12 months. The simulation then provides predicted monthly water levels at three riparian and three grassland wells that can be compared to observed data during the following 12 months.

Hydrological and biological field data will be monitored, and compared to model predicted data, to determine if the management goals are being met through the FOP. If threshold values for specific triggers are exceeded, hydrologic conditions and facility operations will be assessed, and if necessary, the FOP will be revised to minimize or avoid adverse impacts to the resource. This system of monitoring and assessment is an on-going process through the collection and assessment of real-time, near real-time, and biological datasets. The AMP/FOP are maintained, assessed, and implemented by appropriate subject matter experts (e.g., hydrologists and biologists).

Additionally, the AMP collects data on the operation of the inflatable weir gate(s); the FOP will establish guidelines for lowering and raising the gate(s) during significant flows to flush accumulated sediments downstream. Water diverted from the SMR is conveyed to the percolation ponds for recharge to the groundwater aquifer or bypassed to Lake O'Neill. Water stored at Lake O'Neill will continue to be released to the SMR for recharge during periods of low river flow and/or low groundwater levels on an annual basis consistent with current practice. These operations would be monitored by a Supervisory Control and Data Acquisition system and controlled by on-site adjustments to the weir gates.

The AMP will use hydrologic and biological monitoring data from the Lower SMR, in conjunction with data from stream gages and groundwater monitoring wells, to refine the water use strategy for withdrawals to avoid the loss of essential aquatic habitat and to avoid significant losses of riparian scrub and woodland habitats for other protected species. Observed data will be compared to simulated model results. This data, along with environmental, legal, and physical constraints will be used to guide project operations and set monthly diversion, pumping, and bypass amounts. The FOP is the plan that specifies how operations will achieve those goals and objectives.

The AMP and FOP are intended to guide decision making so resources are balanced with legal and regulatory requirements associated with managing the groundwater basin. The goals of an effective AMP and FOP are to facilitate institutional learning and continuous process

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

improvement, and to assure longterm sustainability of environmental and physical resources. As new information and data become available, short-term and long-term adjustments are made to pumping and other processes in order to meet these goals. The success of adaptive management depends upon a comprehensive and integrated approach based on these goals. The approach is collaborative, emphasizing communication between subject matter experts and MCBCP.

To understand the past, present, and future status of aquatic and riparian habitats and species of the Lower SMR, MCBCP will coordinate SMR CUP project operations with on-going MCBCP ES Natural Resource Programs and the Integrated Natural Resources Management Plan (INRMP) monitoring programs, with long term monitoring actions from the SMR CUP project incorporated into INRMP, that focus on riparian ecosystem health monitoring and federally-listed species nesting microhabitat monitoring. The AMP will incorporate physical and environmental parameters that are currently monitored in the SMR Watershed to actively improve and empirically manage the effect of the project on environmental resources. As part of the AMP process, MCBCP will review all parameters periodically and maintains the authority to eliminate programs that are not producing useful data and incorporate any new or revised parameters for monitoring. MCBCP currently monitors the following parameters:

- Annual sampling of arroyo toad breeding effort to determine presence/absence in order to inform a population model based on proportion area occupied (i.e., an ongoing 5-year trend analysis) (ES)
- Annual sampling of vireo territories and flycatcher occupancy and nest success (ES)
- Continue monitoring bird species biodiversity and survivorship using the existing Monitoring Avian Productivity and Survivorship on a yearly basis to detect trends (ES)
- Groundwater quality samples from groundwater production wells (ES)
- Surface water quality grab samples (ES)
- Lake O'Neill precipitation and evaporation data (WRD)
- USGS Streamflow Gaging Stations on the SMR, De Luz Creek, Sandia Creek, Fallbrook Creek, O'Neill Ditch and bypass, and Lake O'Neill spill and release (WRD, USGS)
- Recharge Pond Diversion and infiltration rate (WRD)
- Groundwater level data from six riparian and grassland wells (WRD)
- Monthly Groundwater production data (WRD)

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

- Soil Moisture data near riparian vegetation (WRD)
 - Soil Moisture data arroyo toad reference site (TBD) (WRD)
 - Stream channel geometry cross-sections following 10-year storm events (WRD)
 - Continue yearly insect biodiversity and abundance monitoring in both the riparian and estuary system to detect trends (ES)
 - Continue yearly live and dead fuel moisture monitoring to determine if impacts to riparian habitats are caused from ambient humidity or water diversion (ES)
 - Continue to remove exotic aquatic animal species that may be competitors or predators of sensitive species found in riparian/estuarine zones and check the stomach contents of invasive species to determine their impact on listed species (ES)
 - Riparian Ecosystem Health Monitoring (ES)
 - Monitoring of restoration activities of temporary impacts from construction (via Restoration Plans) to riparian and upland habitats to ensure that success criteria is met (ES)
 - Monitoring of both prescribed fire and wildfire conditions through Remote Access Weather Stations (RAWS) including temperature, relative humidity, wind speed/direction, rainfall, 10 hour fuels, and solar (ES)
1. MCBCP will make the current monitoring programs more robust by collecting additional data that is relevant to measuring impacts to federally-listed species from operations. The AMP will assess data collected under the current monitoring programs with additional parameters proposed below, by comparing their hydrologic indicators to simulated groundwater and surface water levels using the AMP Model discussed in the following section. The AMP will then provide recommendations to adaptively manage water withdrawals to minimize adverse impacts on the river and its resources (e.g., federally-listed species habitats), if any, through implementation of the FOP.

a. Arroyo Toad

An arroyo toad monitoring program has been conducted annually throughout the SMR using a Proportion Area Occupied Model (PAOM) since 2003, and will be continued and enhanced, as necessary. Additional physical and environmental parameters collected under MCBCP's on-going arroyo toad management program would be

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

incorporated into the AMP to strengthen, and to actively improve and empirically manage, the effect of the project on environmental resources:

- i. The arroyo toad survey effort will provide additional information regarding arroyo toadbreeding success in the Lower SMR and in Survey Reaches 4-8 in particular. Arroyo toad survey efforts above the new weir or in other watersheds on MCBCP will not be reduced from current levels to offset the increase on the Lower SMR.
- ii. Water quality parameters (e.g., temperature, salinity, turbidity, flow velocity) will be collected at established points within annual monitoring transects.
- iii. The wetted width of the channel will be measured at established points within annual monitoring transects.
- iv. Aquatic life stages and early terrestrial life stage arroyo toad surveys will be conducted in the lower SMR from May 1 to July 15 to document breeding effort and success

b. Riparian Ecosystem Health Monitoring

A Riparian Ecosystem Health Monitoring Program (REHMP) has been established in the Lower SMR by a current ES program and will be continued and enhanced, as necessary. ES developed a rigorous approach to monitor riparian health with a Riparian Habitat Monitoring Plan in 2007 to determine if the Lower SMR riparian areas are recovering post extensive Arundo and Tamarisk removal. To document the natural recovery of the system as compared to untreated adjacent riparian woodland, treatment stratification categories (“Years Since Last Treatment”) are measured against two main success criteria: Absolute Native Cover and Less than 1% of the Three Main Exotics Absolute Cover (Arundo, Tamarisk, and Lepidium). Secondary success standards are also measured to further understand the health of the riparian system: Native Herb Frequency and California Rapid Assessment Methods. As developed, the Primary Success standards need to be met, while secondary success standards do not have to be met, but provide information about the state of the riparian system.

2. Data sets were collected in 2009 and in 2012 and show that the riparian system is moving towards meeting the Primary Success standards; this data reveals that it takes approximately 5 years to meet these standards. Another data set will be collected in spring of 2016 and is expected to show full recovery of the riparian system, unless the large Basilone Complex

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

wildfire of May 2014 has impaired this recovery.

Additional parameters collected under MCBCP's on-going Riparian Ecosystem Health Monitoring program would be incorporated into the AMP to strengthen, and to actively improve and empirically manage, the effect of the project on environmental resources. To meet the goals of the AMP, the monitoring program will be adjusted in 2017: the "Years Since Last Treatment" stratified sampling methods will be replaced by a stratified sampling method located in each aquifer sub-basin and adjacent to drinking water wells. Historic data will not be lost and will be incorporated into the vegetation baseline.

i. Maintaining the Natural Variability within the Riparian System that Supports Listed Species

- The AMP will incorporate parameters from the MCBCP Riparian/Estuarine Biological Opinion consistent with managing groundwater levels and withdrawals to minimize loss and degradation of habitat quality, to the extent practicable (BO; Service 1995a). Additionally, MCBCP will utilize information from project P527B (Removal of Wastewater Plants from the SMR) that assessed the relationship between groundwater levels and plant health with the Riparian Monitoring and Modeling Sewage Effluent Compliance Projects on Marine Corps Base, Camp Pendleton Report (SDSU 2007). The 2007 report found that willows resilience and ability to survive high variation in groundwater by a variety of physiological and morphological adjustments allow the willows to go through cycles of impairment or decline and recovery.
- The AMP will continually monitor groundwater levels, and their rate of change, for the purpose of evaluating conditions for the riparian woodlands. The AMP will review hydrological and biological data that establishes the relationship between the riparian vegetation root zone, depth to water, and rate of decline to assess the health of the riparian vegetation to prevent changes that are not within natural variability.
- The following possible additional information at these sites will be collected to ascertain possible changes in riparian habitat that is valuable to federally-listed riparian species: vertical distribution of foliage, abundance of seedlings (i.e., recruitment), stem diameter, soil

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

moisture, and changes in basal area. Depth to groundwater (e.g., maximum depth to the water table for each year) and rate of groundwater decline will be measured near (see above) the established riparian habitat monitoring locations for a comparison of riparian habitat structure and other variables to ground-water pumping.

ii. Least Bell's Vireo and Southwestern Willow Flycatcher Microhabitat

Study sites will include those area occupied (or previously) occupied by both LBVI and SWFL to capture vegetation community characteristics of their nesting habitat.

- Soil moisture monitors may be placed within 50 meters of current occupied and recently extirpated southwestern willow flycatcher habitat to determine soil saturation during the breeding period.

c. Estuarine Monitoring

MCBCP is currently funding estuarine studies to evaluate the condition of the estuary; the California Regional Water Quality Control Board (RWQCB) is in partnership with MCBCP to determine any improvements that are necessary for future management and ecosystem function. This monitoring will be incorporated into the AMP and its new proposed model to redefine the relationship between the southern California steelhead migration and proposed actions.

d. Lower SMR AMP Model

MCBCP will develop a Lower SMR AMP Model with updated scientific information and better methods to simulate pumping impacts on habitat to replace the existing Lower SMR Model. The relationship between project operations and the habitat that supports various species in the Lower SMR Basin will be described by the Lower SMR AMP Model³. The AMP Model would establish the 12-month pumping and diversion schedule that minimizes or avoids negative impacts to habitat while meeting the water demand requirements; and which is the basis for establishing the operational requirements outlined in the annual FOP. Initial improvements to the AMP Model include the following:

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

- i. The AMP Model will be developed with a refined stress period based on an update conceptual model that incorporates data from the 2014 and 2015 stream-aquifer interaction studies.
- ii. The AMP Model will refine the relationship between surface flow and groundwater levels, at mutually agreed upon reference sites, which are used to assess arroyo toad habitat between March and June.
- iii. The AMP Model will refine the relationship between surface flow and groundwater levels and estuarine parameters to redefine the relationship between the southern California steelhead migration and proposed actions.
- iv. The improved model will be calibrated to streamflow, groundwater, and soil moisture observations consistent with arroyo toad sampling sites located between the estuary and the diversion weir.
- v. The AMP Model will replace the current 3-foot depth to groundwater standard for estimating impacts to arroyo toad breeding habitat. Future simulations will account for actual surface flow based on observations and measurements by MCBCP.
- vi. Stream channel geometry and refined elevation data will be incorporated in the improved AMP Model to account for changes in stream geomorphology so errors in model simulations from migrating channels may be reduced.
- vii. A refinement of the existing 200-foot by 200-foot model grid may be used to better simulate geomorphology and the stream-aquifer interaction.

Operational Conservation Measures Named in the Section 7 Consultation with the USFWS

A synopsis of the Section 7 Consultation SCMs has been provided below. For details on each SCM, refer to USFWS 2016.

Arroyo Toad

2. MCBCP will manage water operations so as not to cause more than a 50-year average annual reduction of 12 percent⁴ in the occurrence of surface water, between the new weir and the Lower Ysidora Narrows (arroyo toad survey blocks 2 through 11), for four continuous months during the arroyo toad breeding season. ⁵
3. MCBCP will manage water operations so as not to cause more than a 15 percent⁶ reduction in

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

the occurrence of water in arroyo toad survey blocks 4 through 8, based on a 50-year balanced hydrologic period.

4. MCBCP will update the arroyo toad monitoring program to strengthen MCBCP's ability to monitor arroyo toad breeding success in the Lower SMR and inform CUP operations. MCBCP will increase the proportion of survey blocks on the Lower SMR that are monitored on an annual basis, consistent with the current survey design (Brehme et al. 2006).
5. MCBCP will monitor real-time surface flow on the SMR below the weir to increase understanding of the relationship between observed surface flow, modeled surface flow, and arroyo toad breeding activities. This information will be used to refine the surface flow modeling effort and provided to AMP participants to inform future CUP management of diversions and groundwater pumping that may affect arroyo toad breeding.
6. To the extent practicable, MCBCP will avoid water management actions during the arroyo toad breeding season that may lead to rapid or substantial changes in SMR surface flow that may adversely affect arroyo toad breeding. Where MCBCP based management actions may result in a sudden decline or increase in surface baseflows outside normal streamflow variability during the arroyo toad breeding season, these actions will be coordinated through the AMP to ensure that they are implemented in a manner that minimizes adverse impacts to all arroyo toad life stages.
7. Non-native, introduced predators and competitors represent a major threat to arroyo toad survival and reproduction (Service 1999). MCBCP will manage arroyo toad habitat as defined in the Riparian BO and as determined through further discussion with the USFWS. Management actions will include control of exotic invasive wetland species (e.g., bullfrogs, crayfish, exotic reptiles, amphibians, and fishes) on the SMR from Stuart Mesa Road to the upstream property boundary of MCBCP and control of beavers on MCBCP property. The arroyo toad monitoring and management program will continue to be evaluated and updated during the future INRMP conference(s) between MCBCP and USFWS.
8. To offset unavoidable impacts to arroyo toads and their habitat caused by future CUP operations (e.g., the reduction in surface water breeding habitat and riparian foraging and sheltering habitat), MCBCP will implement the following conservation actions:
 - a. MCBCP will partially offset permanent impacts to arroyo toad riparian foraging and sheltering habitat by deducting 225 acres of accrued credits from their Riparian BO Habitat Ledger.
 - b. MCBCP will contribute to the funding of the conservation of the Open Space

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Management Zone (OSMZ) within the upper SMR watershed. The OSMZ contains an estimated 37.81 acres of open water habitat suitable for arroyo toad breeding and 393.3 acres of riparian habitats suitable for arroyo toad foraging and sheltering.^{9 10}

- c. Prior to project construction, MCBCP will offset permanent impacts to arroyo toads by placing at least \$2,316,000¹¹ in a fund (arroyo toad conservation fund) for the purpose of conserving and managing at-risk properties that contain significant arroyo toad breeding populations and their associated breeding habitat. This site may additionally support vireo and gnatcatcher breeding and dispersal habitat. The fund will be held by a USFWS-approved entity qualified to hold funds for conservation purposes, and the use of these funds will be subject to an agreement reviewed and approved by MCBCP, USFWS, and fund holder.

Least Bell's Vireo

9. MCBCP will continue base-wide surveys for vireos on MCBCP as defined in the Riparian BO12 and the INRMP conference with the USFWS
10. To offset unavoidable impacts to vireos and their habitat caused by future CUP operations (e.g., the reduction in riparian breeding, foraging and sheltering habitat), MCBCP will implement the following conservation actions:
 - a. MCBCP will partially offset permanent impacts to vireo riparian breeding, foraging and sheltering habitat by deducting 225 acres of accrued credits from their Riparian BO Habitat Ledger.¹³
 - b. MCBCP will contribute to the funding of the conservation of the OSMZ within the upper SMR watershed. The OSMZ is estimated to contain 278.05 acres mixed riparian woodland and scrubland habitat suitable for vireo breeding, foraging and sheltering.

Southwestern Willow Flycatcher

11. MCBCP will continue basewide surveys for flycatchers on MCBCP as defined in the Riparian BO14 and the INRMP conference with the USFWS.
12. MCBCP will fund a habitat enhancement study that is intended support flycatcher breeding requirements and offset anticipated CUP operation impacts. In coordination with the USFWS and flycatcher experts, MCBCP will develop methods and procedures to improve and maintain hydric soil conditions in areas within or adjacent to flycatcher breeding territories.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

- a. Initial efforts to improve and maintain locally hydric soil conditions will include the installation of a low volume, shallow groundwater irrigation pumping well in each of three sites on the Lower SMR. Initial conceptual design of this well consists of a four inch PVC well with a DC power pump and small solar panel designed to pump 5-10 gallons per minute. The pump will be used to irrigate the riparian habitat within or adjacent to any flycatcher territory occupied in the previous year. Pumps will be operated from mid-April through the end of August.
- b. Prior to the implementation of the proposed design discussed above, alternatives to the proposed design will be discussed by MCBCP ES and USFWS, with input from flycatcher experts. Any alternative design adopted will have the same goal of promoting soil moisture and vegetation conditions that support breeding flycatchers.
- c. Initial placement of the pumping wells will be based on discussion and agreement between MCBCP ES and USFWS, with input from flycatcher experts. The pumping wells will be placed in a manner to create soil moisture conditions that promote vegetation which supports breeding flycatchers. Relocation of the pumps within or between years will only occur through joint agreement between MCBCP ES and USFWS, with input from flycatcher experts.
- d. Flycatcher territory and nest monitoring and associated vegetation monitoring will be used to assess the effect of the pumping wells on vegetation structure and composition and flycatcher territorial establishment and nesting success. Monitoring activities related to this effort will be coordinated in advance by MCBCP ES, USFWS, and flycatcher experts conducting the monitoring.
- e. These habitat enhancement activities will be implemented prior to the beginning of CUP operations, but no later than the first flycatcher breeding season after CUP construction starts. Pumping to saturate soils will continue for a minimum of 5 consecutive years, with annual reporting and analysis of the effects of pumping on soil moisture, vegetation response, and flycatcher territorial and breeding response in the area affected. At the end of the 5-year period, a final report will be provided to USFWS, and the findings will be discussed by MCBCP ES, USFWS, and flycatcher experts prior to beginning of the next flycatcher breeding season.
- f. If the methods described above are determined to have a measurable benefit in supporting flycatcher territory establishment and breeding success, then MCBCP will incorporate these efforts into their long-term management of flycatchers on MCBCP, in the INRMP. Final design of the flycatcher habitat enhancement project will be coordinated between

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

MCBCP and USFWS.

Operational Terms and Conditions Named in the Section 7 Consultation with the USFWS

13. MCBCP has committed to implement all conservation measures for CUP operations as listed in the project description of USFWS 2016. If there is any uncertainty regarding the measures listed, MCBCP will coordinate with the USFWS to interpret and implement the conservation measures in a manner consistent with the effects analysis of this biological opinion or reinstate consultation if the measures cannot be implemented as anticipated. MCBCP will continue to coordinate with the USFWS on the CUP AMP development, implementation, and modifications on at least an annual basis.
14. MCBCP will provide an annual report to the USFWS on the preceding year's observed annual surface flows on the Lower SMR to ensure compliance with incidental take triggers set for arroyo toads. Details of the report and reporting requirements can be found in USFWS 2016.
15. MCBCP will develop and implement the REHMP in coordination with the USFWS, and will use the REHMP to measure changes to native riparian vegetation on the Lower SMR and ensure compliance with incidental take triggers set for arroyo toads and vireos. Details of the REHMP can be found in SCM 2.b. and in USFWS 2016.
16. The frequency of REHMP monitoring after the initiation of CUP operations will be determined during the INMRP conference between MCBCP and the USFWS prior to 2020; the USFWS initially recommends REHMP monitoring be conducted at least once every 3 years. REHMP monitoring will be conducted consistently at a time when vegetative cover is maximal and disturbance to nesting birds will be minimal (e.g., late July – August). To account for natural variation in vegetative cover in response to hydrological cycles, measured cover values will be averaged across the most recent three REHMP monitoring efforts for comparison to 2017-2019 baseline conditions. Any future changes to the monitoring protocol or intensity will be coordinated with the USFWS prior to being implemented to ensure consistency of comparisons to baseline conditions. After completion of any given REHMP monitoring effort, MCBCP will provide a report to the USFWS on the monitoring results. This report will: (1) provide information regarding native riparian vegetation cover in a manner comparable to information provided within the Pre-CUP baseline study; (2) compare recent observed riparian vegetation conditions to Pre-CUP baseline conditions; (3) indicate whether any observed decline in vegetation cover at any height class or vegetation category exceeds triggers set for incidental take of arroyo toads and vireos. This report will be provided to the USFWS by January of the year following the monitoring year. After

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

providing this report, MCBCP and the USFWS will discuss this report within 60 days of submittal to determine whether the incidental take trigger is being approached or has been exceeded, and what additional measures should be implemented to ensure compliance with established triggers.

17. MCBCP will continue to conduct arroyo toad monitoring in a manner consistent with recent monitoring efforts, but will increase annual survey effort within the Lower SMR as described in SCM 2.a. Any future changes to the monitoring protocol or intensity will be coordinated with the USFWS prior to being implemented to ensure consistency of comparisons to baseline conditions. An annual report of survey results will be provided to the USFWS by January of the year following the monitoring year. After providing this report, MCBCP and the USFWS will discuss this report within 60 days of submittal to determine whether the incidental take trigger is being approached or has been exceeded, and what additional measures should be implemented to ensure compliance with established triggers.
18. MCBCP will continue to conduct vireo monitoring in a manner consistent with recent monitoring efforts. Any future changes to the monitoring protocol or intensity will be coordinated with the USFWS prior to being implemented to ensure consistency of comparisons to baseline conditions. An annual report of survey results will be provided to the USFWS by January of the year following the monitoring year. After providing this report, MCBCP and the USFWS will discuss this report within 60 days of submittal to determine whether the incidental take trigger is being approached or has been exceeded, and what additional measures should be implemented to ensure compliance with established triggers.

Operational Reasonable and Prudent Measures/Terms and Conditions Named in the Section 7 Consultation with NOAA Fisheries

19. MCBCP will ensure that the operation of the O'Neill Diversion weir does not preclude a properly functioning migration corridor for adult and juvenile steelhead in the Santa Margarita River from the O'Neill Diversion weir downstream to the Pacific Ocean.
 - a. For the purpose of ensuring that flow criteria are met as described and provided for in the proposed action, MCBCP shall share all data with NOAA Fisheries as a result of continuously monitoring instantaneous river discharge in the Santa Margarita River immediately upstream of the O'Neill Diversion weir. MCB Camp Pendleton shall produce hydrographs during the steelhead migration season (December 1-May 31) for flows measured above 150 cfs upstream of the O'Neill Diversion weir for the duration of the proposed action. These hydrographs can be included with yearly monitoring report.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

20. MCB Camp Pendleton will implement a steelhead capture and relocation protocol before dewatering efforts that is protective of adult and juvenile steelhead including parr.
- a. To minimize the adverse effects on the species from maintenance events (removal of sediment in the action area to ensure proper function of the weir and dewatering activities), MCBCP shall provide a Surface Water Diversion Plan and Sediment Maintenance Plan to NOAA Fisheries prior to implementing the proposed action. The Surface Water Diversion Plan shall include equipment proposed to be used for capturing and relocating steelhead, as part of the incidental take described above in NOAA 2016, when those actions will take place, how will steelhead be transported, and a description of the habitat where steelhead will be relocated. MCB Camp Pendleton must receive NOAA Fisheries agreement for the final Surface Water Diversion Plan and Sediment Maintenance Plan prior to implementing the Surface Water Diversion Plan and Sediment Maintenance Plan.
 - b. Juvenile steelhead that are unintentionally captured, collected, or trapped within the O'Neill Diversion weir (including within any fish collection device), or found, including individuals that are stranded, in the Santa Margarita River upstream or downstream of the O'Neill Diversion weir, shall be digitally photographed, measured to the nearest mm (FL), and examined for evidence of smolting (absence of parr marks, external silvering and blackened fin margins, large head, slender body and long caudal peduncle). The date and time of the capture shall be recorded and referenced to the digital photograph and measured length. Juvenile steelhead showing characteristics that are intermediate to parr and smolt (e.g., no evidence of parr marks and external silvering or blackened fin margins) will be classified as presmolt. Parr shall be released into a suitable instream area of the Santa Margarita River or adjoining tributaries upstream of the O'Neill Diversion weir. Presmolt and smolt steelhead shall be released into the Santa Margarita River immediately downstream of the O'Neill Diversion weir. If the characteristic or condition of the freshwater migration corridor throughout the Santa Margarita River downstream of the O'Neill Diversion weir is not conducive to allowing volitional migration of steelhead from the O'Neill Diversion weir to the estuary or ocean, steelhead shall be placed in an aerated container of river water and immediately transported by vehicle downstream and then released into the estuary near the mouth of the Santa Margarita River.
 - c. MCB Camp Pendleton shall contact NOAA Fisheries immediately if one or more steelhead are found dead or injured. The purposes of the contact shall be to review the activities resulting in take, to determine if additional protective measures are required, and to discuss handling procedures for injured or dead steelhead.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

21. MCB Camp Pendleton will implement an adaptive-management plan for the purpose of effectively addressing and resolving uncertainties related to implementation of the proposed action. Details of the terms and conditions of the AMP and NMFS review schedule are found in NOAA 2016.
22. MCB Camp Pendleton will report to NMFS the activities associated with minimizing and monitoring the effects of the proposed action, and with monitoring steelhead migrants.
 - a. MCB Camp Pendleton shall document evidence demonstrating compliance with term and conditions 1(a) of NOAA 2016, and submit this information to NMFS for review no later than June 30th of each year for the duration of implementing the proposed action. These annual reports shall detail the findings from the operations, monitoring and maintenance of the O'Neill Diversion Facility (including the diversion weir) for each year of operation. Each report will be provided for NMFS to review and provide guidance if necessary on one or more recommended actions to ensure operation of the diversion and weir lead to minimized adverse effects, avoiding any lapse in collecting continuous data.
 - b. The data that will be collected as required by term and condition 2(a) and 2(b) of NOAA 2016 shall be recorded on standardized data sheets, along with information about river flow and water temperature, and then entered and saved into an electronic spreadsheet (Microsoft Office Excel). The electronic spreadsheet will be transmitted to an electronic address of NMFS no later than June 30th of each year for the life of the proposed action. Specific details of various aspects of the data collection, including schedules and the specific information to be collected, and how it will be reported on the electronic spreadsheet, shall be developed by MCB Camp Pendleton in cooperation with and agreement from NOAA Fisheries prior to collecting data as required by term and condition 2(a) and 2(b) of NOAA 2016.
 - c. MCBCP shall notify NOAA Fisheries of a problem encountered with achieving compliance with any of the Reasonable and Prudent Measures and Terms and Conditions in NOAA 2016 through electronic correspondence. Such notification shall be made to NMFS within a reasonable period of time, but in no case later than 48 hours after MCBCP's discovery of any such problem. Electronic correspondence for compliance issues shall also be documented through official correspondence to NMFS, which may require more than 48 hours for MCBCP to generate.

General Construction Conservation Measures

General Construction Measures Named in the Section 7 Consultation with the USFWS

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

23. All mechanized clearing and grading, vehicle traffic, equipment staging, and the deposition of soil will be confined to the footprints defined in this EIS/EIR. Construction site boundaries will be clearly delineated by flagging, stakes, survey lath, or snow fencing, as practical.
24. Contractors would be provided with digital files and hardcopy maps showing the project footprints that were used for the environmental analyses in this EIS/EIR and would be informed that construction activity must be confined within those limits. Digital files and hardcopy maps would also include the locations of federally listed species, sensitive habitats (including vernal pools), jurisdictional waters of the U.S. and cultural resources. Any work that is proposed outside those corridors would be subject to review by MCBCP ES and DET Fallbrook's Conservation Program Manager to determine if potential impacts would occur to environmental resources. Prior to the project being implemented, MCBCP ES will inform USFWS of significant changes to the project that may affect federally listed species and reinitiate consultation if necessary.
25. Project design would incorporate correct use of grading and drainage control to minimize erosion during the construction period, and procedures to ensure that slopes and backfilled areas do not erode when construction is completed. To prevent erosion and soil loss, excavation and grading during the rainy season (November 1 to May 1) would be minimized. Where it is impractical to avoid grading during the rainy season, erosion and sedimentation BMPs would be installed and maintained immediately downslope of work areas until work is completed and graded areas have been re-contoured, physically stabilized, and planted. Erosion and sedimentation BMPs would be monitored during construction to ensure stabilization of the site.
26. Project design will avoid direct and indirect impacts to riparian habitats, jurisdictional waters, and other sensitive wetlands (e.g., vernal pools) to the greatest extent feasible. The limits of sensitive wetlands will be clearly marked in the field with markers or exclusion fencing, and these restricted areas will be monitored by the project biologist during construction phases to ensure that these areas are not being directly or indirectly impacted by project activities.
27. Vernal pools have not been identified to occur within or immediately adjacent to the project footprint. If any previously undocumented and/or un-surveyed vernal pools are encountered before or during construction, these pools will be staked and protected from disturbance during pipeline construction unless and until the absence of listed species of fairy shrimp is confirmed by a USFWS approved biologist using an approved methodology.
28. Final design of the O'Neill Headgate and Ditch improvements will include escape design elements for amphibians and mammals, as described in the Final Revised Biological

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Assessment dated September 2015 and other supplementary information provided during this consultation.

29. The proposed project would have a total area of greater than 1 acre (0.4 hectare) of soil disturbance and therefore, would be required to obtain coverage under the California Construction General Permit (CGP) for stormwater: SWRCB Order No. 2009-0009-DWQ (National Pollutant Discharge Elimination System [NPDES] No. CAS 000002) (SWRCB 2009a). Coverage under the CGP would be established for both traditional construction sites as well as Linear Utility Projects. Linear Utility Project activities include, but are not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits; substructures; pipelines; towers; poles; cables; wires; connectors; switching, regulating, and transforming equipment). Soil disturbance includes, but is not limited to, clearing, grading, grubbing, excavation, demolition, stockpiling, trenching, laydown areas, and construction of access roads. The project would comply with the provisions described below:
- a. The contractor would complete a risk determination and prepare a draft Stormwater Pollution Prevention Plan (SWPPP) in accordance with the risk level requirements in the CGP. The draft SWPPP and risk determination would be submitted to the FEAD or FPUD, as applicable, for review at least 60 days prior to initiation of any soil disturbance. The risk determination and SWPPP would be prepared, stamped, and revised by a Qualified SWPPP Developer (licensed engineer, hydrologist, or other qualified professional identified in the permit).
 - b. The contractor would obtain coverage under the CGP by uploading an NOI, approved SWPPP, risk determination, site map, and other supporting documentation to the California Stormwater Multi-Application and Report Tracking System (SMARTS) website. The FEAD or FPUD, as applicable, would review, certify, and submit the NOI to the SWRCB. The contractor would submit a hard copy of the certification statement from SMARTS, together with a check for the permit fee, to the San Diego RWQCB, allowing 7-14 days for fee processing. A Waste Discharge Identification (WDID) number must be received from SMARTS prior to initiation of any soil disturbance.
 - c. The project would comply with all provisions described in the CGP and strictly follow the SWPPP. The SWPPP would be maintained at the project site and updated as necessary to track modifications, Best Management Practice (BMP) location and implementation, training, etc. The certification statement would be included in the on-site SWPPP.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

- d. On-site stormwater compliance would be the responsibility of the contractor's Qualified SWPPP Practitioner (certified professional identified in the CGP). The Qualified SWPPP Practitioner would be responsible for all required inspections, sampling, recordkeeping, and corrective actions. The contractor would upload all required documentation to the SMARTS website and notify the FEAD or FPUD, as applicable, that documents are ready for review, certification, and submittal.
 - e. Annually by 1 August, or upon completion of construction, whichever comes first, the contractor would upload a draft Annual Report, including records of all inspection, sampling, and corrective actions to the SMARTS website. The FEAD or FPUD, as applicable, would review, certify, and submit the Annual Report to the SWRCB.
 - f. Upon completion of construction, the contractor would upload the Notice of Termination (NOT) and supporting documentation to the SMARTS website. The FEAD or FPUD, as applicable, would review, certify, and submit the NOT to the SWRCB. In order to terminate coverage, the project must meet permanent stabilization requirements specified within the CGP. The Annual Report and NOT must be accepted by the SWRCB before the contractor would be released from the contract.
30. In conjunction with the SWPPP, construction-related dust will be minimized by reducing vehicle speeds and traffic in newly cleared areas and covering or lightly spraying exposed soil piles with water when weather conditions warrant. Concrete discharge will not be allowed to reach surrounding water bodies or pools unless specifically authorized in a Clean Water Act (CWA) discharge permit.
31. The project site-specific excavation, grading, and filling plans, SWPPP, and BMPs for portions of the project within Det. Fallbrook will be reviewed by the Det. Fallbrook Environmental Programs and Services Office (EPSO). The plans and BMPs will be approved by the EPSO, and any recommendations made by the EPSO will be incorporated into the project plans to ensure that soil loss and erosion at Det. Fallbrook are minimized. Within the community of Fallbrook, erosion control measure will include any additional requirements of the applicable jurisdiction. Provisions for both temporary and permanent erosion and sediment controls will be implemented in accordance with the SWPPP prepared and designed specifically for the construction sites.
32. Erosion and sedimentation controls will be monitored and maintained during construction and until disturbed areas are stabilized and not susceptible to further erosion, as approved by MCBCP ES.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

33. An Operations Manual and a Facility Response Plan would be prepared according to federal regulations and USMC requirements to minimize potential adverse impacts on water quality that would result from operations and potential spill events. In addition, the contractor would implement a Spill Prevention and Response Procedures Program to prevent spills and minimize potential adverse impacts. On MCBCP, fueling of equipment would be conducted in accordance with applicable Range Regulations as well as with the MCBCP Spill Prevention, Control and Countermeasures Plan.
34. Fueling and lubrication of equipment during all phases of construction would be allowed only in designated staging areas specified on the construction maps or on construction right-of-way and would not occur within 100 ft (30 m) of drainages. Portable fuel tanks would be secured in moving vehicles to prevent spills. Emergency provisions would be in place at all crossings before the onset of construction to prevent accidental spills from contaminating downstream habitats.
35. Heavy equipment and construction activities would be restricted to existing roads and disturbed areas to the maximum extent practicable. Staging areas would be located in disturbed habitats and would be delineated on the grading plans. Vehicle operation and laydown areas would be defined by staking and flagging between stakes to prevent operations outside these areas.
36. Construction work at night would be avoided to the greatest extent possible. Where it cannot be avoided, nighttime construction lighting would be shielded so that light dispersal into adjacent native habitats is significantly reduced. Other methods of reducing light pollution (e.g., dusk-to-dawn sensor activation, motion-sensitive activation, low-lumen or limited-spectrum lighting) would also be applied as possible. Permanent outdoor lighting installed at proposed facilities would also be shielded (or use other methods of reducing light pollution; e.g., motion-sensitive activation) to maximally reduce light pollution into adjacent native plant communities.
37. To control the spread of weeds that may degrade native plant communities on MCBCP and/or DET Fallbrook, all construction equipment and vehicles would be thoroughly power-washed before entering MCBCP and/or DET Fallbrook. On MCBCP, the project biologist would identify weed species that become established at the various project sites and report all new weed species invasions to MCBCP ES.
38. All in-stream construction or dredging would incorporate equipment decontamination before construction activities begin to prevent the potential spread of non-native aquatic species.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

39. Construction workers would be prohibited from bringing domestic pets to construction sites to ensure that domestic pets do not disturb or deplete wildlife in adjacent habitats.
40. The project site would be kept as clean as possible to avoid attracting predators. All food-related trash would be placed in sealed bins or removed from the site regularly.
41. All construction and maintenance-related debris would be disposed of properly and would not be discarded on site. The site would be restored to as near the original biological condition as possible once the project is completed. If MCBCP's or DET Fallbrook's USEPA hazardous waste generator identification number is utilized on the manifest for hazardous waste disposal, then the manifest would come through the responsible installation Hazardous Waste Branch office for signature.
42. Construction workers would use portable chemical toilets, with secondary containment basins to prevent spillage, during construction. Chemical toilets would not be placed within 100 ft (30 m) of riparian habitat except on existing roads.
43. Conservation measures specified herein for construction activities would also apply during operations to non-emergency maintenance or repair activities that necessitate heavy equipment operation, excavation, or vegetation removal. Such activities would be coordinated with MCBCP ES on MCBCP, with natural and cultural resource managers on DET Fallbrook, or with CDFW on nonfederal land, as applicable.
44. An Emergency Response Plan would be prepared to specify measures to be taken in emergencies that pose an immediate threat to public safety or property. The plan would identify points of contact and appropriate notification and monitoring protocols in the event of potential damage to sensitive natural or cultural resources.
45. The contractor would prepare an Environmental Protection Plan (EPP) to address areas within the project footprint where environmental impacts may be encountered from active or closed Installation Restoration (IR), or Resource Conservation and Recovery Act (RCRA) sites, including munitions. For portions of the project within MCBCP, the EPP would be submitted for approval by the Naval Facilities Engineering Command Southwest (NAVFAC SW) Contracting Officer prior to the start of any construction activity. The EPP would include measures the contractor would take to prevent or control release of contaminants to air, land, and water during the construction activities. The EPP would address solid and sanitary waste management, recycling project waste and demolition debris, air pollution controls on equipment and operations, application of paints and coatings, contractor parking and laydown, equipment fueling, hazardous

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

material use, hazardous waste storage and disposal, and procedures to follow in the event that site contamination is discovered. For portions of the project within DET Fallbrook, the EPP would be submitted to the Naval Weapons Station Seal Beach Environmental Program Services Office (EPSO) for review and approval. Any recommendations or requirements made by the EPSO would be incorporated into the EPP and implemented to ensure there are no hazardous materials or hazardous materials impacts at MCBCP and DET Fallbrook.

46. The project site-specific excavation, grading, and filling plans, SWPPP, and BMPs for portions of the project within DET Fallbrook would be reviewed by the Naval Weapons Station Seal Beach EPSO. The plans and BMPs would be approved by the EPSO and any recommendations made by the Environmental Program Services would be incorporated into the project plans to ensure that soil loss and erosion at DET Fallbrook are minimized. Within the community of Fallbrook, erosion control measure would also include any additional requirements of the applicable jurisdiction. Provisions for both temporary and permanent erosion and sediment controls would be implemented in accordance with the SWPPP prepared and designed specifically for the construction sites.

Geological Resources

47. Before construction begins, a project-specific geotechnical study would be conducted that would provide seismic design parameters in accordance with the Uniform Building Code and the California Building Code; specify requirements for trench excavation and pipeline construction to prevent collapse during construction; and slope stability parameters and foundation setbacks. The geotechnical study would include the following:
 - a. The geotechnical report would include an evaluation of the suitability of excavated materials as trench backfill, and recommendations for screening, compaction, and filling procedures to ensure stability of the pipe bedding and cover. The geotechnical report would also evaluate the engineering characteristics of the soils in the area where the retaining walls and concrete slab apron for the inflatable weir diversion structure would be constructed and provide recommendations for slope excavation and compaction to ensure foundation stability. During the geotechnical study, soil corrosive potential would also be evaluated, and recommendations would be provided for concrete and metal component design to provide corrosion resistance as needed, and ensure slope/surface stability.
 - b. Design and construction procedures would use recommendations from the

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

geotechnical study based on site specific information regarding groundwater depth and soil characteristics to minimize differential settlement in specific areas determined to be subject to liquefaction.

- c. The overall project siting would conform to existing topography to minimize slope cut and fill; levees and berms would be properly designed and constructed to ensure constructed slope stability, and subsurface filling would be done in accordance with the geotechnical report recommendations for stability. These procedures would be utilized to ensure that there would be no significant impacts with respect to slope stability and landslides with implementation of the project.
 - d. Prior to installation of geotechnical borings, active IR and RCRA sites would be identified within or near the proposed project footprints to mitigate and/or avoid environmental impacts.
48. All new MCBCP facilities would be designed to comply with the NAVFAC P-355 Seismic Design Manual and the criteria identified. All new FPUD facilities would be constructed in accordance with FPUD design standards and any excavations in County roads or right-of-ways would be coordinated with the County and meet County of San Diego requirements.

Water Resources

49. For project components that would, or would be likely to, involve groundwater extraction (dewatering) at construction sites, foundation dewatering, or groundwater extraction associated with a remediation/cleanup project, MCBCP ES, DET Fallbrook's Conservation Program Manager, or FPUD, as applicable, would be contacted for guidance. Disposal options for groundwater may include the following:
- a. Discharges of uncontaminated groundwater to land would comply with the San Diego Basin Plan Conditional Waiver No. 2-"Low Threat" Discharges to Land found in San Diego RWQCB Resolution No. R9-2007-0104 (San Diego RWQCB 2007). Land applied water may not discharge to Clean Water Act (CWA) jurisdictional surface waters.
 - b. Discharges to the sanitary sewer system would be requested through the MCBCP ES, DET Fallbrook's Conservation Program Manager, or FPUD, as applicable.
 - c. If options (a) and (b) are not feasible, discharges to storm drains or surface waters (including seasonally dry channels) would obtain coverage under the San Diego General Groundwater Permit, San Diego RWQCB Order No. R9-2008-0002

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

(NPDES No. CAG919002) (San Diego RWQCB 2008). Sampling and/or treatment may be required and would be the responsibility of the contractor performing the work. Application for permit coverage must be submitted to the FEAD or FPUD, as applicable, at least 60 days prior to the planned commencement of the discharge. The FEAD or FPUD, as applicable, would review and certify the application, and the contractor would then submit the application and permit fee to the San Diego RWQCB. A WDID number must be received from the San Diego RWQCB prior to initiation of dewatering. A NOT must be accepted by the San Diego RWQCB before the contractor would be released from the contract.

50. Discharges of uncontaminated groundwater to land from well replacements and/or well development would comply with the San Diego Basin Plan Conditional Waiver No. 2-“Low Threat” Discharges to Land found in San Diego RWQCB Resolution No. R9-2007-0104 (San Diego RWQCB 2007). Land applied water may not discharge to CWA jurisdictional surface waters. MCBCP ES would be contacted for guidance.
51. For discharges of potable water resulting from hydrostatic testing, repair, or maintenance of potable water pipelines, tanks, or vessels associated with drinking water purveyance and storage, MCBCP ES, DET Fallbrook’s Conservation Program Manager, or FPUD, as applicable, would be contacted for guidance. Disposal options for discharged potable water may include the following:
 - a. Discharges to land would comply with the San Diego Basin Plan Conditional Waiver No. 2-“Low Threat” Discharges to Land found in San Diego RWQCB Resolution No. R9-2007-0104 (San Diego RWQCB 2007). Land applied water may not discharge to CWA jurisdictional surface waters.
 - b. Discharges to the sanitary sewer system would be requested through the MCBCP ES, DET Fallbrook’s Conservation Program Manager, or FPUD, as applicable.
 - c. If options (a) and (b) are not feasible, discharges to storm drains or surface waters (including seasonally dry channels) would obtain coverage under the San Diego RWQCB Order No. R9-2010-0003 (NPDES No. CAG679001) (San Diego RWQCB 2010).
52. Discharges of uncontaminated slurries or drilling muds (i.e., from vertical and horizontal directional drilling) to land would comply with San Diego Basin Plan Conditional Waiver No. 9-Discharges of Slurries to Land found in San Diego RWQCB Resolution No. R9-2007-0104 (San Diego RWQCB 2007). MCBCP ES, DET Fallbrook Public Works, or

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

FPUD, as applicable, would be contacted for further guidance.

53. Concreting operations would be conducted to ensure discharge water, including washout, associated with these operations does not reach surrounding water bodies or pools unless specifically authorized in a CWA discharge permit.
54. Projects on MCBCP and DET Fallbrook with a footprint of 5,000 ft² or greater would implement Low Impact Development (LID) features in accordance with the Department of Defense Unified Facilities Criteria Low Impact Development (Unified Facilities Criteria [UFC] 3-210-10) (2010) and Section 438 of the Energy Independence and Security Act (2007). A comprehensive set of stormwater planning, design, and construction elements would be used to maintain or restore predevelopment hydrology of the site with regard to volume, rate, and duration of flow, pollutant loading, and temperature for the 95th percentile, 24-hour storm. LID strategies are described in detail in UFC 3-210-10, Chapter 2. These strategies address the long-term post construction (operational) phase where enduring water quality benefits are provided by low impact design, source controls, and treatment controls. Depending on site conditions, purpose, and surrounding landscape, strategies would include, but not be limited to, the following:
 - a. Integrating detention basins, biofiltration cells, vegetated swales, infiltration strips, or other similar earth-based vegetated system for accepting and conveying runoff associated with new paved surfaces and other permanent impervious features. Designs should consider, but not be limited to, increasing the size of local flood control sites serving the project areas or including detention/retention systems in designs for parking areas or other sites.
 - b. Optimizing the use of suitable pervious materials for hardscaped surfaces (e.g., porous pavements, gravel walkways, grass pavers, etc.).
 - c. Maximizing soft-bottom drainage that is amenable to vegetative planting and natural treatment of runoff.
 - d. Integrating natural rock or similar material for protection against scour and sediment transport at discharge points and on stream banks of soft-bottom drainages.
 - e. Integrating meandering pathways within soft-bottom watercourses for increased residence time and improved vegetated runoff treatment.
 - f. Incorporating low-flow pathways for new hardscaped impervious drainages (e.g., concrete channels) to concentrate dry-weather flows along the thalweg (i.e., lowest point

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

of flow), minimize vegetative growth, and reduce long-term maintenance.

- g. Enhancing stormwater infiltration in areas of poor soil permeability by incorporating buried recharge conveyance components (e.g., buried roof downspouts, subdrains for vegetated areas).
- h. Selecting and designing project-related access routes to minimize impacts to receiving waters, in particular the discharge of identified pollutants to an already impaired water body.
- i. Designing projects located within the 100-year flood zone to minimize the risk of property loss, injury, or death from flooding events.

Biological Resources Measures Named in the Section 7 Consultation with the USFWS

Temporary Impact Restoration and Permanent Impact Compensation

55. After final design of the project, the design contractor will provide geographic information system (GIS) shapefiles, including the project footprint and amount/type of vegetation impacted (including both temporary and permanent), to MCBCP ES. MCBCP will provide the USFWS with summary tables showing amount/type of vegetation impacted (including both temporary and permanent) based on final project designs.
56. After construction impacts to vegetation, the construction contractor will provide GIS shapefiles, including the project footprint and amount/type of vegetation impacted (including both temporary and permanent), to MCBCP ES. MCBCP will provide the USFWS with summary tables showing amount/type of vegetation impacted (including both temporary and permanent) based on actual project impacts.
57. Temporary impacts to riparian vegetation, arroyo-toad occupied upland vegetation, gnatcatcher occupied coastal sage scrub (CSS) and Stephens' kangaroo rat (SKR) habitat from project construction will be restored onsite following impact.

Riparian Restoration

- a. Temporary impacts to riparian vegetation will be restored consistent with the Biological Opinion for Programmatic Activities and Conservation Plans in Riparian and Estuarine/Beach Ecosystems on Marine Corps Base, Camp Pendleton (Riparian BO). 16. Restoration of Upland Habitats Occupied by Arroyo Toad, Gnatcatcher and SKR a. For restoration of temporarily impacted upland arroyo toad, gnatcatcher and SKR habitat, a

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Work Plan will be developed and approved by MCBCP ES and Det. Fallbrook's CPM prior to restoration implementation. The plan will include the proposed restoration locations (including GIS shapefiles with the submittal), methods that will be used to restore habitat, and pre-restoration site photos (see CM-58f).

- b. Restoration will consist of targeted application of herbicide for 3 years at each temporary restoration location, with a list of target species provided to the contractor by MCBCP ES and Det. Fallbrook's CPM.
 - c. To successfully restore the area to native vegetation, the topsoil in these areas will be salvaged during construction, stockpiled, and then reapplied as the surface horizon where applicable. Where feasible, topsoil may be taken from permanently impacted areas and reapplied to the surface horizon of temporarily impacted areas.
 - d. Where applicable (e.g., in large disturbed areas), hydroseed with an appropriate native seed mix may be applied to assist with restoration.
 - e. The contractor will provide photos at 20 point locations to assess the progress of restoration. Photos shall be taken prior to construction, prior to restoration, and after the completion of restoration (i.e., after 3 years of targeted herbicide application).
 - f. A Final Report will be developed and approved by MCBCP ES and Det. Fallbrook's CPM after the completion of restoration and provided to the USFWS. The report will include the restoration locations (including GIS shapefiles with the submittal), methods that were employed to restore habitat, restoration site photos, and a subjective assessment of restoration success.
58. In addition to restoration of temporarily impacted riparian habitat, MCBCP will compensate for temporary impacts to riparian habitat that extend over one riparian bird breeding season (March 15 to August 31) in compliance with the Riparian BO. The amount of compensation is dependent upon the temporary effect period of the Riparian BO (e.g., temporary effects that are greater than one breeding season, but are less than two breeding seasons, require 25 percent compensation). MCBCP will offset these extended temporary impacts by deducting the appropriate amount of accrued credits from their Riparian BO Habitat Ledger.17
59. Final designs for construction will minimize the removal of riparian habitat. Any reduction of permanent impacts to riparian habitat achieved as a result of further minimizing the project footprint will proportionately reduce the amount of compensation required. Permanent impacts to occupied riparian habitat related to construction will be offset in accordance with formulas specified in the 16 Per Riparian BO (typically at a 2:1 ratio). MCBCP will offset

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

these permanent impacts by deducting the appropriate amount of accrued credits from their Riparian BO Habitat Ledger.

60. Final designs for construction will minimize the removal of CSS that has the potential to support gnatcatchers. Any reduction of permanent impacts to gnatcatcher-occupied CSS achieved as a result of further minimizing the project footprint will proportionately reduce the amount of conservation MCBCP will commit to offset impacts. Permanent impacts to gnatcatcher-occupied CSS will be offset at a 2:1 ratio. MCBCP will implement one of two alternative strategies to offset permanent impacts to occupied CSS:
 - a. CSS credit purchase at the Buena Creek Conservation Bank or other USFWS-approved CSS bank off of MCBCP.
 - b. CSS restoration at the Lima CSS Restoration Area18 on MCBCP.
61. Final designs for construction will minimize impacts to upland habitats that have the potential to support arroyo toads. Any reduction of permanent impacts to upland habitats occupied by arroyo toads achieved as a result of further minimizing the project footprint will proportionately reduce the amount of conservation MCBCP will commit to offset impacts. MCBCP will offset the permanent impacts to upland arroyo toad habitat by deducting the appropriate amount of accrued credits (at a ratio of 0.5:1) from their Riparian BO Habitat Ledger.

Primary Project Biologist

62. A primary project biologist would oversee avoidance and minimization measures specified within these conservation measures. Different project biologists may be designated for specific measures listed based on the qualifications necessary to satisfy the specific measure. If multiple project biologists are required, their activities would be coordinated through one primary project biologist. The primary project biologist would have sufficient training and experience to identify all of the federally listed species and their habitats that are likely to be encountered within or near the project footprint. The project biologist(s) would have experience and training necessary to conduct tasks described in BO for this project. Required experience for the project biologist(s) will include but is not limited to the following:
 - a. The project biologist will have experience in wetland biology necessary to fulfill the requirements of the Clean Water Act Sections 401 and 404 if applicable.
 - b. The project biologist will be knowledgeable of and able to identify weed species listed in the California Invasive Plant Inventory to assist with weed control and restoration

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

activities.

- c. The project biologist for measures associated with arroyo toads (ARTOs) will have at least 2 years of independent experience conducting arroyo toad surveys and have demonstrated experience in handling arroyo toads.
 - d. The project biologist for measures associated with the flycatcher will be a trained ornithologist with at least 40 hours of observation in the field with the target species and documented experience locating and monitoring nests of the target species.
 - e. The project biologist for measures associated with SKR will have at least 10 years of experience trapping both SKR and Dulzura kangaroo rat (*Dipodomys simulans*; DKR). At a minimum, the project biologist will have at least 40 sessions of supervised SKR trapping across multiple areas, including areas where both SKR and DKR co-occur, with a demonstrated ability to distinguish identifying features of these two species; supervised handling and identification of at least 20 SKR and 20 DKR during trapping sessions; demonstrated ability to identify appropriate SKR habitat, develop appropriate trap-placement designs, set and bait traps, and safely extract and handle all species that may be captured.
63. For construction on MCBCP and DET Fallbrook, a contractor education program would be conducted by the primary project biologist with oversight by MCBCP ES personnel and the Conservation Program Manager on DET Fallbrook. It would be conducted during all project phases and cover the potential presence of listed species; the requirements and boundaries of the project; the importance of complying with avoidance, minimization, and compensation measures; and problem reporting and resolution methods. MCBCP and DET Fallbrook would ensure the placement of signs indicating the necessity for all activities to be strictly confined to the project site.
64. The primary project biologist would monitor all construction activities to ensure compliance with compensation measures and would keep the FEAD Construction Manager and MCBCP ES and DET Fallbrook, as applicable, informed of construction activities that may threaten significant biological resources, particularly sensitive species and their habitats.
65. The primary project biologist would provide electronic versions of monthly biological monitoring reports to MCBCP ES and DET Fallbrook. All observed or suspected (e.g., due to unauthorized impacts to occupied habitat) injury or mortality of federally-listed species will be reported electronically to MCBCP ES and/or the Det. Fallbrook CPM within 24 hours of the initial observation.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

66. The primary project biologist would have the ability to halt construction activities, if necessary, to avoid unanticipated impacts to sensitive resources. If it is necessary to halt construction activities, the project biologist would contact MCBCP ES and DET Fallbrook immediately to discuss appropriate actions. As needed, MCBCP ES and DET Fallbrook staff would confer with the USFWS to ensure the proper implementation of species and habitat protection measures. The project biologist would provide a brief written report of the incident within 24 hours of the action to the FEAD Construction Manager and MCBCP ES and/or DET Fallbrook, as applicable.

Seasonal Restrictions

67. All vegetation clearing required by the proposed project would occur outside of the nesting season for avian species (February 15 to August 31); i.e., vegetation clearing will occur from September 1 to February 14.
68. Grading during the rainy season (November 1 to May 1) will be minimized. Where it is impractical to avoid grading during the rainy season, erosion and sedimentation BMPs will be installed and maintained immediately downslope of work areas until work is completed and graded areas have been re-contoured, physically stabilized, and planted.

Arroyo Toad Year-Round Measures

All construction activities within arroyo toad breeding and upland habitats will apply the following measures year round:

69. The ARTO project biologist will monitor all construction activities in and adjacent to occupied ARTO riparian and aestivation habitat to ensure compliance with all relevant conservation measures and will keep MCBCP ES informed of construction activities that may threaten arroyo toads. The project biologist will ensure that incidental disturbance is minimized and limited to activities essential to the project in accordance with this biological opinion.
70. The ARTO biologist would also be on call and available as needed at other times in the event that an ARTO is encountered during project activities. The ARTO biologist would be present onsite fulltime for the 3 days following any measurable rainfall event (i.e., 0.05 inch or greater) or other appropriate climatic conditions (e.g., high relative humidity and moderate temperatures) that are likely to elicit above-ground ARTO movement.
71. The ARTO biologist will monitor for arroyo toads within both breeding and aestivation habitat during excavation.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

72. Any ARTOs found within the project footprint would be captured and released by the ARTO biologist to the closest area of suitable habitat outside the project footprint but in the same watershed. The ARTO biologist will immediately notify MCBCP ES regarding any arroyo toads relocated; MCBCP ES will report any ARTO relocation to USFWS within 2 working days.
73. Dirt/sand piles left overnight would be covered with tarps or plastic with the edges sealed with sandbags, bricks, or boards to prevent ARTOs from burrowing into the dirt. Holes or trenches would be covered with material such as plywood or solid metal grates with the edges sealed with sandbags, bricks, or boards sufficient to prevent wildlife from falling into holes or trenches. If toads are observed in or adjacent to the project work site, work would stop immediately and MCBCP ES notified.
74. The ARTO biologist will be present at the end of the day to ensure that the excavations are properly covered to prevent toads from entering any open pits and trenches.
75. The ARTO biologist will be present each morning before construction activities begin and during removal of excavation unit covers and soil stockpile tarp, to ensure that arroyo toads have not entered the project site. In the event soil piles have not been covered properly, the biologist will sift through the top 8 inches of soil to ensure arroyo toads are not present.
76. All nighttime construction activities would be prohibited in and/or adjacent to occupied ARTO habitat. In addition, to the greatest extent possible, access to the project construction site would occur via preexisting access routes. Project-related vehicle traffic would be limited to daylight hours, as ARTO movement across roadways occurs primarily during nighttime hours.
77. Ingress and egress of construction equipment and personnel would be kept to a minimum and would use a single access point to the site where possible.
78. Dust control measures (i.e., water truck spraying) will be conducted in a manner to avoid attracting arroyo toads into project activity areas. All road watering activities will be restricted to only the areas in need of compaction (e.g., hard pack areas of roads and work areas) and not over-spray in adjacent areas. This watering will be conducted with a hose. Watering into the edges of the site will be minimized as much as possible. Water trucks will be limited to 5 miles per hour, and no other vehicles will follow the water truck for at least 5 minutes after spraying to minimize mortality of arroyo toads that may be attracted to the sprayed area.
79. If pipelines are constructed above ground in occupied ARTO habitat, they would be raised to

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

allow toad passage under the pipes.

Arroyo Toad Breeding Season Measures

All construction activities within arroyo toad breeding habitats during the breeding season for arroyo toad (March 15 to August 15) will apply the following measures:

80. Temporary silt fencing would be installed around the perimeter of all work areas within occupied ARTO breeding habitat with the ARTO biologist present.
 - a. The silt fencing would be installed at least 14 days prior to construction to allow enough time for ARTO surveys to be completed during optimal weather conditions. MCBCP ES would provide requirements for the toad fencing to the contractor.
 - b. All fencing materials (i.e., mesh, stakes) would be removed following construction.
 - c. If construction within a designated area extends between two arroyo toad breeding seasons (e.g., construction of the new weir structure), fencing will remain in place and maintained through the non-breeding season until construction in this area is completed. Where removal of fencing may be warranted due to extended periods of inactivity, the arroyo toad biologist will discuss with MCBCP ES. MCBCP ES will discuss with USFWS, and they will jointly determine the appropriate course of action.
 - d. Where fencing may not be warranted due to climatic conditions, topography, or other factors, the arroyo toad biologist will discuss with MCBCP ES. MCBCP ES will discuss with USFWS, and they will jointly determine the appropriate course of action.
81. After exclusionary fencing has been installed within work areas located in occupied ARTO breeding habitat, but prior to initiation of construction, at least 3 nighttime surveys for ARTOs would be conducted within the fenced area by the ARTO biologist. These surveys would be conducted during appropriate climatic conditions and during the appropriate hours (i.e., evenings, nights, and mornings) to maximize the likelihood of encountering ARTOs. If climatic conditions are not highly suitable for ARTO activity, ARTO habitat in the project footprint would be watered to encourage aestivating toads to surface. All ARTOs found within the project area would be captured and translocated by the project biologist to the nearest suitable riparian habitat. Upon completion of these surveys and prior to initiation of construction activities, the project biologist would report the capture and release locations of all ARTOs found and relocated during this initial survey to MCBCP ES, who in turn would submit it to the USFWS.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

82. After the initiation of construction, the arroyo toad biologist will be present each morning before construction activities begin to check the integrity of the arroyo toad fence and locate and remove any arroyo toads that may have entered the area. The arroyo toad biologist will be present at the end of the day to check the integrity of the arroyo toad fence.
83. The ARTO biologist would survey the area inside the fence just prior to ground disturbing activities.
84. If arroyo toad egg masses or larvae are found within permanent or temporary impact areas during construction (e.g., in the open water habitat in the Santa Margarita River), the ARTO biologist will discuss with MCBCP ES. MCBCP ES will discuss and jointly determine appropriate additional measures with USFWS, such as translocation or other conservation measures. If relocation of egg masses is deemed appropriate, the project biologist will report the original and new locations of all egg masses/larvae found and relocated to MCBCP ES, who will submit this report to USFWS.

Least Bell's Vireo

85. Construction at the Lower SMR Crossing¹⁹ will only occur during the non-breeding season for the vireo (i.e., construction will occur from September 1 to March 14). To the maximum extent possible, construction and other project-related activities that occur within 250 feet of occupied vireo habitat will take place outside the vireo breeding season (March 15 to August 31).

Southwestern Willow Flycatcher

87. Construction at the Lower SMR crossing will only occur during the non-breeding season for the flycatcher (i.e., construction will occur from September 1 to March 14).
88. For portions of the project footprint other than the Lower SMR crossing, construction activities will not occur within 250 feet of occupied flycatcher habitat during the breeding season (May 1 to August 31). Occupation by flycatchers will be based on the following:
 - a. Any areas mapped as territorial flycatcher habitat in either of the preceding 2 calendar years will be considered occupied flycatcher habitat.
 - b. In addition to 89a. described above, if construction will occur within or adjacent to any suitable flycatcher habitat²⁰ from June 8 to August 31, then current flycatcher occupation will be determined based on base-wide flycatcher surveys being conducted in the same calendar year or project-specific surveys.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

- i. To determine current flycatcher occupation, MCBCP ES will provide the primary project biologist with two reports showing the current mapped flycatcher locations and breeding status from ongoing annual base-wide flycatcher surveys:
 - A report on June 7, 7 days after the end of the 1st flycatcher survey period (May 15-31).²¹
 - A report on July 1, 7 days after the end of the 2nd flycatcher survey period (June 01-24).
- c. If annual base-wide flycatcher survey information is not available, project-specific flycatcher surveys will be conducted in addition to 89a. described above. All activities that occur within 250 feet of riparian habitat during the breeding season will apply the following measures:
 - ii. The flycatcher biologist will conduct pre-construction surveys for active flycatcher nests in all riparian habitat within 250 feet of the construction/maintenance footprint. Pre-construction surveys will consist of three surveys spaced evenly in time over the 2 weeks immediately prior to construction activities.
 - iii. During ongoing construction during the breeding season in riparian habitat, the flycatcher biologist will conduct weekly surveys (prior to 11:00 a.m.) within the previously identified occupied habitat to determine the status of nesting flycatchers.
 - iv. The flycatcher biologist will provide an electronic report of nest survey results to MCBCP ES within 7 days of completing the survey; MCBCP ES will forward this report to USFWS.
 - v. The primary project biologist will use criteria and information as defined above to ensure that construction avoids flycatcher breeding locations as required during the breeding season.

Coastal California Gnatcatcher

89. To the maximum extent possible, construction and other project-related activities that occur within 250 feet of occupied gnatcatcher habitat will take place outside the gnatcatcher breeding season (February 15 to August 31).

Stephens' Kangaroo Rat

90. Final designs for the project and construction schedule in potential SKR habitat will be

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

reviewed and approved by MCBCP ES and the Det. Fallbrook CPM before construction activities are initiated. Pipeline construction in suitable and occupied SKR habitat will avoid and minimize potential impacts to SKR and its habitat to the maximum extent practicable.

91. Since small mammal populations are not static temporally or spatially, all survey data, including the most current SKR survey data for MCBCP and Det. Fallbrook, will be compiled and used in identifying areas to be potentially avoided during construction activities.
92. Within 4 weeks prior to initiation of construction activities at any particular location and before exclusionary fencing is erected, the project biologist will conduct a preliminary SKR survey within 50 feet of the project footprint in all areas likely to be occupied by SKR. The project biologist will:
 - a. Mark all active and potentially active kangaroo rat burrows within or adjacent to the area that will be affected by construction activities and create a 15-foot buffer around the burrow to encompass the entire underground portion of the burrow. Burrow locations and other kangaroo rat sign will be mapped and provided to MCBCP ES, the Det. Fallbrook CPM, and USFWS prior to initiation of construction activities.
 - b. Conduct 3 nights of trapping at each location where kangaroo rat burrows or other sign are located within the proposed project footprint or an adjacent 50-foot buffer on either side of the project footprint. Trapping will be used to distinguish between SKR and the closely related DKR. DNA samples may be requested by the Det. Fallbrook CPM for genetic confirmation of species identifications. Locations of SKR caught during trapping will be mapped and provided to MCBCP ES, the Det. Fallbrook CPM, and USFWS prior to initiation of construction activities. A table will be included showing the anticipated permanent and temporary impacts to kangaroo rat burrowing and foraging habitat²² based on final project designs. If project impacts exceed those anticipated in this biological opinion, MCBCP will reinitiate consultation.
93. Prior to construction in or near SKR-occupied areas, exclusionary fencing will be installed and maintained along portions of the project where SKR occur within 100 feet of the bi-directional pipeline footprint. Fencing will extend for at least 100 feet along the construction footprint boundary in each direction from the location of any SKR location mapped within 100 feet of the footprint. Fencing will minimize the likelihood that SKR will enter the project footprint and be crushed or trapped during project construction. The need for exclusionary fencing will be determined on a case by case basis at the discretion of MCBCP ES and the Det. Fallbrook CPM in coordination with the project biologist.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

94. SKR trapping and relocation in advance of project activities may be conducted in limited instances where it is determined that any SKR trapped may be safely relocated outside the project footprint (i.e., outside of the exclusionary fence) within a portion of its likely home range. The need for trapping and relocation will be determined on a case by case basis at the discretion of MCBCP ES and the Det. Fallbrook CPM in coordination with the project biologist. MCBCP ES will report any attempt to trap and relocate SKR to USFWS within 2 working days.
95. The project biologist will be on site during construction site fencing, trenching, and other construction-related activities with the potential to impact SKR. Any SKR found incidentally during construction activities that can be safely captured by the project biologist will be relocated to suitable habitat outside of the project footprint. Any incidental relocation of SKR by the project biologist will be reported to MCBCP ES and the Det. Fallbrook CPM; MCBCP ES will report any SKR relocation to USFWS within 2 working days.
96. The destruction of potential SKR burrows that show signs of current use or occupancy and patches of occupied habitat will be avoided to the maximum extent feasible. To the extent feasible, a 15-foot buffer around SKR burrows will also be avoided to maintain the integrity of underground burrow systems. The status of burrows occurring within construction areas will be determined by the project biologist. All burrows and patches of occupied habitat to be avoided will be flagged by the project biologist before the initiation of construction activities and indicated on project maps provided to the contractor.
97. Stockpiled soils will be covered with plastic or other material deemed suitable by the project biologist, and the edges will be held in place by sandbags at the end of each work day. The project biologist will inspect covered stockpiles daily for gaps or sign that small mammals, including SKR, have accessed the soils underneath and will be present when these covers are removed. If burrows characteristic of SKR are found, the burrows will be excavated and any SKR found will be relocated by the project biologist to suitable habitat adjacent to the project footprint.
98. Open trenches will be covered or ramped (e.g., soil slope for easy egress) each evening at the completion of work. Trench covers will consist of rigid boards or plates that cover all openings into the exposed trench. The project biologist will be present when the boards or plates are removed and will relocate any SKR that may have entered the trench during the night to suitable habitat adjacent to the project footprint.
99. All nighttime construction activities will be prohibited in and/or adjacent to areas occupied

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

by SKR. This includes transportation to and from the project site when the route passes through or adjacent to occupied SKR habitat.

100. No construction activities within occupied SKR habitat will occur during rainy periods when burrows may be more susceptible to collapse and degradation from vehicular and foot traffic.
101. The project biologist will inspect the construction area each morning before the start of activities and monitor subsequent construction activities in potential SKR habitat. Torpid or injured animals (unable to flee) may be temporarily held and transported to an ES and USFWS-approved location for care and/or rehabilitation. Recovered animals will be returned to an ES and USFWS-approved release site.
102. All road watering activities will be restricted to only the areas in need of compaction (e.g., hard pack areas of roads and work areas) and not over-spray in adjacent grasslands. This watering will be conducted with a hose. Watering into the edges of the site (weeded/grassy/vegetated areas) will be minimized as much as possible. Water trucks will be limited to 5 miles per hour, and no other vehicles will follow the water truck for at least 5 minutes after spraying to minimize mortality of SKR that may be attracted to the sprayed area.

San Diego and Riverside Fairy Shrimp

103. Any previously undocumented and/or unsurveyed vernal pools encountered during construction would be staked and protected from disturbance during pipeline construction unless and until the absence of listed species of fairy shrimp is confirmed by a qualified (USFWS-permitted) biologist using an approved methodology.

Construction Terms and Conditions Named in the Section 7 Consultation with the USFWS

104. At least 14 days prior to initiating any portion of CUP construction activities that will directly impact habitat that supports listed species or has a high potential to support listed species, MCBCP will submit to the USFWS (via email or mail) a figure showing the impact area based on final project designs relative to the impact area depicted in the BA. The figure will include vegetation mapping and all federally listed species observations from basewide and project-specific surveys (identified to the year and source of the survey) and a table showing the final permanent and temporary impacts by habitat type. If the project is implemented in phases (e.g., weir construction and O'Neill Ditch upgrade, new wells and collection pipeline, bi-directional pipeline, etc.) and submittals are made for each phase, the table showing the permanent and temporary impacts by habitat type will provide

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

information for the current phase submitted, each previous phase submitted, and the cumulative impacts to date.

105. MCBCP has committed to implement all CUP construction conservation measures listed in the project description of USFWS 2016. If there is any uncertainty regarding the measures listed, the Marine Corp will coordinate with the USFWS to interpret and implement the conservation measures in a manner consistent with the effects analysis of this biological opinion or reinitiate consultation if the measures cannot be implemented as anticipated.
106. MCBCP will provide annual reports on the status of CUP construction until all CUP construction is completed.
107. Prior to initiating construction activities in suitable arroyo toad riparian and upland vegetation, MCBCP will provide to the USFWS (via email or mail) the results of the pre-construction arroyo toad surveys, including the number of arroyo toads captured and relocated for the project phase (as described above) being implemented, the cumulative number of arroyo toads captured and relocated as a result of completed phases of the project, the project-specific and cumulative number of individuals killed or injured during capture and relocation efforts, and a map indicating where arroyo toads were captured and released relative to the project area. The purpose of this notification is to ensure that the impacts to arroyo toad from CUP construction do not exceed the exempted amount of take based on number of individuals captured within the project footprint.
108. Within 30 days of completing construction activities for a particular phase (as described above) of the project, MCBCP will notify the USFWS (via email or mail) of any arroyo toads that were captured and relocated during construction activities. This notification will include the number of arroyo toads captured and relocated in association with the particular phase of CUP construction being addressed, the cumulative arroyo toads captured and relocated as a result of all completed phases of CUP construction, the phase-specific and cumulative number of individuals killed or injured during capture and relocation efforts, the phase-specific and cumulative number of individuals killed or injured as a result of construction activities, and a map indicating where arroyo toads were captured and released relative to the footprint of that construction phase. The purpose of this notification is to ensure that the impacts to arroyo toad from CUP construction do not exceed the exempted amount of take based on number of individuals captured and relocated, number of individuals killed or injured during capture and relocation, or number of individuals killed or injured as a result of construction activities.
109. Within 30 days of completing removal of arroyo toad riparian and upland vegetation for a

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

particular phase (as described above) of CUP construction, MCBCP will notify the USFWS (via email or mail) of the total amount of arroyo toad riparian and upland habitat removed in association with CUP construction activities for a particular phase and the cumulative amount of riparian and upland vegetation removed as a result of all phases completed to date. The purpose of this notification is to ensure that the impacts to arroyo toad from CUP construction do not exceed the exempted amount or extent of take based on impacts to arroyo toad habitat.

110. If death or injury of any arroyo toad is observed in association with capture and relocation activities or construction activities within the footprint for any phase of CUP construction, MCBCP will notify the USFWS within 1 business day and submit a written report (via email or mail) describing the incident within 2 business days so that the activities resulting in take can be reviewed to determine if additional protective measures are required.
111. Prior to initiating construction activities for any particular phase of the CUP, MCBCP will review the latest annual basewide survey data to verify that no more than 10 vireo territories (total) will be substantially impacted (i.e., more than 20 percent of a pair's territory will be impacted) by CUP construction and that no more than 31 vireo territories overlap with any portion of the CUP construction footprint. Prior to initiating activities for any particular phase of construction, MCBCP will provide to the USFWS a map (via email or mail) showing the most recent distribution of vireos relative to the footprint for that phase, an estimate of the number of vireo territories that overlap with the project footprint and will be substantially impacted by that phase, and the cumulative total of vireo territories that overlap with and are substantially impacted by all phases of CUP construction initiated to date. The purpose of this notification is to ensure that impacts to vireos from CUP construction do not exceed the exempted amount of take based on the number of vireo territories in the project footprint.
112. Within 30 days of completing removal of vireo habitat for a particular phase (as described above) of CUP construction, MCBCP will notify the USFWS (via email or mail) of the total amount of vireo habitat removed in association with CUP construction activities for a particular phase and the cumulative amount of vireo habitat removed as a result of all phases completed to date. The purpose of this notification is to ensure that the impacts to vireo from CUP construction do not exceed the exempted amount or extent of take based on impacts to vireo habitat.
113. Prior to initiating construction activities for any particular phase of the CUP, MCBCP will review the latest annual base-wide survey data to verify that no more than two gnatcatcher territories (total) will be substantially impacted (i.e., more than 20 percent of a pair's

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

territory will be impacted) by CUP construction and that no more than nine gnatcatcher territories overlap with any portion of the CUP construction footprint. Prior to initiating activities for any particular phase of construction, MCBCP will provide to the USFWS a map (via email or mail) showing the most recent distribution of gnatcatchers relative to the footprint for that phase, an estimate of the number of gnatcatcher territories that overlap with the project footprint and will be substantially impacted by that phase, and the cumulative total of gnatcatcher territories that overlap with and are substantially impacted by all phases of CUP construction initiated to date. The purpose of this notification is to ensure that impacts to gnatcatchers from CUP construction do not exceed the exempted amount of take based on the number of gnatcatcher territories in the project footprint.

114. Within 30 days of completing removal of CSS for a particular phase (as described above) of CUP construction, MCBCP will notify the USFWS (via email or mail) of the total amount of CSS removed in association with CUP construction activities for a particular phase and the cumulative amount of CSS removed as a result of all phases completed to date. The purpose of this notification is to ensure that the impacts to gnatcatchers from CUP construction do not exceed the exempted amount or extent of take based on impacts to gnatcatcher habitat.
115. Prior to initiating CUP construction activities for the bi-directional pipeline within SKR habitat, MCBCP will provide to the USFWS (via email or mail) the results of the pre-construction SKR surveys, including the number of SKR captured and relocated, the number of individuals killed or injured during capture and relocation efforts, and a map indicating where SKR were captured and released relative to the project area. The purpose of this notification is to ensure that the impacts to SKR from CUP construction do not exceed the exempted amount of take based on the estimated number of SKR in the project footprint.
116. Within 30 days of completing construction activities for the bi-directional pipeline within SKR habitat, MCBCP will notify the USFWS (via email or mail) of any SKR that were captured and relocated during construction activities. This notification will include the number of SKR captured and relocated, the number of SKR killed or injured during capture and relocation efforts, and a map indicating where SKR were captured and released relative construction footprint. The purpose of this notification is to ensure that the impacts to SKR from CUP construction do not exceed the exempted amount of take based on number of individuals captured and relocated, number of individuals killed or injured during capture and relocation, or number of individuals killed or injured as a result of construction activities.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

114. Within 30 days of completing impacts to SKR habitat for construction of the bi-directional pipeline, MCBCP will notify the USFWS (via email or mail) of the total amount of SKR habitat impacted in association with CUP construction activities. The purpose of this notification is to ensure that the impacts to SKR from CUP construction do not exceed the exempted amount or extent of take based on impacts to SKR habitat.
118. If death or injury of SKR is observed in association with capture and relocation activities or construction activities for the bi-directional pipeline, MCBCP will notify the USFWS within 1 business day and submit a written report (via email or mail) describing the incident within 2 business days so that the activities resulting in take can be reviewed to determine if additional protective measures are required.

Construction Reasonable and Prudent Measures/Terms and Conditions Named in the Section 7 Consultation with NMFS

119. MCBCP shall direct the design team to prepare feasibility-level designs and produce design-package submittals for NMFS' review and comment as described in NOAA 2016.
120. MCBCP shall submit a draft schedule for the design and project implementation to NMFS within 120 days after issuance of the final biological opinion. The schedule shall indicate target time frames for each stage of the design process and deliverables to NMFS for all submittals required under each reasonable and prudent measure. In addition, the draft schedule shall identify approximate time frames to achieve major milestones in the construction and facility start-up phase. The construction and start-up schedule may be revised by agreement between MCBCP and NMFS during the design process as more information is developed. NMFS anticipates that design, construction, and facility startup could conceivably occur within 3 years after commencement of the formal design process. However, the ultimate deadline for implementation and operations is on or before April 1, 2019, when construction authority expires under the Omnibus Public Land Management Act of 2009 (Title IX, Section 9108).

Cultural Resources

121. Should buried cultural resources and/or human remains be encountered during any construction activities on MCBCP or DET Fallbrook, the discovery would be treated according to procedures outlined in the MCBCP Integrated Cultural Resource Management Plan (ICRMP) or DET Fallbrook ICRMP, respectively. These procedures are also specified in 36 CFR § 800.13, the implementing regulations of the NHPA, while Native American Graves Protection and Repatriation Act would be applied if any human remains are

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

identified as having Native American decent. Should buried cultural resources and/or human remains be encountered during construction activities on non-DOD lands, the discovery would be treated according to procedures outlined in the County of San Diego guidelines for determining significance of cultural resources pursuant to CEQA (County of San Diego 2007a), and PRC Section 5097.98 for human remains. In addition, any required cultural monitoring, development, and or review of a monitoring plan would be consistent with the Section 106 consultation.

Air Quality

122. Fugitive dust control measures would be implemented to reduce emissions of particulate matter (less than or equal to 10 microns in diameter [PM10] and particulate matter less than or equal to 2.5 microns in diameter [PM2.5]) to the extent possible. These measures include watering unpaved roads and actively graded surfaces up to three times daily, as well as reducing speeds on unpaved roads to 15 miles per hour (mph) (24 kilometers per hour [kph]), suspending grading activities if wind speeds exceed 25 mph (40 kph), and replacing ground cover in graded areas as soon as possible. Watering would be done lightly to avoid the accumulation of surface water.
123. Construction specifications for the construction work that will implement BMPs to minimize air emissions from equipment and vehicles would be developed. The specification will include requirements for minimizing construction-related trips, minimizing idling, and proper equipment maintenance and inspection.

Hazardous Wastes and Materials

124. If construction would occur within or near an IR Program Site on MCBCP, all project activities in the IR site and the surrounding area would require approval of MCBCP ES. ES would notify the MCBCP's FFA Team, which consists of MCBCP, DON, USEPA, Cal EPA DTSC, and San Diego RWQCB.
125. The contractor would prepare a Soil Management Plan to address potential soil impacts from IR Program, RCRA, or munitions sites identified within, or near the proposed project footprint. The procedures described in the Soil Management Plan would be followed for installation of the pipeline. Under direction of MCBCP ES, the contractor would prepare a Soil Management Plan for handling, testing, and disposing of the soils. The procedures described in the Soil Management Plan would be followed for installation of the pipeline. The contractor would coordinate with MCBCP ES to determine appropriate disposition for the soil based on the analytical results; this would ensure that all potentially contaminated

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

soil would be disposed of in accordance with applicable federal, state, and local regulations and MCBCP requirements. Appropriate health and safety measures would be followed and all requirements of USACE Manual EM 385-1-1 Safety and Health Requirements and Title 29 CFR (Labor) § 1910 Occupational Safety and Health Standards Subpart H Hazardous Materials Section 120 Hazardous Waste Operations and Emergency Response would be met.

126. If pipeline construction activities encounter potentially contaminated soil (i.e., discolored and or odorous) at DET Fallbrook or within the community of Fallbrook, the soil would be managed in accordance with all applicable federal, state, County of San Diego, and federal requirements, as well as any additional requirements specific to the applicable jurisdiction.
127. It is likely that the proposed project footprint may encounter contaminated groundwater from active IR or underground storage tank sites. If pipeline construction activities encounter potentially contaminated groundwater, the water would be managed in accordance with all applicable federal, state, County of San Diego, and federal requirements, as well as any additional requirements specific to the applicable jurisdiction.
128. Groundwater is known to be contaminated at various IR locations throughout MCBCP. If dewatering operations are taking place within a suspected groundwater contaminant plume, the action proponent or their contractor would coordinate with MCBCP ES (i.e., Stormwater Branch, Wastewater Branch, and IR Branch) to ensure that all reporting requirements and regulatory approvals are obtained. Potentially contaminated groundwater encountered during construction activities on MCBCP would be tested and handled in accordance with the direction of MCBCP ES. MCBCP ES would review and approve a proposed sampling plan. Arrangements would be made with the MCBCP Facilities Maintenance Department for acceptability of the water for discharge into the sanitary sewer based on the results of the laboratory analysis, volume, and accessibility to a sewer manhole. Appropriate health and safety measures would be followed and all requirements of USACE Manual EM 385-1-1 Safety and Health Requirements and Title 29 CFR (Labor) § 1910 Occupational Safety and Health Standards Subpart H Hazardous Materials Section 120 Hazardous Waste Operations and Emergency Response would be met.
129. It is likely that monitoring wells would be encountered during construction. If monitoring wells are encountered during construction activities, they would not to be damaged or destroyed, and the IR Branch would be alerted. Reconstruction/renovation of destroyed or damaged wells would be the responsibility of the project proponent.
130. A Hazardous Materials Business Plan would be prepared in accordance with County of San

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Diego guidelines to describe how the construction worker would manage their hazardous materials during construction.

131. An Oil Spill Response Plan (OSRP) would be prepared and reviewed and approved by appropriate federal, state, and local agencies. The OSRP is required under state and federal regulations (Senate Bill 2040 and 40 CFR § 300, the National Oil and Hazardous Substances Pollution Contingency Plan). The OSRP provides a list of emergency service providers. For project components on MCBCP, the procedures outlined in the Oil and Hazardous Substance Integrated Contingency Plan Amended April 2011 would be followed. For project components on non-federal land, FPUD would comply with requirements of CDFW, Office of Spill Prevention and Response.

Utilities

132. During project design, pipeline alignments and construction footprints would be selected to avoid or minimize disruption of existing utilities. The location of underground utilities would be verified prior to excavation to further avoid impacts. Also, the design of new electrical transformers and panels that would be needed to supply power to the wells would be coordinated closely with MCBCP and San Diego Gas & Electric (SDG&E) to minimize or eliminate any temporary disruption of power supplies during construction and start-up.
133. For any wells located within the project footprint, the contractor would contact MCBCP ES to determine if the well is active or abandoned.
134. Newly constructed or repaired wells that are not in service for more than three months would be sampled for bacteriological quality prior to use in accordance with the American Water Works Association C654-03 (CCR Title 22 §64583).
135. The contractor would coordinate well closure and application review with MCBCP ES.
136. The project proponent or contractor would submit an amended drinking water permit to modify, add to, or change the source of supply or method of treatment of, or change in the distribution system as authorized by a valid existing permit in accordance with California Health and Safety Code §116550.
137. The existing MCBCP Domestic Water Permit for the Southern Water System would be amended to include the four new wells and any associated changes to the existing water system. Appropriate permits for water well drilling would be obtained from the San Diego County Department of Environmental Health and water wells would be constructed in accordance with the California Water Well Standards utilizing a C-57

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Contractor.

138. The contractor would ensure potable water pipeline separation and installation standards are followed as outlined in CCR Title 22, § 64572.
139. To avoid cross contamination of potable water lines to be installed adjacent to sanitary sewer lines, the contractor would coordinate installation and inspection of newly installed backflow control devices and air gaps with the Facilities Maintenance Department in accordance with CCR Title 17.
140. The contractor would ensure that new potable water pipelines installed or that have been taken out of service for repairs (de-pressurized) would be disinfected and sampled for bacteriological quality prior to use, in accordance with the American Water Works Association Standard C651-05. Water samples would be required to be negative for coliform bacteria prior to the main (s) being placed in service in accordance with CCR Title 22, §64580.
141. The water source of a public water system would be required to have the capacity to meet the system's maximum day demand regularly, in accordance with CCR Title 22 §64554. A Source Capacity Planning Study may be required if there is difficulty with the water system's source capacity or proposed expansion by the DPH.

III. PROJECT PURPOSE AND NEED

The purpose of the Proposed Action is to resolve the water rights issues between MCB Camp Pendleton and FPUD and satisfy the Court's order to find a "physical solution" to the ongoing dispute in *United States v. Fallbrook Public Utility District, et al.* It would efficiently meet the long-term water demands of MCB Camp Pendleton and FPUD, reduce FPUD's dependence on imported water, maintain watershed resources, and improve water supply reliability by managing the yield of the Lower SMR Basin. The Proposed Action is needed to upgrade/develop infrastructure and cooperative water management processes that satisfy MCB Camp Pendleton's and FPUD's respective current and future water requirements. MCB Camp Pendleton and FPUD entered into a Memorandum of Understanding (MOU) in 2001 agreeing to jointly participate in the project in good faith and with full cooperation. MCB Camp Pendleton, Reclamation, and FPUD signed a Conceptual Points of Agreement in January 2011.

IV. COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

The FPUD is the lead agency for the proposed project under the California Environmental Quality Act (CEQA). Pursuant to the requirements of the State CEQA Guidelines, a Notice of

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Preparation (NOP) was sent to the California State Clearinghouse on December 14, 2004 announcing the preparation of a Draft EIS/EIR. The NOP was publicly circulated for 30 days, from December 15, 2004, to January 31, 2005. In addition, The MCB Camp Pendleton, Reclamation and the FPUD conducted two public scoping meetings on January 12, 2005 and January 13, 2005 to provide the public and governmental agencies information on the CEQA process and to give further opportunities to identify environmental issues and alternatives for consideration in the EIS/EIR.

A Notice of Availability/Notice of Completion for the Draft EIS/EIR was published in the Federal Register on May 9, 2014 and a Notice of Completion was provided to the Governor's Office of Planning and Research State Clearinghouse on May 9, 2014 to initiate a 45-day public review of the Draft EIS/EIR. The public review period for the Draft EIS/EIR concluded on July 10, 2014 and a public meeting was held on May 29, 2014 at FPUD. The Draft EIS/EIR has been made available to the public via the MCB Camp Pendleton website: <http://www.pendleton.usmc.mil/base/environmental/index.asp>, the Fallbrook Public Utility District website: <http://www.fpud.com>, and at the following local libraries: City of San Clemente Public Library, Fallbrook Public Library, and the City of Oceanside Public Library. Written and verbal comments on the Draft EIS/EIR were provided by the U.S. Environmental Protection Agency (USEPA) and FPUD Board members, respectively.

MCB Camp Pendleton, Reclamation and FPUD reviewed all of the written comments received from interested persons, organizations and agencies and prepared detailed responses on the comments directed to any significant environmental issues. The comments and responses, along with revisions to the Draft EIS/EIR text, are included in a separate document which, together with the Draft EIS/EIR, comprises the Final EIS/EIR.

V. FINDINGS REGARDING POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACTS

The EIS/EIR was prepared by FPUD, the U.S. Marine Corps (USMC), the U.S. Department of the Interior, and the Bureau of Reclamation (Reclamation) to evaluate the potential environmental impacts of the proposed project. The EIS/EIR joint document was prepared to meet the requirements of both NEPA and CEQA after the federal lead agencies (USMC and Reclamation) determined that an EIS is required under NEPA and the FPUD, as the CEQA lead agency, determined that the potential impacts of the project on non-federal lands were sufficient to trigger an EIR. CEQA provides that when making findings, a public agency must adopt a mitigation monitoring and reporting program for the changes to the project which it has adopted

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

or made conditions of approval in order to mitigate or avoid significant project-related impacts on the environment. In accordance with CEQA, a Mitigation Monitoring Compliance and Reporting Program (MMCRP) has been prepared for the Project; however, the MMCRP only includes those special conservation measures and mitigation measures that are the responsibility of the FPUD. Those SCMs and Mitigation Measures that are the responsibility of USMC and/or Reclamation have not been included in the MMCRP for FPUD. The MMCRP is designed to ensure compliance during implementation of the approved project through ongoing monitoring and reporting of adopted mitigation measures as well as environmental commitments incorporated into the Project. The primary goal of the MMCRP is to ensure that during final design, construction, and operation, the Project will avoid or reduce potentially significant environmental impacts.

The EIS/EIR addressed those areas considered potentially significant: geological resources; water resources; water quality; biological resources; cultural resources; air quality; hazardous materials and wastes; and utilities. Several additional resources were evaluated: traffic, noise, socioeconomics and environmental justice; land use and recreation; and visual resources. However, because potential impacts were considered to be negligible or non-existent for these resources, it was determined that these resource areas would have less than significant impacts and detailed evaluation in the EIS/EIR was not required.

Based on the results of the EIR/EIS analysis, it was concluded that with the implementation of SCMs incorporated into the proposed project along with proposed mitigation measures would ensure that impacts to geological resources; water resources; water quality; biological resources; cultural resources; air quality; hazardous materials and wastes; and utilities would be less than significant for Alternative 1.

The EIS/EIR reviewed combined cumulative impacts associated with the proposed project's effects in conjunction with the effects of past, present and reasonably foreseeable future projects in the same geographic area. For this purpose, the EIR/EIS included a list of projects located in the immediate vicinity and expected to be constructed during the same time period as the proposed project (completed projects were considered part of the baseline analysis). The cumulative impact analysis was conducted for each of the same impact areas as in the project impact analysis. The EIR/EIS analysis concluded that, with the implementation of SCM's and the proposed mitigation measures, the proposed project would not have any significant cumulative impacts.

The facts listed herein in support of findings summarize the basis for the findings, as set forth more fully in the Draft EIS/EIR, Final EIS/EIR and appendices thereto. The findings shown below are for potential impacts on both federal and non-federal land. Those SCMs and

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

mitigation measures that do apply to the FPUD, have been listed in the MMCRP to ensure compliance during implementation of the approved project through ongoing monitoring and reporting of adopted mitigation measures as well as environmental commitments incorporated into the Project. For convenience of reference, impacts and mitigation measures are referenced by designations given in the EIS/EIR by specific topic area. The findings and facts in support of the findings are as follows.

A. Geological Resources

Potential Effect: Construction activities and earthwork associated with the construction of Alternative 1 such as grading and excavation could potentially alter topography.

Findings: Through the implementation of SCMs listed under Geological Resources in Section 2.3.1.4, Special Conservation Measures, of the EIS/EIR the impacts to topography due to earthwork associated with the construction of Alternative 1 would be less than significant (Finding 1).

Facts in Support of Findings: Construction activities such as grading and excavation would have the potential to alter topography. The majority of the earthwork required for this project consists of excavating below ground to lay pipelines. Most of the project components would be situated where topographic slope is gentle relative to the surrounding area because pipeline alignments have been selected that follow low-lying areas and established roadways or existing pipeline alignments where slopes have already been moderated to facilitate vehicle traffic or previous projects. Construction of production wells, pump stations, and the FPUD WTP would require minimal earthwork to provide level surfaces, as these components are located in already level or previously graded areas. Through implementation of SCMs listed in Section 2.3.1.4, natural surface drainages and preconstruction vegetation patterns would be reestablished following construction.

Potential Effect: Implementation of Alternative 1 could potentially result in impacts regarding slope stability and landslides.

Finding: With the implementation of SCMs listed under Geological Resources in Section 2.3.1.4, Special Conservation Measures, there would be no significant impact regarding slope stability and landslides as a result of implementation of Alternative 1 (Finding 1).

Facts in Support of Findings: As indicated under SCMs listed in Section 2.3.1.4, a project-specific geotechnical study would be conducted that would evaluate the engineering characteristics of the soils to be excavated, and make recommendations for slope excavation; retaining wall locations; and fill material suitability, screening, compaction, and placement that would ensure that the earthwork does not affect natural slope stability or create an unstable surface for construction. The project design phase would also include specifications for routing

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

stormwater runoff to ensure that the earthwork does not cause erosion that would affect slope stability.

The topography would not be substantially altered with the implementation of Alternative 1 and all subsurface filling would be done in accordance with geotechnical recommendations for stability.

Potential Effect: Significant impacts could potentially occur due to subsidence associated with construction activities under Alternative 1.

Finding: No significant impacts would occur due to subsidence associated with construction activities under Alternative 1 (Finding 1).

Facts in Support of Finding: Dewatering during construction and pumping associated with well development would be short term and involve small quantities of groundwater (relative to the aquifer).

Mitigation Measures: None.

Potential Effect: Significant impacts could potentially occur due to seismicity and seismic hazards associated with construction activities under Alternative 1.

Finding: No significant impacts would occur due to seismicity and seismic hazards associated with construction activities under Alternative 1 (Finding 1).

Facts in support of Finding: The types of construction activities proposed (below-grade excavation, trenching to depths of less than 10 ft [3 m] below the surface, backfilling, grading, well drilling and installation, sloped canyon wall excavations within a limited area, site leveling, and concrete slab construction) are not of the type that would potentially make the ROI more sensitive to the effects of seismic activity (i.e., blasting or largescale slope modification).

Potential Effect: Significant impacts could potentially occur due to ground acceleration associated with construction activities under Alternative 1.

Finding: With the implementation of SCMs listed under Geological Resources in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, no significant impacts would occur due to ground acceleration associated with Construction activities under Alternative 1 (Finding 1).

Facts in support of finding: As indicated under the SCMs listed in Section 2.3.1.4, the geotechnical study would identify the expected severity of ground shaking for all project component locations, and provide seismic design parameters in accordance with the Uniform Building Code and the California Building Code. The geotechnical study would also specify

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

requirements for trench excavation for pipeline construction to prevent collapse during construction, slope stability parameters for excavations, and retaining walls, and foundation setbacks. All new MCB Camp Pendleton facilities would be designed to comply with the NAVFAC P-355 Seismic Design Manual and the criteria identified in the most recent design specifications of the Structural Engineering Association of America. All new FPU D facilities would be constructed in accordance with applicable County of San Diego seismic regulations.

Potential Effect: Significant impacts could potentially occur to seismically induced ground movement and liquefaction associated with construction activities under Alternative 1.

Finding: With the implementation of SCMs listed under Geological Resources in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, construction of Alternative 1 would not cause significant impacts as a result of seismically induced ground movement or liquefaction (Finding 1).

Facts in Support of Finding: As indicated under the SCMs listed in Section 2.3.1.4, a geotechnical study would be conducted that identifies the expected severity of ground shaking for all project component locations, and provide seismic design parameters in accordance with the Uniform Building Code and the California Building Code. Using site-specific information about soil characteristics and depth to groundwater, the geotechnical study would also provide recommendations for design and construction procedures to minimize differential settlement in specific areas determined to be subject to liquefaction.

Potential Effect: Significant impacts to soils could potentially occur with implementation of Alternative 1.

Finding: With implementation of BMPs, compliance with established plans and policies, incorporation of standard erosion control measures into project design and construction, and implementation of SCMs listed under Geological Resources in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, no significant impacts to soils would occur with the implementation of Alternative 1 (Finding 1).

Facts in Support of Finding: Through the implementation of SCMs listed in Section 2.3.1.4, impacts to soils, erosion, and sedimentation would be minimized. The project design would incorporate the use of grading and drainage control to minimize erosion during the construction period, and procedures to ensure that slopes and backfilled areas do not erode when construction is completed. To prevent erosion and soil loss, excavation and grading would be scheduled to avoid the rainy season to the maximum extent practical.

Construction activities would be completed in compliance with the geotechnical recommendations incorporated into project design and the CGP. As part of the CGP, a SWPPP would incorporate erosion control measures as recommended in the site-specific geotechnical study for proposed construction activities. In addition, as outlined in the *California RWQCB*

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Erosion and Sediment Control Field Manual (RWQCB 1999), the *MCB Camp Pendleton Soil Erosion Management Practice Handbook* (MCB Camp Pendleton 2000), the *Stormwater Best Management Handbook* (California Stormwater Quality Association 2009), and the INRMP (MCB Camp Pendleton 2011), BMPs would be implemented on MCB Camp Pendleton before, and during, the rainy season to maximize the effectiveness of erosion and sediment control measures.

At DET Fallbrook and within the community of Fallbrook, erosion control measures would also include any additional requirements of the applicable jurisdiction. Provisions for both temporary and permanent erosion and sediment controls would be implemented in accordance with the SWPPP prepared and designed specifically for the construction sites. Once implemented, these control measures would be monitored and maintained to ensure their effectiveness.

Following the construction, soils would be stabilized and re-vegetated with native plants, as appropriate, to minimize post-construction erosion.

Potential Effect: Significant impacts to topography could potentially occur as a result of operational activities under Alternative 1.

Finding: With the implementation of SCMs listed under Geological Resources in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, no significant impacts to topography would occur as a result of operational activities under Alternative 1 (Finding 1).

Facts in support of Finding: During operations, no further alterations of surface topography would take place, aside from minor excavation that may be required for maintenance of facilities or pipelines. Should excavation be required, SCMs would be followed and the surface would be re-graded to previous contours and stabilized with vegetation to prevent erosion from undermining the excavated area.

Potential Effect: Significant impacts relative to landslides or seismicity and seismic hazards could potentially occur as a result of operational activities under Alternative 1.

Finding: With the implementation of the SCMs listed in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, no significant impacts relative to landslides or seismicity and seismic hazards would occur as a result of operational activities under Alternative 1 (Finding 1).

Facts in support of Finding: The types of proposed operations (water diversion, transfer, storage in percolation ponds; water treatment; and pipeline maintenance) are not of the type that would increase the potential for landslides or make the ROI more sensitive to the effects of seismic activity (e.g., blasting, mining, or high-pressure subsurface liquid injection). The project facilities and components would be designed and constructed according to the requirements of the project-specific geotechnical study, and the building codes and engineering criteria required in the SCMs. These design criteria would ensure that the completed facilities would not present

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

slope or seismic hazards.

Potential Effect: Significant impacts could potentially occur due to subsidence and differential settlement associated with operational activities under Alternative 1.

Finding: With the implementation of the SCMs in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, no significant impacts relative to subsidence and differential settlement would occur as a result of operational activities under Alternative 1 (Finding 1).

Facts in support of Finding: Groundwater pumping that is not managed has the potential to cause subsidence through aquifer compaction in the Chappo and Lower Ysidora basins if groundwater levels drop below saturated clay layers. Geological cross sections prepared for the Permit 15000 Feasibility Study (Stetson 2001) identified clay layers underlying the Ysidora aquifers that would be susceptible to subsidence. However, the surface water and groundwater model developed for the project established constraints on groundwater pumping so as not to draw the water table below these clay layers (Reclamation 2007b).

Through implementation of the AMP/FOP, groundwater levels would be monitored during operations and these constraints would be implemented to maintain the groundwater level above the known clay layers susceptible to compaction (Stetson 2001; Reclamation 2009). Maintaining the groundwater level above these established levels through groundwater level monitoring would prevent compaction of the aquifer due to groundwater withdrawal (Reclamation 2007b; Reclamation 2009).

Potential Effect: Significant operational impacts to geological resources would occur with the operation and maintenance of Alternative 1.

Potential Effect: Significant impacts to geological resources could potentially occur due to operational activities under Alternative 1.

Finding: Through design and engineering controls, there would be no significant operational impacts to geological resources with implementation of Alternative 1 (Finding 1).

Facts in Support of Finding: The proposed facilities would incorporate standard erosion control measures to minimize potential erosion from the sites during post-construction activities (i.e., operations and maintenance). These erosion control measures and sediment control actions (e.g., planting native vegetation, installing appropriately sized storm water drainage infrastructure) would be designed and constructed on a site-specific basis at each location to minimize erosion potential at each location. As a result of continued compliance with established plans and policies and continued implementation of erosion control measures, potential impacts associated with operations and maintenance of the proposed facilities would not be significant.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

B. Water Resources

Potential Effect: Construction activities associated with Alternative 1 could potentially have a significant impact on Santa Margarita River flow conditions.

Findings: There would be no significant impacts on the Santa Margarita River flow conditions from the implementation of Alternative 1 (Finding 1).

Facts in Support of the Finding: Construction of the replacement diversion structure and excavation activities within the O'Neill Ditch and headgate would occur during the dry portions of the year when flow in the SMR is naturally low. Any surface flow would be temporarily diverted around the weir construction and returned to the river channel immediately downstream of the construction area. Flow diversion to O'Neill Ditch would not occur during construction activities for the weir or ditch.

Construction activities related to installation of the production wells would not occur within the SMR channel. Following installation, groundwater pumping would be required in order to fully develop the wells. The well development process would include pumping the wells to remove fine-grained material introduced into the filter pack during well construction. Well development increases the rate of movement of water into the well and stabilizes the aquifer formation surrounding the well. Groundwater pumping for well development would be temporary, and would therefore have no significant impacts on SMR flow.

Potential Effect: Construction activities associated with Alternative 1 could have a significant impact to sediment load within the SMR downstream of the diversion structure, due to the removal of this sediment.

Findings: There would be no significant impacts to sediment load within the SMR downstream of the diversion structure due to the removal of this sediment (Finding 1).

Facts in Support of the Finding: Approximately 1,000 cy of depositional material would be removed from the SMR on the upstream side of the weir, adjacent to the diversion headgate during replacement of the diversion structure. This area would only be excavated from the banks and no equipment would enter the river channel. Current operations of the existing sheet pile diversion periodically require similar sediment removal behind the sheet pile weir and in front of the headwall and headgate. The estimated 1,000 cy is a small portion of the 84,000 to 102,000 cy estimated to be currently trapped behind the existing sheet pile weir (Reclamation 2004b). No other components would impact sediment load in the SMR during construction activities associated with Alternative 1.

Potential Effect: The proposed improvements to existing diversion and recharge facilities and

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

increased groundwater production under Alternative 1 could have the potential to impact SMR flow during operational activities.

Findings: With the implementation of SCM's listed under Section 2.3.1.4, the change in surface flow would be within the natural variability of the SMR watershed and there would be no significant impacts to surface flow in the SMR (Finding 1).

Facts in Support of the Finding: Operations under Alternative 1 would be designed to increase the sustained basin yield of the Lower SMR Basin by increasing diversion and recharge of surface water during Above Normal and Very Wet hydrologic conditions and curtailing groundwater pumping during dry hydrologic conditions. The rates of diversion, recharge, and groundwater pumping under Alternative 1 would be managed through application of the AMP/FOP. The operations guided by the AMP/FOP would optimize groundwater production while meeting the following project environmental constraints: (1) maintenance of groundwater levels within historical range, (2) no aquifer compaction, and (3) no seawater intrusion.

The Alternative 1 Model (Stetson 2012b) simulates project impacts for an expected range of hydrologic conditions while following the environmental constraints that would be applied through the AMP/FOP.

Annual and Seasonal Flow. Under Alternative 1 operations, SMR flow would continue to show a large range of seasonal and annual variability based hydrologic condition (Table 4.2-1). SMR annual inflow to the Model averaged 38,300 af/y and varied from 5,500 af/y to 132,900 af/y for various hydrologic conditions; SMR Outflow from the Model boundary averaged 29,700 af/y, varying from 500 af/y during Extremely Dry/Very Dry years to 125,000 af/y during Very Wet years (Table 4.2-1).

Surface water diversions at the inflatable weir would be managed to allow for water supply requirements to be met while protecting groundwater resources and responding to environmental concerns. The increased diversion capacity under Alternative 1 would result in average annual diversion rates from the SMR to increase from 7,500 af/y (Baseline Model) to 10,000 af/y (Stetson 2012a,b). Changes in surface diversions under Alternative 1, as compared to the Baseline, would be least during Extremely Dry/Very Dry hydrologic conditions (+400 af/y) and greatest during Very Wet conditions (+6,500 af/y) when flow is greatest in the SMR (Table 4.2-2).

Operations associated with the new and existing production wells would include additional groundwater pumping that would also induce increased recharge directly from the SMR.

Operations under Alternative 1 would be guided through implementation of the AMP/FOP. The hydrologic condition would be identified each year on May 1 based on the previous winter's runoff, and the AMP/FOP would be updated to provide diversion and pumping schedules for the upcoming year. The AMP/FOP would include real-time monitoring of various physical and environmental parameters that would trigger modifications to diversion, recharge, and pumping

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

rates to protect resources in the SMR and riparian habitats. By design, the AMP/FOP would also be modified to account for long term changes in climate patterns such as flashier winter storms, reduction in annual precipitation, and/or cyclical climate patterns (e.g., long term dry or wet periods).

Overall, operations under Alternative 1 would result in additional diversion and groundwater pumping from the Lower SMR Basin, as compared to the Baseline. However, the greatest diversion/pumping rates and subsequent reduction in surface flow would occur when the most amount of water is flowing in the SMR during Very Wet years. High runoff during these Very Wet years would otherwise discharge to the Pacific Ocean. By design of operations under Alternative 1, MCB Camp Pendleton's water demand would be supplemented by imported water supplies during Extremely Dry/Very Dry hydrologic conditions, allowing for substantially less diversion and groundwater pumping. This would have a net result of maintaining the same annual surface flow, as compared to the Baseline simulation while riparian areas and associated resources are most sensitive during Extremely Dry/Very Dry hydrologic conditions.

Streamflow during the dry season occurs due to rising groundwater at natural constrictions (e.g., the Narrows) in the Lower SMR Basin. In between these locations, the SMR may be intermittent, depending on hydrologic conditions. Surface flows would be similarly intermittent during the dry season under Alternative 1 operations.

Operations under Alternative 1 include the implementation of an AMP/FOP which would be constrained by streamflow, groundwater levels, and biological resources. These parameters would be monitored and variation outside their natural variability would result in changes in diversions and groundwater pumping.

Potential Effect: The operation of Alternative 1 could potentially result in significant impacts to peak flow in the SMR.

Findings: There would be no significant impacts to peak flow in the SMR (Finding 1).

Facts in Support of the Finding: Alternative 1 would result in reduced peak surface flows in the SMR downstream from the diversion structure. With a maximum diversion of 200 cfs, as compared to the existing maximum diversion of 60 cfs, up to 140 cfs of additional surface flow could be diverted. This increase in diversion capacity would typically be utilized only in Above Normal and Very Wet years and during the hours/days (depending on magnitude of storm) following a storm event. Given proposed versus existing diversions, a reasonable assumption is that the occurrence of flows above 60 cfs would diminish as flows ranging from 200 cfs to 60 cfs would potentially be captured by diversions during the receding limb of the hydrograph.

Under the proposed operations, the diversion of up to 200 cfs would occur during storm events smaller than the 5-year event (8,000 cfs). Assuming the maximum potential diversion of 200 cfs under Alternative 1 did occur, the 2-year flood event (1,000 cfs) would be reduced by an additional 14% above baseline conditions, but for the 5-year and greater flood events, reductions

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

would be less than 1.8%. Although a 14% reduction in the magnitude of the 2-year event may temporarily reduce the size of the bankfull channel, the larger events (5-year and greater) are typically responsible for affecting channel geomorphology, and peak flows would be only slightly reduced during these large events with a diversion increase of 140 cfs.

Under operations of Alternative 1, average annual increases in surface flow diversions from the SMR would be primarily due to the increased diversion capacity at the inflatable weir. The increased diversion capacity would be capable of maximizing diversions when surface flows are high during Above Normal and Very Wet years.

Potential Effect: Significant impacts to sediment load within the SMR downstream of the of the diversion structure could have the potential to occur with the operation of Alternative 1.

Findings: There would be no significant impacts to sediment load within the SMR downstream of the diversion structure (Finding 1).

Facts in Support of the Finding: The existing sheet pile diversion structure allows for the accumulation of sediment behind the structure. To maintain operation of the structure, sediment is periodically excavated and hauled to an off-site location. The inflatable weir diversion structure is designed to be self-cleaning, thereby minimizing operational and maintenance costs associated with the removal of sediment that currently builds up behind the existing structure. This would also reduce the transport of sediment into the O'Neill Ditch, the percolation ponds, and Lake O'Neill. Operations personnel would lower/deflate the 46-ft (14-m) gate section of the new diversion structure during smaller flood events (i.e., the 2- to 5-year events) and both gates during the first 12 to 24 hours of any significant flood flow (i.e., greater than the 10-year event), for the purpose of flushing accumulated sediments and debris downstream. Because approximately 95% of the sediment transport in the SMR is estimated to occur during the 10-year or greater flood event (Reclamation 2004b), the designed self-cleaning nature of the proposed structure would aid in maintaining the natural flushing that is currently prevented from occurring due to the existing structure's design.

An estimated 84,000 to 102,000 cy of sediment is currently trapped behind the existing sheet pile weir and this represents approximately 2 to 4 times the estimated average annual sediment load of 36,000 to 51,000 tons per year that passes the I-5 crossing (Reclamation 2004b). Under the proposed operations of the inflatable weir, this trapped sediment would be flushed out when the gates are lowered during a 10-year or greater flood event. As a result of this self-cleaning nature, less sediment would remain trapped behind the weir and additional sediment would be carried downstream as compared to existing conditions.

It is therefore likely that the amount of sediment released during subsequent flushing events would be less than the amount released during the initial flushing. The additional sediment load in the river would return sediment transport to a more "natural" condition.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Sediment transport models indicate that this sediment would initially deposit in the approximately 1-mi (1.6-km) reach just downstream of the weir where the floodplain widens substantially and the river bed is prone to deposition (Reclamation 2004b). The model also predicts that the reaches further downstream are degradational and that the sediment would be gradually transported to the mouth of the SMR, but may cause temporary aggradation near the mouth until completely flushed out (Reclamation 2004b). For existing conditions, the modeled sedimentation patterns downstream of the diversion structure suggest aggradation of up to 2 ft (0.6 m), and degradation of up to 5 ft (1.5 m) for most flood conditions. Therefore, operational impacts from this initial temporary sediment pulse would be within the range of existing sedimentation conditions downstream of the weir.

As recommended in *Hydraulic and Sediment Considerations for Proposed Modifications to O'Neill Diversion Weir on SMR* (Reclamation 2004b), an operation plan based on analysis of river hydraulics and sediment loads would be prepared to provide guidance on operation of the diversion structure to minimize downstream impacts from sediment transport. The replacement structure would be beneficial by returning sediment transport in the SMR to more natural conditions.

Potential Effect: Operations under Alternative 1 could have potential effects on the frequency or duration of estuary closure and as such have impacts to the SMR Estuary.

Findings: Operations under Alternative 1 have minimal, if any, effects on the frequency or duration of estuary closure beyond historical occurrence and as such impacts to the SMR Estuary would not be significant (Finding 1).

Facts in Support of the Finding: SMR flow plays a role in keeping the SMR Estuary open to tidal influence while peak flows support the reopening of the estuary after extended periods of being closed. Historical data indicate that the estuary closed during drier hydrologic cycles and opened following winter-time high flows. Photographic evidence indicates the estuary was closed during Extremely Dry/Very Dry and Below Normal hydrologic years that occurred during the 1960s, 1970s, and 1980s; and estuary gage data show that the estuary was closed most often during drier than normal hydrologic conditions of the late 1980s, late 1990s, and in to the 2000s. Although no direct correlation may be made between streamflow rates and the status of the estuary closure, historical evidence indicates estuary closure tends to occur when SMR flow is low during drier than normal hydrologic conditions.

Alternative 1 would result in reduction to SMR flow; however, this would not result in an overall shift of hydrologic condition going from wetter to drier. Therefore, closure of the estuary under Alternative 1 operations would be expected to continue to occur periodically during Below Normal and Extremely Dry/Very Dry hydrologic conditions at an occurrence rate similar to that which took place during existing conditions over the past 60 years.

After extended periods of closure, (i.e., greater than a few weeks), the SMR Estuary historically remained closed until the next stormwater runoff event occurred as indicated by the SMR flow

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

hydrograph. These increased flows typically occur as a result of the first significant winter rain event(s).

Under Alternative 1 operations, the diversion from the SMR would remove only a small percentage of peak stormwater runoff. The peak streamflow rate from the 2-year storm event on this portion of the SMR is estimated to be 1,000 cfs (USACE 2000). Even with the maximum diversion rate of 200 cfs, this would only reduce the 2-year flood event peak discharge to 800 cfs, which historical data indicates would be adequate to breach the sand berm at the mouth of the SMR Estuary. The typical early winter storm flows under Alternative 1 would be sufficient to breach a sand berm at the mouth of the estuary during closed conditions.

Potential Effect: Significant impacts to groundwater levels could potentially occur during general construction activities.

Findings: No significant impacts to groundwater levels would occur during general construction activities (Finding 1).

Facts in Support of the Finding: Construction activities associated with pipeline trenching and excavation for facility foundations would typically remain above the groundwater table. However, if groundwater is encountered, dewatering wells or sumps may be used to lower the water table a few feet below the impacted construction area. This lowering of the water table would be temporary and water levels affected by construction dewatering would return to normal levels when construction is completed.

Potential Effect: Significant impacts to groundwater levels could potentially occur during well development.

Finding: No significant impacts to groundwater levels would occur during well development (Finding 1).

Facts in Support of Findings: Groundwater pumping for well development would temporarily lower groundwater levels surrounding the well, but groundwater levels would recover soon after well development pumping has ceased.

Potential Effect: The improvements to existing diversion and recharge facilities and increased groundwater production associated with the existing and four new proposed groundwater production wells could have the potential to impact groundwater resources during Alternative 1 operational activities.

Finding: With the implementation of the SCMs listed in Section 2.1.3.4 and the constraints through the AMP/FOP and with the implementation of Mitigation #1, there would be no

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

significant impacts to groundwater resources under Alternative 1 operations (Finding 1).

Facts in Support of Findings: Alternative 1 operations would include the implantation of an AMP/FOP and sustained basin yield would be increased. Operation of the 16 groundwater production wells (12 existing and 4 new wells) would be managed through an AMP/FOP that is constrained by (1) maintenance of water levels within historical range, (2) no aquifer compaction, and (3) no seawater intrusion. In addition to the 16 production wells, 6 observation wells that monitor groundwater levels in riparian and grassland areas of the three sub-basins would be used to manage production locations and rates.

Based on the environmental constraints and operational parameters, the Alternative 1 Model simulation shows a 2,400 af/y increase in sustained basin yield above Baseline basin yield (Stetson 2012a,b). Groundwater pumping would be curtailed during drier hydrologic conditions by relying on an annual average of 500 af/y of imported water to meet MCB Camp Pendleton's potable water demand. In addition, Alternative 1 groundwater pumping would be managed to minimize pumping near the riparian corridor and shifting pumping to grassland areas during drier periods to reduce the potential for adverse impacts to groundwater resources.

Operational activities under Alternative 1 would be based on hydrologic conditions, where the AMP/FOP would prescribe pumping rates ranging from a maximum during Very Wet years to substantial reductions in groundwater production during Extremely Dry/Very Dry years (Table 4.2-5). The change from Baseline for Extremely Dry/Very Dry hydrologic conditions (-1,100 af/y) reflects the curtailment in pumping rates during consecutive drier than normal water years.

The increase in pumping during wet years would coincide with increased total diversion/recharge. When compared to Baseline conditions, the change in recharge under Alternative 1 would be least during Extremely Dry/Very Dry years and greatest during Very Wet years when diversions capture runoff from high flow events to replace storage lost during drier than normal years. The minimal change in diversion/recharge during Extremely Dry/Very Dry conditions under Alternative 1 (-200 af/y) would occur due to reductions in project related diversions and groundwater pumping which have been designed to meet environmental constraints. This would support the minimal change in streamflow at the Ysidora gage and downstream model boundary (0 af/y) as previously discussed in the Section 4.2.2.1, *Surface Water Resources*. In summary, the increased average annual groundwater production (2,400 af/y) under Alternative 1 would be balanced with increased average annual groundwater recharge (2,500 af/y) (Stetson 2012a,b), resulting in an increase to the sustained basin yield and no long term effects on the Ysidora Groundwater Basin.

The groundwater available for pumping fluctuates seasonally and varies by hydrologic condition. Pumping would be reduced during dry years to prevent seawater intrusion and protect riparian habitat by maintaining minimum groundwater levels. During consecutive drier than normal water years, pumping rates would be further reduced, with restricted groundwater production continuing until wetter hydrologic conditions occur. Specifically, through the application of the AMP/FOP under Alternative 1, groundwater pumping would be curtailed when the average

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

monthly groundwater levels drops to within 3 ft (1 m) of the historical minimum along the riparian corridor. Pumping would be further reduced or shut off if the groundwater level drops to within 0.5 ft (0.2 m) of the historic minimum. Pumping rates would remain reduced until the average monthly groundwater levels returned to 0.5 ft (0.2 m) above the historical minimum (Stetson 2009). The pumping rates for Extremely Dry/Very Dry hydrologic conditions provided in Tables 4.2-1 and 4.2-5 reflect the curtailment in pumping rates during consecutive drier than normal water years.

Based on the Alternative 1 Model simulation results, depth to groundwater would be greatest during Extremely Dry/Very Dry conditions and somewhat less during wetter than normal hydrologic conditions. Application of the AMP/FOP would include the monitoring and constraints mentioned above, therefore maintaining groundwater levels above historical groundwater lows. Decreased water levels would be temporary and seasonal, and would be created to allow for additional storage capacity within the aquifer to maximize recharge capacity during the wet season. The Alternative 1 Model simulation also indicates that groundwater levels would not increase significantly above historic baseline levels due to increased recharge rates. For this project, the effect of lowered groundwater levels may result in reduced pumping efficiency or production from other MCB Camp Pendleton supply wells. However, through application of the AMP/FOP, the wells throughout the groundwater basin would be managed to optimize pumping rates and minimize reduction in pumping efficiency.

Aquifer compaction through over-pumping could also impact groundwater resources by resulting in permanent reduction in aquifer storage volume. However, groundwater pumping would be managed through the AMP/FOP to prevent subsidence through aquifer compaction by maintaining groundwater levels above saturated clay layers. Therefore, no subsidence and subsequent loss of aquifer storage volume would occur.

The Model also simulates subsurface underflow and evapotranspiration. Subsurface underflow out of the downstream Model boundary indicates the potential for seawater intrusion. A neutral or positive value for subsurface underflow indicates that a groundwater gradient toward the ocean is maintained while a negative value would indicate landward migration of saltwater into the freshwater aquifer could occur. Subsurface underflow out of the Model was positive (+100 af/y) for both the Alternative 1 and the Baseline simulations (Tables 3.2-6 and 4.2-1), indicating that no saltwater intrusion would be expected to occur.

Modeled evapotranspiration indicates the consumptive use of groundwater by riparian phreatophytes and can be used as an indicator of potential impacts to riparian habitat and the riverine environment. A substantial decline in annual evapotranspiration could be indirectly related to a stressed riverine environment. Evapotranspiration under Baseline conditions averaged 2,500 af/y and decreased by 100 af/y for Alternative 1. This would not be considered a significant decline in annual evapotranspiration. Due to Alternative 1 operations management which includes reductions in both diversions and pumping during drier than normal conditions, evapotranspiration would increase from 1,300 af/y to 1,700 af/y during Extremely Dry/Very Dry hydrologic conditions when compared to the Baseline (Tables 3.2-6 and 4.2-1, respectively). An

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

increase in evapotranspiration is directly related to an increase in groundwater levels that support riparian vegetation and surface water flow throughout the Upper Ysidora, Chappo, and Lower Ysidora sub-basins.

Potential impacts to groundwater resources in the Upper Ysidora and Chappo Sub-basins would occur with implementation of Alternative 1. The following mitigation measure to monitor and reduce impacts to groundwater resources to below a level of significance would be implemented:

Mitigation #1:The AMP/FOP would include the maintenance of groundwater levels within historical range constraint. Groundwater levels would be monitored by a series of telemetered groundwater monitoring wells and pumping would be reduced or shut off if the groundwater level drops to within historic levels and remain reduced until the average monthly groundwater levels recover to above historic levels.

C. Water Quality

Potential Effect: Construction activities associated with the Alternative 1 could potentially result in the generation of pollutants including sediment and other construction-related constituents (such as nutrients, trace metals, oil and grease, miscellaneous waste, and other toxic chemicals). Without controls, the pollutants would potentially enter receiving waters and impact surface water quality.

Finding: Through the implementation of the SCMs listed in Section 2.3.1.4, no significant impacts to surface water quality would occur during construction activities associated with Alternative 1 (Finding 1).

Facts in Support of Findings: Because the combination of construction activities associated with the project would disturb more than 1 acre (0.4 hectare) of land, Alternative 1 would be subject to the requirements of the SWRCB CGP as described under SCMs in Section 2.3.1.4.

The construction contract would require that the construction contractor prepare and implement a SWPPP and implement all applicable BMPs in accordance with the CGP from initiation through completion of construction activities. Appropriate construction BMPs would be implemented in accordance with the CGP that meet requirements for Best Available Technology and Best Conventional Pollutant Control Technology to reduce or eliminate pollutants from entering the receiving waters. These BMPs generally fall into four main categories: erosion control, soil stabilization, sediment control, and non stormwater management. Implementation of a SWPPP and BMPs would minimize the potential for pollutants to enter receiving waters during construction.

If trenching associated with pipeline construction encounters groundwater in portions of the pipeline alignment, dewatering would be required. Dewatering activities would be temporary and localized, and the measures indicated in Section 2.3.1.4, Special Conservation Measures, would

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

be followed, including the compliance with *General Waste Discharge Requirements for Discharges from Groundwater Extraction*, if necessary.

The replacement of the diversion structure would require temporary diversion of surface water around the construction site and additional dewatering. Dewatering effluent from within the SMR channel would be considered “surface water” and would therefore not be subject to regulations for groundwater dewatering discharges. Pumped dewatering effluent that is free from all visible contaminants would be returned to the SMR downstream of the construction area. Pumped water that contains turbidity above ambient pre-project conditions in the SMR would be treated to remove sediment prior to being re-introduced downstream. Options for treatment include baffle systems, anionic polymers systems, dewatering bags, or off-stream tanks for either treatment (settling) or disposal. Chemical coagulants would not be used to aid the settling of dewatering effluent. Once the dewater effluent reaches ambient pre-project conditions, it would be returned to the SMR downstream of the construction area.

Approximately 6,000 cy of material would be removed from O’Neill Ditch and would be placed in Ponds 6 and/or 7 for dewatering. Through previous projects and consultations with the USACE, Ponds 1-7 were determined to be non-jurisdictional. Therefore, the materials from O’Neill Ditch would not be placed in any surface water body deemed “waters of the U.S.” Water from the material would be allowed to percolate into the groundwater basin, thus, a Section 404 permit would not be required.

Trenchless construction (e.g., bore-and-jack or horizontal directional drilling) would occur in areas with sensitive water resources and wetlands such as the SMR and associated floodplain, Lake O’Neill overflow outlet, and Fallbrook Creek. A hydrogeologic evaluation would be prepared to investigate geologic formations, groundwater depths, and the distance and depth of drilling prior to trenchless construction. Trenchless construction methods such as horizontal directional drilling that result in discharge of uncontaminated slurries or drilling muds would follow SCMs indicated in Section 2.3.1.4, Special Conservation Measures, including the compliance with *San Diego Basin Plan Conditional Waiver No. 9-Discharges of Slurries to Land*, if necessary. Installing the pipeline beneath the SMR, Lake O’Neill overflow outlet, and Fallbrook Creek would avoid direct impacts to the creek beds and associated downstream water quality.

Potential Effect: Construction of new facilities associated with Alternative 1 has the potential to increase stormwater runoff and affect surface water quality.

Finding: With the implementation SCMs listed in Section 2.3.1.4, increased stormwater runoff would be minimized and there would be no significant impacts to surface water quality associated with stormwater runoff (Finding 1).

Facts in Support of Findings: Components associated with Alternative 1 do not involve the construction of large buildings or other large impervious areas such as parking lots and would therefore, contribute little additional stormwater runoff and/or pollutants to surface waters.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

However, all new facilities on MCB Camp Pendleton and DET Fallbrook would incorporate the concept of LID as described in Section 2.3.1.4, *Special Conservation Measures*, which would minimize stormwater runoff.

Potential Effect: Alternative 1 operations could potentially cause significant impacts to the SMR water quality.

Finding: With implementation of the SCMs listed in Section 2. 3.4.1, there would be no significant impacts to SMR water quality from project operations and SMR water quality would continue to benefit from inclusion of the OSMZ with implementation of Alternative 1 (Finding 1).

Facts in Support of Findings: The replacement inflatable diversion structure would increase the instantaneous diversion capacity from the SMR to O'Neill Ditch from 60 cfs to 200 cfs. However, the diversion structure would act as a weir, similar to the existing sheet pile weir, and serve only as a point of potential hydraulic control. This physical structure would not directly alter the water quality of flows in the SMR. Operational activities associated with the O'Neill Ditch and headgate only involve the conveyance of water diverted from SMR to the percolation ponds and Lake O'Neill and would not affect water quality.

The impact of reduced surface flows during Below Normal hydrologic conditions to water quality and beneficial uses are unknown. Reduced surface flows may have negative or positive effects on dissolved oxygen, nutrients, and water temperature depending on the contribution of rising groundwater on ambient conditions. Implementation of a water quality monitoring program as part of the AMP/FOP would monitor for changes in SMR water quality during all hydrologic conditions.

Reduction in surface flow could also potentially reduce the SMR's capacity to absorb or dilute potential spills or other contaminated discharges. However, MCB Camp Pendleton would continue to follow a base-wide Spill Prevention and Response Procedures Program to prevent spills and minimize potential adverse impacts and would comply with all San Diego RWQCB and SWRCB requirements for discharges. In addition, SCMs (Section 2.3.1.4) require implementation of the same protective and restoration measures for non-emergency accidents as would apply to construction.

SMR flow would be within the range of natural variability and would therefore, not be subject to greater adverse impacts due to accidental spills and discharges, as compared to the Baseline. Given the unpredictable location of accidents, their low probability in any particular place, and the relatively small-scale, temporary effects that are most likely to occur, these types of accidents would have minimal impacts on water quality.

The inclusion of the OSMZ under Alternative 1 is intended to result in continued benefit to water quality in the SMR by preventing additional construction, long-term development activities, and conversion to agricultural land use in this area that could lead to increased impairment to water

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

quality in the SMR. The OSMZ would also continue to act as buffer between the river and surrounding agricultural and developed lands, removing nutrients and other pollutants from stormwater runoff. In addition, protection of this land would prevent development of riparian rites and increased withdrawals upstream of the project.

Potential Effect: When the SMR Estuary is in a “closed” state because of operations under Alternative 1, the water quality in the estuary could potentially degrade over time, resulting in potential water quality impairment to designated beneficial uses in the estuary.

Finding: Operations under Alternative 1 would not contribute to significant impacts to water quality in the SMR Estuary (Finding 1).

Facts in Support of Findings: Operations under Alternative 1 would not be expected to alter the frequency or duration of estuary closure beyond historical occurrence.

Potential Effect: With the implementation of Alternative I, operational impacts could potentially contribute to significant impacts to ocean water quality.

Finding: No significant operational impacts to ocean water quality would occur with implementation of Alternative 1 (Finding 1).

Facts in Support of Findings: Under Alternative 1, the treatment of groundwater at the FPUD WTP would create a waste stream, consisting of RO and ion exchange brine. The maximum brine discharge would be approximately 1 cfs with an estimated TDS concentration of 5,816 mg/L that would be discharged to the Pacific Ocean via the existing Oceanside Ocean Outfall. A TDS concentration of 5,816 mg/L is slightly greater than 10% of ocean salinity. The additional brine from the FPUD WTP would be blended with the existing FPUD flows discharged under FPUD’s Oceanside Ocean Outfall NPDES Permit and would meet the permit requirements for their permitted discharge flows.

FPUD has an NPDES Permit (CA0108031) that was renewed in August of 2012, which allows for an average annual discharge of up to 2.4 MGD effluent from the Oceanside Ocean Outfall. The brine discharge under Alternative 1 would be conveyed through the existing Fallbrook Outfall Pipeline, discharged under FPUD's Oceanside Ocean Outfall NPDES Permit, and would meet the permit requirements for permitted discharge flows.

The City of Oceanside also has an NPDES Permit (CA0107433) to discharge via the Oceanside Ocean Outfall. The City of Oceanside discharge includes portions from other local cities or sanitation districts, MCB Camp Pendleton, and Biogen Idec Pharmaceuticals Corporation. The City of Oceanside permit includes the discharge of brine from a brackish groundwater desalination facility, which is similar to the proposed FPUD WTP brine, and allows for an average annual discharge of up to 22.9 MGD of combined effluent and brine.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

The brine from the FPUD WTP would be blended with the existing flows discharged under the FPUD and Oceanside Ocean Outfall NPDES Permits and would not substantially alter the characteristics of these permitted discharge flows. The FPUD NPDES permit would need to be amended to allow for the inclusion of the brine from the project. The brine discharge from the FPUD WTP is not expected to impact the ability of FPUD to meet NPDES permit requirements.

Potential Effect: Construction activities associated with Alternative 1 could have potential impacts on groundwater quality.

Findings: There would be no impacts to groundwater quality due to construction activities associated with Alternative 1 (Finding 1).

Facts in Support of Finding: Under Alternative 1, construction activities would include surface water quality protection measures that would also serve to protect groundwater quality. By adhering to the provisions of the CGP and implementing a SWPPP and BMPs associated with addressing site- and activity-specific water resource protection needs, there would be a reduction in stormwater pollutant loading potential and thus a reduction in pollution loading potential to the underlying groundwater.

Potential Effect: Increased groundwater recharge and extraction could have the potential to impact groundwater quality during operational activities associated with Alternative 1.

Findings: Because the recharged SMR water would be of similar or better water quality than the underlying groundwater, the recharge of these waters to the groundwater aquifer would improve or have no significant adverse impacts on groundwater quality (Finding 1).

Facts in support of Findings: The water quality of recharge waters under Alternative 1 would be the same as the water quality of waters being recharged under existing conditions, with the primary difference being an increase in recharge volume.

The TDS in the SMR measured at various upstream locations near or upstream of the diversion point shows a wide range of TDS from as low as 365 mg/L to as high as 935 mg/L. The average value estimated at the point of diversion is 786 mg/L, slightly above the Basin Plan objective of 750 mg/L. TDS concentration in the Ysidora Basin ranged from approximately 660 mg/L to over 900 mg/L and averaged 790 mg/L. Therefore, the TDS of water recharged from the SMR would be relatively similar to, or slightly better than, the underlying groundwater quality using TDS as the primary indicator of mineral quality.

Also, nitrate-N concentrations in the SMR can range from 1.2 mg/L to 4.2 mg/L with an average value of approximately 2.8 mg/L. These values are well below the 10 mg/L Basin Plan objective for groundwater nitrate, and similar to the range found in existing wells in the Ysidora Basin.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Potential Effect: Construction activities associated with Alternative 1 could have the potential to effect flow conditions in the SMR during periods when potential flood flows are likely to occur which could impact flood flows.

Finding: There would be no significant impacts on frequency of flood flows, the flood flow regime, or extent of flooding in the SMR (Finding 1).

Facts in Support of Finding: Construction of the replacement diversion structure would occur during the dry portions of the year, and therefore, construction activities are not expected to have any effect on flow conditions in the SMR during periods when potential flood flows are likely to occur. No other components would impact flood flows during construction activities associated with Alternative 1.

Potential Effect: Operational activities associated with Alternative 1 could have the potential to impact flood flows.

Findings: Through implementation of LID, as described in Section 2.3.1.4, Special Conservation Measures, Alternative 1 would result in a minimal increase in stormwater runoff. Therefore, there would be no significant impacts on frequency of flood flows, the flood flow regime, or extent of flooding in the SMR (Finding 1).

Facts in Support of Findings: The frequency and magnitude of flood flows in the SMR are driven by the hydrology of the up-gradient watershed. Both gates of the inflatable weir would be lowered/deflated during any significant flood flow (i.e., greater than the 10-year event), thereby reducing water surface elevations in the vicinity and upstream of the weir in comparison to existing conditions. In addition, the flushing of sediment currently trapped behind the weir would allow for increased conveyance in the channel upstream of the weir and also contribute to reduced water surface elevations in comparison to existing conditions. Overall, this would reduce flooding in this area as compared to the existing condition.

D. Biological Resources

Potential Effect: Construction activities associated with Alternative 1 could potentially impact plant communities and vegetation.

Findings: Adherence to SCMs listed under Biological Resources in Section 2.3.1.4 of the EIR/EIS along with protective measures assures that there would be no negative effect on listed plant communities and/or vegetation (Finding 1).

Facts in Support of Findings: Permanent impacts are associated with facility construction that would eliminate existing vegetation. Vegetation is assumed to be temporarily removed from the pipeline construction corridor. As such, if dewatering of the trench itself proved to be necessary

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

for construction, there would be no additional impact on vegetation. No long-term effects on drainage or soil moisture that could otherwise affect vegetation are anticipated.

The majority of impacts to plant communities would affect disturbed/developed habitat (including agricultural land) and non-native grassland, with small areas of native plant communities impacted.

Potential Effect: Construction activities associated with Alternative 1 could potentially impact wildlife.

Findings: Adherence to SCMs listed under Biological Resources in Section 2.3.1.4 of the EIR/EIS would assure that there would be no negative effect on listed wildlife species (Finding 1).

Facts in Support of Findings: All riparian habitat, wetland impacts, ARTO aestivation habitat, and CAGN occupied habitat would be mitigated in accordance with the SCMs listed under Biological Resources in Section 2.3.1.4. The majority of impacts to plant communities would affect disturbed/developed habitat (including agricultural land) and non-native grassland, with small areas of native plant communities impacted. Monitoring and other protective measures listed in Section 2.3.1.4 under Biological Resources would reduce but not eliminate impacts on wildlife. In particular, wildlife habitats would be substantially disturbed during construction, and most resident wildlife would be displaced or subject to injury or mortality if remaining on-site during construction. Displaced wildlife would incur energetic costs and predation risks as a result of moving away from construction into other areas. Suitable habitat nearby is likely to already be occupied by members of the same species, forcing resident individuals to either share resources or move into habitats of poorer quality.

Apart from disturbance and mortality to wildlife, habitat conditions in affected areas would be altered for one to several years. Some opportunistic, wide-ranging predators (e.g., coyotes, turkey vultures), as well as consumers that feed on herbaceous plants (or seeds) or on the insects that are attracted to areas of new growth, may increase foraging in the disturbed areas, particularly as ground and vegetation disturbance increases the availability of food resources. The cover of woody vegetation, however, would be diminished for at least several years. Following construction and during operation of the project, herbicides may be used where necessary to control noxious weeds. Adherence to SCMs along with protective measures that are part of the INRMP (DET Fallbrook 2006; MCB Camp Pendleton 2011), assures that there would be no negative effect on listed species due to herbicide use. Given the proposed restoration measures, these wildlife habitat impacts (both positive and negative) would be temporary and are not considered significant.

With the avoidance of breeding-season vegetation clearance (to the maximum extent practicable) and active nests of migratory birds in CSS, riparian, and wetland habitats, followed by the restoration of native vegetation (except in new facility locations), construction impacts on

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

migratory bird populations would be minimized. Although the removal of vegetation outside the breeding season would reduce the immediate impacts that would have otherwise occurred to breeding individuals in that location, the loss of acreage would affect migrants that subsequently return to the area. Individuals would be forced to compete for territories in new locations, and would be likely to incur increased energetic costs and reduced survivorship or breeding opportunities. With the relatively small acreage of permanent impact to these habitats, significant impacts to migratory bird populations are not likely to occur.

Potential Effect: Operations associated with Alternative 1 could have potential significant impacts on listed wildlife species or their habitats.

Findings: With Adherence to the SCMs listed under Biological Resources in Section 2.3.1.4 of the EIS/EIR, operations associated with Alternative 1 are not likely to adversely affect listed wildlife species or their habitats. Impacts would be less than significant (Finding 1).

Facts the Support Findings:

Operational impacts would include the potential for periodic disturbance of pipeline corridors due to maintenance and repairs. Such impacts would be temporary and most likely of very limited spatial scale and would be subject to the SCMs listed under Biological Resources in Section 2.3.1.4 of the EIS/EIR. Therefore, operations associated with maintenance and repairs are not likely to adversely affect listed species or their habitats.

Diversion, recharge, and groundwater production operations would be established based on meeting certain physical and environmental constraints that include: (1) maintenance of water levels within historical range (i.e., as named in MCB Camp Pendleton's Riparian/Estuary BO (USFWS 1995a), (2) no aquifer compaction, and (3) no seawater intrusion. The ability to meet these constraints is based on the adaptive management of surface and groundwater resources consistent with hydrologic conditions.

MCB Camp Pendleton's 1995 Riparian/Estuarine BO Instructions (USFWS 1995a) emphasized that pumping regimes should minimize the drawdown to not exceed 15 ft (5 m) depth to groundwater level, because this is the upper limit of willow riparian root zone depth, beyond which plants are unable to utilize groundwater. However, the Riparian/Estuarine BO (USFWS 1995a) also recognized that the Chappo Sub-basin would incur a groundwater drop below 15 ft (5 m) due to current groundwater drawdown practices at the time. Using the results from the Lower SMR Model, changes in streamflow conditions between historical baseline (Baseline) and future Alternative 1 groundwater management operations were assessed (Stetson 2013b). Using a 50-year simulation period based on 1952 to 2001 hydrology, groundwater levels below the SMR were simulated in the Upper Ysidora, Chappo, and Lower Ysidora sub-basins. Results from the Baseline model run show that groundwater levels below the streambed would be within 15 ft (5 m) of the surface in the Upper and Lower Ysidora sub-basins and within 30 ft (9 m) in the Chappo Sub-basin. Using the same 50-year simulation period, the Lower SMR Model indicates that Alternative 1 groundwater levels below the SMR bed would remain within 15 ft (5

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

m) in the Upper and Lower Ysidora sub-basins and within 20 ft (6 m) of the surface in the Chappo Sub-basin. The Lower SMR Model does indicate a reduction of 100 AFY (4%) in evapotranspiration by phreatophytes (deep-rooted plants that obtains water from groundwater) under Alternative 1 compared to the Baseline; reduced evapotranspiration use by phreatophytes, consistent with conditions that occur during dry or prolonged drought conditions, may result in stresses to vegetation at a slightly higher occurrence under Alternative 1. However, the simulated evapotranspiration by riparian vegetation would be within the natural variability that occurs between dry and wet years.

Operational effects discussed above that may affect listed species and habitats include:

- Operations would be designed to increase the sustained basin yield of the Lower SMR Basin by increasing diversion and recharge of surface water during Below Normal, Above Normal and Very Wet hydrologic conditions and curtailing groundwater pumping during dry hydrologic conditions. During Very Wet years, surface water diversions would be increased when runoff would otherwise be discharged into the Pacific Ocean. During Extremely Dry/Very Dry hydrologic conditions, groundwater pumping would be curtailed. As a result, Alternative 1 would result in reduced surface flows in the SMR downstream from the inflatable weir during Below Normal and Above Normal hydrologic conditions.
- Under Alternative 1 operations, SMR flow would continue to show a large range of seasonal and annual variability based on hydrologic conditions.
- Operations under Alternative 1 include the implementation of an AMP/FOP which would be constrained by streamflow, groundwater levels, and biological resources.
- Alternative 1 would have a diversion of a maximum of 200 cfs, as compared to the existing maximum diversion of 60 cfs. However, because most of the sediment in the riverbed is moved during the larger storms, the effects on sediment distribution and channel geomorphology, if any, would likely be small.
- Sediment trapped behind the inflatable weir would be flushed (via lowering the gates of the weir) during 10-year or greater flood events, thus returning the SMR to a more “natural” condition.
- Since existing conditions do not provide access to imported water supplies, minimum annual groundwater pumping rates are 6,300 AFY under Recent Management conditions, as compared to 4,600 AFY under the Proposed Action operations.
- Operations would be expected to have minimal, if any, effects on the frequency or duration of estuary closure beyond historical occurrence, and as such, impacts to the SMR Estuary would not be significant.
- Groundwater levels beneath the grassland areas, where vegetation does not rely on groundwater, would tend to be lower during all hydrologic conditions under Alternative 1 operations.
- The Riparian/Estuarine BO (USFWS 1995a) indicates that groundwater pumping 15 feet below ground surface has been used as the upper limit of willow riparian root zone depth, beyond which plants are unable to utilize groundwater. The AMP/FOP would be developed to improve the relationship between the 15-foot depth to water and health of

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

the riparian vegetation to prevent changes to the environment that are not within natural conditions, and modeling demonstrates that

- Alternative 1 would be an improvement over Recent Management conditions (refer to Appendix C-4 for a detailed description).
- Relative to the Recent Management, surface diversions in combination with groundwater withdrawals would increase the yearly minimum depth to groundwater along the riparian corridor during most years in the Upper Ysidora Riparian Indicator Cell. However, modeling demonstrates this would not have a long-term impact to riparian vegetation (see Section 5.3.4 and Appendix F for a detailed description).
- Reduced surface flows may have negative or positive effects on dissolved oxygen, nutrients, and water temperature depending on the contribution of rising groundwater on ambient conditions; the AMP/FOP would implement a water quality monitoring program.

Potential Effect: Construction activities associated with Alternative 1 could have potential impacts on Riparian Habitat as discussed in Table 3.3-2 of the EIS/EIR.

Findings: Implementation of SCM's listed in Section 2.3.1.4 of the EIS/EIR would minimize impacts to Riparian habitats and species to a level that would not be considered significant (Finding 1).

Facts in Support of Finding: In the Alternative 1 footprint (to provide a more accurate depiction for the Section 7 consultation with the USFWS), plant communities on MCB Camp Pendleton and DET Fallbrook have been mapped utilizing the installation's vegetation mapping preferences; for consistency, vegetation types were categorized from both installations into those following MCB Camp Pendleton's Riparian Biological Opinion (USFWS 1995a). When reviewing permanent impacts from construction, just less than half of the 11 acres of permanent construction occurs in developed/disturbed areas with the remaining occurring in native habitats. For the estimated 130 acres of temporary impacts, approximately 70 acres of impacts are in disturbed and developed areas (Table 3.3-2).

Plant communities found within the construction project footprint for the Alternative 1 include (refer to

Appendix C-2 for detailed description of each type):

Riparian Communities

- Southern Riparian Woodland
- Southern Riparian
- Open Water/Open
- Freshwater
- Mixed Woodland
- Sycamore
- Grass-forb Mix
- Mixed Willow-Exotic/ Exotic-Other

Upland Scrub Communities

- Diegan Coastal Sage

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Upland Grassland/ Herbaceous Communities

- Non-native Grassland
- Non-native Vegetation
- Purple Needlegrass

Upland Woodland Communities

- Eucalyptus Woodland
- Coast Live Oak Woodland

Disturbed/Developed

- Disturbed/Developed

Potential Effect: Operational activities associated with Alternative 1 could have potential impacts on Riparian Habitat.

Findings: Implementation of SCM's listed in Section 2.3.1.4 of the EIS/EIR would minimize impacts to Riparian habitats and species to a level that would not be considered significant (Finding 1).

Facts in Support of Finding: Although surface water flows influence the establishment of riparian habitat communities, many riparian plants depend upon groundwater resources for continued sustenance. Mature riparian trees and shrubs are typically associated with water tables < 3 m deep and water table declines can potentially lead to reduced plant growth and eventual mortality. Declines in water tables may also change the distribution and abundance of riverine plant species, thus altering riparian habitat community composition. However, groundwater resources typically fluctuate over time as a result of natural processes, and many riparian plant species are physiologically adapted to handle fluctuating levels. Climatic factors such as precipitation and temperature also influence plant response to water table decline and therefore play a role in determining impacts on riparian habitats. Other factors that affect riparian habitat community response to water table decline include the magnitude, rate, and duration of water decline, as well as the morphological condition of vegetation communities and availability of other water sources.

The LSMR Model was used to assess future impacts to riparian vegetation by comparing annual evapotranspiration between the Historical, Recent Management and CUP Model Runs. Simulated evapotranspiration in the models is related to plant species, density, and root depth; such that water availability for riparian vegetation decreases as groundwater levels decline, resulting in less simulated evapotranspiration. Because the groundwater levels in the CUP Model run were restricted to those levels that occurred historically, the magnitude of groundwater pumping was restricted such that historical distributions of riparian vegetation would be maintained in the future under project conditions. However, a variation in water availability is expected to occur from one year to another as reflected by the difference in evapotranspiration between the model runs. Comparison of the CUP Model to the Recent Management Run shows that average annual water use by riparian vegetation may decrease 300 AFY from 2,700 AFY to 2,400 AFY. The reduction in evapotranspiration may result in either plants becoming more stressed, or plant die off, occurring during different periods than what would occur naturally. In

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

order to maintain the riparian plant communities within a natural variability that has occurred historically, a series of control sites will be established to relate the groundwater levels to plant community health. Riparian groundwater monitoring wells will be monitored to assure groundwater levels will not deviate from historical minimum and that they will stay within a natural range of wetting and drying from one hydrologic condition to another. When groundwater levels reach within 3 feet of their historical minimum, a series of adaptive conservation measures will be triggered to assure plants are not stressed beyond their historical range. Using groundwater levels as a trigger and the three-foot buffer to historical minima as a threshold value will provide water operators time to adjust the FOP.

Continued monitoring of the groundwater levels and riparian vegetation at key control sites, agreed to by the stakeholders, will allow for assessment of potential impacts to other species that rely on the health of the riparian vegetation. Relationships between the quality of riparian vegetation and the occupancy rate of bird species has not yet been established in the Santa Margarita River. Other hydrologic and biologic factors (e.g. surface water availability, willow recruitment) will be recorded so that the relationship between water availability and the health of riparian vegetation can be established and applied to other species that may rely on the vegetation for survival.

To monitor potential changes to riparian habitat, and ultimately its impact on federally-listed species, MCB Camp Pendleton will enhance the current Riparian Ecosystem Health Monitoring program (SCM 2). MCB Camp Pendleton's Riparian Ecosystem Health Monitoring program developed a rigorous approach to monitor riparian health with a Riparian Habitat Monitoring Plan (HMP) in 2007 to determine if the lower SMR riparian areas are recovering post extensive Arundo and Tamarisk removal. Data sets were collected in 2009 and in 2012 and shows that the riparian system is moving towards meeting the Primary Success standards; this data reveals that it takes approximately 5 years to meet these standards. Another data set will be collected in spring of 2016 and is expected to show full recovery of the riparian system, unless the large Basilone Complex wildfire of May 2014 has impaired this recovery.

Additional parameters collected under MCB Camp Pendleton's on-going Riparian Ecosystem Health Monitoring program would be incorporated into the AMP to strengthen, and to actively improve and empirically manage, the effect of the project on environmental resources. The AMP will incorporate parameters from the MCB Camp Pendleton Riparian/Estuarine Biological Opinion consistent with managing groundwater levels and withdrawals to minimize loss and degradation of habitat quality, to the extent practicable (BO; USFWS 1995a). Additionally, MCB Camp Pendleton will utilize information from project P527B (Removal of Wastewater Plants from the SMR) which assessed the relationship between groundwater levels and plant health with the Riparian Monitoring and Modeling Sewage Effluent Compliance Projects on MCB Camp Pendleton (SDSU 2007).

MCBCP 2007 found that willows resilience and ability to survive high variation in groundwater by a variety of physiological and morphological adjustments allow the willows to go through cycles of impairment or decline and recovery. The AMP enhanced Riparian Ecosystem Health

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Monitoring program will continually monitor groundwater levels, and their rate of change, for the purpose of evaluating conditions for the riparian woodlands. Further information that may be collected in the enhanced Riparian Ecosystem Health Monitoring program would add to the development of the AMP: vertical distribution of foliage, abundance of seedlings (i.e., recruitment), stem diameter, soil moisture, and changes in basal area. Depth to groundwater (e.g., maximum depth to the water table for each year) and rate of groundwater decline will be measured near the established riparian habitat monitoring locations (that correspond to federally-listed bird species) for a comparison of riparian habitat structure and other variables to groundwater pumping. In addition, MCB Camp Pendleton will be collecting least Bell's vireo and southwestern willow flycatcher microhabitat data to determine changes in nesting habitat. Merging the information into the AMP will provide a better understanding concerning the overall ecosystem health and specific microhabitat changes to listed species habitat. MCB Camp Pendleton will use the information to make informed decisions (to adapt) on future ground-water pumping and water diversion operations.

Based on the projected average decline of 10.2 percent in evapotranspiration rates, we anticipate a proportional loss of riparian vegetation cover and that the carrying capacity for federally-listed species on the Lower SMR will proportionately decline by about 10.2 percent over time.

Potential Effect: Construction activities associated with Alternative 1 could have potential impacts on aquatic habitats and species.

Findings: Implementation of SCM's listed in Section 2.3.1.4 of the EIS/EIR would minimize impacts to aquatic habitats and species to a level that would not be considered significant (Finding 1).

Facts in Support of Finding: Construction impacts on aquatic habitats and species include direct impacts at construction sites and indirect impacts downstream of or subsequent to construction. To the extent that the construction cannot avoid aquatic habitats, impacts would occur at the diversion structure on the SMR, elsewhere along the SMR, and in various other locations along the bi-directional and conveyance pipelines. These impacts include the temporary disruption of sediment and surface flows, as well as the localized degradation of water quality by increased concentrations of suspended sediments, all of which would be likely to cause the displacement of, and injury or mortality to, resident aquatic species, including both the nektonic (freelyswimming) and benthic (bottom-dwelling) communities.

Potential impacts on the SMR and other streams subject to construction (Lake O'Neill overflow outlet and Fallbrook Creek), and their resident species have been minimized, though not completely avoided, by limiting in-water construction to the dry season and through the use of trenchless construction as identified in the project description. Construction during the dry season reduces the potential for incidental damage to a larger area by erosion and sedimentation. There would still be surface and/or shallow groundwater flows through the construction area, which would have to be temporarily pumped or diverted around areas of excavation and structure placement. Trenchless construction would avoid surface impacts within sensitive aquatic

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

habitats, but would result in some disturbance at access pits located adjacent to these habitats. Any resident aquatic species in the immediate areas of construction would still be negatively impacted, but this would be a very small portion of the population that inhabits the river. Since the areas affected are relatively small and downstream flows and connectivity between up- and downstream aquatic habitats would be maintained, the impact on aquatic habitat and resident aquatic species is considered less than significant.

Construction in upland and riparian habitats would expose soils to erosion which could lead to sedimentation in waterbodies downslope. However, implementation of a site-specific SWPPP incorporating BMPs for erosion and sediment control, as well as subsequent revegetation of disturbed areas, would minimize these types of impacts, such that they would not be considered significant.

Potential Effect: Construction activities associated with Alternative 1 could potentially cause impacts to jurisdictional wetlands and other waters of the U.S. at MCB Camp Pendleton, DET Fallbrook, and non-DOD land within the community of Fallbrook.

Findings: Adherence to SCMs listed in Section 2.3.1.4 and Mitigation Measure #2, Jurisdictional Wetlands and Other Waters of the U.S., listed in Section 4.3.2.5 of the EIR/EIS would assure no impacts to jurisdictional wetlands and other waters of the U.S. would occur with the construction of Alternative 1 (Finding 1).

Facts in Support of the Findings: Alternative 1 would potentially impact up to 5.23 acres (2.12 hectare) of jurisdictional wetlands on MCB Camp Pendleton, 0.17 acre (0.07 hectare) of jurisdictional wetlands on DET Fallbrook, and 0.20 acre (0.08 hectare) of jurisdictional wetlands on non-DOD land. Alternative 1 would also potentially impact up to 7,032 linear ft/3.12 acres (1.26 hectares) of other waters of the U.S on MCB Camp Pendleton; 1,030 linear ft/0.26 acre (0.11 hectare) of other waters of the U.S on DET Fallbrook; and 1,192 linear ft/0.14 acre (0.06 hectare) of other waters of the U.S on non-DOD land within the community of Fallbrook. However, through the implementation of various avoidance measures (i.e., relocation of pipeline alignment within buffer to existing disturbed road and/or bridge; trenchless construction; or suspending pipeline above creek), impacted area would be substantially less.

Impacts to jurisdictional wetlands and other waters of the U.S. greater than 0.5 acre (0.2 hectare) would require an individual permit from the USACE. Unavoidable impacts to wetlands and other waters of the U.S. may require mitigation, as described under Mitigation Measure #1 in Section 4.3.2.5. Preparation and approval of a detailed mitigation plan would be required in conjunction with the permit application. If the unavoidable impacts to jurisdictional waters support federally listed species, then input from USFWS would also be required. The mitigation plan would describe on-site, off-site, and as needed, off-base mitigation. For all habitat restoration that is proposed, this plan would include details regarding site preparation (e.g., grading), planting specifications, and irrigation design, as well as maintenance and monitoring procedures. The plan would also outline success criteria and remedial measures should the mitigation effort fall short of the success criteria, and a strategy for long-term mitigation site management. A portion

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

of the mitigation obligations may be satisfied by participating in a fee-based mitigation program (e.g., a wetland mitigation bank) in which case, long-term management for such mitigation would be covered under the terms of the formal banking agreement.

Mitigation Measures: In addition to the SCMs referenced in Section 2.3.1.4, including the AMP/FOP, the following mitigation measure (Mitigation Measure #2 in Section 4.3.3.5 of the EIR/EIS) is proposed under Alternative 1:

Unavoidable impacts to jurisdictional wetlands and other waters of the U.S. shall require mitigation that will be outlined in the Army Corps of Engineer individual permit. The development of a mitigation and monitoring plan is a requirement of CWA Sections 401 and 404 permit applications for activities that would discharge dredge or fill materials into jurisdictional waters. During the design phase of the project, the Marine Corps will choose a footprint that has the most minimal impact necessary to complete the project. The mitigation and monitoring plan should include details regarding site appropriateness, preparation (e.g., grading), recontouring, planting specifications (including seed mixes and plant palettes), and irrigation design (if determined necessary), as well as maintenance and monitoring procedures (including monitoring period and reporting). The plan should also outline yearly success criteria and remedial measures should the mitigation effort fall short of the success criteria.

Potential Effect: Operation of the new inflatable weir diversion structure in conjunction with the groundwater production wells under Alternative 1 could potentially increase the amount of water that is currently being removed from the SMR. The increased removal could diminish the extent, duration, quality and connectivity of seasonal aquatic habitats, which may be detrimental to native freshwater species.

Findings: With Adherence of SCMs listed under Section 2.3.1.4 in the EIS/EIR, impacts to seasonal aquatic habitats would be less than significant (Finding 1).

Facts in Support of Finding: The project design maximizes the use of peak flow events during wetter than normal conditions and reduces project operations during drier hydrologic conditions to minimize impact on the environment. Comparison of groundwater levels and streamflow during Extremely Dry/Very Dry conditions actually show an improvement under Alternative 1 when compared to Baseline conditions. However, under other conditions, streamflow would be diminished under Alternative 1 relative to Baseline. Project impacts to streamflow would occur during the winter months when flows are higher, and virtually never during the dry summer months. In comparison to Baseline, the effects of Alternative 1 on streamflow would be most pronounced during below normal to above normal rainfall conditions, and during storms with a recurrence interval of 2 years or less (i.e., the bankfull condition). The typical winter flows at the point of diversion are 100-166 cfs, and could be fully captured under Alternative 1, whereas only 60 cfs can be captured under existing/Baseline conditions. At such times, the extent and duration of seasonal aquatic habitats is expected to be diminished under Alternative 1 relative to Baseline.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Alternative 1 would capture only about 1% or less of the flow of the large-magnitude storms that transport most of the sediment down the SMR. As such, Alternative 1 is expected to have little or no impact on the major natural flood events that shape channel geomorphology, scour existing vegetation, and provide new sites for vegetation establishment. The proportion of regular seasonal high flows captured would be larger, and could affect in channel sediment transport and microhabitats (e.g., formation of points and bars) during “normal” periods. If flows during the wet season were reduced, the extent, duration, quality, and connectivity of aquatic habitats downstream could also be reduced. Lower flows may be associated with reduced oxygenation and increased temperatures, which would typically be detrimental to native freshwater species. Stagnant pooling water may increase as a result of decreased water flow that would normally flush the low lying areas.

Use of the percolation ponds would involve regular filling and (passive) draining, and the occasional removal of accumulated sediments. Owing to the manner of operation and the relatively coarse, well-drained nature of the substrate, the percolation ponds are not expected to provide habitat for aquatic species. Aquatic organisms, organic matter, and nutrients may be transported from the SMR into the percolation ponds and Lake O’Neill via the O’Neill Ditch, but are unlikely to survive for long. The loss of organic matter, nutrients, and primary and secondary aquatic production are unavoidable adverse indirect effects of diverting water from the river that exists today under Baseline conditions

Potential Effect: Tidal flushing is critical to the maintenance of estuarine habitats and species. Closure is associated with deteriorating water quality, which causes mortality to aquatic species, reduced biodiversity in the nektonic and benthic communities, and diminished estuary productivity. Operation of Alternative 1 could potentially increase the frequency or duration of closure at the mouth of the SMR Estuary.

Findings: With the implementation of the AMP/FOP and other SCMs listed under Section 2.3.1.4 in the EIR/EIS, the operation of Alternative 1 it is expected that consideration would be given to modifying operations when it would help avoid worsening conditions in the estuary. Thus, Alternative 1 would not increase the frequency or duration of closure at the mouth of the SMR Estuary (Finding 1).

Facts in Support of Findings: It is unlikely that the frequency or duration of closure at the mouth of the SMR Estuary would increase under Alternative 1. This estuary closure in the SMR, as for other lagoon type estuaries in southern California, appears to be primarily controlled by the interaction of long-shore sand transport with annual patterns of drought and flooding. Given that under Alternative 1 existing dry season low flows would be maintained and the first heavy flows of the rainy season would not be diverted, the pattern of openings and closures is likely to continue. Freshwater inflows in combination with tidal circulation through the mouth of the estuary would typically be sufficient to retard the formation of a sand-barrier berm across the mouth. Accordingly, negative impacts on estuarine productivity are not expected. With the implementation of the AMP/FOP, it is expected that consideration would be given to modifying operations when it would help avoid worsening conditions in the estuary. For example, if the

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

mouth of the estuary were to remain closed for a prolonged period, diversions could be reduced to facilitate the natural breaching of the berm and reestablish tidal flushing.

Potential Effect: Discharging the dilute brine to the Pacific Ocean from the existing Oceanside Ocean Outfall could potentially negatively impact water quality and biological resources in the runoff area.

Findings: Adherence to the NPDES permit as required would assure that impacts to water quality and biological resources caused by the dilute brine to the Pacific Ocean from the existing Oceanside Ocean Outfall would be minor and probably undetectable (Finding 1).

Facts in Support of Finding: Assuming the discharge conforms to the requirements of the NPDES permit as required, the impact on water quality and any secondary effects on organisms in the runoff areas from the pipe would be negligible.

Potential Effect: Operation of Alternative 1 could potentially affect the extent and duration of ponding, which could affect mosquito production.

Findings: No effect on mosquito production is anticipated (Finding 1).

Facts in Support of Findings: It would be expected that reduced flows and/or lowered water tables would generally reduce ponding and associated insect production. Although it is also possible that some areas that would otherwise be connected by surface flow would become isolated, these areas would be along the river channel where predatory species that can easily move between puddles (e.g., backswimmers that eat mosquito larvae) would remain abundant. Hence, no effect on mosquito production is anticipated.

Potential Effect: Construction and operation of Alternative 1 could potentially negatively impact the habitat of the southern California steelhead. Making the precautionary assumption that SCS are present in the SMR and likely to migrate through the action area, Alternative 1 may adversely affect the passage of adults or juveniles in the SMR between the Pacific Ocean and inflatable weir and at the inflatable weir and O'Neill Ditch.

Finding: Alternative 1 is not likely to jeopardize the continued existence of the endangered SCS. Alternative 1 may result in incidental take of SCS. The action is not likely to jeopardize the continued existence of the endangered SCS. Alternative 1 may result in incidental take of SCS. Alternative 1 would not have a significant impact on SCS. MCB Camp Pendleton is consulting with NOAA Fisheries and the results of the consultation would be implemented.

Alternative 1 may affect and is likely to adversely affect SCS habitat due to the construction of the diversion weir; a larger construction footprint is needed for the diversion structure, which will permanently impact SCS migration habitats. However, individual SCS will not be likely

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

affected during construction since it will occur during low flow of the SMR.

Depending on the nature of hydrologic modifications to the river system with operations, Alternative 1 may affect and is likely to adversely affect SCS migration in the SMR downstream of the proposed diversion. NOAA anticipates the need for MCB Camp Pendleton to capture and relocate individuals during maintenance events, including planned and unexpected repair events. These injuries and losses are not expected to continually suppress population abundance for the Santa Margarita River steelhead. (Finding 1)

Facts in Support of the Findings: Southern California Steelhead habitat in the Lower SMR downstream of the weir is limited to migration habitat; there is no suitable spawning or juvenile rearing habitat in this reach of the river. However, some habitat that appears suitable for spawning occurs upstream of the action area in De Luz and Roblar Creeks. Normal marine salinities typically exist in the SMR Estuary, and transitional brackish habitat suitable for smolts migrating to the ocean appear to be of very limited extent, existing only at the upper end of the estuary (inland from I-5 to approximately Stuart Mesa Road). However studies to date indicate the potential is there but not currently suitable due to lack of food and temperature fluctuations.

Construction. Construction of the proposed action will permanently increase the footprint of structures within the Santa Margarita River floodplain with permanent removal of streambed material to accommodate the creation of larger concrete portions of the O'Neill Ditch intake structure, the weir, and the fish-passage facility. These changes will result in a larger permanently impacted area extending further into the existing channel bank. The proposed increased footprint of the culverts, control building, along with the rock/sand trap (trash rack) proposed downstream of the culverts will reduce the amount of natural channel material contributing to the streambed and overall streambank stability upstream of the weir.

Permanent removal of riparian and aquatic vegetation and removal of sediment and debris from the stream channel will alter channel morphology and hydraulic conditions that support fish movement. Although, as noted in the operational section below, the proposed weir structure will improve passage conditions for SCS.

Considerable design changes in coordination with NOAA Fisheries resulted in a substantially enlarged footprint; however, the revised design and operation schedule greatly reduces the potential impacts to SCS and will cost an estimated three million to construct, plus considerable annual long term operation and maintenance costs. For this reason MCB Camp Pendleton considers all impacts associated with improvements at the diversion structure completely compensated.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Construction of the proposed action will require manipulation of channel features and will require MCBCP to temporarily redirect the flow of the Santa Margarita River (i.e., first realignment of the river) for approximately two months during the dry season to minimize instream disturbance effects on water quality in the action area. However, methods for diverting flow (e.g., coffer dams or temporary diversion channels and piping) during construction will utilize the wide channel by diverting flows to one side of the river while work occurs on the opposite side. For permeable sand materials, well points or sumps will be used to further lower the water table a few feet below the impacted constructed area. Because construction of the inflatable diversion weir would occur during the dry season, when conditions for SCS are unsuitable along the Lower SMR due to high temperatures and the reduced extent of surface water, SCS would not be present in the vicinity at that time. Sediments would be disturbed during construction, but such changes would be temporary as the sediments are redistributed during the following rainy season. Therefore, individual SCS would not be impacted by construction. Temporarily impacted areas will be restored on-site in accordance with MCB Camp Pendleton's Riparian Biological Opinion.

NOAA 2016 anticipates temporary changes to instream flow within and downstream of the project site during dewatering prior to construction; these fluctuations in flow are anticipated to be small, gradual, and short-term due to the proposed work window. Based on the general description provided in MCBCP 2014, NOAA 2016 assumes that construction of the inflatable weir structure should not measurably change the magnitude and extent of anticipated temporary effects due to flow diversion, with the dewatering process temporarily reducing about 50 percent of available aquatic habitat in the construction area. Given the overall scope of temporary riparian and instream activities, conditions during the dry season (e.g., little to no flowing water), and the use of the proposed site-specific storm water pollution prevention plan (SWPPP) incorporating best management practices (BMPs) for erosion and sediment control, including replacement of vegetation in disturbed areas, NOAA 2016 does not anticipate turbidity and downstream sedimentation rates that would measurably degrade available habitat for steelhead in the action area.

Operations. Operation of Alternative 1 is likely to adversely effect SCS (NOAA 2016), which would result in incidental take of the species. Alternative 1 is expected to continue reducing the magnitude and duration of winter and spring river discharge in the action area downstream of the point of diversion. Effects of the diversion operations are most pronounced during relatively low flows (i.e., owing to the capacity of the diversion, 200 cfs), which occur frequently in the SMR watershed. The report prepared by Reclamation et al. (2012) identified minimum flow conditions necessary to allow upstream migration of adult SCS between the SMR Estuary and diversion weir. These conditions typically only occur during Above Normal and Very Wet years.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Under Alternative 1, duration of flows necessary to allow upstream (and downstream) migration of SCS would be reduced slightly, however there would be negligible reduction during periods when migration is most likely to occur (i.e., during long duration events in wet years). A full description of operational effects can be found in NOAA 2016. Alternative 1 approximates the historical falling limb of the hydrograph for the lower Santa Margarita River to minimize adverse effects on migrating adult and juvenile steelhead. NOAA 2016 cites that there is no elimination of available migration opportunities in addition to having no severe disruption of migratory behavior of both adult and juvenile steelhead relative to those that occurred before the current MCBCP surface-water diversion and groundwater pumping activity. The proposed action will result in the greatest magnitude of effects in reducing streamflow during below normal (rainfall) years. However, below normal water years for this watershed appear to provide extremely limited migration opportunities, where the magnitude and duration of elevated flows rarely meet the minimum depth requirements for safe passage in the action area (NOAA 2016).

The proposed action, chiefly the expected interaction of groundwater-withdrawal effects on the amount and extent of surface water, is expected to have minimal reduction in the amount and extent of rearing habitat for endangered steelhead in the lower SMR (NOAA 2016). Based on the surface-flow analysis, which incorporated effects from groundwater pumping. Suitable living space for juvenile steelhead is expected to be extremely limited in SMR, lacking continuous connectivity from the POD to the estuary (NOAA 2016). NOAA 2016 states that further reductions in surface or groundwater flows from

Alternative 1 is inconsequential to suitable juvenile rearing habitat. The proposed new weir has been designed to improve passage conditions for SCS, as compared to the existing sheet pile weir. Upstream migration of adult SCS would be improved through partially lowering of the shorter weir gate and directing flow to a plunge pool that would allow adult steelhead to negotiate over the weir and continue upstream during the December through May migration season. Downstream migration of both adult and juvenile SCS would be improved through the incorporation of a fish screen to prevent entrainment in the diversion structure during the December through May migration season. A fish by-pass line would be associated with the fish screen that would allow fish entrained into the intake to be returned downstream on the SMR and continue their migration downstream to the ocean. As a result, it is unlikely that individual SCS would be deterred from migration or injured in the process.

Potential Effect: Construction and operation of Alternative 1 could potentially negatively impact the federally listed Tidewater Goby.

Finding: Tidewater Goby does not occur at present, although there is a possibility of future occurrence. Given the low likelihood of any adverse effect on potential TWG habitat, coupled

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

with the implementation of the SCMs identified in Section 2.3.1.4 Special Conservation Measures and BMPs during construction as named in Section 2.3.2.1, Alternative 1 may affect, but is not likely to adversely affect, Tidewater Goby. No significant impact would occur. (Finding 1)

Facts in Support of the Findings: Construction. Tidewater Goby does not occur in areas subject to or indirectly affected by construction and hence would not be affected by construction; the southernmost construction site in Alternative 1's footprint is over 8 kilometers upstream from the Santa Margarita estuary, where Tidewater Goby historically occurred. Tidewater Goby have not been present within the SMR Estuary since 2000. Using BMPs during construction as named in Section 2.3.2.1 will greatly reduce sedimentation from construction reaching the SMR estuary, if Tidewater Goby do recolonize the SMR estuary. Operational activities associated with the new inflatable diversion weir and increased groundwater pumping will have minimal, if any, effects on the water quality that flows in the SMR estuary and on the duration of estuary closure beyond historical occurrence. With the implementation of the SCMs, operations could be modified if conditions warrant, for example to increase river flows in order to facilitate natural breaching of the berm at the mouth. As a result, the action would not affect the possibility of recolonization by Tidewater Goby. If the species did re-enter and/or be rediscovered in the SMR, the SCMs would enable consideration of the effects of operations on Tidewater Goby along with other estuarine species in consultation with USFWS.

Potential Effect: Construction and operation of Alternative 1 could potentially negatively impact the federally listed and endangered California Gnatcatcher (CAGN) species.

Finding: Alternative 1 may affect and is likely to adversely affect CAGN due to construction-related removal of occupied habitat, albeit temporary, which cannot be completely eliminated. Vegetation clearing will occur outside of the breeding season per avoidance and minimization measures; therefore, potential direct effects to individual nests are unlikely to occur. A total of two CAGN territories within the CUP construction Project Footprint is estimated to have greater than 20% of the territory impacted, thus resulting in a substantial, albeit short-term impact. In addition, approximately 16 (15.5 rounded up) CAGN territories may be located within 500-foot of the construction footprint and be subjected to indirect effects, with the likelihood of two CAGN pairs over the 3-year construction duration to have a reduction in reproduction. With the implementation of SCMs for temporary and permanent disturbance of CAGN occupied coastal sage scrub habitat, minor short-term and negligible long-term adverse effects to individual gnatcatchers would occur from construction. These impacts represent a fraction of the available gnatcatcher habitat within the affected populations and are predominantly temporary. Therefore, no effect on the overall distribution or abundance of the species (i.e., no long-term effects on the CAGN population) on MCB Camp Pendleton or DET Fallbrook is anticipated. (Finding 1).

Facts in Support of the Findings:

Construction. Using 2010 and 2014 MCB Camp Pendleton base-wide survey data and 2009 and 2014 DET Fallbrook installation-wide survey data an average of 15.5 CAGN territories overlap the area of potential direct impact (500 ft buffer/ROI) for Alternative 1 (see Appendix C for the

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Effects Analysis; MCBCP 2015.) (Note: the CAGN territory calculation is modeled after the CAGN effects analysis in the Base-wide Utilities Infrastructure BO [USFWS 2010] using a territory size of 5.70 acres [2.30 hectares], which is the gnatcatcher territory size documented in a similar habitat and environmental conditions).

The permanent effect of construction under Alternative 1 on CSS would be the loss of approximately 0.42 acre (0.17 hectare) of CAGN unoccupied CSS habitat on MCB Camp Pendleton near the diversion weir, O'Neill ditch, and at pump station locations along the bi-directional pipeline route (see Table 4.3-1). A small 0.01 acre (<0.01 hectare) area of occupied CAGN habitat at the O'Neill ditch could be permanently impacted on MCB Camp Pendleton.

Construction would temporarily affect approximately 15.25 acres of CAGN occupied CSS habitat (4.08 acres on MCB Camp Pendleton and 11.17 acres on DET Fallbrook). A total of six (5.5 rounded up) CAGN territories all on MCB Camp Pendleton and DET Fallbrook would potentially be directly impacted (see Appendix C-1); with two CAGN territories having >20% of the territory impacted by construction, thus rising to a level of "take" (i.e., adverse impact) since the impact will substantially increase the risk of mortality or interfere with gnatcatcher breeding activity. The area of actual effect could potentially be smaller than the acreages described above. This is because the majority of the occupied temporary impact area (15.18 acres [6.14 hectares]) occurs along the bi-directional pipeline, which would only involve temporary impacts inside a 50-ft (15-m) wide corridor located within the larger 100-ft (30-m) wide buffer corridor used for acreage calculations. An analysis of the wider 100-ft (30-m) buffer areas has been provided to allow the flexibility of placing the pipeline anywhere within the buffer area to meet site-specific construction needs and minimize effects. Individual CAGN may be displaced to adjacent habitat, especially along the pipeline corridors. In addition, construction is predicted to start 4-6 years after the May 2014 wildfires; the coastal sage scrub habitat in the burned territories that are predicted to be impacted may or may not have recovered by the time of construction start and thus not necessarily occupied by CAGN at time of construction CSS vegetation removal. Apart from vegetation removal, temporary direct effects would include the potential disturbance of CAGN during construction due to noise, traffic, and human occupancy in the project vicinity. Noise and indirect effects may extend into adjacent habitat occupied by CAGN. Individuals could be displaced to adjacent areas, and may experience energetic costs or increased risk of predation as a result; either of which may affect subsequent survival and reproduction. The USFWS Biological Opinion (BO) estimates that a disturbance of gnatcatchers related to CUP construction is likely to reduce reproduction for two CAGN pairs over the 3-year duration of construction, but this limited reduction in reproduction will only have a minor effect on gnatcatchers in the action area and range wide (USFWS 2016).

Effects to CAGN would be minimized through implementation of the SCMs listed under Biological Resources in Section 2.3.1.4.

The action area is already subject to noise and traffic due to training and existing roads. Noise, lighting, vehicles, and human occupancy associated with the proposed project would temporarily increase the amount and duration of noise and human activity, but this effect would be short-term

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

and localized and would not be expected to negatively affect CAGN on a regional scale. Areas of temporarily disturbed CSS habitat would be restored per the SCMs.

Operations. The operational effects include both diversion of water at the weir and ground-water pumping and their associated impacts to individuals and habitat. The combination of these operations will decrease the surface flow in the Santa Margarita River and may potentially impact native habitat around the well locations, where ground-water is being pumped out of the watershed. CAGN habitat is located outside of the floodplain of the SMR, and should not be impacted by operations. 9 out of 16 wells (including both operational and proposed) are located within riparian habitat. The upland well locations are located within grassland habitat near the Santa Margarita River on MCBCP; the closest CAGN territory to a groundwater well is 611-ft to the southeast. Since CAGN occupy over 0.11 miles from groundwater pumping wells, direct and indirect effects from operations of the Project Action are not predicted to impact CAGN-occupied coastal sage scrub.

Potential Effect: Construction and Operation of Alternative 1 could potentially have a negative impact on the federally listed and endangered Least Bell's Vireo (LBVI) species.

Findings: Alternative 1 may affect and is likely to adversely affect LBVI due to construction related removal of occupied habitat and indirect effects (construction during the breeding season), which cannot be completely eliminated. Vegetation clearing will occur outside of the breeding season per avoidance and minimization measures; therefore, potential direct effects to individual nests are unlikely to occur. For significant impacts, a total of 10 LBVI territories may be located within the CUP construction Project Footprint and are estimated to have greater than 20% of the territory impacted, thus resulting in a substantial, albeit short-term impact. In addition, there is a likelihood of eight LBVI pairs over the 3-year construction duration to have a reduction in reproduction. Approximately 87 LBVI territories may be located within 500-feet of the construction footprint and be subjected to indirect effects that are less than substantial. With the implementation of SCMs for temporary and permanent disturbance of LBVI occupied riparian habitat, minor short-term and negligible long-term adverse effects to individual vireos would occur from construction. These impacts represent a fraction of the available least Bell's vireo habitat within the affected populations and are largely temporary.

Using the modelled decline of 10.2% of evapotranspiration in the riparian system below the diversion structure, USFWS 2016 estimates that there may be a loss of up to 45 LBVI territories on the Lower SMR as a result of future CUP operations. The AMP/FOP would implement a riparian habitat monitoring program in combination with the LBVI monitoring program, in coordination with those stakeholders with extensive knowledge of the least Bell's vireo population dynamics within the Santa Margarita River.

Impacts to vireo will be minimized with avoidance, minimization, and compensation measures named in the AMP/FOP and SCMs in Section 2.3.1.4, *Special Conservation Measures*. USFWS 2016 supposes that impacts due to CUP operations are likely to reduce the overall vireo population on the Lower SMR; however, this population will remain stable due to the Marine

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Corps high level of management through the Riparian BO and INRMP. In addition, the OSMZ will provide high quality LBVI habitat, as well as the in-lieu fee program potentially.(Finding 1)

Facts in Support of the Findings:

Construction. Using 2010 and 2014 MCB Camp Pendleton base-wide survey data and 2008 and 2013 DET Fallbrook installation-wide survey data an average of 87 LBVI territories overlap the area of potential direct impact (500 ft buffer/ROI) for Alternative 1 (see Appendix C for the Effects Analysis; MCBCP 2015,) (*Note:* the LBVI territory calculation is modeled after the LBVI effects analysis in the Basewide Utilities Infrastructure BO [USFWS 2010] using a territory size of 1.9 acres [0.8 hectare], which is the LBVI territory size documented in a similar habitat and environmental conditions). The principal permanent construction effect of the Alternative 1 would be the loss of LBVI habitat. Construction would permanently affect approximately 5.20 acres (2.10 hectares) of riparian habitat occupied by LBVI, all of which occurs on MCB Camp Pendleton at the diversion weir, O’Neill Ditch, production wells, conveyance pipelines, HDD drilling locations, and permanent access roads. Construction would temporarily affect approximately 21.98 acres (8.89 hectares) of LBVI-occupied riparian habitat (21.72 acres [8.79 hectares] on MCB Camp Pendleton and 0.26 acres [0.11 hectares] on DET Fallbrook). The majority of these temporary impacts would occur in the location along O’Neill Ditch, the production wells, and conveyance pipelines. Small areas of riparian habitat also occur along the bi-directional pipeline corridor on MCB Camp Pendleton and DET Fallbrook. Direct impacts to LBVI occupied riparian habitat would be compensated in accordance with MCB Camp Pendleton’s Riparian/Estuarine BO (USFWS 1995a) (refer to SCM 32 in Section 2.3.1.4). A total of 27 LBVI territories all on MCB Camp Pendleton would potentially be directly impacted (see Appendix C-1); with 10 (9.5 rounded up) LBVI territories having >20% of the territory impacted by construction, thus rising to a level of “take” (i.e., adverse impact) since the impact will substantially increase the risk of mortality or interfere with vireo breeding activity. LBVI within construction footprint areas would experience a direct loss of foraging/nesting habitat, whereas birds within the construction buffer distance could have breeding and/or foraging behavior disrupted, with attendant effects on reproduction, energetics, or predation risk. Temporarily impacted habitat will be restored and is likely to be re-occupied by vireos within 2 to 7 years after restoration.

To minimize impacts to LBVI, construction would take place outside the breeding season to the maximum extent practicable. Construction at the diversion weir must take place during the LBVI breeding season; since this is when flow is lowest in the SMR. To determine how many LBVI may be significantly impacted by construction at the weir, the number of LBVI territories from 2010 and 2014 that overlap within 250 ft. of construction was noted (Figure XX); 250 feet is the distance assumed where LBVI would be significantly impacted (e.g., breeding or foraging behavior would be disrupted); versus 251-500 feet where LBVI would be subjected to indirect effects that are less than significant. It is estimated that a maximum of six LBVI territories (six territories were present in 2010; three territories in 2014) around the weir may be significantly impacted during construction during the breeding season. Overall, the USFWS Biological Opinion (BO) estimates that a disturbance of vireos related to CUP construction is likely to

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

reduce reproduction up to eight LBVI pairs over the 3-year duration of construction, but this limited reduction in reproduction will only have a minor effect on vireos in the action area and range wide (USFWS 2016).

Operations. Riparian habitat along the SMR has consistently supported breeding LBVI (MCB Camp Pendleton 2011); the riparian habitat downstream of the weir location supports approximately 50% of the MCB Camp Pendleton population (Lynn and Kus 2011; MCB Camp Pendleton 2012a,b). Multiple factors for watershed management can affect riparian habitat, but research has not been conducted specifically for LBVI habitat use in Southern California, as it relates to either groundwater pumping or water diversion. The CUP Model indicates that there will be a reduction in evapotranspiration from riparian vegetation when compared to recent management conditions as described in Section 3.2.4.3. The impact to LBVI habitat due to lower groundwater levels and the subsequent reduction in evapotranspiration by riparian vegetation was modelled for the USFWS Section 7 Consultation 3.2.4.3. These impacts would be minimized through successful implementation of the AMP/FOP, as described in Section 2.3.1.4, *Special Conservation Measures*. The AMP/FOP would implement riparian vegetation monitoring to help measure impacts to LBVI nesting and foraging habitat, and minimize effects to nesting pairs or reproduction.

Due to the modelled reduction in evapotranspiration of 10.2% of riparian habitat below the diversion structure, it is assumed that the general decline in the quantity and quality of the riparian habitat will be dispersed across the entire Lower SMR and occur over an extended period of time. Over time, individual vireos will adjust their territory boundaries according to the amount and configuration of suitable habitat; habitat thinning and loss of understory may require that vireos expand their territories to encompass required foraging and nesting resources. Some vireos may be forced to abandon their territories in favor of more suitable habitat. Vireos that successfully establish territories in habitat elsewhere are expected to experience reduced productivity (e.g., delayed initiation or prevention of nest building, fewer nesting attempts per season, and/or overall reduction in reproductive output) due to reduced availability of foraging and breeding habitat and increased territorial interactions. If displaced birds cannot find suitable habitat to forage and shelter in, it is anticipated they will be more vulnerable to predation and otherwise may die or be injured (USFWS 2016).

Based on the projected average decline of 10.2 percent in evapotranspiration rates, the USFWS 2016 predicts a proportional loss of riparian vegetation cover and that the carrying capacity for LBVI on the Lower SMR will proportionately decline by about 10.2 percent over time. Using this decline in carrying capacity, and the average of 438 vireo territories on the Lower SMR, a loss of up to 45 LBVI territories over time on the Lower SMR as a result of future CUP operations is expected. To partially offset projected operational impacts to vireos, the Marine Corps will deduct 225 credits from the Riparian BO Habitat Ledger (CM-9). Credits used from Riparian BO Habitat Ledger represent riparian habitat that has already been restored or enhanced through removal of non-native invasive plant species per the Riparian BO (USFWS 1995a) and the INRMP; and will be maintained or will fully recover to high-quality habitat. Preservation and management of riparian habitat in the OSMZ could have long-term beneficial effects on LBVI

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

habitat which may, to some extent, offset effects on the LBVI population in the Lower SMR. The Marine Corps estimates that the OSMZ contains 393.3 acres of riparian habitat suitable for vireo breeding, feeding, and sheltering. The Marine Corps will contribute funds necessary to conserve 105 acres of open water and riparian habitat in the OSMZ.

Preservation and management of riparian habitat for the ARTO in-lieu fee program (SCM 9 in Section 2.3.1.4) may also have long-term beneficial effects on LBVI habitat, if habitat that is chosen for ARTO conservation also harbors LBVI, which is highly likely.

Potential Effect: Construction and Operation of Alternative 1 could potentially have negative impacts on the federally listed and endangered Southwestern Willow Flycatcher (SWFL) species.

Findings: Alternative 1 may affect and is not likely to adversely affect southwestern willow flycatcher due to construction-related project activities: occupied SWFL habitat is not being impacted directly by the project and indirect effects are negligible due to construction activities avoiding known SWFL occupied habitat during the breeding season. Vegetation clearing will occur outside of the breeding season per avoidance and minimization measures; therefore, potential direct effects to individual nests (if SWFL happen to nest outside of their current known territories) are unlikely to occur. Approximately one SWFL polygynous territory may be located within 500-feet of the construction footprint and be subjected to indirect effects; therefore, breeding season restrictions have been imposed upon construction this is area to avoid any impacts. With the implementation of the SCMs, the effects to individual flycatchers from construction are minor.

Depending on the nature of hydrologic modifications to the river system with operations, Alternative 1 may affect, likely to adversely affect southwestern willow flycatcher in the SMR downstream of the proposed diversion. However, even with a modelled decline of 10.2% of evapotranspiration in the riparian system below the diversion structure, USFWS (2016) states that Alternative 1 is not expected to reduce the numbers, reproduction, or distribution of flycatchers on the Base, or impact recovery of the species.

The AMP/FOP would implement a riparian habitat monitoring program in combination with the SWFL monitoring program, in coordination with those stakeholders with extensive knowledge of the southwestern willow flycatcher population dynamics within the Santa Margarita River. In addition, MCB Camp Pendleton will implement measuring soil moisture of SWFL occupied habitat in the AMP/FOP,

and set up artificial seeps to enhance currently occupied SWFL habitat. With the SWFL seeps, soil moisture shall remain high enough to support the current vegetation structure and provide foraging that supports nesting SWFL. In addition, the OSMZ will provide critical high quality SWFL habitat, albeit currently unoccupied. Through successful implementation of the AMP/FOP, as described in Section 2.3.1.4, *Special Conservation Measures*, habitat would be regularly monitored and if the riparian habitat value where the SWFL breed is reduced, operations would be re-evaluated, which may include reinitiation of consultation with the

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

USFWS. No long-term effects on the SWFL population on MCB Camp Pendleton are anticipated.

Facts in Support of Findings:

Construction. There are no recent SWFL territories within the areas of potential permanent and temporary impact for Alternative 1 on MCB Camp Pendleton and DET Fallbrook Figure 4.3-1). Given the long-term absence of SWFL from potential construction areas, combined with the implementation of SCMs listed in Section 2.3.1.4, construction-related disturbance to SWFL nesting behavior is unlikely. In addition, vegetation clearing during the breeding season would not occur and disturbance to riparian habitat in the SMR would be minimized per avoidance and minimization measures; therefore, potential direct effects are unlikely to occur. The principal direct effect of the Alternative 1 would be the loss of potential (future) SWFL foraging and breeding habitat. Construction would permanently affect approximately 5.20 acres (2.10 hectares) and temporarily affect 22.34 acres (9.04 hectares) of riparian habitat on both MCB Camp Pendleton and DET Fallbrook (Table 3.3-2).

To determine the number of southwestern willow flycatcher adjacent to the project footprint where breeding and/or foraging behavior of SWFL could potentially be disrupted (i.e., within the construction buffer distance), the following calculation modeled after the LBVI effects analysis in the BUI BO (Basewide Utilities Infrastructure BO [USFWS 2010]) was used: the number of SWFL territories (territory boundaries are defined in the Annual Reports issued by USGS; Howell 2014) that overlap with the maximum CUP Project Footprint (the 500 ft. buffer/ROI) was counted. Using this calculation, it is estimated that the maximum CUP Project footprint overlaps with one flycatcher polygynous territory on MCB Camp Pendleton; the 2011 territory is approximately 480 feet and the 2014 territory is approximately 270 feet away from the proposed project footprint (Table 3.3-4). The maximum number of nests from the 2010-2014 dataset notes that there were seven nests attempted in this polygynous territory (in 2013). The majority of this occupied habitat burned in the May 2014 wildfire; however, MCB Camp Pendleton began a habitat restoration project within this area in 2015. Due to the May 2014 wildfire and recent (2012-2014) drought, the SWFL may be expanding/changing their territory boundaries (as noted in 2014 when the territory expanded). Although SWFL have high site fidelity, when construction is projected to start in 4-6 years, breeding SWFL may potentially move closer to the SMR/project footprint.

Potential interference with foraging or movements by SWFLs in this location is of concern because the SWFL breeding population and area of occupied habitat on MCB Camp Pendleton is very small. Disturbance to individuals in this small population could cause them to abandon the area, and the numbers are so low as to limit future breeding opportunities among remaining individuals. Therefore, to minimize indirect impacts to SWFL during construction, construction adjacent to current occupied SWFL habitat would take place outside of the southwestern willow flycatcher breeding season (SCM-XX; SCM-88). In addition, in other portions of the construction footprint that are adjacent to riparian habitat, the project biological monitor will receive a report with current SWFL breeding survey information (or if that's not available, a

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

biological monitor would conduct pre-construction surveys focusing on southwestern willow flycatcher) to note any SWFL adjacent to the project footprint (SCM-89). If territorial SWFL are confirmed within 250 feet (76 m) of the construction footprint during the breeding season (May 15 to August 31), then construction activities would be halted until MCB Camp Pendleton could confer with the Service.

Operations. Riparian habitat along the Lower SMR is the only location on MCB Camp Pendleton that currently supports breeding SWFL; although in 2012, territories (one at each locale with no confirmed breeding) were established at Lake O'Neill on Fallbrook Creek and at the Sierra percolation ponds (Howell and Kus 2012); in 2013, one additional territory was established at Pilgrim Creek with no confirmed breeding (Howell and Kus 2013); and in 2014, one nesting female was detected at Pilgrim Creek (Howell and Kus 2014).

SWFL nest building generally occurs mid-May to mid-July (USGS 2010b), with the SMR typically drying up downstream of Basilone Bridge by July. SWFL breed in dense riparian habitats where surface water is present or soil moisture is high enough to maintain vegetation structure (USGS 2010b), and often rely on aquatic insects for a food source. However, hydrologic conditions in the Southwest are typically variable, with water availability at a site fluctuating over the course of a breeding season or from year to year (USGS 2010b). Due to the modelled reduction in evapotranspiration of 10.2% of riparian habitat below the diversion structure, it is assumed that the general decline in the quantity and quality of the riparian habitat will be dispersed across the entire Lower SMR and occur over an extended period of time. Over time, for the reasons mentioned above for the LBVI, individual SWFL may adjust their territory boundaries or abandon their territories within this degraded riparian habitat (USFWS 2016). Based on the projected average decline of 10.2 percent in evapotranspiration rates, USFWS 2016 predicts a proportional loss of riparian vegetation cover and that the carrying capacity for SWFL on the Lower SMR will proportionately decline by about 10.2 percent over time. Using this decline in carrying capacity, and the average of 10 flycatcher territories on the Lower SMR, a loss of up to two SWFL territories over time on the Lower SMR as a result of future CUP operations is expected. However, these impacts would be minimized through successful implementation of the AMP/FOP, as described in Section 2.3.1.4, Special Conservation Measures and the addition of three groundwater pumps on the Lower SMR to create artificial seeps that are expected to promote conditions favorable for flycatcher breeding, feeding, and sheltering.

As noted in SCM-13, MCB Camp Pendleton proposes to enhance southwestern willow flycatcher habitat by creating saturated soil adjacent to extant SWFL breeding populations by installing three low volume, shallow groundwater irrigation pumping wells. Updated information from the annual SWFL monitoring and Riparian Ecosystem Health Monitoring program will be used to ascertain the effectiveness of soil saturation. With the creation of these seeps, USFWS (2016) anticipates that the loss of the two flycatcher territories will be avoided. In addition, placement of the seeps will provide useful information for managing flycatchers on MCBCP and throughout the Coastal California Recovery Unit (USFWS

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

2016). Preservation and management of riparian habitat in the OSMZ could have long-term beneficial effects on the SWFL critical habitat. However, the SWFL does not currently nest in the OSMZ, and its future use of that location depends on expanding numbers from other locations, a function of the overall recovery of the population.

Preservation and management of riparian habitat for the ARTO in-lieu fee program (SCM 9 in Section 2.3.1.4) may also have long-term beneficial effects on SWFL habitat, if habitat that is chosen for ARTO conservation also harbors SWFL.

Potential Effect: The construction and operation of Alternative 1 could potentially have negative impacts on the federally listed and endangered Ridgway's Rail (RIRA), formally Light Footed Clapper Rail species.

Findings: Alternative 1 would have no direct effects on individual RIRA, and with the implementation of the SCMs as identified in Section 2.3.1.4, Special Conservation Measures, it is very unlikely that there would be any negative impact to the estuarine and coastal salt and freshwater marsh habitat used for nesting and foraging. Thus, the Alternative 1 may affect, but is not likely to adversely affect the RIRA.

Findings in Support of Finding:

Construction. Under Alternative 1, no construction activities would occur in or near the SMR Estuary. Therefore, no effects to RIRA are expected due to construction activities; the southernmost construction site in the project footprint is over 8 kilometers upstream from the Santa Margarita Estuary, where Ridgway's rail occur.

Operations. Operational activities associated with the new inflatable diversion weir and increased groundwater pumping will have minimal, if any, effects on the water quality that flows in the SMR estuary and on the duration of estuary closure beyond historical occurrence. Operational activities would result in brine discharge into the Pacific Ocean from the Oceanside Ocean Outfall. This is not expected to have any effect on water quality or marine communities, or to alter foraging conditions for the RIRA. RIRA are present nesting and foraging within the coastal marsh habitats of the SMR Estuary, anywhere from the SMR river mouth to the areas further upstream west of Stuart Mesa Road. Although the Proposed Action would result in reduced surface flows in the SMR downstream from the inflatable weir, it is unlikely that this would affect streamflow or habitat near the estuary; therefore, the availability of marsh habitat for the RIRA or the abundance of prey species (arthropods, clams, mussels, etc.) would not be diminished.

Circumstances leading to closure and subsequent breaching at the mouth of the lagoon are largely controlled by large-scale seasonal and inter-annual patterns of drought and rainfall, such that any added effect of the project would be very small. With the implementation of the SCMs, as described in Section 2.3.1.4, *Special Conservation Measures*, it is expected that consideration

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

would be given to modifying operations (e.g., to allow increased river flows to facilitate natural breaching of a berm at the mouth) when it would help avoid worsening conditions in the estuary.

Potential Effect: The construction and operation of Alternative 1 could potentially have negative impacts on the federally listed and endangered California least tern (CLTE).

Findings: With the implementation of the AMP/FOP, as described in Section 2.3.1.4, Special Conservation Measures, CLTE nesting habitat and foraging conditions would be maintained in the SMR

estuary. As such, Alternative 1 may affect, but is not likely to adversely affect the CLTE. Therefore, Alternative 1 would not have a significant impact on the CLTE. (Finding 1).

Facts in Support of Finding:

Construction. Under Alternative 1, no construction activities would occur in or near the SMR Estuary. Therefore, no effects to CLTE are expected from construction; the southernmost construction site in the Proposed Action footprint is over eight kilometers upstream from the Santa Margarita Estuary, where California least tern occur.

Operations. Operational activities associated with the new inflatable diversion weir and increased groundwater pumping will have minimal, if any, effects on the water quality that flows in the SMR estuary and on the duration of estuary closure beyond historical occurrence. Operational activities would result in brine discharge into the Pacific Ocean from the Oceanside Ocean Outfall. This is not expected to have any effect on water quality or marine communities, or to alter foraging conditions for CLTE. CLTE forage in the SMR Estuary, but more frequently in the ocean, and nest on the margins of the estuary. Although Alternative 1 would result in reduced surface flows in the SMR downstream from the inflatable weir except during Extremely Dry/Very Dry hydrologic conditions, it is unlikely that this would affect tidal flushing; therefore, the availability of beach habitat for roosting and nesting on the margins of the estuary will not be diminished. Circumstances leading to closure and subsequent breaching at the mouth of the lagoon are largely controlled by large-scale seasonal and inter-annual patterns of drought and rainfall, such that any added effect of the project would be very small. With the implementation of the Santa Margarita River Conjunctive Use Project as described in Section 2.3.1.4, Special Conservation Measures, it is expected that consideration would be given to modifying operations (e.g., to allow increased river flows to facilitate natural breaching of a berm at the mouth) when it would help avoid worsening conditions in the estuary.

Potential Effect: Construction and operation of Alternative 1 could potentially negatively impact the federally listed and endangered Snowy Plover (SNPL) species.

Findings: Alternative 1 would have no direct effects on individual SNPL, and with the implementation of the SCMs as identified in Section 2.3.1.4, Special Conservation Measures, it is very unlikely that there would be any negative impact to the estuarine and beach habitat used for nesting and foraging. Thus, the action may affect, but is not likely to adversely affect the

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

SNPL. Therefore, Alternative 1 may affect, but is not likely to adversely affect the SNPL. (Finding 1)

Facts in Support of Finding:

Construction. Under Alternative 1, no construction activities would occur in vicinity of SNPL habitat. Therefore, no effects to SNPL are expected due to construction; the southernmost construction site in the footprint is over 8 kilometers upstream from the Santa Margarita Estuary, where western snowy plover occur.

Operations. Operational activities associated with the new inflatable diversion weir and increased groundwater pumping will have minimal, if any, effects on the water quality that flows in the SMR estuary and on the duration of estuary closure beyond historical occurrence. Operational activities would result in brine discharge into the Pacific Ocean from the Oceanside Ocean Outfall. This is not expected to have any effect on water quality or marine communities, or to alter foraging conditions for the SNPL. SNPL are present nesting and foraging on the flats and shorelines of the SMR Estuary. Although Alternative 1 would result in reduced surface flows in the SMR downstream from the inflatable weir except during Extremely Dry/Very Dry hydrologic conditions, it is unlikely that this would affect tidal flushing; therefore, the availability of beach habitat for roosting and nesting above the high tide line or the abundance of invertebrate prey species would not be diminished. Circumstances leading to closure and subsequent breaching at the mouth of the lagoon are largely controlled by large-scale seasonal and inter-annual patterns of drought and rainfall, such that any added effect of the project would be very small. Berm formation and estuary closure usually occur during the dry summer-fall months and are unlikely during the spring when SNPL are nesting. With the implementation of the SCMs, as described in Section 2.3.1.4, *Special Conservation Measures*, it is expected that consideration would be given to modifying operations (e.g., to allow increased river flows to facilitate natural breaching of a berm at the mouth) when it would help avoid worsening conditions in the estuary.

Potential Effect: Construction and operation of Alternative 1 could potentially have negative impacts on the habitat of the federally listed and endangered Arroyo Toad (ARTO) species.

Findings: Alternative 1 may affect and is likely to adversely affect a small number of ARTO due to construction-related risks of injury or mortality which cannot be completely eliminated; a total of 119 adult arroyo toads may be located within the CUP construction Project Footprint, in addition to potential metamorphs. With the implementation of SCMs for temporary and permanent disturbance of riparian and aestivation habitat, minor short-term and negligible long-term adverse effects to individual toads would occur from construction. These impacts represent a fraction of the available arroyo toad habitat within the affected populations and are largely temporary. USFWS (2016) concludes that the restored areas after construction will be reoccupied by ARTO shortly following restoration efforts, that the permanent loss of habitat only represents a fraction of the thousands of acres of occupied ARTO habitat on MCB Camp Pendleton and rangewide, and that the potential loss of ARTO due to construction is not anticipated to increase the extinction risk of the Lower SMR population of ARTO.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Depending on the nature of hydrologic modifications to the river system with operations, Alternative 1 may affect and is likely to adversely affect breeding arroyo toad habitat and the population in the SMR downstream of the proposed diversion. The decrease in water flow to the lower reaches of the SMR over a 50-year modelled period could have adverse effects slow-flowing areas that arroyo toads use for egg deposition and breeding support habitat, thereby affecting the population size on MCB Camp Pendleton. Using hydrologic modelling, it is estimated that over a 50-year period, surface flow in the SMR below the weir will decrease by 11.6% and ET by 10.2%. In addition, in Survey Blocks 4-8, surface flow in the SMR will decrease by 14.6%. Factors that influence the quantity of impacted stream-supported habitat include soil moisture, soil composition, and depth to water. The AMP/FOP would implement a hydrologic and soil moisture monitoring program, in combination with an arroyo toad monitoring program, to develop the relationship between groundwater levels and arroyo toad habitat along the SMR corridor. Impacts to arroyo toad will be minimized with conditions named in the AMP/FOP and SCMs in Section 2.3.2.1.

Restoring 225 acres of riparian habitat on MCBCP has increased the baseline of available breeding, feeding, and sheltering habitat for arroyo toad populations on MCBCP, making them more resilient to future operational impacts. Preservation of habitat in the OSMZ could have long-term beneficial effects on ARTO that may, to some extent, offset potential adverse effects on the population in the Lower SMR. Preservation and management of riparian habitat for the ARTO in-lieu fee program (SCM 9 in Section 2.3.1.4) will offset potential adverse effects on the population in the Lower SMR. USFWS (2016) anticipates a reduction in the overall population of arroyo toads on the Lower SMR due to future operations, however the SCMs will limit reduction in surface flows due to future CUP operations so that they are no greater than modeled as part of this consultation. This measure will maintain flows sufficient to ensure regular breeding and a stable population of arroyo toads on the Lower SMR. USFWS 2016 opinion is that Alternative 1 will not appreciably reduce the numbers, reproduction, or distribution of arroyo toads on MCBCP or range wide or significantly impact recovery of the species. (Finding 1).

Facts in Support of Finding:

Construction. Based on the acreage of immediate construction impacts, i.e., work areas, plus reasonable buffer distances for incidental disturbance (see Appendix C-3) there are approximately 25.72 acres (10.41 hectares) of ARTO occupied riparian, freshwater, and open water habitat (i.e., breeding habitat) subject to direct effects by temporary and permanent construction in the Alternative 1 area on MCB Camp Pendleton. In addition, there are approximately 1.91 acres (0.77 hectares) of suitable ARTO aestivation (i.e., sometimes referred to as “upland” habitat) habitat on MCB Camp Pendleton that may incur direct effects by temporary and permanent construction in the Alternative 1 area on MCB Camp Pendleton. This habitat is located in the area of the inflatable weir diversion, O’Neill Ditch, production wells, conveyance pipelines, HDD drilling locations, and permanent access roads to the pipelines. It is recognized that ARTOs from a larger area, extending throughout the floodplain and to an unknown degree into adjacent uplands, may move through the Action Area and thereby be

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

affected. The area of potential indirect effects is substantially larger as noted below under Operations.

Construction would permanently affect approximately 5.18 acres (2.10 hectares) of ARTO occupied riparian habitat, which will be mitigated in accordance with MCB Camp Pendleton's Riparian/Estuarine BO (USFWS 1995a; see SCM-9 in Section 2.3.2.1). The analysis names approximately 2.14 acres of freshwater and riparian habitat at the Lake O'Neill ditch as being permanently impacted by the Proposed Action; although ARTO would not deposit egg strings within the Lake O'Neill ditch, the habitat is still considered breeding habitat for it is riparian habitat that toads may forage in or traverse. Construction would temporarily affect approximately 20.54 acres (8.31 hectares) of ARTO occupied riparian habitat on MCB Camp Pendleton, which will be restored following SCM-58 in Section 2.3.2.1. Construction would permanently affect approximately 0.26 acres (0.11 hectares) of ARTO upland aestivation habitat, which will be compensated for in accordance with SCM-9 in Section 2.3. Construction would temporarily affect approximately 1.65 acres (0.67 hectares) of ARTO upland aestivation habitat on MCB Camp Pendleton, which will be restored following SCM-58 in Section 2.3; this acreage is reflected in Table 5-10.

Potential direct effects to ARTO individuals could occur within the proposed construction areas. During construction in ARTO habitat, ARTO that reside in or attempt to move through the project area would be at risk of injury or mortality from foot and vehicle traffic and earth-moving activities. ARTO behavior (foraging, breeding, and movement to and from riparian and adjacent aestivation habitats) may also be disrupted. Injury or mortality of tadpoles or eggs and instream disturbance of algal mats, sand bars, or sandy banks used by ARTO would be minimal since HDD drilling would be implemented at the Santa Margarita River crossing thus avoiding the instream channel. Instream construction of the weir diversion structure would take approximately 2 months during the dry season, but within the construction footprint at this location, low-flow stream channels are not present directly above or below the weir to elicit ARTO breeding.

Arroyo toad density estimates were used in MCB Camp Pendleton's Basewide Utilities Infrastructure Biological Opinion (Basewide Utilities Infrastructure BO [USFWS 2010]) to help analyze the effects of the action on the arroyo toad. A similar analysis can be made using the same density estimates for the Santa Margarita watershed that was used in USFWS 2010, 0.72 arroyo toads/acre in upland (i.e., named aestivation habitat in this BA) habitat and 4.6 arroyo toads/acre in riparian (i.e., breeding) habitat.

Therefore, Alternative 1 may result in 1.91 acres (0.77 hectares) of impacts (both permanent and temporary) to aestivation habitat within the Santa Margarita watershed, which could result in impacts to 1 arroyo toad. Alternative 1 may result in 25.72 acres (10.41 hectares; both permanent and temporary) of impacts to arroyo toad riparian breeding habitat within the Santa Margarita watershed, which could result in impacts to 118 arroyo toads; a total of 119 adult arroyo toads (rounded up to 120) may be located within the CUP construction footprint. Note that this estimate excludes metamorphs, which could significantly increase the number of arroyo toads impacted by construction from Alternative 1. However, the minimal footprint needed at the weir

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

and at the HDD drilling locations will be surveyed by the biological monitor prior to construction impacts, thus reducing potential impacts to metamorphs.

Effects to ARTO would be minimized through implementation of the SCMs listed in Section 2.3.2.1. Based on relatively limited areas of effect and implementation of these measures, the potential for an adverse effect on individual ARTO would be minimized. Nevertheless, a few individuals may unavoidably be injured or killed during construction activities, although this would not affect population numbers or distribution on MCB Camp Pendleton. USFWS 2016 estimates that if 75 percent (or 90 individuals) of the 120 arroyo toads in the project footprint are successfully removed, then an estimated 25 percent (or 30 individuals) of the arroyo toads within the impact area will remain. USFWS (2016) assumes that all arroyo toads remaining in the impact area will be killed or injured, but few, if any, will be seen.

Operations. Depending on the nature of hydrologic modifications to the river system with operations, Alternative 1 may affect and is likely to adversely affect breeding ARTO habitat and the population in the SMR downstream of the proposed diversion (refer to Appendix C-4 for a more detailed description of the expected impacts to ARTO from the operation of Alternative 1). The operation of the inflatable diversion weir would include its lowering during peak flood events in order to allow sediment that has accumulated behind the weir to be flushed downstream. After the weir is lowered, as the pulse of sediment moves downstream, and as water velocities drop, coarser sediments would be left at the margins of the floodplain where waters have receded or tend to accumulate in areas of deep, slow-moving water. A renewed sediment supply for the lower part of the river would allow more natural geomorphic adjustments in channels, bars, and floodplain vegetation to occur, which would be beneficial to the ARTO in the long term.

However, the greatest impact on ARTO populations would be the increase of diversions and groundwater pumping to increase the sustained basin yield of the Lower SMR Basin. Diversion and recharge of surface water would be increased during Above Normal and Very Wet hydrologic conditions and curtailing groundwater pumping during dry hydrologic conditions; as a result, the Proposed Action would result in reduced surface flows in the SMR downstream from the inflatable weir except during Extremely Dry/Very Dry hydrologic conditions. Water withdrawals from the SMR would reduce flows, probably reducing the extent and seasonal persistence of shallow pools and slow-flowing areas favored by ARTO.

Since water diversions would occur during the breeding period for ARTO on MCB Camp Pendleton (15 March to 15 August), changes in surface water flow could prevent reproduction or survival of individuals. Since the number of ARTO individuals impacted is impossible to predict, the LSMR Model (see Section C-4) results were used to calculate the areal extent of impacted stream due to project conditions. With the Proposed Project (CUP Model run), an 11.6 % overall impact to the stream corridor is predicted over 50- years on modelled pumping and diversions. The decline in mean annual surface flow will mean less breeding habitat available for arroyo toads, with a proportional decline in egg laying and production of juvenile arroyo toads on the Lower SMR, all of which will contribute to a reduction in the future arroyo toad population on

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

the Lower SMR. While arroyo toads can tolerate and persist in a wide range of riparian habitat conditions, Alternative 1 operations are anticipated to result in a decrease in quantity and quality of the available riparian habitat, a reduction of the invertebrate food prey base available, and increased exposure of arroyo toads to depredation, which will also contribute to a decrease in the arroyo toad population along the Lower SMR (USFWS 2016). To calculate impact acreage on arroyo toad habitat from operations, the evapotranspiration (ET) area outside of the low flow channel was evaluated based on analysis developed for the LSMR Model's evapotranspiration calculations. The model simulates phreatophyte ET that relies on groundwater and does not account for the water demand met by precipitation (e.g. grasses and shrubs that rely on precipitation). The datasets for the model included infrared and aerial photographs from 1980, 1982, 1989, and 1993; and Camp Pendleton's 1997 riparian vegetation survey. The phreatophyte ET was calculated by the model using a maximum potential ET rate, plant extinction depths, and groundwater levels; ET is estimated to decrease by 10.2%. Using recent aerial imagery, and basing the analysis on current vegetation conditions and developed areas within the Lower SMR floodplain, USFWS 2016 determined that about 2,223 acres of riparian habitat (including 135.70 acres of open water wetland habitat calculated in the MCBCP 2015) occurs between the location of the new weir and Stuart Mesa Road. Using density estimates from BUI (as used in the construction impacts analysis; 4.6 toads/acre), it is estimated that over 10,000 ARTO (juveniles, subadults, adults; 4.6 ARTO/acre x 2,223 acres = 10,226 ARTO) may occur in the lower reach of the SMR that is likely to be affected by Alternative 1. A 10.2 percent reduction in overall riparian vegetation cover over time is equivalent to about 225 acres (10.2% of 2,223 acres = 226.75) of impacts.

Following review of the September 2015 Biological Assessment (BA), a request was made by the USFWS to investigate impact to water resources in Survey Blocks 4 through 7 due to the critical nature of these reaches to support ARTO habitat (as defined during annual ARTO monitoring as containing dense populations of ARTO). Therefore, the Lower Santa Margarita River (LSMR) Model was refined that increased the predictive accuracy by relying on observed hydrological and biological datasets. In order to establish accountability and provide a physical relationship between historical and CUP operational data in the future, the investigative area was expanded to include Segment 8 which contains the long-term USGS stream gauge at Ysidora (see Appendix C-5). The results from the 10-year model were correlated with the 50-year model to assess the impact at survey blocks 4 to 8 during the balanced hydrologic period, showing a 14.6% decline in mean annual surface flow. Impacts occur during Below Normal and some Above Normal Hydrologic conditions due to a shift in the occurrence interval.

Effects to ARTO would be minimized through implementation of the SCMs listed in Section 2.3.2.1, including those based upon the modelled 11.6 % overall impact to the overall stream corridor and 14.6% decline in Survey Blocks 4 to 8 as predicted over 50-years on modelled pumping and diversions. USFWS 2016 states that successful arroyo toad breeding on the Lower SMR may not occur as extensively as it has in the recent past, but breeding should still occur on a regular basis. The overall arroyo toad population should continue to remain viable, though at a reduced level. USFWS 2016 suggests that with continued implementation of conservation

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

measures, the arroyo toad population on the Lower SMR should be resilient to further declines or potential extirpation.

The Marine Corps is offsetting these impacts by deducting credits from the Riparian Bank, preserving the OSMZ, and contributing to the ARTO in-lieu fee program. 225 acres of riparian habitat on MCBCP has been restored by removing non-native invasive plant species consistent with the Riparian BO (coined the Riparian Bank; CM 9). This has increased the baseline of available breeding, feeding, and sheltering habitat for arroyo toad populations on MCBCP, making them more resilient to future operational impacts.

Preservation of habitat in the OSMZ could have long-term beneficial effects on ARTO that may, to some extent, offset potential adverse effects on the population in the Lower SMR. The 1398 acre OSMZ parcel is comprised of 115.25 acres of oak woodland, 37.81 acres of non-vegetated floodway, and 278.05 acres of riparian habitat for a total of 431.11 acres of riparian habitat significant to arroyo toad. These three habitat types surrounding the SMR support ARTO aestivating and foraging habitat. Conservation of the entire OSMZ watershed (upland areas) benefits MCBCP's arroyo toad population, since the OSMZ is directly upstream the Base along the SMR. Both the riparian and upland areas in the OSMZ act as a natural filter from the surrounding agricultural and urban areas, which attenuates pesticides and increased nutrients from those areas.

Preservation and management of riparian habitat for the ARTO in-lieu fee program (SCM 9 in Section 2.3.1.4) will offset potential adverse effects on the population in the Lower SMR. Since conservation of the OSMZ may not fully offset impacts to arroyo toad breeding habitat caused by CUP operations, the Marine Corps will also fund an "in lieu fee" with \$2,316,000.24 that will be used to conserve additional property off of MCBCP that contains open water arroyo toad breeding habitat (CM-73.C). The in-lieu-fee cost was derived from off-setting 26.8% of projected operational impacts (project impacts equal 225 acres at a 2:1 ratio, for a total of 450 acres); therefore, 26.8% is the equivalent to off-setting 120.625 acres of the total impact. Cost of impact per acre was loosely based from Appendix 1 of the Riparian BO (USFWS 1995a) section 11.5.5 Alternative Mitigation Measures at \$12,000 per acre (in 1994 dollars extrapolated forward for 2015 rate of inflation is \$19,200). Although specific properties to be conserved have not been identified, USFWS 2016 expects that this fund will be used to conserve properties that have a significant amount of occupied open water arroyo toad breeding habitat within the southern California coastal region (i.e., within San Diego or Orange Counties), which may be threatened by the loss or degradation of this habitat.

Potential Effect: Construction and Operation of Alternative 1 could have potentially significant impacts on the federally listed and endangered San Diego Fairy Shrimp/Riverside Fairy Shrimp (SDFS/RFS) species.

Findings: Because SDFS/RFS have not been documented in the Alternative 1 action area, no potential temporary or permanent disturbance would occur. Alternative 1 would have no effect on SDFS/RFS. No significant impacts would occur. (Finding 1)

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Facts in Support of Findings:

Construction. Fairy shrimp have not been documented in Alternative 1 action areas; therefore, construction will not affect SDFS/RFS. To minimize risks to SDFS/RFS potentially occurring within the proposed construction areas, the SCMs listed under *Biological Resources* in Section 2.3.1.4 would be implemented.

Operations. Fairy shrimp have not been documented in Alternative 1 areas or ROI; therefore, no adverse operational effects to SDFS/RFS would occur.

Potential Effect: Construction and Operation of Alternative 1 could have potential significant impacts to the federally listed and endangered Stephens' Kangaroo Rat (SKR) species.

Findings: Alternative 1 may affect and is likely to adversely affect SKR due to construction-related removal of occupied habitat, albeit temporary, which cannot be completely eliminated. A total of two SKR territories within the CUP construction Project Footprint is estimated to have greater than 20% of the territory impacted, thus resulting in a substantial, albeit short-term impact. Although, USFWS 2016 believes that these SKR will be relocated with exclusionary trapping and that construction activities will not lead to mortality or injury of any SKR. With the implementation of SCMs for temporary and permanent disturbance of SKR-occupied habitat, minor short-term and negligible long-term adverse effects to individual kangaroo rats would occur from construction. These impacts represent a fraction of the available SKR habitat within the affected populations and are temporary. Therefore, no effect on the overall distribution or abundance of the species (i.e., no long-term effects on the SKR population) is anticipated. In addition, USFWS 2016 expects the restored areas to be re-occupied shortly after restoration efforts. (Finding 1).

Facts Supporting Findings:

Construction. SKR surveying was conducted within the Alternative 1 project footprint, and within 300 feet from the footprint in appropriate habitat, in October and November 2015. Four locations of SKR were trapped during the survey effort: one within the footprint, and three within the 300 ft. buffer (Montgomery 2015).

With project construction of Alternative 1, there is a total potential effect to approximately 1.29 acres of SKR occupied habitat; all effects are temporary from the construction of the Bi-directional Pipeline and located on Detachment Fallbrook (refer to Appendix C). An impact of 1.29 acres represents about 1 percent of the 2007 estimate, and about 0.3 percent of the 2001-2002 estimate of population on Detachment Fallbrook; USFWS 2016 states that because only a fraction of the population will be impacted, displacement of SKR in the project footprint is not anticipated to have a long-term effect on the SKR population on Det. Fallbrook. A territory is considered significantly impacted if greater than 20% will be impacted. (Note: to estimate significant impacts, a 50-meter buffer was created around each positive SKR trap location during the 2015 effort. The 50-meter buffer represents an estimate of SKR "typical movements", where

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

the individual typically moves short distances within its home territory). In total, two of the four territories of SKR have significant impacts.

The area of actual effect could potentially be smaller than the acreages described above. This is because the occupied temporary impact area occurs along the bi-directional pipeline, which would only involve temporary impacts inside a 50-ft (15-m) wide corridor located within the larger 100-ft (30-m) wide buffer corridor used for acreage calculations. An analysis of the wider 100-ft (30-m) buffer areas has been provided to allow the flexibility of placing the pipeline anywhere within the buffer area to meet site specific construction needs and minimize effects.

Individual SKR will be trapped out of the project footprint, and may be displaced to adjacent habitat, especially along the pipeline corridors. With implementation of the proposed conservation measures, USFWS 2016 predicts that death or injury of up to two SKR with home ranges overlapping the bidirectional pipeline construction footprint will be avoided with siting the pipeline away from habitat and installing exclusionary fencing.

Operations. As described for other federally-listed species, the operational effects include both diversion of water at the weir and ground-water pumping and their associated impacts to individuals and habitat. The combination of these operations will decrease the surface flow in the Santa Margarita River and may potentially impact native habitat around the well locations, where ground-water is being pumped out of the watershed. SKR habitat is located outside of the floodplain of the SMR, and should not be impacted by operations. 9 out of 16 wells (including both operational and proposed) are located within riparian habitat. The upland well locations are located within grassland habitat near the Santa Margarita River on MCBCP; the closest SKR population to a groundwater well is 2429.53 ft to the southeast, at 25 Area Combat Town. Since SKR occupy over 0.46 miles from groundwater pumping wells, direct and indirect effects from operations of the Project Action are not predicted to impact SKR-occupied habitat.

Potential Effect: Construction and Operation of Alternative 1 could have potential significant impacts to the state-listed threatened and endangered Belding's Savannah Sparrow (BSSP) Species.

Findings: With the implementation of the SCMs, as described in Section 2.3.1.4, *Special Conservation Measures*, it is expected that consideration would be given to modifying operations (e.g., to allow increased river flows to facilitate natural breaching of a berm at the mouth) when it would help avoid worsening conditions in the SMR Estuary. Given the persistence of the BSSP population in the SMR Estuary throughout recent history, including periods of prolonged closure that occurred prior to and during 2010, the increased possibility of closure does not pose a threat to the local population. Alternative 1 would not substantially increase the likelihood or duration of estuary closures. Therefore, Alternative 1 would not have a significant impact on BSSP (Finding 1).

Facts in Support of Findings:

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Construction. As of 2010, 100 territories of BSSP were found in the SMR Estuary. Under the Proposed Action, no construction activities would occur in or near the SMR Estuary. Therefore, no effects to BSSP are expected from construction; the southernmost construction site in the Proposed Action footprint is over 8 kilometers upstream from the Santa Margarita Estuary, where Belding's Savannah Sparrow occurs.

Operations. As discussed for RIRA, CLTE, and SNPL, it is unlikely that tidal circulation and habitat conditions in the SMR Estuary would be negatively impacted by Alternative 1. The closure and subsequent opening of the mouth of the estuary is largely controlled by large-scale conditions of climate and long shore sediment transport. Existing conditions that lead to estuary closure (seasonal low flows) and breaching of the berm by the first high flows of the rainy season would be little if at all affected by Alternative 1. With the implementation of the AMP/FOP, as described in Section 2.3.1.4, *Special Conservation Measures*, it is expected that consideration would be given to modifying operations (e.g., to allow increased river flows to facilitate natural breaching of a berm at the mouth) when it would help avoid worsening conditions in the SMR Estuary.

Potential Effect: Construction and operation of Alternative 1 could significantly impact other special status plant species.

Findings: Special status plant species would potentially be impacted by construction and operational activities. However, no significant impacts to these species local populations are expected from the implementation of Alternative 1. With the successful implementation of the SCMs and the AMP/FOP, as described in Section 2.3.1.4, impacts would be less than significant (Finding 1).

Facts in Support of Findings: As noted in Section 3.3 there are two species of special status plants that were documented in the ROI that are likely to be impacted by Alternative 1. Four additional special status plants are known to occur in the OSMZ: Engelmann oak, Fish's milkwort, ocellated Humboldt lily, and rainbow manzanita (RM). These species would benefit from the protection of the OSMZ under Alternative 1 (refer to Table 3.5-5 in Section 3.3).

Construction. Construction impacts would be temporary.

Operations. Operational impacts include potential re-disturbance of plants during maintenance and repairs. As for construction, these impacts would be temporary and less than significant

Potential Effect: The Construction and operation of Alternative 1 could have potential significant impacts on Upland special status wildlife species.

Findings: Upland special status wildlife species would not be significantly impacted by construction or operational activities. Protection and management of habitat within the OSMZ would have beneficial impacts (Finding 1).

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Facts in Support of Findings: Upland special status species that are present in the ROI include the species listed in Table 3.3-6 that occur in chaparral, CSS, grassland, and woodland habitats. Protection and management of habitat within the OSMZ would have beneficial impacts.

Construction. Many special status species are known or likely to occur in CSS or other upland habitats within the ROI (Table 3.3-6). Individuals of these species may be temporarily impacted by construction, but such impacts would be localized and minimized by proposed conservation measures and would not affect regional population sizes, distribution, or increase the need for future protection by listing under the state- or federal ESA. Therefore, these impacts would not be significant.

Operations. Maintenance or repairs during operational activities have the potential to re-disturb upland habitats. However, operations would not significantly impact upland special status wildlife species.

Potential Effect: The Construction and operation of Alternative 1 could have potential significant impacts on Aquatic and Riparian special status wildlife species.

Findings: Aquatic and riparian special status wildlife species would potentially be impacted by construction and operational activities. With the successful implementation of the SCMs and AMP/FOP, as described in Section 2.3.1.4, impacts would be less than significant (Finding 1).

Facts in Support of Findings:

Aquatic and riparian special status species that are present in the ROI include the arroyo chub, coast range newt, western spadefoot toad, two-striped garter snake, western pond turtle, yellow-breasted chat, and yellow warbler.

Construction. The majority of construction impacts would be temporary, with a permanent loss of a projected 5.20 acres of riparian habitat. Individuals of these species may be temporarily impacted by construction, but such impacts would be localized and minimized by proposed conservation measures and would not affect regional population sizes, distribution, or increase the need for future protection by listing under the state- or federal ESA. Therefore, these impacts are considered adverse, but less than significant.

Operations. As previously discussed in depth for federally-listed and state-listed species, effects of water withdrawals on the aquatic habitat of the SMR are potentially significant because of its regional importance to aquatic and riparian species. Operations would potentially reduce surface flow of the SMR during the toad breeding season, and modify aquatic habitat along the Lower SMR, but would not eliminate habitat for these species, all of which are widely distributed in southern California. Therefore, operational impacts are considered potentially adverse but with the successful implementation of the AMP/FOP, as described in Section 2.3.1.4, *Special Conservation Measures*, less than significant. Protection and management of aquatic habitat in the OSMZ would benefit all of the aquatic special status species, at least partially offsetting impacts further downstream.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

E. Cultural Resources

Potential Effect: Implementation of Alternative 1 could cause significant impacts to cultural resources.

Findings: As a result of SCMs under Cultural Resources in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR incorporated into the project, potential significant impacts would not occur; therefore, no mitigation measures would be required (Finding 1).

Facts in Support of the Findings: Record searches and archaeological surveys have been investigated and documented within the proposed project site. No cultural resources have been identified within the area of potential effect for the following project components:

- Replacement of Exiting Sheet Pile Diversion with Inflatable Weir Diversion Structure,
- Improvements to Percolation ponds 1-7,
- Groundwater Production Wells and Associated Collection System Infrastructure, and
- FPUD WTP.

Therefore, no effects to cultural resources would occur. Although no cultural resources have been identified within the area of potential effect for the above listed project components, the SCM listed under *Cultural Resources* would be implemented in the event that unknown cultural resources are encountered during construction. Therefore, with implementation of this SMC, as needed, no significant impacts to cultural resources would occur during construction of the above listed components.

The SCADA System would not involve construction under Alternative 1 and would therefore, not impact cultural resources.

The following project components do have known cultural resources.

MCB Camp Pendleton

Improvements to O'Neill Ditch and Headgate

A total of four cultural resources were identified within the area of potential effect for this project component. Improvements to O'Neill Ditch (SMR-CUP 4) would include the removal of three newly identified historic culverts (SMR-CUP 1-3) for replacement, along with an increase in ditch capacity. The northern section of the present-day O'Neill Ditch maintains a similar alignment to the original main ditch, but the original irrigation system is no longer intact. It is likely that the 1883 main ditch has been modified over time. It is more likely that a ditch has been reconstructed in a similar alignment by the military in support of the Percolation Basin. The historic culverts (SMR CUP 1-3) and O'Neill Ditch (SMR-CUP 4) are ineligible for listing on the National Register of Historic Places. Should buried cultural resources be encountered during

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

construction activities, the SCM listed under Cultural Resources would be implemented. Therefore, no significant impacts would occur with implementation of this component.

Other Components

No sites were identified within the area of potential effect associated with the groundwater production wells, collection system infrastructure, and bi-directional pipeline on MCB Camp Pendleton. However, for any drilling/trenching operations within the upper 15 ft (5 m) of the floodplain, which has the potential for buried deposits, monitoring is required and would be conducted by a qualified archaeologist and Native American monitor approved by the Cultural Resources Branch. Should buried cultural resources be encountered during construction activities, the SCM listed under Cultural Resources would be implemented. Therefore, no significant impacts to cultural resources would occur as a result of implementation of these components.

DET Fallbrook

Water Conveyance/Distribution System, including Bi-Directional Pipeline to FPUD

Table 4.4-1 provides a summary of NRHP eligibility status and recommendations for each of the cultural resources identified within area of potential effect to the bi-directional pipeline along Ammunition Road on DET Fallbrook. There are three known cultural resources within the APE of this project component on DET Fallbrook: SDI-10158, Segment C of SDI-14005H, and -14381; while SDI-14375 would be avoided by a realignment of the pipeline. SDI-10158 is an NRHP eligible site, but the portion that the APE passes through was observed to be disturbed from previous grading activities. Segment C of SDI-14005H and SDI-14381 are both NRHP ineligible sites. Monitoring by a qualified archaeologist and Native American monitor approved by the Cultural Resources Manager for DET Fallbrook is required for SDI-10158 and -14381 during construction because the APE passes through both and for SDI-14375 due to its close proximity to the APE, as there is a potential for inadvertent discoveries. Additionally, a monitoring buffer of 100 ft (30 m) around each of these three sites is recommended. No monitoring is recommended for Segment C of SDI-14005H. Should buried cultural resources be encountered during construction activities, the SCM identified listed under Cultural Resources would be implemented. Therefore, no significant impacts to cultural resources would occur with implementation of this component of

Community of Fallbrook

Water Conveyance/Distribution System, including Bi-Directional Pipeline to FPUD

One cultural resource exists within this project component. The Martin Reservoir in the Gheen Zone was constructed for the FPUD as a PWA-funded project between February and June 1939, and it was evaluated for its possible eligibility to the NRHP. Although the Martin Reservoir was constructed as a part of a national program through the PWA, an association with the PWA is not enough to make the structure eligible. The Martin Reservoir is ineligible under Criteria A, B, C, and D of the National Register of Historic Places. The Martin Reservoir was also evaluated for its possible eligibility to the California Register of Historic Resources under the four criteria and is recommended not eligible on a state or local level to the California Register of Historic Resources. Should buried cultural resources be encountered during construction activities, the

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

SCM listed under *Cultural Resources* would be implemented. Therefore, no significant impacts to cultural resources would occur with implementation of this component.

MITIGATION MEASURES: None required.

F. Air Quality

Potential Effect: Potential air quality impacts associated with the implementation of Alternative 1 include construction emissions and emissions associated with facility operations and maintenance activities. Potential air quality impacts from proposed construction activities would occur from (1) combustion emissions due to the use of fossil fuel-powered equipment; and (2) fugitive dust emissions (PM₁₀) during construction activities, earth-moving activities, and the operation of equipment on bare soil.

Findings: With the implementation of the SCMs listed under Air Quality in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR to reduce emissions of particulate matter (PM₁₀ and PM_{2.5}), the estimated construction emissions as a result of implementation of Alternative 1 would be below the *de minimis* levels for CAA conformity; therefore, no significant impacts to air quality would occur (Finding 1).

Alternative 1 would conform to the San Diego Air Basin SIP and would not trigger a conformity determination under Section 176© of the CAA. The USMC has prepared a Record of Non-Applicability for CAA conformity (Finding 1).

Facts in Support of Findings: Fugitive dust control measures that are considered part of proposed project would be implemented as SCMs (refer to SCMs listed in Section 2.3.1.4) to reduce emissions of particulate matter (PM₁₀ and PM_{2.5}) to the extent possible. These measures include watering unpaved roads and actively graded surfaces three times daily, as well as reducing speeds on unpaved roads to 15 mph (24 kph), suspending grading activities if wind speeds exceed 25 mph (40 kph), and replacing ground cover in graded areas as soon as possible. These measures have been taken into account in the emission calculations for Alternative 1.

Potential Effect: Air quality impacts from proposed operational activities could potentially occur due to indirect emissions from energy use to power pumps, the FPUD WTP, and other support equipment. Emissions could also potentially result from periodic maintenance required to maintaining percolation ponds, and other maintenance activities.

Findings: Emissions associated with operational and maintenance activities under Alternative 1 would be below the *de minimis* levels for CAA conformity; therefore, no significant impacts to air quality would occur (Finding 1).

Alternative 1 would conform to the San Diego Air Basin SIP and would not trigger a conformity determination under Section 176© of the CAA. The USMC has prepared a Record of Non-Applicability for CAA conformity (Finding 1).

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Facts in Support of Finding: Due to the low energy use requirements for the FPUD WTP, emissions associated with the indirect emissions from energy use to power pumps, the FPUD WTP, and other support equipment would be insignificant and were therefore not included in the operational emissions calculations. Maximum daily and annual operational emissions on any single day would be associated with the periodic maintenance of percolation ponds. Periodic maintenance activities for percolation ponds would require 30 days in any single year.

G. Hazardous Materials and Wastes

POTENTIAL EFFECTS: CONSTRUCTION ASSOCIATED WITH ALTERNATIVE 1 COULD INCREASE HUMAN HEALTH RISK OR ENVIRONMENTAL EXPOSURE TO HAZARDOUS MATERIALS OR HAZARDOUS WASTES.

Finding: Through the implementation of SCMs listed in Section 2.3.1.4, Special Conservation Measures, no increase in human health risk or environmental exposure to hazardous materials or hazardous wastes would result from construction associated with Alternative 1; therefore, no significant impacts would occur due to construction activities under Alternative 1 (Finding 1).

Facts in Support of the Finding: Hazardous materials used during construction would include fuel and hydraulic fluid contained in heavy equipment, vehicles and vessels performing the construction tasks, and paints, coatings and sealants to be used on structures such as the FPUD WTP and inflatable weir compressor building.

Excavation, construction, and pipeline assembly, and groundwater well installation are not anticipated to involve hazardous materials other than those described above. Neither the rubber-gasketed steel pipeline, nor the heat-welded HDPE pipeline requires the use of external coatings or sealants.

Nonhazardous waste from construction may include short sections of HDPE and steel piping; boxes and crates used in the shipment of materials and rubble from trenching paved areas. Construction workers would use portable chemical toilets during construction.

On MCB Camp Pendleton and DET Fallbrook, the NAVFAC SW Contracting Officer would require that project design adhere to the standards and provisions included in CFR Title 40, §§ 260-265 and CFR Title 49, §§ 172, 173, and 178; Title 22 of the CCR (Division 4.5 Health Standards for the Management of Hazardous Waste); and County of San Diego Ordinance Title 6, Division 8, Chapter 11, as well as other regulations related to health and safety and emergency response. Additionally, MCB Camp Pendleton would require that hazardous waste be removed from MCB Camp Pendleton within 60 days of initial generation and that a Uniform Hazardous Waste Manifest would be prepared and brought with the waste to the Hazardous Waste Branch for signature on the way out of MCB Camp Pendleton for disposal.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Construction contractors involved with Alternative 1 would be subject to all federal, state, and County of San Diego requirements for hazardous materials and hazardous waste management, and would be required to prepare an EPP for approval by the NAVFAC SW Contracting Officer prior to the start of any construction activity on MCB Camp Pendleton and DET Fallbrook (MCB Camp Pendleton 2009a). The EPP would include measures the contractor would take to prevent or control release of contaminants to air, land, and water during construction activities.

The EPP would address:

- Solid and sanitary waste management,
- Recycling project waste and demolition debris,
- Air pollution controls on equipment and operations,
- Application of paints and coatings,
- Contractor parking and laydown,
- Equipment maintenance and fueling,
- Hazardous material use,
- Hazardous waste storage and disposal, and
- Procedures if site contamination is discovered.

The construction contractor would also be required to develop a project-specific construction SWPPP or use an existing Base-wide construction SWPPP. The SWPPP would specify BMPs to prevent construction pollutants from contacting stormwater, prevent erosion, eliminate or reduce non-stormwater discharges, and perform inspections of all BMPs (SWRCB 2009a). The SWPPP would also include

BMPs to minimize potential impacts related to the construction components, such as the use of sediment barriers, inlet covers, covering stockpiles, and inspecting equipment and vehicles for drips, and placing drip pans beneath vehicles and equipment (SWRCB 2009a). The SWPPP and project-specific or existing BMPs would be approved by MCB Camp Pendleton, DET Fallbrook, County of San Diego, and the SWRCB prior to initiating construction activities.

Contractors would be required to park their vehicles within staging areas designated by MCB Camp Pendleton ES, DET Fallbrook, and FPUD. No vehicle maintenance would be allowed in the staging areas. At MCB Camp Pendleton, vehicle fueling would be allowed only within fueling locations designated by MCB Camp Pendleton ES and approved by the MCB Camp Pendleton Fire Department. Contractors would also be allowed to store small amounts of fuel for small-engine powered equipment within the designated fueling location. At DET Fallbrook and within the community of Fallbrook, construction vehicle and equipment fueling would be subject to approval from the applicable jurisdiction. In the event that a spill occurs, the construction contractor would be responsible for spill response, cleanup, and regulatory reporting. As required, the applicable jurisdiction (i.e., fire department and/or San Diego RWQCB) would be contacted immediately to report any spills during construction.

Unused HDPE pipe sections would be suitable for use or recycling; the contractor's EPP would address disposition of excess/scrap HDPE material. Unused steel pipe would also be suitable for

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

use or recycling and would be addressed by the EPP. The contractor would be required to make arrangements for recycling or disposal of other solid wastes such as packing and building scrap materials at an appropriate solid waste facility with sufficient capacity to receive the waste, as agreed to by the USMC.

Construction related earth materials (rubble from trenching paved areas and dredged materials from O'Neill Ditch) would require appropriate disposal off-Base. The contractor would be required to make arrangements for disposal of such material originating at DET Fallbrook or FPUD, per USMC agreement.

Potential Effect: Significant impacts to IR activities at MCB Camp Pendleton could potentially occur with the installation of new production wells under Alternative 1.

Finding: With the implementation of SCMs listed in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, there would be no significant impacts to IR activities at MCB Camp Pendleton with installation of new production wells under Alternative 1 (Finding 1). There are no other IR sites or other types of cleanup sites within the project area at MCB Camp Pendleton; therefore, there would be no significant impacts to other IR activities or cleanup sites (Finding 1).

Facts in Support of the Finding: As indicated in SCMs listed in Section 2.3.1.4, Special Conservation Measures, the contractor would be required to coordinate with MCB Camp Pendleton's FFA team regarding placement of new groundwater production wells in relation to the location and status of MCB Camp Pendleton IR Sites 1119 and the 22/23 Area groundwater. The contractor would also be required to obtain from the IR Branch/RCRA Division current information about groundwater monitoring wells for the IR sites in the groundwater production well basin, their specific surveyed locations, and IR sites' groundwater quality monitoring program results when determining locations for new groundwater production wells. The location of these wells and the potential impact to IR sites due to groundwater pumping would be assessed using the best available data in the AMP/FOP. The results and actions developed from the AMP/FOP would be used to meet the goals and requirements of each IR site.

Potential Effect: Significant impacts to IR activities at DET Fallbrook could potentially occur with the installation of the bi-directional pipeline under Alternative 1.

Finding: There would be no significant impact to IR activities at DET Fallbrook with installation of the bi-directional pipeline under Alternative 1 (Finding 1).

Facts in support of finding: During the design phase the contractor would be required to coordinate with DET Fallbrook IR Program personnel to determine the exact boundaries of DET Fallbrook IR Sites 29 and 32; a route for the bi-directional pipeline would be surveyed within the 100-ft (30.5-m) buffer zone that avoid these two IR sites.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Potential Effect: Significant impacts to active CERCLA cleanup sites other sites identified by Cal EPA GeoTracker in the community of Fallbrook could potentially occur with the installation of the bi-directional pipeline under Alternative 1.

Findings: There would be no significant impact to active CERCLA cleanup sites or other sites identified by CAL EPA Geotracker in the community of Fallbrook with the installation of the bi-directional pipeline under Alternative 1 (Finding 1).

Facts in support of findings: No CERCLA sites or other sites identified by Cal EPA GeoTracker are located in the bi-directional pipeline ROI. Therefore, there would be no significant impact to active cleanup sites in the community of Fallbrook with installation of the bi-directional pipeline under Alternative 1.

Potential Effect: Contaminated soil or groundwater could be encountered during construction activities associated with Alternative 1.

Findings: Upon the implementation of SCM's for Hazardous Waste identified in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, impacts from contaminated soil or groundwater would be minimized to a level that is less than significant (Finding 1).

Facts in Support of the Findings: Construction contractors involved with Alternative 1 would be subject to all federal, state, and County of San Diego requirements for hazardous materials and hazardous waste management, and would be required to prepare an EPP for approval by the NAVFAC SW Contracting Officer prior to the start of any construction activity on MCB Camp Pendleton and DET Fallbrook (MCB Camp Pendleton 2009a). The EPP would include measures the contractor would take to prevent or control release of contaminants to air, land, and water during construction activities. The EPP would address procedures if site contamination is discovered.

Potential Effect: With the operation of Alternative 1 components, there could be an increase in human health risk or environmental exposure to hazardous materials or hazardous wastes.

Findings: With the implementation of the SCMs listed in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, no increase in human health risk or environmental exposure to hazardous materials or hazardous wastes would occur with operations under Alternative 1 (Finding 1).

Facts in support of findings: Hazardous materials associated with project operations would include paints and lubricants associated with maintaining the inflatable weir diversion structure, its compressor building, steel water conveyance pipeline, and tank components. Paints, lubricants, and fuels would be consumed during use, leaving no waste other than residue-coated containers.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Steel pipeline maintenance would consist of corrosion monitoring and occasional repairs as needed. Corrosion protection monitoring would include periodically taking electrical measurements at test stations installed on the pipe during construction in areas with potentially corrosive soils. When the pipelines are in use, possible loss of water and wastewater from the pipelines would be identified through line pressure monitoring and follow-up inspections by field technicians.

MCB Camp Pendleton

In accordance with County of San Diego requirements, Hazardous Materials Business Plans would be prepared for buildings in which hazardous materials or wastes would be present. All hazardous materials and wastes would be properly managed, segregated, labeled, and stored in accordance with all federal, state and County of San Diego regulations, and USMC requirements for hazardous materials management. Hazardous materials and hazardous waste storage areas would be inspected by the County of San Diego Department of Environmental Health.

DET Fallbrook

All hazardous materials and wastes would be properly managed, segregated, labeled, and stored in accordance with all federal, state and County of San Diego regulations, and DON requirements for hazardous materials management. Hazardous materials and hazardous waste storage areas would be inspected by the County of San Diego Department of Environmental Health.

FPUD

Hazardous materials associated with operations of the FPUD WTP would involve adding various water treatment chemicals to the water such as sodium metabisulphite (Na₂S₂O₅) for dechlorination prior to entry to the RO membranes; an anti-scaling agent for the RO equipment, sodium hydroxide (NaOH) for pH adjustment, and NaOCl for disinfection. While these chemicals are not hazardous when diluted in treated water, the bulk quantities and high concentrations of some chemicals used at the FPUD WTP may meet the criteria to be managed as hazardous materials.

Fuel for the FPUD WTP generator would be stored in an above ground storage tank that would comply with all federal, state, and County of San Diego requirements, and would be inspected regularly to ensure its integrity. The above ground storage tank would be equipped with a high-level indicator and alarm to prevent accidental releases during fueling operations. In accordance with County of San Diego requirements, Hazardous Materials Business Plans would be prepared for buildings in which hazardous materials or wastes would be present. All hazardous materials and wastes would be properly managed, segregated, labeled, and stored in accordance with all federal, state and County of San Diego regulations for hazardous materials management. Hazardous materials and hazardous waste storage areas would be inspected by the County of San Diego Department of Environmental Health.

The brine waste from the FPUD WTP would be discharged to the Pacific Ocean via FPUD's connection to the Oceanside Ocean Outfall. The brine discharge would meet California Ocean

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Plan (SWRCB 2009a) criteria for ocean discharge. None of the brine discharge would require handling or disposal as hazardous waste. FPUD's existing NPDES Permit (CA0108031) would be amended to include brine discharge from the project, and additional discharge is not expected to impact the ability to meet NPDES permit requirements, and discharge of the brine is not expected to impact the ability to meet NPDES permit requirements.

Potential Effect: Significant hazardous materials and waste impacts could potentially result from the installation of new groundwater production wells.

Findings: With the implementation of SCMs listed in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, Alternative 1 would not result in significant hazardous materials and wastes impacts (Finding 1).

Facts in support of the findings: During the final design phase, the contractor would acquire current information from the IR Branch /RCRA Division about groundwater monitoring wells for MCB Camp Pendleton IR Site 1119 and the 22/23 Area groundwater site, their specific surveyed locations, and both IR sites' groundwater quality monitoring program results when determining location(s) for new groundwater production wells.

The contractor would be required to coordinate with and obtain approval from MCB Camp Pendleton's FFA Team that the proposed locations and pumping rates for new groundwater production wells would minimize the potential for human exposure to contaminants in groundwater and would not impact IR activities at MCB Camp Pendleton IR Site 1119 or the 22/23 Area groundwater site. Available water quality, and other relevant hydrologic data, would be used by the AMP/FOP to assess whether or not impacts from project related groundwater production well locations would occur at IR sites.

Under Alternative 1, new well locations were sited, using available data and models, to avoid impacts to known contaminated groundwater sites based on information provided by MCB Camp Pendleton ES (MCB Camp Pendleton 2005), Parsons (2005, 2010), and Shaw Environmental Inc. (2005). Specifically, the proposed well locations were sited so that they were either cross-gradient or up-gradient of known plumes, including IR Site 1119 (Parsons 2012), so that groundwater pumping would not impact the mapped plumes. The groundwater level contours and gradients developed from the model simulation were reviewed at the locations of known contaminants under Alternative 1 pumping schedule. Review of these data indicated that known contaminate plumes would not be impacted by the placement of the proposed new production wells. All available VOC water quality data provided by MCB

Camp Pendleton ES was referenced during model simulation. Therefore, the new production wells are not expected to pull in contaminants from the contaminated portion of the aquifer and the operation of production wells would not impact IR cleanup operations. During future operations, the AMP/FOP would monitor and assess available water quality and water level data from all known IR sites to meet the FFA goals and objectives. Based on pre-determined thresholds directly related to measured parameters, the AMP/FOP would determine whether goals are being met. If threshold levels are exceeded and management goals are not met,

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

alternative courses of action consistent with MCB Camp Pendleton directives would be implemented. These courses of action may include, but not be limited to, shifting groundwater pumping to non-contaminated wells, well-head treatment for specific contaminants, other best management techniques, or curtailment of groundwater pumping.

H. Utilities

Potential Effects: Implementation of Alternative 1 could potentially disrupt utilities infrastructure/facilities which could result in interruptions in service for potable water, solid waste disposal, electrical power, or natural gas systems.

Findings: With the implementation of SCMs in Section 2.3.1.4, Special Conservation Measure, in the EIS/EIR, no significant impacts to existing utilities would occur during construction under Alternative 1 (Finding 1).

Facts in Support of Findings: The following components would involve construction activities in the vicinity of existing facilities infrastructure:

- *Production Wells and Collection System.* Most of the construction of new wells and collection piping would be away from major roads and utility corridors. However, there is a limited area where the piping would be constructed in and across Vandegrift Boulevard and the area around Haybarn Canyon where there are various existing underground utilities.
- *FPUD WTP.* The FPUD WTP would be constructed in the vicinity of the existing FPUD wastewater treatment plant where there are various existing underground utilities and overhead power lines.
- *Water Conveyance/Distribution System.* Construction of the water conveyance/distribution systems pipelines would be along Vandegrift Boulevard, Rattlesnake Canyon Road, and Fallbrook Road through MCB Camp Pendleton; Ammunition Road and various dirt roads through DET Fallbrook; and various roads within the community of Fallbrook. There are various underground utilities that exist in portions of this corridor within MCB Camp Pendleton, DET Fallbrook, and Fallbrook.

As indicated in SCMs listed in Section 2.3.1.4, *Special Conservation Measures*, pipeline alignments and construction footprints would be selected during project design to avoid or minimize disruption of existing electricity, natural gas, and water utilities. The location of underground utilities would be verified prior to excavation to further avoid impacts. Also, the design of new electrical transformers and panels that would be needed to supply power to the wells would be coordinated closely with MCB Camp Pendleton and SDG&E to minimize or eliminate any temporary disruption of power supplies during construction and start-up. Therefore, through appropriate design details and construction contract provisions, no significant impacts to existing utilities would occur during construction under Alternative 1

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Potable Water Supply

Potable water supplies within the ROI would not be impacted because nonpotable water would be provided for grading and dust control activities by the construction contractor. Therefore, no impacts to potable water supply would occur during construction under Alternative 1.

Solid Waste Collection and Disposal

Solid waste (i.e., construction debris) generated by the construction of pipelines and associated facilities would be recycled or disposed of properly by the construction contractor. Solid waste would continue to be disposed at either the San Onofre or Las Pulgas landfills, which are not expected to reach their capacities until the years 2183 and 2047, respectively.

Material dredged from O'Neill Ditch would be placed in Ponds 6 and 7 for dewatering until final disposition. There is a potential for use as daily cover at the Las Pulgas landfill on MCB Camp Pendleton. Therefore, no significant impacts to solid waste collection and disposal would occur under Alternative 1 if dredged material is used as daily cover.

Although the impacts are not significant, as part of the continuing commitment of the Marine Corps to waste minimization, the construction contractor would be required to follow MCB Camp Pendleton's reuse and recycling program goals and guidelines for solid waste, and to make the fullest use practicable of recovered construction materials.

Electricity

Implementation of Alternative 1 would require the use of portable, fuel-powered generators to supply electricity for construction activities. Proposed construction activities would not require the use of MCB Camp Pendleton's or SDG&E's electrical system. Therefore, no significant impact on the electrical system in the ROI would occur as a result of construction activities under Alternative 1.

Natural Gas

Construction activities under Alternative 1 would not require the use of natural gas. Therefore, no significant impacts on the availability of natural gas sources would occur under Alternative 1.

Potential effect: Implementation of a component or combination of components of Alternative 1 could potentially exceed the existing capacity of the utilities infrastructure/facilities for potable water, solid waste disposal, electrical power, or natural gas systems.

Findings: Through implementation of SCMs listed in Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, Alternative 1 would not exceed the existing capacity of the utilities infrastructure/facilities and would not result in significant impacts to utilities (Finding 1).

Facts in support of finding:

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Potable Water Supply

MCB Camp Pendleton

Implementation of Alternative 1 is estimated to yield an additional 3,500 af/y of groundwater from the

Ysidora Basin (Stetson 2012a,b). A portion of this additional supply of water would help reduce MCB Camp Pendleton's anticipated future reliance on imported water. In addition, connections to off-base water supplies would provide MCB Camp Pendleton with an emergency potable water supply. Therefore, implementation of Alternative 1 would provide a beneficial impact to potable water supplies.

FPUD

Implementation of Alternative 1 is estimated to yield an additional 3,500 af/y of groundwater from the Ysidora Basin (Stetson 2012a,b). An annual average of 3,100 af/y (Stetson 2012b) of groundwater would be delivered to FPUD and treated at the FPUD WTP, providing FPUD with a local source of potable water and reducing their dependence on imported water from the SDCWA. Therefore, implementation of Alternative 1 would provide a beneficial impact to potable water supplies.

Solid Waste Collection and Disposal

MCB Camp Pendleton

During normal operations of Alternative 1, periodic maintenance dredging of the percolation ponds would occur. The material would be hauled to Las Pulgas landfill on MCB Camp Pendleton and used as daily cover. Therefore, no significant impacts to solid waste collection and disposal would occur under Alternative 1.

FPUD

At the FPUD WTP, iron and manganese solids would be pumped to sludge drying beds, allowed to dry, and then removed for disposal at a nearby landfill. This would occur periodically and the nearby landfill has sufficient capacity to handle the volume. Therefore, no significant impacts to solid waste collection and disposal would occur under Alternative 1.

Electrical Power

MCB Camp Pendleton

During normal operations of Alternative 1, electrical power would be needed for operation of the production well pumps and the MCB Camp Pendleton booster pump associated with the water conveyance/distribution system. The components with the large majority of the demands would be located in the general vicinity of or serviced by the existing Haybarn Canyon substation on

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

MCB Camp Pendleton, which is undergoing expansion to nearly 70 MW of capacity (MCB Camp Pendleton 2010b). This expansion of capacity would accommodate the on-base demand for SMR CUP of 0.66 MW. Therefore, no significant impacts on MCB Camp Pendleton's electrical system would occur as a result of implementation of Alternative 1.

FPUD

Under Alternative 1, electrical power demand for operation of the FPUD WTP and Gheen Zone/Martin

Reservoir Pump Station would be 1.36 MW. Power is currently provided at these sites and SDG&E has the capacity to provide power for project components (FPUD 2009). Therefore, no significant impacts on SDG&E's electrical system would occur as a result of implementation of Alternative 1.

Natural Gas Systems

Operations under Alternative 1 would not require the use of natural gas. Therefore, no significant impacts on existing natural gas sources would occur under Alternative 1.

VI. CUMULATIVE EFFECTS

Potential Effect: For purposes of the EIR's analysis of cumulative impacts, a list of projects in the immediate vicinity and expected to be constructed during the same time period as the Project was used in accordance with CEQA. Projects that are completed or in operation were considered as part of current baseline conditions discussed by issue area in the EIS/EIR.

Findings: With regulatory programs designed to address certain cumulative impacts, adherence to the mitigation measure, and SCMs listed under Section 2.3.1.4, Special Conservation Measures, in the EIS/EIR, Implementation of Alternative 1 would not result in significant cumulative impacts to any environmental resource area. Therefore, cumulative impacts from Alternative 1 in conjunction with other past, present, and reasonably foreseeable future actions, would not be significant (Findings 1 and 2).

Facts in Support of the Finding: Alternative 1, as well as other projects listed in Section 5.3, would comply with established policies, regulations, and directives to ensure that project-specific impacts are minimized or avoided. With regulatory programs designed to address certain cumulative impacts, adherence to the mitigation measure, and special conservation measures for the respective environmental impact areas as outlined in Section 2.3.1.4 of the EIS/EIR, potentially significant cumulative impacts will be reduced to a level that is less than significant and not cumulatively considerable.

**Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)**

VII. GROWTH INDUCEMENT

Potential Effects: Potential Effects examined included: short term and long-term employment impacts and inducement of growth through the provision of infrastructure or service capacity by the Project.

Findings: The Project would have a negligible effect on growth due to employment opportunities. The Project would not induce growth through the provision of infrastructure or service capacity (Finding 1).

Facts in Support of Findings: Construction of the components of Alternative 1 would result in some economic inducement associated with construction expenditures. Although the number of employees involved and the total amount of wages is unknown at this time, it is anticipated that the majority of employees would either live or reside temporarily in the immediate area. No new housing or temporary lodging would be constructed as a result of implementation of Alternative 1.

Implementation of Alternative 1 would not induce potential future growth at MCB Camp Pendleton or within the FPUD service area. The Proposed Action would improve water supply reliability and support current MCB Camp Pendleton activities by managing yield of the Lower SMR Basin. This increased water yield would not result in growth inducement but would rather reduce dependence on imported water, which is anticipated to increase in the future regardless of project implementation. Based on consideration of the effects of the construction and operation of the various components, growth inducement would not occur as a result of implementation of the Proposed Action.

VIII. FINDINGS REGARDING ALTERNATIVES TO THE PROJECT

CEQA requires an EIR to describe a reasonable range of alternatives to the project or to the location of the project, which could feasibly attain the project objectives, and to evaluate the comparative merits of the alternatives. Only alternatives that meet most of the Project objectives, that are feasible, and that would avoid or substantially reduce at least one of the significant impacts of the project need be considered.

Findings of Fact
Santa Margarita River Conjunctive Use Project
(State Clearinghouse No. 2004121068)

Alternatives considered in this EIR include the no project alternative, Alternative 1 (the preferred alternative) as well as Alternative 2. The No Project Alternative would not meet the purpose and need of this project as established by MCB Camp Pendleton, Reclamation and the FPUD. Alternatives 1 and 2 both meet the basic objectives of the project, but Alternative 1 has been determined to be the environmentally superior alternative.

Findings: The EIS/EIR analysis indicates that, assuming implementation of SCMs listed in Section 2.3.1.4, Special Conservation Measures, and the mitigation measure presented in the EIS/EIR, no identified significant impacts to environmental resources would result from construction and operation of Alternative 1. Impacts to biological resources and water resources would increase for Alternative 2, while not reducing other identified environmental effects. Therefore, in terms of physical effects on the environment, the environmentally superior alternative is the proposed Alternative 1 (Finding 1).

Exhibit B

Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project

Special Conservation Measure (SCM) Number	Minimization, Mitigation, Monitoring, and Reporting Measure	Implement Procedure or Action	Responsible Organization(s)	Deliverable/ Report	Compliance Schedule	Verification of Compliance
General Construction Conservation Measures						
23	All mechanized clearing and grading, vehicle traffic, equipment staging, and the deposition of soil would be confined to the footprints defined in this Environmental Impact Statement/Environmental Impact Report (EIS/EIR). Construction site boundaries would be clearly delineated by flagging, stakes, survey lath, or snow fencing, as practical.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
25	Project design would incorporate correct use of grading and drainage control to minimize erosion during the construction period, and procedures to ensure that slopes and backfilled areas do not erode when construction is completed. To prevent erosion and soil loss, excavation and grading during the rainy season (November 1 to May 1) would be minimized. Where it is impractical to avoid grading during the rainy season, erosion and sedimentation Best Management Practices (BMPs) would be installed and maintained immediately downslope of work areas until work is completed and graded areas have been re-contoured, physically stabilized, and planted. Erosion and sedimentation BMPs would be monitored during construction to ensure stabilization of the site.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
26	Project design will avoid direct and indirect impacts to riparian habitats, jurisdictional waters, and other sensitive wetlands (e.g., vernal pools) to the greatest extent feasible. The limits of sensitive wetlands will be clearly marked in the field with markers or exclusion fencing, and these restricted areas will be monitored by the project biologist during construction phases to ensure that these areas are not being directly or indirectly impacted by project activities.	Construction contractor would implement SCM	Construction contractor	None	Construction phase	
27	Vernal pools have not been identified to occur within or immediately adjacent to the project footprint. If any previously undocumented and/or un-surveyed vernal pools are encountered before or during construction, these pools will be staked and protected from disturbance during pipeline construction unless and until the absence of listed species of fairy shrimp is confirmed by a USFWS approved biologist using an approved methodology.	Construction contractor would implement SCM	Construction contractor	None	Construction phase	
29	The proposed project would have a total area of greater than 1 acre (0.4 hectare) of soil disturbance and therefore, would be required to obtain coverage under the California Construction General Permit (CGP) for stormwater: State Water Resources Control Board [SWRCB] Order No. 2009 0009-DWQ (National Pollutant Discharge Elimination System [NPDES] No. CAS 000002) (SWRCB 2009a). Coverage under the CGP would be established for both traditional construction sites as well as Linear Utility Projects. Linear Utility Project activities include, but are not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits; substructures; pipelines; towers; poles; cables; wires; connectors; switching, regulating, and transforming equipment). Soil disturbance includes, but is not limited to, clearing, grading, grubbing, excavation, demolition, stockpiling, trenching, laydown areas, and construction of access roads. The project would comply with the provisions described	<p>Obtain project coverage under California Construction General Permit.</p> <ul style="list-style-type: none"> Upload required documents to SMARTS website to obtain coverage under California Construction General Permit. Obtain WDID before initiation of any soil disturbance. Ensure compliance with on-site stormwater requirements, upload 	Construction contractor	NOI, approved SWPPP, Risk Determination, Site Map, other supporting documentation, certification statement, permit fee check, and WDID number. Draft and Final	Design and construction phases	

Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project

Special Conservation Measure (SCM) Number	Minimization, Mitigation, Monitoring, and Reporting Measure	Implement Procedure or Action	Responsible Organization(s)	Deliverable/ Report	Compliance Schedule	Verification of Compliance
	<p>below:</p> <ul style="list-style-type: none"> The contractor would complete a risk determination and prepare a draft Stormwater Pollution Prevention Plan (SWPPP) in accordance with the risk level requirements in the CGP. The draft SWPPP and risk determination would be submitted to the FPUD for review at least 60 days prior to initiation of any soil disturbance. The risk determination and SWPPP would be prepared, stamped, and revised by a Qualified SWPPP Developer (licensed engineer, hydrologist, or other qualified professional identified in the permit). The contractor would obtain coverage under the CGP by uploading a Notice of Intent (NOI), approved SWPPP, risk determination, site map, and other supporting documentation to the California Stormwater Multi-Application and Report Tracking System (SMARTS) website. The FPUD would review, certify, and submit the NOI to the SWRCB. The contractor would submit a hard copy of the certification statement from SMARTS, together with a check for the permit fee, to the San Diego RWQCB, allowing 7-14 days for fee processing. A Waste Discharge Identification (WDID) number must be received from SMARTS prior to initiation of any soil disturbance. The project would comply with all provisions described in the CGP and strictly follow the SWPPP. The SWPPP would be maintained at the project site and updated as necessary to track modifications, Best Management Practice (BMP) location and implementation, training, etc. The certification statement would be included in the on-site SWPPP. On-site stormwater compliance would be the responsibility of the contractor's Qualified SWPPP Practitioner (certified professional identified in the CGP). The Qualified SWPPP Practitioner would be responsible for all required inspections, sampling, recordkeeping, and corrective actions. The contractor would upload all required documentation to the SMARTS website and notify the FPUD that documents are ready for review, certification, and submittal. Annually by 1 August, or upon completion of construction, whichever comes first, the contractor would upload a draft Annual Report, including records of all inspection, sampling and corrective actions to the SMARTS website. The FPUD would review, certify, and submit the Annual Report to the SWRCB. Upon completion of construction, the contractor would upload the Notice of Termination (NOT) and supporting documentation to the SMARTS website. The FPUD would review, certify, and submit the NOT to the SWRCB. In order to terminate coverage, the project must meet permanent stabilization requirements specified within the CGP. The Annual Report and NOT must be accepted by the SWRCB before the contractor would be released from the contract. 	<p>all required documents to the SMARTS website, and notify FPUD that the documents are ready for review, certification, and submittal.</p> <ul style="list-style-type: none"> Annually by 1 August, or upon completion of construction, whichever comes first, upload a draft Annual Report, including records of all inspection, sampling and corrective actions to the SMARTS website. The FPUD would review, certify, and submit the Annual Report to the SWRCB. Upon completion of construction, upload the Notice of Termination (NOT) and supporting documentation to the SMARTS website. The FPUD would review, certify, and submit the NOT to the SWRCB. 		<p>Annual Report. Draft and Final NOT.</p>		
30	<p>In conjunction with the SWPPP, construction-related dust will be minimized by reducing vehicle speeds and traffic in newly cleared areas and covering or lightly spraying exposed soil piles with water when weather conditions warrant. Concrete discharge will not be allowed to reach surrounding water bodies or pools unless specifically authorized in a</p>	<p>Construction contractor would implement SCM</p>	<p>Construction contractor</p>	<p>None</p>	<p>Construction phase</p>	

Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project

Special Conservation Measure (SCM) Number	Minimization, Mitigation, Monitoring, and Reporting Measure	Implement Procedure or Action	Responsible Organization(s)	Deliverable/ Report	Compliance Schedule	Verification of Compliance
	Clean Water Act (CWA) discharge permit.					
31	The project site-specific excavation, grading, and filling plans, SWPPP, and BMPs for portions of the project within the community of Fallbrook will be reviewed by FPUD. The plans and BMPs will be approved by the FPUD, and any recommendations made by the FPUD will be incorporated into the project plans to ensure that soil loss and erosion are minimized. Erosion control measures will include any additional requirements of the applicable jurisdiction. Provisions for both temporary and permanent erosion and sediment controls will be implemented in accordance with the SWPPP prepared and designed specifically for the construction sites.	Construction contractor would implement SCM and FPUD will review.	Construction contractor/FPUD	Site specific excavation, grading and filling plans, SWPPP and BMPs for portions of the project within the community of Fallbrook	Construction phase	
32	Erosion and sedimentation controls will be monitored and maintained during construction and until disturbed areas are stabilized and not susceptible to further erosion, as approved by FPUD.	Construction contractor	Construction contractor/FPUD	Erosion and sediment controls	Construction phase	
34	Fueling and lubrication of equipment during all phases of construction would be allowed only in designated staging areas specified on the construction maps or on construction right-of-way and would not occur within 100 ft (30 m) of drainages. Portable fuel tanks would be secured in moving vehicles to prevent spills. Emergency provisions would be in place at all crossings before the onset of construction to prevent accidental spills from contaminating downstream habitats.	Ensure that fueling and minor equipment maintenance would take place within existing paved areas or identified laydown areas, and occur at least 100 feet away from drainages. Cleaning of vehicles and equipment should take place off-site where feasible. Rinsing of vehicle tires and undercarriage for the purpose of dust control shall be performed within designated bermed areas.	Construction contractor	None	Construction phase	
35	Heavy equipment and construction activities would be restricted to existing roads and disturbed areas to the maximum extent practicable. Staging areas would be located in disturbed habitats and would be delineated on the grading plans. Vehicle operation and laydown areas would be defined by staking and flagging between stakes to prevent operations outside these areas.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
36	Construction work at night would be avoided to the greatest extent possible. Where it cannot be avoided, nighttime construction lighting would be shielded so that light dispersal into adjacent native habitats is significantly reduced. Other methods of reducing light pollution (e.g., dusk-to-dawn sensor activation, motion-sensitive activation, low-lumen or limited-spectrum lighting) would also be applied as possible. Permanent outdoor lighting installed at proposed facilities would also be shielded (or use other methods of reducing light pollution; e.g., motion-sensitive activation) to maximally reduce light pollution into adjacent native plant communities.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	

Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project

Special Conservation Measure (SCM) Number	Minimization, Mitigation, Monitoring, and Reporting Measure	Implement Procedure or Action	Responsible Organization(s)	Deliverable/ Report	Compliance Schedule	Verification of Compliance
38	All in-stream construction or dredging would incorporate equipment decontamination before construction activities begin to prevent the potential spread of non-native aquatic species.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
39	Construction workers would be prohibited from bringing domestic pets to construction sites to ensure that domestic pets do not disturb or depredate wildlife in adjacent habitats.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
40	The project site would be kept as clean as possible to avoid attracting predators. All food-related trash would be placed in sealed bins or removed from the site regularly.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
41	All construction and maintenance-related debris would be disposed of properly and would not be discarded on site. The site would be restored to as near the original biological condition as possible once the project is completed.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
42	Construction workers would use portable chemical toilets, with secondary containment basins to prevent spillage, during construction. Chemical toilets would not be placed within 100 ft (30 m) of riparian habitat except on existing roads.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
43	Conservation measures specified herein for construction activities would also apply during operations to non-emergency maintenance or repair activities that necessitate heavy equipment operation, excavation, or vegetation removal. Such activities would be coordinated with CDFW on non-federal land.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
44	An Emergency Response Plan would be prepared to specify measures to be taken in emergencies that pose an immediate threat to public safety or property. The plan would identify points of contact and appropriate notification and monitoring protocols in the event of potential damage to sensitive natural or cultural resources.	Prepare and implement an Emergency Response Plan.	Construction contractor	Emergency Response Plan	Construction phase	
Geological Resources						
47	<p>Before construction begins, a project-specific geotechnical study would be conducted that would provide seismic design parameters in accordance with the Uniform Building Code and the California Building Code; specify requirements for trench excavation and pipeline construction to prevent collapse during construction; and slope stability parameters and foundation setbacks. The geotechnical study would include the following:</p> <ul style="list-style-type: none"> The geotechnical report would include an evaluation of the suitability of excavated materials as trench backfill, and recommendations for screening, compaction, and filling procedures to ensure stability of the pipe bedding and cover. The geotechnical report would also evaluate the engineering characteristics of the soils in the area where the retaining walls and concrete slab apron for the inflatable weir diversion structure would be constructed and provide recommendations for slope excavation 	Prepare Geotechnical Report and implement design recommendations during final design of project.	Engineering contractor	Geotechnical Report	Design phase	

Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project

Special Conservation Measure (SCM) Number	Minimization, Mitigation, Monitoring, and Reporting Measure	Implement Procedure or Action	Responsible Organization(s)	Deliverable/ Report	Compliance Schedule	Verification of Compliance
48	<p>and compaction to ensure foundation stability. During the geotechnical study, soil corrosive potential would also be evaluated, and recommendations would be provided for concrete and metal component design to provide corrosion resistance as needed, and ensure slope/surface stability.</p> <ul style="list-style-type: none"> Design and construction procedures would use recommendations from the geotechnical study based on site specific information regarding groundwater depth and soil characteristics to minimize differential settlement in specific areas determined to be subject to liquefaction. The overall project siting would conform to existing topography to minimize slope cut and fill; levees and berms would be properly designed and constructed to ensure constructed slope stability, and subsurface filling would be done in accordance with the geotechnical report recommendations for stability. These procedures would be utilized to ensure that there would be no significant impacts with respect to slope stability and landslides with implementation of the project. <p>All new FPUD facilities would be constructed in accordance with FPUD design standards and any excavations in County roads or right-of-ways would be coordinated with the County and meet County of San Diego requirements.</p>	Engineering Contractor would coordinate design of project with the FPUD.	Engineering contractor and FPUD	None	Design phase	
Water Resources						

Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project

Special Conservation Measure (SCM) Number	Minimization, Mitigation, Monitoring, and Reporting Measure	Implement Procedure or Action	Responsible Organization(s)	Deliverable/ Report	Compliance Schedule	Verification of Compliance
49	<p>For project components that would, or would be likely to, involve groundwater extraction (dewatering) at construction sites, foundation dewatering, or groundwater extraction associated with a remediation/cleanup project, the FPUD would be contacted for guidance. Disposal options for groundwater may include the following:</p> <ol style="list-style-type: none"> Discharges of uncontaminated groundwater to land would comply with the San Diego Basin Plan Conditional Waiver No. 2-“Low Threat” Discharges to Land found in San Diego RWQCB Resolution No. R9-2007-0104 (San Diego RWQCB 2007). Land applied water may not discharge to Clean Water Act (CWA) jurisdictional surface waters Discharges to the sanitary sewer system would be requested through FPUD. If options (1) and (2) are not feasible, discharges to storm drains or surface waters (including seasonally dry channels) would obtain coverage under the San Diego General Groundwater Permit, San Diego RWQCB Order No. R9-2008-0002 (NPDES No. CAG919002) (San Diego RWQCB 2008). Sampling and/or treatment may be required and the responsibility of the contractor performing the work. Application for permit coverage must be submitted to and would be the responsibility of the contractor performing the work. Application for permit coverage must be submitted to the FPUD, at least 60 days prior to the planned commencement of the discharge. The FPUD would review and certify the application, and the contractor would then submit the application and permit fee to the San Diego RWQCB. A WID number must be received from the San Diego RWQCB prior to initiation of dewatering. A NOT must be accepted by the San Diego RWQCB before the contractor would be released from the contract. 	<p>Coordinate any proposed dewatering operations with the FPUD prior to construction.</p>	<p>Construction contractor</p>	<p>None</p>	<p>Design phase</p>	
51	<p>For discharges of potable water resulting from hydrostatic testing, repair, or maintenance of potable water pipelines, tanks, or vessels associated with drinking water purveyance and storage, the FPUD, would be contacted for guidance. Disposal options for discharged potable water may include the following:</p> <ol style="list-style-type: none"> Discharges to land would comply with the San Diego Basin Plan Conditional Waiver No. 2-“Low Threat” Discharges to Land found in San Diego RWQCB Resolution No. R9-2007-0104 (San Diego RWQCB 2007). Land applied water may not discharge to CWA jurisdictional surface waters. Discharges to the sanitary sewer system would be requested through the FPUD. If options (1) and (2) are not feasible, discharges to storm drains or surface waters (including seasonally dry channels) would obtain coverage under the San Diego RWQCB Order No. R9-2010-0003 (NPDES No. CAG679001) (San Diego RWQCB 2010). 	<p>Coordinate any proposed discharges of potable water resulting from hydrostatic testing, repair, or maintenance of potable water pipelines, tanks, or vessels associated with drinking water purveyance and storage with FPUD prior to construction.</p>	<p>Construction contractor</p>	<p>None</p>	<p>Design phase</p>	

Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project

Special Conservation Measure (SCM) Number	Minimization, Mitigation, Monitoring, and Reporting Measure	Implement Procedure or Action	Responsible Organization(s)	Deliverable/ Report	Compliance Schedule	Verification of Compliance
52	Discharges of uncontaminated slurries or drilling muds (i.e., from horizontal directional drilling) to land would comply with San Diego Basin Plan Conditional Waiver No. 9-Discharges of Slurries to Land found in San Diego RWQCB Resolution No. R9-2007-0104 (San Diego RWQCB 2007). FPUD would be contacted for further guidance.	Coordinate any proposed discharges of uncontaminated slurries or drilling muds with FPUD prior to construction.	Construction contractor	None	Design phase	
53	Concreting operations would be conducted to ensure discharge water, including washout, associated with these operations does not reach surrounding water bodies or pools unless specifically authorized in a CWA discharge permit.	Coordinate any proposed concreting operations with FPUD prior to construction.	Construction contractor	None	Design phase	
Biological Resources						
55	After final design of the project, the design contractor will provide geographic information system (GIS) shapefiles, including the project footprint and amount/type of vegetation impacted (including both temporary and permanent) to FPUD to provide to the USFWS with summary tables showing amount/type of vegetation impacted (including both temporary and permanent) based on final project designs.	Provide geographic information system shapefiles showing footprint and amount/type of vegetation impacted (both temporary and permanent)	Construction contractor/FPUD	GIS shapefiles	Design phase	
56	After construction impacts to vegetation, the construction contractor will provide GIS shapefiles, including the project footprint and amount/type of vegetation impacted (including both temporary and permanent), to FPUD. FPUD will provide the USFWS with summary tables showing amount/type of vegetation impacted (including both temporary and permanent) based on actual project impacts.	Provide geographic information shapefiles, including the project footprint and amount/type of vegetation impacted (both temporary and permanent)	Construction contractor/FPUD	GIS shapefiles	After Construction Phase	
57	Temporary impacts to riparian vegetation, arroyo-toad occupied upland vegetation, gnatcatcher occupied coastal sage scrub (CSS) and Stephens' kangaroo rat (SKR) habitat from project construction will be restored onsite following impact.	Restore riparian vegetation, arroyo-toad occupied upland vegetation, gnatcatcher-occupied coastal sage scrub (CSS) and Stephens kangaroo rat habitat	Construction contractor	None	After Construction Phase	
Primary Project Biologist						
62	A primary project biologist would oversee avoidance and minimization measures specified within these SCMs. Different project biologists may be designated for specific measures listed based on the qualifications necessary to satisfy the specific measure. If multiple project biologists are required, their activities would be coordinated through one primary project biologist. The primary project biologist would have sufficient training and experience to identify all of the federally listed species and their habitats that are likely to be encountered within or near the project footprint. The project biologist(s) would have experience and training necessary to conduct tasks described in BO for this project. Required experience for the project biologist(s) will include but is not limited to the following: <ul style="list-style-type: none"> The project biologist will have experience in wetland biology necessary to fulfill the 	The primary project biologist would oversee avoidance and minimization measures specified within these SCMs.	Primary project biologist and FPUD	None	Construction phase	

Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project

Special Conservation Measure (SCM) Number	Minimization, Mitigation, Monitoring, and Reporting Measure	Implement Procedure or Action	Responsible Organization(s)	Deliverable/ Report	Compliance Schedule	Verification of Compliance
	<p>requirements of the Clean Water Act Sections 401 and 404 if applicable.</p> <ul style="list-style-type: none"> The project biologist will be knowledgeable of and able to identify weed species listed in the California Invasive Plant Inventory to assist with weed control and restoration activities. The project biologist for measures associated with ARTOs would have at least 2 years of independent experience conducting arroyo toad surveys and have demonstrated experience in handling ARTOs. The project biologist for measures associated with the flycatcher will be a trained ornithologist with at least 40 hours of observation in the field with the target species and documented experience locating and monitoring nests of the target species. The project biologist for measures associated with SKR will have at least 10 years of experience trapping both SKR and Dulzura kangaroo rat (<i>Dipodomys simulans</i>; DKR). At a minimum, the project biologist will have at least 40 sessions of supervised SKR trapping across multiple areas, including areas where both SKR and DKR co-occur, with a demonstrated ability to distinguish identifying features of these two species; supervised handling and identification of at least 20 SKR and 20 DKR during trapping sessions; demonstrated ability to identify appropriate SKR habitat, develop appropriate trap-placement designs, set and bait traps, and safely extract and handle all species that may be captured. 					
Seasonal Restrictions						
67	All vegetation clearing required by the proposed project would occur outside of the nesting season for avian species (February 15 to August 31). i.e., vegetation clearing will occur from September 1 to February 14.	Coordinate construction schedule with FPUD. Have an approved on-site contracted biological construction monitor ensure that all measures to protect avian species are implemented.	Construction contractor/project biologist and FPUD	None	Design and construction phases	
Cultural Resources						
121	Should buried cultural resources and/or human remains be encountered during construction activities on non-DOD lands, the discovery would be treated according to procedures outlined in the County of San Diego guidelines for determining significance of cultural resources pursuant to CEQA (County of San Diego 2007a), and PRC Section 5097.98 for human remains. In addition, any required cultural monitoring, development, and or review of a monitoring plan would be consistent with the Section 106 consultation.	Have an on-site contracted archaeologist review the final proposed alignment and construction activities and determine the need for on-site monitoring.	Construction contractor/FPUD	Contracted archaeologist reviews final proposed alignment and construction activities and determines need for on-site monitoring.	Design phase	
Air Quality						
122	Fugitive dust control measures would be implemented to reduce emissions of particulate matter (less than or equal to 10 microns in diameter [PM10] and particulate matter less than or equal to 2.5 microns in diameter [PM2.5]) to the extent possible. These measures	Construction contractor would implement SCM.	Project proponent, construction oversight authority, or duly	None	Construction phase	

Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project

Special Conservation Measure (SCM) Number	Minimization, Mitigation, Monitoring, and Reporting Measure	Implement Procedure or Action	Responsible Organization(s)	Deliverable/ Report	Compliance Schedule	Verification of Compliance
	include watering unpaved roads and actively graded surfaces up to three times daily, as well as reducing speeds on unpaved roads to 15 miles per hour (mph) (24 kilometers per hour [kph]), suspending grading activities if wind speeds exceed 25 mph (40 kph), and replacing ground cover in graded areas as soon as possible. Watering would be done lightly to avoid the accumulation of surface water.		designated contractor			
123	The FPUD would develop a construction specification for the construction work that will implement BMPs to minimize air emissions from equipment and vehicles. The specification will include requirements for minimizing construction-related trips, minimizing idling, and proper equipment maintenance and inspection.	Develop a construction specification as identified in SCM.	FPUD	Construction specifications to limit air quality impacts	Design phase	
Hazardous Wastes and Materials						
126	If pipeline construction activities encounter potentially contaminated soil (i.e., discolored and or odorous) within the community of Fallbrook, the soil would be managed in accordance with all applicable federal, state, County of San Diego, and federal requirements, as well as any additional requirements specific to the applicable jurisdiction.	Prepare Soil Management Plan	Construction contractor	Soil Management Plan	Design and construction phases	
127	It is likely that the proposed project footprint may encounter contaminated groundwater from underground storage tank sites. If pipeline construction activities encounter potentially contaminated groundwater, the water would be managed in accordance with all applicable federal, state, County of San Diego, and federal requirements, as well as any additional requirements specific to the applicable jurisdiction.	Coordinate any proposed dewatering operations within any known or suspected groundwater contaminant plume FPUD prior to construction.	Construction contractor	None	Design and construction phases	
130	A Hazardous Materials Business Plan would be prepared in accordance with County of San Diego guidelines to describe how the construction worker would manage their hazardous materials during construction.	Prepare Hazardous Materials Business Plan.	Construction contractor.	Hazardous Materials Business Plan	Design phase	
131	An Oil Spill Response Plan (OSRP) would be prepared and reviewed and approved by appropriate federal, state, and local agencies. The OSRP is required under state and federal regulations (Senate Bill 2040 and 40 CFR § 300, the National Oil and Hazardous Substances Pollution Contingency Plan). The OSRP provides a list of emergency service providers. For project components on non-federal land, FPUD would comply with requirements of CDFW, Office of Spill Prevention and Response.	Prepare Oil Spill Response Plan.	Construction contractor	Oil Spill Response Plan	Design phase	
Utilities						
132	During project design, pipeline alignments and construction footprints would be selected to avoid or minimize disruption of existing utilities. The location of underground utilities	Design engineer would	Engineering contractor	None	Design phase	

**Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project**

Special Conservation Measure (SCM) Number	Minimization, Mitigation, Monitoring, and Reporting Measure	Implement Procedure or Action	Responsible Organization(s)	Deliverable/ Report	Compliance Schedule	Verification of Compliance
	would be verified prior to excavation to further avoid impacts. Also, the design of new electrical transformers and panels that would be needed to supply power to the wells would be coordinated closely with San Diego Gas & Electric (SDG&E) to minimize or eliminate any temporary disruption of power supplies during construction and start-up.	implement SCM.				
136	The project proponent or contractor would submit an amended drinking water permit to modify, add to, or change the source of supply or method of treatment of, or change in the distribution system as authorized by a valid existing permit in accordance with California Health and Safety Code §116550.	FPUD would submit an amended drinking water permit.	FPUD	Amended drinking water permit	Operational phase	
138	The contractor would ensure potable water pipeline separation and installation standards are followed as outlined in CCR Title 22, § 64572.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
139	To avoid cross contamination of potable water lines, any water lines installed adjacent to sanitary sewer lines would be installed in accordance with California Department of Public Health separation requirements.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
140	The contractor would ensure that new potable water pipelines installed or that have been taken out of service for repairs (de-pressurized) would be disinfected and sampled for bacteriological quality prior to use, in accordance with the American Water Works Association Standard C651-05. Water samples would be required to be negative for coliform bacteria prior to the main (s) being placed in service in accordance with CCR Title 22, §64580.	Construction contractor would implement SCM.	Construction contractor	None	Construction phase	
141	The water source of a public water system would be required to have the capacity to meet the system's maximum day demand regularly, in accordance with CCR Title 22 §64554. A Source Capacity Planning Study may be required if there is difficulty with the water system's source capacity or proposed expansion by the DPH.					

**Draft Minimization, Mitigation, Monitoring, and Reporting Tracking Sheet
Santa Margarita River Conjunctive Use Project**

List of Acronyms

BMP	Best Management Practice
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CGP	California General Permit
CAGN	California gnatcatcher (<i>Poliopitila Californica Californica</i>)
CWA	Clean Water Act
DOD	Department of Defense
EIS/EIR	Environmental Impact Statement/Environmental Impact Report (EIS/EIR)
FPUD	Fallbrook Public Utility District
Kph	Kilometers per hour
LBVI	least Bell's vireo (<i>Vireo bellii pusillus</i>)
MCB	Marine Corps Base
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
OSRP	Oil Spill Response Plan
PM	Particulate Matter
RWQCB	Regional Water Quality Control Board
SCM	Special Conservation Measure
SDG&E	San Diego Gas & Electric
SMARTS	Stormwater Multi-Application and Report Tracking System
SWRCB	State Water Resources Control Board
SWPPP	Stormwater Pollution Prevention Plan
WDID	Waste Discharge Identification

Exhibit C

Notice of Determination

Appendix D

To:

Office of Planning and Research
U.S. Mail: Street Address:
P.O. Box 3044 1400 Tenth St., Rm 113
Sacramento, CA 95812-3044 Sacramento, CA 95814

County Clerk
County of: San Diego
Address: 1600 Pacific Highway, Suite 103
San Diego, CA 92101

From:

Public Agency: Fallbrook Public Utility District
Address: 990 E Mission Road
Fallbrook, CA 92028
Contact: Jack Bebee
Phone: (760) 728-1125

Lead Agency (if different from above):
Address:
Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2004121068

Project Title: Santa Margarita River Conjunctive Use Project

Project Applicant: Fallbrook Public Utility District (FPUD)

Project Location (include county): Camp Pendleton, DET Fallbrook, and Community of Fallbrook, San Diego County

Project Description:

The proposed project would upgrade an existing groundwater recharge and recovery system to help meet water demands for Camp Pendleton and the community of Fallbrook, reduce regional dependency on imported water, and improve water reliability. Project elements would improve existing facilities, replace existing structures, and /or construct new facilities. The proposed project would include diversion system upgrades, groundwater recharge, and groundwater production. Raw groundwater would be delivered to FPUD via a new bi-directional pipeline for treatment in a new water treatment plant constructed on FPUD property adjacent to DET Fallbrook and operated by FPUD.

This is to advise that the Fallbrook Public Utility District has approved the above (Lead Agency or Responsible Agency)

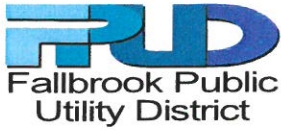
described project on September 26, 2016 and has made the following determinations regarding the above described project.

- 1. The project will have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan was adopted for this project.
5. A statement of Overriding Considerations was adopted for this project.
6. Findings were made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
Fallbrook Public Utility District, 990 E Mission Road, Fallbrook, CA 92028

Signature (Public Agency): Title: Assistant General Manager

Date: September 26, 2016 Date Received for filing at OPR:



990 East Mission Road
P. O. Box 2290
Fallbrook, California
92088-2290

(760) 728-1125
Fax (760) 728-5943

Board of Directors:

Bob Anderson
Milt Davies
Al Gebhart
Don McDougal
Charley Wolk

Staff:

Brian J. Brady
General Manager

Jack Bebee
Assistant General Manager

Marcie Eilers
Admin Services Manager

Robert H. James
Legal Counsel

Mary Lou Boultinghouse
Board Secretary

**Treasurer's Report
August 31, 2016**

Money Market Account

Disbursements		2,951,473.01
Receipts	\$	3,146,184.65
Interest		
Balance as of 7/31/1	\$	1,186,133.79
Balance as of 8/31/16	\$	2,457,476.07

Operating Account

Disbursements	\$	2,924,533.21
Receipts	\$	2,945,518.18
Balance as of 7/31/1	\$	12,198.02
Balance as of 8/31/16	\$	33,646.61

All investments have been made in accordance with the District's Annual Statement of Investment Policy.

Marcie Eilers
August 31, 2016

Transaction Type	Trade Date	Settle Date	Security Description	CUSIP	Principal Proceeds	Accrued Interest	Total Amount
INTEREST	8/1/2016	8/25/2016	FNMA SERIES 2016-M9 ASQZ	3136ASPX8	-	156.19	156.19
SELL	8/1/2016	8/10/2016	FNMA BENCHMARK NOTE	3135G0J53	50,168.50	227.78	50,396.28
BUY	8/1/2016	8/10/2016	TOYOTA ABS 2016-CA3	89237WAD9	44,998.79	-	44,998.79
INTEREST	8/1/2016	8/2/2016	MONEY MARKET FUND	MONEY0002	-	56.08	56.08
SELL	8/1/2016	8/2/2016	FHLB NOTES	3130A6LZ8	529,311.00	883.33	530,194.33
BUY	8/1/2016	8/2/2016	FHLB NOTES	3130A8PK3	528,118.50	220.83	528,339.33
BUY	8/2/2016	8/3/2016	ING (US) FUNDING LLC COMM PAPER	4497W0P10	397,755.33	-	397,755.33
SELL	8/2/2016	8/3/2016	FHLB NOTES	3130A6LZ8	399,524.00	673.61	400,197.61
INTEREST	8/7/2016	8/7/2016	FHLB NOTES	3130A8PK3	-	266.84	266.84
INTEREST	8/7/2016	8/7/2016	FHLB NOTES	3130A8PK3	-	264.32	264.32
BUY	8/10/2016	8/15/2016	GOLDMAN SACHS GRP INC CORP NT (CALLABLE)	38141GVU5	296,693.20	2,326.04	299,019.24
BUY	8/10/2016	8/15/2016	FHLMC REFERENCE NOTE	3137EAEA3	499,770.00	1,333.33	501,103.33
SELL	8/10/2016	8/15/2016	US TREASURY NOTES	912828Q78	304,113.28	1,199.39	305,312.67
SELL	8/10/2016	8/15/2016	GENERAL ELEC CAP CORP NOTES	36962G3U6	539,975.00	8,125.00	548,100.00
SELL	8/10/2016	8/11/2016	US TREASURY NOTES	912828UL2	355,646.48	143.85	355,790.33
SELL	8/10/2016	8/11/2016	FHLB NOTES	3130A6LZ8	599,358.00	1,093.75	600,451.75
INTEREST	8/12/2016	8/12/2016	CAPTIAL ONE BANK USA NA LT CD	14042E5N6	-	2,076.79	2,076.79
INTEREST	8/12/2016	8/12/2016	CAPTIAL ONE BANK USA NA LT CD	140420UE8	-	2,443.29	2,443.29
INTEREST	8/15/2016	8/15/2016	TOYOTA ABS 2016-B A3	89231UAD9	-	119.17	119.17
INTEREST	8/15/2016	8/15/2016	CARMAX ABS 2016-3 A2	14314EAB7	-	109.68	109.68
WITHDRAW	8/18/2016	8/18/2016	CASH	CASH	1,000,000.00	-	1,000,000.00
INTEREST	8/24/2016	8/24/2016	MELLON BANK (CALLABLE) CORPORATE NOTE	06406HCZ0	-	3,784.00	3,784.00
INTEREST	8/26/2016	8/26/2016	FNMA BENCHMARK NOTE	3135G0J53	-	8,125.00	8,125.00
INTEREST	8/30/2016	8/30/2016	GOLD COAST BANK LT CD	38058KCS3	-	249.70	249.70
BUY	9/1/2016	9/2/2016	US TREASURY NOTES	912828XE5	533,469.73	2,022.54	535,492.27
SELL	9/1/2016	9/2/2016	FHLMC REFERENCE NOTE	3137EAEA3	499,135.00	1,510.42	500,645.42
INTEREST	9/13/2016	9/13/2016	CIT BANK LT CD	17284A6P8	-	554.52	554.52



Managed Account Summary Statement

For the Month Ending **August 31, 2016**

FPUD - INVESTMENT PORTFOLIO - 28710100

Transaction Summary - Managed Account	Cash Transactions Summary - Managed Account
Opening Market Value	
Maturities/Calls	0.00
Principal Dispositions	2,790,442.97
Principal Acquisitions	17,651.06
Unsettled Trades	0.00
Change in Current Value	(1,771,216.02)
Closing Market Value	(1,000,000.00)
	0.00

Earnings Reconciliation (Cash Basis) - Managed Account	Cash Balance
Interest/Dividends/Coupons Received	29,997.77
Less Purchased Interest Related to Interest/Coupons	(3,880.20)
Plus Net Realized Gains/Losses	3,949.48
Total Cash Basis Earnings	\$30,067.05

Earnings Reconciliation (Accrual Basis)	Total
Ending Amortized Value of Securities	14,171,298.82
Ending Accrued Interest	45,809.47
Plus Proceeds from Sales	2,790,442.97
Plus Proceeds of Maturities/Calls/Principal Payments	0.00
Plus Coupons/Dividends Received	17,651.06
Less Cost of New Purchases	(1,771,216.02)
Less Beginning Amortized Value of Securities	(15,155,925.02)
Less Beginning Accrued Interest	(52,276.72)
Total Accrual Basis Earnings	\$45,784.56

Closing Cash Balance	\$51,001.03
Total Cash Basis Earnings	\$30,067.05
Total Accrual Basis Earnings	\$45,784.56
Accrued but not yet received	\$14,253,772.64





Portfolio Summary and Statistics

For the Month Ending **August 31, 2016**

FPUD - INVESTMENT PORTFOLIO - 28710100

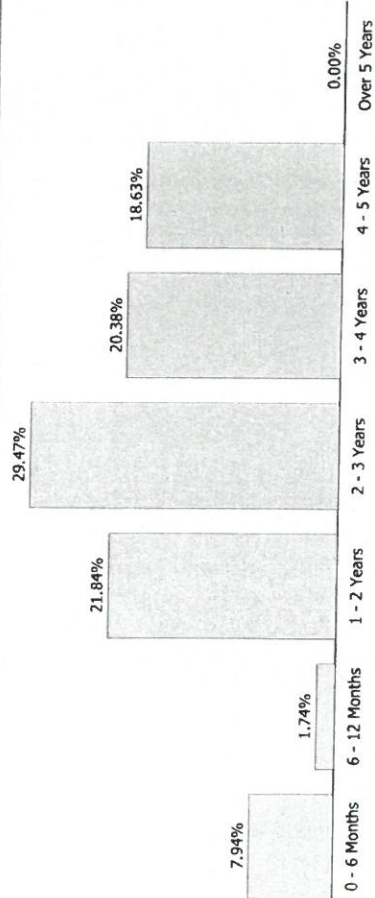
Account Summary

Description	Par Value	Market Value	Percent
U.S. Treasury Bond / Note	1,500,000.00	1,537,147.95	10.78
Federal Agency Collateralized Mortgage Obligation	105,000.00	105,709.75	0.74
Federal Agency Bond / Note	4,115,000.00	4,109,663.15	28.83
Corporate Note	4,077,000.00	4,200,457.84	29.48
Commercial Paper	1,140,000.00	1,133,755.96	7.95
Certificate of Deposit	2,796,000.00	2,842,231.66	19.94
Asset-Backed Security / Collateralized Mortgage Obligation	325,000.00	324,806.33	2.28
Managed Account Sub-Total	14,058,000.00	14,253,772.64	100.00%
Accrued Interest		45,809.47	
Total Portfolio	14,058,000.00	14,299,582.11	

Unsettled Trades

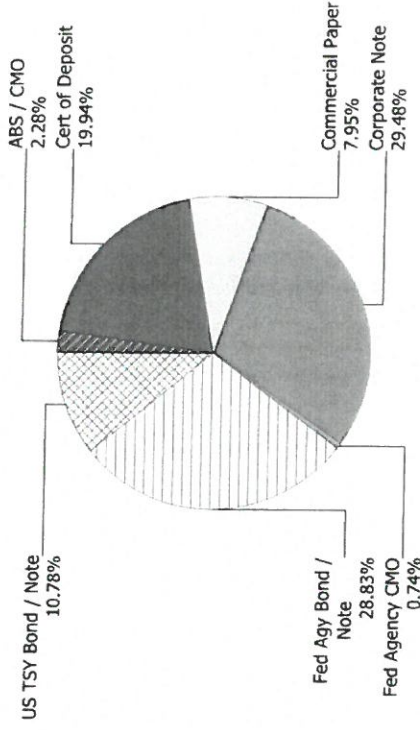
0.00 0.00 0.00

Maturity Distribution



July 1.62% 4.8% 22.12% 30.05% 23.93% 17.48% **Position has shortened since July**

Sector Allocation



Characteristics

Yield to Maturity at Cost	1.41%
Yield to Maturity at Market	1.19%
Duration to Worst	2.64
Weighted Average Days to Maturity	1003





Managed Account Issuer Summary

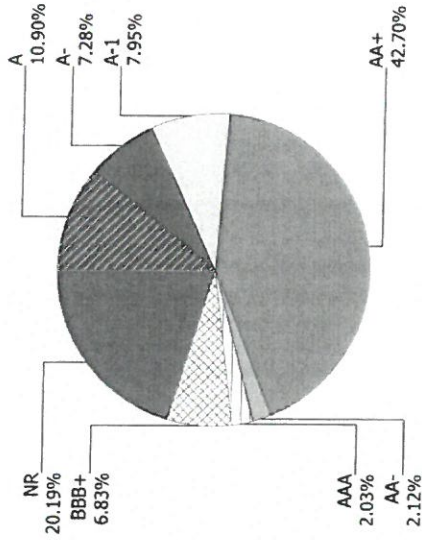
For the Month Ending August 31, 2016

FPUD - INVESTMENT PORTFOLIO - 28710100

Issuer Summary

Credit Quality (S&P Ratings)

Issuer	Market Value of Holdings	Percent
AMERICAN EXPRESS CO	541,332.42	3.80
APPLE INC	332,691.78	2.33
BANK OF BARODA	249,961.50	1.75
BANK OF MONTREAL	248,048.75	1.74
BANK OF NEW YORK CO INC	358,470.46	2.51
BB&T CORPORATION	252,151.25	1.77
BNP PARIBAS	487,613.21	3.42
BURLINGTON NORTHERN SANTA FE	220,442.00	1.55
CAPITAL ONE FINANCIAL CORP	500,485.52	3.51
CARMAX AUTO OWNER TRUST	134,852.85	0.95
CATERPILLAR INC	579,128.39	4.06
CELTIC BANK	247,479.65	1.74
CHEVRON CORP	302,112.90	2.12
CIT BANK	100,821.60	0.71
CITIGROUP INC	100,804.30	0.71
FANNIE MAE	2,055,974.34	14.43
FEDERAL HOME LOAN BANKS	1,361,823.26	9.55
FIRST RESOURCE BANK	248,691.17	1.74
FREDDIE MAC	797,575.30	5.60
GOLD COAST BANK	247,097.94	1.73
GOLDMAN SACHS GROUP INC	295,325.27	2.07
ING GROUP NV	398,094.00	2.79
JOHN DEERE OWNER TRUST	34,999.01	0.25
JP MORGAN CHASE & CO	496,041.91	3.48
MORGAN STANLEY	577,281.79	4.05
RONDOUT SAVINGS BANK	248,623.31	1.74
SALLIE MAE BANK	246,304.79	1.73
STATE BANK OF INDIA	250,400.54	1.76
SYNCHRONY BANK	251,039.25	1.76
TOYOTA AUTO RECEIVABLES	154,954.47	1.09
UNITED STATES TREASURY	1,537,147.95	10.78
WELLS FARGO & COMPANY	396,001.76	2.78





Managed Account Issuer Summary

For the Month Ending **August 31, 2016**

FPUD - INVESTMENT PORTFOLIO - 28710100

Total **\$14,253,772.64** **100.00%**





Managed Account Detail of Securities Held

For the Month Ending August 31, 2016

FPUD - INVESTMENT PORTFOLIO - 28710100

Security Type/Description	Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
U.S. Treasury Bond / Note												
US TREASURY NOTES	912828UL2	912828UL2	195,000.00	AA+	Aaa	05/03/16	05/06/16	197,201.37	1.07	233.15	197,015.07	197,376.66
DTD 01/31/2013 1.375% 01/31/2020												
US TREASURY NOTES	912828XE5	912828XE5	575,000.00	AA+	Aaa	06/27/16	06/29/16	588,903.32	0.87	2,191.60	588,293.10	584,164.35
DTD 06/01/2015 1.500% 05/31/2020												
US TREASURY NOTE	912828A42	912828A42	730,000.00	AA+	Aaa	04/27/16	04/29/16	752,299.22	1.31	3,709.84	750,686.01	755,606.94
DTD 12/02/2013 2.000% 11/30/2020												
Security Type Sub-Total			1,500,000.00					1,538,403.91	1.11	6,134.59	1,535,994.18	1,537,147.95
Federal Agency Collateralized Mortgage Obligation												
FNMA SERIES 2016-M9 ASQ2	3136ASPX8	3136ASPX8	105,000.00	AA+	Aaa	06/09/16	06/30/16	106,049.95	1.05	156.19	105,979.22	105,709.75
DTD 06/01/2016 1.785% 06/01/2019												
Security Type Sub-Total			105,000.00					106,049.95	1.05	156.19	105,979.22	105,709.75
Federal Agency Bond / Note												
FHLMC REFERENCE NOTE	3137EAEA3	3137EAEA3	500,000.00	AA+	Aaa	08/10/16	08/15/16	499,770.00	0.78	1,500.00	499,776.37	499,058.50
DTD 04/07/2016 0.750% 04/09/2018												
FHLB NOTES	3130A8PK3	3130A8PK3	525,000.00	AA+	Aaa	07/07/16	07/08/16	523,908.00	0.73	218.75	523,984.41	522,423.30
DTD 07/08/2016 0.625% 08/07/2018												
FHLB NOTES	3130A8PK3	3130A8PK3	530,000.00	AA+	Aaa	08/01/16	08/02/16	528,118.50	0.80	220.83	528,193.22	527,398.76
DTD 07/08/2016 0.625% 08/07/2018												
FNMA BENCHMARK NOTE	3135G0J53	3135G0J53	1,625,000.00	AA+	Aaa	04/27/16	04/29/16	1,622,123.75	1.06	225.69	1,622,468.61	1,626,036.75
DTD 02/23/2016 1.000% 02/26/2019												
FHLMC REFERENCE NOTE	3137EAEB1	3137EAEB1	300,000.00	AA+	Aaa	07/19/16	07/20/16	299,274.00	0.96	298.96	299,301.26	298,516.80
DTD 07/20/2016 0.875% 07/19/2019												
FNMA BENCHMARK NOTES	3135G0D75	3135G0D75	320,000.00	AA+	Aaa	07/06/16	07/07/16	326,617.60	0.97	920.00	326,371.16	324,227.84
DTD 04/27/2015 1.500% 06/22/2020												
FHLB GLOBAL NOTE	3130A8O55	3130A8O55	315,000.00	AA+	Aaa	07/14/16	07/15/16	313,084.49	1.25	462.66	313,132.11	312,001.20
DTD 07/14/2016 1.125% 07/14/2021												





Managed Account Detail of Securities Held

For the Month Ending August 31, 2016

FPUD - INVESTMENT PORTFOLIO - 28710100

Security Type/Description	Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value			
Corporate Note															
MORGAN STANLEY CORP NOTE	DTD 04/25/2013 2.125% 04/25/2018	6174467U7	220,000.00	BBB+	A3	07/13/16	07/18/16	222,382.60	1.50	1,636.25	222,224.38	222,247.74			
APPLE INC GLOBAL NOTES	DTD 05/06/2014 2.100% 05/06/2019	037833AO3	325,000.00	AA+	Aa1	05/29/14	05/29/14	329,582.50	1.80	2,180.21	327,539.22	332,691.78			
CHEVRON CORP NOTES	DTD 05/16/2016 1.561% 05/16/2019	166764BH2	300,000.00	AA-	Aa2	05/09/16	05/16/16	300,000.00	1.56	1,365.88	300,000.00	302,112.90			
CITIGROUP INC CORP NOTES	DTD 06/09/2016 2.050% 06/07/2019	172967KS9	100,000.00	BBB+	Baa1	06/02/16	06/09/16	99,948.00	2.07	466.94	99,951.83	100,804.30			
BURLINGTON NRTH CORP	DTD 09/24/2009 4.700% 10/01/2019	12189TBC7	200,000.00	A	A3	06/03/16	06/08/16	220,780.00	1.48	3,916.67	219,368.64	220,442.00			
CATERPILLAR FINANCIAL CORP NOTES	DTD 12/01/2014 2.250% 12/01/2019	14912L6F3	565,000.00	A	A2	04/24/15	04/24/15	577,181.40	1.76	3,178.13	573,704.43	579,128.39			
MELLON BANK (CALLABLE) CORPORATE NOTE	DTD 02/24/2015 2.150% 02/24/2020	06406HCZ0	352,000.00	A	A1	07/07/15	07/07/15	352,148.30	2.14	147.16	352,115.76	358,470.46			
JP MORGAN CHASE & CO NOTES	DTD 07/22/2010 4.400% 07/22/2020	46625HHS2	455,000.00	A-	A3	04/27/16	04/29/16	493,065.30	2.31	2,168.83	490,159.58	496,041.91			
WELLS FARGO & COMPANY NOTES	DTD 12/07/2015 2.550% 12/07/2020	94974BGR5	385,000.00	A	A2	04/27/16	04/29/16	391,579.65	2.16	2,290.75	391,120.53	396,001.76			
MORGAN STANLEY CORP NOTES	DTD 04/21/2016 2.500% 04/21/2021	61746BEA0	350,000.00	BBB+	A3	05/10/16	05/13/16	352,009.00	2.38	3,159.72	351,895.08	355,034.05			
GOLDMAN SACHS GRP INC CORP NT (CALLABLE)	DTD 04/25/2016 2.625% 04/25/2021	38141GVU5	290,000.00	BBB+	A3	08/10/16	08/15/16	296,693.20	2.11	2,664.38	296,633.81	295,325.27			
AMERICAN EXPRESS CREDIT CORP NOTES	DTD 05/05/2016 2.250% 05/05/2021	0258MDEB1	285,000.00	A-	A2	05/05/16	05/10/16	286,558.95	2.13	2,066.25	286,467.35	290,006.03			
BRANCH BANKING & TRUST CORP NOTE	DTD 05/10/2016 2.050% 05/10/2021	05531FAV5	250,000.00	A-	A2	05/10/16	05/16/16	249,835.00	2.06	1,580.21	249,844.45	252,151.25			
Security Type Sub-Total											4,112,896.34	0.95	3,846.89	4,113,227.14	4,109,663.15





Managed Account Detail of Securities Held

For the Month Ending August 31, 2016

FPUD - INVESTMENT PORTFOLIO - 28710100

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Security Type Sub-Total						4,171,763.90	1.98	26,821.38	4,161,025.06	4,200,457.84
Commercial Paper										
ING (US) FUNDING LLC COMM PAPER -- 0.000% 02/01/2017	4497W0P10	A-1	P-1	08/02/16	08/03/16	397,755.33	1.12	0.00	398,113.00	398,094.00
BNP PARIBAS NY BRANCH COMM PAPER -- 0.000% 02/03/2017	09659BP38	A-1	P-1	05/09/16	05/10/16	486,155.54	1.06	0.00	487,784.79	487,613.21
BANK OF MONTREAL CHICAGO COMM PAPER -- 0.000% 04/21/2017	06366GRM3	A-1	P-1	07/25/16	07/26/16	247,907.78	1.13	0.00	248,195.56	248,048.75

Security Type Sub-Total						1,131,818.65	1.09	0.00	1,134,093.35	1,133,755.96
Certificate of Deposit										
SALLIE MAE BANK LT CD DTD 10/24/2012 1.350% 10/24/2016	795450PZ2	NR	NR	10/25/12	10/25/12	246,000.00	1.32	1,182.82	246,000.00	246,304.79
GOLD COAST BANK LT CD DTD 12/30/2013 1.200% 10/30/2017	38058KCS3	NR	NR	12/31/13	12/31/13	245,000.00	1.13	16.11	245,000.00	247,097.94
CELTIC BANK LT CD DTD 12/20/2013 1.250% 12/20/2017	15118RJL2	NR	NR	12/21/13	12/21/13	245,000.00	1.22	612.50	245,000.00	247,479.65
CIT BANK LT CD DTD 03/13/2013 1.100% 03/13/2018	17284A6P8	NR	NR	03/14/13	03/14/13	100,000.00	1.08	518.36	100,000.00	100,821.60
RONDOUT SAVINGS BANK LT CD DTD 01/23/2015 1.350% 07/23/2018	77632ZAP4	NR	NR	01/24/15	01/24/15	245,000.00	1.32	362.47	245,000.00	248,623.31
FIRST RESOURCE BANK LT CD DTD 01/28/2015 1.300% 07/30/2018	336177A03	NR	NR	01/29/15	01/29/15	245,000.00	1.10	305.41	245,000.00	248,691.17
CAPTIAL ONE BANK USA NA LT CD DTD 08/12/2015 1.700% 08/13/2018	14042E5N6	NR	NR	08/12/15	08/12/15	245,000.00	1.40	228.22	245,000.00	248,520.90
SYNCHRONY BANK LT CD DTD 10/25/2013 2.150% 10/25/2018	36157OSM0	NR	NR	10/25/13	10/25/13	245,000.00	2.05	1,861.66	245,000.00	251,039.25





Managed Account Detail of Securities Held

For the Month Ending August 31, 2016

FPUD - INVESTMENT PORTFOLIO - 28710100

Security Type/Description	Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Certificate of Deposit												
BANK OF BARODA LT CD	10/28/2013 2.050% 10/29/2018	0606246K4	245,000.00	NR	NR	10/29/13	10/29/13	245,000.00	1.96	1,733.79	245,000.00	249,961.50
STATE BANK OF INDIA LT CD	12/18/2013 2.050% 12/18/2018	856283VY9	245,000.00	NR	NR	12/19/13	12/19/13	245,000.00	1.96	1,032.02	245,000.00	250,400.54
AMERICAN EXPRESS BK FSB LT CD	07/24/2014 2.000% 07/24/2019	02587CAJ9	245,000.00	NR	NR	07/25/14	07/25/14	245,000.00	1.92	523.56	245,000.00	251,326.39
CAPITAL ONE BANK USA NA LT CD	08/12/2015 2.000% 08/12/2019	140420UE8	245,000.00	NR	NR	08/12/15	08/12/15	245,000.00	1.94	268.49	245,000.00	251,964.62

Security Type Sub-Total	2,796,000.00	8,645.41	2,796,000.00	1.56	2,842,231.66						
Asset-Backed Security / Collateralized Mortgage Obligation											
TOYOTA ABS 2016-C A3	89237WAD9	45,000.00	AAA	Aaa	08/01/16	08/10/16	44,998.79	1.14	29.93	44,998.79	44,874.28
CARMAX ABS 2016-3 A2	14314EAB7	135,000.00	AAA	NR	07/14/16	07/20/16	134,988.98	1.18	70.20	134,989.41	134,852.85
TOYOTA ABS 2016-B A3	89231UAD9	110,000.00	AAA	Aaa	05/02/16	05/11/16	109,994.38	1.30	63.56	109,994.38	110,080.19
JOHN DEERE ABS 2016-B A3	47788NAC2	35,000.00	NR	Aaa	07/19/16	07/27/16	34,997.21	1.25	41.32	34,997.29	34,999.01

Security Type Sub-Total	325,000.00	205.01	324,979.87	1.22	324,806.33
Managed Account Sub-Total	14,058,000.00	45,809.47	14,171,298.82	1.41	14,253,772.64
Securities Sub-Total	\$14,058,000.00	\$45,809.47	\$14,171,298.82	1.41%	\$14,253,772.64
Accrued Interest					\$45,809.47
Total Investments					\$14,299,582.11





Managed Account Fair Market Value & Analytics

For the Month Ending August 31, 2016

FPUD - INVESTMENT PORTFOLIO - 28710100

Security Type/Description	Dated Date/Coupon/Maturity	CUSIP	Par	Broker	Next Call Date	Market Price	Market Value	Unreal G/L On Cost	Unreal G/L Amort Cost	Effective Duration	Duration to Worst at Mkt	YTM
U.S. Treasury Bond / Note												
US TREASURY NOTES		912828UL2	195,000.00	RBC CAP		101.22	197,376.66	175.29	361.59	3.33	3.33	1.01
DTD 01/31/2013 1.375% 01/31/2020												
US TREASURY NOTES		912828XE5	575,000.00	CITIGRP		101.59	584,164.35	(4,738.97)	(4,128.75)	3.63	3.63	1.07
DTD 06/01/2015 1.500% 05/31/2020												
US TREASURY NOTE		912828A42	730,000.00	CITIGRP		103.51	755,606.94	3,307.72	4,920.93	4.06	4.06	1.15
DTD 12/02/2013 2.000% 11/30/2020												
Security Type Sub-Total			1,500,000.00				1,537,147.95	(1,255.96)	1,153.77	3.80	3.80	1.10
Federal Agency Collateralized Mortgage Obligation												
FNMA SERIES 2016-M9 ASQ2		3136ASPX8	105,000.00	CSFB		100.68	105,709.75	(340.20)	(269.47)	1.81	2.53	1.47
DTD 06/01/2016 1.785% 06/01/2019												
Security Type Sub-Total			105,000.00				105,709.75	(340.20)	(269.47)	1.81	2.53	1.47
Federal Agency Bond / Note												
FHLMC REFERENCE NOTE		3137EAE3	500,000.00	JEFFERIE		99.81	499,058.50	(711.50)	(717.87)	1.59	1.59	0.87
DTD 04/07/2016 0.750% 04/09/2018												
FHLB NOTES		3130A8PK3	525,000.00	BARCLAYS		99.51	522,423.30	(1,484.70)	(1,561.11)	1.92	1.92	0.88
DTD 07/08/2016 0.625% 08/07/2018												
FHLB NOTES		3130A8PK3	530,000.00	TD SEC U		99.51	527,398.76	(719.74)	(794.46)	1.92	1.92	0.88
DTD 07/08/2016 0.625% 08/07/2018												
FNMA BENCHMARK NOTE		3135G0J53	1,625,000.00	NOMURA		100.06	1,626,036.75	3,913.00	3,568.14	2.45	2.45	0.97
DTD 02/23/2016 1.000% 02/26/2019												
FHLMC REFERENCE NOTE		3137EAE1	300,000.00	TD SEC U		99.51	298,516.80	(757.20)	(784.46)	2.84	2.84	1.05
DTD 07/20/2016 0.875% 07/19/2019												
FNMA BENCHMARK NOTES		3135G0D75	320,000.00	MERRILL		101.32	324,227.84	(2,389.76)	(2,143.32)	3.69	3.69	1.14
DTD 04/27/2015 1.500% 06/22/2020												
FHLB GLOBAL NOTE		3130A8O55	315,000.00	TD SEC U		99.05	312,001.20	(1,083.29)	(1,130.91)	4.71	4.71	1.33
DTD 07/14/2016 1.125% 07/14/2021												
Security Type Sub-Total			4,115,000.00				4,109,663.15	(3,233.19)	(3,563.99)	2.51	2.51	0.98
Corporate Note												





Managed Account Fair Market Value & Analytics

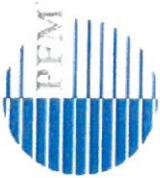
For the Month Ending August 31, 2016

FPUD - INVESTMENT PORTFOLIO - 28710100

Security Type/Description	Dated Date/Coupon/Maturity	CUSIP	Par	Broker	Next Call Date	Market Price	Market Value	Unreal G/L On Cost	Unreal G/L Amort Cost	Effective Duration	Duration to Worst at Mkt	YTM
Corporate Note												
MORGAN STANLEY CORP NOTE	DTD 04/25/2013 2.125% 04/25/2018	6174467U7	220,000.00	CSFB		101.02	222,247.74	(134.86)	23.36	1.61	1.61	1.50
APPLE INC GLOBAL NOTES	DTD 05/06/2014 2.100% 05/06/2019	037833AO3	325,000.00	NEW ACCT		102.37	332,691.78	3,109.28	5,152.56	2.59	2.59	1.20
CHEVRON CORP NOTES	DTD 05/16/2016 1.561% 05/16/2019	166764BH2	300,000.00	WELLSFAR		100.70	302,112.90	2,112.90	2,112.90	2.63	2.63	1.30
CITIGROUP INC CORP NOTES	DTD 06/09/2016 2.050% 06/07/2019	172967KS9	100,000.00	CITIGRP		100.80	100,804.30	856.30	852.47	2.67	2.67	1.75
BURLINGTON NRTH CORP	DTD 09/24/2009 4.700% 10/01/2019	12189TBC7	200,000.00	GOLDMAN		110.22	220,442.00	(338.00)	1,073.36	2.85	2.85	1.31
CATERPILLAR FINANCIAL CORP NOTES	DTD 12/01/2014 2.250% 12/01/2019	14912L6F3	565,000.00	NEW ACCT		102.50	579,128.39	1,946.99	5,423.96	3.11	3.11	1.46
MELLON BANK (CALLABLE) CORPORATE NOTE	DTD 02/24/2015 2.150% 02/24/2020	06406HCZ0	352,000.00	NEW ACCT	01/24/20	101.84	358,470.46	6,322.16	6,354.70	3.32	3.27	1.60
JP MORGAN CHASE & CO NOTES	DTD 07/22/2010 4.400% 07/22/2020	46625HHS2	455,000.00	BONY		109.02	496,041.91	2,976.61	5,882.33	3.58	3.58	1.98
WELLS FARGO & COMPANY NOTES	DTD 12/07/2015 2.550% 12/07/2020	94974BGR5	385,000.00	WELLSFAR		102.86	396,001.76	4,422.11	4,881.23	4.01	4.01	1.85
MORGAN STANLEY CORP NOTES	DTD 04/21/2016 2.500% 04/21/2021	61746BEA0	350,000.00	SCOTIA		101.44	355,034.05	3,025.05	3,138.97	4.33	4.33	2.17
GOLDMAN SACHS GRP INC CORP NT (CALLABLE)	DTD 04/25/2016 2.625% 04/25/2021	38141GVU5	290,000.00	JPMCHASE	03/25/21	101.84	295,325.27	(1,367.93)	(1,308.54)	4.31	4.25	2.21
AMERICAN EXPRESS CREDIT CORP NOTES	DTD 05/05/2016 2.250% 05/05/2021	0258M0EB1	285,000.00	GOLDMAN		101.76	290,006.03	3,447.08	3,538.68	4.40	4.40	1.86
BRANCH BANKING & TRUST CORP NOTE	DTD 05/10/2016 2.050% 05/10/2021	05531FAV5	250,000.00	KEYBAN		100.86	252,151.25	2,316.25	2,306.80	4.43	4.43	1.86
Security Type Sub-Total			4,077,000.00				4,200,457.84	28,693.94	39,432.78	3.45	3.44	1.70
Commercial Paper												
ING (US) FUNDING LLC COMM PAPER	---	4497W0P10	400,000.00	BARCLAYS		99.52	398,094.00	338.67	(19.00)	0.42	0.42	1.12



PFM Asset Management LLC



Managed Account Fair Market Value & Analytics

For the Month Ending August 31, 2016

FPUD - INVESTMENT PORTFOLIO - 28710100

Security Type/Description	Dated Date/Coupon/Maturity	CUSIP	Par	Broker	Next Call Date	Market Price	Market Value	Unreal G/L On Cost	Unreal G/L Amort Cost	Effective Duration	Duration to Worst at Mkt	YTM
Commercial Paper												
BNP PARIBAS NY BRANCH COMM PAPER	-- 0.000% 02/03/2017	09659BP38	490,000.00	BNP PARI		99.51	487,613.21	1,457.67	(171.58)	0.43	0.43	1.13
BANK OF MONTREAL CHICAGO COMM PAPER	-- 0.000% 04/21/2017	06366GRM3	250,000.00	BMO		99.22	248,048.75	140.97	(146.81)	0.63	0.63	1.22
Security Type Sub-Total			1,140,000.00				1,133,755.96	1,937.31	(337.39)	0.47	0.47	1.14
Certificate of Deposit												
SALLIE MAE BANK LT CD	DTD 10/24/2012 1.350% 10/24/2016	795450P22	246,000.00	NEW ACCT		100.12	246,304.79	304.79	304.79	0.15	0.15	0.84
GOLD COAST BANK LT CD	DTD 12/30/2013 1.200% 10/30/2017	38058KCS3	245,000.00	NEW ACCT		100.86	247,097.94	2,097.94	2,097.94	1.16	1.16	0.44
CELTIC BANK LT CD	DTD 12/20/2013 1.250% 12/20/2017	15118RUL2	245,000.00	NEW ACCT		101.01	247,479.65	2,479.65	2,479.65	1.30	1.30	0.45
CIT BANK LT CD	DTD 03/13/2013 1.100% 03/13/2018	17284AGP8	100,000.00	NEW ACCT		100.82	100,821.60	821.60	821.60	1.53	1.53	0.54
RONDOUT SAVINGS BANK LT CD	DTD 01/23/2015 1.350% 07/23/2018	776322AP4	245,000.00	NEW ACCT		101.48	248,623.31	3,623.31	3,623.31	1.89	1.89	0.55
FIRST RESOURCE BANK LT CD	DTD 01/28/2015 1.300% 07/30/2018	336177AO3	245,000.00	NEW ACCT		101.51	248,691.17	3,691.17	3,691.17	1.91	1.91	0.49
CAPTIAL ONE BANK USA NA LT CD	DTD 08/12/2015 1.700% 08/13/2018	14042ESN6	245,000.00	NEW ACCT		101.44	248,520.90	3,520.90	3,520.90	1.94	1.94	0.93
SYNCHRONY BANK LT CD	DTD 10/25/2013 2.150% 10/25/2018	36157OSM0	245,000.00	NEW ACCT		102.47	251,039.25	6,039.25	6,039.25	2.14	2.14	0.92
BANK OF BARODA LT CD	DTD 10/28/2013 2.050% 10/29/2018	0606246K4	245,000.00	NEW ACCT		102.03	249,961.50	4,961.50	4,961.50	2.15	2.15	1.02
STATE BANK OF INDIA LT CD	DTD 12/18/2013 2.050% 12/18/2018	856283VY9	245,000.00	NEW ACCT		102.20	250,400.54	5,400.54	5,400.54	2.29	2.29	1.00
AMERICAN EXPRESS BK FSB LT CD	DTD 07/24/2014 2.000% 07/24/2019	02587CAU9	245,000.00	NEW ACCT		102.58	251,326.39	6,326.39	6,326.39	2.88	2.88	1.03
CAPTIAL ONE BANK USA NA LT CD	DTD 08/12/2015 2.000% 08/12/2019	140420UE8	245,000.00	NEW ACCT		102.84	251,964.62	6,964.62	6,964.62	2.93	2.93	0.98
Security Type Sub-Total			2,796,000.00				2,842,231.66	46,231.66	46,231.66	1.88	1.88	0.78





Managed Account Fair Market Value & Analytics

For the Month Ending August 31, 2016

FPUD - INVESTMENT PORTFOLIO - 28710100

Security Type/Description	Dated Date/Coupon/Maturity	CUSIP	Par	Broker	Next Call Date	Market Price	Market Value	Unreal G/L On Cost	Unreal G/L Amort Cost	Effective Duration	Duration to Worst at Mkt	YTM
Asset-Backed Security / Collateralized Mortgage Obligation												
TOYOTA ABS 2016-C A3	89237WAD9	45,000.00	MITSU			99.72	44,874.28	(124.51)	(124.51)	2.00	2.14	1.27
DTD 08/10/2016 1.140% 08/15/2019												
CARMAX ABS 2016-3 A2	14314EAB7	135,000.00	CSFB			99.89	134,852.85	(136.13)	(136.56)	1.12	2.75	1.21
DTD 07/20/2016 1.170% 08/15/2019												
TOYOTA ABS 2016-B A3	89231UAD9	110,000.00	CITIGRP			100.07	110,080.19	85.81	85.81	1.84	2.56	1.27
DTD 05/11/2016 1.300% 04/15/2020												
JOHN DEERE ABS 2016-B A3	47788NAC2	35,000.00	RBC CAP			100.00	34,999.01	1.80	1.72	2.01	3.35	1.25
DTD 07/27/2016 1.250% 06/15/2020												
Security Type Sub-Total		325,000.00					324,806.33	(173.03)	(173.54)	1.58	2.66	1.24
Managed Account Sub-Total		14,058,000.00					14,253,772.64	71,860.53	82,473.82	2.61	2.64	1.19
Securities Sub-Total		\$14,058,000.00					\$14,253,772.64	\$71,860.53	\$82,473.82	2.61	2.64	1.19%
Accrued Interest							\$45,809.47					
Total Investments							\$14,299,582.11					



PFM Asset Management LLC



Managed Account Security Transactions & Interest

For the Month Ending August 31, 2016

FPUD - INVESTMENT PORTFOLIO - 28710100

Transaction Type	Trade Settle	Security Description	CUSIP	Par	Principal Proceeds	Accrued Interest	Total	Realized G/L Cost	Realized G/L Amort Cost	Sale Method
BUY	08/01/16	FHLB NOTES	3130A8PK3	530,000.00	(528,118.50)	(220.83)	(528,339.33)			
	08/01/16	DTD 07/08/2016 0.625% 08/07/2018								
	08/01/16	TOYOTA ABS 2016-C A3	89237WAD9	45,000.00	(44,998.79)	0.00	(44,998.79)			
	08/02/16	DTD 08/10/2016 1.140% 08/15/2019								
	08/03/16	ING (US) FUNDING LLC COMM PAPER	4497W0P10	400,000.00	(397,755.33)	0.00	(397,755.33)			
	08/10/16	0.000% 02/01/2017								
	08/15/16	GOLDMAN SACHS GRP INC CORP NT (CALLABLE)	38141GVU5	290,000.00	(296,693.20)	(2,326.04)	(299,019.24)			
	08/10/16	DTD 04/25/2016 2.625% 04/25/2021								
	08/15/16	FHLMC REFERENCE NOTE	3137EAEA3	500,000.00	(499,770.00)	(1,333.33)	(501,103.33)			
	08/10/16	DTD 04/07/2016 0.750% 04/09/2018								
Transaction Type Sub-Total				1,765,000.00	(1,767,335.82)	(3,880.20)	(1,771,216.02)			

Transaction Type	Trade Settle	Security Description	CUSIP	Par	Principal Proceeds	Accrued Interest	Total	Realized G/L Cost	Realized G/L Amort Cost	Sale Method
INTEREST										
	08/01/16	MONEY MARKET FUND	MONEY002	0.00	0.00	56.08	56.08			
	08/25/16	FNMA SERIES 2016-M9 ASQ2	3136ASPX8	105,000.00	0.00	156.19	156.19			
	08/07/16	DTD 06/01/2016 1.785% 06/01/2019								
	08/07/16	FHLB NOTES	3130A8PK3	530,000.00	0.00	266.84	266.84			
	08/07/16	DTD 07/08/2016 0.625% 08/07/2018								
	08/07/16	FHLB NOTES	3130A8PK3	525,000.00	0.00	264.32	264.32			
	08/12/16	DTD 07/08/2016 0.625% 08/07/2018								
	08/12/16	CAPTIAL ONE BANK USA NA LT CD	140420UE8	245,000.00	0.00	2,443.29	2,443.29			
	08/12/16	DTD 08/12/2015 2.000% 08/12/2019								
	08/12/16	CAPTIAL ONE BANK USA NA LT CD	14042ESN6	245,000.00	0.00	2,076.79	2,076.79			
	08/15/16	DTD 08/12/2015 1.700% 08/13/2018								
	08/15/16	TOYOTA ABS 2016-B A3	89231UAD9	110,000.00	0.00	119.17	119.17			
	08/15/16	DTD 05/11/2016 1.300% 04/15/2020								
	08/15/16	CARMAX ABS 2016-3 A2	14314EAB7	135,000.00	0.00	109.68	109.68			
	08/24/16	DTD 07/20/2016 1.170% 08/15/2019								
	08/24/16	MELLON BANK (CALLABLE) CORPORATE NOTE	06406HCZ0	352,000.00	0.00	3,784.00	3,784.00			
	08/26/16	DTD 02/24/2015 2.150% 02/24/2020								
	08/26/16	FNMA BENCHMARK NOTE	3135G0J53	1,625,000.00	0.00	8,125.00	8,125.00			
	08/26/16	DTD 02/23/2016 1.000% 02/26/2019								





Managed Account Security Transactions & Interest

For the Month Ending August 31, 2016

PFUD - INVESTMENT PORTFOLIO - 28710100

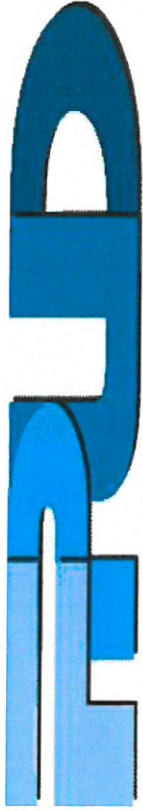
Transaction Type	Trade	Settle	Security Description	CUSIP	Par	Principal Proceeds	Accrued Interest	Total	Realized G/L Cost	Realized G/L Amort Cost	Sale Method
INTEREST											
	08/30/16	08/30/16	GOLD COAST BANK LT CD DTD 12/30/2013 1.200% 10/30/2017	38058KCS3	245,000.00	0.00	249.70	249.70			
Transaction Type Sub-Total								17,651.06			
SELL											
	08/01/16	08/02/16	FHLB NOTES DTD 10/09/2015 0.625% 10/26/2017	3130A6LZ8	530,000.00	529,311.00	883.33	530,194.33	720.80	477.60	SPEC LOT
	08/01/16	08/10/16	FNMA BENCHMARK NOTE DTD 02/23/2016 1.000% 02/26/2019	3135G0J53	50,000.00	50,168.50	227.78	50,396.28	257.00	248.21	SPEC LOT
	08/02/16	08/03/16	FHLB NOTES DTD 10/09/2015 0.625% 10/26/2017	3130A6LZ8	400,000.00	399,524.00	673.61	400,197.61	588.00	402.48	SPEC LOT
	08/10/16	08/11/16	FHLB NOTES DTD 10/09/2015 0.625% 10/26/2017	3130A6LZ8	600,000.00	599,358.00	1,093.75	600,451.75	954.00	652.04	SPEC LOT
	08/10/16	08/11/16	US TREASURY NOTES DTD 01/31/2013 1.375% 01/31/2020	912828UL2	350,000.00	355,646.48	143.85	355,790.33	1,695.31	1,970.21	SPEC LOT
	08/10/16	08/15/16	US TREASURY NOTES DTD 05/02/2016 1.375% 04/30/2021	912828O78	300,000.00	304,113.28	1,199.39	305,312.67	(1,640.63)	(1,517.08)	SPEC LOT
	08/10/16	08/15/16	GENERAL ELEC CAP CORP NOTES DTD 04/21/2008 5.625% 05/01/2018	36962G3U6	500,000.00	539,975.00	8,125.00	548,100.00	1,375.00	25,730.14	SPEC LOT
Transaction Type Sub-Total								2,790,442.97	3,949.48	27,963.60	
Managed Account Sub-Total								1,036,878.01	3,949.48	27,963.60	
Total Security Transactions								\$1,036,878.01	\$3,949.48	\$27,963.60	



General Ledger

Revenue vs Expenses Summary

User: marcic
 Printed: 9/21/2016 - 1:30 PM
 Fiscal 2016
 Fiscal 1 to 11



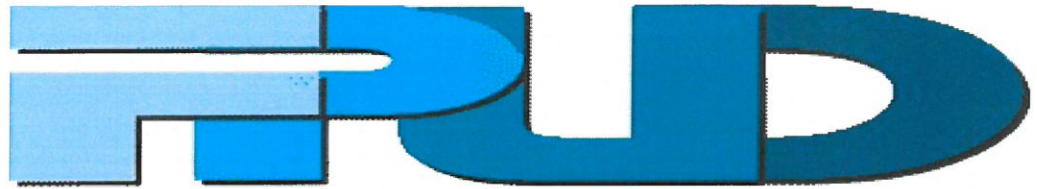
Fallbrook Public Utility District

Purchasing Dept. Phone: (760) 728-1151, Fax: (760) 728-8491
 Main Office Phone: (760) 728-1125, Fax: (760) 728-6029

Fund	Description	Revenues for Period	Expenses for Period	Year to Date Amount
10	Treasurer's Receipt/Disburse	3,565,798.43	3,073,832.34	491,966.09
20	Property Taxes	1,759,296.85	1,759,296.85	0.00
30	Water Operations	16,999,382.07	17,557,885.98	-558,503.91
31	Recycled Operations	938,931.93	788,645.01	150,286.92
32	Wastewater Operations	4,949,187.05	4,431,865.74	517,321.31
40	Water Capital Improvement	3,154,830.90	3,880,469.22	-725,638.32
41	Recycled Capital Improvement	682,428.25	0.00	682,428.25
42	Wastewater Capital Improvement	1,902,252.88	1,175,518.21	726,734.67
60	Equipment & Warehouse	956,796.06	907,702.24	49,093.82
71	DeLuz Improvements	65,328.51	0.00	65,328.51
75	Red Mountain SRF	366,535.70	131,177.21	235,358.49
76	WWTP QECB Solar Loan	1,027,682.14	93,236.03	934,446.11
77	WWTP SRF	350,944.00	0.00	350,944.00
		36,719,394.77	33,799,628.83	2,919,765.94

Report Totals:

General Ledger
Balance Sheet
Consolidated



Fallbrook Public Utility District
Purchasing Dept. Phone: (760) 728-1151, Fax: (760) 728-8491
Main Office Phone: (760) 728-1125, Fax: (760) 728-6029

User: marcie
 Printed: 9/21/2016 1:36:24 PM
 Period 01 - 11
 Fiscal Year 2016

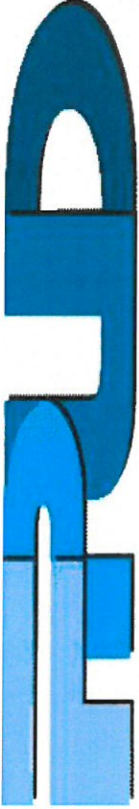
Description	End Bal
Asset	
Cash and Investments	19,018,938.34
Cash With Treasurer's Fund	8,714,067.36
Receivables	4,579,881.38
Inventory	2,232,928.82
Other Current Assets	1,231,394.69
Restricted Cash & Investments	373,965.97
Board Designated Assets	-46,116.00
Capital Assets-Being Depreciated	130,041,230.27
Capital Assets-Not Being Depreciated	76,147,270.15
Accumulated Depreciation	-66,761,390.33
Asset	175,532,170.65
Liability	
Accounts Payable	-5,395,530.86
Cash Due to Other Funds	-8,714,067.36
Accrued Wages	-126,702.18
Compensated Absences	-1,277,442.05
Construction and Other Deposits	-11,812.00
Accrued Interest Payable	-453,671.10
HRA Liability	-190,366.15
OPEB Liability	-544,296.00
Retention Payable	-7,966.30
Other Long Term Liabilities	-46,978,425.00
Liability	-63,700,279.00
Fund Balance	
Fund Balance	-108,912,125.71
Fund Balance	-108,912,125.71
Ret Earnings Total	2,919,765.94
Liab Fund Bal and Ret Earnings Total	-175,532,170.65

General Ledger

Revenue vs Expenses Summary

User: marcie
 Printed: 9/22/2016 - 11:19 AM
 Fiscal 2017
 Fiscal 1-Jul

Fallbrook Public Utility District
 Purchasing Dept. Phone: (760) 728-1151, Fax: (760) 728-8491
 Main Office Phone: (760) 728-1125, Fax: (760) 728-6029



Fund	Description	Revenues for Period	Expenses for Period	YTD
10	Treasurer's Receipts/Disburse	158,088.81	654,861.74	-496,772.93
20	Property Taxes	0.00	0.00	0.00
30	Water Operations	2,092,546.66	1,827,768.90	264,777.76
31	Recycled Operations	145,836.00	50,455.07	95,380.93
32	Wastewater Operations	463,477.63	297,139.26	166,338.37
40	Water Capital Improvement	349,651.21	192,000.00	157,651.21
41	Recycled Capital Improvement	0.00	12,779.59	-12,779.59
42	Wastewater Capital Improvement	103,754.25	100,000.00	3,754.25
60	Equipment & Warehouse	47,630.98	50,289.76	-2,658.78
75	Red Mountain SRF	0.00	62,989.73	-62,989.73
76	WWTP QECB Solar Loan	33,815.13	0.00	33,815.13
77	WWTP SRF	31,904.00	0.00	31,904.00
Report Totals:		3,426,704.67	3,248,284.05	178,420.62

General Ledger

Revenue vs Expenses Summary

User: marcie

Printed: 9/22/2016 - 11:25 AM

Fiscal 2017

Fiscal 2-Through August



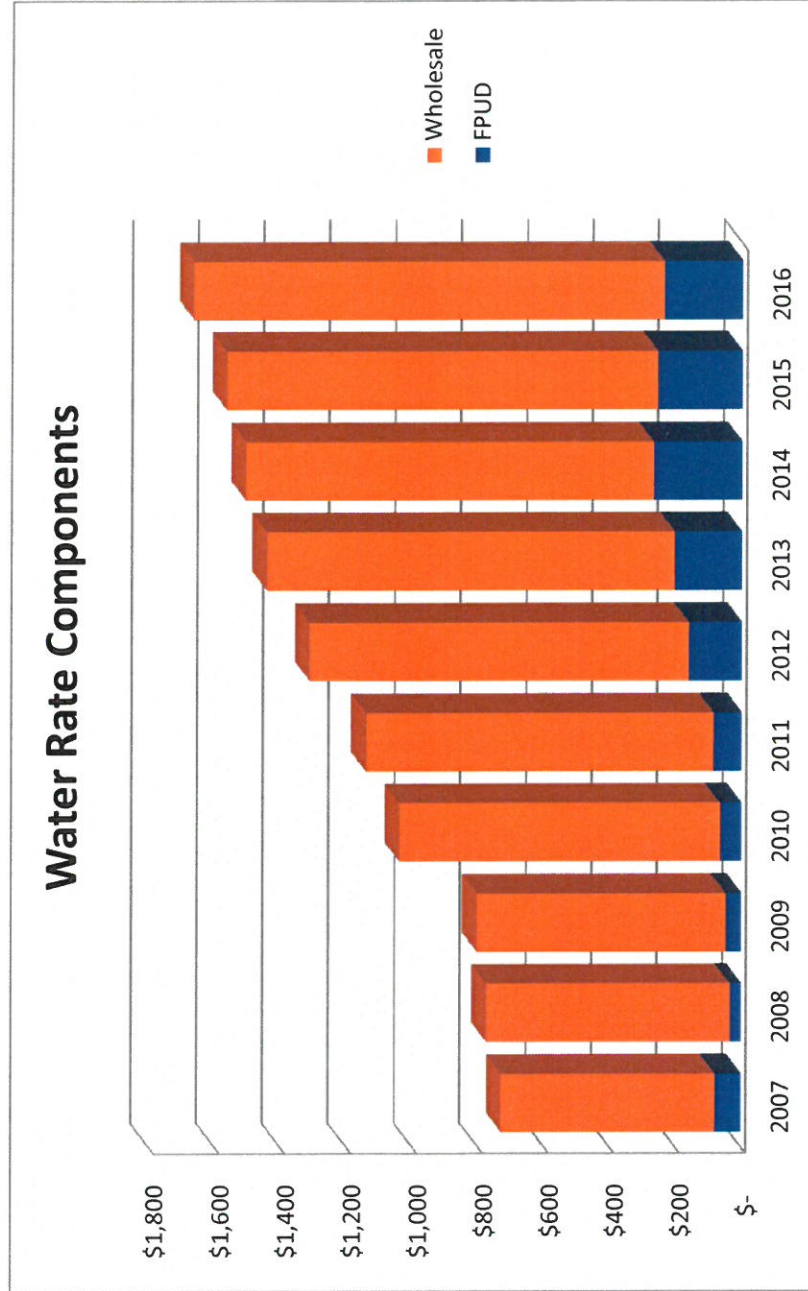
Fallbrook Public Utility District

Purchasing Dept. Phone: (760) 728-1151, Fax: (760) 728-8491

Main Office Phone: (760) 728-1125, Fax: (760) 728-6029

Fund	Description	YTD Balance Before	Revenues for Period	Expenses for Period	Year to Date Amount
10	Treasurer's Receipts/Disburse	-496,772.93	539,717.90	311,210.22	-268,265.25
20	Property Taxes	0.00	28,806.72	28,806.72	0.00
30	Water Operations	264,777.76	2,154,051.90	2,351,424.35	67,405.31
31	Recycled Operations	95,380.93	275,144.21	98,156.74	272,368.40
32	Wastewater Operations	166,338.37	467,861.19	508,512.88	125,686.68
40	Water Capital Improvement	157,651.21	200,510.11	208,333.27	149,828.05
41	Recycled Capital Improvement	-12,779.59	0.00	0.00	-12,779.59
42	Wastewater Capital Improvement	3,754.25	90,513.85	100,000.00	-5,731.90
60	Equipment & Warehouse	-2,658.78	143,268.47	118,046.92	22,562.77
75	Red Mountain SRF	-62,989.73	15,061.17	-8.52	-47,920.04
76	WWTP QECB Solar Loan	33,815.13	199,312.73	0.00	233,127.86
77	WWTP SRF	146,516.62	73,661.50	0.00	105,565.50
	Report Totals:	293,033.24	4,187,909.75	3,724,482.58	641,847.79

Calendar Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Wholesale	\$ 653	\$ 743	\$ 760	\$ 977	\$ 1,061	\$ 1,154	\$ 1,241	\$ 1,240	\$ 1,313	\$ 1,431
FPUD	\$ 80	\$ 36	\$ 48	\$ 67	\$ 86	\$ 163	\$ 206	\$ 272	\$ 258	\$ 241
Per AF	\$ 733	\$ 779	\$ 808	\$ 1,044	\$ 1,147	\$ 1,316	\$ 1,447	\$ 1,512	\$ 1,570	\$ 1,672
Total Discounts	\$ 148	\$ 160	\$ 166	\$ 134	\$ 127	\$ 107	\$ 121	\$ 139	\$ 182	\$ 186



7/31/2016

Treasurer's Warrant No. Jul

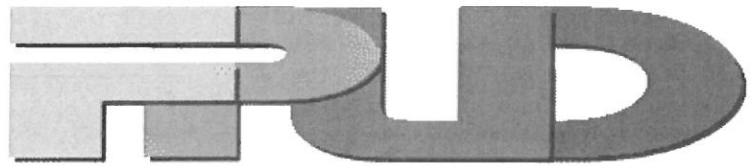
TO: Treasurer of the Fallbrook Public Utility District

The bills and claims listed below are approved as authorized by resolution no. 3538 of the Board of Directors dated July 8, 1985. You are hereby authorized and directed to pay said prospective claims in the amounts stated (less discounts in instances where discounts are allowed).

Accounts Payable

Checks by Date - Summary by Check Date

User: paula
 Printed: 9/2/2016 1:17 PM



Fallbrook Public Utility District

Purchasing Dept. Phone: (760) 728-1151, Fax: (760) 728-8491

Main Office Phone: (760) 728-1125, Fax: (760) 728-6029

Check No	Vendor No	Vendor Name	Check Date	Check Amount
ACH	06758	US TREASURY - PAYROLL TAXES	07/06/2016	57,382.91
ACH	06759	STATE OF CA - PR TAXES	07/06/2016	7,823.65
ACH	06760	STATE OF CA - SDI	07/06/2016	1,844.38
ACH	06761	Lincoln Financial Group	07/06/2016	5,602.51
Total for 7/6/2016:				72,653.45
72302	04949	ALLDATA	07/07/2016	1,620.00
72303	06536	ARCADIS U.S., INC	07/07/2016	1,863.83
72304	02805	Asbury Environmental Services	07/07/2016	120.00
72305	06713	BISHOP'S TREE SERVICE, INC.	07/07/2016	11,100.00
72306	06256	MARYLOU BOULTINGHOUSE	07/07/2016	37.26
72307	06402	BRIAN BRADY	07/07/2016	22.92
72308	06012	CALIFORNIA DEPT OF CSS	07/07/2016	231.00
72309	06115	CDW GOVERNMENT INC.	07/07/2016	167.98
72310	91012	COMPLIANCE SIGNS, INC	07/07/2016	172.00
72311	02176	CORELOGIC SOLUTIONS, LLC	07/07/2016	225.00
72312	00370	Crop Production Services, Inc.	07/07/2016	153.31
72313	09705	CSDA SAN DIEGO CHAPTER	07/07/2016	150.00
72314	06299	D & H WATER SYSTEMS, INC	07/07/2016	8,362.27
72315	02925	DATA NET SOLUTIONS	07/07/2016	268.24
72316	02901	DAVID DEEM	07/07/2016	1,350.01
72317	05192	DIAMOND ENVIRONMENTAL	07/07/2016	170.02
72318	04425	DOMINICK'S SANDWICHES	07/07/2016	24.69
72319	01262	KYLE D. DRAKE	07/07/2016	125.00
72320	06383	DUDEK INC	07/07/2016	8,170.00
72321	09523	FALLBROOK EQUIP RENTALS	07/07/2016	183.60
72322	01099	FALLBROOK IRRIGATION INC	07/07/2016	3.05
72323	01155	FALLBROOK REFUSE	07/07/2016	43.00
72324	00152	FPUD EMPL ASSOCIATION	07/07/2016	816.54
72325	09517	GENCO	07/07/2016	28.08
72326	02170	GRAINGER, INC.	07/07/2016	574.69
72327	05380	HACH CO	07/07/2016	1,908.40
72328	05255	INLAND WATER WORKS SUPPLY	07/07/2016	11,607.30
72329	00190	JCI JONES CHEMICALS INC.	07/07/2016	7,778.50
72330	04027	Joe's Hardware	07/07/2016	663.66
72331	05792	JOSEPH G POLLARD CO INC	07/07/2016	1,225.84
72332	06659	KUBE ENGINEERING	07/07/2016	7,344.27
72333	01703	TODD LANGE	07/07/2016	156.59
72334	90916	KELLY LAUGHLIN	07/07/2016	64.80
72335	04638	LOWE'S CORPORATION	07/07/2016	1,452.77
72336	06123	MACIAS GINI & O'CONNELL	07/07/2016	12,500.00
72337	06338	MYTHOS TECHNOLOGY INC	07/07/2016	438.04
72338	90932	NAPA Auto Parts	07/07/2016	1,676.33
72339	00718	NATIONWIDE RETIREMENT SOLUTIO	07/07/2016	1,908.07
72340	01406	NORTH COUNTY WELDING SUPPLY	07/07/2016	692.16
72341	06298	ONESOURCE DISTRIBUTORS, LLC	07/07/2016	292.42

Check No	Vendor No	Vendor Name	Check Date	Check Amount
72342	05033	PACKARD GOVERNMENT AFFAIRS	07/07/2016	5,000.00
72343	00215	Petty Cash	07/07/2016	111.55
72344	91007	PFM Asset Mangement LLC	07/07/2016	1,204.98
72345	00216	PINE TREE LUMBER	07/07/2016	494.39
72346	04662	QUALITY FENCE	07/07/2016	6,557.00
72347	04800	ROOTX	07/07/2016	1,881.40
72348	00231	SAN DIEGO COUNTY WATER AUTH	07/07/2016	1,552,119.85
72349	00232	SAN DIEGO GAS & ELECTRIC	07/07/2016	3,137.57
72350	06552	SANDIA CREEK ROAD COMMITTEE	07/07/2016	180.00
72351	05861	SCAP	07/07/2016	1,686.00
72352	00236	SCRAPPYS	07/07/2016	495.56
72353	06735	TCN, INC.	07/07/2016	45.66
72354	05883	TESTAMERICA LABORATORIES, INC.	07/07/2016	1,255.30
72355	03027	THE UPS STORE	07/07/2016	61.08
72356	06541	TIFCO INDUSTRIES	07/07/2016	807.95
72357	00724	UNDERGROUND SERVICE ALERT	07/07/2016	220.50
72358	06005	UNIFIRST CORP.	07/07/2016	997.66
72359	06211	UNITED IMAGING	07/07/2016	645.80
72360	00710	UNITED WAY OF SAN DIEGO	07/07/2016	57.00
72361	02570	CHERYL WILLIAMS	07/07/2016	647.50
72362	05909	WAGNER & BONSIGNORE	07/07/2016	470.00
72363	06104	WEST PACK INC.	07/07/2016	1,400.00
Total for 7/7/2016:				1,665,168.39
72369	91033	ABC CONSTRUCTION CO, INC	07/13/2016	1,055.26
72370	91034	C/O KARL ZINNER ADDRESS IMPROV	07/13/2016	937.82
72371	90972	Advanced Marine Preservation, LLC	07/13/2016	144,639.15
72372	04382	AMERICAN RIGGING & SUPPLY CO	07/13/2016	1,092.96
72373	91037	ROBERT AMKRAUT	07/13/2016	10.00
72374	06570	ANCHOR QEA, LLC	07/13/2016	5,487.50
72375	06029	ASSURANT EMPLOYEE BENEFITS	07/13/2016	2,323.78
72376	05958	BAMM! PROMOTIONAL PRODUCTS	07/13/2016	1,497.15
72377	05615	BOOT WORLD INC	07/13/2016	933.90
72378	06256	MARYLOU BOULTINGHOUSE	07/13/2016	6.41
72379	06402	BRIAN BRADY	07/13/2016	46.42
72380	06336	CAPITAL ONE COMMERCIAL	07/13/2016	174.43
72381	06115	CDW GOVERNMENT INC.	07/13/2016	3,409.27
72382	05825	CONSOLIDATED ELECTRICAL	07/13/2016	709.71
72383	05953	CORODATA RECORDS MANAGEMENT	07/13/2016	574.81
72384	00370	Crop Production Services, Inc.	07/13/2016	2,383.45
72385	06299	D & H WATER SYSTEMS, INC	07/13/2016	12,920.50
72386	05180	NOELLE DENKE	07/13/2016	78.01
72387	05192	DIAMOND ENVIRONMENTAL	07/13/2016	333.78
72388	02372	DION INTERNATIONAL	07/13/2016	382.58
72389	09523	FALLBROOK EQUIP RENTALS	07/13/2016	2,653.40
72390	01099	FALLBROOK IRRIGATION INC	07/13/2016	4.71
72391	90945	Fallbrook Radiator	07/13/2016	43.76
72392	01155	FALLBROOK REFUSE	07/13/2016	44.00
72393	00170	FALLBROOK WASTE & RECYCLING	07/13/2016	210.00
72394	04494	FEDERAL EXPRESS CORPORATION	07/13/2016	64.89
72395	02972	FISHER SCIENTIFIC	07/13/2016	1,853.40
72396	00182	GLENNIES OFFICE PRODUCTS	07/13/2016	2,765.17
72397	02170	GRAINGER, INC.	07/13/2016	2,168.99
72398	05925	HD SUPPLY WATERWORKS	07/13/2016	1,783.51
72399	06429	HEALTHPOINTE MEDICAL GROUP, INC	07/13/2016	585.00
72400	91032	HMS CONSTRUCTION INC	07/13/2016	985.05

Check No	Vendor No	Vendor Name	Check Date	Check Amount
72401	03276	HOME DEPOT CREDIT SERVICES	07/13/2016	2,660.13
72402	91031	ROBERT HUBER	07/13/2016	147.66
72403	03161	IDEXX DISTRIBUTION CORP	07/13/2016	651.87
72404	06577	INFOSEND INC	07/13/2016	2,200.50
72405	06359	INFRASTRUCTURE ENGINEERING	07/13/2016	121,156.66
72406	05871	ITRON INC	07/13/2016	8,233.52
72407	05505	TODD JESTER	07/13/2016	296.20
72408	04027	Joe's Hardware	07/13/2016	43.73
72409	90953	JR FILANC CONSTRUCTION CO., INC.	07/13/2016	72,876.40
72410	06596	MCS INSPECTION GROUP	07/13/2016	5,448.00
72411	04926	MINOLTA BUSINESS SOLUTION	07/13/2016	3,255.36
72412	04581	NEIMANS COLLISION CENTER	07/13/2016	756.72
72413	90955	NEWest CONSTRUCTION	07/13/2016	99,666.40
72414	06487	Alisa Nichols	07/13/2016	260.80
72415	91035	DOUGLAS NICKERSON	07/13/2016	17.75
72416	06298	ONESOURCE DISTRIBUTORS, LLC	07/13/2016	2,559.08
72417	02759	PACIFIC SAFETY CENTER	07/13/2016	990.00
72418	03990	PEREZ UPHOLSTERY	07/13/2016	168.20
72419	06199	PLUMBERS DEPOT INC	07/13/2016	4,706.80
72420	06485	FABRIENNE ROBINSON	07/13/2016	20.00
72421	05636	SAM'S CLUB	07/13/2016	3,640.09
72422	90929	SOUTHWEST ANSWERING SERVICE, I	07/13/2016	708.94
72423	91036	ASHLEY STORLIE	07/13/2016	10.00
72424	00159	SUPERIOR READY MIX	07/13/2016	4,897.80
72425	05747	TEMECULA VALLEY PIPE & SUPPLY	07/13/2016	30.16
72426	05883	TESTAMERICA LABORATORIES, INC.	07/13/2016	127.58
72427	04296	TRENCH PLATE RENTAL CO	07/13/2016	6,165.00
72428	06005	UNIFIRST CORP.	07/13/2016	755.46
72429	00458	VERIZON WIRELESS	07/13/2016	611.92
72430	04290	VILLAGE NEWS	07/13/2016	100.00
72431	02960	VWR INTERNATIONAL INC	07/13/2016	440.72
72432	06231	WESTERN WATER WORKS SUPPLY CC	07/13/2016	2,733.22
72433	02570	CHERYL WILLIAMS	07/13/2016	389.38
72434	91038	RICHARD & JILL YOUNG	07/13/2016	30.78
Total for 7/13/2016:				538,915.60
72442	06501	24 HOUR FIRE PROTECTION, INC	07/19/2016	225.00
72443	06740	ACCELA, INC	07/19/2016	975.00
72444	00101	ACWA JPIA	07/19/2016	91,414.57
72445	00160	WILLIAM AHREND	07/19/2016	102.60
72446	04995	AMERICAN MESSAGING	07/19/2016	114.04
72447	04382	AMERICAN RIGGING & SUPPLY CO	07/19/2016	259.20
72448	90980	Bens Asphalt & Maintenance Company, Inc	07/19/2016	18,640.00
72449	02743	BEST BEST & KRIEGER	07/19/2016	4,425.91
72450	05615	BOOT WORLD INC	07/19/2016	262.70
72451	06375	CALGON CARBON CORPORATION	07/19/2016	5,292.59
72452	06012	CALIFORNIA DEPT OF CSS	07/19/2016	231.00
72453	03978	CAMERON WELDING SUPPLY	07/19/2016	200.30
72454	01719	MICKEY M. CASE	07/19/2016	60.00
72455	06115	CDW GOVERNMENT INC.	07/19/2016	19.05
72456	05593	CHARLES P CROWLEY CO INC	07/19/2016	1,672.76
72458	06035	CYBER SECURITY SOURCE	07/19/2016	3,321.81
72459	02925	DATA NET SOLUTIONS	07/19/2016	685.71
72460	05180	NOELLE DENKE	07/19/2016	160.13
72461	05177	DOWNEY BRAND, LLP	07/19/2016	629.00
72462	03087	Marcella M. Eilers	07/19/2016	36.54

Check No	Vendor No	Vendor Name	Check Date	Check Amount
72463	06303	EXECUTIVE LANDSCAPE, INC.	07/19/2016	417.50
72464	09523	FALLBROOK EQUIP RENTALS	07/19/2016	114.00
72465	01099	FALLBROOK IRRIGATION INC	07/19/2016	7.73
72466	00169	FALLBROOK OIL COMPANY	07/19/2016	4,801.17
72467	00170	FALLBROOK WASTE & RECYCLING	07/19/2016	537.20
72468	06353	FIVES NO. AMERICAN COMBUSTION	07/19/2016	836.36
72469	00152	FPUD EMPL ASSOCIATION	07/19/2016	816.54
72470	06286	GARDA CL WEST, INC.	07/19/2016	228.47
72471	02170	GRAINGER, INC.	07/19/2016	368.42
72472	05380	HACH CO	07/19/2016	1,309.44
72473	05803	HADRONEX INC	07/19/2016	13,512.00
72474	06062	HARRINGTON INDUSTRIAL PLASTICS	07/19/2016	41.80
72475	00185	HAWTHORNE MACHINERY CO.	07/19/2016	12,961.96
72476	05925	HD SUPPLY WATERWORKS	07/19/2016	1,867.34
72477	06577	INFOSEND INC	07/19/2016	8,815.15
72478	06267	J2 GLOBAL IRELAND LIMITED	07/19/2016	59.91
72479	90944	ROBERT H. JAMES	07/19/2016	1,080.00
72480	06380	JANI-KING OF CALIFORNIA - SDO	07/19/2016	2,117.39
72481	05505	TODD JESTER	07/19/2016	1,397.03
72482	90953	JR FILANC CONSTRUCTION CO., INC.	07/19/2016	647,900.00
72483	06156	LOMACK SERVICE CORPORATION	07/19/2016	341.00
72484	06633	MAINTENANCE CONNECTION INC	07/19/2016	398.00
72485	91029	Mallory Safety and Supply Co.	07/19/2016	23.33
72486	03944	MISSION RESOURCE CONSV DIST	07/19/2016	62.50
72487	06338	MYTHOS TECHNOLOGY INC	07/19/2016	2,737.00
72488	90932	NAPA Auto Parts	07/19/2016	122.35
72489	03201	NATIONAL SAFETY COMPLIANCE INC	07/19/2016	57.50
72490	00718	NATIONWIDE RETIREMENT SOLUTIO	07/19/2016	1,958.07
72491	06776	Networkfleet, Inc	07/19/2016	808.65
72492	06487	Alisa Nichols	07/19/2016	48.18
72493	01406	NORTH COUNTY WELDING SUPPLY	07/19/2016	223.64
72494	06298	ONESOURCE DISTRIBUTORS, LLC	07/19/2016	309.96
72495	02759	PACIFIC SAFETY CENTER	07/19/2016	1,270.00
72497	00215	Petty Cash	07/19/2016	31.49
72498	02662	QUALITY CHEVROLET	07/19/2016	193.59
72499	04662	QUALITY FENCE	07/19/2016	2,163.00
72500	04075	RAYNE WATER SYSTEMS	07/19/2016	130.00
72501	02854	STEVE RUCKER	07/19/2016	34.52
72502	04903	SAN DIEGO COUNTY AUDITOR & COM	07/19/2016	20,531.75
72503	00231	SAN DIEGO COUNTY WATER AUTH	07/19/2016	22,830.00
72504	00232	SAN DIEGO GAS & ELECTRIC	07/19/2016	10.85
72505	00237	SEARS COMMERCIAL ONE	07/19/2016	917.99
72506	06401	SONSRAY MACHINERY LLC	07/19/2016	1,007.68
72507	06430	SUNSHINE INDUSTRIAL INC.	07/19/2016	2,331.97
72508	05731	TEMECULA VALLEY POWDER COATI	07/19/2016	201.60
72509	05883	TESTAMERICA LABORATORIES, INC.	07/19/2016	718.20
72510	06579	TOWNSEND PUBLIC AFFAIRS, INC	07/19/2016	5,000.00
72511	00250	TRY ENTERPRISES	07/19/2016	6,770.00
72512	00710	UNITED WAY OF SAN DIEGO	07/19/2016	57.00
72513	00458	VERIZON WIRELESS	07/19/2016	426.11
72514	04290	VILLAGE NEWS	07/19/2016	495.00
72515	00233	WAXIE SANITARY SUPPLY	07/19/2016	1,532.51
72516	02570	CHERYL WILLIAMS	07/19/2016	647.50
Total for 7/19/2016:				902,308.26
ACH	06758	US TREASURY - PAYROLL TAXES	07/20/2016	59,367.57

Check No	Vendor No	Vendor Name	Check Date	Check Amount
ACH	06759	STATE OF CA - PR TAXES	07/20/2016	8,539.99
ACH	06760	STATE OF CA - SDI	07/20/2016	1,904.06
ACH	06761	Lincoln Financial Group	07/20/2016	5,615.36
ACH	06763	PERS - PAYROLL	07/20/2016	34,814.47
Total for 7/20/2016:				110,241.45
ACH	06763	PERS - PAYROLL	07/27/2016	459,468.00
72517	01460	AFLAC	07/27/2016	1,217.87
72518	05088	AT&T	07/27/2016	826.20
72519	06235	JACK BEBEE	07/27/2016	1,638.30
72520	02743	BEST BEST & KRIEGER	07/27/2016	625.83
72521	06402	BRIAN BRADY	07/27/2016	44.79
72522	05806	CALIFORNIA MUNICIPAL TREASURER	07/27/2016	155.00
72523	06336	CAPITAL ONE COMMERCIAL	07/27/2016	151.17
72524	01719	MICKEY M. CASE	07/27/2016	225.63
72525	06115	CDW GOVERNMENT INC.	07/27/2016	3,576.27
72526	03205	CITY OF OCEANSIDE	07/27/2016	1,626.19
72527	05714	CNTY OF SAN DIEGO DEPT PUB WRK	07/27/2016	389.50
72528	00370	Crop Production Services, Inc.	07/27/2016	47.52
72529	02901	DAVID DEEM	07/27/2016	1,161.59
72530	05180	NOELLE DENKE	07/27/2016	10.00
72531	05192	DIAMOND ENVIRONMENTAL	07/27/2016	503.80
72532	05177	DOWNEY BRAND, LLP	07/27/2016	3,253.96
72533	04122	EVOQUA WATER TECHNOLOGIES LLC	07/27/2016	3,823.20
72534	09523	FALLBROOK EQUIP RENTALS	07/27/2016	91.30
72535	01099	FALLBROOK IRRIGATION INC	07/27/2016	245.60
72536	00169	FALLBROOK OIL COMPANY	07/27/2016	1,921.93
72537	05733	FIRST BANKCARD	07/27/2016	3,949.34
72538	02170	GRAINGER, INC.	07/27/2016	51.59
72539	06329	HILL BROTHERS CHEMICAL COMPAN	07/27/2016	1,991.50
72540	05505	TODD JESTER	07/27/2016	108.00
72541	06695	KNIGHT SECURITY & FIRST SYS	07/27/2016	180.00
72542	06479	KNOCKOUT PEST CONTROL &	07/27/2016	200.00
72543	01703	TODD LANGE	07/27/2016	360.00
72544	90924	Law Offices of Steohen V. Lopardo	07/27/2016	783.00
72545	03765	LENNIHAN LAW	07/27/2016	1,869.84
72546	05194	Leslie's Pool Supplies	07/27/2016	3,088.58
72547	03322	LIGHTHOUSE AUTOMOTIVE	07/27/2016	473.34
72548	90887	LLoyd Pest Control	07/27/2016	198.00
72549	06263	LOS ANGELES FREIGHTLINER, LLC	07/27/2016	486.59
72550	06614	MITEL LEASING	07/27/2016	817.05
72551	06237	LARRY RAGSDALE	07/27/2016	74.73
72552	06485	FABRIENNE ROBINSON	07/27/2016	20.00
72553	00232	SAN DIEGO GAS & ELECTRIC	07/27/2016	10,314.20
72554	00159	SUPERIOR READY MIX	07/27/2016	1,205.70
72555	06005	UNIFIRST CORP.	07/27/2016	353.99
72556	06108	VIRGINIA WALKER	07/27/2016	817.20
72557	05909	WAGNER & BONSIGNORE	07/27/2016	1,193.88
72558	02570	CHERYL WILLIAMS	07/27/2016	367.50
Total for 7/27/2016:				509,907.68
Report Total (253 checks):				3,799,194.83

Payroll -7/16

Computer Check Register

Payroll #1	137,859.53
Payroll #2	<u>139,434.72</u>
	<u>277,294.25</u>

A handwritten signature in black ink, appearing to read "Brian Brady", written over a horizontal line.

Brian Brady

General Manager

8/31/2016

Treasurer's Warrant No. Aug

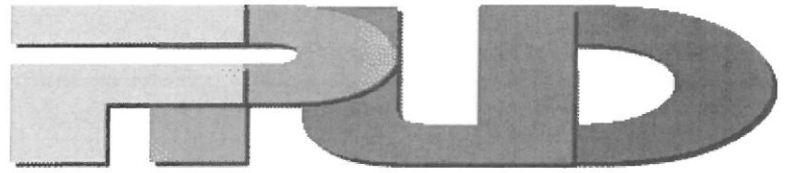
TO: Treasurer of the Fallbrook Public Utility District

The bills and claims listed below are approved as authorized by resolution no. 3538 of the Board of Directors dated July 8, 1985. You are hereby authorized and directed to pay said prospective claims in the amounts stated (less discounts in instances where discounts are allowed).

Accounts Payable

Checks by Date - Summary by Check Date

User: paula
 Printed: 9/2/2016 1:19 PM



Fallbrook Public Utility District
 Purchasing Dept. Phone: (760) 728-1151, Fax: (760) 728-8491
 Main Office Phone: (760) 728-1125, Fax: (760) 728-6029

Check No	Vendor No	Vendor Name	Check Date		Void Checks	Check Amount
ACH	06758	US TREASURY - PAYROLL TAXES	08/03/2016		0.00	59,060.48
ACH	06759	STATE OF CA - PR TAXES	08/03/2016		0.00	8,421.63
ACH	06760	STATE OF CA - SDI	08/03/2016		0.00	1,782.94
ACH	06761	Lincoln Financial Group	08/03/2016		0.00	5,616.75
ACH	06763	PERS - PAYROLL	08/03/2016		0.00	35,282.64
72567	00160	WILLIAM AHREND	08/03/2016		0.00	10.80
72568	06570	ANCHOR QEA, LLC	08/03/2016		0.00	1,370.85
72569	06696	AT & T MOBILTIY	08/03/2016		0.00	54.97
72570	06713	BISHOP'S TREE SERVICE, INC.	08/03/2016		0.00	23,050.00
72571	91028	Bob Turner's Crane Service Inc.	08/03/2016		0.00	882.75
72572	06012	CALIFORNIA DEPT OF CSS	08/03/2016		0.00	231.00
72573	00129	CLINICAL LABORATORY	08/03/2016		0.00	1,084.00
72574	06675	CORODATA SHREDDING, INC	08/03/2016		0.00	49.50
72575	00370	Crop Production Services, Inc.	08/03/2016		0.00	71.28
72576	03134	CWEA	08/03/2016		0.00	500.00
72577	06299	D & H WATER SYSTEMS, INC	08/03/2016		0.00	3,774.45
72578	06507	EUROFINS EATON ANALYTICAL INC	08/03/2016		0.00	2,000.00
72579	09523	FALLBROOK EQUIP RENTALS	08/03/2016		0.00	340.12
72580	02411	FALLBROOK PRINTING CORP	08/03/2016		0.00	654.53
72581	01155	FALLBROOK REFUSE	08/03/2016		0.00	46.00
72582	01432	FERGUSON WATERWORKS #1083	08/03/2016		0.00	3,092.57
72583	00152	FPUD EMPL ASSOCIATION	08/03/2016		0.00	816.54
72584	00182	GLENNIES OFFICE PRODUCTS	08/03/2016		0.00	1,075.68
72585	04958	Gosch Ford Temecula.	08/03/2016		0.00	492.19
72586	02767	GRANGETTO FARM & GARDEN SUPPI	08/03/2016		0.00	2.82
72587	05380	HACH CO	08/03/2016		0.00	171.97
72588	06577	INFOSEND INC	08/03/2016		0.00	2,939.02
72589	00190	JCI JONES CHEMICALS INC.	08/03/2016		0.00	8,173.69
72590	03299	KAMAN INDUSTRIAL TECHNOLOGIE	08/03/2016		0.00	1,760.03
72591	04638	LOWE'S CORPORATION	08/03/2016		0.00	817.53
72592	02618	MC MASTER-CARR	08/03/2016		0.00	1,225.43
72593	04926	MINOLTA BUSINESS SOLUTION	08/03/2016		0.00	693.59
72594	91042	Beth Mudie	08/03/2016	VOID	147.79	0.00
72595	06546	MUTUAL OF OMAHA	08/03/2016		0.00	1,803.58
72596	00718	NATIONWIDE RETIREMENT SOLUTIO	08/03/2016		0.00	1,958.07
72597	06298	ONESOURCE DISTRIBUTORS, LLC	08/03/2016		0.00	70.20
72598	01267	PACIFIC PIPELINE	08/03/2016		0.00	276.70
72599	91007	PFM Asset Mangement LLC	08/03/2016		0.00	1,173.48
72600	00216	PINE TREE LUMBER	08/03/2016		0.00	184.25
72601	02662	QUALITY CHEVROLET	08/03/2016		0.00	273.85
72602	90987	RF Parts Company	08/03/2016		0.00	1,013.14
72603	00231	SAN DIEGO COUNTY WATER AUTH	08/03/2016		0.00	1,375,926.25
72604	00232	SAN DIEGO GAS & ELECTRIC	08/03/2016		0.00	38,821.93
72605	04434	SNAP ON TOOLS	08/03/2016		0.00	143.53
72606	06401	SONSRAY MACHINERY LLC	08/03/2016		0.00	8,093.90
72607	91040	Springbrook National User Group	08/03/2016		0.00	175.00
72608	05415	STATE WATER RESOURCE CONTROL	08/03/2016	VOID	115.00	0.00

Check No	Vendor No	Vendor Name	Check Date	Void Checks	Check Amount
72609	06000	TOBIAS STONEBURNER	08/03/2016	0.00	90.00
72610	06314	SUNPOWER	08/03/2016	0.00	28,834.62
72611	05883	TESTAMERICA LABORATORIES, INC.	08/03/2016	0.00	957.60
72612	04330	UNION BANK	08/03/2016	0.00	1,424.00
72613	00710	UNITED WAY OF SAN DIEGO	08/03/2016	0.00	57.00
72614	04290	VILLAGE NEWS	08/03/2016	0.00	400.00
72615	06231	WESTERN WATER WORKS SUPPLY CC	08/03/2016	0.00	1,299.22
72616	02570	CHERYL WILLIAMS	08/03/2016	0.00	380.63
Total for 8/3/2016:				262.79	1,628,902.70
72617	00805	ACWA/JOINT POWERS INS.	08/11/2016	0.00	27,352.00
72618	91019	All Pro Service and Contractors	08/11/2016	0.00	17,299.80
72619	91045	John Allison	08/11/2016	0.00	57.24
72620	06235	JACK BEBEE	08/11/2016	0.00	75.75
72621	06431	BLACK & VEATCH CORPORATION	08/11/2016	0.00	10,236.25
72622	04178	CALOLYMPIC SAFETY	08/11/2016	0.00	559.66
72623	03978	CAMERON WELDING SUPPLY	08/11/2016	0.00	676.23
72624	06336	CAPITAL ONE COMMERCIAL	08/11/2016	0.00	122.80
72625	03205	CITY OF OCEANSIDE	08/11/2016	0.00	1,480.84
72626	02586	COSTCO MEMBERSHIP	08/11/2016	0.00	206.40
72627	00370	Crop Production Services, Inc.	08/11/2016	0.00	1,593.97
72628	02925	DATA NET SOLUTIONS	08/11/2016	0.00	662.50
72629	02901	DAVID DEEM	08/11/2016	0.00	132.00
72630	05180	NOELLE DENKE	08/11/2016	0.00	76.52
72631	06551	DEPT OF FORESTRY & FIRE	08/11/2016	VOID	1,599.36
72632	09523	FALLBROOK EQUIP RENTALS	08/11/2016	0.00	2,733.80
72633	01155	FALLBROOK REFUSE	08/11/2016	0.00	2,248.12
72634	00170	FALLBROOK WASTE & RECYCLING	08/11/2016	0.00	549.70
72635	91018	GBA Solutions (Hitz Inc.)	08/11/2016	0.00	2,172.88
72636	09517	GENCO	08/11/2016	0.00	200.88
72637	00182	GLENNIES OFFICE PRODUCTS	08/11/2016	0.00	687.16
72638	91048	Christine Hawranik	08/11/2016	0.00	119.65
72639	05925	HD SUPPLY WATERWORKS	08/11/2016	0.00	1,240.59
72640	03276	HOME DEPOT CREDIT SERVICES	08/11/2016	0.00	2,912.30
72641	06463	IOTUM INC.	08/11/2016	0.00	15.49
72642	90944	ROBERT H. JAMES	08/11/2016	0.00	1,875.75
72643	06243	JIM'S SIGN SHOP	08/11/2016	0.00	549.72
72644	04027	Joe's Hardware	08/11/2016	0.00	688.55
72645	90916	KELLY LAUGHLIN	08/11/2016	0.00	64.80
72646	03765	LENNIHAN LAW	08/11/2016	0.00	2,070.18
72647	03322	LIGHTHOUSE AUTOMOTIVE	08/11/2016	0.00	1,466.42
72648	04649	MAR-CON PRODUCTS, INC	08/11/2016	0.00	670.44
72649	90978	MCR Technologies, Inc.	08/11/2016	0.00	188.57
72650	06596	MCS INSPECTION GROUP	08/11/2016	VOID	671.00
72651	04926	MINOLTA BUSINESS SOLUTION	08/11/2016	0.00	3,255.36
72652	91042	Beth Mudie	08/11/2016	0.00	147.79
72653	06338	MYTHOS TECHNOLOGY INC	08/11/2016	0.00	438.04
72654	90932	NAPA Auto Parts	08/11/2016	0.00	4,918.10
72655	06707	NATIONAL METER & AUTOMATION	08/11/2016	0.00	32,417.28
72656	04662	QUALITY FENCE	08/11/2016	0.00	125.00
72657	91050	Tonisue Ranger	08/11/2016	0.00	191.40
72658	91047	Richard Realty Group, Inc	08/11/2016	0.00	57.26
72659	91052	Osvaldo Rivera	08/11/2016	0.00	36.04
72660	05636	SAM'S CLUB	08/11/2016	0.00	1,262.27
72661	04434	SNAP ON TOOLS	08/11/2016	0.00	2,324.76
72662	06401	SONSRAY MACHINERY LLC	08/11/2016	0.00	186.41

Check No	Vendor No	Vendor Name	Check Date	Void Checks	Check Amount
72663	90929	SOUTHWEST ANSWERING SERVICE, I	08/11/2016	0.00	859.09
72664	05415	STATE WATER RESOURCE CONTROL	08/11/2016	0.00	105.00
72665	00159	SUPERIOR READY MIX	08/11/2016	0.00	3,083.86
72666	91051	Terrasas Corporation Re/Max United	08/11/2016	0.00	73.93
72667	05883	TESTAMERICA LABORATORIES, INC.	08/11/2016	0.00	481.98
72668	91043	THE COUNTRY PORCH	08/11/2016	0.00	76.14
72669	06608	THE ROTARY CLUB OF FALLBROOK	08/11/2016	0.00	203.00
72670	06756	TITAN TIRE RECYCLING INC.	08/11/2016	0.00	245.00
72671	06005	UNIFIRST CORP.	08/11/2016	0.00	735.14
72672	06594	UTILITY SERVICES ASSOCIATES	08/11/2016	0.00	12,395.00
72673	00458	VERIZON WIRELESS	08/11/2016	0.00	803.97
72674	90961	VSS SALES'S INC	08/11/2016	0.00	1,588.24
72675	91046	JARED WALTERS	08/11/2016	0.00	116.68
72676	00233	WAXIE SANITARY SUPPLY	08/11/2016	0.00	124.71
72677	06231	WESTERN WATER WORKS SUPPLY CC	08/11/2016	0.00	666.37
72678	02570	CHERYL WILLIAMS	08/11/2016	0.00	507.50
72679	91053	Arlene Yates	08/11/2016	0.00	92.34
Total for 8/11/2016:				2,270.36	148,504.62
ACH	02582	EMPLOYMENT DEVELOPMENT DEPT	08/17/2016	0.00	9,829.21
ACH	06758	US TREASURY - PAYROLL TAXES	08/17/2016	0.00	57,931.72
ACH	06759	STATE OF CA - PR TAXES	08/17/2016	0.00	7,981.59
ACH	06760	STATE OF CA - SDI	08/17/2016	0.00	1,726.38
ACH	06761	Lincoln Financial Group	08/17/2016	0.00	5,642.84
ACH	06763	PERS - PAYROLL	08/17/2016	0.00	36,763.48
72685	06740	ACCELA, INC	08/17/2016	0.00	2,812.45
72686	00101	ACWA JPIA	08/17/2016	0.00	85,323.15
72687	06029	ASSURANT EMPLOYEE BENEFITS	08/17/2016	0.00	1,231.61
72688	05897	FILOMENO CABALBAG	08/17/2016	0.00	646.50
72689	06012	CALIFORNIA DEPT OF CSS	08/17/2016	0.00	231.00
72690	03978	CAMERON WELDING SUPPLY	08/17/2016	0.00	206.71
72691	01719	MICKEY M. CASE	08/17/2016	0.00	99.80
72692	06115	CDW GOVERNMENT INC.	08/17/2016	0.00	437.95
72693	06675	CORODATA SHREDDING, INC	08/17/2016	0.00	49.50
72694	02925	DATA NET SOLUTIONS	08/17/2016	0.00	1,069.44
72695	91041	DeFelsko Corporation	08/17/2016	0.00	184.00
72696	05180	NOELLE DENKE	08/17/2016	0.00	29.95
72697	04944	DLT SOLUTIONS LLC	08/17/2016	0.00	2,468.49
72698	09523	FALLBROOK EQUIP RENTALS	08/17/2016	0.00	713.44
72699	00169	FALLBROOK OIL COMPANY	08/17/2016	0.00	2,061.86
72700	01155	FALLBROOK REFUSE	08/17/2016	0.00	244.28
72701	00152	FPUD EMPL ASSOCIATION	08/17/2016	0.00	816.54
72702	00182	GLENNIES OFFICE PRODUCTS	08/17/2016	0.00	607.27
72703	02767	GRANGETTO FARM & GARDEN SUPPI	08/17/2016	0.00	60.62
72704	05380	HACH CO	08/17/2016	0.00	913.53
72705	06062	HARRINGTON INDUSTRIAL PLASTICS	08/17/2016	0.00	4,886.62
72706	05925	HD SUPPLY WATERWORKS	08/17/2016	0.00	210.61
72707	91015	Indian Springs MFG Co Inc.	08/17/2016	0.00	2,424.48
72708	06577	INFOSEND INC	08/17/2016	0.00	2,896.38
72709	06494	KEPWARE TECHNOLOGIES	08/17/2016	0.00	1,234.00
72710	01703	TODD LANGE	08/17/2016	0.00	115.38
72711	02618	MC MASTER-CARR	08/17/2016	0.00	61.86
72712	06596	MCS INSPECTION GROUP	08/17/2016	0.00	671.00
72713	03944	MISSION RESOURCE CONSV DIST	08/17/2016	0.00	62.50
72714	00718	NATIONWIDE RETIREMENT SOLUTIO	08/17/2016	0.00	1,958.07
72715	06298	ONESOURCE DISTRIBUTORS, LLC	08/17/2016	0.00	99.50

Check No	Vendor No	Vendor Name	Check Date	Void Checks	Check Amount
72716	90939	PCM SALES, INC.	08/17/2016	0.00	1,306.67
72717	91009	PROCESS Equipment Company	08/17/2016	0.00	12,779.59
72718	05415	STATE WATER RESOURCE CONTROL	08/17/2016	0.00	130.00
72719	06735	TCN, INC.	08/17/2016	0.00	48.90
72720	05883	TESTAMERICA LABORATORIES, INC.	08/17/2016	0.00	2,198.18
72721	06541	TIFCO INDUSTRIES	08/17/2016	0.00	604.77
72722	06579	TOWNSEND PUBLIC AFFAIRS, INC	08/17/2016	0.00	5,000.00
72723	00250	TRY ENTERPRISES	08/17/2016	0.00	3,295.00
72724	06005	UNIFIRST CORP.	08/17/2016	0.00	729.01
72725	06211	UNITED IMAGING	08/17/2016	0.00	612.33
72726	00710	UNITED WAY OF SAN DIEGO	08/17/2016	0.00	57.00
72727	00458	VERIZON WIRELESS	08/17/2016	0.00	1,434.01
72728	04290	VILLAGE NEWS	08/17/2016	0.00	495.00
72729	00771	KATHLEEN A. WALTERS	08/17/2016	0.00	98.07
72730	02570	CHERYL WILLIAMS	08/17/2016	0.00	476.88
Total for 8/17/2016:				0.00	263,969.12
72731	01460	AFLAC	08/24/2016	0.00	1,342.02
72732	04995	AMERICAN MESSAGING	08/24/2016	0.00	182.49
72733	91027	AMS	08/24/2016	0.00	559.95
72734	05088	AT&T	08/24/2016	0.00	857.97
72735	02713	AWWA CAL-NEV SECTION	08/24/2016	0.00	80.00
72736	02743	BEST BEST & KRIEGER	08/24/2016	0.00	4,440.18
72737	05615	BOOT WORLD INC	08/24/2016	0.00	535.12
72738	06402	BRIAN BRADY	08/24/2016	0.00	1,150.58
72739	03978	CAMERON WELDING SUPPLY	08/24/2016	0.00	872.80
72740	06336	CAPITAL ONE COMMERCIAL	08/24/2016	0.00	206.40
72741	01719	MICKEY M. CASE	08/24/2016	0.00	225.06
72742	02176	CORELOGIC SOLUTIONS, LLC	08/24/2016	0.00	675.00
72743	05953	CORODATA RECORDS MANAGEMENT	08/24/2016	0.00	616.04
72744	05180	NOELLE DENKE	08/24/2016	0.00	392.38
72745	05704	DEPT OF CONSUMER AFFAIRS	08/24/2016	0.00	115.00
72746	04425	DOMINICK'S SANDWICHES	08/24/2016	0.00	23.49
72747	01262	KYLE D. DRAKE	08/24/2016	0.00	447.00
72748	91058	Dubyk Family Trust	08/24/2016	0.00	5.00
72749	03087	Marcella M. Eilers	08/24/2016	0.00	395.65
72750	06507	EUROFINS EATON ANALYTICAL INC	08/24/2016	0.00	1,600.00
72751	06303	EXECUTIVE LANDSCAPE, INC.	08/24/2016	0.00	417.50
72752	09523	FALLBROOK EQUIP RENTALS	08/24/2016	0.00	6,780.00
72753	01155	FALLBROOK REFUSE	08/24/2016	0.00	45.00
72754	06286	GARDA CL WEST, INC.	08/24/2016	0.00	228.46
72755	00182	GLENNIES OFFICE PRODUCTS	08/24/2016	0.00	694.12
72756	02170	GRAINGER, INC.	08/24/2016	0.00	749.84
72757	91014	Gulf Coast Environmental Systems	08/24/2016	0.00	4,657.70
72758	91000	CHRISTOPHER HAMILTON	08/24/2016	0.00	162.00
72759	05925	HD SUPPLY WATERWORKS	08/24/2016	0.00	1,049.76
72760	02773	HDS WHITE CAP CONST SUPPLY	08/24/2016	0.00	4,867.56
72761	05034	HOSSEIN NAWAAY	08/24/2016	0.00	2,251.80
72762	06577	INFOSEND INC	08/24/2016	0.00	829.04
72763	06267	J2 GLOBAL IRELAND LIMITED	08/24/2016	0.00	59.91
72764	06380	JANI-KING OF CALIFORNIA - SDO	08/24/2016	0.00	2,117.39
72765	05505	TODD JESTER	08/24/2016	0.00	158.86
72766	04027	Joe's Hardware	08/24/2016	0.00	100.80
72767	01703	TODD LANGE	08/24/2016	0.00	267.55
72768	90924	Law Offices of Steohen V. Lopardo	08/24/2016	0.00	3,944.00
72769	06406	KEITH LEWINGER	08/24/2016	0.00	40.20

Check No	Vendor No	Vendor Name	Check Date	Void Checks	Check Amount
72770	06633	MAINTENANCE CONNECTION INC	08/24/2016	0.00	398.00
72771	01782	JEFF MARCHAND	08/24/2016	0.00	380.11
72772	02147	ROBERT MUNGER	08/24/2016	0.00	2,361.41
72773	06338	MYTHOS TECHNOLOGY INC	08/24/2016	0.00	2,737.03
72774	91059	National Charity League	08/24/2016	0.00	175.00
72775	03201	NATIONAL SAFETY COMPLIANCE INC	08/24/2016	0.00	97.45
72776	06776	Networkfleet, Inc	08/24/2016	0.00	808.65
72777	06487	Alisa Nichols	08/24/2016	0.00	270.75
72778	06298	ONESOURCE DISTRIBUTORS, LLC	08/24/2016	0.00	756.10
72779	05033	PACKARD GOVERNMENT AFFAIRS	08/24/2016	0.00	5,000.00
72780	03158	PATTI S PAGE	08/24/2016	0.00	380.10
72781	04512	BILL PEARSON	08/24/2016	0.00	721.30
72782	03401	PELL MELL SUPPLY INC	08/24/2016	0.00	12,037.68
72783	00215	Petty Cash	08/24/2016	0.00	26.25
72784	03137	GARY PITTS	08/24/2016	0.00	238.28
72785	91057	Joeshp M Polzin	08/24/2016	0.00	73.05
72786	03024	DEBRA J. POTTER	08/24/2016	0.00	311.90
72787	02662	QUALITY CHEVROLET	08/24/2016	0.00	290.38
72788	04075	RAYNE WATER SYSTEMS	08/24/2016	0.00	130.00
72789	05936	SAN DIEGO COUNTY RECORDER	08/24/2016	0.00	50.00
72790	05936	SAN DIEGO COUNTY RECORDER	08/24/2016	0.00	50.00
72791	05936	SAN DIEGO COUNTY RECORDER	08/24/2016	0.00	50.00
72792	05936	SAN DIEGO COUNTY RECORDER	08/24/2016	0.00	50.00
72793	00232	SAN DIEGO GAS & ELECTRIC	08/24/2016	0.00	46.04
72794	00237	SEARS COMMERCIAL ONE	08/24/2016	0.00	784.59
72795	90925	SHERWIN-WILLIAMS	08/24/2016	0.00	625.73
72796	02310	DAVID STAGG	08/24/2016	0.00	327.77
72797	04820	KEVIN STAMPER	08/24/2016	0.00	205.07
72798	02927	TIM STERGER	08/24/2016	0.00	380.10
72799	02797	STEVE STONE	08/24/2016	0.00	185.06
72800	06000	TOBIAS STONEBURNER	08/24/2016	0.00	121.26
72801	00159	SUPERIOR READY MIX	08/24/2016	0.00	730.74
72802	05883	TESTAMERICA LABORATORIES, INC.	08/24/2016	0.00	957.60
72803	00724	UNDERGROUND SERVICE ALERT	08/24/2016	0.00	202.50
72804	00771	KATHLEEN A. WALTERS	08/24/2016	0.00	482.77
72805	02570	CHERYL WILLIAMS	08/24/2016	0.00	511.87
Total for 8/24/2016:				0.00	77,098.16
ACH	06758	US TREASURY - PAYROLL TAXES	08/31/2016	0.00	57,632.82
ACH	06759	STATE OF CA - PR TAXES	08/31/2016	0.00	8,177.32
ACH	06760	STATE OF CA - SDI	08/31/2016	0.00	1,704.42
ACH	06761	Lincoln Financial Group	08/31/2016	0.00	5,642.84
ACH	06763	PERS - PAYROLL	08/31/2016	0.00	39,731.05
72814	06054	ACCURATE MEASUREMENT SYSTEM	08/31/2016	0.00	1,143.31
72815	02805	Asbury Environmental Services	08/31/2016	0.00	897.58
72816	06696	AT & T MOBILTIY	08/31/2016	0.00	54.97
72817	05958	BAMM! PROMOTIONAL PRODUCTS	08/31/2016	0.00	1,733.38
72818	00898	BP Battery	08/31/2016	0.00	229.20
72819	06012	CALIFORNIA DEPT OF CSS	08/31/2016	0.00	231.00
72820	91049	California Hazardous Services, Inc.	08/31/2016	0.00	1,050.00
72821	04178	CALOLYMPIC SAFETY	08/31/2016	0.00	1,024.47
72822	03978	CAMERON WELDING SUPPLY	08/31/2016	0.00	956.36
72823	06336	CAPITAL ONE COMMERCIAL	08/31/2016	0.00	259.10
72824	03205	CITY OF OCEANSIDE	08/31/2016	0.00	894.90
72825	91044	Cubicles Office Environments, Inc	08/31/2016	0.00	16,333.27
72826	06551	DEPT OF FORESTRY & FIRE	08/31/2016	0.00	1,599.36

Check No	Vendor No	Vendor Name	Check Date	Void Checks	Check Amount
72827	05192	DIAMOND ENVIRONMENTAL	08/31/2016	0.00	170.02
72828	04425	DOMINICK'S SANDWICHES	08/31/2016	0.00	43.59
72829	05177	DOWNEY BRAND, LLP	08/31/2016	0.00	222.00
72830	91060	EDSI	08/31/2016	0.00	75.00
72831	03087	Marcella M. Eilers	08/31/2016	0.00	566.72
72832	09523	FALLBROOK EQUIP RENTALS	08/31/2016	0.00	842.02
72833	00169	FALLBROOK OIL COMPANY	08/31/2016	0.00	4,895.19
72834	04494	FEDERAL EXPRESS CORPORATION	08/31/2016	0.00	54.81
72835	05733	FIRST BANKCARD	08/31/2016	0.00	6,096.66
72836	00152	FPUD EMPL ASSOCIATION	08/31/2016	0.00	801.00
72837	04958	Gosch Ford Temecula.	08/31/2016	0.00	16.26
72838	02170	GRAINGER, INC.	08/31/2016	0.00	521.65
72839	02767	GRANGETTO FARM & GARDEN SUPPI	08/31/2016	0.00	67.72
72840	05925	HD SUPPLY WATERWORKS	08/31/2016	0.00	2,363.04
72841	06577	INFOSEND INC	08/31/2016	0.00	1,371.41
72842	05255	INLAND WATER WORKS SUPPLY	08/31/2016	0.00	102,197.70
72843	00190	JCI JONES CHEMICALS INC.	08/31/2016	0.00	3,019.79
72844	06243	JIM'S SIGN SHOP	08/31/2016	0.00	154.42
72845	90887	LLoyd Pest Control	08/31/2016	0.00	169.00
72846	06707	NATIONAL METER & AUTOMATION	08/31/2016	0.00	81,047.52
72847	00718	NATIONWIDE RETIREMENT Solutio	08/31/2016	0.00	1,923.07
72848	06298	ONESOURCE DISTRIBUTORS, LLC	08/31/2016	0.00	3,358.96
72849	01267	PACIFIC PIPELINE	08/31/2016	0.00	7,347.07
72850	04489	PARKHOUSE TIRE INC	08/31/2016	0.00	1,875.46
72851	02662	QUALITY CHEVROLET	08/31/2016	0.00	468.76
72852	04662	QUALITY FENCE	08/31/2016	0.00	125.00
72853	06036	QUALITY MICROSCOPE SERVICE	08/31/2016	0.00	150.00
72854	05904	RICHARD TANNER	08/31/2016	0.00	56.04
72855	00232	SAN DIEGO GAS & ELECTRIC	08/31/2016	0.00	43,073.18
72856	91062	MICHEAL SANDOVAL	08/31/2016	0.00	2,000.00
72857	04434	SNAP ON TOOLS	08/31/2016	0.00	488.70
72858	06064	SOLENIIS LLC	08/31/2016	0.00	7,387.63
72859	05883	TESTAMERICA LABORATORIES, INC.	08/31/2016	0.00	798.35
72860	06005	UNIFIRST CORP.	08/31/2016	0.00	432.23
72861	00710	UNITED WAY OF SAN DIEGO	08/31/2016	0.00	57.00
72862	91055	VM3 Environmental, Inc.	08/31/2016	0.00	875.00
72863	05909	WAGNER & BONSIGNORE	08/31/2016	0.00	8,464.35
72864	06231	WESTERN WATER WORKS SUPPLY CC	08/31/2016	0.00	3,811.97
72865	02570	CHERYL WILLIAMS	08/31/2016	0.00	651.88
Total for 8/31/2016:				0.00	427,335.52
Report Total (302 checks):				2,533.15	2,545,810.12

Payroll -8/16

Computer Check Register

Payroll #1	138,809.25
Payroll #2	136,155.66
Payroll #3	<u>139,523.16</u>
	<u>414,488.07</u>

A handwritten signature in black ink, appearing to read "Brian Brady", written over a horizontal line.

Brian Brady

General Manager

Status of Key Projects

Donnil PS Emergency Generator

Awarded Construction Cost	
Change Orders	
Total Cost	
Total Completed	
Percent Complete	
End Date	
Days Added	
Funding Source	Water Capital

Beaver Creek Pipeline Replacement

Awarded Construction Cost (Pending Approval)	\$	1,446,000.00
Change Orders	\$	-
Total Cost	\$	1,446,000.00
Total Completed	\$	758,712.00
Percent Complete		52%
End Date		12/19/2016
Days Added		0
Funding Source	Water Capital	

Plant 2 Force Main Replacement

Awarded Construction Cost*	\$	490,850.00
Change Orders	\$	212,497.52
Total Cost	\$	703,347.52
Total Completed	\$	650,000.00
Percent Complete		92%
End Date		8/2/2016
Days Added		120
Days added due to delays in county traffic control permit and unmarked utilities and additional paving requirements		
Funding Source	Wastewater Capital	

N. Brandon and E. Alvarado Sewer Replacement

Awarded Construction Cost	
Change Orders	
Total Cost	
Total Completed	
Percent Complete	
End Date	
Days Added	
Funding Source	Wastewater Capital

SMRCUP Design

Awarded Design Cost*	\$	3,205,140.00
Contract Ammendments	\$	(158,131.00)
Total Cost	\$	3,047,009.00
Total Completed		\$2,273,000
Percent Complete		75%
End Date		5/1/2016
Days Added		0
* Only Preliminary Design and Design Task was Authorized for \$2,273,096		
Funding Source	Prop 50 Grant: \$2.4 Million Balance Water Capital	

1 MG Tank Recoating

Awarded Construction Cost	
Change Orders	
Total Cost	
Total Completed	
Percent Complete	
End Date	
Comments	

Brooke Street at Stagecoach Waterline

Awarded Construction Cost	
Change Orders	
Total Cost	
Total Completed	
Percent Complete	
End Date	
Days Added	
Funding Source	Water Capital

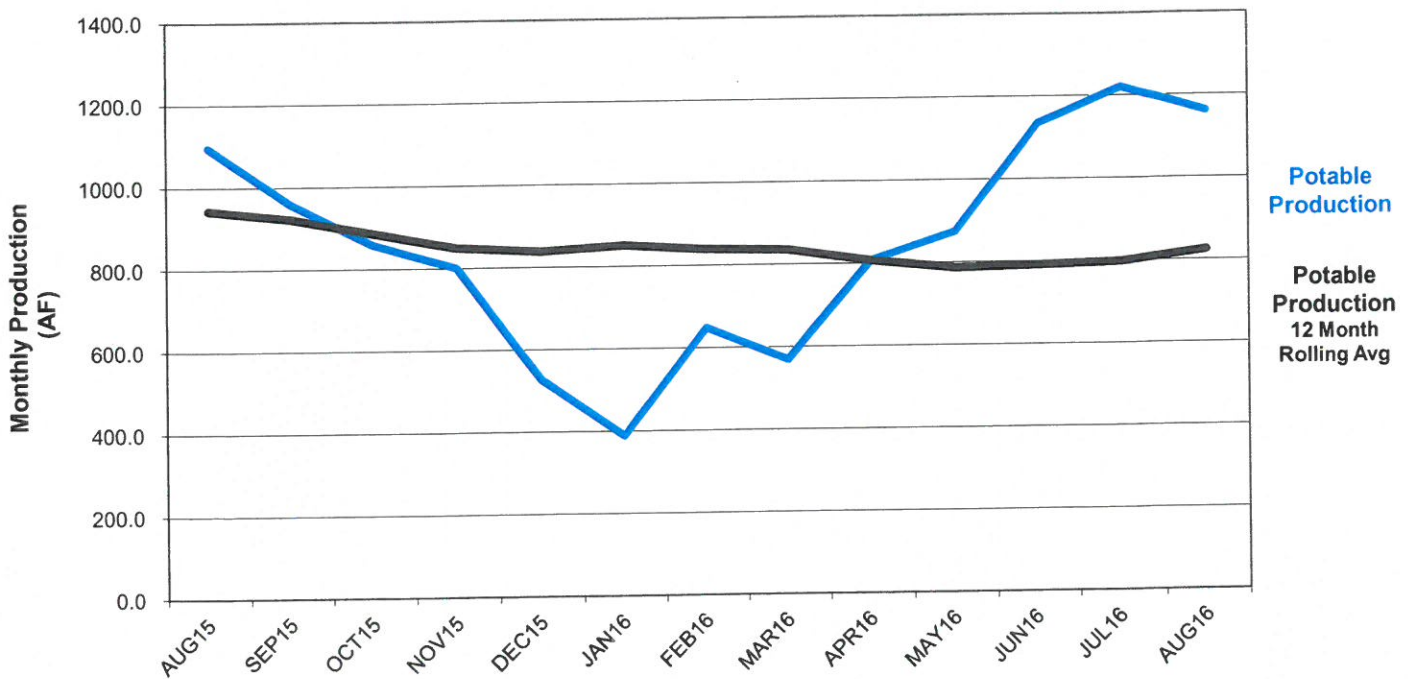
Donnil PS Emergency Generator

Awarded Construction Cost	
Change Orders	
Total Cost	
Total Completed	
Percent Complete	
End Date	
Days Added	
Funding Source	Water Capital

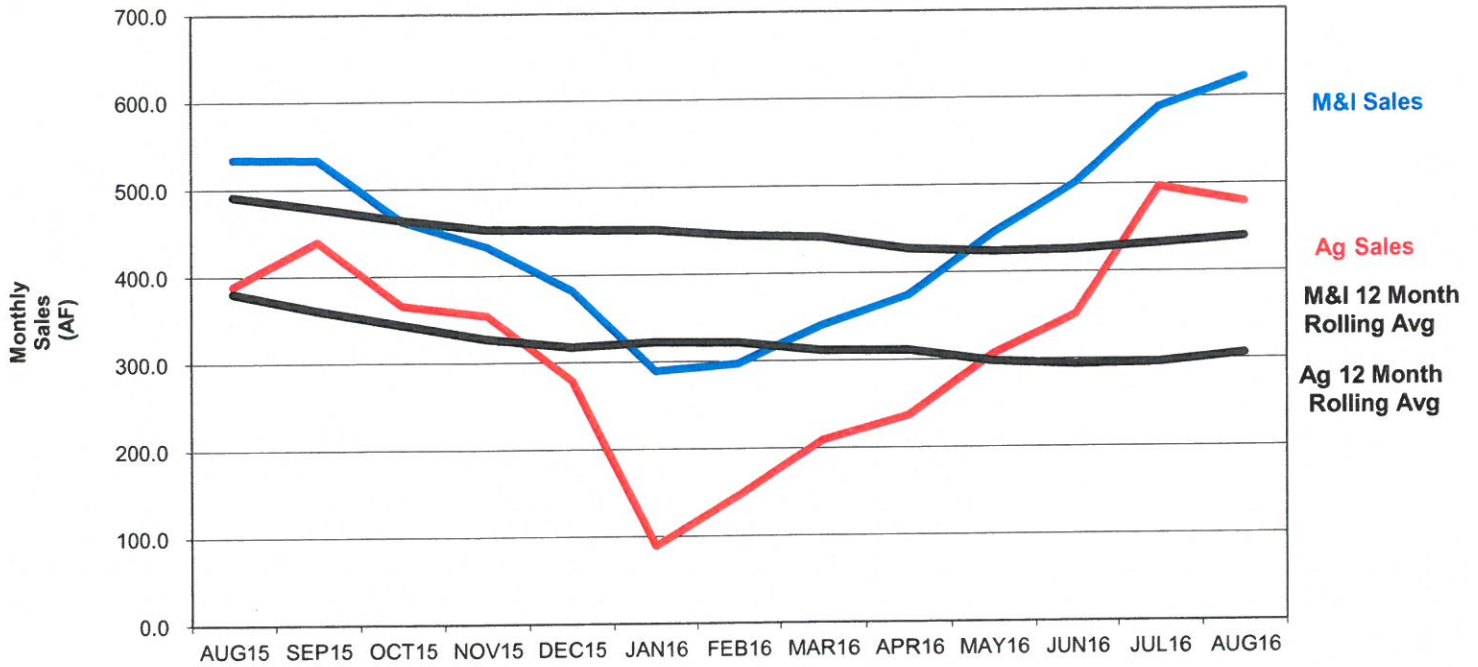
Fallbrook Public Utility District Annual Production



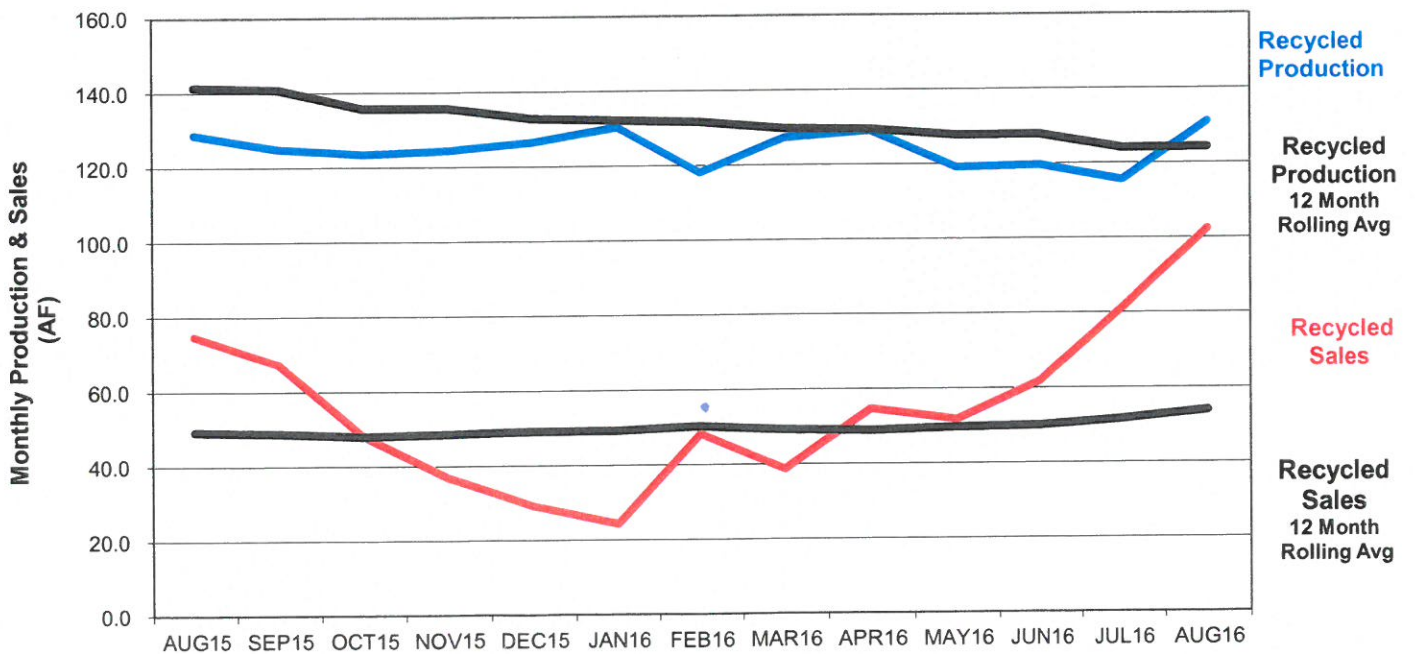
Fallbrook Public Utility District Total Potable Production



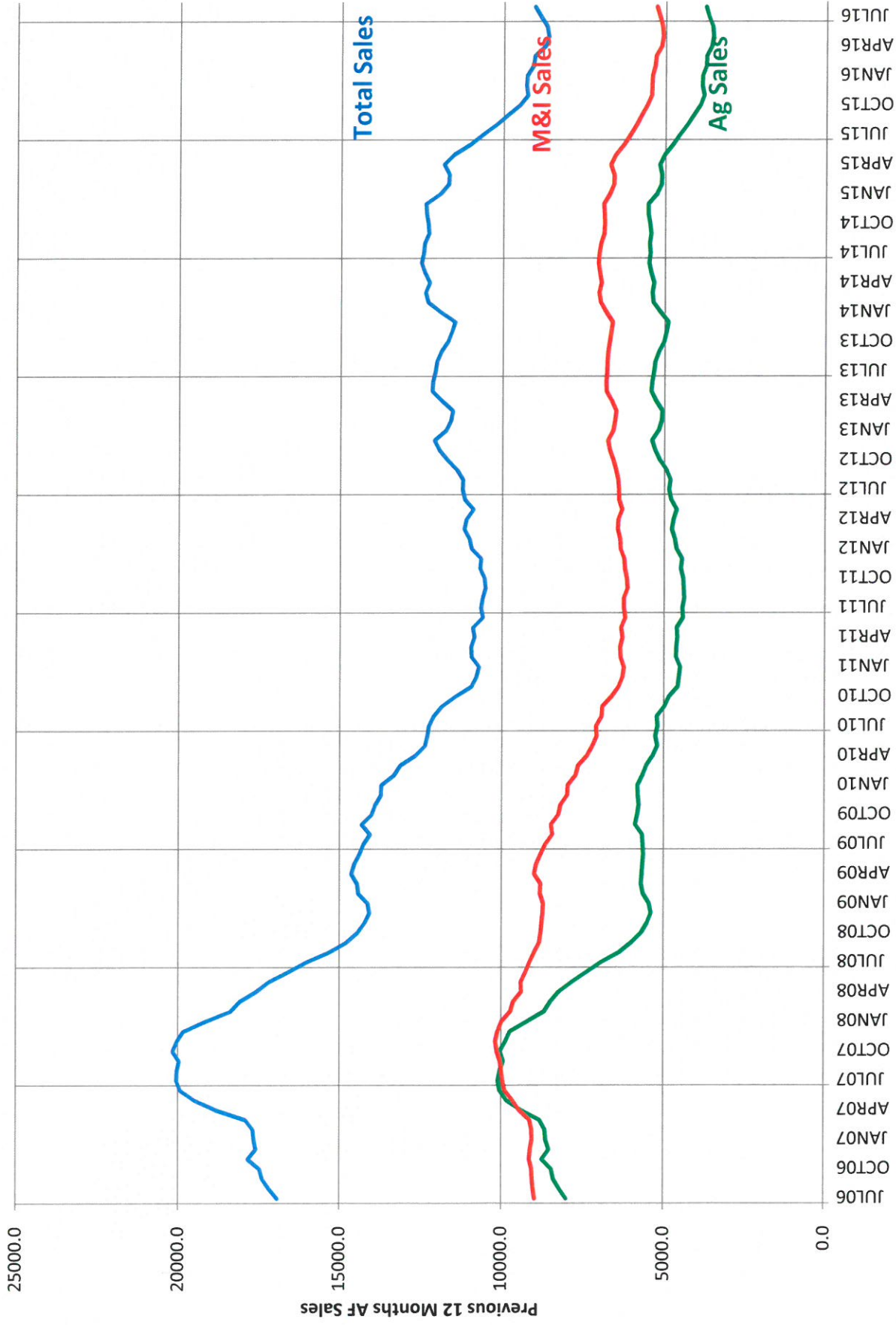
Fallbrook Public Utility District Ag and M&I Sales



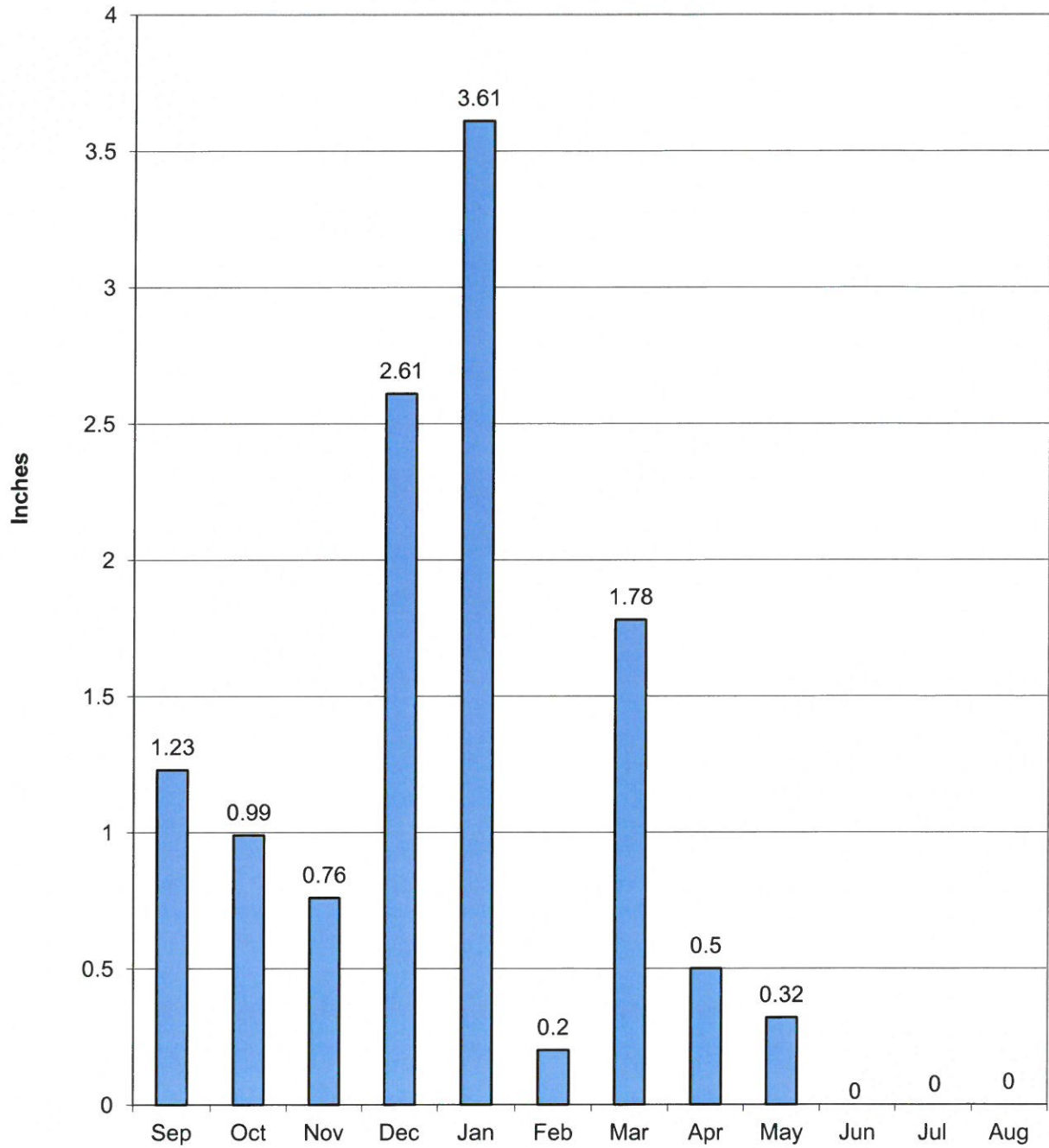
Fallbrook Public Utility District Recycled Water Production & Sales



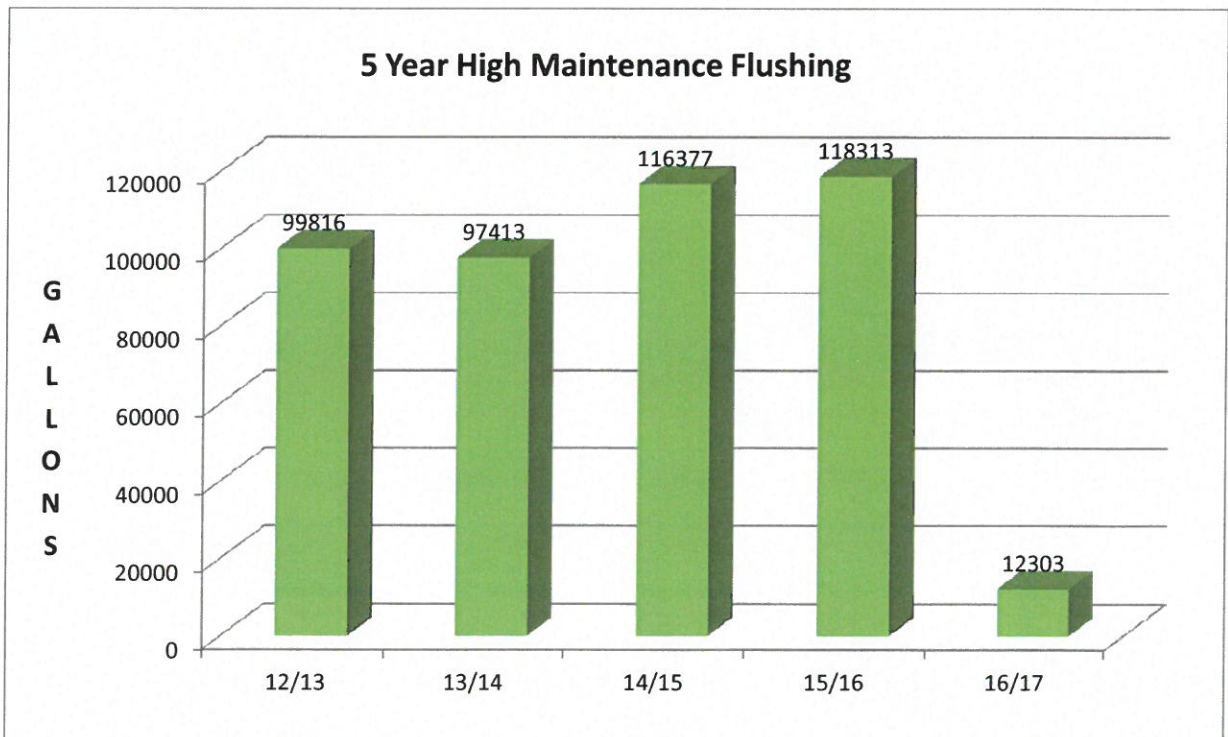
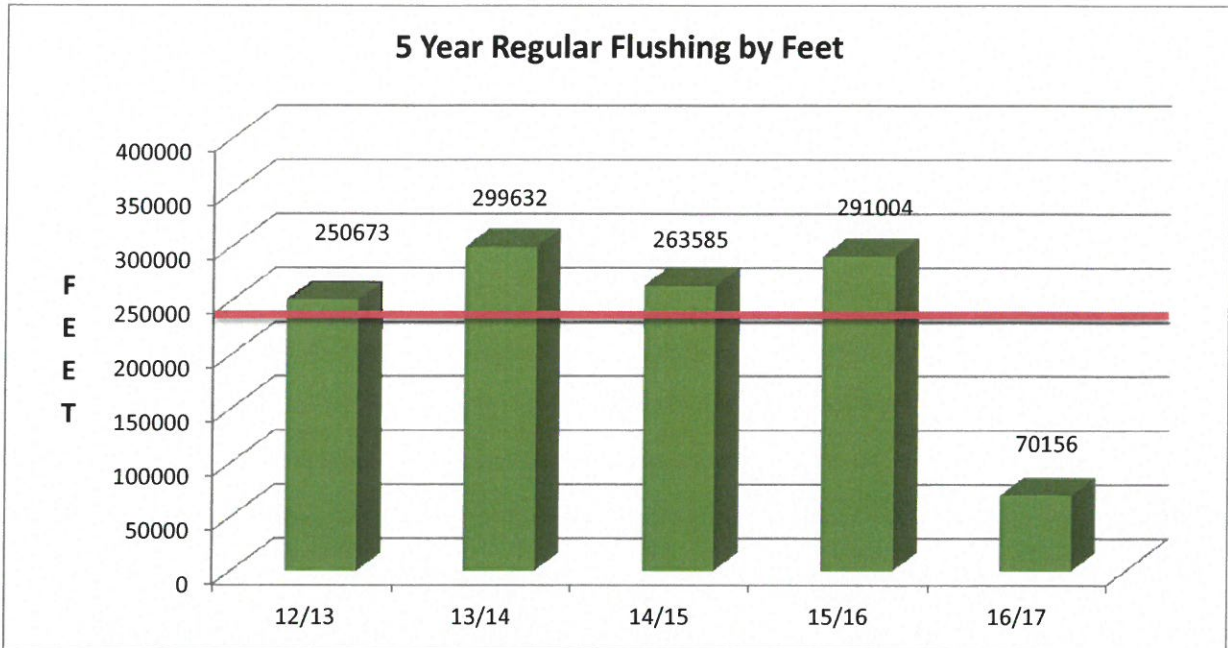
FPUD 12 Month Running Water Sales



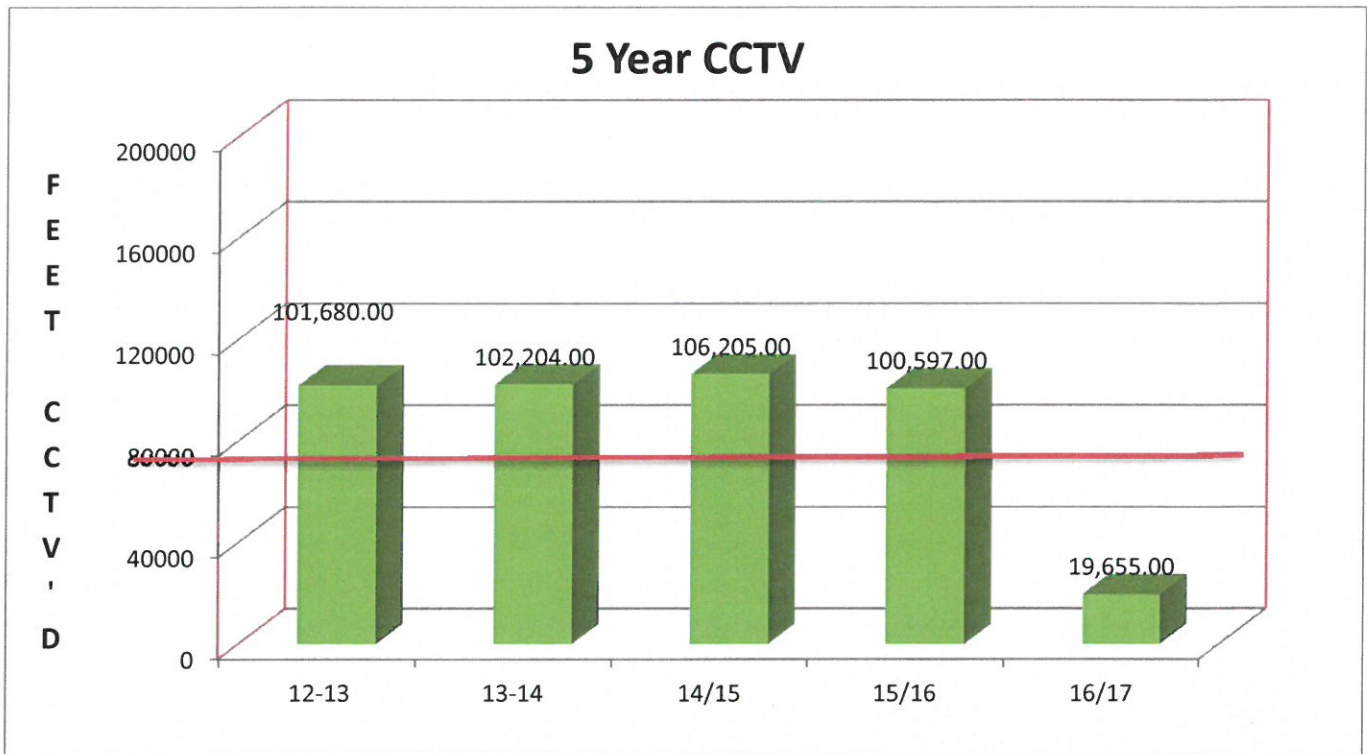
Fallbrook Rainfall In The Last 12 Months



COLLECTION MONTHLY REPORT

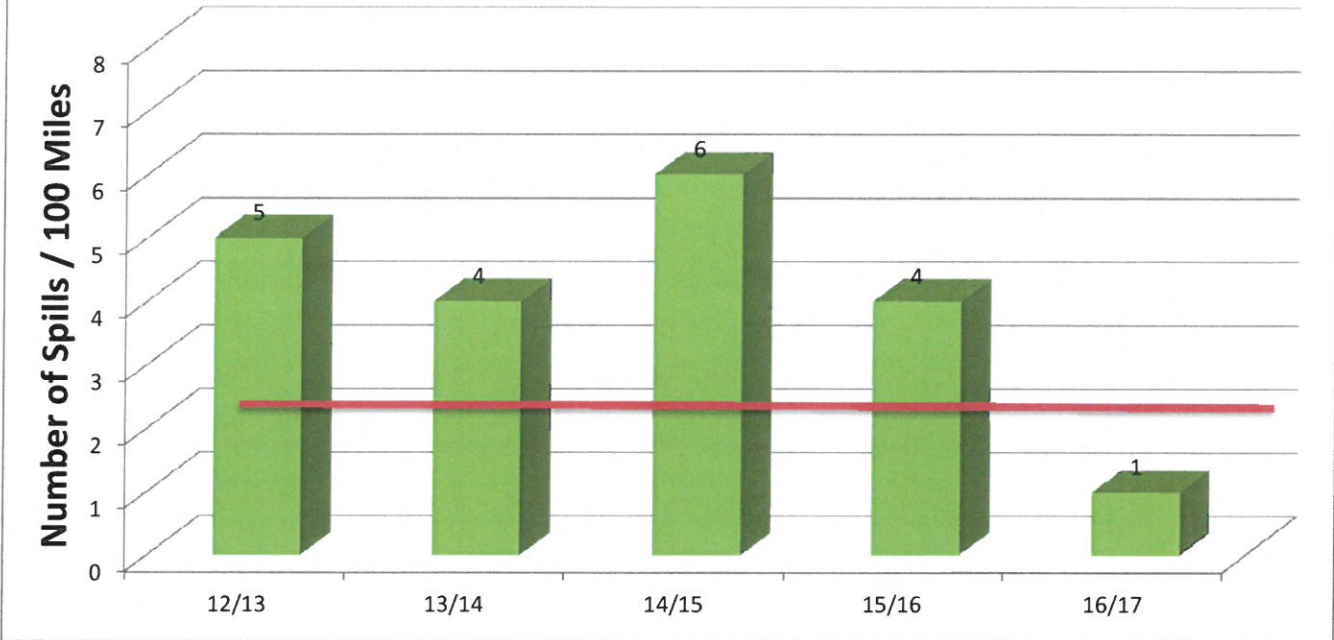


COLLECTION MONTHLY REPORT

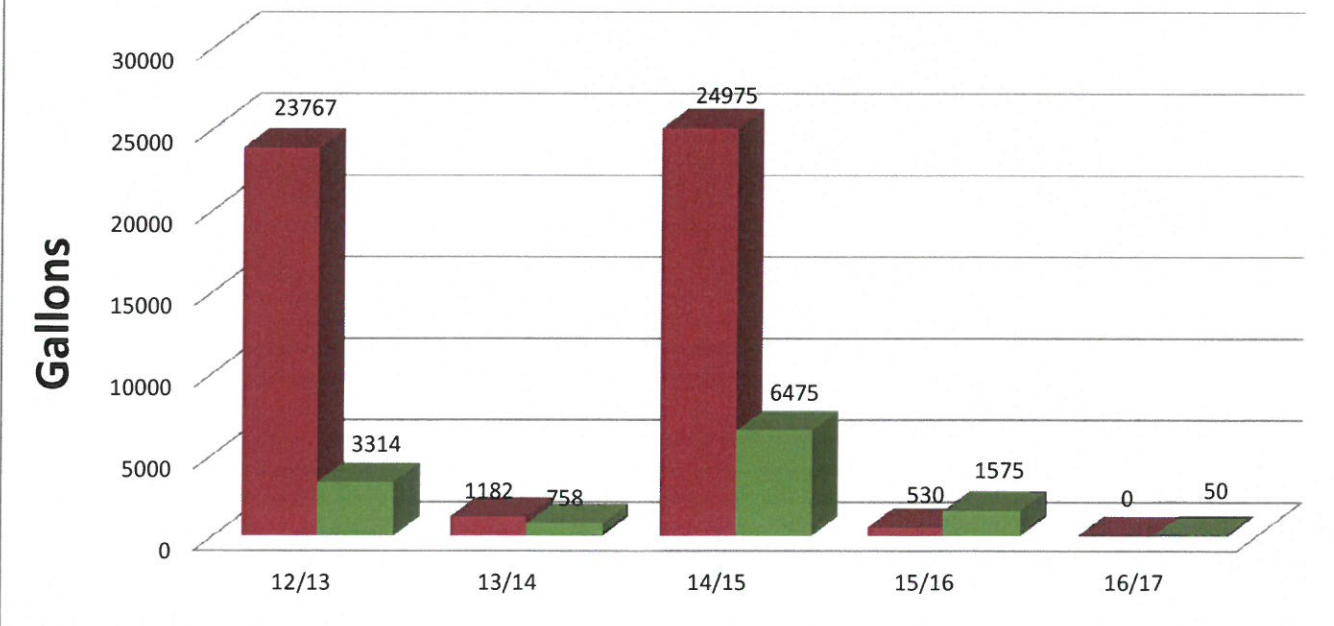


COLLECTION MONTH REPORT

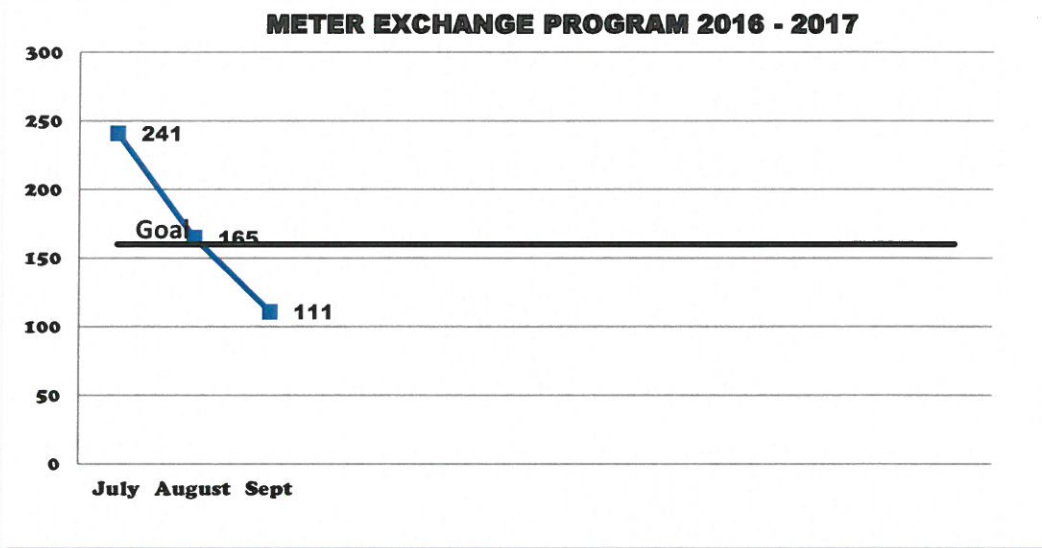
5 Year Sewer Overflows (SSO) Per 100 Miles



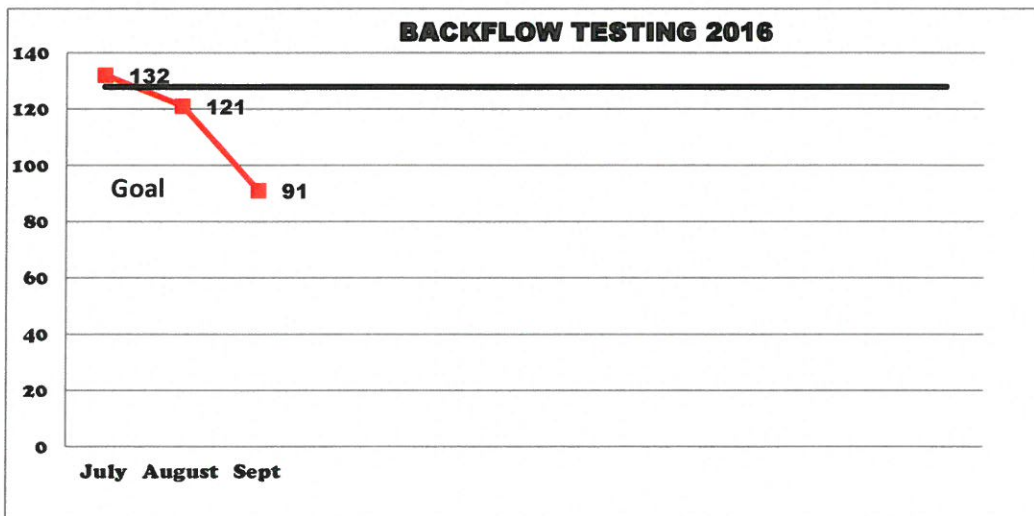
5 Year SSO Lost / Recovered



**DEPT 5
MONTHLY REPORTS**



TOTAL # METERS TO EXCHANGE: 1920
TOTAL # METERS EXCHANGED: 517
METERS LEFT TO EXCHANGE: 1403
PERCENTAGE REMAINING 73.07%



TOTAL TESTED GOAL: 1505
TOTAL TESTED TO DATE: 344
TOTAL NUMBER OF DEVICES ON STAND BY: 126
DEVICES REMAINING TO TEST: 1035
PERCENTAGE REMAINING 68.77%



FALLBROOK PUBLIC UTILITY DISTRICT
BOARD OF DIRECTORS

DIRECTOR'S REPORT OF CONFERENCE / MEETING ATTENDANCE

Director Name: Bob Anderson

Name & Location of Function: Conservation Committee Meeting

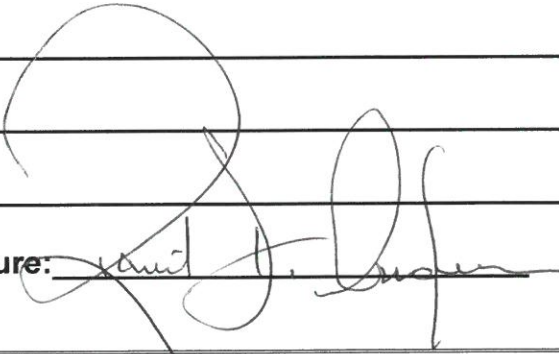
Date(s) of Attendance: 9/15/2016

Purpose of Function: Establishment of a FPUD Conservation Committee

Sponsoring Organization: FPUD

Summary of Conference or Meeting:

Initial committee meeting to define members, organization, goals and function

Director Signature: 

Date: 9/15/2016

The Administrative Code requires reports of conferences or meetings for which a director requests per diem or expense reimbursement. Reports must be submitted to the secretary no later than one (1) week prior to the board meeting.

Reports must be submitted before the District will pay per diem or reimbursement for the conference or meeting. Reports are not required for board or committee meetings or meetings with board or committee officers, the general manager, or the general counsel.



FALLBROOK PUBLIC UTILITY DISTRICT
BOARD OF DIRECTORS

DIRECTOR'S REPORT OF CONFERENCE / MEETING ATTENDANCE

Director Name: Bob Anderson

Name & Location of Function: Council of Water Utilities Meeting

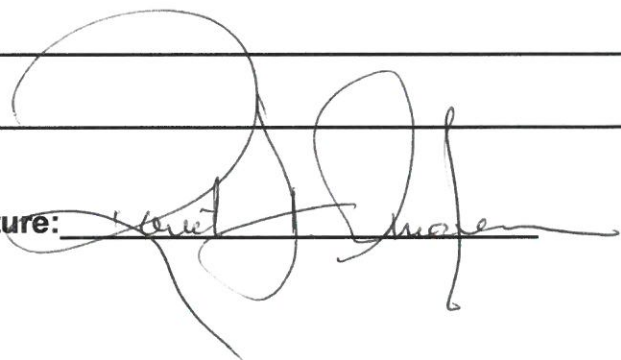
Date(s) of Attendance: 9/20/2016

Purpose of Function: Employee Benefits Strategies for the Water Industry

Sponsoring Organization: Council of Water Utilities, San Diego County

Summary of Conference or Meeting:

A review of Employee Benefits Strategies for the Water Industry – alternatives that are currently available to the district, and insight as to future expectations

Director Signature:  Date: 9/20/2016

The Administrative Code requires reports of conferences or meetings for which a director requests per diem or expense reimbursement. Reports must be submitted to the secretary no later than one (1) week prior to the board meeting.

Reports must be submitted before the District will pay per diem or reimbursement for the conference or meeting. Reports are not required for board or committee meetings or meetings with board or committee officers, the general manager, or the general counsel.



FALLBROOK PUBLIC UTILITY DISTRICT
BOARD OF DIRECTORS

DIRECTOR'S REPORT OF CONFERENCE / MEETING ATTENDANCE

Director Name: Bob Anderson

Name & Location of Function: Dept of Parks & Rec meeting, San Diego

Date(s) of Attendance: September 15, 2016

Purpose of Function: Discuss the availability of funds for Fallbrook Parks and Rec

Sponsoring Organization: FPUD

Summary of Conference or Meeting:

We discussed the possibility obtaining County Parks and Rec funds, or alternative funding methods, to support the ongoing maintenance of Fallbrook's Rec facilities.

The conclusion was Parks and Rec would not be able to participate financially, however, they would be willing support assisting a citizens group in the development of a ballot initiative for community vote.

This information will be brought to the entire Board for further discussion.

Director Signature:  Date: 9/21/2016

The Administrative Code requires reports of conferences or meetings for which a director requests per diem or expense reimbursement. Reports must be submitted to the secretary no later than one (1) week prior to the board meeting.

Reports must be submitted before the District will pay per diem or reimbursement for the conference or meeting. Reports are not required for board or committee meetings or meetings with board or committee officers, the general manager, or the general counsel.



FALLBROOK PUBLIC UTILITY DISTRICT
BOARD OF DIRECTORS

DIRECTOR'S REPORT OF CONFERENCE / MEETING ATTENDANCE

Director Name: AL GEISHART

Name & Location of Function: LAFCD EXPLORE WITH CO. PARKS DEPT.

Date(s) of Attendance: 9/15/2016

Purpose of Function: SOUND OUT FOR CO. PARKS SUPPORT TO MOVE CSA TO FPUD

Sponsoring Organization: FPUD

Summary of Conference or Meeting:

COUNTY GLOSSED OVER LAFCD IDEA, BUT ~~BE~~ BROUGHT UP
IDEA ABOUT LIGHTING DISTRICT UNDER CSA-81, TO PROVIDE
MAINTENANCE FUNDING FOR LANDSCAPE, NON-ACTIVE RECREATION.
WOULD BE A NEW TAX SOURCE TO ALL RESIDENCES OF FALLBROOK
NOT JUST FPUD FOLKS. VOTER ISSUE BUT ONLY NEED
50% APPROVAL. ^{THEY} WOULD COME UP TO EXPLAIN IT IN OCT. 2016
TO ALL INTERESTED PARTIES. FUNDING MIGHT BE AVAILABLE
THROUGH CSA-81 MAINTENANCE RESERVES. TO COVER PROJECT
COST.

Director Signature: Al Geishart

Date: 9/20/16

The Administrative Code requires reports of conferences or meetings for which a director requests per diem or expense reimbursement. Reports must be submitted to the secretary no later than one (1) week prior to the board meeting.

Reports must be submitted before the District will pay per diem or reimbursement for the conference or meeting. Reports are not required for board or committee meetings or meetings with board or committee officers, the general manager, or the general counsel.



FALLBROOK PUBLIC UTILITY DISTRICT
BOARD OF DIRECTORS

DIRECTOR'S REPORT OF CONFERENCE / MEETING ATTENDANCE

Director Name: AL GOBTHART

Name & Location of Function: CDWO meeting / Stone ridge Pkwy CA

Date(s) of Attendance: 9/20/16

Purpose of Function: Learn about employee changes in health care

Sponsoring Organization: FPUD

Summary of Conference or Meeting:

Speaker spoke about changing health care premium cost for current and retired employees. Significant changes in pricing and benefits. We will have to be flexible in the future, less guarantees and less coverage benefits. He seemed to think everything will be fine, election could have impact on affordable care Act. and related cost and benefits

Director Signature: Al Gobthart

Date: 9/21/16

The Administrative Code requires reports of conferences or meetings for which a director requests per diem or expense reimbursement. Reports must be submitted to the secretary no later than one (1) week prior to the board meeting.

Reports must be submitted before the District will pay per diem or reimbursement for the conference or meeting. Reports are not required for board or committee meetings or meetings with board or committee officers, the general manager, or the general counsel.

ROBERT H. JAMES

ATTORNEY AT LAW

ROBERT H. JAMES, Esq.
roberthjameslaw@gmail.com

3668 KATIE LENDRE DRIVE
FALLBROOK, CALIFORNIA 92028

RECEIVED
SEP - 8 2016
TELEPHONE
(760) 723-9018

September 6, 2016

**Board of Directors
Fallbrook Public Utility District**

Milt Davies
P.O. Box 2305
Fallbrook, CA 92088-2305

Al Gebhart
1609 Santa Margarita Dr.
Fallbrook, CA 92028

Robert Anderson
1025 El Piasano Drive
Fallbrook, CA 92028

Don McDougal
P.O. Box 1887
Fallbrook, CA 92088-1877

Charley Wolk
P.O. Box 2168
Fallbrook, CA 92088-2168

Re: General Counsel Board Report for September 2016

Real Property

Use of decades old fire road on private property as hiking trail does not constitute implied dedication of land for public use.

By 1940, the fire departments of Beverly Hills and Los Angeles completed Hastain Fire Road. It wound through public and undeveloped private land in the hills north of the city, connecting with an older abandoned fire road, Peak Trail. By the 1950's both trails had become popular hiking destinations, attracting around 4,000 visitors annually. In the 1990's and 2000's, owners of the property on which the trails ran began to develop the land, knowing that Hastain Fire Road would need to be relocated. In 2011, a group known as Friends of the Hastain Trail filed a complaint against the developers to quiet title to a public recreational trail easement through the private property. At trial they produced witnesses who testified to the trail's popularity and maps indicating the fire road's route. The trial court found that because public's use was substantial, there was an implied dedication of the land for public use.

Reversed and remanded. The sufficient use of real property necessary for implied public dedication must clearly indicate to an owner that there is a danger of his property being dedicated. Here, maps produced to the trial court only established at a minimum that fire roads did exist on the property. They did not establish that there was a permanent and fixed public easement on the land, as fire roads are inherently temporary. This court found that public use of a fire road as a hiking trail should not alarm an owner that his property is in danger of dedication. Thus, this court found that the judgment improperly granted permanent rights to land that as the land was only burdened by a conditional public easement.

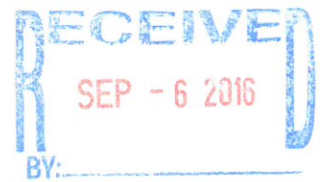
Friends of the Hastain Trail v. Coldwater, California Courts of Appeal – 2nd District, No. B249841, July 27, 2016

ROBERT H. JAMES, Attorney at Law



General Counsel for Fallbrook Public Utility District

RHJ/klm
cc: Brian J. Brady



September 1, 2016

Fallbrook Public Utility District
POB 2290
Fallbrook CA 92088-2290

Attention: Dr. Brian Brady and Board Members

Dear Dr. Brady and Board Members,

1. Being able to take a shower at home rather than the gym.
2. Being able to rinse all the shampoo out of our hair.
3. Appliances that don't shut off mid-cycle.
4. 'Rainbirds' that function properly while irrigating.
5. Hoses that charge.
6. Not having to take the dog to the dog-wash.
7. Being able to have company for dinner parties.

These things and more, are what we are able to enjoy since FPUD has fixed the water pressure problems on Jericho Drive! I reflect upon ALL of these things when I go out to hand-water our most sensitive plants every other evening.

I wanted to take a moment to write and thank Dr. Brady, Jack Bebee, all of the Board Members, field employees and staff, who have spent so much time the last several years addressing our water pressure issues. I don't know what you did to fix the problem...but I am SO thankful you did! Our water pressure has been great and very consistent.

Thank you from our family and from the rest of the residents on Jericho Drive! It was a job well done! Good water pressure is indeed a blessing!

With every good wish,
Lauren-Michele Seals

A handwritten signature in cursive script that reads "Lauren Michele Seals".

791 Jericho Drive
Fallbrook CA 92028