RANCHO MURIETA COMMUNITY SERVICES DISTRICT

15160 JACKSON ROAD
RANCHO MURIETA, CA 95683
916-354-3700
FAX – 916-354-2082

AGENDA

"Your Independent Local Government Agency Providing
Water, Wastewater, Drainage, Security, and Solid Waste Services"

REGULAR BOARD OF DIRECTORS MEETINGS ARE HELD
3rd Wednesday of Each Month

REGULAR BOARD MEETING
June 19, 2013
Closed Session 4:00 p.m. * Open Session 5:00 p.m.
RMCSD Administration Building – Board Room
15160 Jackson Road
Rancho Murieta, CA 95683

BOARD MEMBERS

Gerald Pasek	President
Roberta Belton	Vice President
Betty Ferraro	Director
Paul Gumbinger	Director
Michael Martel	Director

STAFF

Edward R. Crouse	General Manager
Darlene Gillum	Director of Administration
Greg Remson	Security Chief
Paul Siebensohn	Director of Field Operations
Suzanne Lindenfeld	District Secretary

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

REGULAR BOARD MEETING

JUNE 19, 2013

Closed Session 4:00 p.m. - Open Session 5:00 p.m.

AGENDA

RUNNING TIME

1. **CALL TO ORDER** - Determination of Quorum - President Pasek **(Roll Call)** 4:00

2. **ADOPT AGENDA** (Motion) 4:05

3. **SPECIAL ANNOUNCEMENTS AND ACTIVITIES** *(5 min.)* 4:10

4. **CLOSED SESSION** 4:15

Conference with Legal Counsel – Anticipated Litigation. Significant Exposure to Litigation Pursuant to 54956.9(b): Two Potential Cases.

Conference with Legal Counsel – Existing Litigation Pursuant to Government Code section 54956.9(a). Name of case: Rancho Murieta Community Services District v. Elk Grove Bilby Partners, LP, Sacramento County Superior Court Case No. 34-2011-00097778.

Conference with Legal Counsel – Anticipated Litigation. Initiation of litigation pursuant to Government Code Section 54956.9(c): (Two Potential Cases).

Under Government Code section 54956.8: Conference with Real Property Negotiators - Real Property APN 128-0080-067; APN 128-0080-068; APN 128-0080-069; APN 128-0080-076; and APN 128-0100-029. Real Property Agency Negotiator: Edward R. Crouse, General Manager. Negotiating Party: CSGF Rancho Murieta, LLC, BBC Murieta Land, LLC, Murieta Retreats, LLC, PCCP CSGF RB PORTFOLIO, LLC. Under Negotiation: Price and Terms.

Under Government Code 54957: Public Employee Performance Review: Title: General Manager.

5. **OPEN SESSION** 5:00

The Board will discuss items on this agenda, and may take action on those items, including informational items and continued items. The Board may also discuss other items that do not appear on this agenda, but will not act on those items unless action is urgent, and a resolution is passed by a two-thirds (2/3) vote declaring that the need for action arose after posting of this agenda.

The running times listed on this agenda are only estimates and may be discussed earlier or later than shown. At the discretion of the Board, an item may be moved on the agenda and or taken out of order. ***TIMED ITEMS*** *as specifically noted, such as Hearings or Formal Presentations of community-wide interest, will not be taken up earlier than listed.*

6. **REPORT ACTION FROM CLOSED SESSION** 5:05

7. **COMMENTS FROM THE PUBLIC** 5:10

The public shall have the opportunity to directly address the Board on any item of interest before or during the Board's consideration of that item. Public comment on items within the jurisdiction of the Board is welcome, subject to reasonable time limitations for each speaker.

If you wish to address the Board at this time, as a courtesy, please state your name and address, and reserve your comments to no more than 3 minutes so that others may be allowed to speak. No action will be taken.

8. **CONSENT CALENDAR** (Motion) **(Roll Call Vote)** *(5 min.)* 5:20

All the following items in Agenda Item 8 will be approved as one item if they are not excluded from the motion adopting the consent calendar.

a. **Approval of Board Meeting Minutes**
1. May 15, 2013 Board Meeting

b. **Committee Meeting Minutes** (Receive and File)
1. June 4, 2013 Improvements Committee Meeting
2. June 5, 2013 Personnel Committee Meeting
3. June 6, 2013 Finance Committee Meeting
4. June 6, 2013 Security Committee Meeting

c. **Approval of Bills Paid Listing**

9. **STAFF REPORTS** (Receive and File) (*5 min.)* 5:25
- **a.** General Manager's Report
- **b.** Administration/Financial Report
- **c.** Security Report
- **d.** Water/Wastewater/Drainage Report

10. **CORRESPONDENCE** *(5 min.)* 5:30
- **a.** Email from Janis Eckard, dated May 13, 2013

11. **ACCEPT THE FINAL SUMMARY OF DEMAND FACTORS ANALYSIS TECHNICAL MEMORANDUM, PRESENTATION BY LISA MADDAUS, MADDAUS WATER MANAGEMENT** (Discussion/Action) (Motion) *(15 min.)* 5:35

12. **REVIEW RECYCLED WATER FEASIBILITY STUDY, PRESENTATION BY KEVIN KENNEDY, AECOM** (Discussion/Action) *(15 min.)* 5:50

13. **APPROVE PROPOSAL FOR PREPARING A TITLE 22 ENGINEER REPORT AND REPORT OF WASTE DISCHARGE** (Discussion/Action) (Motion) *(5 min.)* 6:05

14. **DISCUSS ADOPTION OF BOARD GUIDELINES** (Discussion/Action) *(5 min.)* 6:10

15. **ADOPT RESOLUTION 2013-02, A RESOLUTION APPROVING THE PROPOSED BUDGET FOR FISCAL YEAR 2013-2014** 6:15

(Discussion/Action) (Motion) **(Roll Call Vote)** *(5 min.)*

16. **ADOPT ORDINANCE 2013-01, AN ORDINANCE AMENDING CHAPTER 14 OF THE DISTRICT CODE, RELATING TO WATER; AMENDING CHAPTER 15 OF THE DISTRICT CODE RELATING TO SEWER; AMENDING CHAPTER 16 OF THE DISTRICT CODE RELATING TO DRAINAGE; AMENDING CHAPTER 16A OF THE DISTRICT CODE RELATING TO DRAINAGE TAX; AMENDING CHAPTER 21 OF THE DISTRICT CODE RELATING TO SECURITY CODE; AND AMENDING CHAPTER 31 OF THE DISTRICT CODE RELATING TO SOLID WASTE COLLECTION AND DISPOSAL** 6:20

(Discussion/Action) (Motion) **(Roll Call Vote)** *(5 min.)*

17. **ELECTION OF CALIFORNIA SPECIAL DISTRICTS ASSOCIATION BOARD OF DIRECTORS, REGION 2** (Discussion/Action) (Motion) *(5 min.)* 6:25

18. **REVIEW AND SELECT CONFERENCE/EDUCATION OPPORTUNITIES** 6:30

(Discussion/Action) (Motion) *(5 min.)*

19. **MEETING DATES/TIMES FOR THE FOLLOWING:** *(5 min.)* 6:35

Special Board Meeting/Workshop: June 28, 2013

Next Regular Board Meeting: July 17, 2013

Committee Meeting Schedule:

- Joint Security - Friday, July 26, 2013 at 9:00 a.m. @ RMA
- Improvements - Wednesday, July 3, 2013 at 8:30 a.m.
- Personnel - Wednesday, July 3, 2013 at 9:30 a.m.
- Finance – Friday, July 5, 2013 at 8:30 a.m.
- Security - Friday, July 5, 2013 at 9:00 a.m.
- Communications - Friday, July 5, 2013 at 10:00 a.m.
- Parks - Thursday, June 27, 2013 at 4:00 p.m. @ RMA

20. **COMMENTS/SUGGESTIONS – BOARD MEMBERS AND STAFF** 6:40

In accordance with Government Code 54954.2(a), Directors and staff may make brief announcements or brief reports of their own activities. They may ask questions for clarification, make a referral to staff or take action to have staff place a matter of business on a future agenda.

21. **ADJOURNMENT** (Motion) 6:45

"In accordance with California Government Code Section 54957.5, any writing or document that is a public record, relates to an open session agenda item and is distributed less than 72 hours prior to a regular meeting, will be made available for public inspection in the District offices during normal business hours. If, however, the document is not distributed until

the regular meeting to which it relates, then the document or writing will be made available to the public at the location of the meeting."

Note: This agenda is posted pursuant to the provisions of the Government Code commencing at Section 54950. The date of this posting is June 14, 2013. Posting locations are: 1) District Office; 2) Plaza Foods; 3) Rancho Murieta Association; 4) Murieta Village Association.

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

Regular Board of Directors Meeting
MINUTES
May 15, 2013
3:30 p.m. Closed Session * 5:00 p.m. Open Session

1. CALL TO ORDER/ROLL CALL

President Gerald Pasek called the regular meeting of the Board of Directors of Rancho Murieta Community Services District to order at 3:30 p.m. in the District meeting room, 15160 Jackson Road, Rancho Murieta. Directors present were Gerald Pasek, Roberta Belton, Betty Ferraro, Paul Gumbinger, and Michael Martel. Also present were Edward R. Crouse, General Manager; Darlene Gillum, Director of Administration; Greg Remson, Security Chief; Paul Siebensohn, Director of Field Operations; and Suzanne Lindenfeld, District Secretary.

2. ADOPT AGENDA

Motion/Belton to adopt the agenda with Agenda Items 13 and 14 being switched. **Second/Gumbinger. Ayes: Pasek, Belton, Ferraro, Gumbinger, and Martel. Noes: None.**

3. SPECIAL ANNOUNCEMENTS AND ACTIVITIES

None.

4. BOARD ADJOURNED TO CLOSED SESSION AT 3:34 P.M. TO DISCUSS THE FOLLOWING ITEMS:

Conference with Legal Counsel – Anticipated Litigation. Significant Exposure to Litigation Pursuant to 54956.9(b): Two Potential Cases.

Conference with Legal Counsel – Existing Litigation Pursuant to Government Code section 54956.9(a). Name of case: Rancho Murieta Community Services District v. Elk Grove Bilby Partners, LP, Sacramento County Superior Court Case No. 34-2011-00097778.

Conference with Legal Counsel – Anticipated Litigation. Initiation of litigation pursuant to Government Code Section 54956.9(c): (Two Potential Cases).

Under Government Code section 54956.8: Conference with Real Property Negotiators - Real Property APN 128-0080-067; APN 128-0080-068; APN 128-0080-069; APN 128-0080-076; and APN 128-0100-029. Real Property Agency Negotiator: Edward R. Crouse, General Manager. Negotiating Party: CSGF Rancho Murieta, LLC, BBC Murieta Land, LLC, Murieta Retreats, LLC, PCCP CSGF RB PORTFOLIO, LLC. Under Negotiation: Price and Terms.

Under Government Code 54957: Public Employee Performance Review: Title: General Manager.

5/6. BOARD RECONVENED TO OPEN SESSION AT 5:04 P.M. AND REPORTED THE FOLLOWING:

Jonathan Hobbs, District General Counsel, reported that the Board will be returning to closed session after completion of tonight's Open Session. No reportable action at this time.

7. COMMENTS FROM THE PUBLIC

Janis Eckard commented on interim water for Murieta Gardens Hotel, community vote regarding payment for developer water, Reynen & Bardis letter of credit and the water plant membrane filtration system. Ms. Eckard asked when District Policy 2004-05, Water Service Commitments (Will Serve Policy) had been abandoned. Ed Crouse stated that the policy is still in effect and that there has been no building or financing of any new development.

Mary Brennan commented on the April 26, 2013 Board workshop, how the community should be at full build out by now, and that District needs to do whatever it can to use the letter of credit.

Bob Wright, President, Rancho Murieta Country Club (RMCC), stated that RMCC is in favor of the new hotel; RMCC has gotten 44 new members in the last two (2) months, and is having Casino Corral this Saturday.

Steve Murphy asked about the letter of credit. Ed Crouse stated that a letter is sent out annually requesting the renewal of the letter of credit. If it is not renewed by the due date, the District can pull the letter of credit. Mr. Murphy asked if the District's legal counsel had spoken with the bank's legal counsel to determine if it is still valid. Mr. Hobbs stated that he has not talked with the bank's attorney but that the letter is still valid. Mr. Murphy suggested Mr. Sullivan's group back up the letter of credit.

8. CONSENT CALENDAR

Motion/Ferraro to adopt the consent calendar with Directors Belton and Gumbinger abstaining from the approval of the April 17, 2013 Board meeting minutes. **Second/Martel. ROLL CALL VOTE: Ayes: Pasek, Belton, Ferraro, Gumbinger, and Martel. Noes: None.**

9. STAFF REPORTS

No comments.

10. CORRESPONDENCE

Director Belton stated the letter from Mr. Schultz has some valuable insight. Director Belton also commented on the emails from Candy Chand and Matthew McGuire and stated that she suggested an advisory vote at the April 26, 2013 Board workshop. President Pasek said that an advisory vote is fine but the residents first have to understand what it is they are voting on.

Ted Hart stated that the Board should be making the decision on whether to use the membrane system or not, no need to put out to a vote/survey since the District will not be able to get a majority of the community to respond.

Director Gumbinger commented on the need to find out what the costs will be for rehabbing to the current 1.5 million gallons capacity before going any father. Director Belton and Martel agreed.

11. APPROVE PROPOSAL FOR WATER TREATMENT PLANT REDESIGN PLANS

Ed Crouse gave a brief summary of the recommendation to approve the proposal from HDR to redesign the Water Treatment Plant 1 expansion project.

Director Ferraro commented on the District having to pay for the design plans for a third time. Mr. Crouse stated that Reynen & Bardis paid for the first set of plans, the developers as a group paid for the second set.

Janis Eckard commented on the problems some agencies have had with the membrane system. Rich Stratton, HDR, stated that the membrane system technology has improved over the years and is working fine in many water agencies.

Mr. Stratton gave a brief overview of the process and stated that a workshop would be held in either July or August to review treatment alternatives and select the preferred technology for expanding Plant 1.

Motion/Gumbinger to approve the proposal from HDR to redesign the Water Treatment Plant 1 expansion project, in an amount not to exceed $177,778, funding to come from Water Replacement Reserves, with the bill being submitted to Reynen & Bardis for payment. If payment not received, payment to be made through the letter of credit. **Second/Belton**. **Ayes: Pasek, Belton, Ferraro, Gumbinger, and Martel. Noes: None.**

12. RECEIVE 2012 DIVERSION REPORT

Jack Fiori, California Waste Recovery Systems (CWRS), gave a presentation regarding the 2012 Diversion Report for Rancho Murieta. The items covered in the report included the consolidated tons collected in Rancho Murieta: 1,891 tons of solid waste, 1,088 tons of green-waste and 639 tons of recycled materials for a total of 3,618 tons. A question and answer period followed.

14. APPROVE ADDITIONAL TERM OF COLLECTION SERVICES WITH CALIFORNIA WASTE RECOVERY SYSTEMS (taken out of order)

Jack Fiori California Waste Recovery Systems (CWRS) gave a brief presentation regarding the additional term of the Collection Services Agreement between Rancho Murieta Community Services District and California Waste Recovery Systems for solid waste collection and disposal. Some of the enhancements to the contract include household battery collection, cell phone collection, e-waste and u-waste collection, used cooking oil, and an increase in the allowable volume of large item collection.

Motion/Belton to approve an additional ten (10) year term of the Collection Services Agreement between Rancho Murieta Community Services District and California Waste Recovery Systems for solid waste collection and disposal. **Second/Gumbinger**. **Ayes: Pasek, Belton, Ferraro, Gumbinger, and Martel. Noes: None.**

13. APPROVE CALIFORNIA WASTE RECOVERY SYSTEMS CONTRACT SEVENTH AMENDMENT

Motion/Martel to approve the seventh (7^{th}) contract amendment between Rancho Murieta Community Services District and California Waste Recovery Systems for solid waste collection and disposal. **Second/Gumbinger**. **Ayes: Pasek, Belton, Ferraro, Gumbinger, and Martel. Noes: None.**

David Vaccarezza, President, California Waste Recovery Systems, commented on how much they appreciate the business and how his staff enjoys working in the community.

Director Gumbinger commented on what a great job the drivers do.

Director Belton commented on how great the quality of service is they provide.

15. REVIEW OF THE PROPOSED 2013/2014 BUDGET AND CAPITAL PROJECTS

Darlene Gillum provided a presentation, which included services provided by the District, current projects, new projects, budget assumptions, staffing, financial statistics, followed by a question and answer period.

President Pasek asked for public comments at 7:24 p.m.

Ken Kosh requested the District keep funding for the taste and odor issues, as there is an odor and bad taste to his water. Paul Siebensohn stated that he will have staff check in to the matter.

Motion/Belton to continue adoption of Resolution 2012-05 to the June 20, 2012 Board meeting, after adopting of Ordinance 2012-01. **Second/Ferraro. ROLL CALL VOTE: Ayes: Pasek, Belton, Ferraro, and Gumbinger. Noes: None. Absent: Martel.**

16. PUBLIC HEARING – REVIEW OF THE PROPOSED RATE INCREASE AND SPECIAL TAX ADJUSTMENTS

Darlene Gillum gave a brief overview of the proposed rate increase for water, sewer, drainage, solid waste, and security, followed by a question and answer period.

President Pasek opened the public hearing at 7:28 p.m. and asked for public comments.

No public comments.

President Pasek closed the public hearing at 7:29 p.m.

Motion/Gumbinger to introduce Ordinance 2013-01, waive the first reading and continue to the June 19, 2013 Board meeting for adoption. **Second/Belton. Roll Call: Ayes: Pasek, Belton, Ferraro, and Gumbinger. Noes: Martel.**

17. DISCUSS PTF REQUEST FOR BOARD OF DIRECTORS PARTICIPATION IN FINANCING AND SERVICES AGREEMENT

Ed Crouse stated that PTF is willing to proceed with negotiations of a Financing and Services Agreement (FSA) for the remaining undeveloped properties owned by PTF (Rancho North Properties) if two (2) Board members participate with staff in the negotiations. The District's informal policy for the current FSA negotiations has been no Board member(s) participate in the negotiations

Mike Hamilton, representative for PTF and Rancho North Properties, stated that having Directors participate with staff has worked well in the past and would like to have them involved now.

Director Gumbinger stated that the Board President should be included in the negotiations.

Motion/Gumbinger to appoint President Pasek to the District's negotiation team for the Finance and Services Agreement. **Second/Ferraro. Ayes: Pasek, Ferraro, Gumbinger, Martel. Noes: Belton**.

18. APPROVE HOTEL SITE WILL SERVE LETTER AGREEMENT

Ed Crouse gave a brief summary of the will serve letter agreement. The will serve letters will remain provisional until the water plant is expanded and the project's 30 EDUs are built into the expansion.

Director Gumbinger commented on his concerns for the need for an Financing and Services Agreement with Cosumnes River Land, LLC; the District should be asking for $6,000 per EDU, for a total of $180,000; and the bill for HDR services for design plans should be sent to Reynen & Bardis for payment, if they don't pay then collect from the letter of credit. Director Gumbinger requested that staff provide information in written form that based on their calculations there is water that can be borrowed on an interim basis prior to the agreement being signed.

John Sullivan, Cosumnes River Land, LLC, commented on the hotel project not being able to move forward until the water entitlements have been settled which Murieta Gardens project is entitled to due to previous owners having already paid for it the entitlements.

Janis Eckard commented on her conversation with the Department of Public Health regarding Title 22 and her concerns regarding available capacity especially on high usage days, which could affect the community's safety net.

Ted Hart commented on how he feels the Board should move forward with the agreement.

Motion/Gumbinger to approve Draft Water Service Agreement for Gardens Project Lot 8 Hotel and Lot 7 Extended Stay Units, subject to District Engineer's calculation for sufficient water capacity available.

Jonathan Hobbs, District Legal Counsel, suggested modifying the motion to require the developer to negotiate in good faith with the District towards a Financing and Services Agreement.

Director Gumbinger amended the motion to approve Draft Water Service Agreement for Gardens Project Lot 8 Hotel and Lot 7 Extended Stay Units, subject to District Engineer's calculation for sufficient water capacity available and require the Cosumnes River Land, LLC to negotiate in good faith with the District towards a Financing and Services Agreement. **Second/Martel. Ayes: Pasek, Ferraro, Gumbinger, Martel. Noes: Belton.**

19. APPROVE PAYMENT OF TAX FOR 6B GENERATOR REPLACEMENT

Paul Siebensohn gave a brief summary of the recommendation to approve the additional payment to Cummins West to cover the tax that was left off the original Board approval.

Motion/Gumbinger to approve an additional payment of $1,566.57 to Cummins West, to cover the tax for the purchase of an LP Generator. Funding to come from Sewer Reserves, CIP 12-07-2. **Second/Martel. Ayes: Pasek, Ferraro, Gumbinger, Martel. Noes: None. Absent: Belton.**

20. APPROVE 2012-13 AUDIT PROPOSAL

Darlene Gillum gave a brief summary of the recommendation to approve the proposal from Larry Bain, CPA, An Accounting Corporation for preparation of the 2012-13 audit reports.

Motion/Gumbinger to approve the proposal from Larry Bain, CPA, An Accounting Corporation, for preparation of audit reports (for the District and for the Community Facilities District #1) for the fiscal year 2012-13, in an amount not to exceed $15,500. Funding to come from the 2013-14 General Administration Operating Budget in the amount of $13,500 for the District and $2,000 from the CFD#1. **Second/Belton. Ayes: Pasek, Belton, Ferraro, Gumbinger, Martel. Noes: None.**

21. APPROVE REGIONAL WATER AUTHORITY PROPOSED AMENDMENT TO THE RWA JOINT POWERS AGREEMENT (JPA)

Ed Crouse gave a brief summary of the recommendation to approve the amendments to the Regional Water Authority Joint Powers Agreement.

Motion/Belton to approve the Regional Water Authority (RWA) Proposed Amendments to the RWA Joint Powers Agreement (JPA) as presented in Amendment 1, red-line version. **Second/Gumbinger. Ayes: Pasek, Belton, Ferraro, Gumbinger, Martel. Noes: None.**

22. REVIEW AND SELECT CONFERENCE/EDUCATION OPPORTUNITIES

Director Ferraro will be attending the CSDA Annual Conference.

23. MEETING DATES/TIMES

No changes.

24. COMMENTS/SUGGESTIONS – BOARD MEMBERS AND STAFF

Director Martel asked Chief Remson how the cameras Stan Van Vleck donated work. Chief Remson stated that they are motion cameras that are monitored by a monitoring company who will notify Security when they feel they need to.

President Pasek stated that staff need to start to work on developing a finance plan; the Board will be having a Special Board meeting, closed session only; and staff need to look at contract alternatives regarding the rehabilitating the water treatment plant.

Suzanne Lindenfeld stated that the April e-waste collection event collected 1,709 pounds of televisions and monitors and 1,378 pounds of other computer related items.

President Pasek stated given the lateness of the meeting, the continuation of the closed session will occur on another day.

25. ADJOURNMENT

Motion/Gumbinger to adjourn at 8:30 p.m. **Second/Ferraro. Ayes: Pasek, Belton, Ferraro, Gumbinger, and Martel. Noes: None.**

Respectfully submitted,

Suzanne Lindenfeld, District Secretary

MEMORANDUM

Date: June 4, 2013

To: Board of Directors

From: Improvements Committee Staff

Subject: June 4, 2013 Committee Meeting Minutes

---

1. CALL TO ORDER

Director Pasek called the meeting to order at 8:30 a.m. Present were Directors Pasek and Gumbinger. Present from District staff were Edward Crouse, General Manager; Greg Remson, Security Chief; and Suzanne Lindenfeld, District Secretary.

2. COMMENTS FROM THE PUBLIC

None.

3. UPDATES

Augmentation Well

The Rights of Entry have been signed and returned to Dunn Environmental. A pre-job meeting will be scheduled to coordinate location and access with ranching operations.

Recycled Water Feasibility Study

No public comments were received. The goal is to have the Draft Recycled Water Feasibility Study presented at the June Board meeting, then out for public comment, with adoption at the July Board meeting.

Hotel Water Service Agreement

Revisions to the Agreement are being reviewed. Once agreed on, the Agreement will be executed. Director Gumbinger requested he receive a copy prior to the District signing the Agreement.

Water Treatment Plant Design

Working on contract approvals/signatures. A Project kick-off meeting is scheduled for Friday, June 7, 2013.

4. PROPOSAL FOR TITLE 22 ENGINEERING REPORT AND REPORT OF WASTE DISCHARGE

Ed Crouse gave a brief summary of the recommendation to approve the proposal from AECOM for Title 22 Engineering Report and Report of Waste Discharge. The Title 22 Engineering Report will encompass both existing and future recycled water uses. **This item will be on the June 19, 2013 Board of Directors meeting agenda.**

5. FINANCING AND SERVICES AGREEMENT

Ed Crouse reported they are working through last minute edits to reflect recent changes in ownership as well as updates to various sections relating to capacity and funding.

6. COMMERCIAL WATER DEMAND FACTORS

Ed Crouse reported that two (2) requests for commercial water usage were sent out last month to local water districts. None of the water districts that responded use standard water usage factors to determine new project water demands. Staff recommends the District continue to use of the current demand factors to determine a project's water demand and then re-evaluate actual water use one (1) year later to determine true water demand use and EDU allocation. The Committee agreed.

7. ESCUELA LA CROSSE FIELD – WATER SERVICE

Ed Crouse reported that Rancho Murieta Association (RMA) is planning a new La Crosse field on the upper portion of the Escuela school site. Water for the field will be temporarily supplied from Stonehouse Park booster pump station. Once the permanent facilities are planned, the Escuela site will have its own water service facility which will require the installation of a separate booster pump.

8. DIRECTORS' & STAFF COMMENTS/SUGGESTIONS

Ed Crouse reported that he and Director Pasek met with Rancho Murieta Country Club (RMCC) last week regarding the availability of recycled water. RMCC will continue to use river water while they can. Ed forwarded to RMCC the contact information of Mark Parsons, RMA, regarding the oak tree mitigation.

9. ADJOURNMENT

The meeting was adjourned at 8:58 a.m.

MEMORANDUM

Date: June 5, 2013

To: Board of Directors

From: Personnel Committee Staff

Subject: June 5, 2013 Personnel Committee Meeting

Director Ferraro called the meeting to order at 9:00 a.m. Present were Directors Ferraro and Gumbinger. Present from District staff were Edward R. Crouse, General Manager; Greg Remson, Security Chief; and Suzanne Lindenfeld, District Secretary.

COMMENTS FROM THE PUBLIC
None.

UPDATES
Employee Relations
Ed Crouse reported that Paul Siebensohn is out on paternity leave and Darlene Gillum is at conference.

Chief Remson reported that the Security Patrol Officer out on a work related injury will be having surgery next week and will be out for 6 to 8 weeks after the surgery.

REVIEW 360 EVALUATION SURVEY QUESTIONS, KOFF & ASSOCIATES
Ed Crouse gave a brief summary of the recommendation to approve the cost for the development and administration of an evaluation of the Board of Directors. Director Gumbinger stated that he feels that the evaluation should be developed and administered in-house.

Director Gumbinger stated that the manager and supervisor evaluation is still too long and feels that employees will not want to complete it. Director Ferraro agreed. After a discussion, the Committee agreed to have 3 to 5 employees complete the survey to see how long it will take.

REVIEW BOARD GUIDELINES
The Committee agreed to have this item on the June Board meeting agenda as a discussion item to decide if the Board wants to have a separate workshop to review the guidelines. Adoption will be at the July Board meeting.

DIRECTORS' & STAFF COMMENTS/SUGGESTIONS
Chief Remson reported that he has scheduled off-duty Sacrament Sheriff Officers to work July 4, 2013. He will also be scheduling additional private security officers.

Director Gumbinger asked if Security does any type of traffic control regarding the repaving the Rancho Murieta Association (RMA) is doing. Chief Remson stated no they do not and that he will contact RMA as he has not been notified of any paving going on.

Director Ferraro asked if there is anything being done about all the people that walk in to attend the July 4 festivities. Chief Remson stated that most of the walk-ins are residents from the South, Murieta Village and guests of residents that do not want to get caught up in the traffic trying to get out. RMA is aware of the situation.

Ed Crouse reported that Rancho Murieta Country Club (RMCC) will have a tent set up behind the RMA Building on July 4. They will have live music and gambling in hopes to draw new members. Chief Remson will be getting additional off-duty SSD Officers to work the tent.

Travis Bohannan represented the District at RMCC's Garden Show this past weekend. Sergeant Bieg will be representing the District at the upcoming Dog Fest. Chief Remson recently attended a Fishing Club meeting and a Kiwanis meeting.

ADJOURNMENT
The meeting was adjourned at 9:38 a.m.

MEMORANDUM

Date: June 6, 2013

To: Board of Directors

From: Finance Committee Staff

Subject: June 6, 2013 Finance Committee Meeting

---

1. CALL TO ORDER

Director Belton called the meeting to order at 9:30 a.m. Present was Director Belton. Present from District staff were Edward Crouse, General Manager; Darlene Gillum, Director of Administration; Greg Remson, Security Chief; and Suzanne Lindenfeld, District Secretary. Director Pasek was absent.

2. COMMENTS FROM THE PUBLIC

None.

3. UPDATES

Elk Grove – Bilby Partners, L.P., Foreclosures

Darlene Gillum reported that Elk-Grove Bilby has paid the Lakeview CFD #1 delinquent assessment in full. All the money received goes to the CFD #1, not to the District. Staff will check to see if it is possible to pay off the bond early.

2013-2014 Budget

Darlene reported that the rate increase from California Waste Recovery Systems came in lower than expected due to Sacramento County not raising their disposal fee. This lower cost will result in the District's rate increase decreasing from 4.59% to 4.55%.

New Billing Statement Design

Staff is working on the new billing statement design which will include comparative usage data by lot type. The goal is to have the new statement design ready for the July billing cycle.

4. DIRECTORS' & STAFF COMMENTS/SUGGESTIONS

Darlene Gillum reported that the District will be receiving a $50,000 refund from the State.

Director Belton asked about the District's ability to fund the surveillance cameras in the community. Darlene stated that it first needs to be decided who is responsible for purchasing cameras; the District feels each entity should be responsible for purchasing their own camera system.

5. ADJOURNMENT

The meeting was adjourned at 9:48 a.m.

MEMORANDUM

Date: June 6, 2013

To: Board of Directors

From: Security Committee Staff

Subject: June 6, 2013 Security Committee Meeting

---

1. CALL TO ORDER

Director Belton called the meeting to order at 10:00 a.m. Present was Director Belton. Present from District staff were Edward R. Crouse, General Manager; Darlene Gillum, Director of Administration; Greg Remson, Security Chief; and Suzanne Lindenfeld, District Secretary. Director Martel was absent.

2. COMMENTS FROM THE PUBLIC

None.

3. MONTHLY UPDATES

Operations

Chief Remson spoke at the Kiwanis meeting, providing brief information on the Security Department and answering questions. There were two (2) DUI arrests in May. Security Patrol Officers have responded to 13 snake calls this month.

Off-Duty Sacramento Sheriff's Deputies (SSD) and private security officers have been scheduled to work on July 4, 2013.

The injured Security Patrol Officer is scheduled to have surgery next week, with a return date of 6-8 weeks. Chief Remson and the other Patrol Officers are covering the shifts.

Incidents of Note

Chief Remson gave a brief overview of the incidents of note for the month of May 2013.

RMA Citations/Advisals

Chief Remson reported on the following Rancho Murieta Association (RMA) rule violation citations for the month of May, which included 14 speeding. RMA rule violation admonishments and/or complaints for the month of May included 43 open garage doors, 30 loose/off leash dogs, 18 barking dogs, 14 fishing license, and 14 speeding.

RMA Compliance/Grievance/Safety Committee Meeting

At the May 6, 2013 meeting, there were two (2) appearances for trash containers and parking and six (6) letters regarding parking and property maintenance. The next meeting is June 3, 2013.

Joint Security Committee
The May 31, 2013 Joint Security Committee meeting was cancelled.

James L. Noller Safety Center
The Safety Center has been open most Mondays and Wednesdays from 10:00 a.m. to 2:00 p.m. VIPS Jacque Villa and Steve Lentz patrol the District as another set of "eyes and ears". Anyone interested in joining the VIPS program or wanting information on the Neighborhood Watch program can contact the VIPS at the Safety Center office at 354-8509.

The Safety Center is also available to all law enforcement officers for report writing, meal breaks and any other needs that arise.

New North Gate
The gate location has been finalized, agreement signed and funds have been released to RMA. RMA has approved a contract with Comstock Johnson Architects, Inc. Director Belton commented on the need for Chief Remson to be an active member of the committee overseeing the design and building of the new gate.

Beach Access/PTF Gates
Security Patrol Officers continue to open the gate at dawn and close the gate at dusk. Calls for service have been minor.

4. SECURITY SURVEILLANCE CAMERAS
Chief Remson reported that he met with three (3) local surveillance camera vendors and provided them information on areas throughout the District where surveillance cameras could be used to monitor areas and facilities. To date, only one (1) agency has submitted their proposal. Staff is waiting for the other two (2) proposals.

5. DIRECTOR & STAFF COMMENTS
Director Belton asked if the Gate Officers were having any problems with the new rule for residents of the Villas. Chief Remson stated that they are still in negotiations regarding that matter.

6. ADJOURNMENT
The meeting adjourned at 10:23 a.m.

MEMORANDUM

Date: June 12, 2013

To: Board of Directors

From: Darlene Gillum, Director of Administration

Subject: Bills Paid Listing

Enclosed is the Bills Paid Listing Report for **May 2013**. Please feel free to call me before the Board meeting regarding any questions you may have relating to this report. This information is provided to the Board to assist in answering possible questions regarding large expenditures.

The following major expense items (excluding payroll related items) are listed ***in order as they appear*** on the Bills Paid Listing Report:

Vendor	Project/Purpose	Amount	Funding
Borges & Mahoney Co.	Annual Chlorine System Service Supplies	$8,530.45 $2,639.40 $11,169.85	Operating Expense Operating Expense
California Waste Recovery Systems	Solid Waste Contract	$44,665.64	Operating Expense
SMUD	Monthly Electric	$22.076.39	Operating Expense
Department of Water Resources	Annual Dam Fees	$30,856.00	Operating Expense
Golden State Flow Measurement	IPERL Meters	$5,657.60	Operating Expenses
Groeniger & Company	Pond 3 & 5 Drain Valve Repair; Supplies	$8,657.95	Operating Expense
Kronick, Moskovitz, Tiedeman & Girard	Legal Consulting	$13,704.84	Operating Expense
NTU Technologies, Inc.	Chemicals	$21,842.20	Operating Expense
SMUD	Monthly Electric	$34,726.80	Operating Expense
USA Blue Book	Maintenance & Repair Supplies	$5,193.36	Reserve Expenditure

Rancho Murieta Community Services District
Bills Paid Listing for May 2013

Ck Number	Date	Vendor	Amount	Purpose
CM26574	5/2/2013	California Public Employees' Retirement Sys	$34,589.40	Payroll
CM26575	5/2/2013	Guardian Life Insurance	$5,152.67	Payroll
CM26576	5/2/2013	Vision Service Plan (CA)	$474.87	Payroll
CM26577	5/10/2013	A Leap Ahead IT	$3,447.18	Monthly IT Services
CM26578	5/10/2013	Ace Hardware	$547.37	Monthly Supplies
CM26579	5/10/2013	Alabama Specialty Products, Inc.	$72.84	Coupon Analysis
CM26580	5/10/2013	Allied Waste Services #922	$349.00	Container Service
CM26581	5/10/2013	American Express	$1,805.32	Monthly Bill
CM26582	5/10/2013	Aramark Uniform Services	$192.28	Uniform Service - Water
CM26583	5/10/2013	ASR - Sacramento Uniform	$59.39	Uniform - Security
CM26584	5/10/2013	Bar-Hein Co.	$1,826.44	Safety Supplies
CM26585	5/10/2013	Borges & Mahoney Co.	$11,169.85	Annual Chlorine System Service; Supplies
CM26586	5/10/2013	California Waste Recovery Systems	$44,665.64	Monthly Solid Waste Contract
CM26587	5/10/2013	CWEA	$75.00	Lab Analyst Certification
CM26588	5/10/2013	CareerTrack	$299.00	Seminar
CM26589	5/10/2013	Costco Wholesale	$894.13	Monthly Supplies
CM26590	5/10/2013	Employment Development Department	$2,600.16	Payroll
CM26591	5/10/2013	Express Office Products, Inc.	$214.70	Office Supplies
CM26592	5/10/2013	Fastenal	$217.98	Supplies/Parts
CM26593	5/10/2013	Folsom Lake Fleet Services	$733.24	Service #520, #212
CM26594	5/10/2013	Groeniger & Company	$653.17	Maintenance & Repair Supplies
CM26595	5/10/2013	Hach Company	$2,993.03	Terbidimeter
CM26596	5/10/2013	John James	$200.00	Water Pressure Valve Rebate
CM26597	5/10/2013	Pollardwater.com - West	$4,656.50	Confined Space Safety Equipment
CM26598	5/10/2013	Konecranes Inc.	$395.00	Quarterly Crane Inspection
CM26599	5/10/2013	James Mee	$100.00	Water Pressure Valve Rebate
CM26600	5/10/2013	Nationwide Retirement Solution	$1,663.23	Payroll
CM26601	5/10/2013	Operating Engineers Local Union No. 3	$520.56	Payroll
CM26602	5/10/2013	P. E. R. S.	$12,646.11	Payroll
CM26603	5/10/2013	PERS Long Term Care Program	$138.76	Payroll
CM26604	5/10/2013	Plaza Foods Supermarket	$15.27	Supplies
CM26605	5/10/2013	S. M. U. D.	$22,076.39	Monthly Electric
CM26606	5/10/2013	Sacramento Area Water Works Association	$325.00	Membership
CM26607	5/10/2013	Schaeffer Manufacturing Company	$661.30	Lube Gear Oil
CM26608	5/10/2013	TASC	$172.69	Payroll
CM26609	5/10/2013	Tesco Controls, Inc.	$1,998.00	Cabinets
CM26610	5/10/2013	U.S. Bank Corp. Payment System	$3,728.46	Monthly Gasoline
CM26611	5/10/2013	U.S. HealthWorks Medical Group, PC	$205.19	First Aid; Annual PFT
CM26612	5/10/2013	USA Blue Book	$703.76	Maintenance & Repair Supplies
ACH	5/10/2013	EFTPS	$9,611.08	Bi-weekly Payroll Taxes
CM26613	5/23/2013	Dept. of Public Health, ELAP Branch	$1,455.00	ELAP WWRP Renewal

Rancho Murieta Community Services District
Bills Paid Listing for May 2013

Ck Number	Date	Vendor	Amount	Purpose
CM26614	5/24/2013	Action Cleaning Systems	$1,172.00	Monthly Cleaning Service
CM26615	5/24/2013	AECOM Technical Services, Inc.	$1,900.00	Recycled Water Standards;Title XVI Feasibility Study
CM26616	5/24/2013	Applications By Design, Inc.	$125.00	Security Data Backup
CM26617	5/24/2013	Aramark Uniform Services	$192.28	Uniform Service - Water
CM26618	5/24/2013	ASR - Sacramento Uniform	$97.15	Uniform - Security
CM26619	5/24/2013	AT&T	$1,158.13	Monthly Phone
CM26620	5/24/2013	Bar-Hein Co.	$7.17	Supplies
CM26621	5/24/2013	BurdgeCooper	$1,350.29	Billing Statements
CM26622	5/24/2013	Caltronics Business Systems	$1,283.32	Monthly Maintenance Fee
CM26623	5/24/2013	CLS Labs	$1,575.84	Monthly Lab Tests
CM26624	5/24/2013	Cummins West	$1,830.00	6B Generator
CM26625	5/24/2013	Daily Journal Corporation	$1,470.00	Public Notice Hearing
CM26626	5/24/2013	Department of Water Resources	$30,856.00	Annual Dam
CM26627	5/24/2013	Employment Development Department	$2,647.51	Payroll
CM26628	5/24/2013	Environmental Resource Associates	$466.85	Lab Proficiency Test
CM26629	5/24/2013	Eurofins Eaton Analytical, Inc.	$250.00	MIB & Geosmin Analysis
CM26630	5/24/2013	Express Office Products, Inc.	$517.39	Office Supplies
CM26631	5/24/2013	Folsom Lake Fleet Services	$1,275.06	Service #519
CM26632	5/24/2013	Ford Motor Credit Company LLC	$234.78	Security Patrol Lease Payment
CM26633	5/24/2013	Golden State Flow Measurement	$5,657.60	Meters
CM26634	5/24/2013	Groeniger & Company	$8,657.95	Repair Pond 3 & 5 Drain Valves; Supplies
CM26635	5/24/2013	Hach Company	$1,584.14	Maintenance & Repair Supplies
CM26636	5/24/2013	Home Depot Credit Services	$80.99	Supplies
CM26637	5/24/2013	Howe It's Done	$156.24	Board Meeting Dinner
CM26638	5/24/2013	HYDEC	$307.90	Maintenance & Repair Supplies
CM26639	5/24/2013	Koff & Associates, Inc.	$1,050.00	360 Evaluation Survey
CM26640	5/24/2013	Kronick Moskovitz Tiedemann & Girard	$13,704.84	Legal Consulting
CM26641	5/24/2013	Kyle Yates, Inc.	$2,364.01	Maintenance & Repair Supplies
CM26642	5/24/2013	McMaster-Carr Supply Co.	$2,970.42	Ice Machine - Warehouse
CM26643	5/24/2013	Nationwide Retirement Solution	$1,663.23	Payroll
CM26644	5/24/2013	NTU Technologies, Inc.	$21,842.20	Chemicals
CM26645	5/24/2013	Operating Engineers Local Union No. 3	$520.56	Payroll
CM26646	5/24/2013	P. E. R. S.	$12,570.44	Payroll
CM26647	5/24/2013	PERS Long Term Care Program	$138.76	Payroll
CM26648	5/24/2013	Plaza Foods Supermarket	$29.08	Supplies
CM26649	5/24/2013	Prodigy Electric	$1,059.12	Miscellaneous Electrician Services
CM26650	5/24/2013	Public Agency Retirement Services	$300.00	Trust Admin Fees
CM26651	5/24/2013	Rancho Murieta Association	$284.47	Landscaping/Cable/Internet
CM26652	5/24/2013	Rancho Murieta Business Center	$32.06	Postage
CM26653	5/24/2013	Rescue Training Institute, Inc.	$70.00	CPR Training
CM26654	5/24/2013	Romo Landscaping	$385.00	Landscaping

Rancho Murieta Community Services District
Bills Paid Listing for May 2013

Ck Number	Date	Vendor	Amount	Purpose
CM26655	5/24/2013	S. M. U. D.	$34,726.80	Monthly Electric
CM26656	5/24/2013	Sensus Metering Systems	$1,585.58	Annual Support
CM26657	5/24/2013	Sierra Chemical Co.	$2,972.70	Chemicals
CM26658	5/24/2013	Sierra Chemical Company	$2,445.20	Chemicals
CM26659	5/24/2013	Sprint	$674.53	Monthly Cell Phone
CM26660	5/24/2013	State Lands Commission	$100.00	Right of way Lease
CM26661	5/24/2013	State Water Resources Control Board	$340.00	Grade 4 Waste Water Certification
CM26662	5/24/2013	TASC	$56.00	Payroll
CM26663	5/24/2013	TASC	$172.69	Payroll
CM26664	5/24/2013	TelePacific Communications	$492.82	Monthly Phone
CM26665	5/24/2013	The Westmark Group, Inc.	$3,582.00	2013 Groundwater Reporting
CM26666	5/24/2013	U.S. HealthWorks Medical Group, PC	$194.86	First Aid
CM26667	5/24/2013	Univar USA Inc.	$1,995.00	Chemicals
CM26668	5/24/2013	UPS	$39.81	Shipping Fee
CM26669	5/24/2013	USA Blue Book	$5,193.36	Maintenance & Repair Supplies
CM26670	5/24/2013	Western Exterminator Co.	$485.50	Monthly Pest Control
ACH	5/24/2013	EFTPS	$9,804.57	Bi-weekly Payroll Taxes
ACH	5/24/2013	US Postmaster	$1,250.00	Postage
ACH	5/31/2013	El Dorado Savings Bank	$20.00	Bank Fees
ACH	5/31/2013	Premier West Bank	$79.00	Bank Fees
		TOTAL	**$364,353.16**	

Rancho Murieta Community Services District
Bills Paid Listing for May 2013

Ck Number	Date	Vendor	Amount	Purpose
		CFD#1 Bank of America Checking		
CM2682	5/10/2013	Bank of America	$14.18	CFD#1 Admin Fees
CM2683	5/10/2013	Rancho Murieta CSD	$33,219.38	Sac County Property Tax Dispursement
CM2684	5/24/2013	CoreLogic Solutions, LLC.	$165.00	CFD#1 Admin Fees
CM2685	5/24/2013	Kronick Moskovitz Tiedemann & Girard	$382.27	CFD#1 Legal Fees
		TOTAL	**$33,780.83**	
		EL DORADO PAYROLL		
Payroll (El Dorado)				
Checks: # CM10995 to CM11009		and Direct Deposits: DD06403 to DD06464	$ 107,427.62	Payroll
ACH	5/31/2013	National Payment Corp	$204.63	Payroll
		TOTAL	**$107,632.25**	

MEMORANDUM

Date: June 14, 2013

To: Board of Directors

From: Edward R. Crouse, General Manager

Subject: General Manager's Report

The following are highlights since our last Board Meeting.

Employee Relations
We terminated a Security Department employee for excessive absenteeism. His management appeal was denied and termination upheld.

The Water Department hired a second intern from the Folsom Lake College Water and Wastewater Certification Program. The first intern over the spring worked out so well, we envision using interns on a routine and ongoing basis.

Finance/IT
Since staff presented our final proposed budget to the Board in May, California Waste Recovery Systems (CWRS) submitted their final rate application, which came in lower than anticipated. This change has resulted in a reduction in the rate increase to 4.55%.

Darlene and Debby are continuing to work with our IT Network consultant in moving us towards having an internal email server. We are still in the research and layout mode to determine the internal and operational issues and concerns.

Security
As previously reported, Greg's patrol ranks are still one (1) Patrol Officer short. The Patrol Officer injured on duty recently had surgery and is now out on a 6-8 week period of physical therapy before he can be evaluated for his return to work. In the mean time, Greg and his staff have been covering shifts due the absence.

Greg continues moving forward with his surveillance camera plan. One proposal has been received, with two (2) more proposals expected next week. The vendors apparently did not realize the extent of the scope and coverage in the community. As a result, there have been many follow up conversations to bottom out on the overall goal of the system and how to compartmentalize and phase in the system among the various potential users.

Water
In May, we experienced a 12% increase in water production over April 2013, which peaked at 2.25 mgd for the month.

Our diversions ended May 31, with 2,224.9 acre-feet diverted, essentially filling all the reservoirs, up to 4765 AF. Paul and staff did a great job balancing diversions and matching pumping rates to river flows, so that we did not need to fire up the 500HP pumps.

Wastewater

Similar to last month, our flows to the wastewater plant are still hovering at 0.395. However, secondary storage decreased to 98.49 MG to 302 AF in early June. We continue to work closely with Rancho Murieta Country Club (RMCC) on river diversion and recycled water deliveries to make sure there is enough recycled water to meet RMCC needs late in the irrigation season in September and October.

Drainage

Staff continued to clear vegetation from our detention basins and ditches in both RM North and South. Basin 5 aeration and fountain continue to operate, although their effectiveness in keeping algae in check is not readily apparent. That said, we have not had any resident complaints about Basin 5.

Laguna Joaquin received a midge fly treatment in May. The next treatment is scheduled for June 20, 2013.

Solid Waste

California Waste Recovery Systems (CWRS) is switching out containers at the administration building and warehouse to replace our commercial pick-up, starting on July 1.

Engineering

Augmentation Well

The Rights of Entry have been signed by the landowner(s), Dunn Environmental, and Frederick Pump and Supply. We have received certificates of insurance. A pre-job meeting will be scheduled to coordinate location and access with the ranching operations. Drilling is tentatively scheduled for the week of June 24, 2013.

Recycled Water Feasibility Study

We received no comments. Kevin Kennedy, AECOM, will be presenting the draft for public release for comments at our June Board meeting.

Recycled Water Standards

Kevin Kennedy, AECOM, is continuing his work on preparing recycled water transmission and irrigation standards to serve commercial and residential projects.

Water Treatment Plant Design

We held our kick off meeting June 7. We discussed plant capacity vs. demand as the preferred approach to design; overall project schedule; phasing capacity improvements/expansions; use of alternative financing and owner pre-purchase of long lead items; and scheduled a 30% design workshop for July 18. The pre-draft 30% design report will be presented at the July Improvements Committee meeting.

MEMORANDUM

Date: June 12, 2013

To: Board of Directors

From: Darlene Gillum, Director of Administration

Subject: Administration/Financial Reports

Enclosed is a combined financial summary report for **May 2013**. Following are highlights from various internal financial reports. Please feel free to call me before the Board meeting regarding any questions you may have relating to these reports.

This information is provided to the Board to assist in answering possible questions regarding under or over-budget items. In addition, other informational items of interest are included.

Water Consumption - Listed below are year-to-date water consumption numbers using weighted averages:

	12 month rolling % increase	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Residences	0.0	2512	2512	2512	2512	2513	2513	2513	2513	2513	2513	2513	
	Weighted average	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Cubic Feet	1761	2991	3140	3063	2232	976	668	751	759	1063	1484	2249	
Gallons per day	439	746	783	764	556	243	167	187	189	265	370	561	
Planning Usage GPD	**583**												

Lock-Offs

For the month of May there were 20 lock-offs.

Aging Report

Delinquent accounts total $74,501 which is 13.8% of the total accounts receivable balance of $539,737. Past due receivables, as a percent of total receivables, have decreased approximately 2.5% since April.

Summary of Reserve Accounts as of May 31, 2013

The District's reserve accounts have increased $510,557 year to date since July 1, 2012. The increase is due to the reserve amounts collected in the Water and Sewer base rates and interest earned. The District has expended $318,612 of reserves since the beginning of the fiscal year, which started July 1, 2012. The total amount of reserves held by the District as of May 31, 2013 is $8,773,693. Please see the Reserve Fund Balances table below for information by specific reserve account.

Reserve Fund Balances

Reserve Descriptions	*Fiscal Yr Beg Balance July 1, 2012*	*YTD Collected & Interest Earned*	*YTD Spent*	*Period End Balance May 31, 2013*
Water Capital Replacement (200-2505)	2,534,416	190,598	(19,646)	2,705,368
Sewer Capital Replacement (250-2505)	2,710,606	253,965	(118,808)	2,845,763
Drainage Capital Replacement (260-2505)	50,015	93	(23,289)	26,819
Security Capital Replacement (500-2505)	51,164	120	(0)	51,284
Sewer Capital Improvement Connection (250-2500)	3,996	10	(0)	4,006
Capital Improvement (xxx-2510)	437,939	2,158	(47,731)	392,366
Water Supply Augmentation (200-2511)	2,548,492	10,492	(109,138)	2,449,846
Water Debt Service Reserves (200-2512)	80,192	52,725	(0)	132,917
Sewer Debt Service Reserves (250-2512)	162,628	390	(0)	163,018
Rate Stabilization (200/250/500-2515)	2,300	6	(0)	2,306
Total Reserves	*8,581,748*	*510,557*	*(318,612)*	*8,773,693*

PARS GASB 45 Trust: The PARS GASB 45 Trust, which is the investment trust established to fund Other Post Employment Benefits, had the following returns:

Period ended April 30, 2013		
1-Month	3-Months	1-Year
1.22%	3.83%	11.09%

Financial Summary Report (year to date through May 31, 2013):

Revenues:

Water Charges, year-to-date, are **above budget $70,469 or 4.5%**

Sewer Charges, year-to-date, are **above budget $325 or 0.0%**

Drainage Charges, year-to-date, are **below budget $472 or (0.3%)**

Security Charges, year-to-date, are **below budget $343 or 0%**

Solid Waste Charges, year-to-date, are **above budget $723 or 0.1%**

Total Revenues, which include other income, property taxes and interest income year-to-date, are **above** budget **$124,956 or 2.5%**. Revenue areas that exceeded budget are primarily Water Charges, Title Transfer Fees, Reconnect Charges and Late Charges. Total Revenue also includes $12,868 for 2011/2012 Mandated Cost Reimbursements (SB90). Year to date residential Water usage has exceeded budget projections by 8.8% and year to date commercial Water usage has exceeded budget projections by 1.5%.

Expenses: **Year-to-date total operating expenses are below budget $168,520 or 3.5%. Year-to-date operational reserve expenditures total $112,189.** Operational reserve expenditures cover projects funded from reserves which are also recorded as operational expenses through the income statement as required by Generally Accepted Accounting Principles (GAAP).

Water Expenses, year-to-date, are **below budget $58,849 or (4.5%), prior to reserve expenditures.** Areas running over budget are Equipment Rental, Power, Hazardous Waste Removal, Post Repair Road Paving, Tools, Maintenance & Repairs, and Vehicle Maintenance. Wages are over budget due to the combination of retroactive adjustments and the actual allocation variance between Water, Sewer and Drainage. Employer Costs are under budget due to the combination of Medical Opt Out contingency under-run and the variance between the actual allocation of labor charges between Water, Sewer and Drainage and the projected budget allocations. Chemicals, Taste & Odor Chemicals, Vehicle Fuel, Meters, Lab Tests, Permits and Conservation are running below budget. Year-to-date, $59,269 of expenses have been incurred from reserves expenditures.

Sewer Expenses, year-to-date, are **over budget by 1,747 or .2%, prior to reserve expenditures.** Areas running over budget are Power, Maintenance & Repair, Permits, Training/Safety, Equipment Rental, Consulting and Hazardous Waste Removal. Wages are over budget due to the combination of retroactive adjustments and the actual allocation variance between Water, Sewer and Drainage. Employer Costs are under budget due to the combination of Medical Opt Out contingency under-run and the variance between the actual allocation of labor charges between Water, Sewer and Drainage and the projected budget allocations. Areas running below budget are Chemicals and Other Direct Costs (which includes: Legal, Vehicle Maintenance, Fuel, Tools and IT Systems Maintenance). Year-to-date, $29,631 of expenses have been incurred from reserves expenditures.

Drainage Expenses, year-to-date, are **below budget by $30,902 or (25.7%)**. Wages are under budget due to the combination of retroactive adjustments and the actual allocation variance between Water, Sewer and Drainage. Employer Costs are under budget due to the combination of Medical Opt Out contingency under-run and the variance between the actual allocation of labor charges between Water, Sewer and Drainage and the projected budget allocations. All other areas, except Permits, are running below budget.

Security Expenses, year-to-date, are **below budget by $51,199 or (5.3%).** Areas running over budget are Vehicle Maintenance, Office Supplies, IT Systems Maintenance (related to installation of the new Security Server), Legal, and Miscellaneous Expense (related to a District Claim). Wages are running under budget due to employees that have been out for extended periods due to medical issues and/or Workers' Comp injury. Employer Costs are running under budget due to actual elected medical benefits running below budgeted medical benefits. Insurance is running below budget because that coverage is now included in the District's general liability policy.

Solid Waste Expenses, year-to-date, are **over budget by $12,381 or 2.3%**. This over-run is related to the Household Hazardous Waste Event.

General Expenses, year-to-date, are **below budget by $41,697 or (4.0%).** The largest area running over budget is Janitorial/Landscape Maintenance, which is related to maintenance and repair of the lawn irrigation system and landscape for the Admin building. Wages, Clerical Services, Travel/Meetings, Office Supplies (related to District information brochures) and Copy Machine Maintenance are also running over budget. Employer Cost, Insurance, Legal, Director Meetings, Vehicle Fuel, IT Systems Maintenance and Community Communication are the largest areas running below budget.

Net Income: Year-to-date unadjusted net income, before depreciation, is $484,226. Net income/(Loss) adjusted for estimated depreciation expense of $1,023,684 is ($539,458).

The YTD expected net operating income before depreciation, per the 2012-2013 budget, is $190,750. The actual net operating income is $293,476 higher than the budget expectation due to revenue running $124,956 over budget and total operating expenses running under budget $168,520.

Rancho Murieta Community Services District

Summary Budget Performance Report

YTD THROUGH MAY 2013

	% of Total	Annual Budget	% of Total	YTD Budget	YTD Actuals	% of Total	YTD VARIANCE Amount	%
REVENUES								
Water Charges	31.4%	$1,733,950	31.2%	$1,574,664	$1,645,133	31.8%	$70,469	4.5%
Sewer Charges	22.5%	1,243,734	22.6%	1,140,120	1,140,445	22.1%	325	0.0%
Drainage Charges	3.2%	176,908	3.2%	162,173	161,701	3.1%	(472)	(0.3%)
Security Charges	21.2%	1,167,898	21.2%	1,070,575	1,070,232	20.7%	(343)	0.0%
Solid Waste Charges	11.1%	610,981	11.1%	560,065	560,788	10.8%	723	0.1%
Other Income	1.5%	84,375	1.5%	75,693	117,018	2.3%	41,325	54.6%
Interest Earrnings	0.0%	1,900	0.0%	1,476	1,537	0.0%	61	4.1%
Property Taxes	9.1%	501,840	9.1%	460,020	460,020	8.9%		0.0%
Reimbursements	0.0%		0.0%		12,868	0.2%	12,868	0.0%
Total Revenues	***100.0%***	***5,521,586***	***100.0%***	***5,044,786***	***5,169,742***	***100.0%***	***124,956***	***2.5%***
OPERATING EXPENSES								
Water/Sewer/Drainage								
Wages	13.8%	759,406	13.9%	673,401	682,408	14.6%	9,007	1.3%
Employer Costs	6.5%	356,819	6.7%	322,902	316,412	6.8%	(6,490)	(2.0%)
Power	5.9%	323,910	5.7%	275,171	294,912	6.3%	19,741	7.2%
Chemicals	4.8%	265,010	4.4%	214,280	132,093	2.8%	(82,187)	(38.4%)
Maint & Repair	6.3%	350,570	6.1%	297,920	325,238	6.9%	27,318	9.2%
Meters/Boxes	1.0%	55,000	1.0%	49,500	35,867	0.8%	(13,633)	(27.5%)
Lab Tests	1.4%	78,250	1.3%	61,750	45,090	1.0%	(16,660)	(27.0%)
Permits	1.1%	62,540	1.1%	54,040	49,345	1.1%	(4,695)	(8.7%)
Training/Safety	0.4%	23,340	0.4%	18,670	20,448	0.4%	1,778	9.5%
Equipment Rental	0.8%	43,000	0.8%	40,700	48,146	1.0%	7,446	18.3%
Other	7.1%	392,160	6.5%	313,916	284,287	6.1%	(29,629)	(9.4%)
Subtotal Water/Sewer/Drainage	**49.1%**	**2,710,005**	**47.8%**	**2,322,250**	**2,234,246**	**47.7%**	**(88,004)**	**(3.8%)**
Security								
Wages	11.1%	613,100	11.2%	545,000	524,045	11.2%	(20,955)	(3.8%)
Employer Costs	6.4%	351,300	6.6%	318,250	294,559	6.3%	(23,691)	(7.4%)
Insurance	0.1%	4,500	0.1%	4,125		0.0%	(4,125)	(100.0%)
Off Duty Sheriff Patrol	0.1%	6,000	0.1%	5,500	5,364	0.1%	(136)	(2.5%)
Other	1.9%	102,930	1.9%	93,361	91,068	1.9%	(2,293)	(2.5%)
Subtotal Security	**19.5%**	**1,077,830**	**19.9%**	**966,236**	**915,036**	**19.5%**	**(51,200)**	**(5.3%)**
Solid Waste								
CWRS Contract	9.7%	533,520	10.1%	489,060	490,637	10.5%	1,577	0.3%
Sacramento County Admin Fee	0.6%	33,960	0.6%	31,130	30,366	0.6%	(764)	(2.5%)
HHW Event	0.2%	12,000	0.2%	12,000	23,568	0.5%	11,568	96.4%
Subtotal Solid Waste	**10.5%**	**579,480**	**11.0%**	**532,190**	**544,571**	**11.6%**	**12,381**	**2.3%**
General / Admin								
Wages	9.1%	502,500	9.2%	445,800	450,723	9.6%	4,923	1.1%
Employer Costs	5.0%	275,200	5.1%	248,650	244,398	5.2%	(4,252)	(1.7%)
Insurance	1.0%	54,060	1.0%	49,555	41,170	0.9%	(8,385)	(16.9%)
Legal	0.5%	25,000	0.5%	22,000	17,250	0.4%	(4,750)	(21.6%)
Office Supplies	0.3%	19,200	0.4%	17,600	20,894	0.4%	3,294	18.7%
Director Meetings	0.3%	18,000	0.3%	16,500	13,100	0.3%	(3,400)	(20.6%)
Telephones	0.1%	4,320	0.1%	3,960	4,412	0.1%	452	11.4%
Information Systems	1.7%	95,400	1.8%	89,331	44,345	0.9%	(44,986)	(50.4%)
Community Communications	0.1%	5,900	0.1%	5,500	2,735	0.1%	(2,765)	(50.3%)
Postage	0.4%	21,780	0.4%	19,965	18,310	0.4%	(1,655)	(8.3%)
Janitorial/Landscape Maint	0.3%	16,800	0.3%	15,400	30,726	0.7%	15,326	99.5%
Other	2.1%	116,790	2.0%	99,099	103,600	2.2%	4,501	4.5%
Subtotal General / Admin	**20.9%**	**1,154,950**	**21.3%**	**1,033,360**	**991,663**	**21.2%**	**(41,697)**	**(4.0%)**
Total Operating Expenses	***100.0%***	***5,522,265***	***100.0%***	***4,854,036***	***4,685,516***	***100.0%***	***(168,520)***	***(3.5%)***
Operating Income (Loss)	***100.0%***	***(679)***	***100.0%***	***190,750***	***484,226***	***100.0%***	***293,476***	***153.9%***
Non-Operating Expenses								
Water Reserve Expenditure	0.0%		0.0%		59,269	52.8%	59,269	0.0%
Sewer Reserve Expenditure	0.0%		0.0%		29,631	26.4%	29,631	0.0%
Drainage Reserve Expenditure	0.0%		0.0%		23,289	20.8%	23,289	0.0%
Total Non-Operating Expenses	***0.0%***		***0.0%***		***112,189***	***100.0%***	***112,189***	***0.0%***
Net Income (Loss)	***100.0%***	***(679)***	***100.0%***	***190,750***	***372,037***	***100.0%***	***181,287***	***95.0%***

Rancho Murieta Community Services District

Budget Performance Report by FUND

YTD THROUGH MAY 2013

	% of Total	Annual Budget	% of Total	YTD Budget	YTD Actuals	% of Total	YTD VARIANCE Amount	YTD VARIANCE %
WATER								
REVENUES								
Water Charges	98.7%	$1,733,950	98.7%	$1,574,664	$1,645,133	98.1%	$70,469	4.5%
Interest Earnings	0.0%		0.0%		178	0.0%	178	0.0%
Other Income	1.3%	22,055	1.3%	20,218	31,778	1.9%	11,560	57.2%
Total Water Revenues	**100.0%**	**1,756,005**	**100.0%**	**1,594,882**	**1,677,089**	**100.0%**	**82,207**	**5.2%**
EXPENSES (excluding depreciation)								
Wages	27.3%	410,082	27.6%	363,637	376,449	29.9%	12,812	3.5%
Employer Costs	12.8%	192,679	13.2%	174,368	173,825	13.8%	(543)	(0.3%)
Power	10.9%	164,450	10.6%	140,201	150,036	11.9%	9,835	7.0%
Chemicals	8.7%	130,300	8.7%	114,180	88,778	7.0%	(25,402)	(22.2%)
T&O - Chemicals/Treatment	4.1%	61,000	3.0%	39,850	15,114	1.2%	(24,736)	(62.1%)
Maint & Repair	11.0%	166,070	11.0%	144,670	156,021	12.4%	11,351	7.8%
Meters/Boxes	3.7%	55,000	3.8%	49,500	35,867	2.8%	(13,633)	(27.5%)
Lab Tests	2.7%	40,000	2.1%	27,500	11,020	0.9%	(16,480)	(59.9%)
Permits	2.1%	32,000	2.1%	27,500	16,395	1.3%	(11,105)	(40.4%)
Training/Safety	0.6%	9,140	0.6%	8,440	8,650	0.7%	210	2.5%
Equipment Rental	1.4%	21,500	1.5%	20,000	23,358	1.9%	3,358	16.8%
Other Direct Costs	14.8%	222,550	15.9%	209,324	204,808	16.3%	(4,516)	(2.2%)
Operational Expenses	**100.0%**	**1,504,771**	**100.0%**	**1,319,170**	**1,260,321**	**100.0%**	**(58,849)**	**(4.5%)**
Water Income (Loss)	**16.7%**	**251,234**	**20.9%**	**275,712**	**416,768**	**33.1%**	**141,056**	**51.2%**
38.9% Net Admin Alloc	**16.7%**	**250,948**	**16.7%**	**220,831**	**196,998**	**15.6%**	**(23,833)**	**(10.8%)**
Reserve Expenditures	**0.0%**		**0.0%**		**59,269**	**4.7%**	**59,269**	**0.0%**
Total Net Income (Loss)	***0.0%***	***286***	***4.2%***	***54,881***	***160,501***	***12.7%***	***105,620***	***192.5%***
SEWER								
REVENUES								
Sewer Charges	98.8%	1,243,734	98.8%	1,140,120	1,140,445	98.4%	325	0.0%
Interest Earnings	0.0%	180	0.0%	165	174	0.0%	9	5.5%
Other Income	1.2%	14,550	1.2%	13,332	18,721	1.6%	5,389	40.4%
Total Sewer Revenues	**100.0%**	**1,258,464**	**100.0%**	**1,153,617**	**1,159,340**	**100.0%**	**5,723**	**0.5%**
EXPENSES (excluding depreciation)								
Wages	27.7%	296,166	29.7%	262,626	263,657	29.8%	1,031	0.4%
Employer Costs	13.0%	139,160	14.3%	125,931	122,523	13.8%	(3,408)	(2.7%)
Power	13.5%	143,960	13.8%	121,560	131,878	14.9%	10,318	8.5%
Chemicals	7.4%	79,310	7.0%	61,800	35,173	4.0%	(26,627)	(43.1%)
Maint & Repair	16.2%	172,500	16.1%	142,250	166,329	18.8%	24,079	16.9%
Lab Tests	3.6%	38,250	3.9%	34,250	34,070	3.9%	(180)	(0.5%)
Permits	2.5%	26,540	3.0%	26,540	28,098	3.2%	1,558	5.9%
Training/Safety	1.3%	14,200	1.2%	10,230	11,798	1.3%	1,568	15.3%
Equipment Rental	1.5%	16,000	1.7%	15,200	22,580	2.6%	7,380	48.6%
Other Direct Costs	13.3%	141,510	9.4%	82,592	68,620	7.8%	(13,972)	(16.9%)
Operational Expenses	**100.0%**	**1,067,596**	**100.0%**	**882,979**	**884,726**	**100.0%**	**1,747**	**0.2%**
Sewer Income (Loss)	**17.9%**	**190,868**	**30.7%**	**270,638**	**274,614**	**31.0%**	**3,976**	**1.5%**
29.7% Net Admin Alloc	**17.9%**	**191,598**	**19.1%**	**168,604**	**150,408**	**17.0%**	**(18,196)**	**(10.8%)**
Reserve Expenditures	**0.0%**		**0.0%**		**29,631**	**3.3%**	**29,631**	**0.0%**
Total Net Income (Loss)	***-0.1%***	***(730)***	***11.6%***	***102,034***	***94,575***	***10.7%***	***(7,459)***	***(7.3%)***
DRAINAGE								
REVENUES								
Drainage Charges	99.8%	176,908	99.9%	162,173	161,701	99.9%	(472)	(0.3%)
Interest Earnings	0.2%	280	0.1%	221	89	0.1%	(132)	(59.7%)
Total Drainage Revenues	**100.0%**	**177,188**	**100.0%**	**162,394**	**161,790**	**100.0%**	**(604)**	**(0.4%)**
EXPENSES (excluding depreciation)								
Wages	38.6%	53,158	39.2%	47,138	42,302	47.4%	(4,836)	(10.3%)
Employer Costs	18.1%	24,980	18.8%	22,603	20,064	22.5%	(2,539)	(11.2%)
Power	11.3%	15,500	11.2%	13,410	12,998	14.6%	(412)	(3.1%)
Chemicals	3.9%	5,400	4.1%	4,950	1,838	2.1%	(3,112)	(62.9%)
Maint & Repair	8.7%	12,000	9.2%	11,000	2,888	3.2%	(8,112)	(73.7%)
Permits	2.9%	4,000	0.0%		4,852	5.4%	4,852	0.0%
Equipment Rental	4.0%	5,500	4.6%	5,500	2,208	2.5%	(3,292)	(59.9%)
Other Direct Costs	12.4%	17,100	12.9%	15,500	2,049	2.3%	(13,451)	(86.8%)
Operational Expenses	**100.0%**	**137,638**	**100.0%**	**120,101**	**89,199**	**100.0%**	**(30,902)**	**(25.7%)**
Drainage Income (Loss)	**28.7%**	**39,550**	**35.2%**	**42,293**	**72,591**	**81.4%**	**30,298**	**71.6%**
6.1% Net Admin Alloc	**28.6%**	**39,352**	**28.8%**	**34,629**	**30,892**	**34.6%**	**(3,737)**	**(10.8%)**
Reserve Expenditures	**0.0%**		**0.0%**		**23,289**	**26.1%**	**23,289**	**0.0%**
Total Net Income (Loss)	***0.1%***	***198***	***6.4%***	***7,664***	***18,410***	***20.6%***	***10,746***	***140.2%***
SECURITY								
REVENUES								
Security Charges	96.6%	1,167,898	96.6%	1,070,575	1,070,232	95.1%	(343)	0.0%
Interest Earnings	0.1%	640	0.0%	490	626	0.1%	136	27.8%

Rancho Murieta Community Services District

Budget Performance Report by FUND

YTD THROUGH MAY 2013

	% of Total	Annual Budget	% of Total	YTD Budget	YTD Actuals	% of Total	YTD VARIANCE Amount	YTD VARIANCE %
Other Income	3.3%	$39,970	3.3%	$36,641	$54,270	4.8%	$17,629	48.1%
Total Security Revenues	**100.0%**	**1,208,508**	**100.0%**	**1,107,706**	**1,125,128**	**100.0%**	**17,422**	**1.6%**
EXPENSES (excluding depreciation)								
Wages	56.9%	613,100	56.4%	545,000	524,045	57.3%	(20,955)	(3.8%)
Employer Costs	32.6%	351,300	32.9%	318,250	294,559	32.2%	(23,691)	(7.4%)
Insurance	0.4%	4,500	0.4%	4,125		0.0%	(4,125)	(100.0%)
Equipment Repairs	0.4%	4,400	0.4%	4,033	2,989	0.3%	(1,044)	(25.9%)
Vehicle Maintenance	0.6%	6,700	0.6%	6,125	9,450	1.0%	3,325	54.3%
Vehicle Fuel	1.9%	20,460	2.0%	19,505	15,103	1.7%	(4,402)	(22.6%)
Off Duty Sheriff Patrol	0.6%	6,000	0.6%	5,500	5,364	0.6%	(136)	(2.5%)
Other	6.6%	71,370	6.6%	63,698	63,527	6.9%	(171)	(0.3%)
Operational Expenses	**100.0%**	**1,077,830**	**100.0%**	**966,236**	**915,037**	**100.0%**	**(51,199)**	**(5.3%)**
Security Income (Loss)	**12.1%**	**130,678**	**14.6%**	**141,470**	**210,091**	**23.0%**	**68,621**	**48.5%**
20.3% Net Admin Alloc	**12.2%**	**130,957**	**11.9%**	**115,241**	**102,804**	**11.2%**	**(12,437)**	**(10.8%)**
Total Net Income (Loss)	***0.0%***	***(279)***	***2.7%***	***26,229***	***107,287***	***11.7%***	***81,058***	***309.0%***
SOLID WASTE								
REVENUES								
Solid Waste Charges	99.9%	610,981	99.9%	560,065	560,788	99.9%	723	0.1%
Interest Earnings	0.1%	600	0.1%	450	366	0.1%	(84)	(18.7%)
Total Solid Waste Revenues	**100.0%**	**611,581**	**100.0%**	**560,515**	**561,154**	**100.0%**	**639**	**0.1%**
EXPENSES (excluding depreciation)								
CWRS Contract	92.1%	533,520	91.9%	489,060	490,637	90.1%	1,577	0.3%
Sacramento County Admin Fee	5.9%	33,960	5.8%	31,130	30,366	5.6%	(764)	(2.5%)
HHW Event	2.1%	12,000	2.3%	12,000	23,568	4.3%	11,568	96.4%
Operational Expenses	**100.0%**	**579,480**	**100.0%**	**532,190**	**544,571**	**100.0%**	**12,381**	**2.3%**
Solid Waste Income (Loss)	**5.5%**	**32,101**	**5.3%**	**28,325**	**16,583**	**3.0%**	**(11,742)**	**(41.5%)**
5.0% Net Admin Alloc	**5.6%**	**32,256**	**5.3%**	**28,384**	**25,321**	**4.6%**	**(3,063)**	**(10.8%)**
Total Net Income (Loss)	***0.0%***	***(155)***	***0.0%***	***(59)***	***(8,738)***	***-1.6%***	***(8,679)***	***14,710.2%***
OVERALL NET INCOME(LOSS)	***100.0%***	***(680)***	***100.0%***	***190,749***	***372,035***	***100.0%***	***181,286***	***95.0%***

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

INVESTMENT REPORT

INSTITUTION		CASH BALANCE AS OF MAY 31, 2013 YIELD	BALANCE
CSD FUNDS			
EL DORADO SAVINGS BANK			
SAVINGS		0.03%	$ 254,247.75
CHECKING		0.02%	$ 5,300.28
PAYROLL		0.02%	$ 65,312.88
PREMIER WEST BANK			
EFT		N/A	$ 82,170.12
LOCAL AGENCY INVESTMENT FUND (LAIF)			
UNRESTRICTED			$ -
RESTRICTED RESERVES		0.25%	$ 5,479,156.75
CALIFORNIA ASSET MGMT (CAMP)			
OPERATION ACCOUNT		0.10%	$ 3,594,553.90
UNION BANK			
PARS GASB45 TRUST	(balance as of 4/30/13)		$ 459,229.06
	TOTAL		$ 9,939,970.74
BOND FUNDS			
COMMUNITY FACILITIES DISTRICT NO. 1 (CFD)			
BANK OF AMERICA			
CHECKING		N/A	$ 2,069,727.33
CALIFORNIA ASSET MGMT (CAMP)			
SPECIAL TAX		0.10%	$ 8,297.53
US BANK			
SPECIAL TAX REFUND		0.00%	$ -
BOND RESERVE FUND/ SPECIAL TAX FUND		0.00%	$ 726,685.00
	TOTAL		$ 2,804,709.86
	TOTAL ALL FUNDS		$ 12,744,680.60

The investments comply with the CSD adopted investment policy.

PREPARED BY: Darlene Gillum
Director of Administration

MEMORANDUM

Date: June 12, 2013

To: Board of Directors

From: Greg Remson, Security Chief

Subject: Security Report for the Month of May 2013

OPERATIONS

I spoke at the Kiwanis meeting, provided brief information on the Security Department and answered questions.

There were two (2) DUI arrests in May. Both were driving golf carts and were the result of single vehicle collisions.

Security Patrol Officers have responded to 13 snake calls this month. Most have been rattlesnakes.

Off-Duty Sacramento Sheriff's Deputies (SSD) and private security officers have been scheduled for the 4th of July.

The injured Security Patrol Officer is still out with a return date of 6-8 weeks. The other Patrol Officers and I are covering the shifts.

INCIDENTS OF NOTE

May 1, Wednesday, reported at 5:54 p.m. at Riverview Park. Arson. Plastic orange fencing near the baseball field was burned. Sacramento Metro Fire Department (SMFD) responded for cleanup.

May 4, Saturday, reported at 4:33 p.m. on Lago Drive. Theft of a credit card. Possible suspect information. Report filed with SSD.

May 9, Thursday, reported at 5:33 p.m. near the Pedestrian Bridge. Juveniles in a dispute over a $15 debt. Four (4) subjects vs. one (1) threatening to fight. Reported that the single subject pulled a small pocket knife and all fled the area. Patrol Officer later located and identified all subjects. SSD responded and contacted juveniles and parents. Mediated.

May 16, Thursday, reported at 7:20 p.m. on Guadalupe Drive. DUI arrest. A resident drove his golf cart off of the roadway and into a drainage ditch. He was transported by SMFD with minor injuries, and later arrested by California Highway Patrol (CHP) for DUI. The driver said he was driving the cart to the mailbox.

May 19, Sunday, reported at 6:22 p.m. on Via Del Cerrito. Mountain lion sighting. The area checked clear.

May 24, Friday, reported at 8:53 a.m. at the 14th North restroom building. Arson. A fire was lit in front of the men's room door, causing damage to the door. Both restrooms had large amounts of toilet paper and toilet seat covers placed in the toilets and sinks, causing them to clog and overflow. A SMFD arson investigator responded for a report.

May 25, Saturday, reported at 1:45 p.m. on Puerto Drive. Burglary. The non-resident owner found various items missing from the house. The house is presently vacant and the owner has possible suspect information. SSD report filed.

May 26, Sunday, reported at 12:30 a.m. in the Villas. DUI arrest. A golf cart driver ran into a parked vehicle.

During the month of May, District Security Patrol Officers also responded to complaints of loud music and disturbances.

RANCHO MURIETA ASSOCIATION COMPLIANCE/GRIEVANCE/SAFETY COMMITTEE MEETING
The meeting was held on May 6, 2013 at the RMA office. There were two (2) appearances for trash containers and parking, and six (6) letters regarding parking and property maintenance. The next meeting is scheduled for June 3, 2013.

JOINT SECURITY COMMITTEE MEETING
The next Joint Security Committee Meeting was scheduled for Friday, May 31, 2013. The meeting was cancelled due to lack of information from camera vendors. I have received one response and am expecting two others soon. The meeting is tentatively scheduled for July 26, 2013 at the RMA building.

JAMES L. NOLLER SAFETY CENTER
The Safety Center has been open most Mondays and Wednesdays from 10:00 a.m. to 2:00 p.m. VIPS Jacque Villa and Steve Lentz continue patrolling the District as another set of "eyes and ears".

The Safety Center is also available to all law enforcement officers for report writing, meal breaks and any other needs that arise.

Anyone who is interested in joining the VIPS program or would like information on the Neighborhood Watch program can contact the VIPS at the Safety Center office at 354-8509.

NEW NORTH GATE
The gate location has been finalized, the agreement signed and funds have been released to RMA. RMA has chosen a design firm and approved a contract with Comstock Johnson Architects, Inc.

BEACH ACCESS/PTF GATES
Patrol Officers continue to open the gate at dawn and close it at dusk. Calls for service have been minor.

MEMORANDUM

Date: June 6, 2013

To: Board of Directors

From: Paul Siebensohn, Director of Field Operations

Subject: Water/Wastewater/Drainage Report

The following is District Field Operations information and projects staff has worked on since the last Board meeting.

Water

Water Treatment Plant #1 production flow is still set at 1.0 million gallons per day (MGD) and Plant #2 production is at 1.25 MGD for a total of 2.25 MGD, with facility operating around 23 hours per day. The flow rate will be raised June 7, 2013 to keep up with the expected demand associated with rising temperatures. Total potable water production for May 2013 was approximately 61.93 million gallons (MG) (190 acre-feet), up from last month's total flow of 41.2 MG. This is 12% higher than the water production in April 2013. A total of 0.16" of rainfall was recorded for the month of May with evaporation at 6.93" as measured by the Bureau of Reclamation at Folsom Lake.

Water Source of Supply

We pumped using the two (2) low capacity pumps 24hrs/day to fill our reservoirs per our water rights. On June 5, 2013, the combined raw water storage for Calero, Chesbro, and Clementia Reservoirs measured 1,552.5 MG (4,765 acre-feet). This season we have diverted approximately 724.9 MG (2,224.9 acre-feet). For perspective, the District typically produces around 587 MG (1,800 acre-feet) through the Water Treatment Plants each year and pumps 700 MG (2,150 acre-feet) to storage.

Wastewater

Influent wastewater flow averaged 0.395 million gallons a day, vs. 0.411 last month, for a total of 12,261,900 gallons, (37.6 acre-feet) for the month of May. A total of 98.49 MG (302.6 acre-feet) of secondary wastewater was measured in the secondary storage reservoirs on June 5, 2013.

Staff is encountering a troublesome issue with a filamentous algae plugging up the intake located in secondary wastewater reservoir #1. They have repeatedly gone out to unplug the intake despite attempts to treat the algae with algaecides.

Maintenance at the Wastewater Treatment Plant this past month included: replaced failed level switches in filters 1, 2, and 3; painted process water pumps and backwash pumps (x4); installed eight (8) new life ring racks around process ponds; installed new check valves on tertiary filter backwash pump 2; cleaned drying beds 2, 3, and 4 of dried biosolids and stock piled them in drying bed 1; replaced packing materials in east DAF pump valves; and replaced flex couplings on east DAF recirculation pumps, painted equipment around the Wastewater Facility and repaired brush aerators M-2 and M-17.

Drainage / CIA Ditch

Laguna Joaquin was treated to help control midge flies. The next treatment should occur around June 20, with each treatment lasting approximately 5-7 weeks as per the midge control product manufacturer.

Staff continues to cut vegetation throughout the drainage system as warm weather and overwatering is promoting weed growth in the drainage ditches.

The CIA Ditch continues to flow for the irrigation of ranch crops. Staff completed the installation of a new metering device on the ditch for water that is being diverted prior to the existing meter at the Equestrian Center, as shown in the photo on the right.

Water Metering and Utility Staff Work

Water meter maintenance completed in May included replacement of fourteen (14) water meters and eight (8) MXUs. Utility staff was called out ten (10) times for water leaks, three (3) of which were District service lines and were repaired, the others being irrigation leaks on the homeowner's sides. They also completed ten (10) underground service alert (USAs) requests.

Utility staff installed a new Clow 960 wet barrel hydrant on Agua Vista and installed two (2) air cushioned surge tanks in the pressure zone to help alleviate pressure fluctuations from customer use, which should also help prevent water leaks in that system.

Other Projects

Water Plant Phase 3

We are meeting with HDR on June 7 to coordinate the kickoff for the redesign for the rehabilitation of Water Plant #1 to a new technology for long term sustainability for the District.

Main Lift North Rehabilitation Project

The draft specifications for the Main Lift North rehabilitation have been received from HDR and are being reviewed by staff.

Well Project

The right of access agreements have been issued by the land owner's representative and we will be proceeding with the drilling of the test wells to investigate a reliable water augmentation supply.

From: Janis Eckard [mailto:janiseckard@ranchomurieta.org]
Sent: Monday, May 13, 2013 4:05 PM
To: Ed Crouse
Subject: Fw: License #11117 Question

To Ed Crouse and all Board members,

Ed please forward this e-mail to all Board members.

At the last CSD meeting John Sullivan stated that the hotel landscaping would be irrigated by recycled water. When I pointed out that treated waste water was not an option, John stated he would use Carol's existing water permit to draw the necessary water from the river. After the meeting, I contacted the State Water Resources Control Board to determine if doing so would be allowed under the permit. Please read the response below.

Carol would be required to apply for a change to her permit. I'm not saying that change wouldn't be allowed, but it's not a given that the use would be granted. Also, there are pumping restricts, in place, on the existing permit.

Sincerely,

Janis Eckard

----- Original Message -----
From: Tauriainen, Andrew@Waterboards
To: Janis Eckard
Cc: O'Hagan, John@Waterboards ; Coats, Brian@Waterboards ; winepro@sbcglobal.net
Sent: Monday, May 13, 2013 3:29 PM
Subject: RE: License #11117 Question

Ms. Eckard,

Please note that there have been two recent enforcement orders issued against Ms. Anderson-Ward regarding Water Right License 11117. The first, Cease and Desist Order WR 2012-0014-DWR (issued July 3, 2012), directed Ms. Anderson-Ward to submit her 2010 annual use report using the online Reporting Management System. The second, Administrative Civil Liability Order WR 2013-0016-DWR (issued March 26, 2013), directed Ms. Anderson-Ward to pay a fine for her earlier failure to submit the 2010 annual use report. Ms. Anderson-Ward has complied with both orders, thus they are no longer in effect.

It is not possible to answer your question regarding Ms. Anderson-Ward's right to apply water to her newly-acquired parcel under License 11117 without additional information. Water right licenses specify a number of conditions, including the point of diversion (where the water is to be removed from the source), the maximum amount of water that may be used, the maximum rate at which the water may be diverted, the purpose of use (what the water will be used for) and the place of use (where the water will be used), etc. In addition, license holders must demonstrate that they have actually used the water or be subject to potentially losing the right for the portion they haven't used.

License 11117 (copy attached) provides that a total of 97 acre-feet of water per year may be collected between two reservoirs between November 1 and the following April 30 each year at a rate no greater than 10 cubic feet per second. The water may be used for irrigation, stockwatering and recreational uses, although the irrigation place of use is confined to 300 acres within a gross area of 445 acres within Section 5, T7N, R8E, MDB&M, as shown on a map located at the State Water Resources Control Board office in downtown Sacramento. License 11117 also includes certain outlet and bypass flow conditions affecting the reservoirs and source streams.

As a general matter, the outdoor irrigation you describe is likely "irrigation" as that term is used in License 11117. So it would probably be within the "purpose of use" under the License. However, unless Ms. Anderson-Ward's new parcel is part of the specific 300 acres identified as the "place of use" within the License, she would not be able to use the water on the new parcel without first seeking and obtaining a change to her License. It is possible that the proposed hotel landscaping use would conflict with other conditions in the License, although I cannot tell based on the information provided.

In our telephone conversation this afternoon, you indicated that you didn't think the new parcel was part of the existing place of use. Therefore, Ms. Anderson-Ward would need to file a petition to change her License in order to use the water on the new property. This is done through the State Water Resources Control Board using the "Petition for Change" form available at http://www.swrcb.ca.gov/waterrights/publications_forms/forms/. The change process is not terribly complicated, as far as water rights matters are concerned, but I strongly recommend that Ms. Anderson-Ward or her consultant take the time to become familiar with the applicable statutes and regulations prior to submitting the petition, as there may be multiple issues and requirements to address in the form.

Please feel free to contact me with any questions. I have copied Mr. Sullivan on this message.

Andrew Tauriainen, Senior Staff Counsel
State Water Resources Control Board
Office of Enforcement
1001 I Street, 16th Floor
Sacramento, CA 95814
tel: (916) 341-5445
fax: (916) 341-5896
andrew.tauriainen@waterboards.ca.gov

From: Janis Eckard [mailto:janiseckard@ranchomurieta.org]
Sent: Saturday, May 11, 2013 2:42 PM
To: Tauriainen, Andrew@Waterboards
Subject: License #11117 Question

Reference: License #11117, Carol Anderson-Ward, 14300 Jackson Road, Rancho Murieta, Ca. 95683 - Currently under a Cease and Desist Order WR 2013-0016-DWR, Issued July 3, 2012.

Dear Mr. Tauriainen,

Ms. Ward recently purchased land (adjoining the above mentioned parcel) in Rancho Murieta, with plans to build a hotel, bar, restaurant and extended stay condos. At a recent Rancho Murieta CSD meeting, her representative - John Sullivan - told the CSD Board that all OUTDOOR IRRIGATION, for this site, would come from Ms. Ward's Cosumnes River water rights.

Is Ms. Ward legally allowed to extend use of these water rights, to the Murieta Gardens parcel, for this purpose? If the answer is yes, do her water rights contain pumping restrictions? If so, what are they?

The answer to these questions are critical, as Ms. Ward is requesting a "will serve" letter from the RMCSD Board, for the INTERIOR water needed to build the hotel.

(FYI - Rancho Murieta's current water treatment plant has met and exceeded it's production capacity on numerous occassions. Although there are plans to expand the treatment plant, in the future, the party financially responsible for the expansion and the completion date remain highly debated issues. As a result, issuing this "will serve" letter could place RM residents at risk of an inadequater water supply, until the plant is expanded. If exterior water is needed - in addition to the interior water requested - the risk will increase. That's the reason for my involvement and why I have sent this e-mail.)

The RM CSD Board will issue their final decision, regarding this matter, at the May 15, 2013 meeting. Please respond to my e-mail prior to that date, so I can present my findings at the meeting.

Your immediate attention to this matter is greatly appreciated. Thank you!

Sincerely,

Janis Eckard

STATE OF CALIFORNIA
THE RESOURCES AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

License for Diversion and Use of Water

APPLICATION 24085 PERMIT 16582 LICENSE 11117
PAGE 1 OF 3

THIS IS TO CERTIFY, *That* HARRY CARLSON; MARJORIE J CARLSON; PHILIP MAUGHN AND RUTH MAUGHN owner
C/O HARRY CARLSON, 2720 CAPITOL AVENUE,
SACRAMENTO, CALIFORNIA 95816

HAVE *made proof as of* JUNE 6, 1977 *(the date of inspection) to the satisfaction of the State Water Resources Control Board of a right to the use of the water of* (1) COSUMNES RIVER AND (2)(3) TWO UNNAMED STREAMS IN SACRAMENTO COUNTY

tributary to (1) MOKELUMNE RIVER AND (2)(3) COSUMNES RIVER THENCE MOKELUMNE RIVER

for the purpose of IRRIGATION, STOCKWATERING AND RECREATIONAL USES *under Permit* 16582 *of the Board and that the right to the use of this water has been perfected in accordance with the laws of California, the Regulations of the Board and the permit terms; that the priority of this right dates from* JUNE 5, 1972 *and that the amount of water to which this right is entitled and hereby confirmed is limited to the amount actually beneficially used for the stated purposes and shall not exceed* A TOTAL OF NINETY-SEVEN (97) ACRE-FEET PER ANNUM TO BE COLLECTED FROM NOVEMBER 1 OF EACH YEAR TO APRIL 30 OF THE SUCCEEDING YEAR AS FOLLOWS:

RESERVOIR #1 - 48 ACRE-FEET PER ANNUM
RESERVOIR #2 - 49 ACRE-FEET PER ANNUM

THE MAXIMUM WITHDRAWAL IN ANY ONE YEAR SHALL NOT EXCEED 97 ACRE-FEET FROM BOTH RESERVOIRS. THE MAXIMUM RATE OF DIVERSION TO OFFSTREAM STORAGE SHALL NOT EXCEED 10 CUBIC FEET PER SECOND.

THIS LICENSE DOES NOT AUTHORIZE COLLECTION OF WATER TO STORAGE OUTSIDE OF THE SPECIFIED SEASON TO OFFSET EVAPORATION AND SEEPAGE LOSSES OR FOR ANY OTHER PURPOSE.

THE POINT OF DIVERSION TO OFFSTREAM STORAGE OF SUCH WATER IS LOCATED:

(1) GRANLEES DAM - NORTH 88°57' EAST 8,578.2 FEET FROM SW CORNER OF SECTION 34, T8N, R8E, MDB&M, BEING WITHIN SW1/4 OF SE1/4 OF SECTION 35, T8N, R8E, MDB&M.

THE POINTS OF DIVERSION AND STORAGE OF SUCH WATER ARE LOCATED:

(2) RESERVOIR #1 - SOUTH 800 FEET AND WEST 650 FEET FROM NE CORNER OF SECTION 5, T7N, R8E, MDB&M, BEING WITHIN NE1/4 OF NE1/4 OF SAID SECTION 5,
(3) RESERVOIR #2 - SOUTH 2,300 FEET AND EAST 1,700 FEET FROM NW CORNER OF SECTION 5, T7N, R8E, MDB&M, BEING WITHIN SE1/4 OF NW1/4 OF SAID SECTION 5.

14471-983 6-80 1M CAM*OSP

Licensee shall allow representatives of the Board and other parties, as may be authorized from time to time by the Board, reasonable access to project works to determine compliance with the terms of this license.

Pursuant to California Water Code Sections 100 and 275, all rights and privileges under this license, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

This continuing authority of the Board may be exercised by imposing specific requirements over and above those contained in this license with a view to minimizing waste of water and to meeting the reasonable water requirements of licensee without unreasonable draft on the source. Licensee may be required to implement such programs as (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this license and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

Reports shall be filed promptly by licensee on appropriate forms which will be provided for the purpose from time to time by the Board.

The right hereby confirmed to the diversion and use of water is restricted to the point or points of diversion herein specified and to the lands or place of use herein described.

This license is granted and licensee accepts all rights herein confirmed subject to the following provisions of the Water Code:

Section 1625. Each license shall be in such form and contain such terms as may be prescribed by the Board.

Section 1626. All licenses shall be under the terms and conditions of this division (of the Water Code).

Section 1627. A license shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code) but no longer.

Section 1628. Every license shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a license is issued takes the license subject to the conditions therein expressed.

Section 1629. Every licensee, if he accepts a license does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any license granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any licensee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any licensee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Section 1630. At any time after the expiration of twenty years after the granting of a license, the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State shall have the right to purchase the works and property occupied and used under the license and the works built or constructed for the enjoyment of the rights granted under the license.

Section 1631. In the event that the State, or any city, city and county, municipal water district, irrigation district, lighting district, or political subdivision of the State so desiring to purchase and the owner of the works and property cannot agree upon the purchase price, the price shall be determined in such manner as is now or may hereafter be provided by law for determining the value of property taken in eminent domain proceedings.

Dated: MAY 11 1981

STATE WATER RESOURCES CONTROL BOARD

Raymond Walsh

Chief, Division of Water Rights

11117

A DESCRIPTION OF LANDS OR THE PLACE WHERE SUCH WATER IS PUT TO BENEFICIAL USE IS AS FOLLOWS:

STOCKWATERING AND RECREATIONAL USE AT RESERVOIR #1 WITHIN N1/2 OF NE1/4 AND RESERVOIR #2 WITHIN NW1/4, AND IRRIGATION OF 300 ACRES WITHIN A GROSS AREA OF 445 ACRES, ALL IN SECTION 5, T7N, R8E, MDB&M, AS SHOWN ON MAP FILED WITH STATE WATER RESOURCES CONTROL BOARD.

NO WATER SHALL BE DIVERTED UNDER THIS LICENSE FROM THE COSUMNES RIVER WHEN THE FLOW MEASURED AT MICHIGAN BAR GAGE IS LESS THAN 70 CUBIC FEET PER SECOND. THE PROVISIONS OF THIS PARAGRAPH ARE BASED UPON A BILATERAL AGREEMENT BETWEEN LICENSEE AND THE DEPARTMENT OF FISH AND GAME AND SHALL NOT BE CONSTRUED AS A FINDING BY THE STATE WATER RESOURCES CONTROL BOARD THAT THE AMOUNT OF WATER NAMED HEREIN IS EITHER ADEQUATE OR REQUIRED FOR THE MAINTENANCE OF FISH.

THE QUANTITY OF WATER DIVERTED UNDER THIS LICENSE IS SUBJECT TO MODIFICATION BY THE STATE WATER RESOURCES CONTROL BOARD, IF, AFTER NOTICE TO THE LICENSEE AND AN OPPORTUNITY FOR HEARING, THE BOARD FINDS THAT SUCH MODIFICATION IS NECESSARY TO MEET WATER QUALITY OBJECTIVES IN WATER QUALITY CONTROL PLANS WHICH HAVE BEEN OR HEREAFTER MAY BE ESTABLISHED OR MODIFIED PURSUANT TO DIVISION 7 OF THE WATER CODE. NO ACTION WILL BE TAKEN PURSUANT TO THIS PARAGRAPH UNLESS THE BOARD FINDS THAT (1) ADEQUATE WASTE DISCHARGE REQUIREMENTS HAVE BEEN PRESCRIBED AND ARE IN EFFECT WITH RESPECT TO ALL WASTE DISCHARGES WHICH HAVE ANY SUBSTANTIAL EFFECT UPON WATER QUALITY IN THE AREA INVOLVED, AND (2) THE WATER QUALITY OBJECTIVES CANNOT BE ACHIEVED SOLELY THROUGH THE CONTROL OF WASTE DISCHARGES.

LICENSEE SHALL MAINTAIN AN OUTLET PIPE OF ADEQUATE CAPACITY IN HIS DAMS AS NEAR AS PRACTICABLE TO THE BOTTOM OF THE NATURAL STREAM CHANNEL, OR PROVIDE OTHER MEANS SATISFACTORY TO THE STATE WATER RESOURCES CONTROL BOARD, IN ORDER THAT WATER ENTERING THE RESERVOIRS WHICH IS NOT AUTHORIZED FOR APPROPRIATION UNDER THIS LICENSE MAY BE RELEASED.

MEMORANDUM

Date: June 13, 2013

To: Board of Directors

From: Improvements Committee Staff

Subject: Accept the Final Summary of Demand Factors Analysis Technical Memorandum

---

RECOMMENDED ACTION

Accept the Final Summary of Demand Factors Analysis Technical memorandum prepared by Lisa Maddaus, Maddaus Water Management, regarding the water usage factor review.

BACKGROUND

Attached is the Final Summary of Demand Factors Analysis Technical Memorandum prepared by Lisa Maddaus, Maddaus Water Management, Inc. Lisa was assisted by Bill Maddaus as well as Darlene Gillum, Paul Siebensohn and me.

The basic purpose of the memorandum was to review our historic billing data for consideration of updating our individual lot category demand factors.

The Memorandum presents results of the review of billing data back to 1998 through a variety of weather scenarios and economic periods. The memo also highlights seasonality minimum and maximums with a 13 month rolling average water use.

In addition, the memo evaluates a per capita analysis as well as a calculated water demand by lot type based on historical indoor use and projected outdoor irrigation demands.

These last two efforts were used to validate the recommended new usage factors.

Following discussion at the Improvements Committee, Lisa made editorial changes to the text for clarification and added separate new graphs for RM North and South. Both Lisa and Staff reviewed vacancy rates due to foreclosures and the like, and found it to be on the order of 2.7% which relates to about a 1% correction, which was determined to be so minor as not to require changes to the analysis. We also added proposed new demand factors for estate lots to better correlate to proposed lot sizes. In addition, we are working on commercial demand conversion factors.

For the commercial demand factors, staff recommended and the Improvements Committee concurred, that the current usage factors be used for planning purposes as well as initial billing and fee calculations. The reason for such a recommendation is two-fold; our number of commercial accounts is too small and variable to accurately correlate to the existing factors. Staff reached out to other local water districts but did not receive commercial data that would allow calculation of a demand factor per square foot basis, similar to the District's current factors.

For planning purposes, i.e. water supply and treatment plant sizing, we will use the current demand factors to determine water demand.

For billing purposes we will use current demand factors and work with the commercial project owner/developer on assigning EDUs for billing and fee calculations. We will re-evaluate EDU assignment after one year of water use.

Recommendation
It is staff's recommendation and not necessarily that of the Improvements Committee, to accept the technical memorandum as complete, but not to adjust demand factors at this time. Given the recent reduction in usage, which may be attributable to a variety of factors, it seems prudent at least at this time to sit back and see where usage, thus demand, settles out in the future.

Another consideration is water demand is just one factor to consider in future water supply planning and treatment plant sizing. As you know we have an augmentation well project ongoing, so there is no need right now to consider right sizing the augmentation supply projections. As for the water plant, we are moving forward with the 670 plant expansion to WTP I. Our current course is to maximize capacity, design-wise, which allows for the plant to accommodate incremental expansions in the future. This approach allows us to right size the plant later as more information is available on water usage, 2020 conservation attainment levels, reductions in density and use of recycled water.

Lisa will attend the meeting to present the memo and be available to answer questions.

MADDAUS WATER MANAGEMENT INC.

Final Technical Memorandum

Prepared for: Ed Crouse, General Manager
Rancho Murieta Community Services District

Subject: **Summary of Residential Demand Factors Analysis**

Date: June 19, 2013

From: Lisa Maddaus, P.E.
Maddaus Water Management, Inc.

Reviewed By: Bill Maddaus, P.E.
Maddaus Water Management, Inc.

1. INTRODUCTION

The purpose of this memorandum is to support continued water supply planning by Rancho Murieta Community Services District (District) as a follow up to the next steps outlined in the IWMP update prepared by Brown and Caldwell in 2010. This Memorandum includes a summary of:

a) Review of water demand factors by lot type using historical consumption between 1998-2012; and
b) Considerations for selecting and updating demand factors for future planning by the District.

The memorandum also includes additional background information such as:

c) Recent influences of weather on annual demand;
d) Trends in each of the customer billing data grouped by lot type and graphed as gallons per day per account (gpd/account);
e) Maximum day demands related irrigation demands and current water treatment capacity; and
f) Codes governing maximum day demands and treatment plant rating capacity.

The recommendation included in this technical memorandum is to update demand factors. A demand factor is a unit of demand in this case, water consumption per residential lot type (or customer category). Another type of demand factor is based on water consumption on a per capita basis. There are four primary planning functions in water supply planning that rely on per lot (or account) demand factors:

- **Water Supply Reliability**: long range estimate of total added demand to ensure enough water supply in drought conditions is available. This was performed as part of the Integrated Water Master Plan Update and relied on the build-out conditions of 4,346 total units using a 750 gallons per day per Equivalent Dwelling Unit (gpd/EDU) demand factor.
- **Demand Management Planning**: unit or per account type water demands used to estimate anticipated water savings due to various conservation activities using existing customer demands tied to customer billing data.
- **Infrastructure Planning**: uses number of new connections, by type, multiplied by the per account type water use summed up for each year that new connections are planned to be added to the system in order to build up a forecast for future water demands.

Infrastructure Design: state code requirements specify the criteria for design of water treatment plants for capacity and water quality. Demand factors are used to determine the total average annual demand estimated at a future date to determine the infrastructure and then apply a "peaking factor" to account for seasonal variation and requirements to serve fire flow (peak hour demands). This analysis is helping to inform the decisions of the District's Board of Directors related to adopting updated demand factors in 2013.

2. BACKGROUND

This project was undertaken to support the update to demand projections associated with District Policy 90-2. Policy 90-2 defines water supply requirements for full build-out as well as water supply augmentation needs to provide water supplies in severe droughts. There are four steps to this update of Policy 90-2:

1. Determine updated demand factors on a gallons per day per equivalent dwelling unit (gpd/EDU) as the basis for District water supply planning.
2. Update the demand projection to 2020 for both potable and non-potable supplies to ensure compliance with the Water Conservation Act of 2009 (SB X7-7) and the District's 2020 Compliance Plan.
3. Update "Policy 90-2 - District Water Supply."
4. Right size the Water Treatment Plant for future expansion.

This technical memorandum is supporting decisions for the first step in this process of updating the demand factors.

3. METHODOLOGY

The industry standard of practice for development of future water demand forecasts using water use factors may be done via one of two methods as described in the American Water Works Association (AWWA) Manual of Practice, M52 Water Conservation Programs – A Planning Manual (AWWA, 2006).

Within Chapter 3 of the Manual, there are two methods for forecasting future water demands. For this analysis, both methods are reviewed using District historical demands. The methods are described as follows:

- **Method 1:** Future population in each year multiplied by demand factor based on gallons per capita per day. Developing this demand factor relies on looking at historical production divided by historical population.

- **Method 2:** Developing water use factors as the basis for projections using customer classes multiplied by the number of connections in that future type of customer category. This method relies on deriving average daily demands by dividing historical monthly metered billed water usage by the number of accounts served over time. To completely account for the future need for District customers, demand factors need to reflect:
  - Serving domestic and commercial needs
  - Variability in climate
  - Variability in economy
  - Serving summer peak demands

Method 2 is most applicable to this analysis given historic basis for planning for the District is based on customer lot type demand factors. Section 5 describes the analysis used for an updated basis for demand factors by customer lot type.

As means to validate the assumptions of water demand factors and future water demand forecasts, it is best practice to estimate the actual demands planned based on:

- Indoor water demands based on estimated people per household (account) for typical end uses that have been determined by studies on a gallon per day per person.
- Outdoor demands based on the expected landscape designs and irrigated area multiplied by amount of applied water.
- Estimated demand by lot types, multiplied by the number of each type of lot planned annually over the planning horizon (or until build-out) to derive the water demand forecast.

The analysis used for updating the water demand factors performs both a “top down” estimate derived from customer billing data and “bottom up” estimate using development plans from near term planned new developments with the District’s service area.

4. SUMMARY OF HISTORIC OVERALL TRENDS IN DISTRICT SERVICE AREA

To best understand the context of how the District demands fluctuate from year to year, it's important to review long range demand trends. These fluctuations in consumption are also important to understand by lot type. Figure 1 below presents an overall historic trend of production, number of accounts and rainfall. The recent drought from 2007-2009 can be observed with higher demands in lower rainfall years. The economic recession has resulted in decreased water consumption nationwide and is also observed in the District’s historic production trend for 2009-2011. When a review of the potential vacancies and foreclosed homes were reviewed from the District’s billing system data, the following was determined:

- For locked off accounts (unpaid or foreclosed home) represented:
    - In 2009, an average of 42 accounts per month was closed equating to less than 2 percent of total average annual residential demand (on a gallon per day basis).
    - In 2010, an average of 36 locked off accounts per month equating to less than 1.4 percent of total average annual residential demand (on a gallon per day basis).
- For potential vacant homes:
    - Based on 2010 U.S. Census, vacancy was documented at 2.7% of residences as taken Spring 2010 during the recession period.

During the economic recession, utilities throughout California have been faced with 5-25% reductions dependent on the usage characteristics of their customers combined with effects of the recent drought in their service area. In 2012, a number of local water purveyors as well as national water purveyors have been seeing a modest increase in demands related to the economic recovery. The District observed an 8% production increase in 2012, presumably due to the combined effect of warmer weather and economic recovery. As the economy continues to recover, this general upward trend in demand is anticipated to continue as well. A discussion of climate influences on the District's historical demand is presented in Appendix A.

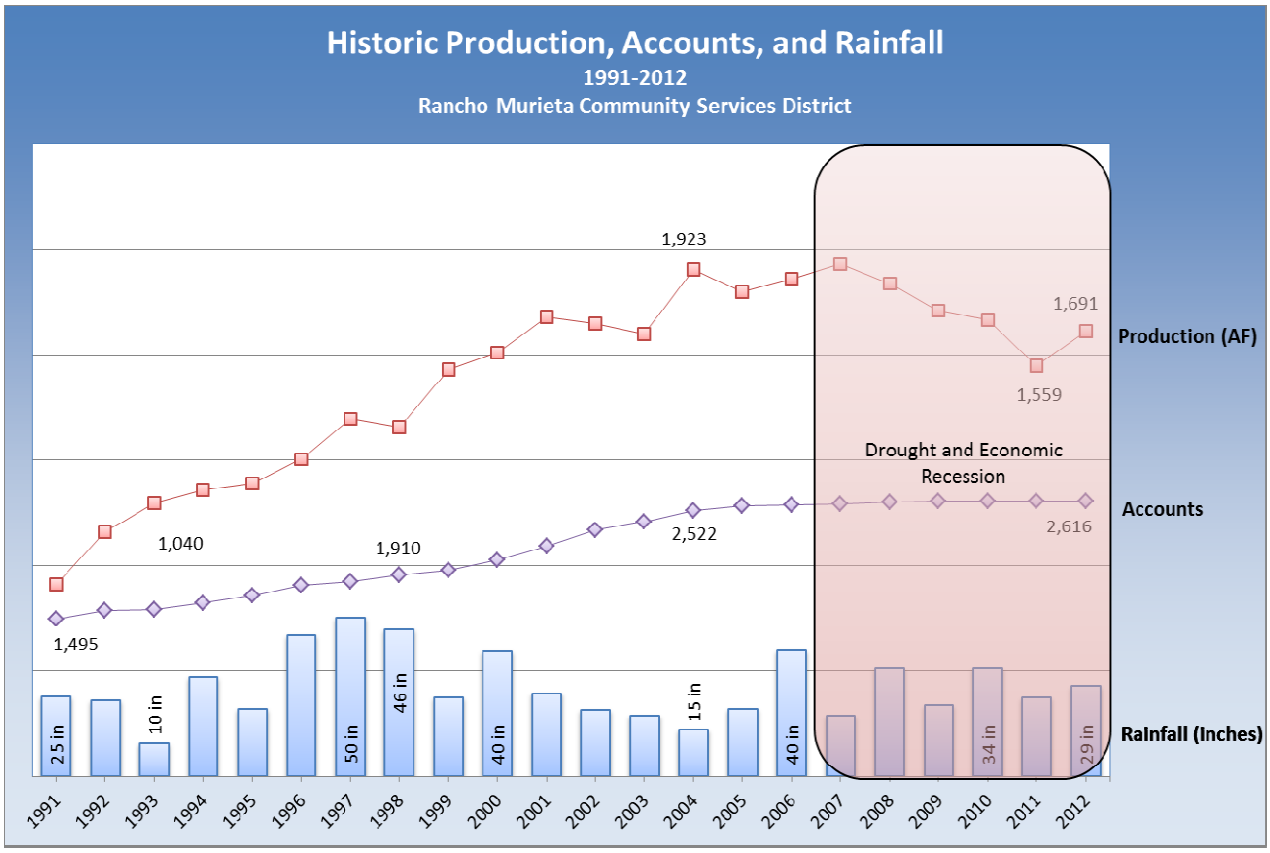


Figure 1. Historic Trends for Water Usage in RCMSD Service Area

5. REVIEW OF HISTORICAL CUSTOMER MONTHLY DEMANDS BY LOT TYPE

Maddaus Water Management, Inc. (MWM) was requested to review historical demand factors to support determining a basis for future demand factors for new homes. For this effort, MWM analyzed customer billing data by lot type to determine past monthly usage trends from 1998-2012. This analysis assists with understanding trends in winter minimum month (presumably without or minimal irrigation) and maximum peak month demands. In addition, these graphs present the fluctuations in demand due to climate.

This billing data history was carefully reviewed by MWM for any abnormally low or high monthly data based on type of customer use. Individual meter records were validated as accurate by District staff. Figure 2 presents the overall historic trend on total customer demand (not including Murieta Village) for the District service area from 1998-2012.

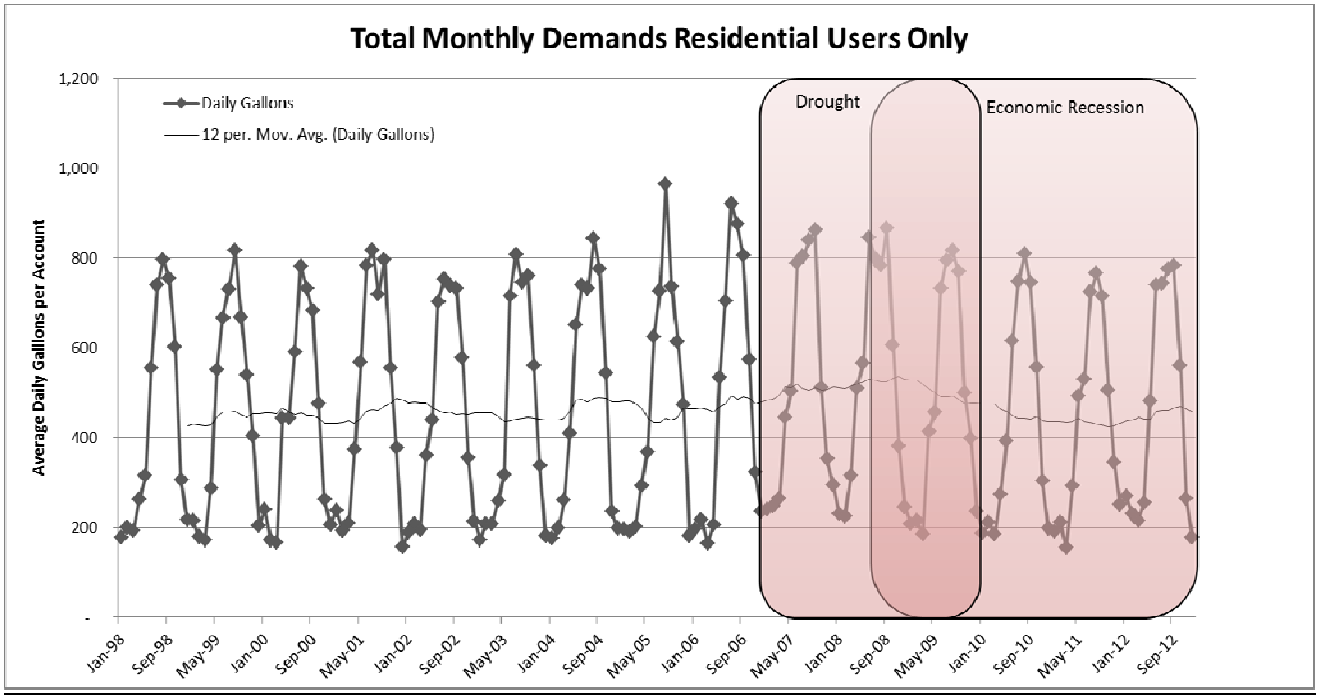


Figure 2. Historic Monthly Usage Trends for Residential Customers 1998-2012

Figure 3 represents the historic trends in demand for Murieta North based on the predominate lot types and includes the following types of customer categories:

- Estate Lots larger than 12,000 square feet (sf)
- Circle Lots
- Cottage Lots
- Townhouse Lots
- Villa Lots

Figure 4 represents the historic trends in demand for Murieta South and includes the following types of customer categories:

- Estate Lots less than 12,000 sf
- Halfplex Lots

For both Figures 3 and 4, there are limited few lot types of other categories included in the data represented and considered negligible. Murieta Village is not included in Figures 2, 3 or 4 but is presented on an individual graph in Appendix B.

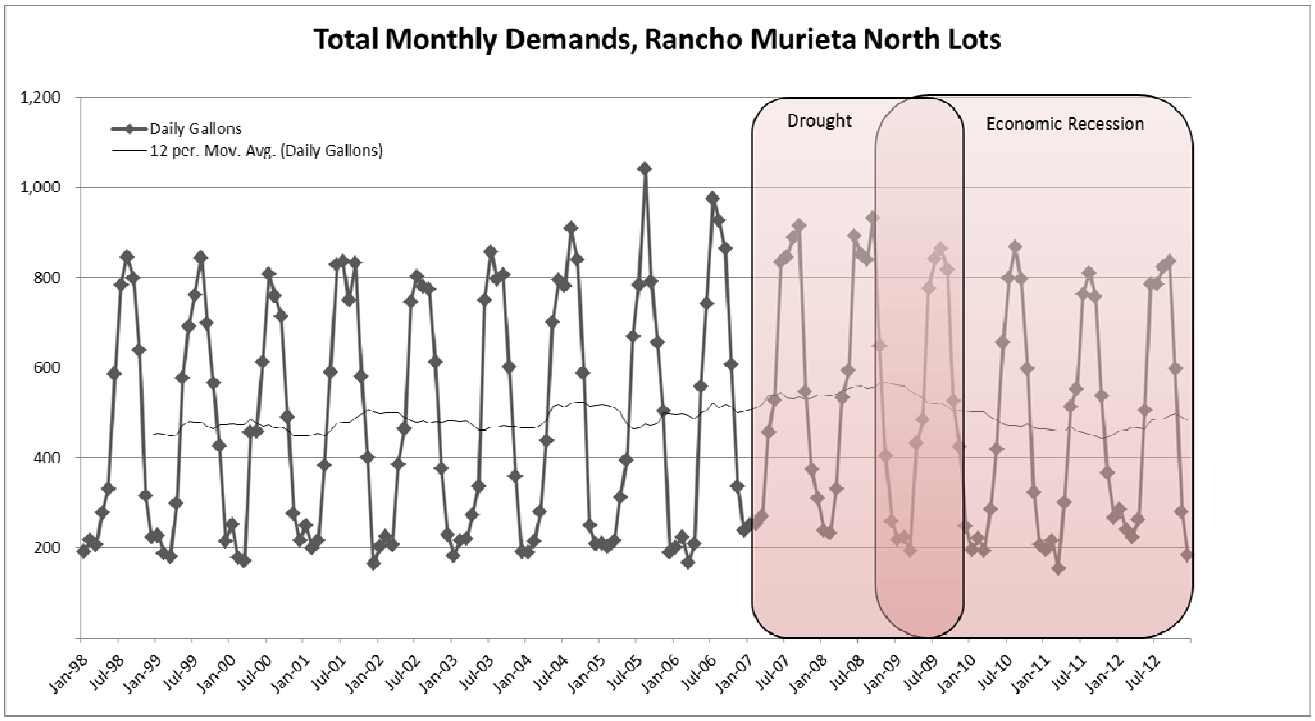


Figure 3. Historic Usage Trends for Murieta - North

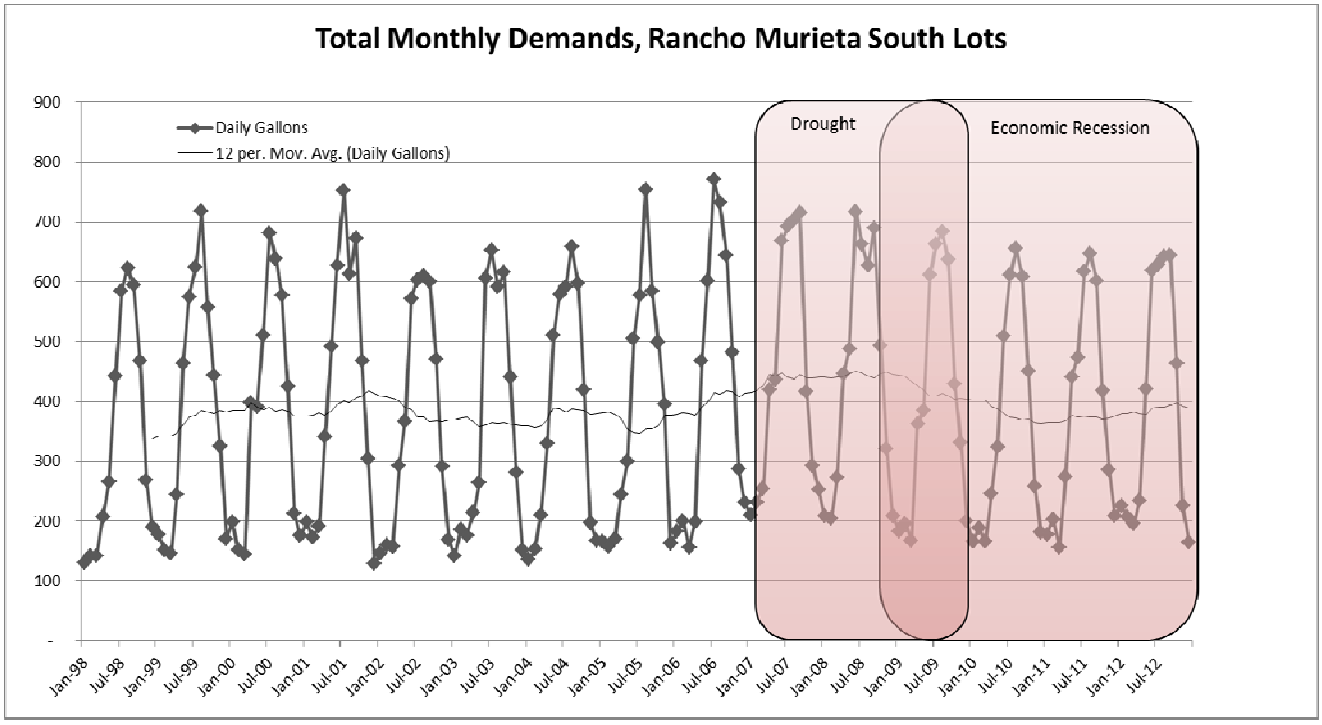


Figure 4. Historic Usage Trends for Murieta - South

Figure 5 presents the historic water demands by the Large Estate Lots (greater than 12,000 square feet) which have a wide range of lot sizes with the majority being about 12,000 square feet in size. Figure 6 presents the historic demand trends for Production (Smaller Estate) Lots (less than 12,000 square feet), which have lot sizes between 5,500 to 6,500 square feet, seen on Rancho Murieta South. Both of these lot types are the categories most similar to lots projected to be built in the future. The commercial usage trends and irrigation accounts along with all the other customer usage trends by lot type are presented in Appendix B. That data will be rolled into the demand forecast in later sections.

General observations from these charts include:

- Most stable demand period is 2001-2006
- Short term effects of the drought and economic recessions started occurring in 2007-present.
- A slight increase in the 12-month moving weighted average started in 2012 (possibly due to the economic recovery).
- Highest demands for large estate lots and production (small estate) lots were observed during good economic periods of 1999-2001 and 2005-2006.

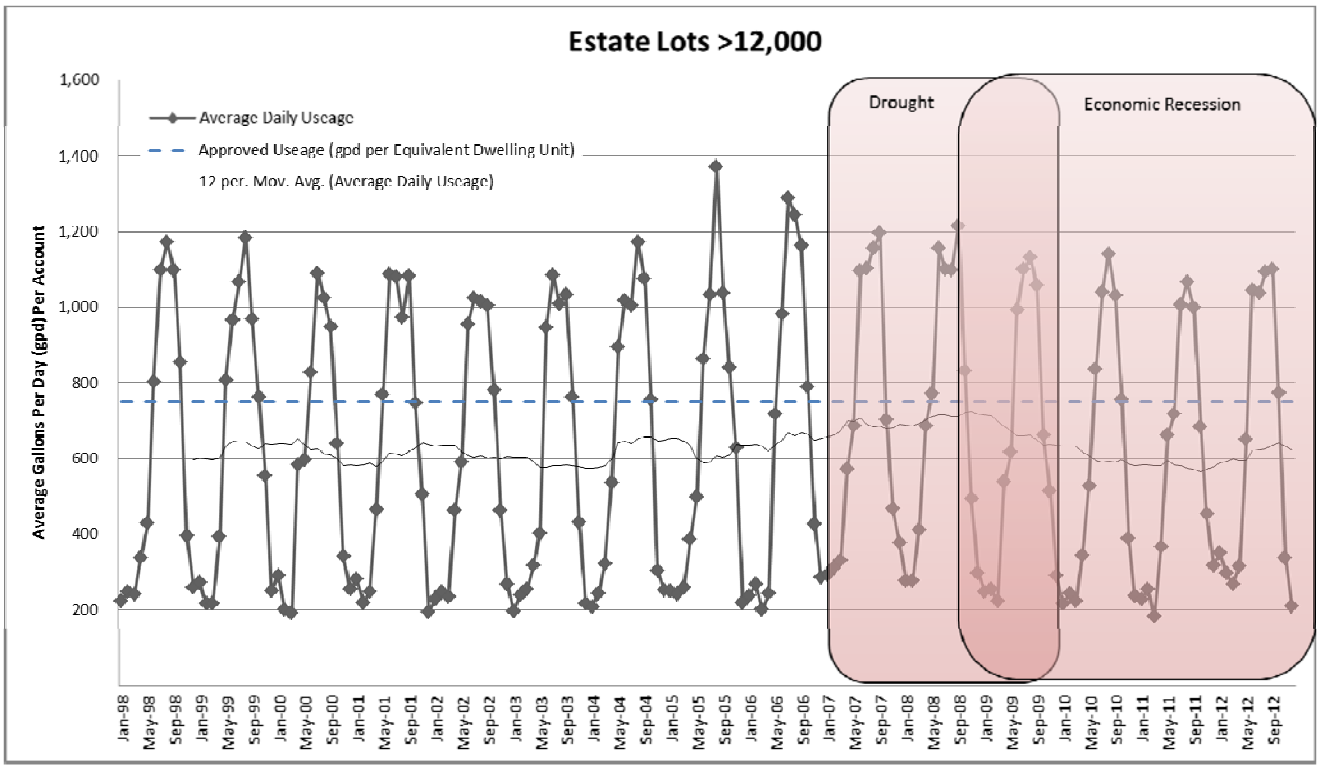


Figure 5. Historic Usage Trends for Large Estate Lots (greater than 12,000 SF)

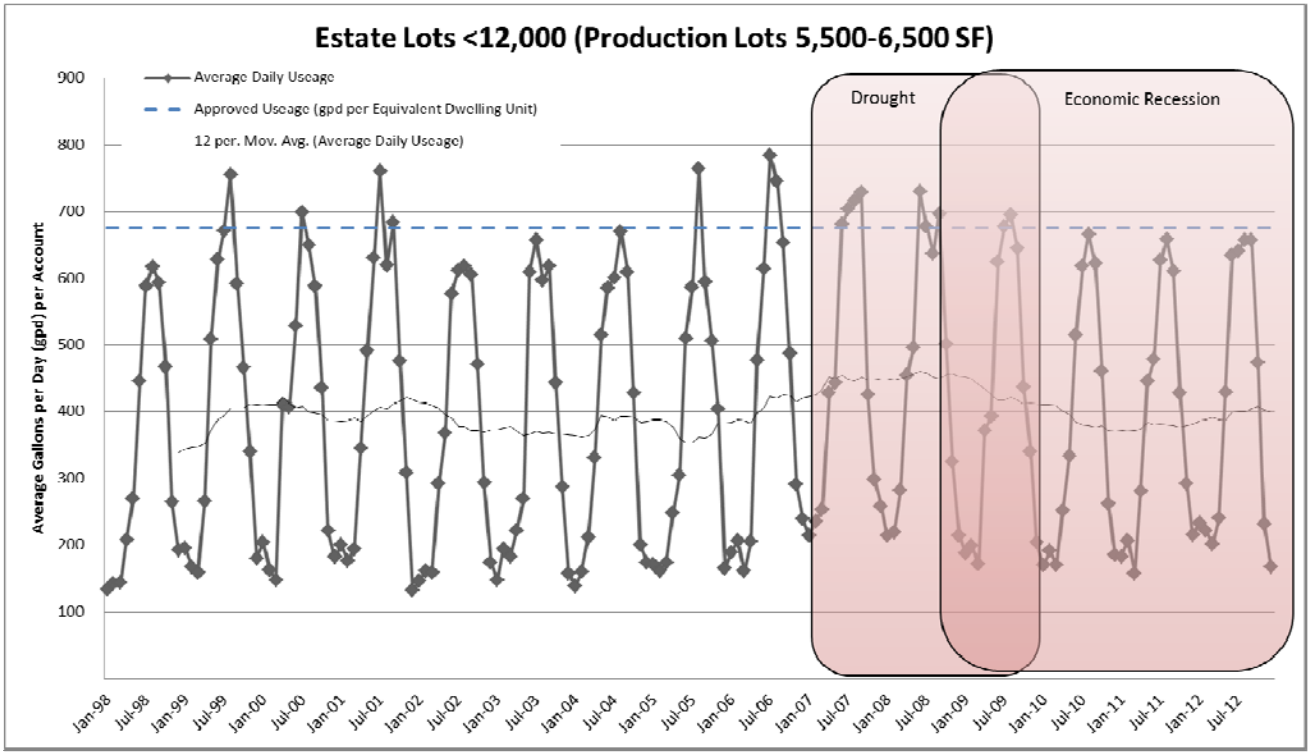


Figure 6. Historic Usage Trends for Small Estate Lots (Production Lots Between 5,500-6,500 SF)

6. HISTORICAL AVERAGE DEMANDS BY EXISTING LOT TYPES

Table 1 presents the maximum month, minimum month and historical averages for consumption by account types in gallons per day from 1998-2012. Also presented is the year with the highest demand (2005) representative of a good economy and relatively normal climatic conditions. The dry year experienced in 2008 was not selected from the historic record because it involved the economic downturn which influenced demands to be lower. Other years were not selected due to similar situations and influences on demands.

Table 1. Historical Average Water Consumption by Customer Category (gal/day/acct)

Customer Category/Lot Type	Maximum (Includes Outdoor)	Minimum	Full Period Average (1998-2012)	Historical Good Economy Annual (2005)
ESTATE LOTS > 12,000 SF	1,372	182	627	636
CIRCLE LOTS	1,042	149	512	491
COTTAGE LOTS	872	125	403	423
ESTATE LOTS <12,000 SF (PRODUCTION LOTS < 6,500 SF)	784	132	396	383
HALFPLEX LOTS	707	86	331	318
TOWNHOUSE LOTS	298	107	184	193
MURIETA VILLAGE	250	77	144	145
VILLA LOTS	257	78	123	126
COMMERCIAL LARGE	15,967	2,466	8,202	9,122
COMMERCIAL SMALL	637	168	365	385
COMMERCIAL IRRIGATION	6,404	6	1,419	1,763
PARKS	29,462	-	1,657	8,140

7. ACCOUNTING FOR VARIABILITY IN CUSTOMER DEMANDS TO DETERMINE WORST CASE CONDITIONS

There are a number of conditions that influence demands day to day, and month to month across years that is outside of any water utility's control. The variability in customer end uses includes a multitude of influences that may be short term (i.e. drought) or longer term (i.e. increasing trend in warmer temperatures) in nature. Some of the influences include:

- Seasonal irrigation: spikes of demand in the summer months(typically July and August peak)
- Dry year conditions: warmer months in the year without drought restrictions, like our recent warmer winters. Severe droughts that would trigger demand restrictions are not accounted for in this analysis. In the 2007-2009 drought, there were not any mandatory cutbacks by the District imposed on customers.
- Shifting climatic trends: irrigation demands are driven by soil moisture which is most affected by modest trends in increasing temperatures and evapotranspiration rates of plants (rising temperatures in the early morning hours has the greatest influence)

- Economic conditions: cycling between stable, boom and bust markets
- Sensitivity to changes in water pricing: less response to change when all services cost more (e.g., price of cell phone service more than water bills on average).
- Shifting demographics: with more or less persons per household within the service area
- Changing customer behaviors: longer range trends in installing more pools, added home water features such as misters, fountains, ponds, more efficient fixtures or appliances, shower panels, etc.
- Changes in landscape aesthetics: willingness to give up inexpensive turf for more native landscape design palates and hardscapes
- Shifts in housing mix: different types of homes being built, smaller lots with larger homes having more bathrooms or two story that allow for more irrigated area
- Changes in housing design: now bathrooms and/or kitchens are farther from the water heaters that are now normally placed in the garage

These influences are challenging to quantify individually and require comprehensive and detailed econometric modeling to determine. However, some overall influences in total aggregate variability can be reviewed looking at historic trends dependent on the conditions experienced (e.g., drought or economic up or downturns).

Figures 2 through 6 and all the figures in Appendix B of trends in customer billing data have a "moving average" shown as a thinner back line. The moving average is 12 months average over time. This moving average is effectively smoothing out the summer irrigation peak and lower winter demands into an annual average demand such that longer range trends may be observed while minimizing the influencing effects on the usage trends due to climate. When demand years end-on-end are trending down this is observed to be the influence of overall conservation or higher efficiency in use on for the type of accounts included in the graph. For example, a longer range trend going down for the single family residential customers, would indicate more efficient indoor fixtures and appliances and/or improvements in irrigation efficiency. The influence of the economic boom from 2001-2005 can be observed and also the recent economic downturn from 2009-2012 along with the climatic variability such as the drought years from 2007-2009. Table 2 presents the variability due to the overall aggregate changes in 12 month moving average demands.

Table 2. Observed Percent Difference in Past Average Monthly Demand for Existing Lots

Lot Type	Maximum Observed Rolling Average (1998-2012)	Minimum Observed Rolling Average (1998-2012)	Percent Difference (Max to Min)
ESTATE LOTS > 12,000	725	567	24%
CIRCLE LOTS	580	457	24%
COTTAGE LOTS	482	333	37%
ESTATE LOTS <12,000 (PRODUCTION LOTS < 6,500 SF)	461	339	31%
HALFPLEX LOTS	387	271	35%
TOWNHOUSE LOTS	212	162	27%
MURIETA VILLAGE	161	124	26%
VILLA LOTS	216	94	NA
		Average	**29%**

Table 3 presents the variability due to the overall aggregate changes in peak summer demands. Based on historical peak monthly demands from the observed 2002 minimum to the 2005-2006 maximum during the period of 1998-2012, the average percent variability across all accounts was 31%. The observed variability from 2005-2006 (good economic period) to the historical average from 1998-2012 was 24%.

Also presented in Table 3 is the seasonal irrigation peak month ratio. This is the historical (2005) peak month demand divided by the minimum month from historical record, which was observed to be more than 5 times.

Table 3. Observations on Maximum Monthly Residential Demand (gal/day/acct)

Customer Category/Lot Type	Historical Average Peak Months (1998-2012)	Historical Peak Month Minimum (2002)	Historical Peak Month Maximum (2005-2006)	Percent Difference (2002 compared to 2005)	Percent Difference (2002 compared to Average 1998-2012)	Minimum Month on Record (1998-2012)	Seasonal Irrigation Peak Month Ratio
ESTATE LOTS > 12,000 SF	1,148	1,017	1,372	30%	18%	197	6.96
CIRCLE LOTS	919	838	1,042	22%	13%	175	5.95
COTTAGE LOTS	706	576	872	41%	21%	147	5.95
PRODUCTION LOTS < 6,500 SF	697	617	784	24%	12%	133	5.88
HALFPLEX LOTS	596	538	707	27%	17%	86	8.24
TOWNHOUSE LOTS	233	197	298	41%	25%	121	2.46
MURIETA VILLAGE	208	181	250	32%	18%	84	2.98
VILLA LOTS*	130	93	228	NA	NA	85	2.68
Average				**31%**	**24%**		**5.18**

*Villa Lots were not used in calculations due to outdoor irrigation not accounted for in customer metered data (given separately metered and billed by HOA).

In summary, using the historical record, it is challenging to "bracket" the high and low end impacts of these influences on demands. As a means to define the total influences, billed metered data by lot type was reviewed in the following two ways:

- Moving average – illustrates the average annual conditions and trends over rolling 12-months.
- Peak demand trends – comparing the lowest to the highest years peak demands

The observed worst case (i.e., the highest demands) in the record was 2005 with the good economy and relatively normal climatic conditions. A more significant worst case could occur with more dry year conditions

on top of a good economy with changing water usage patterns that have usurped any water conservation gains due to plumbing code and outdoor irrigation related codes and ordinances. In order to consider the most conservative worst case scenario, a 30% difference (as documented in Tables 2 and 3) due to variability in customer demand was carried forward in this analysis in support of updating the demand factors. Additional safety factor may be warranted of an additional 10+% to account for dry-year conditions, good economic and other influencing conditions occurring at the same time. In the analysis below, the 30% differential is added to the average, which effectively adds a safety factor for contingency.

8. DEMAND FACTORS CALCULATED BASED ON EXISTING AND PLANNED LOTS

For determining appropriate benchmarks for updates to District demand factors, MWM used two basic approaches:

- "Top-Down Approach" - the same billing usage data to develop the consumption and demand factors presented in Table 4 below that were used to generate the graphics shown in Section 5 and Appendix B.
- "Bottom-Up Approach" – using the planned lots irrigated acreage based on estimated landscape coverage and applied water added to the estimated indoor demands.

Both approaches are presented below.

Top-Down Approach using Existing Lots Consumption Data

MWM took into account the following with the analysis of the demand factors based on historic lots:

- Historic billing data for the two primary lot types of existing Large Estate Lots and Production (Small Estate) Lots (Figure 2 and 3 and Table 1)
- Which years seem the most appropriate for benchmarking District historic demands (Figure 1 and Figure 2)
- Variety of influences on water demand described above due to past climate and economic variability (Table 2)
- Observed upper and lower range percentage variability (Table 2).

To account for the variability across years based on historic observations of percentage variability in the past, 30% contingency was applied to the highest observed average monthly demands by lot type (2005). The 30% was based on the observed 29% difference between the low and high rolling average over the historical period (1998-2012), the "high-low" demand range percentage difference (Table 2). The observed full period average (1998-2012) was nearly the same as the historical peak year of 2005 that experienced both strong and weak economies and warm, dry or wet, cool climate conditions.

Table 4. Actual Water Demand Usage by Customer Category (gal/day/acct)*				
Customer Category/Lot Type	**Full Period Average (1998-2012)**	**Historical Annual Average (2005)**	**High-Low Demand Range Percentage Difference (%)**	**Demand Factors by Lot Type including 30% (Reference Year 2005)**
ESTATE LOTS > 12,000 SF	627	636	30%	827
CIRCLE LOTS	512	491	30%	638
COTTAGE LOTS	403	423	30%	550
ESTATE LOTS <12,000 (PRODUCTION LOTS < 6,500 SF)	396	383	30%	497
HALFPLEX LOTS	331	318	30%	413
TOWNHOUSE LOTS (OR APARTMENT UNITS)	184	193	30%	251
MURIETA VILLAGE	144	145	30%	189
VILLA LOTS	123	126	30%	164
COMMERCIAL LARGE	8,202	9,122	30%	NA
COMMERCIAL SMALL	365	385	30%	NA
COMMERCIAL IRRIGATION	1,419	1,763	30%	NA
PARKS	1,657	8,140	30%	NA

*Note: Demand Factors for New Planned Lots is presented in Table 7.

Bottom-up Approach using Water Demand Estimate for Planned Lots

A very simplistic water budget estimate was generated as a means to review the reasonableness of demand factors developed using the "top-down approach" being applicable to future lot types. To prepare this basic check on assumptions, MWM was informed that two primary residential lot types are planned to be built in the future: Large Estate Lots and Small Estate (Production) Lots.

The following assumptions were used to derive the estimates presented below in Table 5:

New home indoor demand: Based on an estimated 60 gallons per person per day (gpcd) indoor demand with an average of 3 persons per household, the average home is estimated to use 65,700 gallons annually. This indoor use assumption is conservative given existing homes are using more indoor on a per capita basis, between 70-100 gpcd for existing accounts. Higher than 80 gallons per capita per day may indicate that irrigation demand may be occurring during the winter or more occupants per household than estimated for the overall service area (based on the 2010 U.S. Census) for that lot type.

Table 5. Estimated Indoor Per Capita Demand based on 2005 Demands (gallon per capita)				
	Total Annual Demand for 2005 (gallons per year per Account)	**Minimum Month Demand (2005) (gallons per day per account)**	**Persons Per Household (2010 U.S. Census)**	**Per capita Demand Indoor (gallons per person per day)**
ESTATE LOTS > 12,000	232,533	242	2.25	107.6
CIRCLE LOTS	179,576	184	2.25	81.9
COTTAGE LOTS	154,855	171	2.25	75.8
ESTATE LOTS < 12,000 SF (PRODUCTION LOTS < 6,500 SF)	140,637	162	2.25	71.9
HALFPLEX LOTS*	117,082	115	2.25	51.2
TOWNHOUSE LOTS*	70,159	158	2.25	70.1
MURIETA VILLAGE*	52,783	105	2.25	46.6
VILLA LOTS*	45,761	119	2.25	52.9
			Average	**69.8**
*Smaller lot types may have fewer people per household. Conversion factor = 1 cubic foot equals 7.48 gallons.				

Outdoor estimated demand: Outdoor irrigation demand was based on an applied water rate of 4.2 feet (30 year average Reference Evapotranspiration for the Fair Oaks California Irrigation Management Information System). This outdoor use assumption is conservative given existing homes are using on the order of 5.5 to 7.0 feet of water per year. Existing Large Estate Lots are assumed to be 12,000 square feet and Small Estate Lots are between 6,500-5,500 square feet and assumed to be 6,500 square feet.

For additional background when reviewing Table 6, for the new planned developments, there is not a complete match between existing lot types and planned future lot sizes. The new Large Estate Lots are estimated to be approximately 14,500 square feet (sf) each, and Small Estate Lots (Production Homes) are estimated on the order of 8,700 sf each. Landscape coverage was assumed to be the upper range representative of a 2-story home with more ability to have irrigated acreage, using each lot type being analyzed as part of the District's Recycled Water Feasibility Study: 6,490 sf and 2,790 sf for Large and Small Estate Lots, respectively.

Table 6. Outdoor Applied Water Estimate based on 2005 Demands Existing Accounts (ft/yr)								
	Total Annual Demand 2005 (Gallons per Year per Account)	**Minimum Month Demand (gal/day/acct)**	**Total Annual Indoor (gal/yr)**	**Total Annual Outdoor (gal/yr)**	**Estimated Lot Size (sf)**	**Percent Lot Irrigated***	**Estimated Irrigated Landscape Area (sf)**	**Estimated Applied Water (ft/yr)**
ESTATE LOTS > 12,000	232,533	242	87,156	145,376	12,000	30%	3,600	5.4
CIRCLE LOTS	179,576	184	66,358	113,218	7,000	30%	2,100	7.2
COTTAGE LOTS	154,855	171	61,432	93,423	7,000	30%	2,100	6.0
ESTATE LOTS < 12,000	140,637	162	58,201	82,435	6,000	30%	1,800	6.1
HALFPLEX LOTS	117,082	115	41,506	75,576	5,000	30%	1,500	6.7
TOWNHOUSE LOTS (or Apartments)*	70,159	158	56,769	13,390	NA	NA	NA	NA
MURIETA VILLAGE*	52,783	105	37,721	15,062	NA	NA	NA	NA
VILLA LOTS*	45,761	119	42,840	2,921	NA	NA	NA	NA
							Average*	**6.3**

*Smaller lot types with minimal or common area landscaping not considered in the analysis given future development is not planned of this lot type. The higher amount of applied water for circle lot is due to irrigation for the Common Leased Areas. Conversion factor = 1 cubic foot equals 7.48 gallons.

Table 7 presents the water demands for the two new primary types of lots based on indoor and outdoor demands. Indoor demands are based on 60 gallons per day per person and 3 people per household, or 65,700 gallons per year. Outdoor demands are based on the range of applied water from average observed of 6.3 feet (Table 6) per year (ft/yr) to 100% of the 30-year historical average reference evapotranspiration (watering requirements for healthy cool season turf grass 4-7 inches tall in full sun) for the California Irrigation Management Information System (CIMIS) for the Fair Oaks station at 50.5 inches (4.2 ft). Landscape coverage is the amount of irrigated area per lot.

Table 7. Water Demand Estimates for New Planned Lots (gpd/acct)						
	Indoor Usage (gal/year/acct)	**Landscape Coverage (sf/lot)**	**Applied Water Estimate (Low End) (ft/yr)**	**Applied Water Estimate (Upper End) (ft/yr)***	**Demand Factor Range based on New Planned Lot Categories (gpd/acct)**	**Mid-point of the Range (gpd/acct)**
ESTATE LOT >24,000 SF	65,700	18,500	4.2	6.5	1,772-2,644	**2,208**
ESTATE LOTS > 12,000 SF	65,700	6,500	4.2	6.5	739-1,046	**893**
PRODUCTION LOTS <10,500 SF	65,700	6,800	4.2	6.5	765-1,086	**926**
PRODUCTION LOTS <8,500 SF	65,700	4,800	4.2	6.5	593-819	**706**
PRODUCTION LOTS < 6,500 SF	65,700	2,790	4.2	6.5	420-550	**486**

*Note: Upper Applied Water Estimate based on Table 6 regarding existing lots.

9. ADDITIONAL INFLUENCES ON FUTURE DEMANDS IN DISTRICT SERVICE AREA

The following potential influences on future customer demand factors were considered as part of this analysis and considered NOT to require any further adjustments to the factors.

- *Future Recycled Water* – currently there is not enough available capacity now given golf course irrigation demands are not fully met. District needs more connections with wastewater generation in order to have the capacity to deliver additional recycled water to offset potable demands.
  - Golf course demand not fully met.
  - Golf course agreement has first right of refusal for recycled water (currently deliver 450-550 AFY, and need 550-650 AFY) and there is currently no excess for residential properties.
  - No distribution and conveyance and permitted use for recycled water for existing residential properties or park locations.
- *Conservation* – recent findings are showing that homes with more bathrooms and large square footage can and may use more water than existing homes (built pre-2001). Reference: USEPA Study Analysis of Water Use in New Homes included data from the City of Roseville, California.
- A review of new Unit 6 built homes in the District service area between the late 1990s to early 2000s were ½ acre in size and use on the order 15% more water than the overall average for the customer category of large estate lots from 1998-2012. The average water demand for Unit 6 homes was an average 719 gpd/account. For 2005 only it is 751 gpd, which is 18% higher than all large estate lots for 2005.
- While current production lots are in the 5500-6500 sf range, future production lots are in the 8-10,000 foot range, which increases irrigable area leading to an understated production lot demand in the future.

10. POTENTIAL REVISIONS TO DEMAND FACTORS

Based on the analysis presented, Table 8 illustrates current demand factors adjusted to the historic averages observed consumption based on year 2005 data. In the case of the large estate lots, this would be revising the demand factors down from 750 to 636 gpd/EDU. Then it is necessary to add in contingency for the variability in this historic average for which 30% is used based on future potential variability in average monthly demands (see Section 7).

Table 8. Potential Adjustments to Water Demand Factors by Customer Category (gal/day/acct)				
Customer Category/Lot Type	**Historic (2005)**	**High-Low Demand Range Percentage Difference (%)**	**Adjusted Demand Factors**	**Conversion Factor from 830 (gpd/EDU)**
ESTATE LOTS* (12,000 SF)	636	30%	827	1.0
CIRCLE LOTS	491	30%	638	0.8
COTTAGE LOTS	423	30%	550	0.7
ESTATE LOTS <12,000 SF (PRODUCTION LOTS* 5,500-6,500 SF)	383	30%	497	0.6
HALFPLEX LOTS	318	30%	413	0.5
TOWNHOUSE LOTS	193	30%	251	0.3
MURIETA VILLAGE	145	30%	189	0.2
VILLA LOTS	126	30%	164	0.2
COMMERCIAL LARGE	9,122	30%	11,858	NA
COMMERCIAL SMALL	385	30%	500	NA
COMMERCIAL IRRIGATION	1,763	30%	2,291	NA
PARKS	8,140	30%	10,582	NA

*Production lots are the same as with Small Estate Lot Definition of "Estate Lots <12000 SF" Current definitions of usage by lot types are recommended to be revised to allow for more refinement to applicable water budget estimates using the bottom-up approach to new planned developments.

It is recognized in Table 8 above that the past definitions do not align exactly with the new proposed lot sizes of 14,500 square feet and 8,700 square feet. The worst case for higher demand being two story structures that allow for more irrigated area. The proposed recommendation is based on the averages shown in Table 7 with the revised demand factors presented for consideration are taken at at the mid-point of the range as follows:

- **Largest Estate Lots (approximately 24,500 sf) = 2,210 gpd/EDU**
- **Large Estate Lots (approximately 14,500 sf) = 890 gpd/EDU**
- **Large Production Lots (approximately 10,500 sf) = 930 gpd/EDU**
- **Medium Production Lots (approximately 8,500 sf) = 710 gpd/EDU**
- **Small Production Lots (approximately 6,500 sf) = 500 gpd/lot (or 0.6 EDU)**

The mid-point in the range is selected given the irrigated landscape area may be on the order of 40% of the lot size and this would equate to lower applied water estimated. More details on current irrigated area of existing lots from the Rancho Murieta Association or other resource would helpful to also refine the landscape applied water estimate.

As a next step, it is recommended that the lot definitions be further defined and then subdivided into the appropriate different lot size categories based on the definitions of the new developments. The demand factors by new definitions should then have anticipated water use estimates refined and include a sliding scale based on square footage of irrigated landscaped area.

11. CONCLUSIONS

From the analysis performed, the historical billing data has shown relative stability across years on a gallons per account per day basis for District customers. Review of past trends helps to validate the assumptions being used in the estimated water budget.

Given this analysis also follows industry standard practice for developing demand factors and there is adequate accounting for variability in demands due to influences of demand outside of District control, these factors are recommended (a) to be further defined based on shifts in planned new development; or (b) a sliding scale created based on irrigated area to generate a more accurate water budget per lot according to the tentative (or final map). There is a future review of demand factors envisioned as part of a design phase when water and/or waste water treatment plant expansion project(s) begin on a schedule to be determined by new development within the CSD service area.

Once finalized, the water demand factors can be applied to future updates to the District's water demand forecasts as the future lot types are requested. As the water demand from two production homes can use more water than one large estate lot, some careful planning associated with how to forecast future demand is completed for types of future connections needs to be conservatively accounted for.

In addition, very careful tracking of the timing of building of larger lots is important given the Estate Lots would result in a higher than current gallons per day per account usage that may put District at risk for not meeting the gpcd targets adopted as part of the District 2020 Compliance Plan.

12. LIMITATIONS

This document was prepared solely for Rancho Murieta Community Services District in accordance with professional standards at the time the services were performed and in accordance with the Master Services Agreement between the District and Maddaus Water Management dated May 2, 2011. This document is governed by the specific scope of work authorized by the Rancho Murieta Community Services District; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by the Rancho Murieta Community Services District and other parties, such as Sacramento County and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information (e.g. accuracy of billing metered data).

APPENDIX A – HISTORICAL CLIMATE INFLUENCES ON MONTHLY WATER DEMANDS AND PRODUCTION

In order to assist with benchmarking of the time periods used as a basis for the demand factors, an analysis was performed on the influence of climate on water production. Water treatment plant production is governed by the need to deliver in all weather conditions. Water demands are known to fluctuate month on month and from year to year due to changes in climate. A review was made of historic production patterns relative to weather to determine how closely correlated District's production is relative to climate conditions. In other words, this review was necessary to determine if years with highest monthly peak plant production were also years with warmer climate or if warmer years may drive water demand even higher.

The basis for determining whether the climate was warmer than average was performed based on a degree day analysis and a seasonal index was created. This analysis involves the following:

- Downloading Daily Average Air Temperature Data from California Department of Water Resources (DWR), California Irrigation Management Information System (CIMIS) Station 131 for Fair Oaks, CA.
- Accounting for each daily temperature that is above 70 degrees Fahrenheit and sum up by how many degrees total each day departed from 70 ^{o}F for each month.
- Adding up the total degrees above 70 ^{o}F for the year across all months.
- Comparing warmer years with higher than average degrees departure to average or cooler years relative to water production on a gallon per account per day basis both graphically and checking for the level of correlation using statistical analysis.

Historic monthly and annual water production in acre-feet compared to Annual Departure Degrees Above 70 ^{o}F is presented in Figure A-1 and Figure A-2, respectively. Figure A-3 presents another comparison of annual plant production to annual rainfall rates as a metric of wet versus dry conditions and corresponding lower or higher plant production. Based on a review of this analysis, the following observations are made:

- Overall warmer years have tended towards higher water demands.
- The two highest water treatment plant production years of 2004 and 2007 do not directly match the warmest climate years of 2003, 2006 and 2008.
- Recent water demand decline in 2010 is not completely driven by the economic downturn as it was a cooler than average year.

For simplistic statistical review using MS Excel statistical tools, the R^2 value over the whole duration of the record from 1998-2012 was 0.63 or in other words about 60% of the variability in customer demand can be attributed to fluctuations in climate. This illustrates a significant effect from weather given it explains more than 60% of the variability in the data, but is not the only contributing factor to changes in demand. With further analysis of scenarios with weather normalization (such as testing other factors like soil moisture, precipitation, removing years with known economic recession data and drought messaging to customers altering their normal use behaviors), the correlation would be expected to be higher.

In conclusion, the warmest years of 2005 and 2006 were well correlated with higher demands for all the customer categories, especially Large Estate Lots and Small (Production) Estate Lots. The information from this

level of detail in the analysis was determined to be sufficient by District to make an informed decision on average and peak day demand factors and additional analysis was not considered necessary.

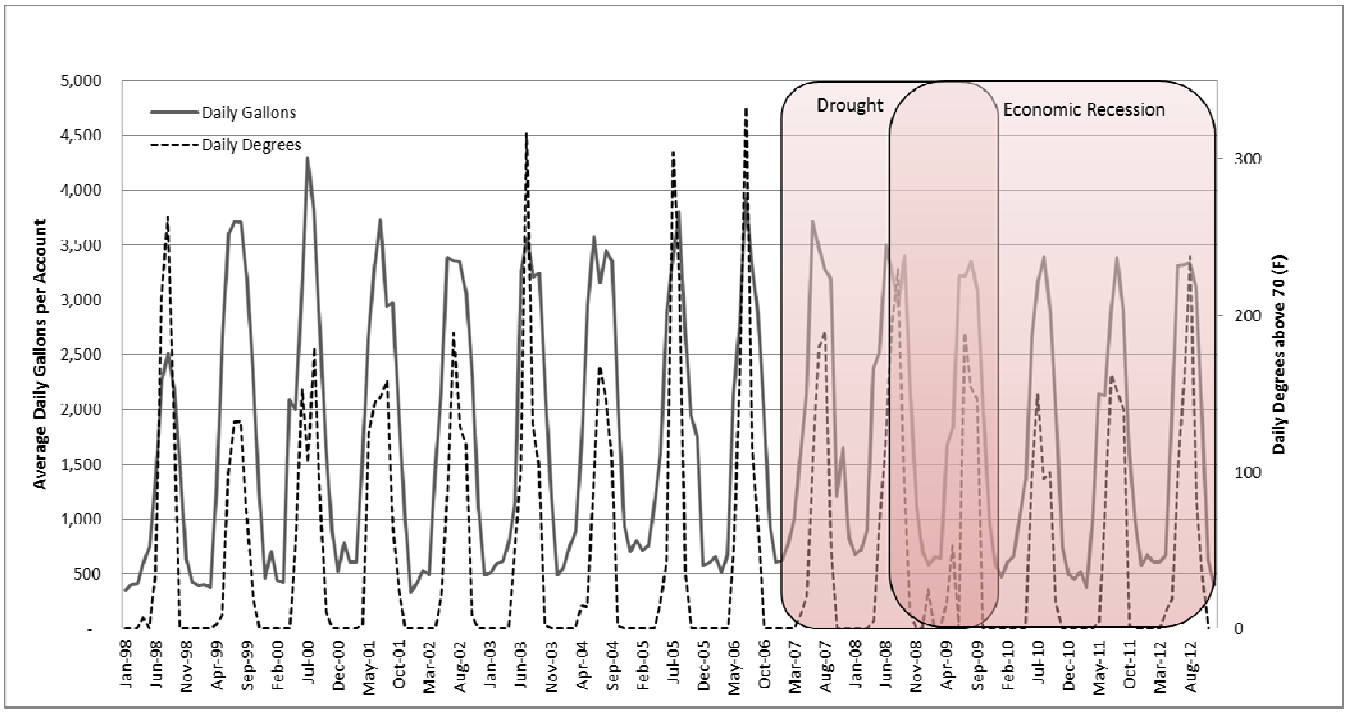


Figure A-1. Historical Monthly Temperature (Degrees) Compared to Water Demands

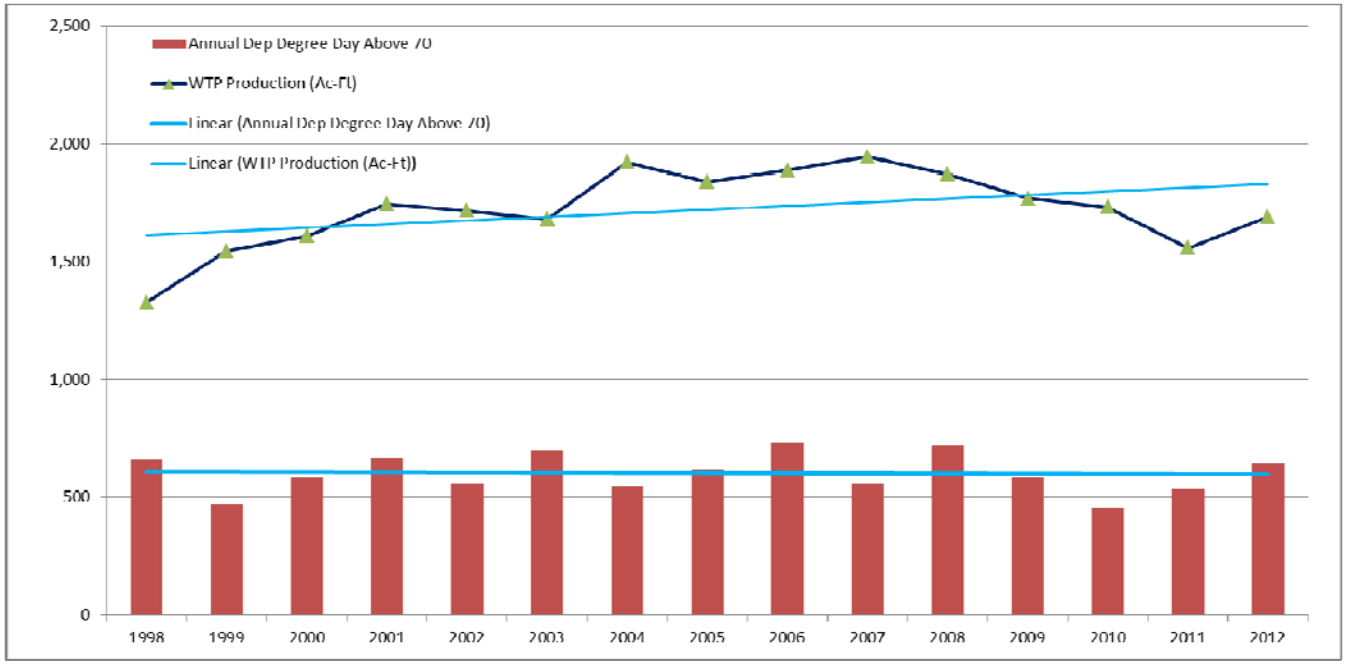


Figure A-2. Historical Influence of Annual Total Degree Days Compared to Water Production

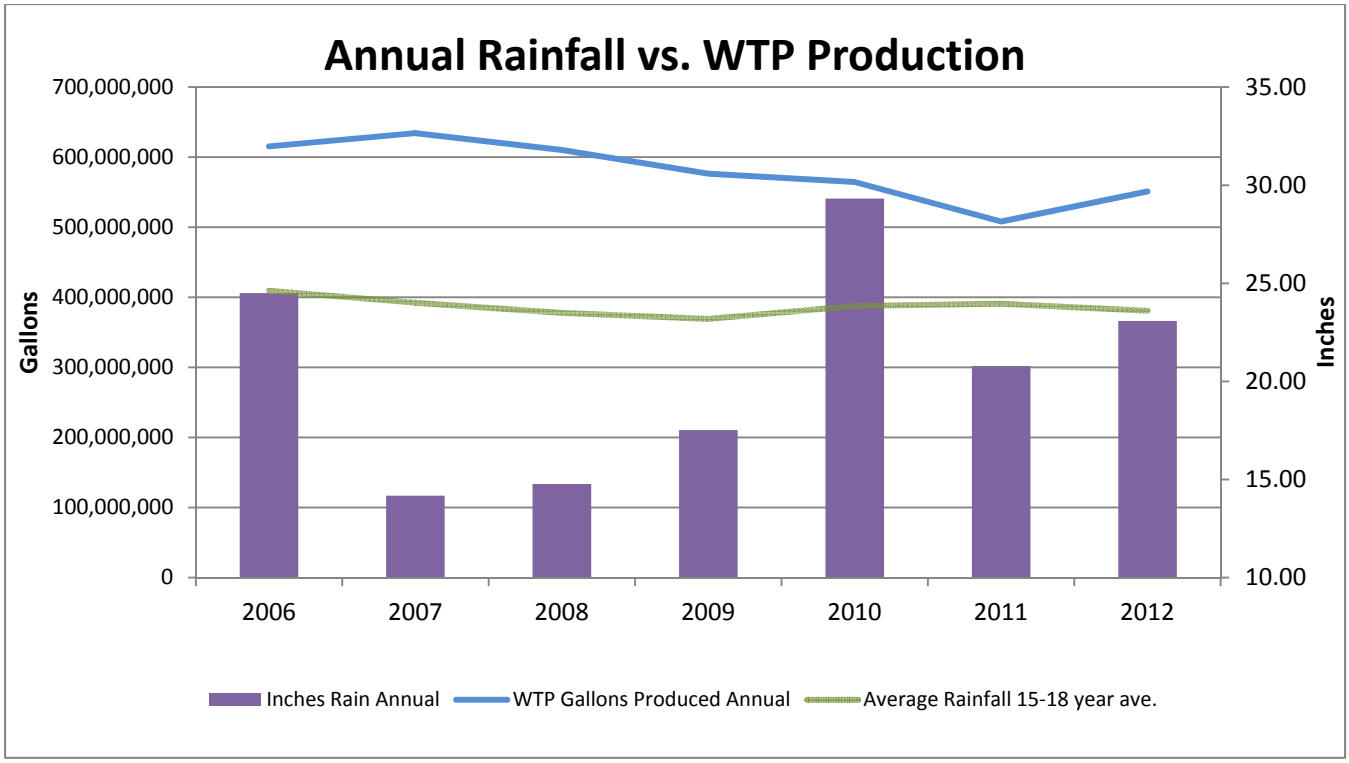
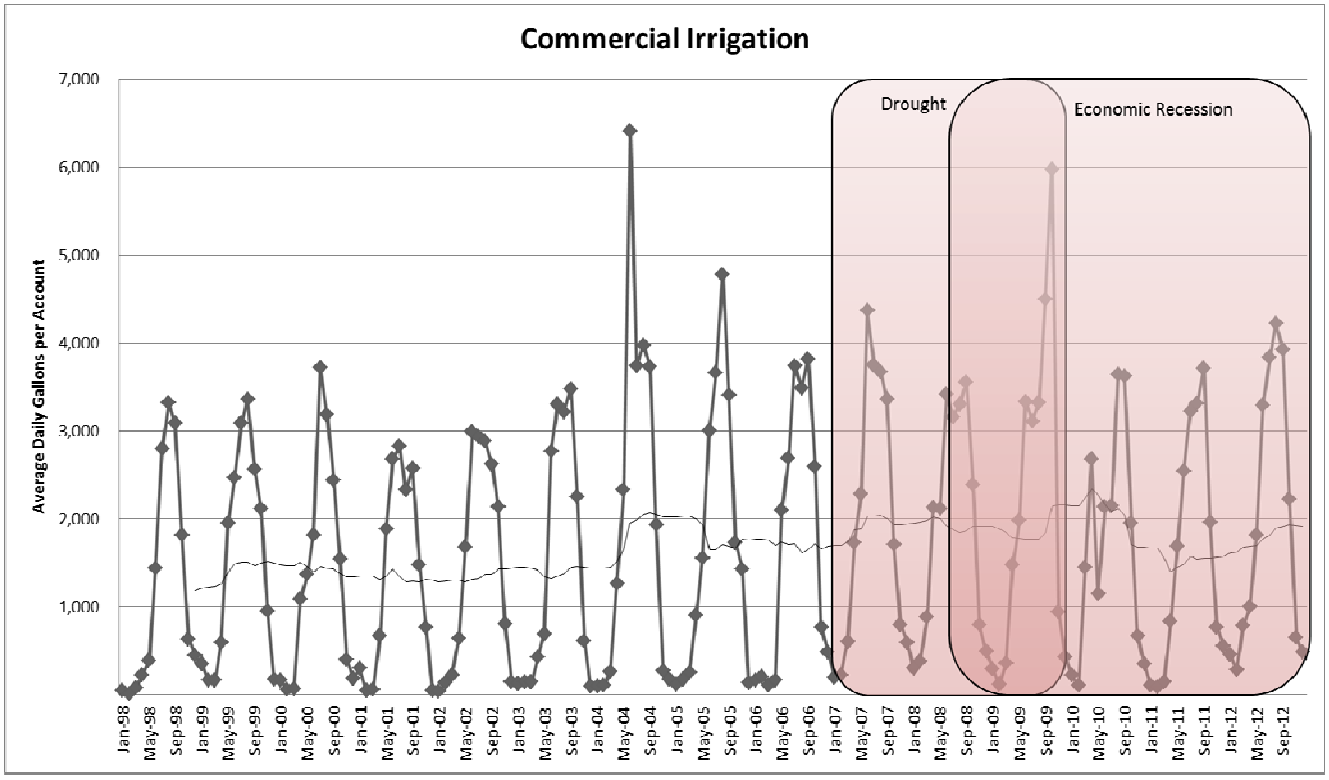
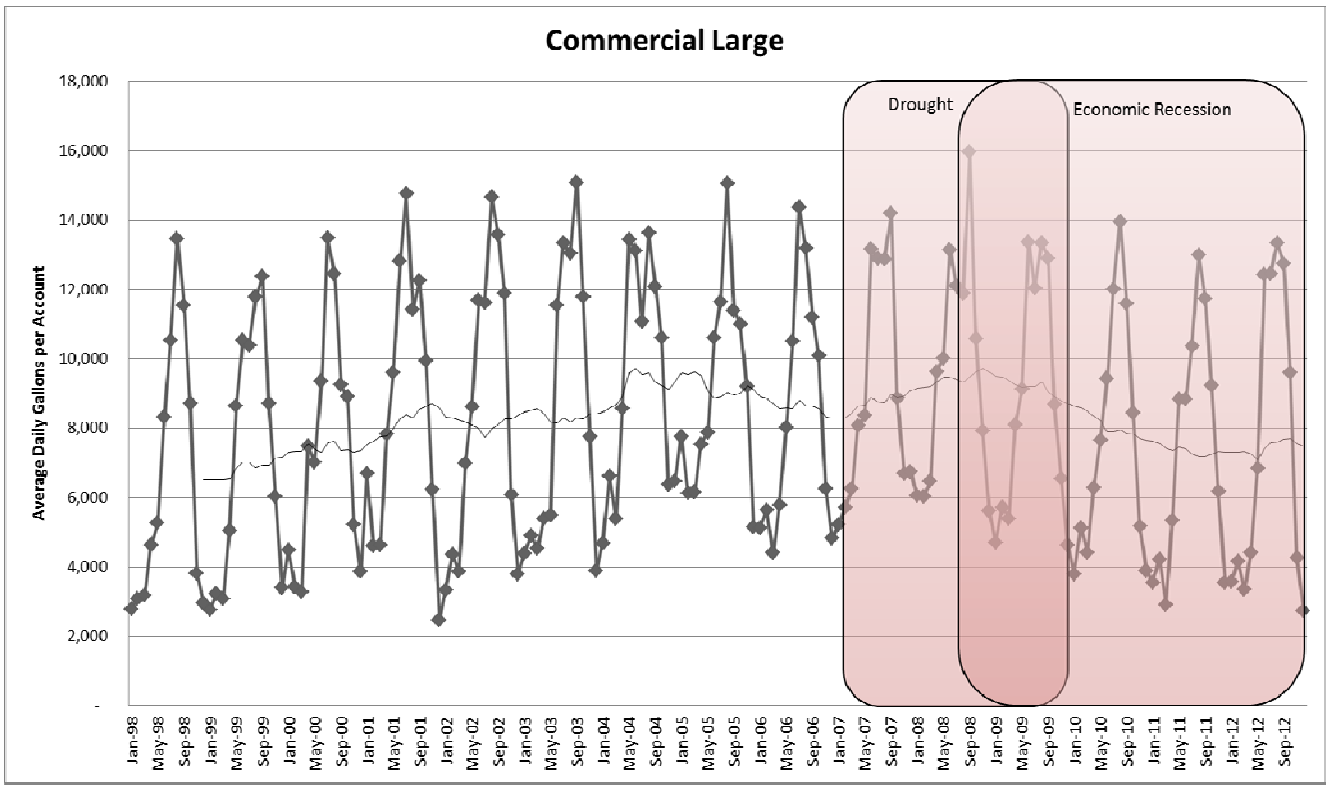
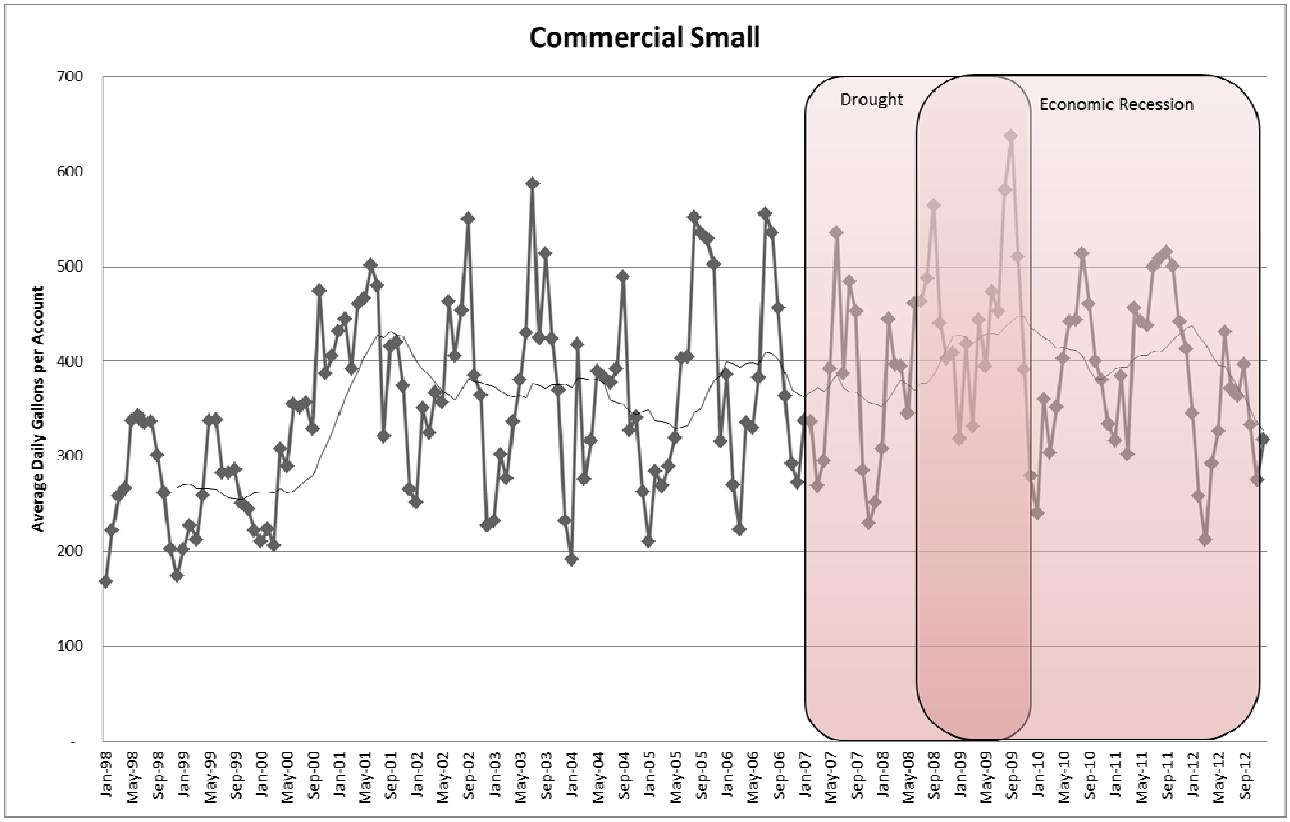


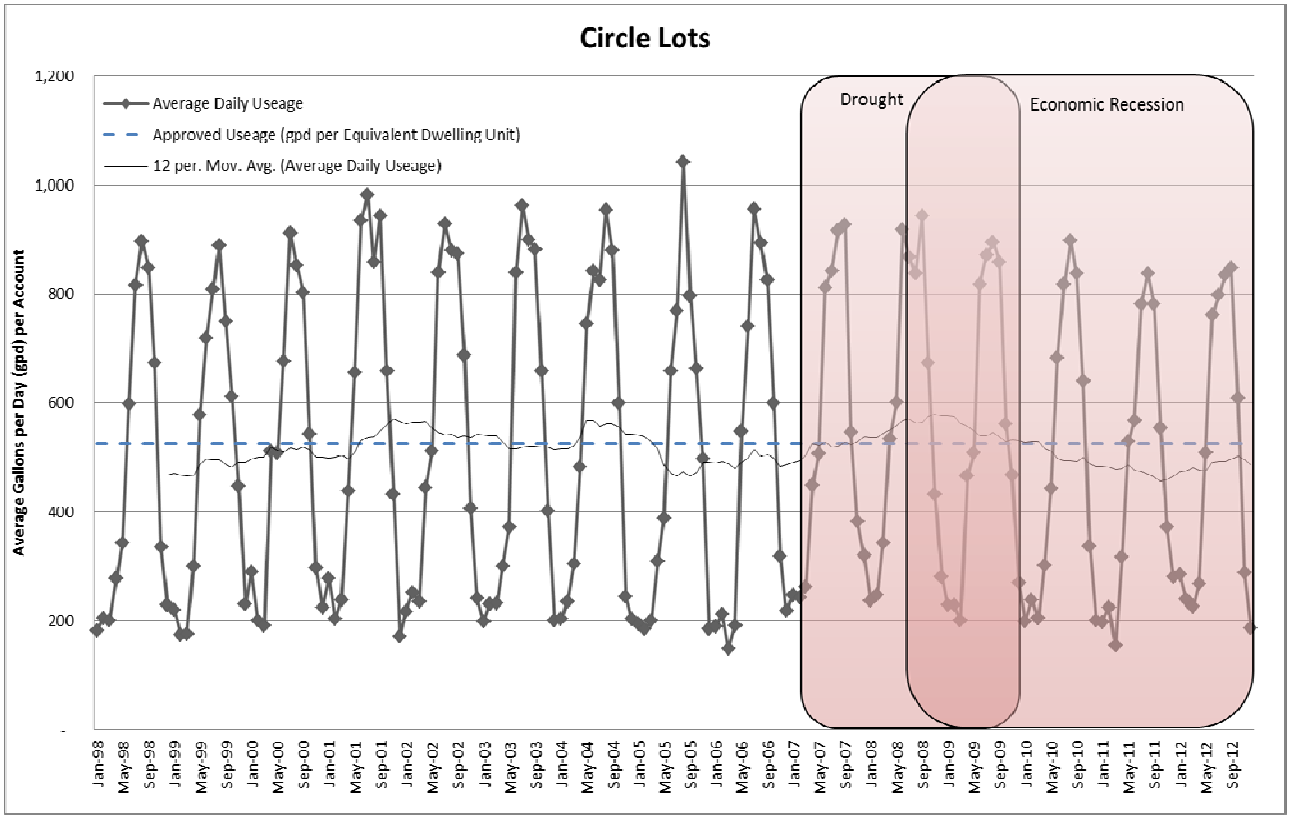
Figure A-3. Historical Influence of Annual Total Degree Days Compared to Water Production

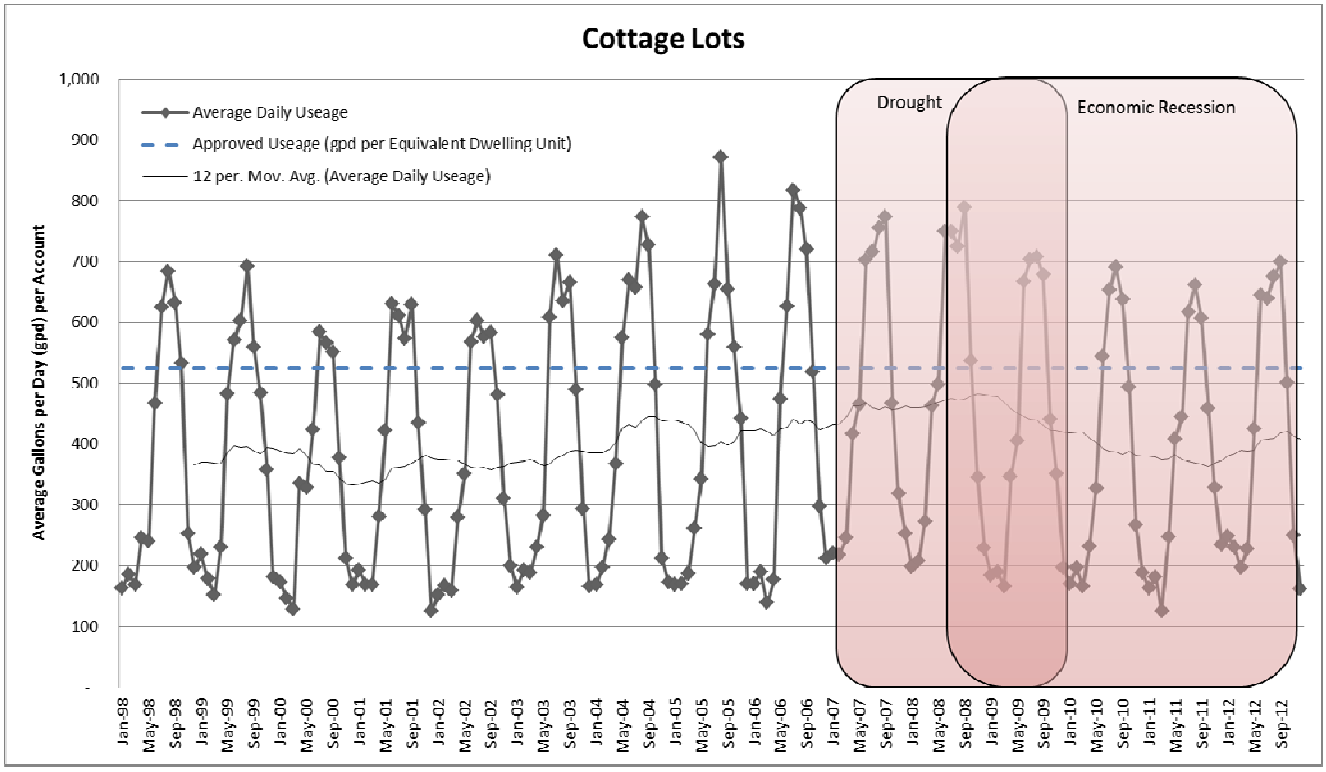
APPENDIX B – GRAPHS OF HISTORICAL WATER DEMAND BY LOT TYPE IN ALPHABETICAL ORDER

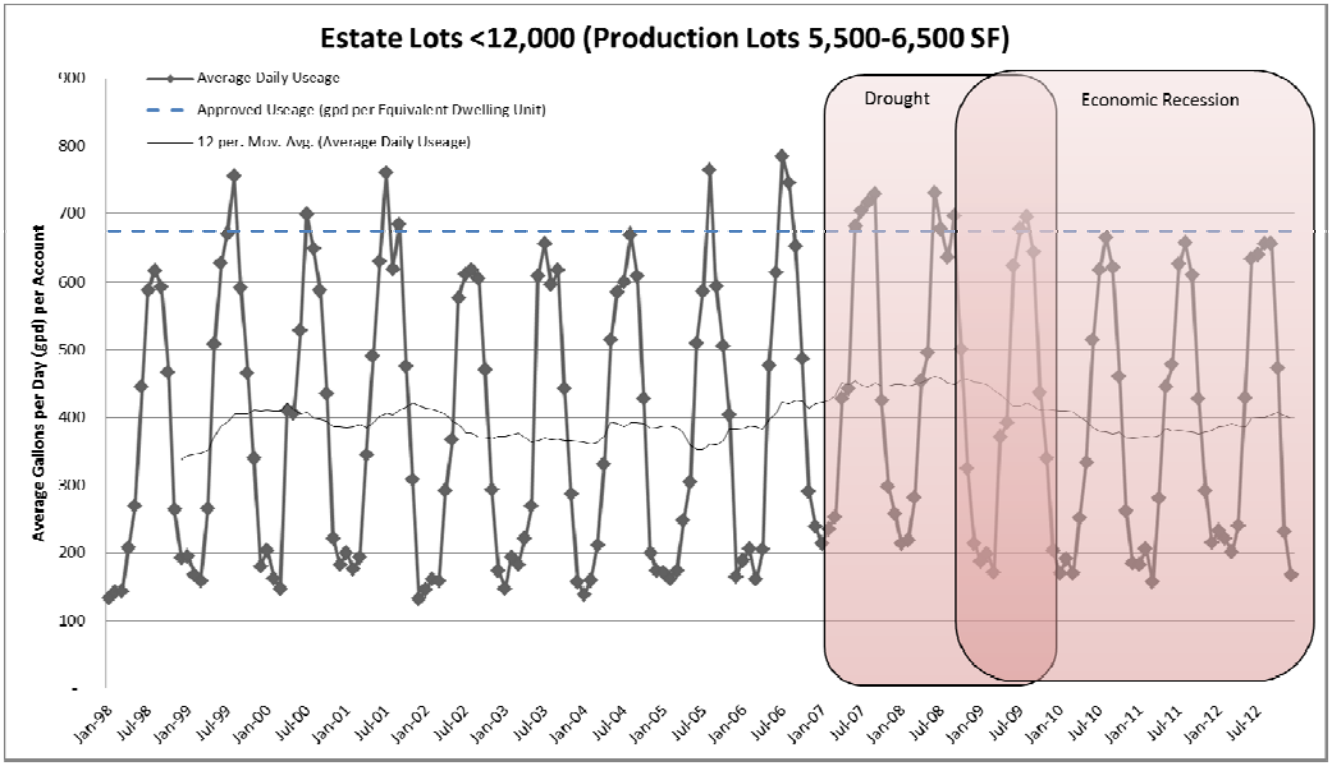


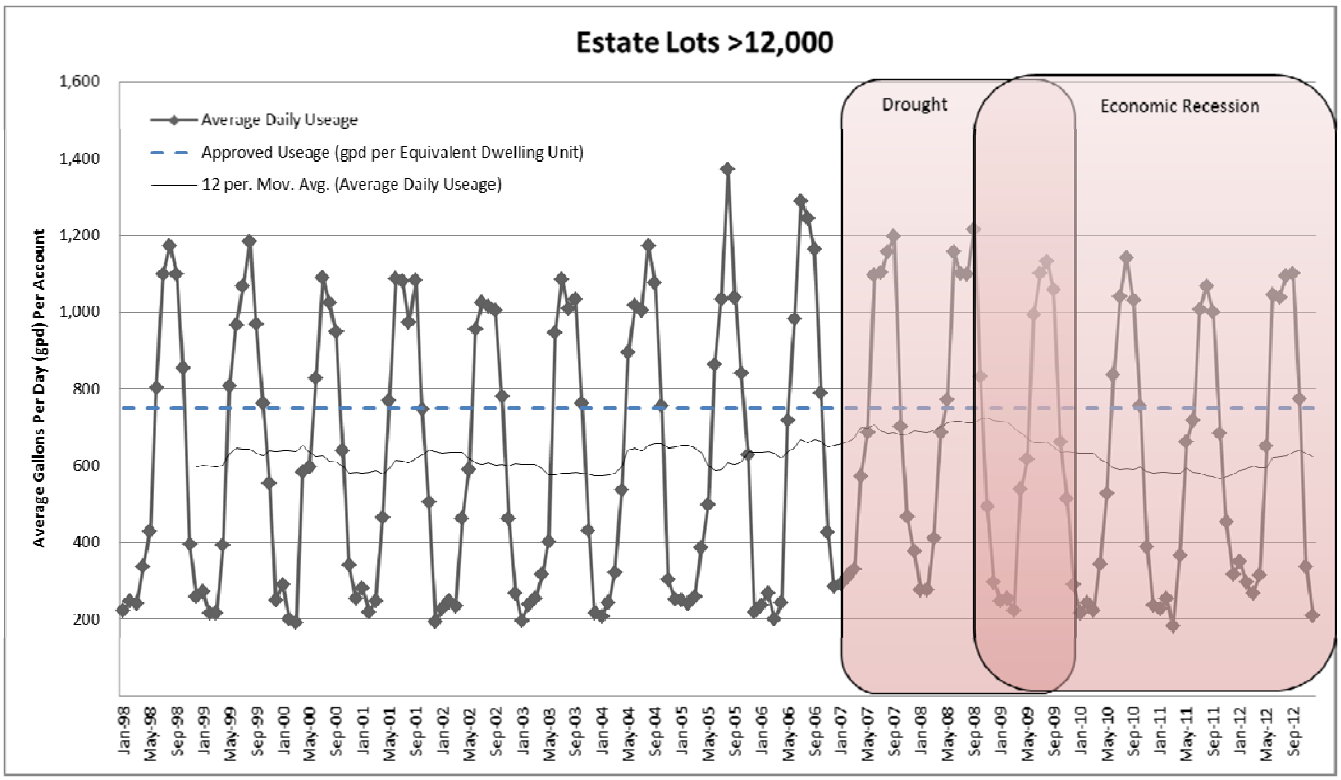


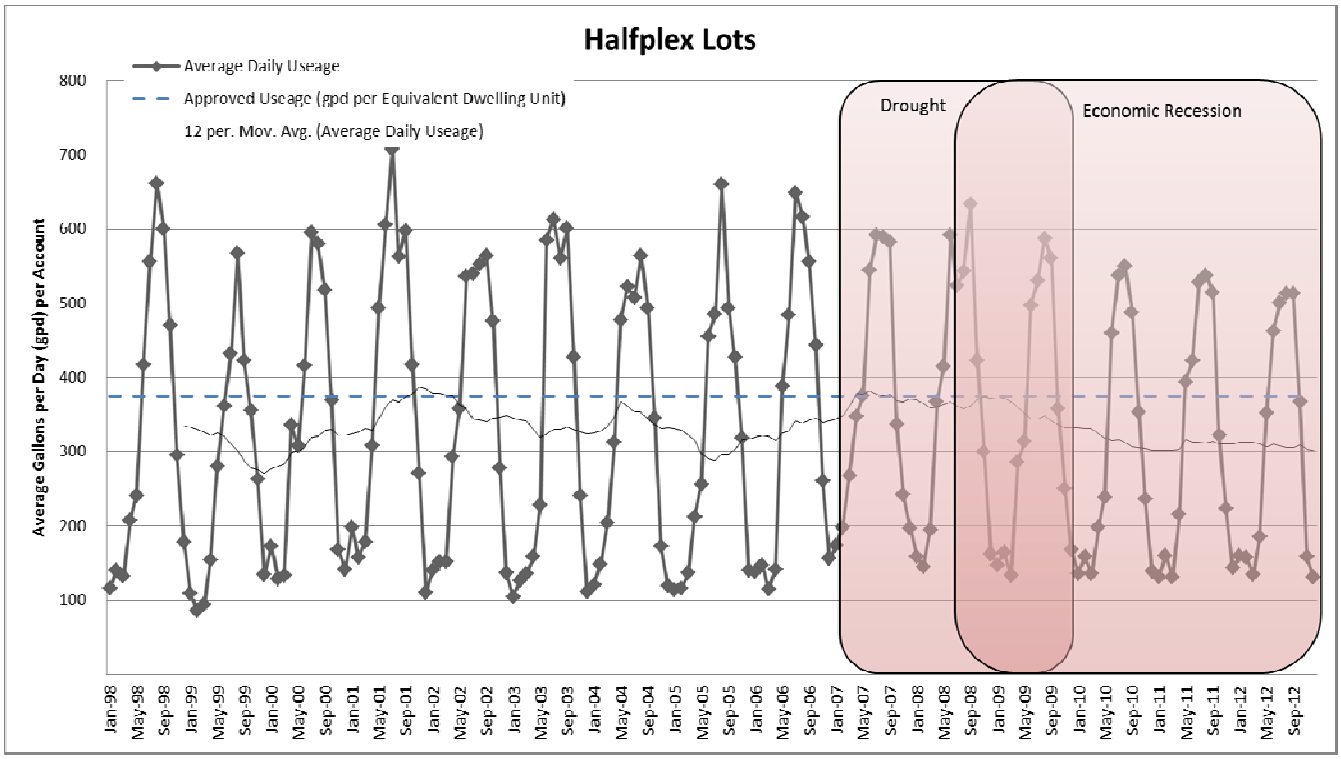


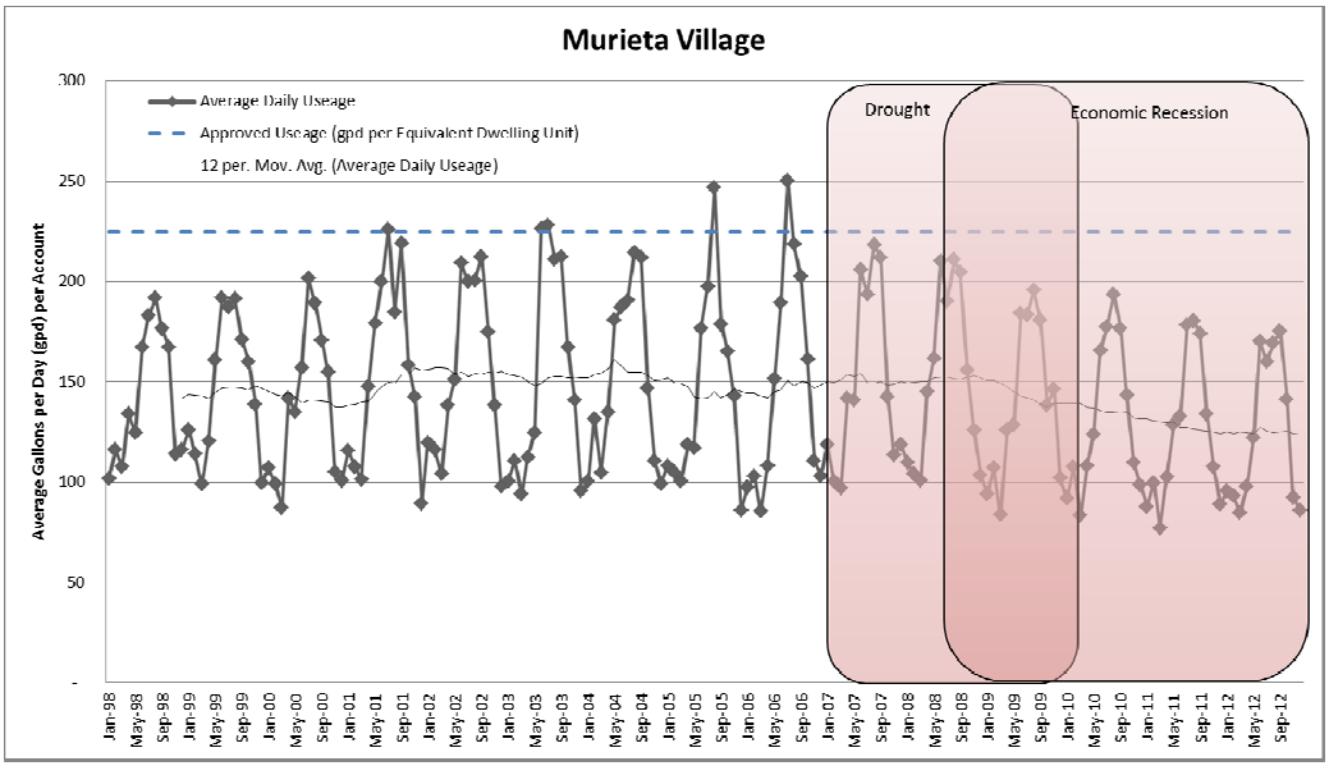




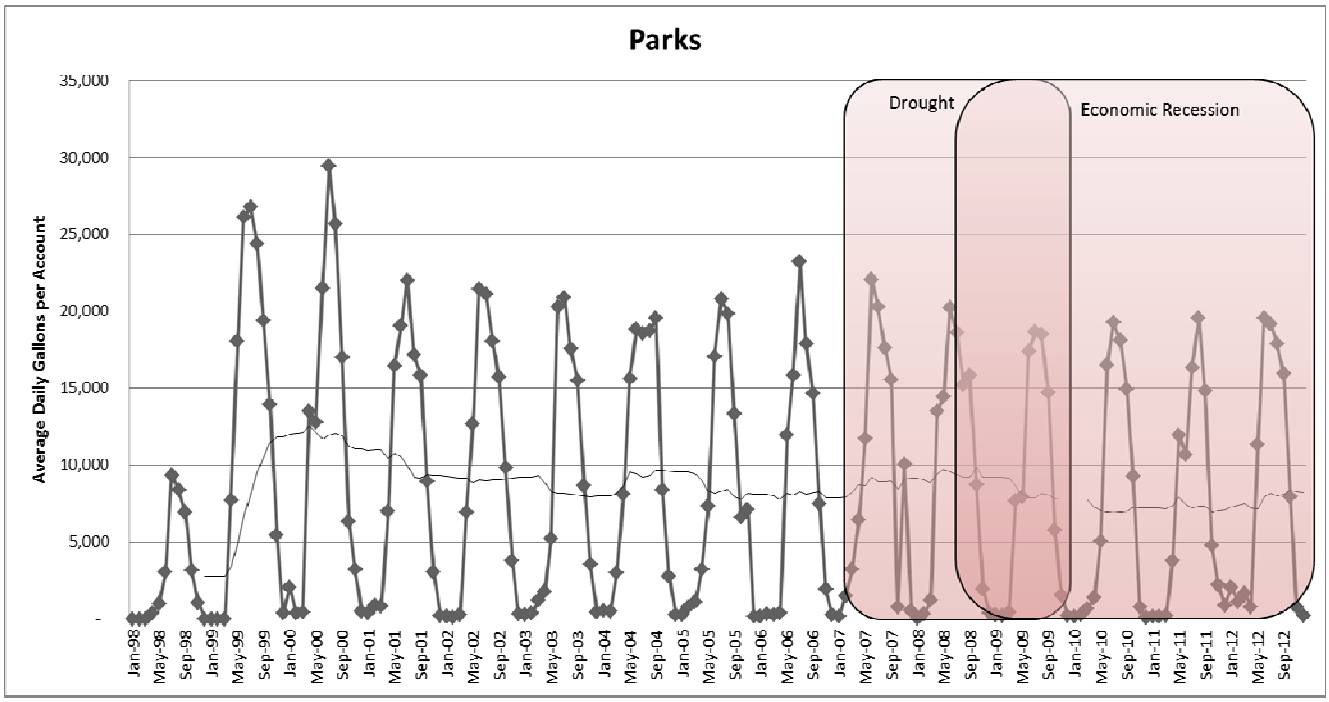


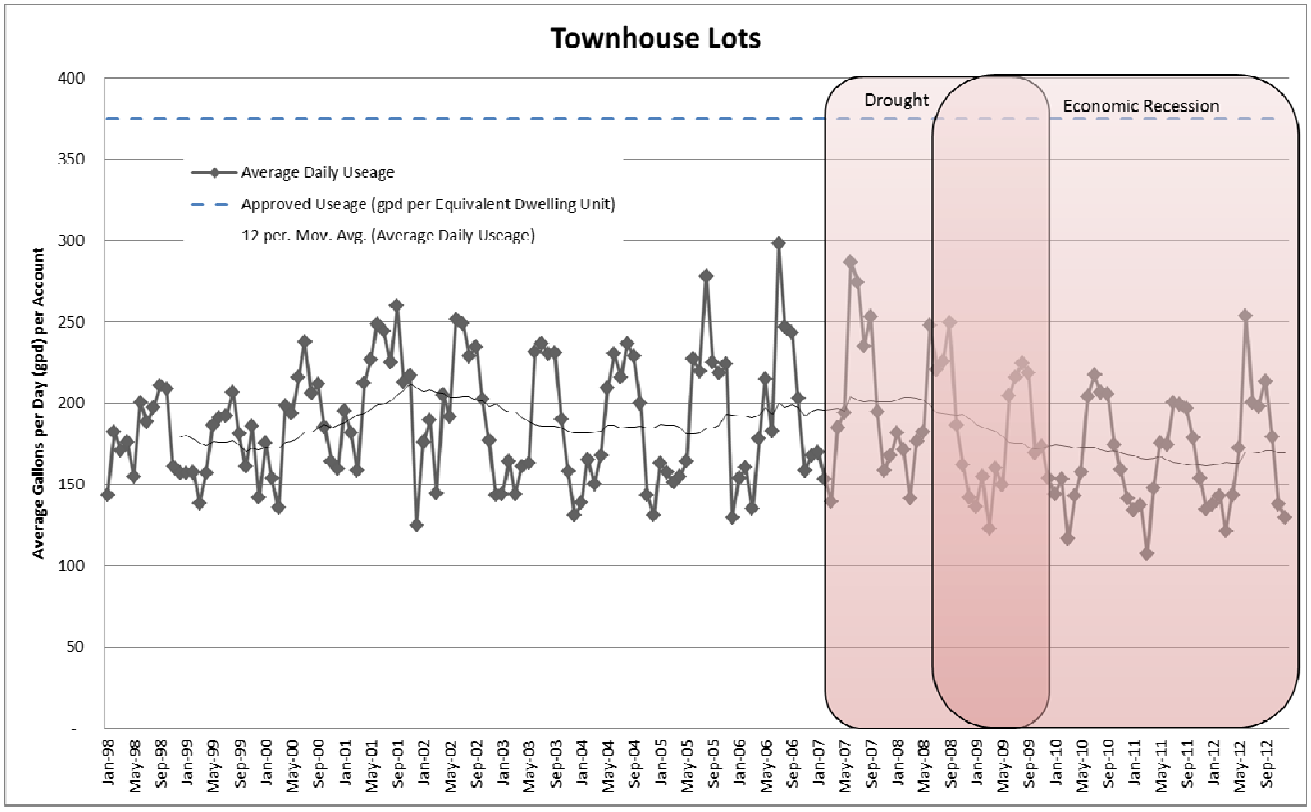


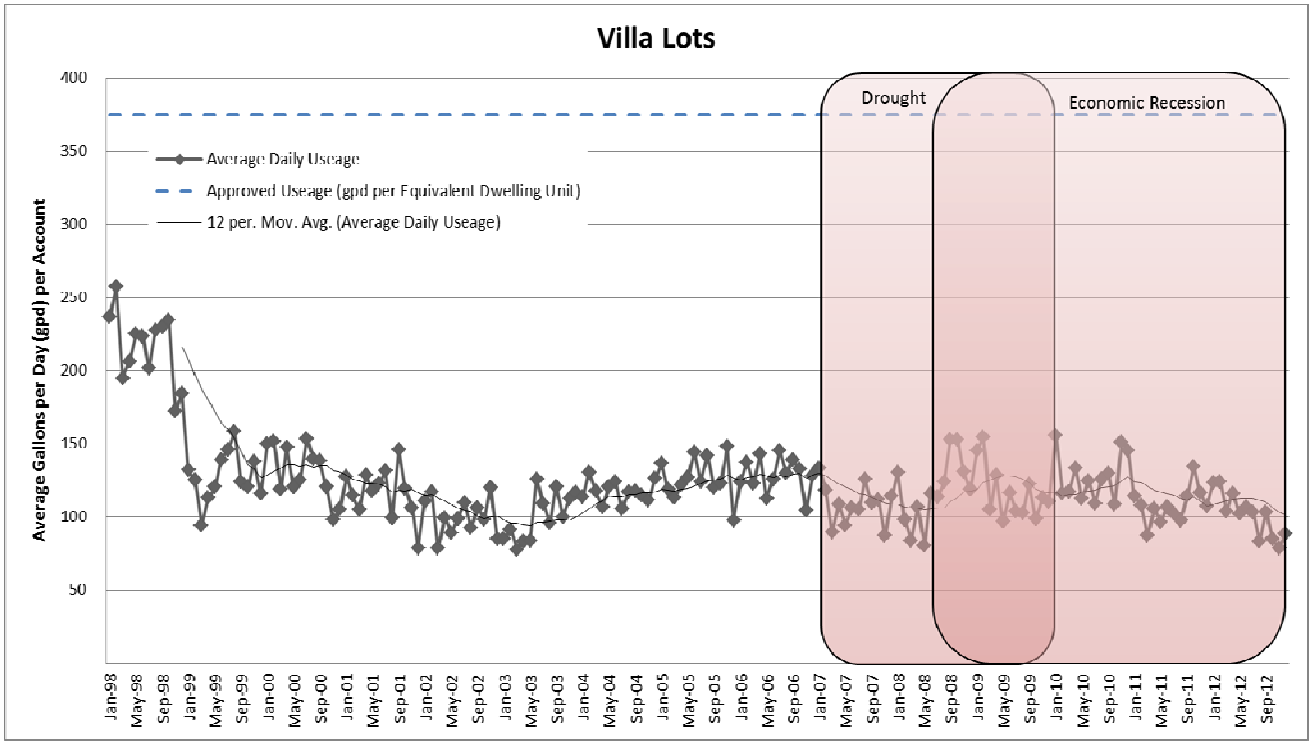




Note: The Demand Factor does include irrigation but the billing data shown in the chart does not include outdoor irrigation as it's metered and managed by the homeowners association.







Note: The Demand Factor does include irrigation but the billing data shown in the chart does not include outdoor irrigation as it's metered and managed by the homeowners association.

MEMORANDUM

Date: June 14, 2013

To: Board of Directors

From: Edward Crouse, General Manager

Subject: Review Recycled Water Feasibility Study – Kevin Kennedy

---

RECOMMENDED ACTION

Release Draft Recycled Water Feasibility Study for public comment.

BACKGROUND

Kevin Kennedy, AECOM, will be present to review the Draft Recycled Water Feasibility Study (Study). Recall, this Study is funded by a grant from the Bureau of Reclamation, under their Water Efficiency Program.

The purpose of the study is to evaluate and compare potential alternatives for expanding the District's existing recycled water program and determine whether expansion of the existing recycled water program is cost-effective when compared to the "No Project" alternative.

Specific goals associated with the Study are to:

- Identify a phased approach to expand the existing recycled water system to serve future residential developments and irrigation of existing parks, roadways medians and commercial landscaping,
- Identify the specific improvements required for the expansion of the existing recycled water system;
- Develop an implementable and regulatory compliant solution for long-term disposal of the District's treated effluent,
- Use recycled water as a means to offset potable water for residential and commercial landscape irrigation

The format of the study, while it may seem unwieldy and confusing, follows study guidelines from the grant award requirements.

Kevin's presentation will review the results, outline the anticipated facilities, explain the basis and estimates of costs as well as cost reduction alternatives and outreach to the development community.

Final approval of the Study will occur at the July Board meeting.

Submitted to
Rancho Murieta Community Services District
15160 Jackson Highway
Rancho Murieta, CA 95683

Submitted by
AECOM
2020 L Street
Sacramento, CA 95811

March 2013

Draft

Title XVI Recycled Water Feasibility Study

Rancho Murieta Community Services District

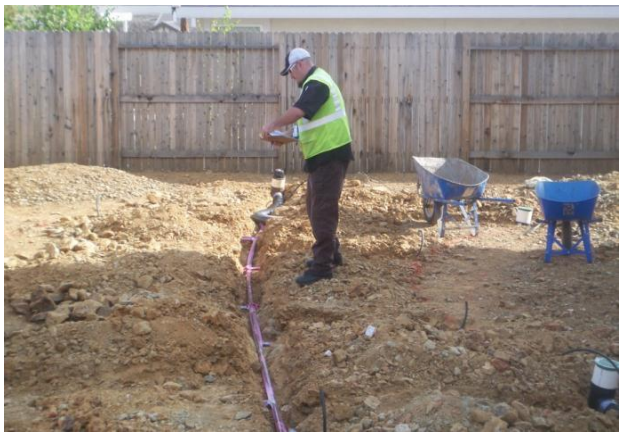


Table of Contents

Executive Summary **ES-1**
1 Introduction **1-1**

1.1 Study Purpose and Goals 1-1
1.2 District Service Area and Study Area Boundaries 1-1
1.3 Project Sponsors 1-1
1.4 Report Organization 1-2

2 Problems and Needs **2-1**

2.1 Key Water Management Problems 2-1

2.1.1 Local Benefits 2-1
2.1.2 Regional Surface and Ground Water Benefits 2-1
2.1.3 Statewide Benefits 2-1

2.2 Water Supplies 2-2

2.2.1 Surface Water Diversions 2-2
2.2.2 Recycled Water 2-3

2.3 Current and Projected Water Demands 2-3
2.4 Potable Water Treatment Improvements 2-6
2.5 Wastewater Treatment and Disposal Improvements 2-6

3 Recycled Water Opportunities **3-1**

3.1 Potential Recycled Water Uses 3-1

3.1.1 Wastewater Facilities Expansion and Financing Plan 3-1
3.1.2 Integrated Water Master Plan and Integrated Water Master Plan Update 3-1
3.1.3 Recycled Water Feasibility Study 3-2
3.1.4 Direct and Indirect Potable Reuse 3-2
3.1.5 Comparison of Alternatives and Recommended Course of Action 3-3

3.2 Implementation Considerations and District's Recycled Water Policy 3-4
3.3 Water, Wastewater, and Recycled Water Jurisdiction 3-5
3.4 Source of Water To Be Recycled 3-5
3.5 Recycled Water Uses and Associated Water Quality and Treatment Requirements 3-7

3.5.1 Existing Wastewater Treatment and Recycled Water Systems 3-7

4 Description of Alternatives **4-1**

4.1 Upgrading Existing Pastureland Irrigation System (Alternative 1) 4-1
4.2 Expanding Recycled Water Program to Serve Future Residential Irrigation (Alternative 2) 4-2
4.3 Treatment and Disposal Water Quality Requirements 4-4
4.4 Alternative Measures or Technologies 4-5

5 Economic Analyses **5-1**

5.1 Comparison of Capital Costs to Serve Individual Developments 5-1
5.2 Comparison of Alternatives 1 and 2 5-4

6 Recommended Improvements and Implementation Plan **6-1**

6.1 Phasing of Recommended Facilities and Implementation Schedule 6-1

6.1.1 Phase 1 Improvements 6-1
6.1.2 Phase 2 Improvements 6-5
6.2 Facility Planning 6-5
6.3 Environmental Compliance and Permitting 6-6
6.4 Coordination with Ongoing Projects and Programs 6-6
6.5 Financing 6-6
6.6 Stakeholder Outreach 6-6
6.7 Implementation Schedule 6-7
7 Environmental Considerations and Potential Side Effects 7-1
7.1 Potential Environmental Effects 7-1
7.1.1 Project Construction 7-1
7.1.2 Project Operation 7-1
7.2 Environmental Review Status and Requirements 7-1
7.3 Public Health and Safety 7-2
7.4 Regional Water Supply and Water Quality 7-2
7.5 Public Involvement 7-2
7.6 Historical Properties 7-3
8 Legal and Institutional Requirements 8-1
8.1 Water Rights 8-1
8.2 Regulatory Requirements 8-1
8.2.1 Title 22 California Code of Regulations 8-2
8.2.2 California Water Code 8-2
8.2.3 Permits and Administrative Provisions 8-2
8.3 Interagency Agreements 8-3
9 Financial Capability of Sponsor 9-1
9.1 Project Implementation Schedule 9-1
9.2 District's Willingness to Pay 9-1
9.3 Project Funding Plan 9-1
10 Research Needs 10-1

List of Tables

Table ES-1. Summary of Required Facility for Recommended Alternative ES-2
Table ES-2. Project Implementation Schedule ES-3
Table 2-1. Existing and Projected Number of Connections at Buildout 2-5
Table 2-2. Current and Projected Water Demands 2-5
Table 4-1. Estimate of Probable Construction and Project Costs for Alternative 1 4-2
Table 4-2. Estimate of Probable Construction and Project Costs for Alternative 2 4-4
Table 5-1. Projected Recycled Water Demands 5-3
Table 5-2. Economic Comparison of Alternatives 1 and 2 5-4
Table 6-1. Summary of Required Facilities for Recommended Plan 6-1
Table 6-2. Project Implementation Schedule 6-3

List of Figures

Figure 1-1. District Service Area and Study Area Boundary....1-3
Figure 2-1. Future Phase 1 and 2 Developments....2-4
Figure 3-1. Existing Recycled Water Conveyance System and Use Areas....3-6
Figure 4-1. Proposed Recycled Water System Expansion (Alternative 2)....4-3
Figure 6-1. Recommended Improvements....6-2

Appendices

Appendix A. District Recycled Water Policy
Appendix B. Cost Estimates and Economic Analyses
Appendix C. General Manager Letter Regarding District Commitment

List of Acronyms

AF	Acre-ft
AFY	Acre-ft per year
Basin Plan	San Joaquin River Basins, Fourth Edition
Board	Rancho Murieta Community Services District Board of Directors
BMP	Best Management Plan
CCR	California Code of Regulations
CDPH	California Department of Public Health
Central Basin	Central Sacramento County Groundwater Basin
CEQA	California Environmental Quality Act
cfs	Cubic feet per second
Delta	Sancramento-San Joaquin Delta
District	Rancho Murieta Community Services District
DPR	Direct potable reuse
EIR	Environmental Impact Report
fps	Feet per second
IPR	Indirect potable reuse
MGD	Million gallons per day
MRP	Master Reclamation Permit
NEPA	Nation Environemntal Policy Act
O&M	Operations and maintenance
Project	Recycled Water System Expansion Project
RWQCB	Regional Water Quality Control Board
Study	Title XVI Recycled Water Feasibility Study
Title 22	California Code of Regulations, Title 22, Chapter 3, Water Recycling Criteria
WDR	Waste Discharge Requirements or Waste Discharge Requirements Order No. 5-01-124
WRR	Water Reclamation Requirements
WWRP	Wastewater Relamation Plant

Executive Summary

This Executive Summary provides an overview of the Title XVI Recycled Water Feasibility Study (Study) and highlights the key findings and recommendations that are further detailed in this report. The purposes of the Study are to (1) determine which particular future residential developments are the most cost-effective for recycled water service, (2) determine whether expansion of the existing recycled water program is cost-effective when compared to the "No Project" alternative, and (3) develop a feasibility study that satisfies the provisions of Public Law 102-575 sections 1603(b) and 1604(c) so that additional Title XVI grant funding can be requested from the Bureau of Reclamation.

Potential Alternatives and Comparison Results

The following alternatives considered in this Study were:

- **Alternative 1 - Upgrading Existing Pastureland Irrigation System (Alternative 1):** This alternative represents the "No Project" alternative and reflects the reasonable and foreseeable actions to meet projected potable water and treated effluent disposal needs of the District's service area. This alternative assumes the existing recycled water program is not expanded beyond satisfying the irrigation demands of the two existing golf courses, the pastureland treated effluent disposal system is upgraded and expanded, and an additional 1.2 MGD of potable water treatment capacity is provided to serve future residential irrigation demand that, for Alternative 2, is satisfied with recycled water. The total estimated project and net present worth costs for this alternative are $24.0 and $24.4 million, respectively.

- **Alternative 2 – Expanding Recycled Water Program (Alternative 2):** This alternative assumes the expansion of the existing recycled water program to serve select future residential developments[1] and existing parks and commercial landscaping. The selected developments were identified by ranking the developments against one another with respect estimated service costs and selecting those deemed to be cost-effective. Service to these residential developments would be provided by expanding the existing North Golf Course Conveyance System through the addition of recycled water transmission mains and service pipelines, storage tanks, and booster pumping stations. The total estimated project and net present worth costs for this alternative are $22.8 and $20.3 million, respectively.

An economic analysis comparing net present worth costs of Alternatives 1 and 2 was developed. This analysis assumed a 20-year life cycle and a 6 percent discount rate and considered the timeline in which individual potable water, wastewater, and recycled water/treated effluent improvements are required to be in service to accommodate two development phases. Results indicate that expanding the District's recycled water program (Alternative 2) has a 26 percent lower net present worth cost and is therefore deemed to be more cost-effective than Alternative 1. In addition to lower cost, Alternative 2 would provide the following significant benefits:

- Reduce future Cosumnes River diversions, offset potable water demands by 370 acre-ft per year, and conserve surface water supplies,

- Help the District meet its 20x2020 Water Conservation Goals,

- Provide opportunities to serve other potential customers along the recycled water transmission pipeline alignment,

- Support regional water planning efforts,

- Providing a sustainable and long-term means for treated effluent disposal that is directly linked to strengthening the local economy,

[1] The recommended developments for recycled water service are Murieta Gardens, Retreats, Residences of Murieta Hills, Industrial / Commercial / Residential, Apartments, Esquela, Terrace, Highlands, and River Canyon.

- Increase water supply reliability,
- Reduce drought deficits and greenhouse gas emissions as well as the District's overall carbon footprint by minimizing potable water treatment requirements,
- Contribute to the statewide recycled water goals and demonstrate the District's willingness to manage its available resources in a responsible and progressive manner, and
- Contribute to the recovery of the Central Sacramento County Groundwater Basin and Sacramento-San Joaquin Delta and Cosumnes River ecosystems.

Alternative 2 was selected as the recommended alternative based on these significant benefits and the cost comparison results.

Recommended Improvements and Implementation Schedule

Improvements required for the recommended alternative are time-phased to correspond to development. Two phases have been established for the addition of facilities and implementation planning based on the occupancy timelines described by local developers. Individual improvements required for the recommended alternative are illustrated in Figure 6-1 and described in Chapter 6. A summary of the required facilities by phase is presented in Table ES-1. The recommended implementation schedule is presented in Table ES-2 and describes the timelines required for all activities associated with implementation.

The technical work completed for this Study provides the rational and framework for the recommended alternative and improvements. Preliminary locations of all new facilities are shown in Figure 6-1. Facility planning is required to develop a hydraulic model, optimize and finalize facility locations and alignments, refine design criteria and sizing, identify land requirements, and optimize, attempt to reduce, and update cost estimates. Following completion of facility planning, environmental and regulatory permitting efforts can commence as shown in Table ES-2.

Table ES-1. Summary of Required Facilities for Recommended Alternative

Facility / Improvement Description	Estimated Quantity	Estimate of Probable Project Costs ($)[a, b]
Phase 1, 2013 – 2015		
Disinfection Facilities Upgrade	195,000 gallons	1,300,000
North Golf Course Pump Station	2,110 gpm	1,700,000
Northwest Transmission Main	11,640 LF	3,530,000
Lookout Hill Tanks and Pump Station	400,000 gallons & 700 gpm	2,080,000
Retreats Service Main	1,725 LF	490,000
	Subtotal	**9,100,0000**
Phase 2, 2016 – 2019		
Seasonal Storage Expansion	240 AF	9,750,000
Industrial, Commercial, Residential	190 LF	220,000
Apartments Service Main	110 LF	210,000
Esquela Service Main	260 LF	80,000
North Conveyance System Extension	2,460 LF	520,000
Bass Lake Tanks and Pump Station	500,000 gallons & 1,040 gpm	2,900,000
	Subtotal	**13,680,0000**
	Grand Total	**22,780,000**

[a] Estimated project costs based upon ENR 20 City Average Construction Cost Index of 9437 (January 2013).
[b] Project costs include estimated construction costs and allowances for contingency, engineering, administration, and permitting.

Table ES-2. Project Implementation Schedule

Step	Lead Agency and Primary Participants	2012 M J J A S O N D	2013 J F M A M J J A S O N D	2014 J F M A M J J A S O N D	2015 J F M A M J J A S O N D	2016 - 2025 16 20 25	Desired Outcome
1 Title XVI Feasibility Study	RMCSD						Determine (1) which developments are the most cost-effective to serve recycled water with respect to one another and (2) which alternative is most cost-effective (No Project or Expanded Recycled Water Program). Identify phased approach and infrastructure improvements to cost effectively serve existing commercial, park, and open space as well as future residential (dual plumbed) and commercial customers.
2 System Design Standards	RMCSD						Develop recycled water standards to serve future commercial and residential customers. Standards will serve as the basis for (1) preparing construction cost estimates and (2) communicating minimum recycled water system requirements to serve future developments and existing commercial areas.
3 Detailed Project Description / Facility Planning	RMCSD						Incorporate commercial irrigation areas, prepare hydraulic model, refine key aspects, and implement methods to reduce project costs for the proposed recycled water system. Project description to serve as the starting point for the CEQA and NEPA compliance effort as well as the Title 22 Engineering Report and Updated WDR.
4 Agency Coordination	RMCSD and RMCC						Identify roles and responsibilities for program participants as described by Title 22 (e.g., Producers, Distributors, and Users) and coordinate use of common infrastructure (e.g., recycled water conveyance systems, North Golf Course Pumping Station, etc.). Identify scheduling/timing constraints and key metrics (e.g., what constitutes success) for each participant. Conduct coordination meetings with Regional Board and CPDH to keep them informed and obtain feedback.
5 Regulatory Permitting							
5a Intended Use of Van Vleck Spray Field	RMCSD and Van Vleck Ranch						Submit a letter to the Regional Board describing the District's intended long-term use of the Van Vleck spray field to satisfy Article F. 12 of WDR R5-2009-0124. COMPLETED
5b CEQA and NEPA Compliance	RMCSD						Analyze potential environmental impacts associated with the implementation of the expanded recycled water program; satisfy CEQA and NEPA (if federal funding obtained) review requirements. Estimated cost is based on preparing initial study/mitigated negative declaration (CEQA) and environmental assessment/FONSI (NEPA).
5c Title 22 Engineering Report Preparation	RMCSD and RMCC						Prepare Title 22 Engineering Report. Recycled water use areas to include existing golf courses, commercial, parks, open space, Van Vleck spray fields, and future residential (dual plumbed) and commercial customers.
5d MRP and Updated WDR Application	RMCSD and RMCC						Complete Form 200 and prepare Report of Waste Discharge requesting the Regional Board's preparation of a Master Reclamation Permit (MRP) and Updated Waste Discharge Requirements (WDRs).
5e Salt and Nutrient Management Plan	RMCSD and RMCC						Prepare salt and nutrient management plan and antidegradation analysis specific to the expanded recycled water program.
5f Title 22 Engineering Report Review and Approval	RMCSD and RMCC						Submit Title 22 Engineering Report (completed in Step 5c) to CDPH and Regional Board for review and approval.
5g Updated WDR Review, MRP Negotiations and Adoption	RMCSD and RMCC						Submit Form 200 and Report of Waste Discharge (completed in Step 5d) to the Regional Board. Negotiate updated Waste Discharge Requirements (WDRs), Master Reclamation Permit (MRP), and monitoring requirements with Regional Board and CDPH staff.
6 Improvements to Existing Infrastructure							
6a Chlorine Contact Basin	RMCSD						Existing WWRP chlorine contact disinfection facilities has a rated capacity of 2.3 MGD, which is less than the 3.0 MGD capacity provided by the tertiary treatment facilities and required by the future recycled water system. Efforts associated with this task are based on planning, design, and construction a 195,000 gallon contact basin within the existing equalization basin.
6b Seasonal Storage Expansion	RMCSD						Install 240 acre-ft (AF) of additional seasonal storage capacity within the WWRP site. Efforts associated with this task are based on planning, design, and construction of new 240 AF storage, conveyance pipeline, and pumping facilities.
7* Detailed Design (Phase 1 RW Program)	RMCSD						Prepare preliminary design report and final hydraulic model, 60, 90, and bid documents (design drawings and specifications) of the proposed recycled water system infrastructure.
8* Bid and Award (Phase 1 RW Program)	RMCSD						Respond to questions from potential bidders, conduct pre-bid meeting, prepare addenda, evaluate bids, and recommend award.
9* Construction (Phase 1 RW Program)	RMCSD						Construct recycled water system expansion and administer contract for the installation of system infrastructure, provide construction management oversight / inspection, respond to contractor requests for information, prepare necessary change orders, review contractor submittals, and participate in construction meetings. Improvements to be limited to those needed to serve Phase 1 development (e.g., 670 Group).
10* Startup (Phase 1 RW Program)	RMCSD and RMCC						Verify that recycled water system operates and performs as designed; modify system to further enhance and optimize system operation and performance.
11 RMCSD Management and Administration							
11a Appoint Recycled Water Program Manager	RMCSD						Hire recycled water program manager. Specific duties to include pre-qualifying landscape designers and construction contractors, regulatory compliance, stakeholder interaction, and recycled water accounting.
11b Operations and Maintenance Plan	RMCSD						Develop operation and irrigation management plans pertaining to the expanded recycled water system.
11c Landscape Designers and Contractors	RMCSD						Compile a list of companies authorized to design and work on residential recycled water systems. Authorized companies shall have attended training (Step 11d) and shall be familiar with system design standards (Step 2) and other pertinent recycled water regulatory requirements.
11d Training (Orientation and Education) Program	RMCSD						Develop and conduct workshops. Target audience is future homeowners and landscape designers and contractors. Workshop content to include description of recycled water standards (Step 2), need to hire authorized companies (Step 11c), and the preparation of recycled water plans.
11e Inspection and Testing Program	RMCSD						Develop program to verify compliance with recycled water standards and regulatory requirements.
12 Public Outreach	RMCSD						Manage information and promote understanding and communication with key stakeholder groups, demonstrate organizational commitment, promote communication and public dialog, ensure fair and sound decision making, and build and maintain trust.
13 Expand RW System to Serve Phase 2 Development	RMCSD						Plan, permit, design, and construction recycled water system to serve expanded recycled water service area associated with Phase 2 developments.

Development of Deliverables
Ongoing Efforts Not Associated with Specific Deadlines or Milestones
Draft Deliverables
Final Deliverables

Footnotes

* Dates shown in this table are considered preliminary estimates and are based on Phase 1 and 2 development occupancy timeframes of 2016 and 2020, respectively. Actual timeframes will depend on actual residential and commercial development timeframes.

1 Introduction

This chapter describes the purpose of the Rancho Murieta Community Services District's (District's) Title XVI Feasibility Study (Study), general characteristics of the Study Area, Project sponsors, and report organization.

1.1 Study Purpose and Goals

The purpose of the Study is to evaluate and compare potential alternatives for expanding the District's existing recycled water program and determine whether the expansion is cost effective compared to the "No Project" alternative. In addition, this Study describes the physical features and associated construction and project costs associated with the expanded recycled water program and "No Project" alternatives as well as environmental considerations and legal and institutional requirements associated with the recommended project. Specific goals associated with the Study are to:

- Identify a phased approach to expand the existing recycled water system to serve future residential developments and irrigation of existing parks, roadway medians, and commercial landscaping,
- Identify the specific improvements required for the expansion of the existing recycled water system,
- Develop an implementable and regulatory compliant solution for long-term disposal of the District's treated effluent,
- Use recycled water as a means to offset future potable water demands and indirectly contribute to tributary stream flows and restoring groundwater levels, and
- Maximize the beneficial uses of the District's water resources.

1.2 District Service Area and Study Area Boundaries

The District was formed in 1982 to provide water supply collection, treatment, and distribution; wastewater collection, treatment, and reuse; as well as storm drainage collection, disposal and flood control services for the community of Rancho Murieta. This community is located 20 miles east of Sacramento on State Highway 16. The area served by the District, which is also defined as the Study Area, is illustrated in Figure 1-1 and encompasses approximately 3,500 acres. Land uses within this service area include approximately 2,000 acres for single family residences, townhouses, apartments, duplexes and mobile homes. The District currently serves 2,604 connections comprised of 2,502 residential, 97 commercial, and 5 park connections. According to Sacramento County's approved Planned Unit Development Plan, the development of the District's service area represents a potential for roughly 5,189 residential units at buildout.

The District's potable water supply consists of seasonal diversions from the Cosumnes River to three off-stream storage reservoirs (Calero, Chesbro, and Clementia). The Cosumnes River flows into southern Sacramento County, joining the Mokelumne River in San Joaquin County and emptying into the Sacramento-San Joaquin Delta. In addition to providing surface water supply, the Cosumnes River helps to recharge the Central Sacramento County Groundwater Basin (Central Basin).

The District's Wastewater Reclamation Plant (WWRP) and the majority of the recycled water alternatives considered in this Study are located within the District's service area, except for the "No Project" alternative which is located immediately south of the Study Area and is comprised of irrigation of pasturelands and other unimproved areas.

1.3 Project Sponsors

The non-federal sponsor is defined as being the entity, or entities, that construct, own, operate, and maintain all or a portion of the recommended project to be funded in part by a Title XVI grant. The non-federal sponsor of the proposed Recycled Water System Expansion Project (Project)[2] is the District.

[2] See Chapter 4 for a description of the proposed Recycled Water System Expansion Project.

1.4 Report Organization

In general, this report is organized in accordance with the feasibility report outline described in the *Guidelines for Preparing, Reviewing, and Processing Water Reclamation and Reuse Project Proposals Under Title XVI of Public Law 102-575*.

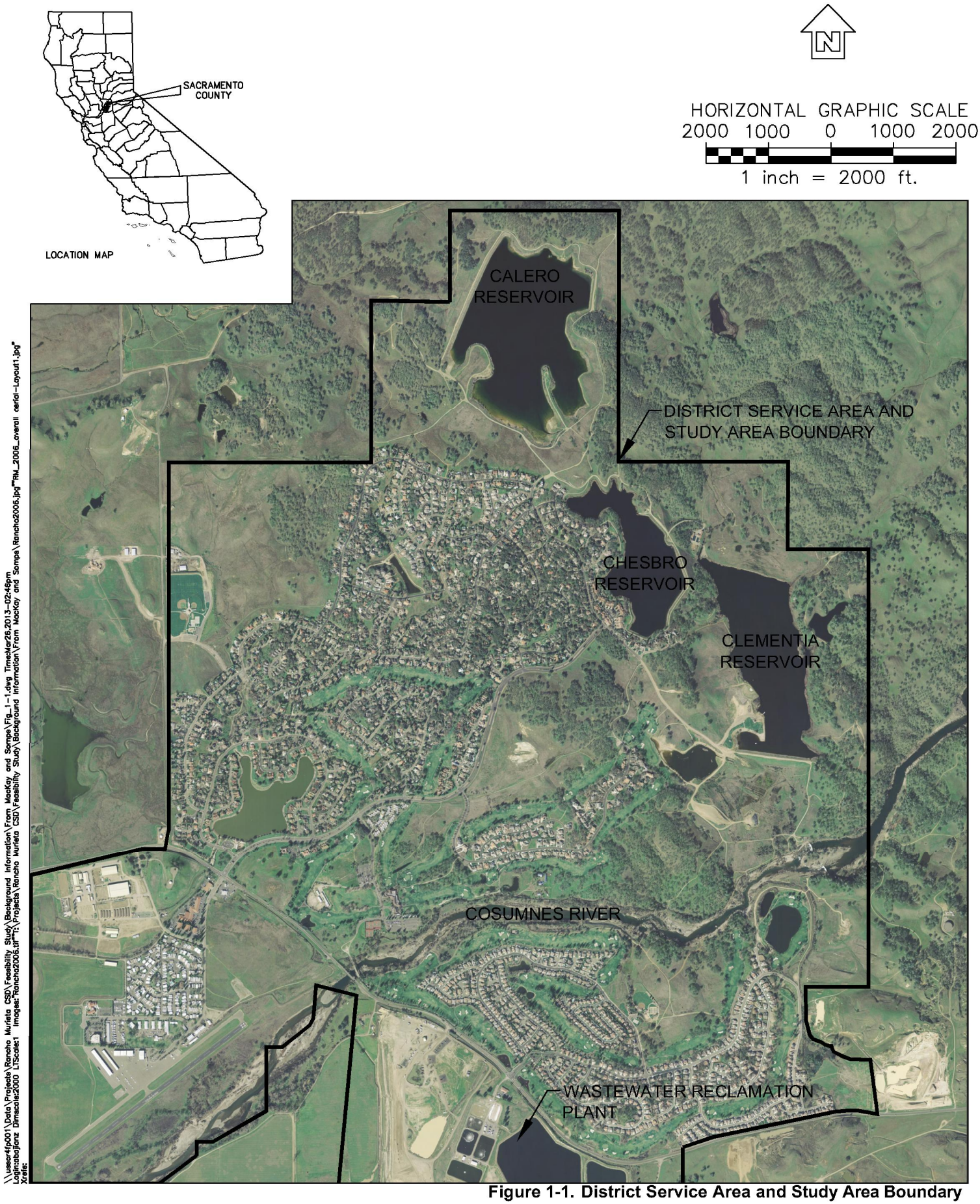


Figure 1-1. District Service Area and Study Area Boundary
Title XVI Recycled Water Feasibility Study

2 Problems and Needs

This chapter describes key water management problems, the benefits associated with the expansion of District's recycled water program, along with Study Area near- and long-term water demands and supplies and treated effluent disposal options.

2.1 Key Water Management Problems

According to the *2009 Water Plan Update*, California is facing one of the most significant water crises in its history. To overcome this crisis, there is a need to follow the principles of integrated water management to provide local, regional, and statewide benefits and to use water more efficiently, improve water quality and reliability, and integrate environmental stewardship into the various aspects of how we collectively manage our water resources. As described below, the Project proposed by the District addresses these needs and will illustrate to others how the expanded use of recycled water can contribute to resolving California's water crisis.

2.1.1 Local Benefits

The District initiated an integrated water master plan in 2005 to address potential drought deficits, improve storage reservoir aesthetics, and identify methods to encourage reductions in residential potable water demands. The plan was subsequently updated in 2010 to address changes in state legislation regarding water use targets and greenhouse gas emissions, federal and state guidance regarding recycled water use, and water supply reliability risks associated with climate change. The primary outcome of these studies was the recognition of the benefits (e.g., reduced costs and drought deficits,[3] environmental benefits, and improved storage reservoir aesthetics) recycled water could provide when used to offset potable water demands within the community as opposed to irrigation of agricultural lands located outside of the District's service area.

2.1.2 Regional Surface and Ground Water Benefits

The Cosumnes River watershed is located within the Sacramento-San Joaquin Basin. This particular watershed has been a major focus of conservation efforts and has been identified as a priority for ecosystem protection and restoration by the California Bay-Delta Authority (formerly CALFED), the USFWS Anadromous Fish Recovery Program, and the Sacramento County (as part of the Sacramento County General Plan). The Cosumnes River channel and its associated floodplain are major sources of recharge for the Central Basin. The Central Basin has experienced declining groundwater levels which have adversely affected the river's fishery, (e.g., salmon), wildlife, recreational, and aesthetic values.

Although the Cosumnes River can be considered relatively small with respect to its length (approximately 80 miles) and watershed area (approximately 1,265 square miles), it is far more important than its size would indicate given that:

- This particular river is the only remaining unregulated river (e.g., no major dams) on the western slope of the Sierra Nevada Mountain Range which allows frequent and regular winter and spring over bank flooding which fosters the growth of native riparian vegetation and helps to sustain wildlife dependent on these riparian habitats.
- This particular river flows through and supports one of the biologically richest regions in California's Central Valley before merging with the Mokelumne River, and
- This particular river recharges the Central Basin and contributes a significant amount of water to the Sacramento-San Joaquin Delta (Delta).

It is estimated that the proposed Project will reduce annual Cosumnes River diversions by approximately 450 acre-foot per year (AFY) under both normal and drought conditions.

2.1.3 Statewide Benefits

The Delta faces multiple challenges related to ecosystem health, water quality, climate change, and water supply reliability. In late 2008, the Governor of California proposed a comprehensive water plan to address long-term water supply needs. The

[3] See Section 2.3 for drought deficit estimations.

Project is directly and consistently aligned with the actions needed to (1) deal with California's dwindling water supply, (2) aggressively promote water programs that stretch California's available potable water supplies, and (3) contribute to the long-term recovery of the Central Basin and Delta and Cosumnes River ecosystems.

The Water Control Plan for the Sacramento River and the San Joaquin River Basins, Fourth Edition (Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin and incorporates plans and policies adopted by the State Water Resources Control Board. The Basin Plan encourages water recycling as a means to conserve and reduce demands on ground and surface water supplies; postpone, or eliminate costly investments for the development of new sources of water supply; enhance water supply reliability during drought; and reduce or eliminate treated effluent surface water discharges.

The District's proposed recycled water system expansion would:

- Reduce future Cosumnes River diversions,
- Offset potable water demands by approximately 370 AFY and conserve surface water supplies,
- Help the District meet the 20x2020 Water Conservation Goals,
- Provide opportunities to serve other potential users along the recycled water transmission pipeline alignment,
- Support regional water planning efforts,
- Provide a sustainable and long-term means for treated effluent disposal that is directly linked to strengthening the local economy,
- Increase water supply reliability and reduce drought deficits,
- Reduce greenhouse gas emissions as well as the District's overall carbon footprint due to reduced potable water diversions and treatment requirements,
- Contribute to the statewide recycled water goals and demonstrates the District's willingness to manage its available resources in a responsible and progressive manner, and
- Contribute to the recovery of the Central Basin and Delta and Cosumnes River ecosystems.

2.2 Water Supplies

The District's water supplies consist of surface water diverted from the Cosumnes River and recycled water as described below.

2.2.1 Surface Water Diversions

The District's potable water supply consists of seasonal diversions from the Cosumnes River that are normally diverted to and stored in three surface storage reservoirs (Calero, Chesbro, and Clementia – see Figure 1-1). These three reservoirs have an estimated total combined storage volume of 5,132 acre-foot (AF) with flashboards, of which 4,732 AF is considered to be usable for domestic and commercial potable water purposes. The District's water rights permit, 16762, includes the following stipulations:

a. Surface water can be diverted from the Cosumnes River into the District's storage reservoirs between November 1 and May 31. This diversion season coincides with the critical fall period as well as the period in which over bank flooding is most likely to occur.

b. Diversions are limited as follows:

   i. No water may be diverted when river flows are less than 70 cubic feet per second (cfs).

   ii. For river flows between 70 and 175 cfs, a maximum diversion rate of 6 cfs is allowed provided this diversion does not reduce downstream flow below 70 cfs,

   iii. When river flows exceed 175 cfs, diversion of up to 46 cfs is allowed for direct use plus an additional 3,900 acre-ft (AF) for storage as follows:

      1) 1,250 AF to Chesbro Reservoir.

      2) 2,610 AF to Calero Reservoir.

3) 850 AF to Clementia Reservoir.
4) 40 AF to South Golf Course Lake 10.

iv. The combined amount of items 2, 3, and 4 cannot exceed 2,650 AFY.

v. The total amount of water taken from the Cosumnes River cannot exceed 6,368 AFY from October 1 to September 30.

Water right permit 16762 was issued in 1969 and amended in 1980. In 2001, the permit was renewed and extended with no new permit requirements through 2020 in consideration that the community was not at full buildout. Given California's current economic circumstances, it now appears likely that in 2020 the community will not have reached buildout and the permit will need to be extended again.

In 1976 and 1977, California experienced the driest single year drought span on record. This drought also represented the driest three year sequence drought event (1976, 1977, and 1978). The California Water Code in Section 10632 (a) mandates planning for water suppliers with more than 3,000 connections, or 3,000 acre-ft, served to use the single worst year in historical record and the driest three year sequence. Given that the District has nearly reached 3,000 connections,[4] the District has decided to follow the above described state mandate planning criteria (e.g., single worst year and driest three year sequence for drought planning purposes).

2.2.2 Recycled Water

The District owns and operates the Rancho Murieta Wastewater Reclamation Plant (WWRP) which provides wastewater treatment and disposal/recycled water services for the entire Study Area. Raw wastewater sources are residential homes and commercial facilities such as stores and restaurants which serve the community. There are no industrial dischargers in the Study Area.

The WWRP consists of a secondary wastewater treatment facility and a tertiary treatment plant. Wastewater undergoing secondary treatment is stored in two storage reservoirs before undergoing tertiary treatment during the dry season. The tertiary treatment facilities consist of two dissolved air flotation units, two rapid sand filters, a chlorine contact chamber and pipeline, and concrete lined equalization basin. The tertiary treatment plant produces treated effluent meeting Title 22 requirements for *Disinfected Tertiary Recycled Water*.

The tertiary treatment plant is generally operated each year from April through November. During the winter, secondary treated effluent is stored in the WWRP's two storage reservoirs which have a total capacity of 756 AF. After undergoing tertiary treatment, recycled water is pumped to the two golf courses located within the Study Area, stored in five reservoirs situated around the golf courses, and subsequently used for golf course irrigation throughout the dry season. Depending on demands, recycled water may be supplemented with raw water from the Cosumnes River. At buildout, all water used for golf irrigation will be recycled water. Currently, annual recycled water production is about 455 AFY. Based on historic irrigation demands, the golf courses require approximately 550 AFY of water based on average levels of precipitation (i.e. approximately 23 inches of rainfall per year).

2.3 Current and Projected Water Demands

Figure 2-1 shows the future developments planned within the District's Service Area and Table 2-1 shows the estimated number of residential, commercial, and park connections associated with current, infill, and future developments. As shown in Figure 2-1 and Table 2-1, the District anticipates two development phases; the first (Phase 1) is comprised of the 670 units which have been approved for development by Sacramento County. The second development phase (Phase 2) represents the addition of approximately 1,200 units. The exact timing of the Phase 1 development is dependent upon the local economy. However, for planning purposes, it has been assumed, based on discussions with District staff and the local developers, that occupancy of the Phase 1 residential developments will begin in 2016 and will extend through 2019. It is anticipated that occupancy of second development phase (Phase 2) will be initiated when the majority of the Phase 1 residential units have been occupied. Therefore, occupancy of the Phase 2 residential developments is assumed to begin in 2020 and extend through 2026.

Table 2-2 presents a summary of potable water supply sources and current and projected water demands for normal and drought conditions. These estimates were obtained from the District's Integrated Water Master Plan Update (October 2010)

[4] The District will exceed the State's applicable criteria when the additional 670 units already approved by Sacramento County are constructed.

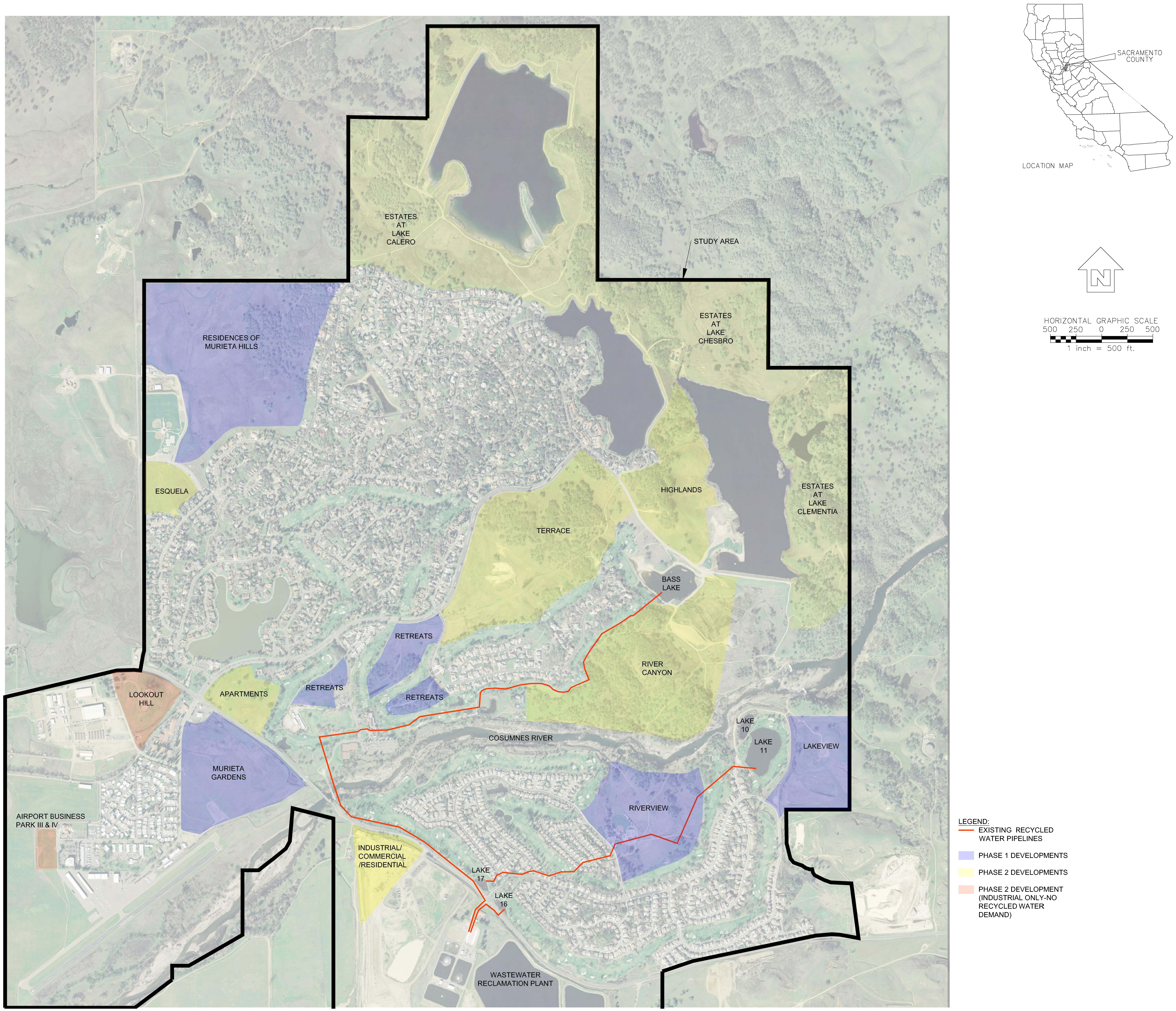


Figure 2-1. Future Phase 1 and 2 Developments
Title XVI Recycled Water Feasibility Study

and are associated with the level of development shown in Figure 2-1. Water supply estimates account for system losses, direct rainfall and runoff, reservoir evaporation and seepage losses, compliance with California's Water Conservation Act (Senate Bill X7-7), and the District's mandatory drought water rationing measures.

Table 2-1. Existing and Projected Number of Connections at Buildout

Condition/Development Phase	Residential Units	Commercial Units	Parks	Total
Current Conditions	**2,502**	**97**	**5**	**2,604**
Infill	**44**			**44**
Phase 1 Development	**620**	**50**	**1**	**671**
Lakeview	99			
Murieta Gardens	99	50	1	
Residences of Murieta Hills	198			
Retreats	84			
Riverview	140			
Phase 2 Development	**1,028**		**1**	**1,029**
Apartments	170			
Esquela	40		1	
Estates of Calero	139			
Estates of Chesbro	78			
Estates of Clementia	94			
Highlands	110			
Industrial/Commercial/Residential	100			
River Canyon	120			
Terrace	177			
Total	**4,194**	**147**	**7**	**4,348**

Table 2-2. Current and Projected Water Demands

Sources of Supply	Current Conditions (AFY)		Future (Buildout) Conditions (AFY)	
	Normal Supply	Drought Supply	Normal Supply	Drought Supply
River Diversion (Potable Supply)	6,370	1,680	6,370	1,680
River Diversion (Golf Course)	95	95	0	0
Recycled Water[a]	455	455	920	920
Total Firm Supply	**6,920**	**2,230**	**7,290**	**2,600**
Conservation Savings (SB7 Compliance)	0	0	910	910
Voluntary/Mandatory Rationing	0	0	0	1,320
Total Planned Supply	**6,920**	**2,230**	**8,200**	**4,830**
Water Demands				
Residential and Non-Residential	1,905	1,905	3,660	3,660
Unaccounted for Water	715	715	890	890
Golf Course	550	465[b]	550	465[b]
Total Estimated Demand	**3,170**	**3,085**	**5,100**	**5,015**

[a] Assumes the beneficial reuse (e.g., potable water offset) of the District's treated effluent/recycled water.

[b] Golf course irrigation practices will be modified during extreme dry years to reduce demands by 15 to18 percent as described in the *Delivery and Use of Recycled Water at the Rancho Murieta Country Club* (May 2010).

Comparison of the planned supplies and demands indicate that the District has adequate water supplies to meet projected demands under all conditions except for future drought conditions. Under this particular condition and assuming that the

Project was implemented, it is estimated that a 185 AFY deficit would occur. If the District decides to implement the No Project Alternative (as described in Chapter 4) the estimated drought deficit would increase to 635 AFY.

2.4 Potable Water Treatment Improvements

The District's first water treatment plant (Plant 1) was constructed in 1975. Plant components and processes include a drum screen, flash mixing, flocculation and sedimentation, traveling bridge filtration, chlorine disinfection, and booster pumps. The second water treatment plant (Plant 2) was constructed in 1988 and has similar components and processes as Plant 1.

In 1995, both Plants 1 and 2 were retrofitted to meet the Surface Water Treatment Rule. Since then, the plants have generally operated well and provide approximately 3.2 MGD of total combined capacity. According to the District's Annual Water Report to the California Department of Public Health, the maximum day demand in 2009 was estimated to be 3.4 MGD. However, since that time, demands appear to have been reduced due to the economic downturn and water conservation programs initiated by the District.

The District recently initiated the use of polyaluminium chloride to address taste and odor concerns. Prior to this recent change, there have been no concerns regarding the quality of water currently produced at either of the water treatment plants. However, to ensure adequate potable water supply for development, the District will initiate the Phase 3 Water Treatment Plant Expansion Project. Components associated with this project include raw water improvements and expanding the capacity of Plant 1.

It is anticipated that a Plant 2 expansion project (the Phase 4 Water Treatment Plant Expansion Project) will be required further in the future to serve development. It has been estimated that once these improvement projects are completed, the firm capacity of the District's water system will be on the order of 7.0 million gallons per day (MGD). However, if the proposed Project (e.g., expanded recycled water use for residential front and backyard irrigation) was to be implemented, the amount of capacity associated with the later improvement project could be reduced by 1.2 MGD. This estimated reduction in WTP capacity is based on historic 2009, 2010, and 2011 golf course irrigation demands. During these years, the average peak month irrigation demand was equal to 31 percent of the total annual recycled water demand.

2.5 Wastewater Treatment and Disposal Improvements

The wastewater treatment and disposal improvements listed below are required to accommodate growth within the community. As described later in Chapter 3, the majority of these improvements and their associated costs have been described in previous studies and reports. Where deemed appropriate, these descriptions served as the basis for developing the most plausible methods for upgrading the existing pastureland irrigation system (Alternative 1 as described in Chapter 4) and expanding the existing recycled water program (Alternative 2 as described in Chapter 4). However as part of this Study, each improvement and their associated costs was adjusted to reflect (1) the key design criteria described in this Study, (2) similar operating and performance requirements such as reliability, redundancy, and regulatory compliance, and (3) appropriate costs associated with administrative, engineering, and regulatory and environmental compliance. Attempts to minimize or optimize the costs associated with Alternatives 1 or 2 have not been conducted as part of this Study so that the two alternatives can be compared to one another with respect to a common level of service. Moreover, the minimization or optimization of costs is beyond the scope of this Study. It is anticipated that a detailed review of each improvement, which shall include cost minimization/optimization, associated with the recommended alternative will be conducted as part of a later effort.

- **Disinfection Facilities Upgrade:** The existing chlorine contact disinfection facilities have a rated capacity of 2.3 MGD, which is less than the rated capacity of 3.0 MGD provided by the other secondary and tertiary treatment processes within the WWRP. To address this issue, the District will be initiating an upgrade to their disinfection facilities by adding 195,000 gallons of chlorine contact basin capacity to increase its rated capacity to 3.0 MGD. This specific improvement will be made by installing concrete walls within the existing equalization basin.

  The timing of this upgrade project is dependent upon development. However, the assumed timing for Phase 1 and 2 developments requires this project to be initiated in late 2014 and completed by the end of 2015. Estimated construction and project (capital) costs associated with this particular upgrade are $930,000 and $1,300,000, respectively. Once the disinfection facilities upgrade project has been completed, the rated treatment capacity of the WWRP will be 3.0 MGD, which is adequate to accommodate the community through buildout.

- **Seasonal Storage Expansion:** Approximately 240 AF of additional seasonal storage capacity is required to accommodate projected growth within the community. However, the assumed timing for Phase 1 and 2 developments requires this project to be initiated in mid- to late-2018 and completed by the end of 2019 when average dry weather flows to the WWRP approach 0.67 MGD. Estimated construction and project costs associated with this expansion are $6,840,000 and $9,750,000, respectively. Costs associated with this particular improvement are based on locating this new storage facility in the southwest corner of the existing WWTP site.

- **Treated Effluent Disposal / Recycled Water Capacity Expansion:** Preliminary development estimates indicate that golf course irrigation will provide adequate treated effluent disposal capacity through the year 2017, when treated effluent production is expected to exceed 550 AFY. To provide additional treated effluent disposal capacity to serve future development, the District is considering the following two alternatives to provide additional treated effluent disposal capacity or expanded recycled water use:

  - **Upgrading Existing Pastureland Irrigation System:** In 2007, the District entered into a temporary agreement with a nearby land owner (Van Vleck Ranching and Resources, Inc.) to dispose of excess treated effluent. This excess effluent had accumulated in the secondary storage ponds over an extended period of time in which the WWRP's disinfection facilities had to be taken out of service for improvements. The land owner has expressed interest in continuing to receive recycled water deliveries indefinitely. Recycled water is currently supplied to the pastureland through a temporary aboveground piping network. In order for the District to implement this option long-term, the Central Valley Regional Water Quality Control Board has indicated that the District must (1) undergo a formal California Environmental Quality Act (CEQA) compliance and review process and (2) upgrade the existing piping network and pumping system to reflect Title 22 compliance and long-term use.

    Estimated construction and project costs associated with implementing the first of three improvement phases associated with this treated effluent disposal alternative are $3,290,000 and $4,280,000, respectively. The timing of this alternative is defined by the District's Waste Discharge Requirements Order No. R5-2009-0124, which allows use of the Van Vleck Ranch for a limited term through December 31, 2014.

    Approximately 150 acres of additional land disposal area are required to accommodate projected growth within the community. The timing of this expansion is dependent upon future growth rates. However, the assumed timing of Phase 1 and 2 developments requires this expansion to be initiated in mid- to late 2020 and completed by the end of 2021. Estimated construction and project costs associated with the second and third improvement phase are $5,740,000 and $7,460,000, respectively. More detailed descriptions of these improvements are presented in Section 4.

  - **Expansion of Existing Recycled Water Program to Serve Residential Homes:** This alternative assumes expansion of the District's existing recycled water program to serve future residential developments for front and backyard irrigation and irrigation of existing parks, roadway medians and commercial landscaping where deemed to be cost effective by the District. A more detailed description of this alternative and its estimated costs are provided in Chapters 4 and 5.

Regardless of which treatment effluent disposal / recycled water capacity expansion alternative is selected, both the disinfection facilities upgrade and seasonal storage expansion projects are required to accommodate projected growth within the Study Area.

3 Recycled Water Opportunities

This chapter describes the opportunities and sources for the expanded use of recycled water within the Study Area as well as a description of the existing recycled water program and the applied recycled water production technologies.

3.1 Potential Recycled Water Uses

The following projects were initiated by the District to identify and compare potential methods to dispose of treated effluent and/or use recycled water to serve future recycled water customers within the Service Area. Ultimately potential recycled water uses were identified through the execution of these separate but interrelated projects as described below.

3.1.1 Wastewater Facilities Expansion and Financing Plan[5]

This project was initiated in 2006 to identify the wastewater treatment, storage, and disposal improvements necessary to accommodate growth within the community through buildout. The following alternatives were identified and compared as part of the project:

- Spray field irrigation of nearby pasturelands
- Recycled water irrigation of new residential developments and parks
- Seasonal surface water discharge of excess treated effluent
- Connection (regionalization) to Sacramento Regional County Sanitation District

3.1.2 Integrated Water Master Plan[6] and Integrated Water Master Plan Update[7]

The Integrated Water Master Plan (IWMP) was initiated in 2005 to address the projected drought deficits, improve storage reservoir aesthetics, and identify methods to encourage reductions in residential potable water demands. A total of ten strategies/components were identified to alleviate drought deficits, including the following three which dealt specifically with treated effluent disposal/expanded recycled water use:

- Expand recycled water program to offset potable water demands based on serving existing and future urban demands (residential, commercial, parks, common area irrigation)
- Exchange treated effluent/recycled water for groundwater
- Recharge local aquifer with recycled water

Workshops, open to the public, were held as part of the project to review preliminary findings and results and to identify and describe potential components and strategies that could achieve the project goals.

The IWMP Update was completed in 2010 and addressed changes in state legislation regarding water use targets and greenhouse gas emissions, federal and state guidance regarding recycled water use, and water supply reliability risks associated with climate change. The primary outcome of these studies was the recognition of the benefits (e.g., reduced costs and environmental impacts and improved storage reservoir aesthetics) recycled water provided when used to offset potable water demands within the community as compared to irrigation of agricultural lands located outside of the District's service area.

[5] Completed July 2007
[6] Completed November 2006
[7] Completed October 2010

3.1.3 Recycled Water Feasibility Study[8]

The project was initiated in 2009 to identify future recycled water customers and provide the District and its Board of Directors (Board) with a better understanding of the specific steps necessary to expand the existing recycled water program. A total of four public workshops were conducted with the District's Board to present and discuss the recycled water program description, administrative structure, infrastructure standards and regulatory compliance, and program implementation.

The primary outcomes of this study were the determinations that:

- Retrofitting existing residential units to accommodate front and backyard recycled water irrigation would be cost prohibitive
- Some existing commercial and urban irrigation accounts located near the existing recycled water conveyance systems could be served cost-effectively
- At that time, the maximum potential commercial and urban recycled water irrigation demand was estimated at 140 AFY, which is considerably less than the demand needed to accommodate the District's long-term treated effluent disposal needs. Based on this finding, it was decided that the District's primary focus of the expanded recycled water system would be on serving future residential developments.

3.1.4 Direct and Indirect Potable Reuse

Water agencies have expressed interest in defining the guidelines and criteria needed to implement direct and indirect potable reuse due to increasing water scarcity, the limits of current conventional water supplies, and need for water agencies to maximize beneficial use of all available water resources. Although neither of these options is currently permissible at this time, the status of both direct and indirect potable reuse were reviewed as part of this Study to determine whether either of these options may represent a viable alternative for long-term effluent disposal in the future. For the purposes of this Study, direct potable reuse (DPR) is defined as the introduction of purified municipal wastewater into a water treatment plant intake or directly into the water distribution system. Indirect potable reuse (IPR) is defined as the planned incorporation of purified municipal wastewater into an environmental buffer (e.g., aquifer or storage reservoir) for a specified period of time before being withdrawn for subsequent potable water treatment and distribution purposes. In DPR, the purified municipal wastewater is not placed into an environmental buffer.

To address the increased interest expressed by water agencies, California's Governor signed Senate Bill 918 into law in September 2010. This bill requires the California Department of Public Health (CDPH):

- Adopt uniform water recycling criteria for IPR for groundwater recharge by the end of 2013. The bill also requires that if an expert panel convened pursuant to the bill finds that the criteria for surface water augmentation would adequately protect public health, criteria for surface water augmentation must be developed by the end of 2016.
- Investigate the feasibility of developing regulatory criteria for DPR and provide a final report on that investigation to the Legislature by the end of 2016.

Preliminary assessments of the IPR and DPR options indicate that the configuration of the District's existing raw water storage and recycled water conveyance systems could be modified for IPR via surface water augmentation cost-effectively and potentially eliminate the need for seasonal storage. Currently, there are no recycling criteria addressing IPR via surface water augmentation in which to determine water and/or wastewater treatment requirements. However, surface water augmentation has previously been addressed in *A Proposed Framework for Regulating the Indirect Potable Reuse of Advanced Treated Reclaimed Water by Surface Water Augmentation in California* (California Potable Reuse Committee, 1996). The committee that wrote the framework concluded that planned IPR of advanced treated recycled water via surface water augmentation would not adversely affect drinking water quality if the following conditions were met:

- Approved advanced wastewater treatment processes have been applied (e.g., oxidation process followed by reverse osmosis membrane treatment)
- All relevant water quality standards are achieved.

[8] Completed June 2009

- Advanced treated recycled water is retained in a storage reservoir for sufficient time before treatment in a water treatment plant.
- Downstream drinking water treatment operations will not be negatively impacted.
- There are multiple barriers for the removal of pathogens and toxic chemicals. The report states that source control of discharges into the wastewater collection system, conventional wastewater treatment, membrane treatment, disinfection, reservoir retention, and surface water treatment are effective physical and chemical barriers.

The authors of the 1996 report considered the following six criteria to be critical for IPR:

- Application of best available technology in advanced wastewater treatment with the treatment plant meeting operating criteria.
- Maintenance or appropriate retention times based on reservoir dynamics.
- Maintenance of advanced wastewater treatment plant operational reliability to consistently meet primary microbiological, chemical and physical drinking water standards.
- Surface water augmentation projects using advanced treated recycled water must comply with applicable State of California criteria for groundwater recharge for direct injection with recycled water.
- Maintenance of reservoir water quality.
- Provision for an effective source control program.

The second criterion listed above calls for a reservoir retention time. A required retention time to provide adequate response time to identify treatment failures and implement mitigation measures/actions and/or provide some level of additional treatment via an environmental buffer has not yet been specified by the CDPH. Thus, discharges of recycled water into a raw water reservoir for IPR will be influenced by a science-based regulatory decision regarding the minimum retention time determined by the CDPH. This decision is complicated by the realities of reservoir hydrodynamics, particularly short-circuiting during reservoir turnover. The City of San Diego is conducting studies that will provide information to be considered by the CDPH in these deliberations. There will likely be similar concerns that will need to be addressed for direct potable reuse to be considered as an acceptable means to supplement drinking water supplies.

CDPH has developed and released draft regulations for groundwater recharge using recycled water (Draft GWR Regulations; last updated in November 2011) which provide guidance in establishing permitting criteria for IPRs. In addition to compliance with drinking water standards, the Draft GWR Regulations establish additional requirements for IPR projects such as control of contaminants, treatment standards, and monitoring requirements. Of importance to the District with respect to IPR via surface water augmentation is the need to monitor chemicals of emerging concern (CECs) (which would increase routine monitoring costs) and the removal of pathogens. According to the Draft GWR Regulations, the wastewater treatment train must consist of at least three separate treatment processes and the wastewater used for recharge must receive treatment that achieves at least 12-log enteric virus reduction, 10-log *Giardia* cyst reduction, and 10-log *Cryptosporidium* oocyst reduction. Based on these removal requirements, a review of wastewater processes currently being considered by CDPH for groundwater recharge for direct injection with recycled water, and the treatment requirements descried in the Draft GWR Regulations, it appears likely that the existing WWRP would have to be modified to incorporate conventional activated sludge followed by tertiary filtration, microfiltration, reverse osmosis, and UV disinfection/advanced oxidation processes. Given the costs associated with these improvements, IPR does not appear to be cost-effective at this time. However, it is recommended that the District continue to monitor the regulatory and implementation status of both IPR and DPR to determine when, or if, this approach becomes economically attractive.

3.1.5 Comparison of Alternatives and Recommended Course of Action

For each of the studies listed above, potential treated effluent disposal/recycled water alternatives were compared with respect to economic and non-economic factors. Both seasonal surface water discharge and regionalization were eliminated from further consideration due to timing and economic factors. Specifically, the implementation of seasonal surface water discharge would have required the District to obtain a NPDES discharge permit, construct and fund the outfall and associated pumping

facility well ahead of development, and could result in the need to significantly modify the WWRP in the foreseeable future to meet more stringent discharge requirements. Regionalization was eliminated because costs were significantly higher than the other competing alternatives.

The use of recycled water for residential irrigation was selected by the District's Board as the preferred alternative and recommended course of action because of the following comparison results and perceived benefits:

- **Economic Comparison:** Preliminary conceptual level cost estimates indicate that expansion of the existing recycled water program to serve future development (residential, park, commercial landscape irrigation) and existing parks, roadway median, and commercial landscape areas are approximately equal to the costs associated with the other competing alternatives based on installing a new recycled water conveyance system.

  As part of this Study, the irrigation of relatively small land parcels, such as roadways medians and commercial landscaping areas was revisited. It was determined that serving these particular recycled water uses may not be cost-effective if (1) accurate as-build drawings of the existing irrigation system are unavailable and increased costs associated with complying with recycled water identification and cross-connection control requirements are anticipated, (2) significant alterations are required to the use area in order to reduce the potential for recycled water ponding and/or runoff and satisfy setback and/or irrigation system requirements, and (3) significant piping improvements are needed to serve recycled water to the irrigation area. Based upon these considerations, the recycled water system improvements described in Chapter 4 focused on serving future developments associated with new residential homes and the irrigation of existing roadway medians and commercial landscaping areas was not considered further in this Study. However, it is recommended that the District consider these and other existing areas for potential recycled water use on a case-by-case basis as part of the future facilities planning effort.

- **Water Rights Permit 16762:** Condition 26 of the District's primary water right promotes the use of recycled water for irrigation purposes.

- **Financial Benefits:** It is anticipated that Rancho Murieta residents will receive indirect financial benefits due to (1) reduced raw water diversion and potable water treatment operations and maintenance costs, (2) maximizing the use and life span of the WWRP, (3) being regulated by recycled water based waste discharge requirements which have been perceived as being more consistent than surface water discharge requirements over the past 10 to 15 years, and (4) the potential reduction in scope for the Phase 4 Water Treatment Plant Expansion Project.

- **Fish and Wildlife Benefits:** The expanded use of recycled water for residential irrigation results in decreased surface water diversions from the Cosumnes River and Delta and increased potential for recharge of the Central Basin. Other environmental benefits include decreased wastewater discharges and the associated potential risk of surface water degradation.

- **Reduced Fertilization Needs:** Recycling treated effluent for landscape irrigation results in the beneficial reuse of both the water and associated nutrients (i.e. nitrogen and phosphorus) for landscape fertilization. For example, at the projected irrigation rate of 2.95 ft/year, it is estimated that recycled water provides an equivalent nitrogen load of 4 to 6.5 lb-N/1,000 sf-year which is comparable to recommended fertilization rates of 4 lb N/1000 sf per application for established lawns.

- **Reduced Greenhouse Gas Emissions:** The wastewater will be treated to a specific water quality standard regardless of the chosen disposal method. However, decreased potable water production, and thus lower greenhouse gas emissions, is associated with the expansion of the existing recycled water program.

3.2 Implementation Considerations and District's Recycled Water Policy

Many recycled water projects do not move forward due to lack of public acceptance and relatively high costs. More specifically, the construction of advanced wastewater treatment facilities coupled with the installation of seasonal storage and separated potable and recycled water conveyance and distribution systems often make recycled water projects cost-prohibitive when compared to other potential sources of supply. The District has attempted to proactively address obstacles that may inhibit the expanded use of recycled water by (1) adopting a Recycled Water Policy, (2) leveraging the existing recycled water conveyance system serving the North and South Golf Courses, (3) meeting with the developer stakeholders

responsible for funding the expanded recycled water system, and (4) meeting with the state agencies responsible for permitting and regulating recycled water use as described below. However, as described in Chapter 2, attempts to minimize or optimize the costs associated with Alternatives 1 or 2 have not been conducted as part of this Study so that the two alternatives can be compared to one another with respect to a common level of service. It is anticipated that a detailed review of each improvement, which shall include cost minimization/optimization, specific to the recommended alternative will be conducted as part of a later task.

- **Recycled Water Policy:** In July 2011, the District's Board adopted a policy regarding the use of recycled water. A copy of this policy is included in Appendix A for reference. This policy requires the following:

  - Future use of recycled water, wherever economically and physically feasible, as determined by the District's Board, for non-domestic purposes when such water is of adequate quality and quantity, available at a reasonable cost, not detrimental to public health, and not injurious to plant life, fish, and wildlife. The type of use is defined by Title 22 of the California Code of regulations. In general, the lands subject to mandatory recycled water use are defined as undeveloped parcels within the existing Service Area.

  - Irrigation of existing parks, roadway median, and commercial landscaping areas may be converted to recycled water wherever economically and physically feasible, as determined by the District's Board. As previously described, it is recommended that recycled water irrigation of existing roadway medians and commercial landscaping be determined on a case by case basis once the recommended residential developments for service, and the general alignment of their associated recycled water conveyance system, have been identified.

- **Leveraging Existing Recycled Water System:** The Project relies upon the use of the existing conveyance systems shown in Figure 3-1 for recycled water conveyance and distribution. These existing systems currently deliver recycled water from the WWRP to the North and South Golf Courses. As illustrated in the next chapter, infrastructure requirements needed to serve future residential developments with recycled water can be minimized by leveraging the capacities readily available in these two systems.

- **Stakeholder Partnering:** District staff have met with the local development community and regulatory agencies (e.g., Central Valley Regional Water Quality Control Board (RWQCB) and CDPH) during the development of this report to (1) describe the proposed expanded recycled water program; (2) identify data and information (e.g., development timelines, phasing, parcel sizes, water supply needs, etc.) pertaining to the specific developments shown in Figure 2-1, (3) identify and discuss specific items which may be problematic from the standpoints of development and regulatory compliance, and (4) discuss potential methods for reducing costs.

  With regard to public acceptance, it is the District's impression that the proposed Project has been well received by the community. Moreover, in addition to having a drought proof water supply for irrigation, it is anticipated that future recycled water customers will save money as recycled water rates are typically priced at about 80 to 90% of potable water rates. It is likely that this anticipated savings will be greater in times of drought when the District has its Drought Management Plan in effect.

3.3 Water, Wastewater, and Recycled Water Jurisdiction

As previously described, the District has sole jurisdiction related to potable water supply and wastewater treatment within the Study Area. Both the District and the Rancho Murieta Country Club have jurisdiction related to the existing use of recycled water within the Study Area. For the Project, it is envisioned that the District would have sole jurisdiction related to the use of recycled water for front and backyard irrigation of future residential units as well as the potential irrigation of existing parks, roadway medians and commercial landscaping.

3.4 Source of Water To Be Recycled

The source of the District's recycled water is treated effluent from its WWRP. The WWRP currently receives approximately 0.5 MGD of residential and commercial wastewater from the Service Area. There are no known industrial contributions to the District's wastewater. In the future, the WWRP is projected to receive approximately 0.9 MGD based on the level of development shown in Figure 2-1.

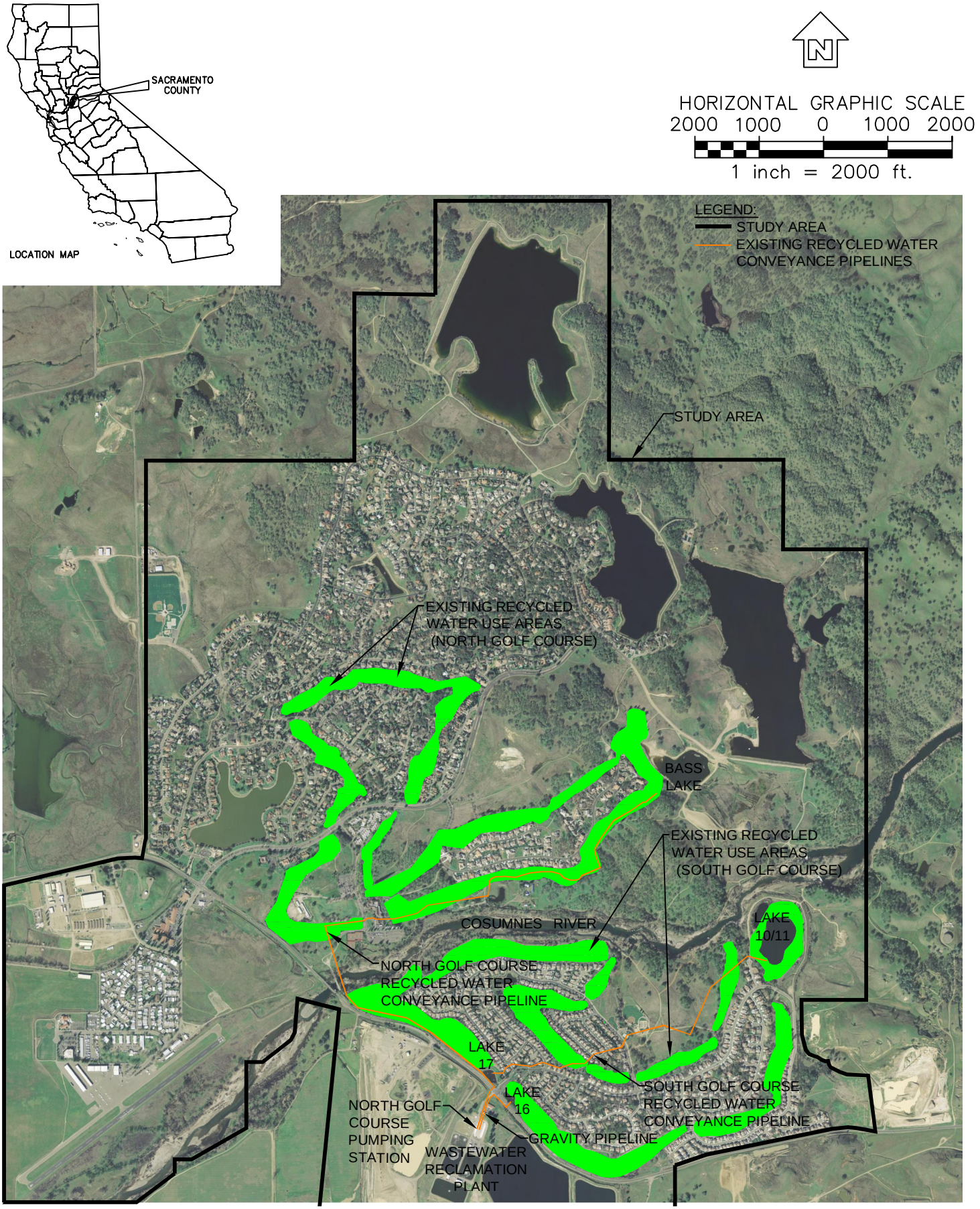


Figure 3-1. Existing Recycled Water System and Use Areas
Title XVI Recycled Water Feasibility Study

3.5 Recycled Water Uses and Associated Water Quality and Treatment Requirements

Recycled water has been used for residential landscape irrigation in California since the early 1990s. In 1999, Serrano, a master-planned community located approximately 20 miles north of the District's service area in El Dorado Hills, became the first community in California, and among the first in the nation, to provide recycled water for irrigation of residents' front and back yards. Other agencies that have dual plumbed residences include the Irvine Ranch Water District in Orange County; Rancho California Water District in Riverside County; City of Windsor, California; and City of Pompano, Florida.

The proposed Project will deliver recycled water for landscape irrigation of new residential homes and existing parks, roadway medians, and commercial accounts. The recycled water will be treated to meet *Disinfected Tertiary Recycled Water* standards as described by the California Code of Regulations, Title 22, Chapter 3, Water Recycling Criteria (Title 22). This level of treatment is accepted by the applicable regulatory agencies for the intended uses. In addition, the Project is supported and encouraged by California's Recycled Water Policy and is permissible under the State Water Resources Control Board's General Recycled Water Permit (WQO No. 2009-006-DWQ).

The District has over 20 years of experience as a recycled water producer and distributor. The proposed Project will be an expansion of the District's existing and successful recycled water program which serves the two existing golf courses located within the community as described below.

3.5.1 Existing Wastewater Treatment and Recycled Water Systems

The District owns and operates the WWRP which receives domestic wastewater from the Study Area and has produced tertiary effluent used for golf course and landscape irrigation since the mid-1980s. The WWRP is designed to treat an annual average flow of up to 1.55 MGD. Currently annual average wastewater influent flows are approximately 0.5 MGD. The rated capacity of 1.55 MGD is adequate to serve the level of development originally envisioned at buildout (approximately 5,200 units). This buildout projection has since been reduced to approximately 4,348 units as described in Table 2-1.

The WWRP consists of both a secondary wastewater facility and a tertiary treatment plant. Wastewater receives secondary treatment through five aerated facultative ponds that are operated in series. Secondary effluent is conveyed into two large reservoirs which store the secondary effluent during the winter season when recycled water is not needed or produced. The two storage reservoirs have a combined capacity of 756 AF. The tertiary treatment system consists of a tertiary pumping station, dissolved air flotation units, sand filters, a chlorine contact basin and pipeline, and a pumping station which serves recycled water to the North Golf Course. The capacity of tertiary treatment plant is currently limited to 2.3 MGD by the chlorine contact basin and pipeline. Once the capacity of this particular process is expanded, the rated capacity of the tertiary treatment plant will be increased to 3.0 MGD. The existing 2.3 MGD capacity is sufficient to meet current recycled water demands. It has been estimated that the 3.0 MGD capacity will be sufficient to meet buildout recycled water demands associated with Alternatives 1 and 2 as described in Chapter 4.

Following secondary and tertiary treatment, the treated effluent is beneficially reused through the irrigation of two golf courses. All of these existing reuse areas are located within the Study Area. The total combined irrigation area and demand of the two golf courses is estimated to be 250 acres and 550 AFY, respectively. Currently recycled water deliveries provide 455 AFY and the remaining 95 AFY golf course demands are met through raw water deliveries from the Cosumnes River. The WWRP is operated under Waste Discharge Requirements Order No. 5-01-124 (WDR) which was issued by the RWQCB. As described in the WDR, the recycled water produced by the WWRP meets the *Disinfected Tertiary Recycled Water* standards and is acceptable by the applicable regulatory agencies for the intended uses.

The existing WWRP has sufficient capacity, is approved by the CDPH and RWQCB, and produces recycled water of a quality suitable for the proposed Project. The WWRP operations and maintenance (O&M) costs are considered relatively low compared to more recently developed recycled water production technologies. For example, membrane filtration often requires more energy due to significantly higher headloss (e.g., pumping) and ballasted flocculation requires higher dosages, and the constant addition, of chemicals (e.g., polymer and alum). The need for these additional resources could be problematic from the standpoint of public acceptance given that both energy and chemical addition impact greenhouse gas emissions as well as treatment costs. Given these considerations, coupled with the fact that the continued use of the existing WWRP would minimize capital and O&M costs associated with the proposed Project, no alternative treatment technologies are deemed necessary.

4 Description of Alternatives

This chapter describes the alternatives that were considered to meet current and projected water demands and treated effluent disposal needs. As described previously, the two alternatives considered for implementation were upgrading the existing pastureland irrigation system (Alternative 1) and expanding the recycled water service program (Alternative 2). Alternative descriptions which include physical, institutional, and operational requirements along with construction and project cost estimates associated with major structures, facilities, infrastructure, etc. are presented below.

4.1 Upgrading Existing Pastureland Irrigation System (Alternative 1)

This alternative represents the "No Project" alternative and reflects the reasonable and foreseeable actions taken by the District to meet the projected potable water supply and treated effluent disposal needs of the Study Area. This alternative assumes that the existing recycled water program is not expanded within the community beyond satisfying the irrigation demands of the two golf courses (e.g., limited to 550 AFY) and that treated effluent beyond this amount is used offsite for pastureland irrigation. Specific improvements associated with this alternative are described below. Table 4-1 lists the estimated construction and project costs associated with the following improvements.

- Undergo a formal environmental review process for long-term treated effluent disposal on nearby pasturelands in accordance with the CEQA,
- Upgrade the existing pipeline conveyance (approximately 5,850 lineal feet of 12-inch diameter pipe) and pumping systems to reflect long-term use and Title 22 requirements,
- Expand the treated effluent disposal system in the future to irrigate an additional 150 acres of pasturelands (through the installation of approximately 12,000 lineal feet of 12-inch diameter pipe),
- Provide an additional 1.2 MGD of potable water treatment capacity to serve projected peak month residential irrigation demands in the future,
- Replace the existing recycled water pumping station currently serving the South Golf Course with a 640 gallon per minute (gpm) facility, and
- Install the disinfection facilities upgrade and seasonal storage expansion as described in Section 2.5. These particular improvements are common to both alternatives.

As shown in Table 4-1, the total estimated project cost for this alternative is approximately $24 million. Improvements common to both alternatives represents a little more than 50 percent of this total estimated costs. Detailed cost estimates associated with each of the improvements listed in Table 4-1 are attached in Appendix B for reference.

There are a few distinct differences between the two alternatives with respect to administrative and annual operation and maintenance (O&M) requirements. These differences are described below.

- There are differences in the anticipated repair and replacement costs associated with the pipeline conveyance systems and increased water treatment plant capacity. Estimated O&M costs for these particular assets are assumed to be equal to 2.5 and 1 percent of the costs associated with these improvements, respectively.
- Higher O&M costs associated with the production of additional potable water supply to satisfy future residential front and backyard irrigation demands are anticipated for Alternative 1. The estimated average potable water production

Table 4-1. Estimate of Probable Construction and Project Costs for Alternative 1

Improvement Project	Estimate of Probable Costs		Timeline When Improvement is Required to Be in Service
	Construction ($)	Project (Capital) ($)	
Improvements Specific to Alternative 1			
Spray Field Improvements	3,290,000	4,280,000	January 1, 2015
Phase 1 Spray Field Expansion	2,470,000	3,210,000	2020
Phase 2 Spray Field Expansion	3,270,000	4,250,000	2022
Subtotal	**9,030,000**	**11,740,000**	
Improvements Common to Both Alternatives			
Seasonal Storage	6,840,000	9,750,000	2020
Disinfection Facilities Upgrade	930,000	1,300,000	2016
South Golf Course Pump Station	900,000	1,240,000	2015
Subtotal	**8,670,000**	**12,290,000**	
Total	**17,700,000**	**24,030,000**	

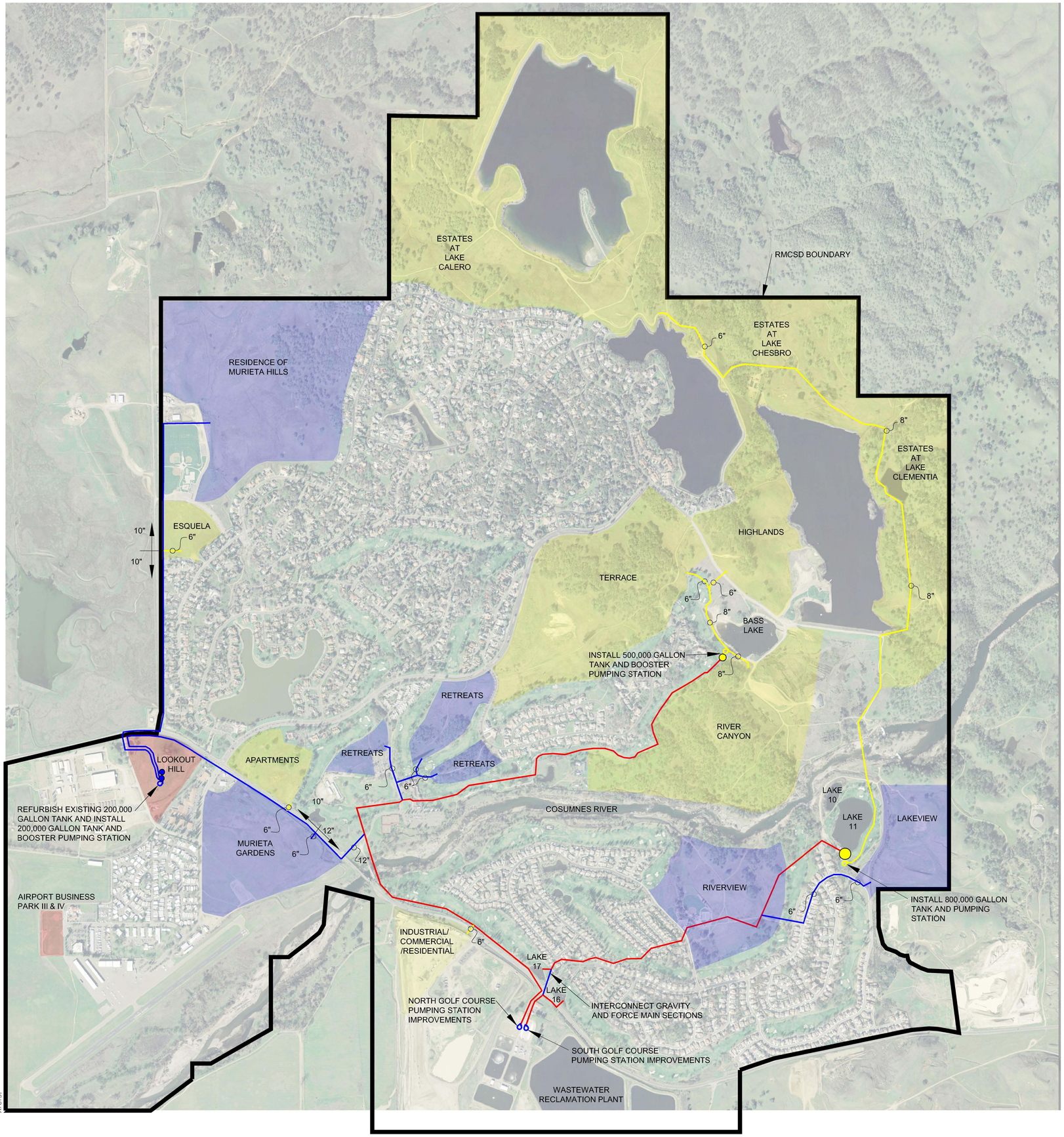
costs for the past three years[9] is $999.5 per acre-ft. Growth projections indicate that recycled water production will exceed combined demands of the North and South Golf Courses in 2018. During that year, approximately 30 AF of excess recycled water would be available. It is estimated that the full 370 AF of excess recycled water would be available in 2026 and beyond.

- The District entered into an agreement with Van Vleck Ranching and Resources, Inc. to supply treated effluent for irrigation of pasturelands located on portions of the Van Vleck Ranch. The District has expressed a desire to maintain the ability to send treated effluent to these pasturelands in the future; albeit under unusual circumstances and as a last resort. In order to maintain the ability to use this backup disposal method long-term, the District would have to modify their agreement with Van Vleck Ranching and Resources, Inc. and file for and obtain approval from the RWQCB for long-term use as part of their master reclamation permit.

4.2 Expanding Recycled Water Program to Serve Future Residential Irrigation (Alternative 2)

This alternative assumes the District expands its existing recycled water program to serve future residential developments and existing parks, roadway medians, and commercial landscaping. As shown in Figure 4-1, the existing recycled water conveyance system would be expanded through the addition of recycled water pipelines, pumping stations, and storage tanks to serve future developments. For the purposes of this Study, it was assumed that Stonehouse Park would be served with recycled water for irrigation purposes in the future. It is likely that other existing parks, roadway medians, and commercial landscaping located adjacent to the existing and proposed recycled water pipelines would also be served with recycled water. However, it is recommended that this determination be made as part of a future effort once the general alignment of the expanded recycled water conveyance system has been determined. Alternative 2 consists of the installation of up to 6.8 miles of underground recycled water transmission pipelines ranging from 6- to 12-inches in diameter and up to three new recycled water storage tanks assuming that all residential developments are served recycled water.

[9] Fiscal years 2009-10, 2010-11, and 2011-12.



N

HORIZONTAL GRAPHIC SCALE
500 250 0 250 500
1 inch = 500 ft.

LEGEND:
- EXISTING RECYCLED WATER PIPELINES
- PHASE 1 RECYCLED WATER IMPROVEMENTS
- PHASE 2 RECYCLED WATER IMPROVEMENTS

NOTE: RECYCLED WATER DISTRIBUTION SYSTEMS LOCATED WITHIN EACH FUTURE DEVELOPMENT ARE NOT SHOWN.

Figure 4-1. Proposed Recycled Water System Expansion (Alternative 2)
Title XVI Recycled Water Feasibility Study

The estimated total project cost of Alternative 2 is $30.8 million. However, the total estimated recycled water demand, assuming all residential developments are served with recycled water, is 1,050 AFY which exceeds the estimated 370 AFY of recycled water available for residential irrigation. Therefore, it has been determined that many of the residential developments will not be served recycled water due to their relatively higher estimated improvement costs. In order to determine which particular developments are to be served recycled water, each of the future developments were compared to one another with respect to estimated unit costs to deliver 1 AFY as described in Chapter 5.

Table 4-2. Estimate of Probable Construction and Project Costs for Alternative 2

Improvement Project	Estimate of Probable Costs		Timeline When Improvement is Required to Be in Service
	Construction ($)	Project (Capital) ($)	
Improvements Specific to Alternative 2			
Lakeview Pipeline (6-inch)	270,000	380,000	2016
Murieta Gardens (12- and 6-inch)	350,000	490,000	2016
Retreats (6-inch)	350,000	490,000	2016
Residences of Murieta Hills (10-inch)	2,170,000	3,040,000	2016
Lookout Hill Tanks and Pump Station	1,770,000	2,080,000	2016
North Course Pump Station	1,420,0000	1,700,000	2016
Industrial, Commercial, Residential (6-inch)	160,000	220,000	2020
Apartments (6-inch)	150,000	210,000	2020
Esquela (6-inch)	60,000	80,000	2020
Bass Lake Tanks and Pump Station	2,070,000	2,900,000	2020
River Canyon (8-inch)	90,000	130,000	2020
Terrace and Highlands (8- and 6-inch)	280,000	390,000	2020
Lake Estates (8- and 6-inch)	4,570,000	6,400,000	2020
Subtotal	**13,710,000**	**18,510,000**	
Improvements Common to Both Alternatives			
Seasonal Storage	6,840,000	9,750,000	2020
Disinfection Facilities Upgrade	930,000	1,300,000	2016
South Golf Course Pump Station	900,000	1,240,000	2015
Subtotal	**8,670,000**	**12,290,000**	
Total	**22,380,000**	**30,800,000**	

4.3 Treatment and Disposal Water Quality Requirements

There are no alternative technologies necessary for either alternative. The existing WWRP currently produces treated effluent meeting unrestricted use (e.g., Disinfected Tertiary standards) and has been approved by the CDPH and RWQCB for the intended uses associated with Alternatives 1 and 2.

4.4 Alternative Measures or Technologies

There are no alternative measures or technologies necessary for either alternative. The existing WWRP is approved by the CDPH and produces treated effluent of sufficient quality for the intended uses. Infrastructure components associated with Alternative 2 will be in conformance with all applicable CDPH requirements specific to recycled water systems.

5 Economic Analyses

This chapter describes the economic analyses that were developed to compare:

- **Unit Capital Costs to Serve Individual Developments:** Each of the future residential developments were compared to one another with respect to estimated unit project costs (e.g., $/AFY) for recycled water service. As described below, the results of this analysis served as the basis for recommending which particular developments would be served recycled water in the future.

- **Comparison of Competing Alternatives:** The two alternatives (Alternatives 1 and 2 as described in Chapter 4) were compared to one another with respect to total and incremental net present worth costs. The result of this analysis was used to determine which alternative was deemed to be more cost-effective.

5.1 Comparison of Capital Costs to Serve Individual Developments

Recycled water system improvements (see Figure 4-1) needed to serve future residential developments were identified. In general, these improvements were associated with recycled water conveyance (pipelines and pumping stations) and storage tanks to supplement recycled water production at the WWRP. Key criteria used to determine the improvements are described below:

- **Maximum Velocity in Recycled Water Mains:** To minimize pumping (energy) costs, a maximum velocity of 6 feet per second (fps) was used to size mains except for the existing 8-inch main serving the North Golf Course. The maximum velocity in this particular main was limited to 7 feet per second to satisfy the relatively high demand served by this particular asset.

- **Maximum Velocity in Recycled Water Pipelines Serving Individual Developments:** To minimize pumping (energy) costs, a maximum velocity of 5 fps was used to size new pipelines serving individual developments.

- **Minimum Pipe Diameter:** A minimum pipe diameter of 6-inches was assumed for all recycled water transmission mains (e.g., pipelines servicing individual developments).

- **Recycled Water Irrigation Schedule:** Both golf course and residential irrigation is assumed to occur over an 8 hour period; between the hours of 10 pm and 6 am to limit the public's potential exposure to recycled water in accordance with Title 22. This irrigation schedule is similar to that used by El Dorado Irrigation for the Serrano residential irrigation program.

- **Bass Lake and Lake16/17 Drawdowns:** During golf course irrigation, the maximum drawdown from these particular recycled water sources is limited to 6 and 4 inches, respectively. The WWRP and recycled water conveyance system must provide adequate production capabilities to refill these lakes on a daily basis during the peak month irrigation demand season.

- **Recycled Water Storage Tank Volume Requirements:** Recycled water storage requirements are equal to two times the difference between projected recycled water irrigation demands and the combined recycled water supply from the WWRP, WWRP Equalization Pond, Bass Lake, and Lakes 16 and 17. It is assumed that residential irrigation demands cannot be met using recycled water stored in Bass Lake or Lakes 16 and 17.[10]

[10] This assumption was made to accommodate CDPH's concerns described in their November 16, 2012 letter addressed to the District.

- **Booster Pumping Stations and Residential Development Distribution Systems:** It is assumed that individual booster pumping stations (if needed) and distribution systems specific to each development will be provided and paid for by the developers. These pumping stations will be used to boost the recycled water pressure to a level acceptable for service (in the range of 60 to 80 pounds per square inch (psi) measured at the residential recycled water meter). Costs associated with these particular stations and pipeline distribution systems are not included in any of the cost estimates described in this report.

Capital costs associated with each of the improvements shown in Figure 4-1 was assigned to a particular development or group of developments based on the area served by the improvement. For example, it is anticipated that a new 10-inch recycled water main and two 200,000 gallon storage tanks would be required to serve developments located in the west and northwest portion of the Study Area (e.g., Apartments, Esquela, and Residences of Murieta Hills). Capital costs associated with these particular improvements were assigned to these developments based on pipeline distance and projected recycled water demands. After assigning each of the improvements to a particular development or group of developments, the total project cost associated with each development was determined by adding the individual improvement cost allocations together. This sum was then divided by a development's projected recycled water demand. This factor ($/AFY) was then used to rank individual developments with respect to one another. Developments associated with lower $/AFY factors were deemed to be the most cost-effective to serve recycled water. Conversely, developments with higher $/AFY factors were deemed to be the less cost-effective. Calculations associated with this particular analysis are attached in Appendix B for reference.

In general, the developments deemed to be the most cost-effective (e.g., Industrial/Commercial/Residential, Murieta Gardens, Apartments, and Retreats) are located along the existing recycled water main serving the North Golf Course and require minimal pipeline improvements for service. The next most cost-effective developments were those located adjacent to Holes 3 through 8 of the North Golf Course (e.g., River Canyon, Terraces, and Highlands). Although these developments require a significant amount of improvements, recycled water demands projected for these particular developments are relatively high, thereby reducing the overall $/AFY factor to within a moderate level. The combined peak irrigation recycled water demands of these developments (e.g., Industrial/Commercial/Residential, Murieta Gardens, Apartments, Retreats, River Canyon, Terraces, and Highlands), the North Golf Course, Residences of Murieta Hills, and Esquela is equal to the estimated hydraulic capacity of the existing 12-inch North Golf Course Recycled Water Conveyance Pipeline. Therefore recycled water service to the other developments located in the north, northeast, and east (e.g., Estates at Lake Calero, Lake Chesbro, and Lake Clementia) must be provided by the South Golf Course Recycled Water Conveyance Pipeline. Higher $/AFY factors were associated with the following three development groups.

- **Estates of Lake Clementia, Chesbro, and Calero:** As shown in Figure 4-1, serving recycled water to these developments would require improvements to (1) the existing South Golf Course conveyance system and (2) extend the recycled water system by approximately 3.4 miles and adding storage and pumping facilities. Given the total combined capital costs attributed to these improvements, service to these three developments does not appear to be cost-effective.

- **Riverview and Lakeview:** Serving recycled water to these developments requires improvements to the existing South Golf Course conveyance system, more specifically connecting the gravity and force main portions of the existing conveyance system and installing a new, higher capacity pumping station. Given the relatively low recycled water demands associated with these two developments, service to these areas does not appear to be cost-effective.[11]

[11] It is anticipated that these developments could be served more cost-effectively if their source of recycled water supply could be drawn from Lakes 10, 11, 16, or 17. However, CDPH has expressed concerns with this methodology in their November 16, 2012 letter.

- **Esquela and Residences of Murieta Hills:** The conveyance system serving these two developments could be expanded to serve Stonehouse Park, which has an estimated recycled water demand of 14 AFY. With the addition of Stonehouse Park, this group of developments has a lower factor when compared to the two other developments listed in the two previous bullets. Given this outcome, it is recommended that these two developments be served with recycled water.

Table 5-1 lists the developments along with their projected wastewater flow and recycled water production contributions. This table also lists the projected recycled water demands associated with each development. Developments NOT recommended for recycled water service are shown in *italics*.

Table 5-1. Projected Recycled Water Demands

Condition or Development	Projected ADWF Contribution (MGD)	Projected Recycled Water Production (AFY)	Projected Recycled Water Demand (AFY)
Existing Conditions	0.51	455	550[a]
Existing Plus Infill	0.52	465	550[a]
Existing, Infill, and Phase 1 Developments			
Murieta Gardens	0.02		19.6
Retreats	0.02		18.8
Residences of Murieta Hills	0.04		73.8 / 84.2[a]
Riverview	*0.03*		*22.4*
Lakeview	*0.02*		*15.8*
Subtotal (rounded)	**0.65**	**620**	**670**
Existing, Infill, and Phases 1 and 2 Developments			
Indust/Com/Residential	0.02		50.9
Apartments	0.03		23.8
Esquela	0.01		25.9 / 29.6[b]
Terrace	0.03		59.9
Highlands	0.02		42.1
River Canyon	0.02		46.4
Estates at Lake Calero	*0.03*		*52.2*
Estates at Lake Chesbro	*0.02*		*29.4*
Estates at Lake Clementia	*0.02*		*31.7*
Total (rounded)	**0.90**	**920**	**920[b]**

[a] Combined demand of North and South Golf Courses based on normal levels of precipitation.

[b] Includes estimated Stonehouse Park irrigation demands of 14 AFY.

Comparison of projected recycled production and demands for the first three conditions (Existing, Existing Plus Infill, and Existing, Infill, and Phase 1 Developments) indicate the need for supplemental water to satisfy residential irrigation demands as the projected demand is greater than production. Following Phase 2 development, the recycled water demand and production is estimated to be in balance during normal levels of precipitation. It is anticipated that supplemental recycled water will be required during dry years and conversely, additional disposal capacity (e.g., conveyance to the Van Vleck Ranch for pasture irrigation) may be required for those years associated with high levels of precipitation.

5.2 Comparison of Alternatives 1 and 2

An economic analysis was conducted to compare Alternatives 1 and 2. This analysis was based on a 20-year life cycle and a discount rate of 6 percent, respectively, and the timeline in which individual potable water, wastewater, and recycled water/treated effluent disposal improvements are required to be in service to accommodate the assumed development timeline. In addition, the improvements and costs associated with Alternative 2 were revised to reflect the developments recommended for service in the previous section. A summary of the analysis results is presented below in Table 5-2. Calculations associated with this analysis are attached in Appendix B for reference.

The analysis results indicate that expanding the District's existing recycled water program to serve residential irrigation is more cost-effective than upgrading the existing pastureland irrigation system. Based on this finding, Alternative 2 is the recommended project described in the following chapter.

Table 5-2. Economic Comparison of Alternatives 1 and 2

Component	Alternative 1 – Upgrade Existing Pastureland Irrigation (No Project Alternative)	Alternative 2 – Expand Recycled Water Program to Serve Residential Irrigation
Costs Associated With All Wastewater, Recycled Water/Treated Effluent Disposal, and Differential Potable Water Improvements		
Base Project Costs ($)[a]	$21,585,000	$18,200,000
O&M Costs ($/yr)[b]	$250,000	$185,000
Net Present Worth Costs ($)	$24,430,000	$20,345,000
Relative (Savings) Difference (%)		16.7
Costs Limited to Differential Potable Water and Recycled Water/Treated Effluent Disposal Improvements		
Base Project Costs ($)[a]	$12,730,000	$9,345,000
O&M Costs ($/yr)[b]	$250,000	$185,000
Net Present Worth Costs ($)	$15,575,000	$11,490,000
Relative (Savings) Difference (%)		26.2

[a] Base (capital) costs are net present worth costs of Alternative 1 and 2 improvements.
[b] Value represents the 20-year average of relative O&M costs.

6 Recommended Improvements and Implementation Plan

This chapter describes the activities needed to implement the recommended project, including the recommended improvements and phasing, facility planning, environmental and regulatory compliance and permitting, coordination with ongoing programs, financing, stakeholder outreach, and a recommended implementation schedule.

6.1 Phasing of Recommended Facilities and Implementation Schedule

The improvements required for the recommended project would be time-phased to correspond with development. The following two phases have been established for the addition of facilities and implementation planning based on the assumed occupancy of Phase 1 and 2 residential developments.

- Phase 1: 2013 – 2015
- Phase 2: 2016 – 2019

The individual improvements required for the recommended plan are illustrated in Figure 6-1. A summary of the required facilities by phase is presented in Table 6-1 and the recommended implementation schedule is presented in Table 6-2. The schedule describes the recommended timelines required for all activities associated with plan implementation.

Table 6-1. Summary of Required Facilities for Recommended Plan

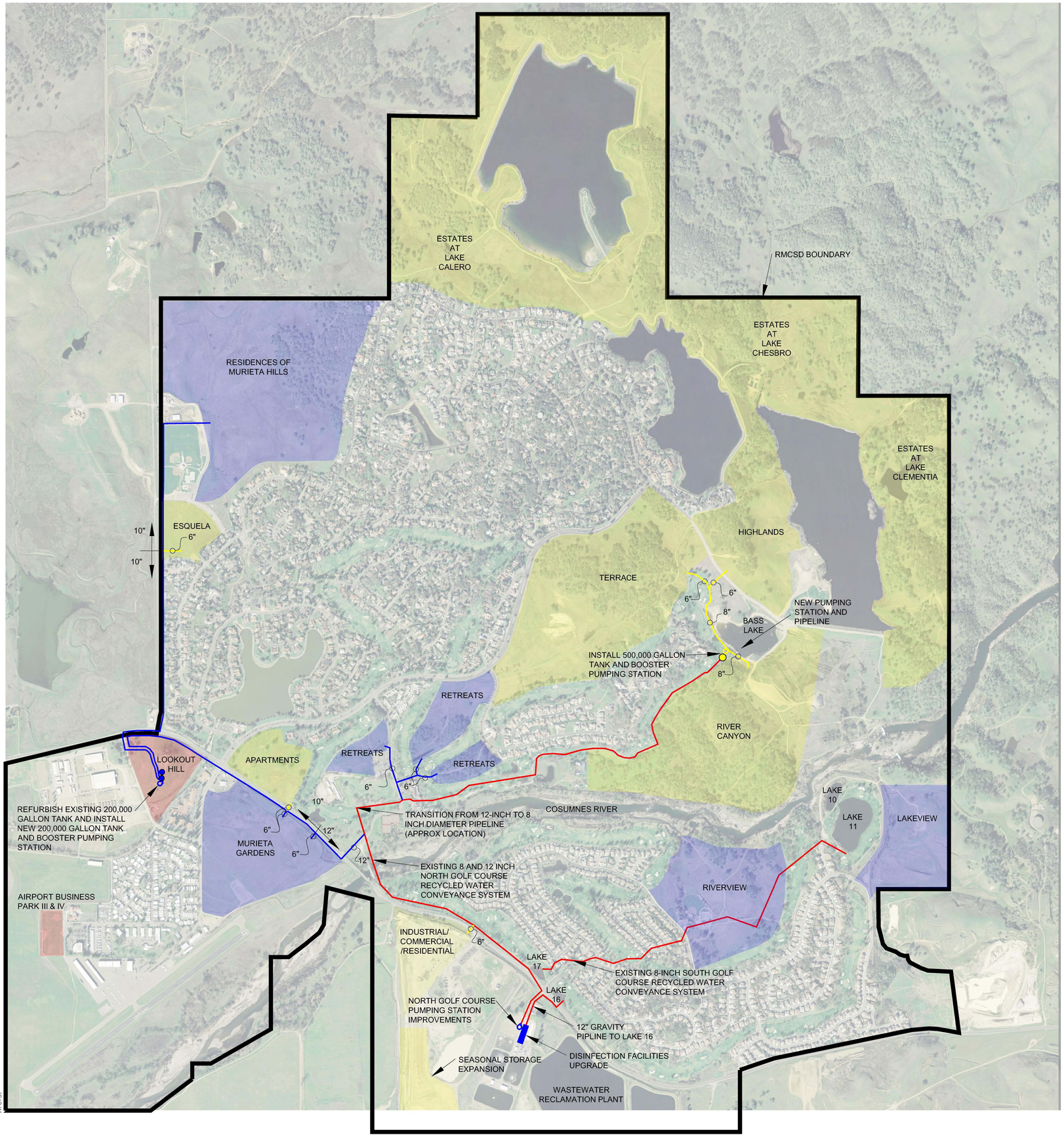
Facility / Improvement Description	Estimated Quantity	Estimate of Probable Project Costs ($)[a, b]
Phase 1, 2013 – 2015		
Disinfection Facilities Upgrade	195,000 gallons	1,300,000
North Golf Course Pump Station	2,110 gpm	1,700,000
Northwest Transmission Main	11,640 LF	3,530,000
Lookout Hill Tanks and Pump Station	400,000 gallons & 700 gpm	2,080,000
Retreats Service Main	1,725 LF	490,000
	Subtotal	**9,100,0000**
Phase 2, 2016 – 2019		
Seasonal Storage Expansion	240 AF	9,750,000
Industrial, Commercial, Residential	190 LF	220,000
Apartments Service Main	110 LF	210,000
Esquela Service Main	260 LF	80,000
North Conveyance System Extension	2,460 LF	520,000
Bass Lake Tanks and Pump Station	500,000 gallons & 1,040 gpm	2,900,000
	Subtotal	**13,680,0000**
	Grand Total	**22,780,000**

[a] Estimated project costs based upon ENR 20 City Average Construction Cost Index of 9437 (January 2013).

[b] Project costs include estimated construction costs and allowances for contingency, engineering, administration, and permitting.

6.1.1 Phase 1 Improvements

The following are descriptions of the recommended Phase 1 recycled water system improvements shown in Figure 6-1. The timing of these improvements is contiguous with the assumed occupancy timeline for the Retreats, Murieta Gardens, and Residences of Murieta Hills developments of 2016 through 2019.



N

HORIZONTAL GRAPHIC SCALE
500 250 0 250 500
1 inch = 500 ft.

LEGEND:
- EXISTING RECYCLED WATER PIPELINES
- PHASE 1 RECYCLED WATER IMPROVEMENTS
- PHASE 2 RECYCLED WATER IMPROVEMENTS

Figure 6-1. Recommended Improvements
Title XVI Recycled Water Feasibility Study

\\usscr4fp001\Data\Projects\Rancho Murieta CSD\Feasibility Study\Background Information\From MacKay and Somps\Fig_6-1.dwg Time:Mar26,2013-10:02am
Login:abajanz Dimscale:500 LTScale:1 Images: "V:\Projects\Rancho Murieta CSD\Feasibility Study\Background Information\From MacKay and Somps\Rancho2006 resample.jpg"
Xrefs:

Table 6-2. Project Implementation Schedule

Step	Lead Agency and Primary Participants	Desired Outcome
1 Title XVI Feasibility Study	RMCSD	Determine (1) which developments are the most cost-effective to serve recycled water with respect to one another and (2) which alternative is most cost-effective (No Project or Expanded Recycled Water Program). Identify phased approach and infrastructure improvements to cost effectively serve existing commercial, park, and open space as well as future residential (dual plumbed) and commercial customers.
2 System Design Standards	RMCSD	Develop recycled water standards to serve future commercial and residential customers. Standards will serve as the basis for (1) preparing construction cost estimates and (2) communicating minimum recycled water system requirements to serve future developments and existing commercial areas.
3 Detailed Project Description / Facility Planning	RMCSD	Incorporate commercial irrigation areas, prepare hydraulic model, refine key aspects, and implement methods to reduce project costs for the proposed recycled water system. Project description to serve as the starting point for the CEQA and NEPA compliance effort as well as the Title 22 Engineering Report and Updated WDR.
4 Agency Coordination	RMCSD and RMCC	Identify roles and responsibilities for program participants as described by Title 22 (e.g., Producers, Distributors, and Users) and coordinate use of common infrastructure (e.g., recycled water conveyance systems, North Golf Course Pumping Station, etc.). Identify scheduling/timing constraints and key metrics (e.g., what constitutes success) for each participant. Conduct coordination meetings with Regional Board and CPDH to keep them informed and obtain feedback.
5 Regulatory Permitting		
5a Intended Use of Van Vleck Spray Field	RMCSD and Van Vleck Ranch	Submit a letter to the Regional Board describing the District's intended long-term use of the Van Vleck spray field to satisfy Article F. 12 of WDR R5-2009-0124. COMPLETED
5b CEQA and NEPA Compliance	RMCSD	Analyze potential environmental impacts associated with the implementation of the expanded recycled water program; satisfy CEQA and NEPA (if federal funding obtained) review requirements. Estimated cost is based on preparing initial study/mitigated negative declaration (CEQA) and environmental assessment/FONSI (NEPA).
5c Title 22 Engineering Report Preparation	RMCSD and RMCC	Prepare Title 22 Engineering Report. Recycled water use areas to include existing golf courses, commercial, parks, open space, Van Vleck spray fields, and future residential (dual plumbed) and commercial customers.
5d MRP and Updated WDR Application	RMCSD and RMCC	Complete Form 200 and prepare Report of Waste Discharge requesting the Regional Board's preparation of a Master Reclamation Permit (MRP) and Updated Waste Discharge Requirements (WDRs).
5e Salt and Nutrient Management Plan	RMCSD and RMCC	Prepare salt and nutrient management plan and antidegradation analysis specific to the expanded recycled water program.
5f Title 22 Engineering Report Review and Approval	RMCSD and RMCC	Submit Title 22 Engineering Report (completed in Step 5c) to CDPH and Regional Board for review and approval.
5g Updated WDR Review, MRP Negotiations and Adoption	RMCSD and RMCC	Submit Form 200 and Report of Waste Discharge (completed in Step 5d) to the Regional Board. Negotiate updated Waste Discharge Requirements (WDRs), Master Reclamation Permit (MRP), and monitoring requirements with Regional Board and CDPH staff.
6 Improvements to Existing Infrastructure		
6a Chlorine Contact Basin	RMCSD	Existing WWRP chlorine contact disinfection facilities has a rated capacity of 2.3 MGD, which is less than the 3.0 MGD capacity provided by the tertiary treatment facilities and required by the future recycled water system. Efforts associated with this task are based on planning, design, and construction a 195,000 gallon contact basin within the existing equalization basin.
6b Seasonal Storage Expansion	RMCSD	Install 240 acre-ft (AF) of additional seasonal storage capacity within the WWRP site. Efforts associated with this task are based on planning, design, and construction of new 240 AF storage, conveyance pipeline, and pumping facilities.
7* Detailed Design (Phase 1 RW Program)	RMCSD	Prepare preliminary design report and final hydraulic model, 60, 90, and bid documents (design drawings and specifications) of the proposed recycled water system infrastructure.
8* Bid and Award (Phase 1 RW Program)	RMCSD	Respond to questions from potential bidders, conduct pre-bid meeting, prepare addenda, evaluate bids, and recommend award.
9* Construction (Phase 1 RW Program)	RMCSD	Construct recycled water system expansion and administer contract for the installation of system infrastructure, provide construction management oversight / inspection, respond to contractor requests for information, prepare necessary change orders, review contractor submittals, and participate in construction meetings. Improvements to be limited to those needed to serve Phase 1 development (e.g., 670 Group).
10* Startup (Phase 1 RW Program)	RMCSD and RMCC	Verify that recycled water system operates and performs as designed; modify system to further enhance and optimize system operation and performance.
11 RMCSD Management and Administration		
11a Appoint Recycled Water Program Manager	RMCSD	Hire recycled water program manager. Specific duties to include pre-qualifying landscape designers and construction contractors, regulatory compliance, stakeholder interaction, and recycled water accounting.
11b Operations and Maintenance Plan	RMCSD	Develop operation and irrigation management plans pertaining to the expanded recycled water system.
11c Landscape Designers and Contractors	RMCSD	Compile a list of companies authorized to design and work on residential recycled water systems. Authorized companies shall have attended training (Step 11d) and shall be familiar with system design standards (Step 2) and other pertinent recycled water regulatory requirements.
11d Training (Orientation and Education) Program	RMCSD	Develop and conduct workshops. Target audience is future homeowners and landscape designers and contractors. Workshop content to include description of recycled water standards (Step 2), need to hire authorized companies (Step 11c), and the preparation of recycled water plans.
11e Inspection and Testing Program	RMCSD	Develop program to verify compliance with recycled water standards and regulatory requirements.
12 Public Outreach	RMCSD	Manage information and promote understanding and communication with key stakeholder groups, demonstrate organizational commitment, promote communication and public dialog, ensure fair and sound decision making, and build and maintain trust.
13 Expand RW System to Serve Phase 2 Development	RMCSD	Plan, permit, design, and construction recycled water system to serve expanded recycled water service area associated with Phase 2 developments.

Footnotes

* Dates shown in this table are considered preliminary estimates and are based on Phase 1 and 2 development occupancy timeframes of 2016 and 2020, respectively. Actual timeframes will depend on actual residential and commercial development timeframes.

- **Disinfection Facilities Upgrade:** Currently the disinfection facilities have a rated capacity of 2.3 MGD, which limits recycled water production capabilities at the WWRP. It is recommended that these facilities be upgraded to provide a rated capacity of 3.0 MGD in accordance with Title 22 requirements.[12] The construction and capital costs estimated for this improvement are $930,000 and $1,300,000, respectively. These costs are based on installing a 195,000 gallon chlorine contact basin within the existing equalization basin.

- **North Golf Course Pumping Station Improvements:** Currently this facility is configured to pump recycled water to either the North Golf Course or the Van Vleck Ranch. The objectives of this improvement project are to (1) separate the functions of this station (one dedicated station for the North Golf Course and one dedicated for the Van Vleck Ranch) and (2) expand the firm capacity[13] of the pumping station serving the North Golf Course to 2,110 gpm. The 2,110 gpm flow rate represents the estimated capacity of the existing 12-inch recycled water pipeline serving the North Golf Course. The construction and project costs estimated for this improvement are $1,420,000 and $1,700,000, respectively. These costs are based on installing a new pumping station to serve the North Golf Course and having the existing station configured to serve Van Vleck Ranch.

- **Northwest Recycled Water Transmission Main:** The installation of a new 12- and 10-inch recycled water transmission main is recommended to serve future developments located along the northwest portion of Jackson Highway and Stonehouse Road. It is envisioned that this main will also serve recycled water to Stonehouse Park for irrigation as well as the Apartments and Esquela in the future. As shown in Figure 6-1, this transmission main will be connected to the existing 12-inch North Golf Course conveyance pipeline immediately north of the Yellow Bridge. It is recommended that a 12-inch highway undercrossing and transmission main be installed up to the point at which the Murieta Gardens development is served; beyond this point the transmission main can be reduced to 10-inch diameter. The lengths of the 12-inch and 10-inch pipelines are estimated to be 1,010 and 10,630 lineal feet, respectively. The construction and project costs estimated for this improvement are $2,520,000 and $3,530,000, respectively. These costs include the installation of 220 lineal feet of 6-inch diameter pipe to deliver recycled water to the Murieta Gardens development.

- **Lookout Hill Recycled Water Storage Tanks and Pumping Station:** The installation of recycled water storage tanks is recommended to supplement recycled water production capacities to satisfy peak irrigation demands. Peak demands associated with the Residences of Murieta Hills and Esquela developments require 200,000 gallons of supplemental recycled water during the 8 hour irrigation schedule described in Section 5.1. It is recommended that a total capacity of 400,000 gallons be provided based on the prescribed storage criteria. To minimize cost, it is recommended that the existing 200,000 gallon water storage tank, which is currently not in service, be rehabilitated and used for recycled water storage. In addition, a new 200,000 gallon storage tank would be installed at this site along with a 700 gpm pumping station needed to deliver recycled water to the developments located in the northwest corner of the Study Area. The construction and capital costs estimated for this improvement are $1,770,000 and $2,080,000, respectively.

- **Retreats Recycled Water Service Pipeline:** The installation of a new 6-inch diameter recycled water pipeline is recommended to serve the Retreats development. As shown in Figure 6-1, this pipeline will be connected to the existing 8-inch North Golf Course conveyance pipeline. The estimated length of this pipeline is 1,730 lineal feet. The construction and project costs estimated for this improvement are $350,000 and $490,000, respectively.

[12] For chlorine disinfection and *Disinfected Tertiary Recycled Water* production, Title 22 requires a minimum CT of 450 mg-min/L and 90 minute (minimum) modal contact time.
[13] The firm pumping capacity is defined as a station's capacity with the largest pump out of service.

6.1.2 Phase 2 Improvements

The following are descriptions of the recommended Phase 2 recycled water system improvements shown in Figure 6-1. The timing of these improvements is contiguous with the assumed occupancy timeline for the Esquela, Apartments, Industrial/Commercial/Residential, Terrace, Highlands, and River Canyon developments of 2020 through 2026.

- **Seasonal Storage Expansion:** Approximately 240 AF of additional seasonal storage is required to accommodate the Phase 2 developments. This facility is to be located within the existing WWRP site as shown in Figure 6-1. The construction and project costs estimated for this improvement are $6,840,000 and $9,750,000, respectively.

- **Industrial/Commercial/Residential Service Pipeline:** The installation of a new 6-inch diameter recycled water pipeline is recommended to serve this development. As shown in Figure 6-1, this pipeline will be connected to the existing 12-inch North Golf Course conveyance pipeline. The construction and capital costs estimated for this improvement are $160,000 and $220,000, respectively which include a highway undercrossing.

- **Apartments Service Pipeline:** The installation of a new 6-inch diameter recycled water pipeline is recommended to serve this development. As shown in Figure 6-1, this pipeline will be connected to the Northwest Recycled Water Transmission Main. The construction and capital costs estimated for this improvement are $150,000 and $210,000, respectively which include a highway undercrossing.

- **Esquela Service Pipeline:** The installation of a new 6-inch diameter recycled water pipeline is recommended to serve this development. As shown in Figure 6-1, this pipeline will be connected to the Northwest Recycled Water Transmission Main. The construction and capital costs estimated for this improvement are $60,000 and $80,000, respectively.

- **North Conveyance System Extension:** The installation of new 8- and 6-inch recycled water transmission mains is recommended to serve the Terrace, Highlands, and River Canyon developments. As shown in Figure 6-1, the proposed 8-inch transmission main will be connected to the existing 8-inch North Golf Course conveyance pipeline near Bass Lake. The construction and capital costs estimated for these improvements are $370,000 and $520,000, respectively.

- **Bass Lake Storage Tank and Pumping Station:** Peak demands associated with the recommended project require an additional 250,000 gallons of supplemental recycled water during the 8 hour irrigation schedule. It is recommended that a total capacity of 500,000 gallons be provided based on the prescribed storage criteria along with a new 1,040 gpm pumping station needed to deliver recycled water to the Terrace, Highlands, and River Canyon developments. The construction and capital costs estimated for this improvement are $2,070,000 and $2,900,000, respectively.

6.2 Facility Planning

The technical work completed for the Study provides the rational and framework for the recommended alternative and improvements. Preliminary locations of all new facilities are shown in Figure 6-1. Facility planning is required to develop hydraulic models of the existing and expanded recycled water delivery system, optimize and finalize facility locations and alignments, refine design criteria and sizing, identify land requirements, and update cost estimates. Following completion of facility planning, environmental and regulatory permitting efforts can commence as described in Table 6-2.

6.3 Environmental Compliance and Permitting

The recommended improvements will require compliance with the CEQA and possibly National Environmental Policy Act (NEPA) to evaluate the environmental impacts associated with the projects. The required environmental compliance documents should be initiated after facility planning and in conjunction with predesign. To facilitate implementation of recommended project, a programmatic environmental impact report should be considered as an initiate step.

Numerous federal, state and local permits will also be required for implementation. The required permits will be identified during the preparation of the predesign report and environmental compliance documents. A permitting strategy should be developed to minimize project delays and potential mitigation costs.

6.4 Coordination with Ongoing Projects and Programs

Implementation of the recommended project should be coordinated with other ongoing projects and programs. Specifically, expansion of the recycled water program should be coordinated with the development of the water conservation program, Phase 3 and 4 Water Treatment Plant Expansion Projects, and drought augmentation efforts.

6.5 Financing

The estimated project costs are summarized in Table 6-1. All costs are presented in 2013 dollars.

The recommended facilities should be incorporated into the District five-year capital improvement program in accordance with the proposed phasing plan. Specific project financing can then be addressed as part of the District's regular budgeting, rates and facility capacity charge program updates.

Furthermore, it is recommended that the District pursue additional funding through the United States Bureau of Reclamation Title XVI program. This program allows the Bureau to provide up to 25 percent matching grants for quality recycled water projects. The remaining 75 percent has to be provided by a non-federal source (the applicant). Grant funds can be used for many of the subsequent tasks described in Table 6-2 such as environmental and regulatory permitting, detailed design, and construction. One approach to obtaining Title XVI funding is through a Congressional write-in to the federal budget. This approach relies upon the local Congressional representative to initiate the budget request through Congressional review and approval of the President's budget. Although this approach has been successful for other California entities, it requires a significant level of assistance in Washington, D.C. A potential approach to reduce costs associated with the pursuit of Title XVI funding while increasing the potential for receiving grant funding is to join a coalition, such as the Sacramento Water Recycling Water Coalition and/or Western Recycled Water Coalition (formerly the San Francisco Bay Area Recycled Water Coalition).

6.6 Stakeholder Outreach

District staff has met with the local development community and regulatory agencies during the development of this report. Continued successful implementation of the recommended project will require ongoing, proactive stakeholder outreach. Two specific items that should be discussed during these future outreach efforts are described below.

- The CDPH has expressed concerns regarding the commingling of recycled water with surface water and local runoff prior to residential irrigation. It has been determined as part of this Study that routing recycled water directly to future residential customers and installing a storage tank and booster pumping station at Bass Lake would be the most cost-effective option for addressing CDPH concerns. The estimated cost associated with these particular facilities is

$2,900,000. It is recommended that the District attempt to change CDPH's position such that the storage tank is not required.

- Local developers have expressed concern that the recommended project may not be affordable. Attempts to minimize or optimize project costs associated with the implementation of the expanded recycled water program were beyond the scope of this Study. However, potential areas for cost reduction have been identified and are described in Appendix B. It is recommended that these areas of potential cost reductions be used as a starting point to determine methods for optimizing facility requirements and reducing the overall costs of the recommended project during the facility planning effort.

6.7 Implementation Schedule

A recommended implementation schedule has been presented in Table 6-2. This implementation schedule covers Phases 1 and 2. Future efforts and updates to the recommended project will provide opportunities for adjusting the timelines based on actual development schedules and other factors.

7 Environmental Considerations and Potential Side Effects

This chapter provides an overview of potential environmental effects associated with the recommended project. As described in Chapter 6, the recommended project is to expand the existing recycled water program to serve future residential homes for front and backyard irrigation and existing parks and commercial landscaping. The anticipated regulatory requirements and compliance measures associated with these particular uses are also described.

7.1 Potential Environmental Effects

As shown in Figure 6-1, the Project would tie into the existing 12- and 8-inch recycled water conveyance pipelines serving the North Golf Course. Environmental impacts from the Project would occur during construction and operation. However, the Project is not expected to have any potential significant environmental effects or involve unique or undefined environmental risks. Construction would involve activities such as site preparation, grading, excavation, and site restoration and would have relatively short-term, temporary impacts. The activities, and thus the extent of impact would vary with project components (e.g., treatment plant upgrades, pipelines, storage tanks, and pump stations). Project operation would involve the supply of recycled water for front and backyard and limited urban irrigation. A brief discussion of the nature of anticipated construction and operational impacts is provided below.

As described in California's Recycled Water Policy, "the State Water Board finds that the use of recycled water in accordance with this Policy, that is, which supports the sustainable use of groundwater and/or surface water, which is sufficiently treated so as not to adversely impact public health or the environment and which ideally substitutes for use of potable water, is presumed to have a beneficial impact. Other public agencies are encouraged to use this presumption in evaluating the impacts of recycled water projects on the environment as required by the California Environmental Quality Act."

7.1.1 Project Construction

Project construction impacts will be consistent with those of any construction project and are anticipated to include short-term impacts to hydrology and water quality, biological resources, cultural resources, land use, traffic and transportation, air quality, noise, utilities, and temporary access to existing facilities within the community. Because the majority of the proposed facilities would lie within the existing WWRP site, along roadways, or within areas to be developed, the impacts are anticipated to be minimal.

7.1.2 Project Operation

Project operation includes the distribution and use of recycled water for residential and urban irrigation. The Project will be consistent with the state, regional, and local policies that encourage recycled water use. The recycled water would be treated to a level stipulated under California Code of Regulations (CCR) Title 22 requirements and will be protective of the environment and public health. Overall, the Project will increase recycled water use thereby offsetting potable water use and reducing the amount of water diverted from the Cosumnes River.

7.2 Environmental Review Status and Requirements

Environmental compliance with the CEQA will be required prior to construction. Compliance with the NEPA will be required for the Project to receive federal funding or other federal approvals. Neither of these efforts has been initiated. However, an environmental constraints analysis will be completed within the next phases to gain a preliminary understanding of impacts associated with the Project. Communication with regulatory agencies (e.g., RWQCB and CDPH) will continue during all subsequent phases.

When the District is ready to move forward with the Project, it will prepare a checklist to document the evaluation of the proposed activity and would use the checklist to determine the appropriate type of tiered environmental review document. If

significant impacts are anticipated, then an Environmental Impact Report (EIR) would be prepared; if less-than-significant effects are expected to occur, a Negative Declaration would be prepared. In either case, the EIR or Negative Declaration will be completed before the completion of detailed design so that the Project can be modified to address environmental impacts and considerations.

7.3 Public Health and Safety

Project construction is expected to increase vehicular and truck traffic in the Project area. Short-term air emissions and increase in noise levels would occur in and around construction corridors. Construction activities may involve the use of hazardous materials during construction; however implementation of best management practices (BMPs) related to fueling, vehicle washing and handling, use, and storage of chemicals would minimize any risk to either workers or the public.

The use of recycled water is highly regulated in California by CCR Title 22. Project operation will include distribution and use of recycled water for residential and urban irrigation. The Project will be consistent with the state, regional, and local policies that encourage recycled water use. The recycled water will be treated at a level stipulated under Title 22 requirements and will be protective of the environment and public health.

7.4 Regional Water Supply and Water Quality

In terms of hydrology, water quality, and hazardous materials impacts, the proper implementation of BMPs will minimize any potential impacts to receiving waters and groundwater. Typical construction related BMPs include scheduling or limiting activities to certain times of the year based on hydrologic considerations, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction in good working condition.

The Project will increase the beneficial use of recycled water for residential and urban irrigation within the Study Area. This increased recycled water use will also increase the reliability of potable water supplies for the community as a whole in addition to residential and urban landscape irrigation. In turn, increased reliability in the community's potable water supply will help to alleviate concerns that surround the potential of future drought conditions. During times of drought, and as the community's population increases, the expanded use of recycled water for landscape irrigation will help reduce demand on existing potable water supplies by 370 AFY and save that potable water for other municipal and environmental uses.

The recycled water produced by the WWRP will meet Title 22 standards for unrestricted use. Having already implemented the use of recycled water for golf course irrigation, both the District and Rancho Murieta Country Club have adopted several mechanisms to manage the design and operation of the recycled water systems in order to safeguard the health and safety of the public and the environment. The environmental analysis of the alternatives prepared for the EIR or Negative Declaration will analyze these impacts in more detail and will include recommended mitigation measures, as necessary.

7.5 Public Involvement

As described in Chapter 3, the District initiated public outreach efforts to discuss the potential expansion of the existing recycled water program as part of this and other previous studies. As part of these efforts, the relative advantages and disadvantages of several competing alternatives were discussed in an open forum. The District intends to continue to solicit public input in a similar fashion during the environmental compliance and detailed design phases.

7.6 Historical Properties

Because the majority of the recycled water pipelines will be placed underground and along existing roads, no buildings or structures of historic significance are anticipated to be affected by the Project, directly or indirectly. Proposed improvements at the WWRP or selected offsite storage tank sites are not anticipated to affect historical properties either.

8 Legal and Institutional Requirements

This chapter describes legal and institutional requirements and potential barriers to implementing the Project.

8.1 Water Rights

In many recycled water programs, decreased or elimination of effluent discharge to waterways has the potential to affect the water rights of downstream users. In this Project, however, the District does not discharge effluent or plan to do so in the future. Therefore, the Project will not adversely affect water rights of downstream water users and there are no unresolved water rights issues potentially resulting from the implementation of the Project. In addition, the District has rights to all of the wastewater conveyed to and treated at the WWRP.

The District and some potential recipients of recycled water may be concerned that decreased use of their existing surface water supplies may jeopardize their surface water diversion rights. Past legal investigations into this issue has shown, however, that shifting from surface water to recycled water will not create the potential to lose the initial surface water right.

California Water Code Section 1010 asserts that no claim of water right (riparian, pre-1914 appropriative, post-1914 appropriative) will be reduced or lost as a result of the use of recycled water. The use of recycled water in lieu of surface water is equivalent to maintaining that right and will be a beneficial use. Section 1010 states:

> "(a) (1) The cessation of, or reduction in, the use of water under any existing right regardless of the basis of right, as the result of the use of recycled water, desalinated water, or water polluted by waste to a degree which unreasonably affects the water for other beneficial uses, is deemed equivalent to, and for purposes of maintaining any right shall be construed to constitute, a reasonable beneficial use of water to the extent and in the amount that the recycled, desalinated, or polluted water is being used not exceeding, however, the amount of such reduction.
>
> (2) No lapse, reduction, or loss of any existing right shall occur under a cessation of, or reduction in, the use of water pursuant to this subdivision, and, to the extent and in the amount that recycled, desalinated, or polluted water is used in lieu of water appropriated pursuant to Chapter 6 (commencing with Section 1375) of Part 2, the board shall not reduce the appropriation authorized in the user's permit." (California Water Code §1010(a))

California Water Code Section 13551 establishes that potable water shall not be used for nonpotable uses if suitable recycled water is available. The use of recycled water constitutes beneficial use under any existing water right. Section 13551 states,

> " A person or public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, shall not use water from any source of quality suitable for potable domestic use for nonpotable uses, including cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses if suitable recycled water is available as provided in Section 13550; however, any use of recycled water in lieu of water suitable for potable domestic use shall, to the extent of the recycled water so used, be deemed to constitute a reasonable beneficial use of that water and the use of recycled water shall not cause any loss or diminution of any existing water right." (California Water Code §13551)

8.2 Regulatory Requirements

Several State and Federal agencies have regulatory power over projects that affect water quality and sources of supply. Implementation of the Project will require coordination with such agencies, as well as with county and private agencies. Other than consultation with the RWQCB, CDPH, and the Rancho Murieta Country Club, no other consultation has occurred between the District and federal, state, regional, and local authorities during the development of this Study. Prior to Project implementation, consultation with the appropriate agency or agencies will be made, as deemed necessary. The Project will

meet all federal, state, and local requirements. It is anticipated the use of recycled water will be permitted by a master reclamation permit to be issued by the RWQCB.

Most, if not all, of the pipelines envisioned for the Project are proposed to be constructed within public roads or right-of-ways. Modifications and improvements to the WWRP as well as expansion of the seasonal storage facilities are proposed to be constructed within the current treatment plant area. Additional pump stations and storage tanks would be proposed to be sited such as not to disturb habitat or other area that could adversely impact endangered species, wetland, waters of the United States, etc. as described in federal, state, regional or local authority requirements.

8.2.1 Title 22 California Code of Regulations

According to Title 22 of the California Code of Regulations (CCR), recycled water can be used for landscape irrigation (residential and non-residential), wetlands, restricted and unrestricted recreational impoundments, landscape impoundments, toilet flushing, and industrial and construction applications. As described previously, all recycled water produced by the WWRP will be treated to the highest standard – *Disinfected Tertiary Recycled Water* as defined by Title 22. Treatment to this standard has been, and will continue to be, readily achieved using the existing WWRP.

In addition to defining recycled water quality requirements, Title 22 also sets requirements specific to dual plumbed recycled water systems, sampling and analysis, engineering report preparation, design and reliability, operations, and the protection of potable water systems.

8.2.2 California Water Code

Division 7 of the California Water Code is designated the Porter-Cologne Water Quality Control Act, which includes the permitting of wastewater treatment plants and water recycling facilities, as well as other water quality-related provisions. The Porter-Cologne Water Quality Control Act established the State Water Resources Control Board and each Regional Water Quality Control Board as the principal State agencies with primary responsibilities for coordinating and controlling water quality and water rights in California. The Porter-Cologne Act is the primary implementation tool for California's responsibilities to regulate pollutant discharge as established under the Clean Water Act.

Division 7, Chapter 7.5 of the California Water Code (Code), also known as the Water Recycling Act of 1991, recognizes the interest to develop water recycling facilities to supplement existing surface water and groundwater supplies in order to meet the State's future water needs. The Code authorizes each regional board, after consulting with and receiving recommendations from the California Department of Public Health, to set requirements which may be placed on the entity reclaiming water, the user, or both, for water that will be used as recycled water. The Code establishes reporting and permitting requirements for the regional boards, which must work collaboratively with the CDPH. Additionally, it generally defines conditions under which recycled water may be used. The conditions for use include:

- If the source of recycled water is of adequate quality, which is determined by CDPH criteria, and does not harm plants, wildlife, and the public health;
- If recycled water may be furnished at a reasonable cost to the use; and
- If the use of recycled water will not adversely affect water rights.

8.2.3 Permits and Administrative Provisions

The RWQCB is assigned with the protection, coordination, and control of water quality within the Sacramento region and, therefore, is responsible for the issuance and enforcement of requirements given to producers, distributors, and users of

recycled water. The RWQCB issues Waste Discharge Requirements (WDRs) for activities which can affect groundwater quality, including recycled water discharges. In addition, Water Reclamation Requirements (WRRs) can also be issued to place conditions on recycled water use. Regional Water Quality Control Boards may issue Master Reclamation Permits (MRPs) in lieu of individual WRRs for projects involving multiple users. These MRPs are issued to a producer or distributor, or both, of recycled water and combine the WDRs and WRRs. It is the District's intent to apply for and obtain a MRP to cover all intended uses (e.g., residential, park, roadway median, commercial, and golf course irrigation). The process for applying for and obtaining approval is summarized below:

1. **Prepare and Submit Title 22 Engineering Report:** The preparation, submission, and approval of a Title 22 Engineering Report describing the manner in which the Project will comply with Title 22 will be required prior to initiating expanded recycled water use. The CDPH's guidance document, entitled *Preparation of an Engineering Report for the Production, Distribution, and Use of Recycled Water*, describes the information required for approval of recycled water projects. The report should contain sufficient information to assure the regulatory agencies that the degree and reliability of treatment is commensurate with the requirements for the proposed use, and that the use of the recycled water will not create a health hazard or nuisance. In general, CDPH is the primary regulatory agency that will review and approve this engineering report to ensure the protection of public health. However, it is likely that the RWQCB will also participate in this review and approval process.

2. **Prepare and Submit Report of Waste Discharge:** Agencies proposing to use recycled water must prepare and submit a Report of Waste Discharge (RWD) to the Regional Water Quality Control Board to identify potential impacts to surface water and groundwater. The RWD typically consists of a package containing a completed Form 200 (Application/Report of Waste Discharge), discharge characterization, site maps, an anti-degradation analysis, and water, salt, and nutrient (nitrogen) management plans.

As shown in Table 6-2 which was presented in the next chapter, the District intends to initiate the preparation of the Title 22 Engineering Report and Report of Waste Discharge later this year.

The District has initiated the process of developing administrative procedures and User Agreements to ensure Title 22 and, and in the future, MRP compliance. Once these procedures and agreements have been approved by the RWQCB, the District may authorize additional recycled water uses on a case-by-case basis in accordance with the MRP. Specific items to be developed by the District include recycled water system guidelines, design and construction standards, homeowner notification form, residential recycled water irrigation installation requirements, and inspection requirements pertaining to the proper installation and routine operations. Residential installation requirements will include the need to submit residential irrigation plans for District approval prior to initiating recycled water service.

8.3 Interagency Agreements

The Project will serve customers within the District's service area. Customers will be served through the use of the existing recycled water conveyance system, a portion of which is owned and operated by the Rancho Murieta Country Club. Therefore, an interagency agreement between the District and the Rancho Murieta Country Club will be required.

9 Financial Capability of Sponsor

This chapter describes the implementation schedule and the District's willingness and ability to pay for its share of the Project capital costs and the full operation, maintenance, and replacement costs.

9.1 Project Implementation Schedule

Table 6-2 shows the proposed implementation schedule illustrating all subsequent Project phases. As shown, the next phases include the development of recycled water system standards, detailed project description, preparation of the environmental review and engineering report documents, and master reclamation permit application. Detailed design of the expanded recycled water system is expected to be initiated during the fourth quarter of 2013, whereas construction and startup are anticipated to occur between October 2014 and the end of 2015. Phase 1 bidding, award, and construction phases are expected to follow the completion of the environmental review process. Actual timing of these phases may be altered depending on project financing and actual development timelines.

9.2 District's Willingness to Pay

The District recognizes the value of recycled water and, as described in Policy 2011-07, is committed to expanding its use when deemed to be cost-effective. As demonstrated by the completion of the previous studies described in Chapters 2 and 3, the District has already invested money and staff time to plan the Project, communicate to the community its intension of expanding the recycled water program, and discuss infrastructure and regulatory requirements with local developers and regulators. The District will utilize developer fees (e.g., Water Supply Augmentation fees and developer contributions) to pay for its share of the capital costs if federal funding becomes available. The District's ability and willingness to pay for the Project is demonstrated in a letter from the District's General Manager. This letter is provided in Appendix C. The District will pay for the full operation, maintenance and replacement costs of the Project through user rates and capital replacement reserve funds.

9.3 Project Funding Plan

The Project will be funded by the District through developer fees (Water Supply Augmentation fees), developer contributions, and Title XVI funding. The Title XVI funding request will not exceed 25% of the Project costs. The District will pay the remaining 75% through developer fees (Water Supply Augmentation fees) and developer contributions. The District has no funding limitations for the Project at this time. The on-going operation and maintenance of the Project will be funded by a user rate structure to be developed by the District. Future replacement costs of the project infrastructure will be addressed through the collection of replacement reserve fees, which will be incorporated in a user monthly base rate.

10 Research Needs

The methodologies and framework needed to complete the remaining planning and detailed design efforts have been successfully demonstrated in the past through the development of similar residential irrigation programs. The Project will be constructed using conventional pipeline, storage tank, and pumping station construction methods. Pipelines will be installed primarily using conventional open trench construction techniques; directional drilling may be considered for portions of the Project if cost-effective. There is no further research necessary to complete and implement the Project.

Appendix A

District Recycled Water Policy

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

Category:	Improvements	**Policy #** 2011-07
Title:	Authorized and Mandated Use of Recycled Water	

PURPOSE

This policy is to authorize the use of recycled water in future developments and existing uses

FINDINGS

1. The District has historically provided for the reuse of tertiary treated effluent on the two golf courses. They have a combined irrigation of approximately 250 acres and have a peak demand of about 1.4 million gallons a day (MGD) during the summer months. The tertiary treatment plant typically operates from late April through October.

2. The disposal method for additional effluent from the District is land application according to the District's Waste Discharge Requirements (WDRs). Currently, the excess recycled water above the demand from the golf course irrigation is discharged outside the District's service area using a sprinkler application system at the Van Vleck ranch.

3. In the future, additional storage will be required for each of the service area's buildout scenarios. Supplementary water is needed to satisfy overall golf course irrigation needs under current conditions as recycled water production is less than the amount required annually. In the future, reclaimed water production may surpass golf course irrigation needs and an additional means of effluent disposal will be needed.

4. The projected influence from reduced indoor potable water demand assuming SB7 (2020) compliance is achieved is an estimated eight percent (8%) reduction. This indoor potable demand is projected to also reduce recycled water storage and disposal needs by 8 percent. Future recycled water available for reuse may be on the order of 1,000 acre-ft/yr (medium growth scenario) assuming 2020 compliance is achieved.

5. Condition No. 26 of Water Rights Permit 16762, District's primary water right, requires the use of recycled water for irrigation purposes.

6. The priority of recycled water availability shall be in accordance with the Agreement for Availability and use of Reclaimed Wastewater dated May 16, 1988,

POLICY

1. The District mandates the future use of recycled water, wherever economically and physically feasible, as determined by the Board, for non-domestic purposes when such water is of adequate quality and quantity, available at a reasonable cost, not detrimental to public health, and not injurious to plant life, fish, and wildlife. The type of use is defined in Title 22 of the California Code of Regulations. In general, the lands subject to mandatory recycled water use are defined as undeveloped parcels within the existing District service area.

2. Existing parks, median landscaping and commercial landscape areas may be converted to recycled water irrigation wherever economically and physically feasible, as determined by the Board.

Adopted by Rancho Murieta Community Services District's Board of Directors	July 20, 2011

Appendix B

Cost Estimates, Economic Analyses, and Potential Cost Saving Measures

Analysis 1 - Determination of Most Cost-Effective Developments for RW Service (Step 1 Assume RW Service to All Developments)
Title XVI Recycled Water Feasibility Study
Alternative 2 - Recycled Water Service to All Developments; With RMCC Contribution for South Golf Course Pumping Station

COST ALLOCATIONS TO INDIVIDUAL DEVELOPMENTS WITH RMCC CONTRIBUTIONS (Initial Analysis - All Developments In)

	Estimated Demand (AFY)	Total Capital Cost Allocation ($)	Relative Unit Cost ($/AFY)	Pumping Station and Tank Improvements: South Golf Course ($)	Pumping Station and Tank Improvements: North Golf Course ($)	Pumping Station and Tank Improvements: Bass Lake PS and Tank ($)	Lookout Hill ($)	Phase 3 ($)	Improvement and Allocation: Lakeview & Riverview ($)	Improvement and Allocation: Murieta Gardens ($)	Improvement and Allocation: Retreats ($)	Improvement and Allocation: Res of Murieta Hills ($)	Improvement and Allocation: Ind/Com/Res ($)	Improvement and Allocation: Apartment 17 ($)	Improvement and Allocation: Esquela ($)	Improvement and Allocation: River Canyon ($)	Improvement and Allocation: Terrace & Highlands ($)
Total				2,130,000	1,700,000	2,900,000	2,080,000	6,400,000	380,000	490,000	490,000	3,040,000	220,000	210,000	80,000	130,000	390,000
Golf Course				1,240,000													
Phase 1 Developments																	
Riverview	22.4	354,238	15,814	131,644					222,594								
Lakeview	15.8	250,497	15,814	93,091					157,406								
Residences of Murieta Hills	73.8	4,451,422	60,303		347,352		1,539,231			252,642		2,312,197					
Retreats	18.8	578,557	30,742		88,557						490,000						
Murieta Gardens	19.6	159,419	8,128		92,292					67,127							
Subtotal	150																
Phase 2 Developments																	
Industrial/Commercial/Residential	50.9	459,735	9,024		239,735								220,000			130,000	
River Canyon	46.4	1,254,450	27,059		218,144	906,306											160,732
Highlands	42.0	1,180,175	28,079		197,773	821,670											229,268
Terrace	60.0	1,683,393	28,079		282,101	1,172,024				81,472		104,840		210,000			
Apartments	23.8	508,325	21,354		112,013					88,759		622,962			80,000		
Esquela	25.9	1,454,523	56,086		122,033		540,769										
Estates of Lake Clementia	31.7	1,539,823	48,556	186,374				1,353,450									
Estates of Lake Chesbro	29.4	1,783,492	60,755	172,520				1,610,972									
Estates of Lake Calero	52.1	3,741,949	71,780	306,370				3,435,579									
Subtotal	362			890,000	1,700,000	2,900,000	2,080,000	6,400,000	380,000	490,000	490,000	3,040,000	220,000	210,000	80,000	130,000	390,000
Total - All Projects	513	**19,400,000**			0	0	0	0	0	0	0	0	0	0	0	0	0

Relative Ranking of Developments

Phase 1 Developments		
Murieta Gardens	8,100	
Riverview	15,814	May or may not be cost-effective depending on how South GC Pumping Station is allocated
Lakeview	15,814	May or may not be cost-effective depending on how South GC Pumping Station is allocated
Retreats	30,714	
Residences of Murieta Hills	54,653	May or may not be more cost-effective depending on whether Stonehouse Park included in the demands associated with Res of Murieta Hills and Esquela
Phase 2 Developments		
Industrial/Commercial/Residential	8,996	
Apartments	21,283	
River Canyon	26,829	
Highlands	27,849	
Terrace	27,849	
Estates of Lake Clementia	48,089	High unit cost; unlikely RMCC will contribute to South GC Pump Station
Esquela	50,508	May or may not be more cost-effective depending on whether Stonehouse Park included in the demands associated with Res of Murieta Hills and Esquela
Estates of Lake Chesbro	60,155	High unit cost; unlikely RMCC will contribute to South GC Pump Station
Estates of Lake Calero	71,059	High unit cost; unlikely RMCC will contribute to South GC Pump Station
Both Phases Combined		
Murieta Gardens	8,100	
Industrial/Commercial/Residential	8,996	
Riverview	15,814	
Lakeview	15,814	
Apartments	21,283	
River Canyon	26,829	
Highlands	27,849	
Terrace	27,849	
Retreats	30,714	
Estates of Lake Clementia	48,089	
Esquela	50,508	
Residences of Murieta Hills	54,653	
Estates of Lake Chesbro	60,155	
Estates of Lake Calero	71,059	

B1

Analysis 1 - Determination of Most Cost-Effective Developments for RW Service (Step 1 Assume RW to All Developments)
Title XVI Recycled Water Feasibility Study
Alternative 2 - Recycled Water Service to All Developments; Without RMCC Contribution for South Golf Course Pumping Station

COST ALLOCATIONS TO INDIVIDUAL DEVELOPMENTS WTHOUT RMCC CONTRIBUTIONS (Initial Analysis All Developments In)

	Estimated Demand (AFY)	Total Capital Cost Allocation ($)	Relative Unit Cost ($/AFY)	Pumping Station and Tank Improvements: South Golf Course ($)	North Golf Course ($)	Bass Lake PS and Tank ($)	Lookout Hill ($)	Phase 3 ($)	Improvement and Allocation: Lakeview & Riverview ($)	Murieta Gardens ($)	Retreats ($)	Res of Murieta Hills ($)	Ind/Com/Res ($)	Apartment 17 ($)	Esquela ($)	River Canyon ($)	Terrace & Highlands ($)
Total				2,130,000	1,700,000	2,900,000	2,080,000	6,400,000	380,000	490,000	490,000	3,040,000	220,000	210,000	80,000	130,000	390,000
Golf Course																	
Phase 1 Developments																	
Riverview	22.4	537,653	24,002	315,059					222,594								
Lakeview	15.8	380,197	24,002	222,791					157,406								
Residences of Murieta Hills	73.8	4,451,422	60,303		347,352		1,539,231			252,642		2,312,197					
Retreats	18.8	578,557	30,742		88,557						490,000						
Murieta Gardens	19.6	159,419	8,128		92,292					67,127							
Subtotal	150																
Phase 2 Developments																	
Industrial/Commercial/Residential	50.9	459,735	9,024		239,735								220,000			130,000	
River Canyon	46.4	1,254,450	27,059		218,144	906,306											160,732
Highlands	42.0	1,180,175	28,079		197,773	821,670											229,268
Terrace	60.0	1,683,393	28,079		282,101	1,172,024											
Apartment 17	23.8	508,325	21,354		112,013					81,472		104,840		210,000			
Esquela	25.9	1,454,523	56,086		122,033		540,769			88,759		622,962			80,000		
Estates of Lake Clementia	31.7	1,799,490	56,744	446,041				1,353,450									
Estates of Lake Chesbro	29.4	2,023,858	68,943	412,886				1,610,972									
Estates of Lake Calero	52.1	4,168,802	79,968	733,224				3,435,579									
Subtotal	362			2,130,000	1,700,000	2,900,000	2,080,000	6,400,000	380,000	490,000	490,000	3,040,000	220,000	210,000	80,000	130,000	390,000
Total - All Projects	513			0	0	0	0	0	0	0	0	0	0	0	0	0	0

Relative Ranking of Developments

Phase 1 Developments		
Murieta Gardens	8,128	
Lakeview	24,002	May or may not be cost-effective depending on how South GC Pumping Station is allocated
Riverview	24,002	May or may not be cost-effective depending on how South GC Pumping Station is allocated
Retreats	30,742	
Residences of Murieta Hills	60,303	May or may not be more cost-effective depending on whether Stonehouse Park included in the demands associated with Res of Murieta Hills and Esquela
Phase 2 Developments		
Industrial/Commercial/Residential	9,024	
Apartment 17	21,354	
River Canyon	27,059	
Highlands	28,079	
Terrace	28,079	
Esquela	56,086	May or may not be more cost-effective depending on whether Stonehouse Park included in the demands associated with Res of Murieta Hills and Esquela
Estates of Lake Clementia	56,744	Highest unit cost; not cost-effective for service - eliminate from contention in Analysis 2
Estates of Lake Chesbro	68,943	Highest unit cost; not cost-effective for service - eliminate from contention in Analysis 2
Estates of Lake Calero	79,968	Highest unit cost; not cost-effective for service - eliminate from contention in Analysis 2
Both Phases Combined		
Murieta Gardens	8,128	
Industrial/Commercial/Residential	9,024	
Apartment 17	21,354	
Lakeview	24,002	May or may not be cost-effective depending on how South GC Pumping Station is allocated
Riverview	24,002	May or may not be cost-effective depending on how South GC Pumping Station is allocated
River Canyon	27,059	
Highlands	28,079	
Terrace	28,079	
Retreats	30,742	
Esquela	56,086	May or may not be cost-effective depending on how South GC Pumping Station is allocated and whether Stonehouse Park included
Estates of Lake Clementia	56,744	Highest unit cost; not cost-effective for service - eliminate from contention in Analysis 2
Residences of Murieta Hills	60,303	May or may not be cost-effective depending on how South GC Pumping Station is allocated and whether Stonehouse Park included
Estates of Lake Chesbro	68,943	Highest unit cost; not cost-effective for service - eliminate from contention in Analysis 2
Estates of Lake Calero	79,968	Highest unit cost; not cost-effective for service - eliminate from contention in Analysis 2

Analysis 2 - Determination of Most Cost-Effective Developments for RW Service (Step 2 All Developments Served RW Except for Lake Estates)
Title XVI Recycled Water Feasibility Study
Alternative 2 - Recycled Water Service to All Developments Except for the Three Lake Estates; With RMCC Contribution for South Golf Course Pumping Station

COST ALLOCATIONS TO INDIVIDUAL DEVELOPMENTS WITH RMCC CONTRIBUTIONS Second Analysis - Lake Estates Out)

	Estimated Demand (AFY)	Total Capital Cost Allocation ($)	Relative Unit Cost ($/AFY)	Pumping Station and Tank Improvements: South Golf Course ($)	North Golf Course ($)	Bass Lake PS and Tank ($)	Lookout Hill ($)	Improvement and Allocation: Phase 3 ($)	Lakeview & Riverview ($)	Murieta Gardens ($)	Retreats ($)	Res of Murieta Hills ($)	Ind/Com/Res ($)	Apartment 17 ($)	Esquela ($)	River Canyon ($)	Terrace & Highlands ($)
Total				1,990,000	1,700,000	2,900,000	2,080,000		380,000	490,000	490,000	3,040,000	220,000	210,000	80,000	130,000	390,000
Golf Course				1,240,000													
Phase 1 Developments																	
Riverview	22.4	661,925	29,550	439,331					222,594								
Lakeview	15.8	468,075	29,550	310,669					157,406								
Residences of Murieta Hills	73.8	4,451,422	60,303		347,352		1,539,231			252,642		2,312,197					
Retreats	18.8	578,557	30,742		88,557						490,000						
Murieta Gardens	19.6	159,419	8,128		92,292					67,127							
Subtotal	150																
Phase 2 Developments																	
Industrial/Commercial/Residential	50.9	459,735	9,024		239,735								220,000			130,000	
River Canyon	46.4	1,254,450	27,059		218,144	906,306											160,732
Highlands	42.0	1,180,175	28,079		197,773	821,670											229,268
Terrace	60.0	1,683,393	28,079		282,101	1,172,024				81,472		104,840		210,000			
Apartments	23.8	508,325	21,354		112,013					88,759		622,962			80,000		
Esquela	25.9	1,454,523	56,086		122,033		540,769										
Estates of Lake Clementia	31.7	0	0					0									
Estates of Lake Chesbro	29.4	0	0					0									
Estates of Lake Calero	52.1	0	0					0									
Subtotal	249			750,000	1,700,000	2,900,000	2,080,000	0	380,000	490,000	490,000	3,040,000	220,000	210,000	80,000	130,000	390,000
Total - All Projects	400				0	0	0	0	0	0	0	0	0	0	0	0	0

Relative Ranking of Developments

Phase 1 Developments		
Murieta Gardens	8,100	
Riverview	29,550	May or may not be cost-effective depending on whether RMCC contributes to South GC improvements
Lakeview	29,550	May or may not be cost-effective depending on whether RMCC contributes to South GC improvements
Retreats	30,714	
Residences of Murieta Hills	54,653	May or may not be more cost-effective depending on whether Stonehouse Park included in the demands associated with Res of Murieta Hills and Esquela
Phase 2 Developments		
Industrial/Commercial/Residential	8,996	
Apartments	21,283	
River Canyon	26,829	
Highlands	27,849	
Terrace	27,849	
Esquela	50,508	May or may not be more cost-effective depending on whether Stonehouse Park included in the demands associated with Res of Murieta Hills and Esquela
Both Phases Combined		
Murieta Gardens	8,100	
Industrial/Commercial/Residential	8,996	
Apartments	21,283	
River Canyon	26,829	
Highlands	27,849	
Terrace	27,849	
Riverview	29,550	May or may not be cost-effective depending on whether RMCC contributes to South GC improvements
Lakeview	29,550	May or may not be cost-effective depending on whether RMCC contributes to South GC improvements
Retreats	30,714	
Esquela	50,508	May or may not be more cost-effective depending on whether Stonehouse Park included in the demands associated with Res of Murieta Hills and Esquela
Residences of Murieta Hills	54,653	May or may not be more cost-effective depending on whether Stonehouse Park included in the demands associated with Res of Murieta Hills and Esquela

Analysis 2 - Determinaiton of Most Cost-Effective Developments for RW Service (Step 2 All Developments Served RW Except for Lake Estates)
Title XVI Recycled Water Feasibility Study
Alternative 2 - Recycled Water Service to All Developments Except for the Three Lake Estates; Without RMCC Contribution for South Golf Course Pumping Station

COST ALLOCATIONS TO INDIVIDUAL DEVELOPMENTS WTHOUT RMCC CONTRIBUTIONS (Second Analysis - Lake Estates Out)

	Estimated Demand (AFY)	Total Capital Cost Allocation ($)	Relative Unit Cost ($/AFY)	Improvement and Allocation: Pumping Station and Tank Improvements — South Golf Course ($)	North Golf Course ($)	Bass Lake PS and Tank ($)	Lookout Hill ($)	Phase 3 ($)	Lakeview & Riverview ($)	Murieta Gardens ($)	Retreats ($)	Res of Murieta Hills ($)	Ind/Com/Res ($)	Apartment 17 ($)	Esquela ($)	River Canyon ($)	Terrace & Higlands ($)
Total				2,130,000	1,700,000	2,900,000	2,080,000	6,400,000	380,000	490,000	490,000	3,040,000	220,000	210,000	80,000	130,000	390,000
Golf Course																	
Phase 1 Developments																	
Riverview	22.4	1,470,293	65,638	1,247,699					222,594								
Lakeview	15.8	1,039,707	65,638	882,301					157,406								
Residences of Murieta Hills	73.8	4,451,422	60,303		347,352		1,539,231			252,642		2,312,197					
Retreats	18.8	578,557	30,742		88,557						490,000						
Murieta Gardens	19.6	159,419	8,128		92,292					67,127							
Subtotal	150																
Phase 2 Developments																	
Industrial/Commercial/Residential	50.9	459,735	9,024		239,735								220,000			130,000	
River Canyon	46.4	1,254,450	27,059		218,144	906,306											160,732
Highlands	42.0	1,180,175	28,079		197,773	821,670											229,268
Terrace	60.0	1,683,393	28,079		282,101	1,172,024											
Apartment 17	23.8	508,325	21,354		112,013					81,472		104,840		210,000			
Esquela	25.9	1,454,523	56,086		122,033		540,769			88,759		622,962			80,000		
Estates of Lake Clementia	31.7	0	0														
Estates of Lake Chesbro	29.4	0	0														
Estates of Lake Calero	52.1	0	0														
Subtotal	249			2,130,000	1,700,000	2,900,000	2,080,000	0	380,000	490,000	490,000	3,040,000	220,000	210,000	80,000	130,000	390,000
Total - All Projects	400			0	0	0	0	-6,400,000	0	0	0	0	0	0	0	0	0

Relative Ranking of Developments

Phase 1 Developments		
Murieta Gardens	8,128	
Retreats	30,742	
Residences of Murieta Hills	60,303	May or may not be more cost-effective depending on whether Stonehouse Park included in the demands associated with Res of Murieta Hills and Esquela
Riverview	65,638	Unlikely RMCC with Contribute and Developments May or May Not Occur in the Future; Deemed to Have Highest Unit Costs
Lakeview	65,638	Unlikely RMCC with Contribute and Developments May or May Not Occur in the Future; Deemed to Have Highest Unit Costs
Phase 2 Developments		
Industrial/Commercial/Residential	9,024	
Apartment 17	21,354	
River Canyon	27,059	
Highlands	28,079	
Terrace	28,079	
Esquela	56,086	May or may not be more cost-effective depending on whether Stonehouse Park included in the demands associated with Res of Murieta Hills and Esquela
Both Phases Combined		
Murieta Gardens	8,128	
Industrial/Commercial/Residential	9,024	
Apartment 17	21,354	
River Canyon	27,059	
Highlands	28,079	
Terrace	28,079	
Retreats	30,742	
Esquela	56,086	
Residences of Murieta Hills	60,303	
Riverview	65,638	Unlikely RMCC with Contribute and Developments May or May Not Occur in the Future; Deemed to Have Highest Unit Costs
Lakeview	65,638	Unlikely RMCC with Contribute and Developments May or May Not Occur in the Future; Deemed to Have Highest Unit Costs

Analysis 3 - Determination of Most Cost-Effective Developments for RW Service (Step 3 All Developments Served RW Except for Three Lake Estates; No RMCC Contribution for South GC Improvements; Allocate Stonehouse Park Demand to Res of Murieta Hills and Esquela)
Title XVI Recycled Water Feasibility Study
Alternative 2 - Recycled Water Service to All Developments Except for Three Lake Estates; Without RMCC Contribution for South Golf Course Pumping Station; Addition of Stonehouse Park Demand

COST ALLOCATIONS TO INDIVIDUAL DEVELOPMENTS WTHOUT RMCC CONTRIBUTIONS (Third Analysis - Lake Estates Out)

	Estimated Demand (AFY)	Total Capital Cost Allocation ($)	Relative Unit Cost ($/AFY)	Improvement and Allocation: South Golf Course ($)	Pumping Station and Tank Improvements: North Golf Course ($)	Pumping Station and Tank Improvements: Bass Lake PS and Tank ($)	Lookout Hill ($)	Phase 3 ($)	Lakeview & Riverview ($)	Murieta Gardens ($)	Retreats ($)	Res of Murieta Hills ($)	Ind/Com/Res ($)	Apartment 17 ($)	Esquela ($)	River Canyon ($)	Terrace & Higlands ($)
Total				2,130,000	1,700,000	2,900,000	2,080,000	6,400,000	380,000	490,000	490,000	3,040,000	220,000	210,000	80,000	130,000	390,000
Golf Course																	
Phase 1 Developments																	
Riverview	22.4	1,470,293	65,638	1,247,699					222,594								
Lakeview	15.8	1,039,707	65,638	882,301					157,406								
Residences of Murieta Hills	84.2	4,505,290	53,519		381,338		1,539,284			262,446		2,322,222					
Retreats	18.8	575,253	30,567		85,253						490,000						
Murieta Gardens	19.6	149,997	7,648		88,849					61,148							
Subtotal	123																
Phase 2 Developments																	
Industrial/Commercial/Residential	50.9	450,792	8,848		230,792								220,000			130,000	
River Canyon	46.4	1,246,312	26,884		210,006	906,306											160,732
Highlands	42.0	1,172,797	27,904		190,395	821,670											229,268
Terrace	60.0	1,672,869	27,904		271,577	1,172,024											
Apartment 17	23.8	484,245	20,342		107,835					74,214		92,196		210,000			
Esquela	29.6	1,472,445	49,794		133,956		540,716			92,192		625,582			80,000		
Estates of Lake Clementia	31.7	0	0														
Estates of Lake Chesbro	29.4	0	0														
Estates of Lake Calero	52.1	0	0														
Subtotal	253			2,130,000	1,700,000	2,900,000	2,080,000	0	380,000	490,000	490,000	3,040,000	220,000	210,000	80,000	130,000	390,000
Total - All Projects	375			0	0	0	0	-6,400,000	0	0	0	0	0	0	0	0	0

Relative Ranking of Developments

Phase 1 Developments		
Murieta Gardens	7,648	
Retreats	30,567	
Residences of Murieta Hills	53,519	
Riverview	65,638	Eliminate and assume these developments not served RW in the futue
Lakeview	65,638	Eliminate and assume these developments not served RW in the futue
Phase 2 Developments		
Industrial/Commercial/Residential	8,848	
Apartment 17	20,342	
River Canyon	26,884	
Highlands	27,904	
Terrace	27,904	
Esquela	49,794	
Both Phases Combined		
Murieta Gardens	7,648	
Industrial/Commercial/Residential	8,848	
Apartment 17	20,342	
River Canyon	26,884	
Highlands	27,904	
Terrace	27,904	
Retreats	30,567	
Esquela	49,794	
Residences of Murieta Hills	53,519	
Riverview	65,638	Eliminate and assume these developments not served RW in the futue
Lakeview	65,638	Eliminate and assume these developments not served RW in the futue

BS

Analysis 4 - Economic Comparison of Alternatives 1 and 2
Title XVI Recycled Water Feasibility Study
Alternative 1 - No Project Alternative - Van Vleck Sprayfield

Inflation Rate (%/yr)	0
Discount Rate (%/yr)	6

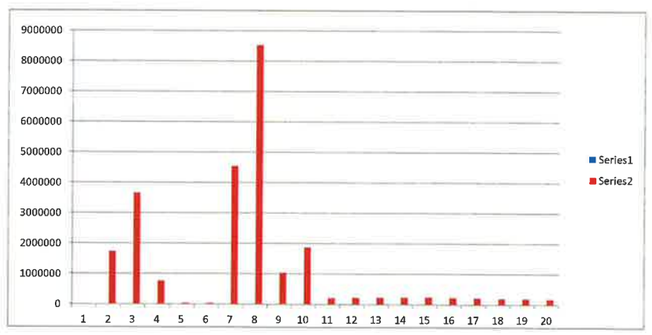
Capital Costs

No.	Improvement	Description
1	Secondary Effluent Storage Capacity Expansion	Provide 240 AF of additional storage capacity; Facility required to be in service when projected ADWFs exceed 0.67 MGD.
2	Chlorine Contact Basin Replacement	Install new 3.0 MGD chlorine contact basin
3	South Golf Course Pump Station Improvements	Install new 640 gpm pumping station to meet existing South Golf Course MDD irrigation demands
4	Van Vleck Improvements	Modify Van Vleck Sprayfield to serve as permanent effluent disposal facility
5	Phase 1 Van Vleck Sprayfield Expansion	Expand Van Vleck Sprayfield to accommodate Phase 1 development (add 60 acres total)
6	Phase 2 Van Vleck Sprayfield Expansion	Expand Van Vleck Sprayfield to accommodate Phase 2 development (add 100 acres total)
7	Water Treatment Plant Expansion	Residential Recycled Water Alternative Provides 370 AFY of RW to serve future residential irrigation; Equivalent to a reduction of 1.1-1.2 MGD WTP capacity during peak month; Reduced WTP capacity anticipated to be associated with Phase 2 development which is expected to begin occupation in 2020

Operations and Maintenance Cost Components

4	Incremental Potable Water Production Costs	Compared to Alternative 2, this alternative requires the production of 370 AFY of potable water at buildout; Excess RW is projected to be available starting in 2018
5	Van Vleck Sprayfield Repair and Replacement	Assumed to be equal to 2.5 % /yr of estimated pipeline and pumping station costs
6	Incremental WTP Repair and Replacement	Assume to be equal to 1% /yr of incremental WTP reduction

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
							3,250,000	6,500,000												
			433,333	866,667																
		413,333	826,667																	
		1,426,667	2,853,333																	
							1,070,000	2,140,000												
									1,416,667	2,833,333										
							2,016,000	4,032,000												
	0	0	0	0	0	0	29,669	71,208	113,757	156,305	198,854	241,403	283,952	326,500	369,049	369,049	369,049	369,049	369,049	369,049
				48,844	48,844	48,844	87,979	87,979	87,979	140,740	140,740	140,740	140,740	140,740	140,740	140,740	140,740	140,740	140,740	140,740
									43,200	43,200	43,200	43,200	43,200	43,200	43,200	43,200	43,200	43,200	43,200	43,200
Subtotal (All Improvements and O&M)	0	1,840,000	4,113,333	915,511	48,844	48,844	6,453,648	12,831,187	1,661,602	3,173,579	382,794	425,343	467,892	510,440	552,989	552,989	552,989	552,989	552,989	552,989
Net Present Worth Costs (All Improvements and O&M)	0	1,735,849	3,660,852	768,680	38,689	36,499	4,549,567	8,533,472	1,042,510	1,878,437	213,750	224,065	232,528	239,314	244,588	230,743	217,682	205,361	193,736	182,770
Grand Total - Net Present Worth Costs (All Improvements and O&M)	**24,429,093**																			
Subtotal (Incremental Improvements and O&M)	0	1,426,667	2,853,333	48,844	48,844	48,844	3,203,648	6,331,187	1,661,602	3,173,579	382,794	425,343	467,892	510,440	552,989	552,989	552,989	552,989	552,989	552,989
Net Present Worth Costs (Incremental Improvements and O&M)	0	1,345,912	2,539,457	41,010	38,689	36,499	2,258,445	4,210,601	1,042,510	1,878,437	213,750	224,065	232,528	239,314	244,588	230,743	217,682	205,361	193,736	182,770
Grand Total - Net Present Worth Costs (Incremental Improvements and O&M)	**15,576,097**																			
Estimated Recycled Water Production	458	460	463	466	497	538	580	621	664	706	749	791	834	877	919	919	919	919	919	919
	2130216.9																			



Analysis 4 - Economic Comparison of Alternatives 1 and 2
Title XVI Recycled Water Feasibility Study
Alternative 2 - Residential Recycled Water Program Alternative

	Inflation Rate (%/yr)	0
	Discount Rate (%/yr)	6

			Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
			Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Capital Costs																							
No.	**Improvement**	**Description**																					
1	Secondary Effluent Storage Capacity Expansion	Provide 240 AF of additional storage capacity; Equivalent ADWF capacity of 0.67 MGD, Occurs 2019.5 or 2025 based on Timeline A and B, respectively								3,250,000	6,500,000												
2	Chlorine Contact Basin Replacement	Install new 3.0 MGD chlorine contact basin				433,333	866,667																
3	South Golf Course Pumping Station Improvements	Install new 640 gpm pumping station to meet existing South Golf Course MDD irrigation demands			413,333	826,667																	
	Phase 1 Recycled Water Infrastructure	Provide Recycled Water Serve to Murieta Gardens, Retreats, and Res of Murieta Hills																					
4	Murieta Gardens	Install 12-inch pipeline to serve recycled water to the Murieta Gardens and other northeast developments				163,333	326,667																
5	Retreats	Install 4-inch pipeline to serve recycled water to the Retreats				163,333	326,667																
6	Residences of Murieta Hills	Install 10-inch pipeline to serve recycled water to Residences of Murieta Hills and, the future, Esquela and the Apartments				1,013,333	2,026,667																
9	Lookout Hill Tanks and Booster Pumping Station	Refurbish existing 200,000 gallon tank and install new 200,00 gallon tank and booster pumping station				693,333	1,386,667																
10	North Golf Course Pumping Station Improvements	Expand firm capacity of existing pumping station to 2,110 gpm (equal to maximum capacity of existing 12-inch pipeline)				566,667	1,133,333																
	Phase 2 Recycled Water Infrastructure																						
11	Industrial/Commercial/Residential	Install 6-inch pipeline and Jackson Highway undercrossing to serve Industrial/Commercial/Residential development								73,333	146,667												
12	Apartments	Install 4-inch pipeline and Jackson Highway undercrossing to serve Apartments 17								70,000	140,000												
13	Esquela	Install 4-inch pipeline to serve Esquela								26,667	53,333												
14	Bass Lake Tank and Pumping Station	Install new 500,000 gallon and 1,040 gpm pumping station to convey recycled water to Terrace, Highlands, and River Canyon developments								966,667	1,933,333												
15	River Canyon	Install 8-inch pipeline to serve River Canyon								43,333	86,667												
16	Terrace and Highlands	Install 6- and 8-inch pipelines to serve Terrace and Highlands								130,000	260,000												
Operations and Maintenance Cost Components																							
17	South Golf Course Conveyance Pipeline and Pumping Station R & R (8-incl	No costs included in NPW comparison as this pipeline must be in service with or without the residential recycled water program to serve the SGC																					
18	North Golf Course Conveyance Pipeline and Pumping Station R & R (12- a	No costs included in NPW comparison as this pipeline must be in service with or without the residential recycled water program to serve the NGC																					
19	Phase 1 Recycled Water Infrastructure Repair and Replacement	Assumed to be equal to 2.5 % /yr of estimated pipeline and pumping station costs exclusive to the residential recycled water system						86,360	86,360	86,360	86,360	86,360	86,360	86,360	86,360	86,360	86,360	86,360	86,360	86,360	86,360	86,360	86,360
20	Phase 2 Recycled Water Infrastructure Repair and Replacement	Assumed to be equal to 2.5 % /yr of estimated pipeline and pumping station costs exclusive to the residential recycled water system										29,565	29,565	29,565	29,565	29,565	29,565	29,565	29,565	29,565	29,565	29,565	29,565
21	Recycled Water Utility Management (1.5 FTEs)	Utility Manager (base salary of $75,000 with 25% fringe benefits); Administrative Support ($50,000 base salary with 25% fringe benefits)				93,750	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000
		Subtotal (All Improvements and O&M)		0	413,333	3,953,750	6,191,667	211,360	211,360	4,771,360	9,331,360	240,925	240,925	240,925	240,925	240,925	240,925	240,925	240,925	240,925	240,925	240,925	240,925
		Net Present Worth Costs (All Improvements and O&M)		0	389,937	3,518,823	5,198,643	167,417	157,941	3,363,621	6,205,887	151,160	142,603	134,531	126,916	119,733	112,955	106,562	100,530	94,839	89,471	84,407	79,629
		Grand Total - Net Present Worth Costs (All Improvements and O&M)		**20,345,605**																			
		Subtotal (Incremental Improvements and O&M)		0	0	2,693,750	5,325,000	211,360	211,360	1,521,360	2,831,360	240,925	240,925	240,925	240,925	240,925	240,925	240,925	240,925	240,925	240,925	240,925	240,925
		Net Present Worth Costs (Incremental Improvements and O&M)		0	0	2,397,428	4,470,973	167,417	157,941	1,072,499	1,883,016	151,160	142,603	134,531	126,916	119,733	112,955	106,562	100,530	94,839	89,471	84,407	79,629
		Grand Total - Net Present Worth Costs (Incremental Improvements and O&M)		**11,492,609**																			
		Relative Difference Between NPW of Alternatives 1 and 2 (%)		**26.2**																			

	0.06
	20
	0.087184557
1001978.052	
2708.048789	
1774136.754	

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	240 AF Secondary Effluent Storage Pond	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						622,200
Mobilization (5%)		5%	LS	6,840,000	342,000	
Bid, Bonds, and Insurance (3%)		3%	LS	6,840,000	205,200	
Submittals		10	Number	5,000	50,000	
O&M Manuals		5	Number	5,000	25,000	
Division 2 - Site Work						3,649,429
Excavation (unclassified, 1.5 cy bucket)		348,480	CY	5.85	2,038,608	
Offsite Hauling (30 miles) and Disposal		116,160	CY	11.3	1,312,608	
Unconfined Backfill and Compaction		193,600	CY	1.5	290,400	
Trenching		1,042	CY	5	5,208	
Confined Backfill and Compaction		1,042	CY	2.5	2,604	
Division 3 - Concrete						100,000
Concrete Allowance		1.0	LS	100,000	100,000	
Division 4 - Masonry				NOT USED		
Division 5 - Metals						50,000
Miscellaneous Metals Allowance		1	LS	50,000	50,000	
Division 6 - Wood and Plastics				NOT USED		
Division 7 - Thermal and Mositure Protection				NOT USED		
Division 8 - Doors and Windows				NOT USED		
Division 9 - Finishes				NOT USED		
Division 10 - Specialties						784,080
Reservoir Liner (25-ft deep reservoir)	Hypalon	522,720	SF	1.5	784,080	
Division 11 - Equipment						250,000
Pumps, Valves, and Appurtenance Allowance		1	LS	250,000	250,000	
Division 12 - Furnishings				NOT USED		
Division 13 - Special Construction				NOT USED		
Division 14 - Conveying Systems				NOT USED		
Division 15 - Mechanical						420,000
14-inch DIP - Storage Pond Feed		1,000	LF	168	168,000	
14-inch DIP - Storage Pond Return		1,500	LF	168	252,000	
Division 16 - Electrical and Instrumentation						70,000
Electrical - 15% of Pumping Station Costs		15%	LS	350,000	52,500	
Instrumentation and Controls		5%	LS	350,000	17,500	

Subtotal	5,945,709
Contingency - Construction Costs (15%)	891,856
Estimate of Probable Construction Costs	**6,840,000**
Administrative Fees (10%)	684,000
Regulatory (CEQA) Compliance (5%)	342,000
Engineering and Construction Management (17.5%)	1,197,000
Contingency - Soft Costs (10%)	684,000
Land Cost	0
Grand Total	**9,750,000**

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	195,000 gallon Chlorine Contact Basin Within Existing 1.8 MG Equalization Basin	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						174,400
Mobilization (5%)		5%	LS	930,000	46,500	
Bid, Bonds, and Insurance (3%)		3%	LS	930,000	27,900	
Submittals		10	Number	5,000	50,000	
O&M Manuals		10	Number	5,000	50,000	
Division 2 - Site Work						0
Excavation (unclassified, 1.5 cy bucket)		0	CY	5.85	0	
Offsite Hauling (30 miles) and Disposal		0	CY	11.3	0	
Unconfined Backfill and Compaction		0	CY	1.5	0	
Trenching		0	CY	5	0	
Confined Backfill and Compaction		0	CY	2.5	0	
Aggregate Base		0	CY	15	0	
Division 3 - Concrete						496,639
Interior Walls		183.7	CY	1,150	211,259	
Exterior Walls		198.5	CY	1,150	228,296	
Slab on Grade (Allowance for concrete repair)		58.3	CY	550	32,083	
Miscellaneous		1	LS	25,000	25,000	
Division 4 - Masonry			NOT USED			
Division 5 - Metals						5,625
Effluent Weir Plate		5	LF	125	625	
Miscellaneous Metals - Allocation		1	LS	5,000	5,000	
Division 6 - Wood and Plastics						3,750
Baffles		3	Each	1,250	3,750	
Division 7 - Thermal and Mositure Protection			NOT USED			
Division 8 - Doors and Windows			NOT USED			
Division 9 - Finishes			NOT USED			
Division 10 - Specialties			NOT USED			
Division 11 - Equipment						70,000
Mixing System	Induction Mixer	2	Each	35,000	70,000	
Division 12 - Furnishings			NOT USED			
Division 13 - Special Construction			NOT USED			
Division 14 - Conveying Systems			NOT USED			
Division 15 - Mechanical						15,000
16-inch Pipe Connection		1	LS	5,000	5,000	
Sprays and Miscellaneous Piping Allowance		1	LS	10,000	10,000	
Division 16 - Electrical and Instrumentation						40,500
Electrical - Allowance		1	LS	10,000	10,000	
Ultrasonic Level Sensor		1	EA	7,500	7,500	
Chlorine/Dechlorination Residual Analyzers		2	EA	6,500	13,000	
Instrumentation and Controls		1	LS	10,000	10,000	

Subtotal	805,914
Contingency - Construction Costs (15%)	120,887
Estimate of Probable Construction Costs	**930,000**
Administrative Fees (10%)	93,000
Regulatory (CEQA) Compliance (2.5%)	23,250
Engineering and Construction Management (17.5%)	162,750
Contingency - Soft Costs (10%)	93,000
Grand Total	**1,300,000**

B9

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	Modify Van Vleck to Serve As Permanent Effluent Disposal Facility (approximately 90 acres)	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						363,200
Mobilization (5%)		5%	LS	3,290,000	164,500	
Bid, Bonds, and Insurance (3%)		3%	LS	3,290,000	98,700	
Submittals		10	Number	5,000	50,000	
O&M Manuals		10	Number	5,000	50,000	
Division 2 - Site Work						44,522
Offsite Hauling (30 miles) and Disposal		170	CY	11.3	1,923	
Trenching		1,950	CY	12.5	24,375	
Confined Backfill and Compaction		1,780	CY	7.5	13,349	
Aggregate Base		325	CY	15	4,875	
Division 3 - Concrete						85,000
Pumping Station		1	LS	50,000	50,000	
Miscellaneous		1	LS	35,000	35,000	
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment						419,419
Pump Station		60	HP	294,419	294,419	
Reconfigure/Refurbish Existing Pump Station		1	LS	125,000	125,000	
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction						585,000
Sprayfield Irrigation System		90	Acres	6,500	585,000	
Division 14 - Conveying Systems			NOT USED			
Division 15 - Mechanical						1,074,338
12-inch Recycled Water Main		5,850	LF	137	803,088	
12-inch Distribution Valves and Appurtenances		5,850	LF	25	146,250	
Miscellaneous Piping		1	LS	125,000	125,000	
Division 16 - Electrical and Instrumentation						167,768
Electrical (25% of Pumping Station)		1	EA	104,855	104,855	
Instrumentation and Controls (15% of Pumping Station)		1	EA	62,913	62,913	

Subtotal	2,739,246
Contingency - Construction Costs (20%)	547,849
Estimate of Probable Construction Costs	**3,290,000**
Administrative Fees (5%)	164,500
Regulatory (CEQA) Compliance (2.5%)	82,250
Engineering and Construction Management (17.5%)	575,750
Contingency - Soft Costs (5%)	164,500
Grand Total	**4,280,000**

B10

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	Phase 1 Sprayfield Disposal Expansion (Add 60 acres; 150 acres total)	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						297,600
Mobilization (5%)		5%	LS	2,470,000	123,500	
Bid, Bonds, and Insurance (3%)		3%	LS	2,470,000	74,100	
Submittals		10	Number	5,000	50,000	
O&M Manuals		10	Number	5,000	50,000	
Division 2 - Site Work						38,847
Offsite Hauling (30 miles) and Disposal		157	CY	11.3	1,775	
Trenching		1,800	CY	12.5	22,500	
Confined Backfill and Compaction		1,643	CY	7.5	12,322	
Aggregate Base		150	CY	15	2,250	
Division 3 - Concrete						20,000
Miscellaneous		1	LS	20,000	20,000	
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment						204,075
Pump Station Expansion		35	HP	204,075	204,075	
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction						390,000
Sprayfield Irrigation System		60	Acres	6,500	390,000	
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						971,312
12-inch Recycled Water Main		5,400	LF	137	741,312	
12-inch Distribution Valves and Appurtenances		5,400	LF	25	135,000	
Miscellaneous Piping		1	LS	95,000	95,000	
Division 16 - Electrical and Instrumentation						51,019
Electrical (15% of Pumping Station)		1	LS	30,611	30,611	
Instrumentation and Controls (10% of Pumping Station)		1	EA	20,407	20,407	

Subtotal	1,972,852
Contingency - Construction Costs (25%)	493,213
Estimate of Probable Construction Costs	**2,470,000**
Administrative Fees (5%)	123,500
Regulatory (CEQA) Compliance (2.5%)	61,750
Engineering and Construction Management (17.5%)	432,250
Contingency - Soft Costs (5%)	123,500
Grand Total	**3,210,000**

B11

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	Phase 2 Sprayfield Disposal Expansion (Add 100 acres; 250 acres total)	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						361,600
Mobilization (5%)		5%	LS	3,270,000	163,500	
Bid, Bonds, and Insurance (3%)		3%	LS	3,270,000	98,100	
Submittals		10	Number	5,000	50,000	
O&M Manuals		10	Number	5,000	50,000	
Division 2 - Site Work						47,480
Offsite Hauling (30 miles) and Disposal		192	CY	11.3	2,169	
Trenching		2,200	CY	12.5	27,500	
Confined Backfill and Compaction		2,008	CY	7.5	15,060	
Aggregate Base		183	CY	15	2,750	
Division 3 - Concrete						20,000
Miscellaneous		1	LS	20,000	20,000	
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment						294,419
Pump Station Expansion		60	HP	294,419	294,419	
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction						650,000
Sprayfield Irrigation System		100	Acres	6,500	650,000	
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						1,166,048
12-inch Recycled Water Main		6,600	LF	137	906,048	
12-inch Distribution Valves and Appurtenances		6,600	LF	25	165,000	
Miscellaneous Piping		1	LS	95,000	95,000	
Division 16 - Electrical and Instrumentation						73,605
Electrical (15% of Pumping Station)		1	LS	44,163	44,163	
Instrumentation and Controls (10% of Pumping Station)		1	EA	29,442	29,442	

Subtotal	2,613,151
Contingency - Construction Costs (25%)	653,288
Estimate of Probable Construction Costs	**3,270,000**
Administrative Fees (5%)	163,500
Regulatory (CEQA) Compliance (2.5%)	81,750
Engineering and Construction Management (17.5%)	572,250
Contingency - Soft Costs (5%)	163,500
Grand Total	**4,250,000**

B12

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	South Course Pumping Station (Alt 1 - RW System NOT Expanded; 640 gpm)	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						172,000
Mobilization (5%)		5%	LS	900,000	45,000	
Bid, Bonds, and Insurance (3%)		3%	LS	900,000	27,000	
Submittals		10	Number	5,000	50,000	
O&M Manuals		10	Number	5,000	50,000	
Division 2 - Site Work						7,013
Offsite Hauling (30 miles) and Disposal		96	CY	11.3	1,088	
Excavation		325	CY	12.5	4,063	
Confined Backfill and Compaction		229	CY	7.5	1,715	
Aggregate Base		10	CY	15	147	
Division 3 - Concrete						104,007
Walls		30	CY	1,350	40,500	
Slab on Grade		19	CY	550	10,507	
Elevated Slab		10	CY	1,350	13,000	
Miscellaneous Concrete		1	LS	40,000	40,000	
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties						33,750
Prefabrated Building		450	SF	75	33,750	
Division 11 - Equipment						260,089
Pumps, Station Valves, and Appurtenances		50	HP	260,089	260,089	
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction			NOT USED			0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						75,000
Miscellaneous Piping Allowance		1	LS	75,000	75,000	
Division 16 - Electrical and Instrumentation						65,022
Electrical (15% of Pumping Station)		1	LS	39,013	39,013	
Instrumentation and Controls (10% of Pumping Station)		1	EA	26,009	26,009	

Subtotal	716,881
Contingency - Construction Costs (25%)	179,220
Estimate of Probable Construction Costs	**900,000**
Administrative Fees (10%)	90,000
Regulatory (CEQA) Compliance (0%)	0
Engineering and Construction Management (17.5%)	157,500
Contingency - Soft Costs (10%)	90,000
Grand Total	**1,240,000**

B13

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	South Course Pumping Station (Alt 2 - RW System Expanded; Analysis 1; 995 gpm)	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						221,600
Mobilization (5%)		5%	LS	1,520,000	76,000	
Bid, Bonds, and Insurance (3%)		3%	LS	1,520,000	45,600	
Submittals		10	Number	5,000	50,000	
O&M Manuals		10	Number	5,000	50,000	
Division 2 - Site Work						7,013
Offsite Hauling (30 miles) and Disposal		96	CY	11.3	1,088	
Excavation		325	CY	12.5	4,063	
Confined Backfill and Compaction		229	CY	7.5	1,715	
Aggregate Base		10	CY	15	147	
Division 3 - Concrete						121,009
Walls		40	CY	1,350	54,000	
Slab on Grade		25	CY	550	14,009	
Elevated Slab		10	CY	1,350	13,000	
Miscellaneous Concrete		1	LS	40,000	40,000	
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties						45,000
Prefabrated Building		600	SF	75	45,000	
Division 11 - Equipment						342,661
Pumps, Station Valves, and Appurtenances		75	HP	342,661	342,661	
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction						300,000
Connection of Gravity and Forcemain Pipeline Sections		1	LS	300,000	300,000	
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						90,000
Miscellaneous Piping Allowance		1	LS	90,000	90,000	
Division 16 - Electrical and Instrumentation						85,665
Electrical (15% of Pumping Station)		1	LS	51,399	51,399	
Instrumentation and Controls (10% of Pumping Station)		1	EA	34,266	34,266	

Subtotal	1,212,948
Contingency - Construction Costs (25%)	303,237
Estimate of Probable Construction Costs	**1,520,000**
Administrative Fees (10%)	152,000
Regulatory (CEQA) Compliance (2.5%)	38,000
Engineering and Construction Management (17.5%)	266,000
Contingency - Soft Costs (10%)	152,000
Grand Total	**2,130,000**

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	South Course Pumping Station (Alt 2 - RW System Expanded; Analysis 2; 730 gpm)	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						213,600
Mobilization (5%)		5%	LS	1,420,000	71,000	
Bid, Bonds, and Insurance (3%)		3%	LS	1,420,000	42,600	
Submittals		10	Number	5,000	50,000	
O&M Manuals		10	Number	5,000	50,000	
Division 2 - Site Work						7,013
Offsite Hauling (30 miles) and Disposal		96	CY	11.3	1,088	
Excavation		325	CY	12.5	4,063	
Confined Backfill and Compaction		229	CY	7.5	1,715	
Aggregate Base		10	CY	15	147	
Division 3 - Concrete						110,315
Walls		36	CY	1,350	48,600	
Slab on Grade		21	CY	550	11,315	
Elevated Slab		8	CY	1,350	10,400	
Miscellaneous Concrete		1	LS	40,000	40,000	
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties						35,625
Prefabrated Building		475	SF	75	35,625	
Division 11 - Equipment						294,419
Pumps, Station Valves, and Appurtenances		60	HP	294,419	294,419	
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction						300,000
Connection of Gravity and Forcemain Pipeline Sections		1	LS	300,000	300,000	
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						100,000
Miscellaneous Piping		1	LS	100,000	100,000	
Division 16 - Electrical and Instrumentation						73,605
Electrical (15% of Pumping Station)		1	LS	44,163	44,163	
Instrumentation and Controls (10% of Pumping Station)		1	EA	29,442	29,442	

Subtotal	1,134,576
Contingency - Construction Costs (25%)	283,644
Estimate of Probable Construction Costs	**1,420,000**
Administrative Fees (10%)	142,000
Regulatory (CEQA) Compliance (2.5%)	35,500
Engineering and Construction Management (17.5%)	248,500
Contingency - Soft Costs (10%)	142,000
Grand Total	**1,990,000**

B15

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	Pipelines Serving Riverview and Lakeview Developments From Existing 8-Inch RW Main	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						71,600
Mobilization (5%)		5%	LS	270,000	13,500	
Bid, Bonds, and Insurance (3%)		3%	LS	270,000	8,100	
Submittals		5	Number	5,000	25,000	
O&M Manuals		5	Number	5,000	25,000	
Division 2 - Site Work						5,268
Offsite Hauling (30 miles) and Disposal		4	CY	11.3	45	
Excavation		237	CY	12.5	2,965	
Confined Backfill and Compaction		233	CY	7.5	1,750	
Aggregate Base		34	CY	15	508	
Division 3 - Concrete			NOT USED			0
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment			NOT USED			0
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction			NOT USED			0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						139,568
6-inch PVC pipeline		1,220	LF	114	139,568	
Division 16 - Electrical and Instrumentation			NOT USED			0

Subtotal	216,436
Contingency - Construction Costs (25%)	54,109
Estimate of Probable Construction Costs	**270,000**
Administrative Fees (10%)	27,000
Regulatory (CEQA) Compliance (2.5%)	6,750
Engineering and Construction Management (17.5%)	47,250
Contingency - Soft Costs (10%)	27,000
Grand Total	**380,000**

B/6

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	12-inch Murieta Gardens Recycled Water Pipeline; Serves Other Northwest Developments As Well	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						78,000
Mobilization (5%)		5%	LS	350,000	17,500	
Bid, Bonds, and Insurance (3%)		3%	LS	350,000	10,500	
Submittals		5	Number	5,000	25,000	
O&M Manuals		5	Number	5,000	25,000	
Division 2 - Site Work						5,330
Offsite Hauling (30 miles) and Disposal		9	CY	11.3	101	
Excavation		239	CY	12.5	2,990	
Confined Backfill and Compaction		230	CY	7.5	1,727	
Aggregate Base		34	CY	15	513	
Division 3 - Concrete			NOT USED			0
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment			NOT USED			0
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction						50,000
Jackson Highway Undercrossing		1	Each	50000		
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						145,974
6-inch PVC pipeline		220	LF	86	18,876	
12-inch PVC pipeline		1,010	LS	126	127,098	
Division 16 - Electrical and Instrumentation			NOT USED			0

Subtotal	279,304
Contingency - Construction Costs (25%)	69,826
Estimate of Probable Construction Costs	**350,000**
Administrative Fees (10%)	35,000
Regulatory (CEQA) Compliance (2.5%)	8,750
Engineering and Construction Management (17.5%)	61,250
Contingency - Soft Costs (10%)	35,000
Grand Total	**490,000**

B17

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	6-inch Retreats Recycled Water Pipeline	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						78,000
Mobilization (5%)		5%	LS	350,000	17,500	
Bid, Bonds, and Insurance (3%)		3%	LS	350,000	10,500	
Submittals		5	Number	5,000	25,000	
O&M Manuals		5	Number	5,000	25,000	
Division 2 - Site Work						7,448
Offsite Hauling (30 miles) and Disposal		6	CY	11.3	63	
Excavation		335	CY	12.5	4,193	
Confined Backfill and Compaction		330	CY	7.5	2,474	
Aggregate Base		48	CY	15	719	
Division 3 - Concrete			NOT USED			0
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment			NOT USED			0
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction			NOT USED			0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						197,340
6-inch PVC pipeline		1,725	LF	114	197,340	
Division 16 - Electrical and Instrumentation			NOT USED			0

Subtotal	282,788
Contingency - Construction Costs (25%)	70,697
Estimate of Probable Construction Costs	**350,000**
Administrative Fees (10%)	35,000
Regulatory (CEQA) Compliance (2.5%)	8,750
Engineering and Construction Management (17.5%)	61,250
Contingency - Soft Costs (10%)	35,000
Grand Total	**490,000**

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	10-inch Residences of Murieta Hills and Esquela (Future) Recycled Water Pipeline	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						223,600
Mobilization (5%)		5%	LS	2,170,000	108,500	
Bid, Bonds, and Insurance (3%)		3%	LS	2,170,000	65,100	
Submittals		5	Number	5,000	25,000	
O&M Manuals		5	Number	5,000	25,000	
Division 2 - Site Work						45,899
Offsite Hauling (30 miles) and Disposal		34	CY	11.3	388	
Excavation		2,067	CY	12.5	25,837	
Confined Backfill and Compaction		2,033	CY	7.5	15,244	
Aggregate Base		295	CY	15	4,430	
Division 3 - Concrete			NOT USED			0
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment			NOT USED			0
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction			NOT USED			0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						1,466,072
10-inch PVC pipeline		10,630	LF	114	1,216,072	
Valves and Appurtenances		1	LS	250,000	250,000	
Division 16 - Electrical and Instrumentation			NOT USED			0

Subtotal	1,735,571
Contingency - Construction Costs (25%)	433,893
Estimate of Probable Construction Costs	**2,170,000**
Administrative Fees (10%)	217,000
Regulatory (CEQA) Compliance (2.5%)	54,250
Engineering and Construction Management (17.5%)	379,750
Contingency - Soft Costs (10%)	217,000
Grand Total	**3,040,000**

B19

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	Lookout Hill RW Storage Tanks (refurnished and new) and Pumping Station	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						191,600
Mobilization (5%)		5%	LS	1,770,000	88,500	
Bid, Bonds, and Insurance (3%)		3%	LS	1,770,000	53,100	
Submittals		5	Number	5,000	25,000	
O&M Manuals		5	Number	5,000	25,000	
Division 2 - Site Work						8,366
Offsite Hauling (30 miles) and Disposal		127	CY	11.3	1,432	
Excavation		352	CY	12.5	4,400	
Backfill and Compaction		225	CY	7.5	1,689	
Aggregate Base		56	CY	15	845	
Division 3 - Concrete			NOT USED			126,027
Tank Base/Foundation		56	CY	1,350	76,027	
Miscellaneous Concrete		1	LS	50,000	50,000	
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties						278,040
Prefabrated Building		150	SF	100	15,000	
New Tank (200,000 gallons)		200000	each	0.9	183,040	
Refurbish Tank (200,000 gallons)		1	LS	80000	80,000	
Division 11 - Equipment						484,978
Pumps, Station Valves, and Appurtenances		125	HP	484,978	484,978	
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction			NOT USED			0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						130,000
Tank Piping, Valves, and Appurtenances		1	LS	85000	85,000	
Repair and Replace Piping		1	LS	45000	45,000	
Division 16 - Electrical and Instrumentation			NOT USED			193,991
Electrical (25% of Pumping Station)		1	LS	121,244	121,244	
Instrumentation and Controls (15% of Pumping Station)		1	EA	72,747	72,747	

Subtotal	1,413,001
Contingency - Construction Costs (25%)	353,250
Estimate of Probable Construction Costs	**1,770,000**
Administrative Fees (5%)	88,500
Regulatory (CEQA) Compliance (2.5%)	44,250
Engineering and Construction Management (5%)	88,500
Contingency - Soft Costs (5%)	88,500
Grand Total	**2,080,000**

B20

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	North Coarse Pumping Station; 2110 gpm	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						163,600
Mobilization (5%)		5%	LS	1,420,000	71,000	
Bid, Bonds, and Insurance (3%)		3%	LS	1,420,000	42,600	
Submittals		5	Number	5,000	25,000	
O&M Manuals		5	Number	5,000	25,000	
Division 2 - Site Work						0
Offsite Hauling (30 miles) and Disposal		0	CY	11.3	0	
Trenching		0	CY	12.5	0	
Confined Backfill and Compaction		0	CY	7.5	0	
Aggregate Base		0	CY	15	0	
Division 3 - Concrete						25,000
Miscellaneous Concrete		1	LS	25,000	25,000	
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment						777,002
Pumps, Station Valves, and Appurtenances		250	HP	777,002	777,002	
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction						0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						75,000
Miscellaneous Piping		1	LS	75,000	75,000	
Division 16 - Electrical and Instrumentation						194,251
Electrical (20% of Pumping Station)		1	EA	155,400	155,400	
Instrumentation and Controls (5% of Pumping Station)		1	EA	38,850	38,850	

Subtotal	1,234,853
Contingency - Construction Costs (15%)	185,228
Estimate of Probable Construction Costs	**1,420,000**
Administrative Fees (5%)	71,000
Regulatory (CEQA) Compliance (0%)	0
Engineering and Construction Management (10%)	142,000
Contingency - Soft Costs (5%)	71,000
Grand Total	**1,700,000**

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	6-inch Industrial/Commercial/Residential Recycled Water Pipeline	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						32,800
Mobilization (5%)		5%	LS	160,000	8,000	
Bid, Bonds, and Insurance (3%)		3%	LS	160,000	4,800	
Submittals		2	Number	5,000	10,000	
O&M Manuals		2	Number	5,000	10,000	
Division 2 - Site Work						820
Offsite Hauling (30 miles) and Disposal		1	CY	11.3	7	
Excavation		37	CY	12.5	462	
Confined Backfill and Compaction		36	CY	7.5	272	
Aggregate Base		5	CY	15	79	
Division 3 - Concrete			NOT USED			0
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment			NOT USED			0
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction						75,000
Jackson Road Undercrossing		1	LS	75000	75,000	0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						21,736
6-inch PVC pipeline		190	LF	114	21,736	
Division 16 - Electrical and Instrumentation			NOT USED			0

Subtotal	130,356
Contingency - Construction Costs (25%)	32,589
Estimate of Probable Construction Costs	**160,000**
Administrative Fees (10%)	16,000
Regulatory (CEQA) Compliance (2.5%)	4,000
Engineering and Construction Management (17.5%)	28,000
Contingency - Soft Costs (10%)	16,000
Grand Total	**220,000**

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	6-inch Apartments Recycled Water Pipeline	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						32,000
Mobilization (5%)		5%	LS	150,000	7,500	
Bid, Bonds, and Insurance (3%)		3%	LS	150,000	4,500	
Submittals		2	Number	5,000	10,000	
O&M Manuals		2	Number	5,000	10,000	
Division 2 - Site Work						475
Offsite Hauling (30 miles) and Disposal		0	CY	11.3	4	
Excavation		21	CY	12.5	267	
Confined Backfill and Compaction		21	CY	7.5	158	
Aggregate Base		3	CY	15	46	
Division 3 - Concrete			NOT USED			0
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment			NOT USED			0
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction						75,000
Jackson Highway Undercrossing		1	Each	75000	75,000	
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						12,584
6-inch PVC pipeline		110	LF	114	12,584	
Division 16 - Electrical and Instrumentation			NOT USED			0

Subtotal	120,059
Contingency - Construction Costs (25%)	30,015
Estimate of Probable Construction Costs	**150,000**
Administrative Fees (10%)	15,000
Regulatory (CEQA) Compliance (2.5%)	3,750
Engineering and Construction Management (17.5%)	26,250
Contingency - Soft Costs (10%)	15,000
Grand Total	**210,000**

B23

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	6-inch Esquela Recycled Water Pipeline	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						24,800
Mobilization (5%)		5%	LS	60,000	3,000	
Bid, Bonds, and Insurance (3%)		3%	LS	60,000	1,800	
Submittals		2	Number	5,000	10,000	
O&M Manuals		2	Number	5,000	10,000	
Division 2 - Site Work						1,123
Offsite Hauling (30 miles) and Disposal		1	CY	11.3	9	
Excavation		51	CY	12.5	632	
Confined Backfill and Compaction		50	CY	7.5	373	
Aggregate Base		7	CY	15	108	
Division 3 - Concrete			NOT USED			0
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment			NOT USED			0
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction			NOT USED			0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						22,308
6-inch PVC pipeline		260	LF	86	22,308	
Division 16 - Electrical and Instrumentation			NOT USED			0

Subtotal	48,231
Contingency - Construction Costs (25%)	12,058
Estimate of Probable Construction Costs	**60,000**
Administrative Fees (10%)	6,000
Regulatory (CEQA) Compliance (2.5%)	1,500
Engineering and Construction Management (17.5%)	10,500
Contingency - Soft Costs (10%)	6,000
Grand Total	**80,000**

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	Bass Lake Tank and Pumping Station; 1040 gpm	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						215,600
Mobilization (5%)		5%	LS	2,070,000	103,500	
Bid, Bonds, and Insurance (3%)		3%	LS	2,070,000	62,100	
Submittals		5	Number	5,000	25,000	
O&M Manuals		5	Number	5,000	25,000	
Division 2 - Site Work						22,955
Offsite Hauling (30 miles) and Disposal		215	CY	11.3	2,435	
Excavation		921	CY	12.5	11,509	
Confined Backfill and Compaction		705	CY	7.5	5,290	
Aggregate Base		248	CY	15	3,721	
Division 3 - Concrete						324,077
Walls		31	CY	1,350	42,500	
Slab on Grade		18	CY	550	10,102	
Elevated Slab		4	CY	1,350	5,625	
Tank Base/Foundation		119	CY	1,350	160,850	
Miscellaneous Concrete		1	LS	105,000	105,000	
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Moisture Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties						495,100
Prefabrated Building		250	SF	150	37,500	
500,000 gallon Storage Tank		500000	LS	0.9	457,600	
Division 11 - Equipment						373,102
Pumps, Station Valves, and Appurtenances		85	HP	373,102	373,102	
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction			NOT USED			0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						75,000
Miscellaneous Piping		1	LS	75,000	75,000	
Division 16 - Electrical and Instrumentation						149,241
Electrical (25% of Pumping Station)		1	LS	93,276	93,276	
Instrumentation and Controls (15% of Pumping Station)		1	EA	55,965	55,965	

Subtotal	1,655,075
Contingency - Construction Costs (25%)	413,769
Estimate of Probable Construction Costs	**2,070,000**
Administrative Fees (10%)	207,000
Regulatory (CEQA) Compliance (2.5%)	51,750
Engineering and Construction Management (17.5%)	362,250
Contingency - Soft Costs (10%)	207,000
Grand Total	**2,900,000**

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	8-inch River Canyon Recycled Water Pipeline	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						27,200
Mobilization (5%)		5%	LS	90,000	4,500	
Bid, Bonds, and Insurance (3%)		3%	LS	90,000	2,700	
Submittals		2	Number	5,000	10,000	
O&M Manuals		2	Number	5,000	10,000	
Division 2 - Site Work						1,900
Offsite Hauling (30 miles) and Disposal		1	CY	11.3	16	
Excavation		86	CY	12.5	1,069	
Confined Backfill and Compaction		84	CY	7.5	631	
Aggregate Base		12	CY	15	183	
Division 3 - Concrete			NOT USED			0
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment			NOT USED			0
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction			NOT USED			0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						40,269
8-inch PVC pipeline		440	LF	92	40,269	
Division 16 - Electrical and Instrumentation			NOT USED			0

Subtotal	69,369
Contingency - Construction Costs (25%)	17,342
Estimate of Probable Construction Costs	**90,000**
Administrative Fees (10%)	9,000
Regulatory (CEQA) Compliance (2.5%)	2,250
Engineering and Construction Management (17.5%)	15,750
Contingency - Soft Costs (10%)	9,000
Grand Total	**130,000**

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	6- and 8-inch Terrace and Highlands Recycled Water Pipeline	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						42,400
Mobilization (5%)		5%	LS	280,000	14,000	
Bid, Bonds, and Insurance (3%)		3%	LS	280,000	8,400	
Submittals		2	Number	5,000	10,000	
O&M Manuals		2	Number	5,000	10,000	
Division 2 - Site Work						5,052
Offsite Hauling (30 miles) and Disposal		4	CY	11.3	43	
Excavation		228	CY	12.5	2,844	
Confined Backfill and Compaction		224	CY	7.5	1,678	
Aggregate Base		33	CY	15	488	
Division 3 - Concrete			NOT USED			0
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties			NOT USED			0
Division 11 - Equipment			NOT USED			0
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction			NOT USED			0
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						180,008
6-inch PVC pipeline		850	LF	86	72,930	
8-inch PVC pipeline		1,170	LF	92	107,078	
Division 16 - Electrical and Instrumentation			NOT USED			0

Subtotal	227,460
Contingency - Construction Costs (25%)	56,865
Estimate of Probable Construction Costs	**280,000**
Administrative Fees (10%)	28,000
Regulatory (CEQA) Compliance (2.5%)	7,000
Engineering and Construction Management (17.5%)	49,000
Contingency - Soft Costs (10%)	28,000
Grand Total	**390,000**

AECOM

Project:	Rancho Murieta Title XVI Recycled Water Feasibility Study	**Date:**	3/29/2013
Job Number:	60273784	**Developed By:**	Kevin Kennedy
Component/Element:	Phase 3 Pipelines to Lake Estates; 795 gpm	**Checked By:**	
Path:			

Specification Section	Description	Quantity	Units	Unit Cost	Subtotal	Total
Division 1 - General Requirements						465,600
Mobilization (5%)		5%	LS	4,570,000	228,500	
Bid, Bonds, and Insurance (3%)		3%	LS	4,570,000	137,100	
Submittals		10	Number	5,000	50,000	
O&M Manuals		10	Number	5,000	50,000	
Division 2 - Site Work						77,781
Offsite Hauling (30 miles) and Disposal		131	CY	11.3	1,475	
Excavation		3,490	CY	12.5	43,628	
Confined Backfill and Compaction		3,360	CY	7.5	25,198	
Aggregate Base		499	CY	15	7,479	
Division 3 - Concrete			NOT USED			0
Division 4 - Masonry			NOT USED			0
Division 5 - Metals			NOT USED			0
Division 6 - Wood and Plastics			NOT USED			0
Division 7 - Thermal and Mositure Protection			NOT USED			0
Division 8 - Doors and Windows			NOT USED			0
Division 9 - Finishes			NOT USED			0
Division 10 - Specialties						769,660
Prefabrated Building		250	SF	150	37,500	
800,000 gallon Storage Tank		800000	Each	0.9	732,160	
Division 11 - Equipment						402,416
Pumps, Station Valves, and Appurtenances		95	HP	402,416	402,416	
Division 12 - Furnishings			NOT USED			0
Division 13 - Special Construction						100,000
Consumnes River Crossing		1	Each	100000		
Division 14 - Conveying Systems			NOT USED			0
Division 15 - Mechanical						1,740,110
6-inch PVC pipeline		17,950	LF	86	1,540,110	
Misceallaneous Piping		1	LS	200000	200,000	
Division 16 - Electrical and Instrumentation			NOT USED			100,604
Electrical (15% of Pumping Station)		1	LS	60,362	60,362	
Instrumentation and Controls (10% of Pumping Station)		1	EA	40,242	40,242	

Subtotal	3,656,171
Contingency - Construction Costs (25%)	914,043
Estimate of Probable Construction Costs	**4,570,000**
Administrative Fees (10%)	457,000
Regulatory (CEQA) Compliance (2.5%)	114,250
Engineering and Construction Management (17.5%)	799,750
Contingency - Soft Costs (10%)	457,000
Grand Total	**6,400,000**

Potential Cost Savings Measures

Local developers expressed their concerned with the overall costs of the expanded recycled water program during the developer outreach meetings. During this meeting, AECOM indicated to meeting attendees that the primary objectives of this study were to:

- Identify which developments appear to be the most cost-effective to serve with respect to one another,
- Determine which alternative was more cost-effective, and
- Prepare a feasibility study report which met the requirements for pursuing additional Title XVI granting funding.

Although optimizing the expanded recycled water program to minimize/reduce costs was beyond the scope of this study, AECOM developed several areas where costs may be reduced or eliminated. The following are descriptions of these areas:

- Pursue additional Title XVI grant funding for detailed design and construction activities. The District should consider joining a coalition to increase their potential for funding.
- Ask CDPH to re-evaluate their position with respect to the need for providing recycled water storage tanks at Bass Lake. The estimated cost associated with this particular tank is on the order of $1 million dollars.
- Costs can be reduced by coordinating and packaging developer and District infrastructure improvements. For example, it is our understanding that the existing storm drainage channel located along the northeast perimeter of Murieta Gardens is to be replaced with a new pipeline. This proposed storm drain pipeline alignment is contiguous with the proposed 12- and 10-inch recycled water pipelines serving the west and northwest developments. Potential savings may be achieved by installing these two pipelines as part of the same contract and within a common trench provided that this is accomplished in accordance with regulatory requirements (e.g., adequate vertical and horizontal separations).
- Discussions with RMCC indicated that the existing pumping station serving the South Golf Course will require replacement in the near future. Once the North Golf Course Pumping Station is replaced with a higher capacity facility, this existing facility could potentially be configured to serve both Van Vleck and the South Golf Course.

Appendix C

General Manager Letter Regarding District Commitment
To Be Developed

About AECOM

AECOM (NYSE: ACM) is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 45,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation, and collaborative technical excellence in delivering solutions that enhance and sustain the world's built, natural, and social environments. A Fortune 500 company, AECOM serves clients in more than 100 countries and has annual revenue in excess of $6 billion.

More information on AECOM and its services can be found at www.aecom.com.

MEMORANDUM

Date: June 4, 2013

To: Board of Directors

From: Improvements Committee Staff

Subject: Approve Proposal for Title 22 Engineering Report and Report of Waste Discharge

---

RECOMMENDED ACTION

Approve the proposal from AECOM to prepare a Title 22 Engineering Report and Report of Waste Discharge, in an amount not to exceed $107,275.00 as the submittal package for the District's Master Reclamation Permit application. Funding to come from Sewer Replacement Reserves.

BACKGROUND

The Central Valley Regional Water Quality Control Board (RWQCB) and California Department of Health (CDPH) require submission of an engineering report as the submittal package for our Master Reclamation Permit and before the use of recycled water can be expanded to serve future residential developments, existing parks, and commercial landscape. AECOM will prepare a Title 22 Engineering Report describing the manner in which the District's recycled water program will comply with the Water Recycling Criteria (i.e., Sections 60301 through 60355 of the California Code of Regulations, Title 22). The Title 22 Engineering Report shall encompass both existing (i.e., irrigation of the North and South Golf Courses and Van Vleck spray field) and the future recycled water uses.

The Report of Waste Discharge shall include the information required by the RWQCB, including an antidegradation analysis and shall encompass both existing (i.e., irrigation of the North and South Golf courses and Van Vleck spray field) and the future recycled water uses.

The scope of work includes: project meetings with District staff; a total of three (3) Title 22 Engineering Report submissions – Administrative Draft, Draft and Final; Report of Waste Discharge; and a Preliminary Environmental Review. The Preliminary Draft Proposal and schedule are attached for your review.

Recall, the preference of the Regional Board is for the District to obtain a Master Reclamation Permit instead of individual user permits for future recycled water users. Under a Master Reclamation Permit, the Permit holder is the District and we have the authority granted by the Regional Board to approve, issue, and administer individual user permits. As example, under the Master Reclamation Permit, the Van Vleck spray field individual Waste Discharge Permit for the use of recycled water would be rescinded and the District would issue and administer an individual permit for the Van Vleck spray field. As such, we would be responsible for identification of system materials and constructions as well as oversight and compliance management with the permit conditions.

The Improvements Committee recommends approval.

AECOM
2020 L Street, Suite 300
Sacramento, CA 95811
www.aecom.com

916.414.5800 tel
916 414 1557 fax

June 3, 2013

DRAFT

Edward Crouse, P.E.
General Manager / District Engineer
Rancho Murieta Community Services District
15160 Jackson Road
P.O. Box 1050
Rancho Murieta, CA 95683

RE: Proposal for a Title 22 Engineering Report and Report of Waste Discharge

Dear Ed,

AECOM is pleased to provide the Rancho Murieta Community Services District (District) with this proposal to prepare a Title 22 Engineering Report and Report of Waste Discharge. As we have discussed, and as recommended by Ms. Anne Olson of the Central Valley Regional Water Quality Control Board (RWQCB), both documents will encompass existing (irrigation of both the North and South Golf Courses and Van Vleck spray field irrigation) and future recycled water uses. The following are descriptions of AECOM's proposed scope of work for developing these two deliverables.

SCOPE OF WORK

Task 1. Project Meetings

AECOM shall schedule, facilitate and attend project meetings as described below:

- Progress Meetings (2) – AECOM's project manager shall meet with District staff to discuss project progress and interim deliverables.
- Review Meetings (3) – AECOM's project manager shall meet with District staff to review and collect comments pertaining to the Administrative Draft of the Title 22 Engineering Report and Draft Report of Waste Discharge (RWD). In addition, we have included one meeting with District staff, AECOM's project manager, and the RWQCB to review the Report of Waste Discharge prior to formal RWQCB submission. It is recommended that this meeting occur immediately after the District's review of the Administrative Draft RWD (i.e. in early November 2013) to coordinate and identify areas the RWQCB may deem incomplete prior to submission.

Deliverables: Meeting agenda, minutes, and action items.

Task 2. Title 22 Engineering Report

The RWQCB and California Department of Public Health (CDPH) require the submission of an engineering report before the use of recycled water can be expanded to irrigate specific future residential developments, existing parks. and commercial landscaping. AECOM will prepare a Title 22 Engineering Report describing the manner in which the District's recycled water program will comply with the Water Recycling Criteria (i.e., Sections 60301 through 60355 of the California Code of Regulations, Title 22). The Title 22 Engineering Report shall be developed in accordance with the *Guidelines for the Preparation of an Engineering Report for the Production, Distribution, and Use of Recycled Water* (dated March 2001) and shall consist of the chapters described below. As indicated

below in the footnotes, information contained in the District's *Recycled Water Standards* and *Title XVI Recycled Water Feasibility Study* will be incorporated into the Title 22 Engineering Report.

- **1.0 Introduction:** This chapter shall describe existing and proposed recycled water uses[1], projected implementation schedules for future developments planning to use recycled water and their estimated demands[1], and water balances demonstrating sufficient recycled water storage and demand to accommodate the projected wastewater influent flows and 100-year level of precipitation through Phase 2 Development as described in the *Title XVI Recycled Water Feasibility Study*.
- **2.0 Recycled Water Project:** This chapter shall identify the agencies and entities that will be involved with the design, treatment, distribution, operations, and maintenance of the recycled water system and describe their specific roles and responsibilities[2]; describe the procedures, restrictions, and other requirements that will be imposed by the District[2]; define the Producer[2], Distributor[2], and Users[2]; characterize the raw influent wastewater and source control programs (if any); describe existing and proposed treatment processes[1], reliability features, supplemental water supplies[1,2], monitoring and reporting requirements[2,3], and a contingency plan.
- **3.0 Transmission and Distribution Systems:** This chapter shall include maps and/or plans showing the locations of the transmission facilities[1] and distribution system layout (if available from the developers) as well as the ownership and location of existing and proposed (if available from the developers) potable water, recycled water, and sewer pipelines.
- **4.0 Use Areas:** This chapter shall describe the specific type of recycled water uses proposed; parties responsible for the distribution and use of the recycled water at the site[1,2]; use area containment measures[2]; a map showing the location of the specific use areas, areas of public access, locations and construction details of wells in or within 1,000 feet of the use area, location and type of signage[2]. In addition, this chapter shall describe how domestic water distribution shall be protected from recycled water in accordance with the regulations pertaining to cross-connections and other standards[2]; how the facilities will be designed to minimize the chance of recycled water leaving the designated use areas[2]; inspection program and responsible personnel[2]; and employee training.

A total of three report submissions are included in our scope of work and fee estimate as described below:

- **Administrative Draft:** The administrative draft report shall be submitted to the District for their review and comment. It is assumed reviewers shall be limited to District staff and their Board of Directors. A two-week District review period is assumed.
- **Draft:** The draft report shall be submitted to the District after AECOM has addressed pertinent District comments. It is assumed that the District will then submit the report to the CDPH and RWQCB (as a courtesy) for their review and comment. A four-week review period has been assumed for CDPH review.
- **Final:** The final report shall be attached as an appendix to the Report of Waste Discharge submittal to the RWQCB.

---

[1] Information pertaining to this particular subject shall be obtained from the *Title XVI Recycled Water Feasibility Study*.
[2] Information pertaining to this particular subject shall be obtained from the District's *Recycled Water Standards* which are currently under development.
[3] Information pertaining to WWRP monitoring and reporting requirements to be obtained from the District's current WDR.

Assumptions: *District to provide three (3) years of routine monitoring data in electronic (e.g., Microsoft Excel) format to characterize the raw wastewater influent stream. District to provide collection and WWRP schematics and flow diagrams in electronic root (non-PDF) format, if available.*

Deliverables: *Five (5) bound hardcopies and one (1) electronic copy (in PDF and Microsoft Word format) of the Administrative Draft, Draft, and Final Title 22 Engineering Reports.*

Task 3 – Report of Waste Discharge

AECOM will prepare draft and final RWD application packages (i.e., Form 200 and supplemental information) asking the RWQCB to update Waste Discharge Requirements and adopt a Master Reclamation Period (MRP) for the District's Wastewater Reclamation Plant (WWRP) and expanded recycled water program, respectively.

The RWD shall include the information required by the RWQCB[4], including an antidegradation analysis as described below, and shall encompass both existing (i.e., irrigation of the North and South Golf Courses and Van Vleck spray field) and the future[5] recycled water uses.

- **Form 200:** Complete Form 200 pertaining to the District's WWRP; type of discharge; California Environmental Quality Act (CEQA) compliance document status and schedule; treated effluent characterization; and descriptions and schematics of the existing wastewater collection, treatment, and disposal systems and best management practices used.

  As part of the environmental compliance effort, AECOM will review CEQA documentation previously completed for areas/developments within the Rancho Murieta community (see attached listing at the end of this proposal) to determine what information may be useful in preparing environmental compliance documentation for the Expanded Recycled Water Program. Based on this review, and information included in the *Title XVI Recycled Water Feasibility Study* regarding construction, operation, and maintenance of Program infrastructure, AECOM will determine the appropriate environmental documentation (Initial Study/Mitigated Negative Declaration or Environmental Impact Report) required for CEQA compliance. In addition, if National Environmental Policy Act (NEPA) compliance is required as a result of Bureau of Reclamation funding under Title XVI, AECOM will identify the appropriate NEPA documentation required and determine if a joint NEPA/CEQA document can be prepared. AECOM will then develop and submit a schedule for completing the required environmental review processes which will be incorporated into Form 200 and the Supplemental Information.
- **Supplemental Information:** Provide written supplemental information pertaining to the specific information requested in Form 200 and required by the amended Recycled Water Policy. Examples of the written descriptions to be developed include the existing collection system; wastewater sources[1] and characteristics; prioritization and coordination of golf course, residential and commercial, and spray field recycled water demands; estimated inflow and infiltration rates[6]; offsite (i.e. golf course and spray field) operations plans[6]; groundwater monitoring well installation and monitoring plan; and antidegradation analysis demonstrating

[4] See http://www.waterboards.ca.gov/publications_forms/forms/docs/form200.pdf
[5] Recycled water service to select future residential developments and existing parks and commercial landscaping
[6] Information to be obtained from previously prepared documents.

that the proposed recycled water system will use less than 10 percent of the assimilative capacity of the groundwater sub-basin with respect to nitrogen and total dissolved solids.

Assumptions: *District to provide three (3) years of routine monitoring data in electronic (Microsoft Excel) format to characterize the treated effluent stream.*

Descriptions of the infrastructure used for collection and to serve existing recycled water uses (i.e., North and South Golf Courses and the Van Vleck spray field) shall be obtained from and limited to existing reports and documents prepared by others or other readily available District information. Our proposed level of effort and fee does not include the development of as-build drawings or more detailed descriptions of these existing assets.

RWQCB staff have indicated that they may take up to one year to review and adopt a new WDR and MRP. Negotiations with the RWQCB, which may take place subsequent to RWD submission, are not included in this scope of work or fee estimate.

Deliverables: *Five (5) bound hardcopies and one (1) electronic copy (in PDF and Microsoft Word format) of the Draft and Final RWD.*

SCHEDULE

We understand that the District intends on submitting the RWD to the RWQCB by the end of this year in order to obtain the updated WDR and MRP by December 31, 2014. AECOM proposes the following milestones to incorporate the *Title XVI Recycled Water Feasibility Study* and *Recycled Water Standards* into this project, provide adequate time for District review and comment, and position the District to submit the RWD by December 31, 2013.

- Notice to Proceed: July 1, 2013
- Title XVI Recycled Water Feasibility Report[7]
  - Final (Board Adoption) July 17, 2013
- Recycled Water Standards[7]
  - Final (Board Adoption) August 21, 2013
- Title 22 Engineering Report:
  - Administrative Draft – October 10, 2013
  - District Review Period – October 11 – 25, 2013
  - Draft Submitted to CDPH and the RWQCB - October 31, 2013
  - CDPH Review Period - November 1 – 29, 2013
  - Final (Appendix to Draft RWD) - November 29, 2013
- Report of Waste Discharge:
  - Administrative Draft - October 16, 2013
  - District Review Period - October 17 - 31, 2013
  - Draft Submitted to the RWQCB- November 29, 2013

PROPOSED FEE

Our proposed fee for this project is $107,275 and is detailed in the attached Table 1 - Estimated Work Effort and Cost. We propose to conduct this project on a time and material basis. Our standard rate sheet for 2013 is also attached for your reference.

[7] Deliverable not included in this scope of work; it is to be completed as part of a different contract.

We look forward to assisting you with this assignment and are available to start upon receipt of Notice to Proceed. If you have any questions or desire any additional information, please feel free to contact Kevin Kennedy at (916) 414-1641.

Sincerely,

Kevin Kennedy, P.E.
Senior Project Manager

Attachments

Table 1 – Estimated Level of Effort
2013 Standard Rate Sheet

Existing CEQA Documentation To Be Reviewed by AECOM

- County of Sacramento, June 2007, Supplemental Final Environmental Impact Report for Riverview: Extension of Time of a Tentative Subdivision Map. Control Number: 04-XSP-0168.
- County of Sacramento, August 2007, Final Environmental Impact Report: The Residences West of Murieta Hills – Rezone, Amendment to the Planned Development Ordinance, Vesting Subdivision Map and Affordable Housing Plan; The Residences East of Murieta Hills – Rezone, Amendment to the Planned Development Ordinance, Vesting Subdivision Map and Affordable Housing Plan; and The Retreat – General Plan Amendment, Rezone, Vesting Subdivision Map, Special Development Permit and Affordable Housing Plan. Control Numbers: 06-RZB-ZOB-SVB-AHS-0252, 01-RZB-ZOB-SVB-AHS-0069 & 01-GPB-RZB-SVB-SPP-AHS-0070 (SCH # 2002022045)
- County of Sacramento, November 2006, Final Supplemental Environmental Impact Report: Lakeview – Resubmission of a Subdivision Map. Control Number: 02-RSP-0051 State Clearinghouse Number: 91022017.
- County of Sacramento, May 2001, Final Environmental Impact Report: Murieta Gardens I – Rezone, Use Permit, Variance, Parking Review and Subdivision Map; and Murieta Gardens II – Use Permit, Special Development Permit, Subdivision Map and Affordable Housing Plan. Control Number: 03-RZB-UPP-SDP-VAZ-PRS-0302, 06-UPP-SDP-SPP-AHS-0514 State Clearinghouse Number: 2005072174.
- County of Sacramento, 1990, Rancho Murieta South Rezone, Amendment to the Planned Development Ordinance, Use Permit and Tentative Subdivision Maps for Riverview, Phase Two and Lakeview (Winncrest Homes) FEIR (County Control No.: 89-RZB-ZOB-0684, 90-SDP-UPB-1070 and 90-SDP-1152; SCH No.: 91022017).
- County of Sacramento, 1990, Rancho Murieta South Rezone, Amendment to the Planned Development Ordinance, and Tentative Subdivision Maps for The Crest and The Greens (R.J.Hill) FEIR (County Control No.: 90-RZB-ZOB-SDP-1473 and 90- SDP-1183; SCH No.: 91022016).
- County of Sacramento, 1990, Rancho Murieta South Unit No. 5 Master Plan Amendment Rezone and Subdivision Map Initial Study-Negative Declaration (County Control No.: 90-RZBSDP- 0073) certified December 7, 1990.
- County of Sacramento, 1984, Rancho Murieta Master Plan.
- County of Sacramento, 1983, Rancho Murieta General Plan Amendment FEIR (County Control No.: 80-GP-1337) August 1983.
- MacKay and Somps Infrastructure Group, May 1993, Rancho Murieta North Infrastructure Master Plan.
- Rancho Murieta Community Services District, October 18, 2010, Integrated Water Master Plan Update

- Rancho Murieta Community Services District, February 27, 2006, Initial Study & Draft Negative Declaration: Rancho Murieta Community Services District on Extension of Time to Apply Water to Beneficial Use Under District Permit 16762.

Table 1 - Estimated Work Effort and Cost

DRAFT

Title 22 Engineer Report and Report of Waste Discharge Preparation

Rancho Murieta Community Services District

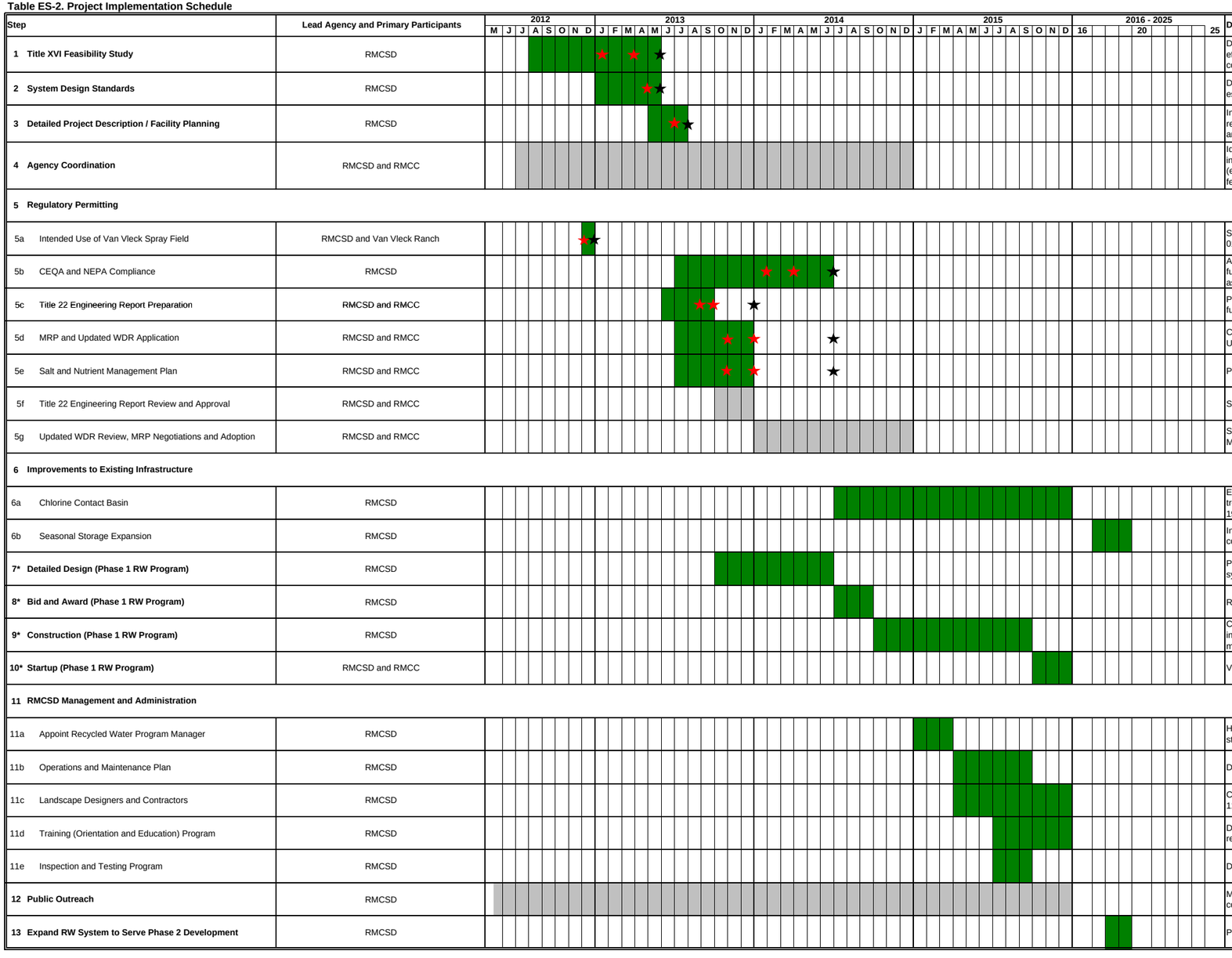
Task No.	Task Description	QA/QC	Project Manager	Env. Task Leader	Senior Engineer	Assistant Engineer	CADD Tech/ Graphics	Clerical	AECOM Labor Hours	Total Labor ($)	Total Expenses ($)	Total Cost ($)
1	Project Management and Meetings (up to 5)		14					8	22	$ 3,500	$ 279	$ 3,779
2	Title 22 Engineering Report	8	54		64	92	40	38	296	$ 41,500	$ 3,820	$ 45,320
3	Report of Waste Discharge[a]	12	72	40	118	44	24	52	362	$ 53,404	$ 4,772	$ 58,176
	COLUMN TOTALS	**20**	**140**	**40**	**182**	**136**	**64**	**98**	**680**	**$ 98,404**	**$ 8,871**	**$ 107,275**

a. Included a limited antidegradation analysis

TOTAL COST	**$ 107,275**

Table ES-2. Project Implementation Schedule

Step	Lead Agency and Primary Participants	Desired Outcome
1 Title XVI Feasibility Study	RMCSD	Determine (1) which developments are the most cost-effective to serve recycled water with respect to one another and (2) which alternative is most cost-effective (No Project or Expanded Recycled Water Program). Identify phased approach and infrastructure improvements to cost effectively serve existing commercial, park, and open space as well as future residential (dual plumbed) and commercial customers.
2 System Design Standards	RMCSD	Develop recycled water standards to serve future commercial and residential customers. Standards will serve as the basis for (1) preparing construction cost estimates and (2) communicating minimum recycled water system requirements to serve future developments and existing commercial areas.
3 Detailed Project Description / Facility Planning	RMCSD	Incorporate commercial irrigation areas, prepare hydraulic model, refine key aspects, and implement methods to reduce project costs for the proposed recycled water system. Project description to serve as the starting point for the CEQA and NEPA compliance effort as well as the Title 22 Engineering Report and Updated WDR.
4 Agency Coordination	RMCSD and RMCC	Identify roles and responsibilities for program participants as described by Title 22 (e.g., Producers, Distributors, and Users) and coordinate use of common infrastructure (e.g., recycled water conveyance systems, North Golf Course Pumping Station, etc.). Identify scheduling/timing constraints and key metrics (e.g., what constitutes success) for each participant. Conduct coordination meetings with Regional Board and CPDH to keep them informed and obtain feedback.
5 Regulatory Permitting		
5a Intended Use of Van Vleck Spray Field	RMCSD and Van Vleck Ranch	Submit a letter to the Regional Board describing the District's intended long-term use of the Van Vleck spray field to satisfy Article F. 12 of WDR R5-2009-0124. COMPLETED
5b CEQA and NEPA Compliance	RMCSD	Analyze potential environmental impacts associated with the implementation of the expanded recycled water program; satisfy CEQA and NEPA (if federal funding obtained) review requirements. Estimated cost is based on preparing initial study/mitigated negative declaration (CEQA) and environmental assessment/FONSI (NEPA).
5c Title 22 Engineering Report Preparation	RMCSD and RMCC	Prepare Title 22 Engineering Report. Recycled water use areas to include existing golf courses, commercial, parks, open space, Van Vleck spray fields, and future residential (dual plumbed) and commercial customers.
5d MRP and Updated WDR Application	RMCSD and RMCC	Complete Form 200 and prepare Report of Waste Discharge requesting the Regional Board's preparation of a Master Reclamation Permit (MRP) and Updated Waste Discharge Requirements (WDRs).
5e Salt and Nutrient Management Plan	RMCSD and RMCC	Prepare salt and nutrient management plan and antidegradation analysis specific to the expanded recycled water program.
5f Title 22 Engineering Report Review and Approval	RMCSD and RMCC	Submit Title 22 Engineering Report (completed in Step 5c) to CDPH and Regional Board for review and approval.
5g Updated WDR Review, MRP Negotiations and Adoption	RMCSD and RMCC	Submit Form 200 and Report of Waste Discharge (completed in Step 5d) to the Regional Board. Negotiate updated Waste Discharge Requirements (WDRs), Master Reclamation Permit (MRP), and monitoring requirements with Regional Board and CDPH staff.
6 Improvements to Existing Infrastructure		
6a Chlorine Contact Basin	RMCSD	Existing WWRP chlorine contact disinfection facilities has a rated capacity of 2.3 MGD, which is less than the 3.0 MGD capacity provided by the tertiary treatment facilities and required by the future recycled water system. Efforts associated with this task are based on planning, design, and construction a 195,000 gallon contact basin within the existing equalization basin.
6b Seasonal Storage Expansion	RMCSD	Install 240 acre-ft (AF) of additional seasonal storage capacity within the WWRP site. Efforts associated with this task are based on planning, design, and construction of new 240 AF storage, conveyance pipeline, and pumping facilities.
7* Detailed Design (Phase 1 RW Program)	RMCSD	Prepare preliminary design report and final hydraulic model, 60, 90, and bid documents (design drawings and specifications) of the proposed recycled water system infrastructure.
8* Bid and Award (Phase 1 RW Program)	RMCSD	Respond to questions from potential bidders, conduct pre-bid meeting, prepare addenda, evaluate bids, and recommend award.
9* Construction (Phase 1 RW Program)	RMCSD	Construct recycled water system expansion and administer contract for the installation of system infrastructure, provide construction management oversight / inspection, respond to contractor requests for information, prepare necessary change orders, review contractor submittals, and participate in construction meetings. Improvements to be limited to those needed to serve Phase 1 development (e.g., 670 Group).
10* Startup (Phase 1 RW Program)	RMCSD and RMCC	Verify that recycled water system operates and performs as designed; modify system to further enhance and optimize system operation and performance.
11 RMCSD Management and Administration		
11a Appoint Recycled Water Program Manager	RMCSD	Hire recycled water program manager. Specific duties to include pre-qualifying landscape designers and construction contractors, regulatory compliance, stakeholder interaction, and recycled water accounting.
11b Operations and Maintenance Plan	RMCSD	Develop operation and irrigation management plans pertaining to the expanded recycled water system.
11c Landscape Designers and Contractors	RMCSD	Compile a list of companies authorized to design and work on residential recycled water systems. Authorized companies shall have attended training (Step 11d) and shall be familiar with system design standards (Step 2) and other pertinent recycled water regulatory requirements.
11d Training (Orientation and Education) Program	RMCSD	Develop and conduct workshops. Target audience is future homeowners and landscape designers and contractors. Workshop content to include description o recycled water standards (Step 2), need to hire authorized companies (Step 11c), and the preparation of recycled water plans.
11e Inspection and Testing Program	RMCSD	Develop program to verify compliance with recycled water standards and regulatory requirements.
12 Public Outreach	RMCSD	Manage information and promote understanding and communication with key stakeholder groups, demonstrate organizational commitment, promote communication and public dialog, ensure fair and sound decision making, and build and maintain trust.
13 Expand RW System to Serve Phase 2 Development	RMCSD	Plan, permit, design, and construction recycled water system to serve expanded recycled water service area associated with Phase 2 developments.



Development of Deliverables

Ongoing Efforts Not Associated with Specific Deadlines or Milestones

★ Draft Deliverables

★ Final Deliverables

Footnotes

* Dates shown in this table are considered preliminary estimates and are based on Phase 1 and 2 development occupancy timeframes of 2016 and 2020, respectively. Actual timeframes will depend on actual residential and commercial development timeframes.

MEMORANDUM

Date: May 28, 2013

To: Personnel Committee

From: Suzanne Lindenfeld, District Secretary

Subject: Discuss Adoption of Board Guidelines

RECOMMENDED ACTION

Review and discuss Board Guidelines, with approval in July 2013.

BACKGROUND

At the February Personnel Committee meeting and Board of Directors meeting, Director Ferraro requested the Board and staff review Chapter 2 of the District Code. As a follow-up, Suzanne had been working on the attached guidelines over the fall of 2012.The guidelines provide the Directors with information that will assist them in carrying out their duties and responsibilities as elected public officials of the District and will assist the public in understanding how the District's Board of Directors conducts its business.

At the May Personnel Committee meeting, the Committee agreed to have the Board review and submit their comments to Suzanne. Once the comments were received, the District's General Counsel reviewed the Guidelines.

While these are guidelines, they do provide some clarification of recent items/issues raised by Director Ferraro. In reviewing the guidelines, you may consider and reflect on items to be addressed in an update to Chapter 2 of the District Code.

The Personnel Committee recommends adoption.

BOARD GUIDELINES

Guidelines for Conducting Rancho Murieta Community Services District Business

First Edition 2013

BOARD GUIDELINES

Purpose:

Provide the Directors with information that will assist them in carrying out their duties and responsibilities as elected public officials of the Rancho Murieta Community Services District and to assist the public in understanding how the District's Board of Directors conducts its business.

DISCLAIMER: These guidelines are intended to assist in the operation of the business of the District. However, these guidelines are not law and are not to be construed to impose upon the District any obligation not set forth by law, and nothing herein is intended to impose a mandatory legal duty upon the District, its Board members, staff, employees, or agents. Any lack of compliance with these guidelines shall not, in itself, invalidate any action of the District or the District Board, nor shall it confer upon any person a cause of action against the District, its Board members, staff, employees, agents, or any other person or entity.

First Edition 2013

TABLE OF CONTENTS

CHAPTER 1 7

INTRODUCTION 7

CHAPTER 2 8

BOARD AND COMMITTEE MEETINGS AND ALLOWABLE DISCUSSIONS 8

BROWN ACT AND ROBERT'S RULES 8

TYPES OF BOARD MEETINGS 8

Regular Board Meetings 8

Special Board Meetings 8

Adjourned Board Meetings 8

Emergency Board Meetings 8

Board Meetings Outside District Service Area 9

TYPES OF COMMITTEES AND COMMITTEE COMMUNICATION 9

Standing Committees 9

Ad Hoc Committees 9

Special Committees 9

Subcommittees 9

Communications from Committees 9

OPEN VERSUS CLOSED SESSION DISCUSSIONS 10

Open Session Discussions 10

Closed Session Discussions 11

Chapter 3 12

THE BOARD MEETING AGENDA 12

Call to Order 12

Roll Call, Determining and Maintaining a Quorum 12

Adopt Agenda 12

Special Announcements and Activities 12

Closed Session 13

Reports from Closed Session 13

Public Comment 13

Consent Calendar 13

Staff Reports 14

Board Correspondence 14

Board Business 14
Review and Select Conference/Education Opportunities 14
Meeting Dates/Times 14
Comment/Suggestions – Board Members and Staff 14
Adjournment 15
CHAPTER 4 16
TRANSACTING BOARD BUSINESS 16
TRANSACTING BUSINESS ON AN ITEM 16
Introducing an Item 16
Staff Presentation 16
Staff Recommendation 16
Clarifying Questions 16
Committee Recommendation 16
Public Comment 16
Motion and Second 17
Discussion 17
Decision 17
MAJORITY VOTE REQUIRED 17
ACTIONS TAKEN BY THE BOARD 17
Motion 17
Resolution 17
Ordinance 18
CHAPTER 5 19
PREPARATION FOR BOARD MEETINGS 19
RECOMMENDED ACTION AND BACKGROUND 19
Title of Item 19
Presenter Information 19
Form of Action 19
Committee Review and Recommendation 19
General Counsel Review 20
Costs and Funding Source 20
Recommendation 20
Background 20
Staff Reports 20
Action Document 20

Reports 20
CHAPTER 6 21
PREPARATION FOR COMMITTEE MEETINGS 21
SCHEDULING AND ATTENDANCE 21
Posting 22
Preparation 22
Format 23
Anticipated Time 23
COMMITTEE RECOMMENDATIONS TO THE BOARD 23
CHAPTER 7 24
EFFECTIVE PARTICIPATION IN BOARD MEETINGS 24
CHAPTER 8 26
PLACING AN ITEM ON THE BOARD OR COMMITTEE AGENDA 26
SOURCES OF ITEMS 26
Items Originating from the General Manager 26
Items Originating from a Board Committee 26
Items Originating from or of Interest to a Director 26
Items Originating from the Public 27
PLACING AN ITEM ON A COMMITTEE AGENDA 27
ITEMS THAT DO NOT REQUIRE COMMITTEE REVIEW 27
Administrative Matters 27
Board Oversight 27
Procedural Streamlining 28
District-Wide Matters 28
Matters that Must be Considered Only by the Full Board to Protect the District's Interest 28
CHAPTER 9 29
DIRECTOR ROLES AND DUTIES 29
The Board of Directors 29
Directors 29
Traits of Effective Directors 29
CHAPTER 10 31
PRESIDENT AND VICE PRESIDENT 31
ROLES AND DUTIES 31
Board President 31

Vice President **31**

CHAPTER 11 ..... **32**

GENERAL MANAGER'S ROLE **32**

Legal Requirements 32

Contractual Requirements 32

Job Classification 32

Practice Based on Good Governance 33

CHAPTER 12 ..... **34**

WORKING WITH DISTRICT STAFF **34**

CHAPTER 13 ..... **36**

THE ROLE OF GENERAL COUNSEL AND SPECIAL COUNSEL **36**

THE ROLE OF LEGAL COUNSEL **36**

General Counsel 36

Special Counsel 36

The District as a Client 36

Hiring and Termination 37

Regular Performance Evaluations 37

SPECIAL ETHICAL CONSIDERATIONS FOR PUBLIC AGENCY LAWYERS **37**

PROTECTING ATTORNEY-CLIENT PRIVILEGE, ATTORNEY WORK PRODUCT DOCTRINE AND MAINTAINING THE CONFIDENTIALITY OF COMMUNICATIONS WITH COUNSEL **37**

Attorney-Client Privilege 37

Attorney-Work Product Doctrine 37

Confidentiality of Communications 38

CHAPTER 14 ..... **39**

EFFECTIVE COMMUNICATIONS **39**

GENERAL GUIDELINES **39**

Communicating with the Public 39

Communication with Other Agencies 39

Speaking as a Private Individual 40

Communicating with the Media 40

Communicating with Liaison Committees 40

Building Goodwill with Other Agencies 41

Communicating in Writing 41

Communicating Electronically 41

CHAPTER 1

INTRODUCTION

These Guidelines for Conducting Board Business ("Guidelines") describes the methods, means, customs and practices that the Board of Directors ("Board") employs in exercising its authority, complying with various legal requirements, working with the public and Rancho Murieta Community Services District ("District") staff, and otherwise conducting the District's business.

The Board is the legislative body that governs the District, sets the District's policies, hires its General Manager and General Counsel, and is ultimately responsible and accountable to the people of the District. It exercises these powers pursuant to the Community Services District Law, *California Government Code*, section 61000 et seq.

No individual member of the Board has any individual authority to bind the District, since only the Board as a whole can exercise authority. Using authority provided in the Community Services District law or delegated by the Board, the General Manager is responsible for running the day-to-day business of the District and is accountable to the Board.

The roles, responsibilities, duties, and authority of the Board and individual Directors are explained more fully in the various sections of these Guidelines.

CHAPTER 2

BOARD AND COMMITTEE MEETINGS AND ALLOWABLE DISCUSSIONS

BROWN ACT

The District's Board meetings are conducted consistent with the Ralph M. Brown Act; Gov't Code sections 54950 et seq.

TYPES OF BOARD MEETINGS

There are four (4) main types of Board meetings: regular, special, adjourned, and emergency.

Regular Board Meetings

Most District business is conducted at the regular monthly Board meetings. The dates, times and locations of regular Board meetings are established by resolution of the Board. Currently, regular Board meetings are the third (3rd) Wednesday of each month, open session beginning 5:00 p.m., in the District Boardroom located at 15160 Jackson Road, Rancho Murieta, California. Closed sessions may start earlier as designated in the posted meeting agenda. The agenda for regular Board meetings must be posted in a public place at least 72 hours prior to the meeting.

Special Board Meetings

Occasionally, Special Board meetings are held for the purpose of discussing a special topic, for a workshop or if it is necessary to hold a meeting at a time or date other than the regular Board meeting. Special Board meetings may be called at any time by the Board President or a majority of the Board. They may be held at a time and place desired by the Board but generally must be convened within the District's service area. Written notice must be given to Directors, the media, and the public 24 hours in advance of a Special Board meeting. The agenda for a Special Board meeting must be posted in a public place at least 24 hours prior to the meeting.

Adjourned Board Meetings

After any regular or Special Board meeting has been called to order, it may be adjourned by the Board to another date, time and place if the business of that meeting has not been completed or if the Board's deliberations would benefit from continuing the meeting at another time or in another location. Also, if less than a quorum is present, the Directors who are present (or, if none are present, the District Secretary) can adjourn the meeting to another date, time and place.

Emergency Board Meetings

The Board may hold an Emergency Board Meeting when prompt action is necessary due to the disruption or threatened disruption of public facilities. There are two (2) levels of emergency: emergency and dire emergency. An emergency is a work stoppage, crippling activity or other activity that severely impairs public health, safety or both, as determined by a majority of the Board. A meeting to deal with such a situation may be called on one (1) hour's notice to the newspapers and media outlets that have requested notice of meetings. A dire emergency is a crippling disaster, mass destruction, terrorist act, or threatened terrorist act that poses peril so immediate and significant that the only requirement is that notice must be given to newspapers and media outlets that have requested notice of meetings at or near the time Directors are notified of the meeting.

Board Meetings Outside District Service Area

Regular or special meetings of the Board may be held at a District-owned facility outside the District's service area, provided that the topics of the meeting are limited to items directly related to that facility. There are other limited times when a Board meeting may be held outside the District boundaries (examples include but are not limited to multi-agency meetings, meetings with General Counsel , or meetings to inspect real property). District General Counsel should be consulted for the particular requirements related to these and other limited exceptions.

TYPES OF COMMITTEES AND COMMITTEE COMMUNICATION

Standing Committees

A Standing Committee is one with a particular subject matter jurisdiction. The Board establishes the Committee's charter. The Committee makes recommendations to the Board upon matter within its scope. Currently, the Communication & Technology, Finance, Improvements, Parks, Personnel, Regional Water Authority, Security and Joint Security Committees are Standing Committees. A Standing Committee may deliberate and recommend changes in District policy or direction but may not itself create or change policy or direction. Although they have commonly been called technical committees, a more precise description is Standing Committees because these committees permissibly perform some of the standing functions of the Board, enabling the Board to better focus on the policy questions raised by the particular matter.

Ad Hoc Committees

Ad hoc Committees may be created by the Board of Directors to undertake special assignments on behalf of the Board. An ad hoc Committee shall exist for a specified term or until its special assignments are completed, whichever comes first, but its existence may be extended for an added term or added assignments by action of the Board. Unless otherwise specified, members of an ad hoc Committee shall be appointed by the President of the Board and shall serve at the President's pleasure.

Special Committees

Special Committees may be created by the Board of Directors to undertake special assignments on behalf of the Board. A Special Committee shall continue in existence indefinitely. Unless otherwise specified, members of a Special Committee shall be appointed by the President of the Board and shall serve at the President's pleasure.

Subcommittees

Subcommittees may be created by any Standing Committee of the Board of Directors to undertake specific assignments on behalf of the Standing Committee. The Standing Committee creating a Subcommittee shall establish such term, as it deems desirable. Unless otherwise specified, members of a Subcommittee shall be appointed by the Chairman of the Subcommittee's parent Committee and shall serve at the President's pleasure.

Communications from Committees

To reduce the risk of communications that could result in impermissible discussion or consensus-building, there are ground rules for communicating between different committees (or their respective members) through either the Board or the General Manager. (Note: the Board may only provide new policy direction to District staff or management via the General Manager.)

The Brown Act prohibits Directors from conducting District business outside Board or Committee meetings. The normal definition of a meeting is the congregation of a majority of the members of a legislative body at the same time and place, including by teleconference or electronic means, to hear, discuss or deliberate upon

any item that is within the subject matter jurisdiction of the legislative body. However, it is also possible to impermissibly develop a collective consensus among a majority of the Board without three (3) members being physically present at the same time and place, such as by serial communications by Directors.

Effective in 2009, the Legislature amended the Brown Act to state that "a majority of the members of a legislative body shall not, outside a meeting authorized by this chapter, use a series of communications of any kind, direct or through intermediaries, to discuss, deliberate or take action any on item of business that is within the subject matter jurisdiction of the legislative body" (*Government Code*, section 54952.2(b) (1)). The Brown Act does not impose an absolute prohibition on all discussion outside meetings that may involve a majority of Directors. This additional clarification took effect in 2009; "Paragraph (1) shall not be construed as preventing an employee or official of a local agency from engaging in separate conversation or communications outside of a meeting authorized by this chapter with members of a legislative body in order to answer questions or provide information regarding a matter that is within the subject matter jurisdiction of the local agency, if that person does not communicate to members of the legislative body the comments or position of any other member or member of the legislative body" (*Government Code*, section 54952.2(b)(2)).

There are three (3) basic ways to comply with the Brown Act while employing Committees to address matters that do not fall within the jurisdiction of any of the current Standing Committees. Each alternative employs a different strategy to guard against improper deliberations or the development of a collective consensus in violation of the Brown Act. This does not diminish the importance of following the procedures regarding communication between committees discussed below.

- The first alternative is to ensure that no two (2) Committees consider the same policy matters. This is the reason for developing a mission statement within the charter of each Committee.

- The second alternative entails creating a new Committee specific to a major topic of importance as a separate Standing Committee and carving out the subject matter of the new committee from the existing Standing committees. This approach avoids the same issue being addressed serially in more than one Standing Committee, so that three (3) Directors would not have deliberated on the same topic except at a Board meeting. While this approach could sidestep many Brown Act issues, there may be practical difficulties in actually carrying it out, given possible interrelationships of the subject matter of a new Committee with the traditional Committees.

- The third alternative is to have a given subject handled in its entirety by the Board and thereby avoiding any separate Committee deliberations.

OPEN VERSUS CLOSED SESSION DISCUSSIONS

Board and Committee meetings can have open as well as closed session topics for discussion.

Directors should remember that any form of communications between or among Committees has the potential to result in impermissible discussion or consensus-building outside noticed Board meetings. The most reliable way to avoid improper communication is to transmit information between Committees only through the General Manager. Standing Committees must avoid deliberating on the same subjects. It is the responsibility of the General Manager to identify when this is happening or could happen, and to take action.

Open Session Discussions

The Board and its Committees transact the vast majority of the public's business in open session. Open sessions are those portions of the Board or Committee meetings that are open to the public and during which

the public can address the Board or Committee and comment on any item of business being considered or on any matter within the Board's subject matter jurisdiction or the Committee's charter that is not on the agenda.

Closed Session Discussions
To protect the confidentiality of information presented in closed session, staff will collect all written material distributed during the session at the end of the session.

In general, the Brown Act directs the District to conduct all of its business in public. However, the Board and its Committees may also meet in closed session under a series of carefully defined exceptions to the Brown Act. Closed sessions are used when the public's interest could be adversely affected if the Board's or Committees' discussion took place in public. Closed sessions are used to give direction to District negotiators for labor contracts with District employees and for the acquisition or disposal of real property.

The Board and its Committees may also meet in closed session to confer with legal counsel regarding claims or threats of litigation, initiation of litigation, or to discuss existing litigation in which the District is involved. Finally, the Board and its Committees may meet in closed session when evaluating the performance of a public employee, when dealing with the hiring, dismissal or discipline of a public employee; or with certain security matters.

Matters discussed in closed session are strictly confidential. Disclosure of information from a closed session may prejudicially impact District interest and can result in 1) the possible censure by the Board of a Director who breaches the confidentiality requirement; 2) the issuance of an injunction against such conduct by a court; or 3) in an appropriate case, criminal penalties.

Chapter 3

THE BOARD MEETING AGENDA

The Board meeting agenda is an informational, decision-making and management tool. It presents the issues under consideration and provides a brief general description of actions the Board will consider taking. The agenda is accompanied by a packet of supporting materials designed to aid decision-making by presenting in sufficient factual detail the issues and options which are to be used in the decision-making process. Typically, each item presented to the Board includes recommendations for specific actions.

The General Manager, in consultation with the Board President, shall set the agenda. Committee recommendations on topics to be included on the agenda shall be given to the General Manager. Individual Directors may request items to be placed on the agenda by notifying the General Manager of their request no later than 2:00 p.m. five (5) business days prior to the meeting date

The agenda of each Board meeting includes the elements described below.

Call to Order
The President of the Board shall strike the gavel and begin the Board meeting. In the absence of the President, the Vice President shall call the meeting to order. In the absence of both the President and Vice President, the District Secretary shall call the meeting to order.

Roll Call, Determining and Maintaining a Quorum
The District Secretary calls the roll of the Directors and records the names of those present and those absent in the minutes of the meeting. If a Director enters the meeting late or departs early, those times are also recorded in the minutes. If a quorum of the Board (three (3) Directors) is not present, no further proceedings or discussion may occur and the District Secretary announces that the meeting is adjourned for lack of a quorum.

The Board must maintain a quorum through the meeting in order to conduct business. However, the meeting may be adjourned with less than a quorum by those Directors who are present; if no Director is present, the District Secretary can adjourn the meeting.

Adopt Agenda
At this point in the meeting, a Director or the General Manager has an opportunity to propose re-arranging the order of the items on the agenda. The Board President will re-arrange agenda items if the need should arise. For example, a closed session may be moved to an earlier time in a meeting, or a Board Business item may be moved ahead of another item due to some unusual circumstances or if audience members are present for a particular agenda item. Timed items, such as hearings, cannot be heard earlier than the time published.

Special Announcements and Activities
During this section of the meeting, the General Manager, or staff members designated by the General Manager, addresses the Board with matters such as introducing new District employees, acknowledging employee promotions and certifications, acknowledging or giving a special award or recognizing an event, local students or dignitaries.

If neither the President nor Vice President is present, the District Secretary would at this point ask for a motion to name a President Pro-tem for that meeting. If the motion is made, seconded, and passed (requires a 3-0 vote) the Director so named presides over the meeting. If there is no such motion or second, or if the motion does not pass, the District Secretary presides over the meeting but cannot make motions or seconds, vote on any item, or enter into policy level deliberations and discussions.

Closed Session
Closed Sessions are usually held at the beginning of the meeting.

Reports from Closed Session
Upon returning to open session, the Board President or General Counsel will announce any reportable action taken in closed session. Such reports are required by law.

Public Comment
At every Board meeting, members of the public are allowed to address the Board on any item of interest within the subject matter jurisdiction of the Board that is not already included on the posted agenda. The Board President asks anyone desiring to make public comments to state his/her name and address so that the minutes accurately reflect the speakers identity and affiliation and so that the District can contact the speak if necessary. The President calls speakers to the lectern and asks them to identify themselves, announce their item and address the Board.

Public comments are limited to three (3) minutes per speaker, unless extended by the President. Directors may ask clarifying questions but cannot take any action on, discuss or debate the matters not on the agenda that are presented during the public comment period. Members of the public may also make requests to have items placed on a future agenda during the public comment portion of the meeting. After considering such a request, the Board may provide direction to the General Manager regarding including that item on future Board or Committee agendas.

Consent Calendar
Matters listed under the consent calendar are considered routine and generally are acted upon by one motion. Directors normally do not discuss consent calendar matters. Items may be removed from the Consent Calendar in three (3) ways.

- If a Director has an unanswered question or concern about any of the items listed on the Consent Calendar, he/she must request that the matter be removed prior to a motion being made and approved. Any such request by a Director is automatically granted. When a Director wishes to pull an item from the consent calendar for discussion, it is helpful if he/she contact the General Manager before the Board meeting to explain his/her concern. This enables staff to provide information that might be needed to further the Board's discussion.

- On occasion, the General Manager may request that the President remove an item from the Consent Calendar. Typically, this occurs so staff can clarify for the record any matters in the written material provided to the Board, to present new information that came to staff's attention subsequent to the preparation of the agenda or for other similar administrative reasons.

- A member of the audience may also request that the Board remove an item from the Consent Calendar so that it may be discussed. Any such request must be made prior to the time the Board votes on the matter as part of the Consent Calendar. Any such request from a member of the public will only be granted if a Director agrees that the item should be removed from the Consent

Calendar and makes a Director request. Nevertheless, any member of the public has a right to comment on any item on the Consent Calendar. The member of the public should identify what items he/she is commenting upon and proceed to make his/her comments. Such commenting does not automatically require that the Board remove the item from the Consent Calendar unless a Director so requests for discussion or a separate vote.

Once any item is removed from the Consent Calendar, the remaining items are considered and approved by a single motion. The removed items are then discussed and considered individually.

Staff Reports
The General Manager and District staff report on upcoming events, recent occurrences and informational matters that may have significance to the District.

Board Correspondence
The agenda will list all correspondence received by the District that is addressed or copied to the Board. The agenda listing informs the public what has been received and documents that all material sent to the Board have been transmitted to the Board. Generally, staff makes the listing but if Directors have received correspondence that has not been sent to staff, the Director should make an announcement. The announcement should identify the sender, the subject, the form of communication (letter, e-mail, etc.) and the date on the correspondence.

All Board correspondence reported under this item (as well as material first made available on any agenda item at the Board meeting) is maintained by the District in accordance with a Brown Act provision that took effect on July 1, 2008 (Government Code, section 54957.5). This information is available for inspection by the public upon request.

Board Business
Board business is the section of the agenda where the Board considers and decides the more complex or significant matters of the District's business or conducts formal public hearings when required to do so by an applicable law or regulation. Some items require an action by the Board, others are informational. In some cases, the Board will discuss a matter without making a decision and refer the matter back to staff or a Standing Committee for further development. *See Chapter 4 – Transacting Board Business for Appropriate Protocol.*

Review and Select Conference/Education Opportunities
This is the section of the meeting where Directors request Board approval to attend various conference and/or education opportunities. Also at this time, Directors must provide brief reports on meetings that they have attended at the District's expense. (AB 1234)

Meeting Dates/Times
During this section of the meeting, the Board acknowledges the dates and times for the next month's Board and Standing Committee meetings.

Comment/Suggestions – Board Members and Staff
During this section of the meeting, Directors and staff are invited to comment on their District-related activities or to suggest new ideas and concepts.

Adjournment

The Board meeting will adjourn by the making of a motion, a second and a call for a vote. The meeting may be adjourned if there is less than a quorum present by action of those Directors who remain in attendance; if no Director is present, the District Secretary may adjourn the meeting. Occasionally, meetings are adjourned in memory of a loved one or close friend of the District or in honor of a significant event.

CHAPTER 4

TRANSACTING BOARD BUSINESS

Items presented for consideration at Board meetings are handled in a consistent manner to ensure that:

- Pertinent facts associated with a matter are presented not only for the benefit of the Board but also for the benefit of any member of the public who is present;
- Actions taken by the Board are properly approved; and
- The Board takes action only on items that are scheduled for action on the agenda. For example, the Board may discuss but not taken action on an item that is identified as being for Discussion and Information or as a Special Announcement.

TRANSACTING BUSINESS ON AN ITEM

Introducing an Item

The Board President announces each agenda item, referencing the item number and the nature of the matter.

Staff Presentation

The General Manager or, at the General Manager's discretion, a staff member, summarizes the item being considered, including background, pertinent facts and details, analyses conducted by staff, and options available for the Board's consideration. On occasion, a consultant may assist the General Manager or staff in presenting an agenda item.

Staff Recommendation

The General Manager makes a recommendation on each action item. The recommendation is identified in the Recommended Action section of the staff report. The General Manager often delegates this responsibility to Department Managers.

Clarifying Questions

Directors ask questions of the presentation and offer general comments about the subject matter after the staff presentation. Questions and comments at this time are to clarify the matter and the recommendation. Debates or deliberations occur after public comment and after a motion has been made.

Committee Recommendation

If a Standing Committee has reviewed the matter, the outcome of its discussion will be noted in the Summary and Recommendation included in the Board agenda packet. Should any of the Directors on the Committee so desire, this is the time to state the Committee's recommendation and the reasons for it.

Public Comment

The Board President then opens up the meeting to the public for comment on the matter. The public must have an opportunity to comment on every agenda item. Sometimes this is done very formally through a public hearing. Other times, the President simply asks the audience if there are any comments. The President will ask speakers to state their name and address for the record and for the benefit of others in the audience. If it is obvious that no potential speakers are present, there is no need to formally call for public comment. A member of the public should be permitted to speak only once, and public comments are limited to three (3)

minutes per speaker, unless otherwise allowed or extended by the President. In the event the District receives written correspondence from the public on the matter after publication of the agenda, that written correspondence will be presented to the Board at this time.

Motion and Second
After public comment, a Board member may make a motion regarding the action to be taken on the item. The motion must be seconded before additional debate or discussion on the matter is permitted. No discussion may occur on a motion without a second. A motion fails if it does not receive a second.

Discussion
After a motion is properly made and seconded, the Board discusses the merits of the item in an attempt to reach a decision. During this time, the Board may ask staff or the public additional questions or seek the advice of the General Manager and/or General Counsel. As discussion by the Board ensues, the motion may be amended or withdrawn or a substitute motion offered. These actions must follow the procedures adopted by the Board.

Decision
When the Board President senses that a discussion has run its course or when a motion to call the question is properly made and seconded, the Board President calls for a vote on the motion on the floor. After hearing the results, the Board President announces the vote. Voting may be by voice or roll call.

MAJORITY VOTE REQUIRED

A majority vote is required for any action to be taken by the Board (i.e., there must be a minimum of three (3) affirmative votes) regardless of how many Directors are present. This requirement is mandated by State law. In certain instances, a super-majority vote of the Board is required (e.g. to adopt a resolution if necessary to condemn real property or to add an emergency item to an agenda). In those cases, General Counsel will provide guidance.

ACTIONS TAKEN BY THE BOARD

The Board of Directors approves items by:

- Motion
- Resolution
- Ordinance

Motion
The Board uses a motion to submit a matter for action. A motion can be a parliamentary tool used by a member of the Board (plus another member who seconds the motion) to place a matter before the entire Board for its consideration. A motion also can be a legislative action used to authorize or approve action on simple matters that are routine in nature, such as approving direction to staff, communicating a District position, approving a task order, increasing a purchase order amount, or approving a proclamation. The minutes of the Board meeting document the Board's determination on the matters. A motion is always used to place a recommendation before the Board to approve a resolution or adopt an ordinance.

Resolution

A resolution constitutes a more formal written expression of the will of the Board as the District's legislative body. Resolutions represent an official Board action and/or position taken on a particular issue that may be more temporary in nature than an ordinance but for which a separate permanent record is needed. Resolutions preserve the history of the action taken in a separate official instrument in addition to documentation in the Board's minutes. A resolution becomes effective immediately and remains in effect until rescinded, cancelled or superseded by Board action by means of a new resolution. Resolutions typically are used to adopt policies, approve agreements (e.g. master agreements, construction agreements, public facilities planning agreements, and transfer agreements), award contracts for materials or services, approve memoranda of understanding with bargaining groups, award pay for performance, and establish or amend job classifications. Resolutions, if properly written, can be used to change the rates and charges that the District imposes for the privilege of receiving service. Given the nuances of the law in this area, General Counsel should always be consulted to determine the proper instrument for approving rates and charges.

Ordinance

An ordinance is the most formal of actions that can be taken by the Board. Ordinances are used to establish the local laws that are within the District's power to enact and are applicable throughout the District. Ordinances may apply only to matters not preempted or superseded by federal or state law. An ordinance is the authorizing instrument to change the District Code, which is a compilation of the rules and regulations of the District. Ordinances also may be used to set the District's rates and charges after consultation with General Counsel (see *Resolutions* above). State law requires that some ordinances be published or posted. In some cases, a public hearing is required prior to consideration. An ordinance generally becomes effective 30 days after adoption unless it expressly provides otherwise. Ordinances remain in full force and effect until repealed, modified or superseded by the Board in another ordinance or by action of the voters through initiative or referendum. Everyone at the District, including the Board, is bound by the requirement of an ordinance (and the Code it establishes). Ordinances are the law of the District and are enforced by staff. Only the Board itself may waive, modify or suspend an ordinance by the enactment of a subsequent ordinance. The only way to change an ordinance is to pass an ordinance that revises the original ordinance.

CHAPTER 5

PREPARATION FOR BOARD MEETINGS

All Board meetings are open to the public and are subject to the provisions of state law called the Ralph M. Brown Act (hereafter referred to as the "Brown Act"), also known as the Open Meeting Law (*California Government Code*, section 54950 et seq.).

With limited exceptions, all Board meetings must be publicly noticed in advance of the meeting in order to inform the public about the business of the District and to provide an opportunity for public participation.

District staff prepares a detailed agenda packet summarizing the business to be transacted at a Board meeting. Agenda packets are delivered to Directors and are available to the public at that time. Materials for the closed session portion of the agenda are not made public.

For regular meetings, agenda packets are prepared and delivered no later than the Sunday before the meeting because the Board meets on Wednesdays and 72 hours advance posting of the agenda for the public is required. Directors prepare for Board meetings by studying the agenda packet in detail in advance of the meeting.

The Board agenda packet may include various pieces of information for any given item, as described below.

RECOMMENDED ACTION AND BACKGROUND

The Recommended Action and Background are a one-page summary of an item. Each item to be considered by the Board (including matters on the Consent Calendar as well as those listed as Board Business) will have Recommended Action and Background. It includes the following information.

Title of Item

The title is a brief description that reveals the nature of the item. The title is the same on the Recommended Action and Background as on the agenda, and wording must comply with Brown Act requirements to provide a brief general description of the item. The title determines what action the Board is allowed to take or the nature of the information that the Board may receive. For example, if an item is identified on the agenda face sheet as being for Discussion or for Information, the Board may not vote on that item at that meeting. This requirement ensures that the public is properly informed of what action the Board may take so they can decide whether or not to participate.

Presenter Information

This identifies which staff member or Director will present the item and the nature of the presentation (verbal, slides, etc.).

Form of Action

The form of action (motion, resolution or ordinance) required by the Board is noted.

Committee Review and Recommendation

If an item was reviewed by Committee, the name of the committee, the date it last discussed the item and its recommendation are noted as applicable.

General Counsel Review
When staff has received General Counsel's review and/or opinion to an item, the Recommended Action and Background notes that fact.

Costs and Funding Source
The cost (known or estimated) associated with a recommended action is noted, along with its funding source. The Recommended Action and Background only notes the cost of the item being presented to the Board for discussion. For example, if approval of a $250,000 consulting agreement associated with a $10 million project is being considered, the cost noted is $250,000. When the Board certifies an Environmental Impact Report (EIR) on a $5 million project, the cost shown on the Recommendation and Background is $0 as there is no additional cost to the District associated with the certification.

Recommendation
The General Manager's recommendation for action is presented at the top of the Recommended Action and Background. The recommendation is phrased in such a way so that if a Director concurs, he/she may read or make specific reference to the recommendation when making a motion.

Background
The balance of the Recommended Action and Background provides a short general summary of the action being considered by the Board. Additional details are provided in staff reports or other documents.

Staff Reports
One or more staff reports may be include for an item if the Board needs more information than can be provided in the one-page Recommended Action and Background.

Action Document
The recommended action document (resolution or ordinance) typically follows the Recommended Action and Background.

Reports
Reports, or their executive summaries, may be attached if they are needed for the Board to consider and deliberate.

CHAPTER 6

PREPARATION FOR COMMITTEE MEETINGS

Traditionally, the Board has established various Committees based on specific subject matter to facilitate the Board's consideration of District business. Committee structure and membership are proposed by the Board President and confirmed by the Board. This is done every year in December. There is no legal requirement for the Board to form committees.

Committee meetings serve as venues for developing and deliberating issues before they reach the entire Board for consideration. A Committee, by itself, can take no action; only the Board can take action. Committees may provide on-going guidance to staff so long as that guidance is consistent with the broad policy direction set by the Board.

As is done for Board meetings, District staff prepares a detailed agenda packet summarizing the business to be transacted at each Committee meeting. The agenda packets are delivered to Committee members and are also made available to the public at that time.

SCHEDULING AND ATTENDANCE

Standing Committee meetings are generally scheduled monthly, quarterly or annually depending on the needs of the District. Monthly Committee meetings occur on a fixed schedule (e.g., the first Tuesday and Thursday of each month). Committee meetings generally occur during the daytime work hours (from 8:00 a.m. to 5:00 p.m.)

It is recognized that some Directors are employed or conduct their own business during those hours and may have expected or unexpected conflicts in schedule between Committee meetings and their own employment or business needs. It is also recognized that rescheduling Committee meetings due to conflicts in Directors' schedules can make it difficult for the public to attend, can create scheduling difficulties for interested parties and consultants who are often present for discussion of an item and can increase the workload for District staff.

In order to minimize these impacts while allowing flexibility in schedules for Directors, the following principals should be kept in mind:

- The public has a right to easy, timely and predictable access to the deliberations of the Board of Directors and its committees.
- The District shall schedule and hold Committee meetings only when needed to conduct District business.
- To the greatest extent practical, Committee meetings should be scheduled on a regular, predictable basis. Directors and staff should make a deliberate effort to attend Committee meetings as scheduled.
- Often a Director or key staff member knows of an upcoming schedule conflict well in advance. Examples are planned business trips or vacations. ACWA or CSDA conferences or other activities in which the District has a business interest.

- Both Directors and staff have a responsibility to bring such conflicts in schedule to the attention of the others affected so that a Committee meeting can be rescheduled well in advance.

- Directors may, within the requirements of the Brown Act, attend Committee meetings via teleconference when they are unable to attend in person. Directors should make teleconferencing arrangements with staff well in advance and always before agendas are posted so that the requirements of the Brown Act are satisfied.

- If a Director is unable to attend a Committee meeting as scheduled, it is his/her responsibility to consider the following options:
    - Ask an alternate to attend the meeting.
    - Arrange for attendance at the meeting via teleconference.
    - Do not attend, recognizing that the meeting may only involve one committee member, and the recommendation, if any, may only reflect one committee member's views. .
    - Request rescheduling, realizing that this may impact the public, support personnel and consultants, and District staff. The other Committee member must agree to the new schedule.

Posting

For regular Committee meetings, the agendas are generally prepared and posted on the Friday immediately preceding the week during which the Committee meets. This is required for regular meetings held on Monday afternoons and conservatively meets the posting requirement for meetings on any other day of the week. For Monday morning meetings, the agenda is posted on the previous Thursday to meet the 72 hour posting requirement.

For Special Committee meetings, there is a 24-hour posting requirement. It is the District's administrative goal to post agendas for all Special Committee meetings on the Friday immediately preceding the week during which the Committee meets or earlier, conservatively meeting the posting requirement. Occasionally, the need for a special meeting arises mid-week; in those cases the agenda must be posted 24 hours in advance of the meeting.

In addition, a Committee may, on a two-thirds vote (unanimous for a two-member committee), add an item to the agenda of that Committee meeting if the need to discuss that item became known after publication of the agenda and if the Committee members who are present determine that there is a need for immediate action.

Preparation

The agenda packets for each Committee are delivered to the Committee members on Friday or Saturday of the week preceding the meeting (or as soon as possible). The agenda packets are also made available to the public at the same time. Directors prepare for Committee meetings by studying the agenda packet in detail in advance of the meeting.

If a Director has questions about the information in the packet, he/she should contact the General Manager, department managers or District Secretary for clarification or for further explanation. Committee business is transacted in the most complete, efficient and effective manner when Directors have reviewed and understand the information and issues presented for consideration by the time they arrive at the Committee meeting.

Format
Staff work on any given agenda item can be in various stages of completion at the time it is presented to the Committee. Often the work is not in final form and the materials presented to the Committee are less formal than those presented to the Board.

The material presented to a Committee may be in the form of a final or draft Summary and Recommendation, a memorandum from the General Manager and/or District staff, executive summaries and/or excerpts from draft or final reports, simple tables, drawings, spreadsheets, PowerPoint presentations, or similar work.

Staff will continue to work on items after the Committee agenda has been posted. As a result, District staff will often bring additional written material to a Committee meeting so as to present the latest information about the topic.

On occasion, the agenda will note, "Material will be forthcoming." This is only done when the work is not completed by the preceding Friday. District staff strives to avoid this approach, as it compromises a Committee member's ability to prepare properly for the meeting.

Anticipated Time
Staff estimates how long the Committee will take to hear and transact the item. These estimates are intended to help manage time during Committee meetings but do not limit the actual time that the Committee may spend on any item.

COMMITTEE RECOMMENDATIONS TO THE BOARD

A Committee can make one (1) of five (5) recommendations to the Board: approval/adoption, disapproval, neutral, no recommendation, and informational.

- A recommendation to approve/adopt is given when the Committee endorses the General Manager's recommendation or, alternatively, develops a recommendation of its own to present to the Board. In the latter case, both the General Manager's recommendation and that of the Committee is presented to the Board.
- A recommendation to disapprove is less common and occurs when Board action is required on a matter (keeping in mind a Committee cannot kill an item) or in those instances when the General Manager's recommendation differs from the consensus developed by a Committee.
- A neutral recommendation occurs in those instances when a Committee is split on a matter.
- No recommendation occurs when the Committee specifically decides not to make a recommendation; in such instances, the Committee's discussions, if any, are summarized for the Board.
- An informational recommendation is made when the Committee desires input from the Board in order to complete its deliberation; in this instance the item is calendared for discussion only by the Board (no action) and subsequently returns to the Committee for additional discussion and deliberation.

CHAPTER 7

EFFECTIVE PARTICIPATION IN BOARD MEETINGS

The following ground rules apply to all Directors.

- Come to meetings prepared. Contact the General Manger ahead of any meeting if you have clarifying questions or need additional background. Many times your questions can be answered without taking up meeting time. Also, it helps staff to understand your concerns ahead of the meeting so they can be prepared with the information you need.

- During the meeting, express your thoughts and support them whenever possible with facts, figures and references. Specifically identify your sources of information so as to establish their credibility with your colleagues. More specific statements are more persuasive to your colleagues on the Board then generalized statements. Examples: (a) I spoke with ____, who is the President of the homeowners association and he/she would like the District to _____" is better than "The public thinks that we should do_____;" (b) "(specific name) told me _____" is better than "I was told that _____;" (c) "(specific organization) has a concern with _____" is better than "Everyone thinks that____.

- Be creative. Innovative ideas supported by sound reasoning are welcome on complicated matters when the Board is attempting to arrive at a consensus.

- Take a positive approach. Keep an open mind. When a Director proposes an idea, look for the value in that idea.

- Be enthusiastic.

- Stay on the subject. Do not introduce other agendas. Keep your comments brief but long enough to establish your point.

- When you do not understand what someone is saying, ask for clarification. Make criticism positive and constructive. Direct critical comments to the issues being discussed, not toward the person expressing the idea.

- Protect the rights of others to have their opinions and feelings heard. Encourage silent members to participate.

- Help the Board President when others take up outside issues. Interrupt gently and say, "We're getting a little off the subject here, maybe we should get back to our topic."

- Share your thoughts. Holding back when you have an idea robs the Board and staff of your knowledge and opinion and prevents further development of your idea. Have confidence in yourself and speak up.

- Protect ideas. Help the Board President set an atmosphere where people will feel comfortable expressing ideas even if they are not perfect. When someone begins attacking another's idea, say, "That idea probably has faults, most ideas do. Let's just let ideas come out for now and evaluate them later."

- Attend and participate. Be on time and stay for the entire meeting. Advise the General Manager or District Secretary if you are unable to attend or know you will be arriving late and/or leaving early.
- Be an active listener. Be open-minded: listen and consider all points of view.
- At all times, ask yourself, “What, right now, would help the Board move ahead and get this problem solved? What can I do to help the Board function more effectively? How can I help?”
- Always remember that civil discourse is one of the keys to effective communication.

CHAPTER 8

PLACING AN ITEM ON THE BOARD OR COMMITTEE AGENDA

SOURCES OF ITEMS

Items on the Board agenda originate from a variety of sources: the General Manager, Standing committees, Directors and the public.

Items Originating from the General Manager

Many items on the agenda originate with the General Manager and District staff. The following types of items are typical:

- Matters on which policy direction from the Board is required.
- Items with over-arching policy implications (e.g., labor negotiations, budgeting, and strategic planning).
- Action required by law (e.g., consolidation of District elections, amending a Conflict of Interest Code).
- Intermediate actions in the overall implementation of a Board-approved project or program (e.g., awarding construction contracts, considering an environmental review document).
- Discretionary decisions for which authority has not been delegated to the General Manager.
- Informational items to keep the Board current on a matter or to allow them to discuss the implications of continuing on a previously agreed course of action.
- Items with critical timing needs.
- Proclamations honoring special events or individuals.

Items Originating from a Board Committee

A Director may bring up a new item at a Committee meeting. However, in such cases, the advance notice requirements of the Brown Act only allows the Committee to decide to place such a matter on a future agenda; the matter cannot be discussed at the meeting at which it was first verbally mentioned. Committee recommendations may be referred to the Board and may include items that are routine business, new ideas developed by Committee or unusual matters.

Items Originating from or of Interest to a Director

Any Director may request that an item be placed on a future Committee and/or Board agenda during the Director Comment section of a Board meeting. If time allows, a Committee may review the matter prior to discussion by the Board. The Director who originated the item contacts the General Manager to more fully explain the issue so that staff can prepare a Recommended Action and Background (which allows the Board to discuss the matter). The Director who placed the item on the agenda is cited as the reference and is expected to lead the discussion.

For any matter referred to or being discussed by a Committee, the Committee shall report its findings back to the Board and capture its deliberations in the notes prepared by the Committee. If, after reviewing the notes prepared by the Committee, a Director wishing to have a matter discussed by the full Board, may state this request at a Board meeting or notify the General Manager. The General Manager shall then notify the Committee of the Director's request and schedule the matter for discussion at the next reasonably available Committee meeting. This process allows the Committee to complete their work and respond to concerns raised. Following that Committee meeting, the General Manager shall place the matter on the Board agenda for discussion at the next reasonably available Board meeting.

Items Originating from the Public

Members of the public may request to have an item placed on a future Board or Committee agenda during the Public Comment portion of a Board or Committee meeting. The Board or Committee considers such requests of the public to have an item placed on a future agenda and provides direction to the General Manager. The Board may not discuss the matter brought up by the public at the same meeting at which it is first verbally mentioned.

PLACING AN ITEM ON A COMMITTEE AGENDA

Committee agenda items originate from the General Manager or his/her staff, the Board, or a Director. Items requested by a member of the public may be placed on a Committee agenda if decided by the Board, the Committee or the General Manager.

All matters typically go to Committee prior to being placed on the Board agenda. The General Manager decides which Committee reviews an item based on the nature of the item and the charter of each committee.

The Board may refer an item to Committee for consideration or further discussion. This typically occurs when new matters are brought to the attention of the Board by a Director or by the public.

ITEMS THAT DO NOT REQUIRE COMMITTEE REVIEW

The Board's system of Standing Committees that review matters within their subject matter jurisdiction is one way the Board uses to efficiently conduct its business. It also creates opportunities for public involvement in Board deliberations in a less formal manner than at a Board meeting. However, there are several matters that do not require Committee review, either because they are routine or because it is proper or legally require that only the full Board consider them. The following items may be placed directly on a Board agenda without Committee review.

Administrative Matters

- Proclamations
- Notifications (training, conferences, etc.)
- Board Organizational Matters (appointment of Board President or Vice President)
- Appointment of Committees

Board Oversight

- Performance Evaluation (General Manager or General Counsel)
- Mandated Reports

- Consideration of Conference Attendance

Procedural Streamlining

- Second reading of an Ordinance.
- Rejection of routine claims.
- Acceptance of projects.
- Acceptance of developer improvements.
- Intention to levy assessments in existing assessment Districts (mandated notification step in anticipation of formal action later).
- Follow-up of items for action previously presented in workshops for discussion.
- Any item with a critical timing need when a Committee meeting cannot be effectively scheduled.

District-Wide Matters

- Items with over-arching policy implications (e.g., budgeting, strategic planning).
- General informational items that keep the Board current on a matter or allow them to discuss the implications of continuing with a previously agreed upon course of action.
- Presentations requested by the Board.
- Actions required by law (e.g., consolidation of District elections, amending conflict of interest codes).

Matters that Should be Considered Only by the Full Board to Protect the District's Interest

- Personnel appeals (that are before the Board and on which the Board must be unbiased and rule on the record before them).
- Environmental review documents where the administrative record must be developed in front of the entire Board.

CHAPTER 9

DIRECTOR ROLES AND DUTIES

THE BOARD OF DIRECTORS

The Board of Directors is the legislative body that holds governing authority for the District. The Board of Directors' roles and responsibilities are as follows:

- Establish policies, procedures and regulations for District operations;
- Establish and oversee the District's finances and its budgets, program, and performance;
- Provide the resources needed by management and staff to carry out District policy;
- Determine the mission of the District;
- Approve and ensure the implementation of the District's Strategic Plan and vision; and
- Appoint and evaluate the General Manager and General Counsel.

Directors

Apart from his/her normal functions as part of the Board of Directors, each individual Director's roles and responsibilities are as follows:

- Function only as one (1) member of the Board
- Have no individual authority (other than ceremonial rights of the President and Vice President of the Board as described elsewhere);
- May not commit, nor represent that they commit, the District to any policy, act, or expenditure; and
- Support decisions made by the Board (even when the Board decision conflicts with their individual position).

Traits of Effective Directors

Directors most effectively represent the District when they do the following:

- Represent **all** constituents of the District, considering the view points of everyone as they conduct the District's business;
- Attend all Board meetings and Committee meetings to which they are appointed. If a Director cannot attend, he or she should follow the process outlined in Chapter 6 – Preparation for Committee Meetings and notify the Board President, the General Manager and/or the District Secretary as soon as possible;
- Are decisive, making and accepting a decision and moving on;
- Consider and set short-term and long term goals;
- Support District policies, once adopted;
- Ask the General Manager routine or clarifying questions ahead of the Board or Committee meetings to avoid potential Brown Act conflicts;
- Let staff administer and manage the District, provided that such actions are consistent with the polices adopted by the Board;
- Read Board and Committee agendas, packets and prepare for all meetings;
- Are a positive public face of the District;

- Are inquisitive;
- Are courageous about difficult decisions;
- Clearly communicate their positions and reasoning and do not leave colleagues and staff guessing;
- Think big picture;
- Manage conflict carefully and use civil discourse;
- Stay focused and efficient, using words carefully and concisely;
- Are creative about solving problems;
- Express optimism and open-mindedness;
- Offer respect and consideration to each other, staff, guests from other agencies and the public;
- Work as a team;
- Are timely with attendance and communications; and
- Remain policy oriented and avoid focusing overly on operational details.

CHAPTER 10

PRESIDENT AND VICE PRESIDENT
ROLES AND DUTIES

BOARD PRESIDENT

The Board President has no individual powers to bind the District. The following are the roles and responsibilities of the Board President:

- Serve as presiding officer at all Board meetings;
- Maintain proper conduct of Board meetings:
  - Run effective and efficient meetings, including but not limited to ensuring appropriate opportunities for public participation and managing the time;
  - Keep the Board focused on the discussion at hand and true to its proper role and responsibility;
  - Avoid diversions from the agenda or disruptions in the conduct of District business;
  - Maintain proper and appropriate parliamentary procedure and agenda management (e.g. ensure that actions are taken with proper motions and seconds);
  - Acknowledge and diplomatically facilitate appropriate public participation in the activities of the Board; and
  - When necessary and appropriate, call a Special Board meeting.
- Vote, discuss and make motions the same as other members of the Board; however, the President will only rarely make motions and second motions;
- Allow the other Directors to complete their comments on an item before offering his or her own;
- Keep the meeting discussions focused on properly noticed agenda items and steadfastly move the Board toward making decisions;
- Sign various Board-approved/adopted documents on behalf of the Board;
- Propose for Board approval standing and ad-hoc Committees considering the policy and business needs of the District;
- Propose the membership of each Committee, including two (2) regular members for each Committee, subject to approval by the Board.
- Act as official head of the District for ceremonial purposes; and
- Serve as the primary interface for the Board with the members of the media; though other Directors may be contacted by the press and may also discuss matters with them (when contacted by the media, a Director should inform the General Manager).
- Provide leadership and direction on Board related responsibilities.

VICE PRESIDENT

The Vice President performs all duties of the President in the event the President is absent.

CHAPTER 11

GENERAL MANAGER'S ROLE

Legal Requirements

The Community Services District Law, the enabling statue under which the District was organized and now operates, defines the General Manager as the highest level management appointee who is directly responsible to the Board for the implementation of the policies established by the Board (see *Government Code*, section 61002(f), 61040 and 61050 et seq.). The General Manager serves as the District's Chief Executive Officer and is responsible for the day to day operations and functions of the District.

The powers and duties of the General Manager specified by the law are as follows (Government Code section numbers are shown in parentheses):

- Implement the policies established by the Board for the operation of the District (61051);
- Appoint, supervise, discipline and dismiss District employees, consistent with the employee relations system established by the Board (61051);
- Supervise the District's facilities and services (61051);
- Supervise the District's finances (61051);
- If authorized by the Board, transfer funds between budget categories, other than transfers from the designated reserve for capital outlay (61111(b));
- Co-sign promissory notes with the Board President (611319c)); and,
- Prepare and file various reports.

The General Manager may not be a member of the Board (61040(e)) but may serve as the District's Finance Officer (61050(c)). Traditionally, the Board has appointed a District Finance Officer different than the General Manager. The Community Services District Law specifies that the General Manager serves at the pleasure of the Board and that the Board sets the compensation of the General Manager (61050(d) and (e)).

Contractual Requirements

The terms and conditions of the General Manager's employment are expressed in a contract with the District. That contract provides that the incumbent shall perform all duties and assume all obligations of the office of General Manager as described in the job classification for the position of General Manager, and shall be subject to all pertinent provisions of the ordinances, resolutions, rules, regulations, and all other lawful orders and directives of the District or the Board. The contract requires that all duties and obligations be performed in an efficient and professional manner and in conformance with the standards generally prevailing for the performance of the duties and obligations pertaining to the office of similar managerial positions of public or private entities, including but not limited to community services districts.

Job Classification

The job classification for the position of General Manager is approved by the Board and specifies the required minimum qualifications (experience and training), knowledge, skills and abilities as well as the duties of the position. (See General Manager job description.)

The General Manager delegates many duties to other District Managers and staff. In doing so, the General Manager remains accountable to the Board.

Practice Based on Good Governance

The role of the General Manager is also defined by the relationship between the position and the Board. In its simplest form, the relationship is defined as the Board setting policy for the District or providing policy level guidance to the General Manager and the General Manager being responsible for implementing those policies. The General Manager is responsible for the performance of the District within policy criteria established by the Board and is accountable to the Board for all aspects of District operation. As such, the Board views all organizational successes and/or failures as those of the General Manager.

The Board's sole connection to the operational aspects of the District is through the General Manager. Decisions or instructions of individual Directors or Committees are not binding on the General Manager, who can only take direction from the Board. The Board can only give direction to the General Manager and not to other District managers or staff. The General Manager is available to all Directors to discuss District issues and strategies. The General Manager is the clearinghouse for all informational requests originating from Directors.

The Board establishes the General Manager's annual performance plan and typically evaluates the performance of the General Manager on an annual basis, but can do so more frequently if the situation warrants.

CHAPTER 12

WORKING WITH DISTRICT STAFF

The District's success in efficiently accomplishing its mission is partly due to the direct and regular access staff has to Directors. This helps in that decisions are made in real time, with minimal re-work. However, even with the real-time communication that occurs at Committee and Board meetings, there are times when a Director needs additional information from staff. The following guidelines will enable a Director to quickly and efficiently get needed information without disrupting staff's routine work.

- Always start with the General Manager, as he/she can obtain an answer or get the right person involved in the discussion, as needed.
- If the General Manager is unreachable, contact the Director of Administration.
- If neither the General Manager nor Director of Administration is available, contact one of the senior managers.
- The District Secretary can help you at any time with administrative matters (e.g. scheduling, expense reports, requirements such as Fair Political Practices Commission Forms, travel arrangements, etc.).
- The District's Human Resources staff can help a Director at any time with issues dealing with a Director's personnel benefits or issues of a similar personal nature.

Given the workload that staff faces and the General Manager's expectation that each senior manager (and employee) is responsible to complete assigned work, it is important that management has the ability to adjust staff's priorities and not be surprised.

When discussing a matter with staff, please keep in mind the following principles.

- Do not make assignments. It is quite easy for staff to interpret an innocent question or comment from a Director as direction to drop current assignments and undertake some project, research or investigation, creating risk that important priorities and assignments are not completed on time or that the District does not fulfill commitments made to others (very often customers).
- Take any information as work in progress. Be cautious with the use of information. What is heard from a staff member may not be what the General Manager ultimately recommends. Very often, there are differences of opinion among staff as an issue is vetted prior to being presented to the Board. In addition, the General Manager's opinion given at an early point in a project may change as more information becomes known and before the matter is formally presented to the Board. Finally, keep in mind that it is hard for some staff members to say, "I don't know," when talking to a Director.
- Request information judiciously. The District is a public agency and therefore very little information, other than personal data about employees or customers, cannot be disclosed to Directors. However, take care not to overwhelm the General Manager and staff with requests for information.

- Let the General Manager know if disappointed by a response. Since the Board judges the General Manager on the performance of the whole staff, inform the General Manager when improvement is needed.

CHAPTER 13

THE ROLE OF GENERAL COUNSEL AND SPECIAL COUNSEL

THE ROLE OF LEGAL COUNSEL

The primary obligation of both General Counsel and Special Counsel is to provide all the legal options available, including advantages and disadvantages of each and to advise of legal risks. (When the term Legal Counsel is used throughout this document, it shall mean both General Counsel as well as Special Counsel). The public official receiving that advice has the right to make policy decisions, based on the legal options provided and legal risk entailed.

General Counsel

The Community Services District Law provides that a District may engage professional services including Legal Counsel (Government Code, 61060(g)). The District Board of Directors appoints the General Counsel. The General Counsel serves as the primary legal advisor, is responsible for day to day legal questions and provides ongoing legal advice and opinions regarding the long term interests of the District. The General Counsel is expected to provide high quality, trustworthy and responsive legal counsel in a professional manner to assist in accomplishing the District's goals and objectives. When necessary, the General Counsel represents the District in litigation matters and before administrative agencies and, in some instances, manages Special Counsel appointed for a particular matter. The General Counsel should seek to practice preventative law in an effort to help the District recognize and manage risks in a timely and effective manner. Preventative law can limit the expenditure of District resources to defend legal actions, reduce the frequency and severity of disputes, and help the District maintain a positive image in the community.

Special Counsel

The District may, at the District's sole discretion and without approval or consultation with General Counsel, hire outside Special Counsel. However, the District may, but is not required, to seek General Counsel's assistance in determining whether to utilize outside Special Counsel and in the selection process. The retention of Special Counsel may be necessary based on any number of factors, including the need for highly specialized knowledge, the provision of a defense by an insurer or should a conflict of interest arise with the General Counsel on a particular matter. Unless prevented by a conflict of interest, General Counsel should facilitate and cooperate in the retention of Special Counsel services to ensure the District receives accurate and cost-effective legal advice and services.

The District as a Client

While the general practice of the District is for the Board to delegate day to day management authority to the General Manager, it is important to remember that Legal Counsel to the District represents the entity rather than any natural person (i.e. Legal Counsel is not the attorney for any individual Director, District employee or officer). The client in such a representation is the entity itself as embodied in the "highest authorized officer, employee, body or constituent overseeing the particular engagement" (California Rules of Professional Conduct, Rule 3-600(A)). In the case of the District, the highest authorized authority is generally the Board of Directors. The Board may delegate this authority to the General Manager by action of the Board duly taken. The most common points of contact for legal counsel are the General Manager, District's senior management and to a lesser extent, other District employees and individual Directors.

During the course of representation, the Legal Counsel may become aware of information that indicates that the interests of a District official or employee may not be aligned with the interests of the District. Should such situations arise, Legal Counsel's duty of loyalty and confidentiality is owed to the District and not the individual. In such a situation, the individual's communications with the legal counsel are not confidential and cannot be withheld from others with authority over the matter at issue, whether the General Manager or the Board of Directors.

Hiring and Termination

General Counsel and Special Counsel are hired by and may only be terminated by the Board unless those actions have been delegated to the General Manager by duly taken action of the Board.

Regular Performance Evaluations

The Board, with the assistance of the General Manager, may establish the General Counsel's annual performance plan and may evaluate performance on an annual basis, or when the Board deems it appropriate.

SPECIAL ETHICAL CONSIDERATIONS FOR PUBLIC AGENCY LAWYERS

In California, lawyers are regulated by both the Legislature and the California Supreme Court, under Rules of Professional Conduct promulgated by the California State Bar Board of Governors and approved by the Court (see, generally, the State Bar Act and California Business & Professional Code, section 6000 et seq.). Public agency attorneys are also subject to the laws and rules contained in the Political Reform Act and Government Code, section 1090. Statutes may also impose a duty on public agency attorneys that they owe directly to the public. Further, the courts have enunciated the principle that lawyers for public agencies have special ethical obligations to further justice-i.e. these lawyers are held to a higher standard than other attorneys.

For example, under *California Rules of Professional Conduct*, Rule 3-600(B), an entity's lawyer who becomes aware of the conduct of an entity's agent which may be or is a violation of law and is "reasonably imputable to the organization" or that "is likely to result in substantial injury to the organization," may take the matter to the "highest internal authority within the organization." No confidential information may be disclosed beyond the organization, unless it is to prevent a criminal act that the attorney reasonably believes is likely to result in death of or substantial bodily harm to an individual, but only after the attorney has exhausted all options to convince the client not to commit the criminal act.

PROTECTING ATTORNEY-CLIENT PRIVILEGE, ATTORNEY WORK PRODUCT DOCTRINE AND MAINTAINING THE CONFIDENTIALITY OF COMMUNICATIONS WITH COUNSEL

Protecting both the Attorney-Client Privilege and the Attorney-Work Product Doctrine and maintaining confidentiality of communications between the District and Legal Counsel are vital to ensuring the District's ability to confide freely in its Attorneys.

Attorney-Client Privilege

The District, acting through Legal Counsel, may claim the Attorney-Client Privilege (see, generally, California Evidence Code, section 954). However, the privilege only protects communications and only extends to information given for the purpose of obtaining legal representation. Core information is not necessarily protected and the information will not be privileged simply because it has been told or provided to the General Counsel. The privilege may be waived if the confidential communications are disclosed to third parties.

Whenever a Director communicates in writing with staff on a matter that involves a legal matter, appropriate Legal Counsel should be copied on that correspondence.

Attorney-Work Product Doctrine

The Attorney-Work Product Doctrine protects the work of the attorney and includes the legal theories and strategies of legal counsel. Attorney-work product may be found in interviews, statements, memoranda, correspondence, briefs, mental impressions, personal beliefs, and countless other forms. The Attorney-Work Product Doctrine is broader than the attorney-client privilege in that protects materials prepared by the attorney, whether or not disclosed to the client and materials prepared by third parties for the attorney (see Laguna Beach County Water District v. Sup. Ct. (Woodhouse) (2004) 124 Cal.App.4th 1453 and *California Code of Civil Procedure*, section 2018).

Whenever a Director receives a work product from an attorney, that work product must not be transmitted to a third party. The Director shall also take great care in managing that document, keeping it only as long as needed and destroying or returning copies to the District or Legal Counsel.

Confidentiality of Communications

The duty of confidentiality is broader than the Attorney-Client Evidentiary Privilege and the Attorney-Work Product Doctrine. Legal Counsel's duty of confidentiality runs to the District itself, including the Board of Directors as a whole, rather than to an individual Board member, District official or employee (see, generally, *California Business & Professions Code*, section 6068). When an individual Board member receives advice from Legal Counsel, that advice is provided to the Director in his or her official capacity and the advice is subject to disclosure to the entire Board.

Information and advice provided to the Board of Directors or Legal Counsel during a closed session is generally confidential and may also be privileged. It is important to note that a Board member may inadvertently waive the attorney-client privilege by discussing closed session matters with third parties. Directors and others present at a closed session should take care to prevent unauthorized disclosure of confidential information. There is a particular risk of breach of confidentiality when a Director maintains material distributed in a closed session in personal files.

CHAPTER 14

EFFECTIVE COMMUNICATIONS

GENERAL GUIDELINES

- Make no promises for the Board or the District.
- Be aware of how various forms of communication affect how messages are received: formal versus informal, written versus verbal, in-person versus over the phone versus electronic. Strive to use each form at the appropriate time.
- Confer with the General Manager when in doubt – staff is always available to advise you on how best to proceed.
- Maintain neutrality when required by not discussing nor commenting upon matters that are quasi-judicial in nature such as, but not limited to, administrative hearings on personnel matters or environmental impact reports, until the entire record is presented to the full Board; it is imperative that a Director maintain an open mind on such matters until after all information has been entered into the public record and presented to the full Board.

Communicating with the Public

- A Director can always communicate with District constituents.
- Inform the General Manager as soon as possible about concerns you have heard from your constituents. Many times the concern can be handled administratively or is already a work in progress.
- Don't make personal comments or promises for the District because only the Board can commit the District to an action or policy.
- Understand that very often there is a fair amount of background to an issue and you may have heard only one perspective.

Communication with Other Agencies

- It is acceptable to attend meetings of other public agencies and it is good to introduce yourself so everyone knows you are present.
- If you are speaking for the District at another agency's public meeting, always clearly state that what you are saying has been approved by the Board and do not deviate from the message and/or position.
- Be clear when the Board has no position on an issue.
- Take opportunities to develop relationships but always in a way that supports Board policy and avoids accusations of deal-making.
- Be positive and cooperative in comments and attitudes about people and other agencies (particularly in public).

- Communicate in a way that builds positive relationships.

Speaking as a Private Individual

- If you speak as a private citizen at a public gathering, clearly state that you are doing so.
- Keep in mind that even when you say you are speaking as a private individual, many in your audience nevertheless hear your comments in light of your position as a Director of the District.
- Apply common sense.
- Avoid personal statements that might be interpreted as District policy.
- Support District policy, avoiding personal statements that conflict with policy and indentify when your personal opinions deviate from Board policy as determined by the Board majority.
- It is acceptable to speak as an individual on issues not related to District business, but make it clear that your remarks are solely your own.

Communicating with the Media

If you choose to talk with the media, the following practices can help you present your thoughts effectively.

- Do not use the phrase, "No comment," as this phrase has been stigmatized and may be interpreted negatively.
- Feel free to refer media inquiries to the General Manager or confer with the General Manager prior to speaking with the media to ensure that you are fully briefed on the facts associated with the topic at hand.
- Feel free to use and ask staff to prepare talking points so as to convey a consistent message about District actions.
- Clarify when your view is dissenting, but support adopted Board policy even when you are in the minority. Don't stimulate or inflame controversy.
- If you communicate with the media before you vote on a matter, you can inadvertently become a party to a serial meeting in conflict with the Brown Act if the media were to poll other Directors and share with them your predisposition on a matter.

Communicating with Liaison Committees

- At meetings of a Joint Powers Authority (JPA), your role is different from that of your role at a liaison meeting because you also serve as a Director of the JPA, which is an independent government agency.
- When serving on a JPA Board, the California Attorney General has opined and the Joint Powers Act suggests that a Director has independent discretion apart from the agency to which Board he or she was elected. In other words, a JPA Director owes his or her primary duty to the JPA when acting in that capacity. However, since a District Director serves on a JPA Board at the pleasure of the District Board, the District Board can terminate the Director's appointment to the JPA at is sole discretion and without showing cause for the termination of that appointment.

- Subject to the points above it, the District Board has discussed a matter and arrived at a decision; the JPA representative should advocate and vote as decided by the District Board.

- Problems can arise when there is a conflict around a specific issue, either between the best interest of the JPA versus the best interest of the District or between the majority District position and the representative's individual view. In such situations, prior consultation with the General Manager and/or General Counsel is advised.

- The Board President considers the individual views of the Director when suggesting appointments to JPA positions so as to avoid potentially awkward situations.

- If the representative knows there is a serious personal conflict, he or she can ask to be replaced by the alternate for those meetings dealing with the issues of concern.

- Matters discussed in a closed session of the JPA are subject to the same confidentiality obligations as a District closed session. However, there are certain exceptions and exemptions to this general rule. Specific concerns over what may be discussed with the District Board and under what circumstances should be addressed with the General Counsel.

Building Goodwill with Other Agencies

- Remain positive in outlook, comments and tone, particularly in public.

- Work on building and improving positive relationships and mending previously strained relationships.

- Remember that the professional staff of the District and other agencies can and do work things out with input and guidance from their respective Board. Sometimes it may be more effective to not say anything.

- Learn about and understand the interests and needs of the other agencies.

- Informal interactions help build connections better than formal interactions.

- Do not force relationships; work on them to the extent they are needed.

- There is an appropriate time and place for applying pressure to get desired results; grandstanding at public meetings rarely achieves this purpose.

- Whatever happens, model good behavior, keep communications professional and civil, and always show others the same respect you hope to receive in return.

Communicating in Writing

Refer to District policy and consult with the General Manager on all correspondence and other written communications. Follow District policy regarding Board correspondence.

Communicating Electronically

- All communications to and from a Director related to District business, including email, mobile to mobile texting, mobile instant messaging, computer based instant messaging, chat logs, and similar modes of electronic communication, are very likely to be considered a public record (even those originating from your personal e-mail) and are subject to disclosure under the Public Records Act to the same extent as traditional written materials.

- Electronic communications are potentially discoverable if legal proceedings are involved.
- Keep in mind that these forms of electronic communication are often retained by and can be retrieved from electronic devices, software programs, and/or the companies that provide such services even if you delete from your display.
- With constituents and other agencies, generally it is better to communicate in person rather than through e-mail. When you communicate face to face, the other party is more likely to interpret your message correctly.
- When you receive an e-mail related to District business, consider:
    - Copying the e-mail (and any response you make) to the General Manager;
    - Using the e-mail response as an opportunity to open a subsequent verbal communication with the constituent; and
    - Referring the matter to the General Manager for assistance in preparing a response (with suggestions for what might be included in the response).
- When writing back, refer to and rely on Board policy to address the concerns raised.
- Be careful about using Reply to All and using features that automatically fill in e-mail addresses when emailing or posting on discussion boards, social media messages and social networking sites. This can lead to inadvertent serial meetings that are prohibited by the Brown Act.

MEMORANDUM

Date: June 13, 2013

To: Board of Directors

From: Darlene J. Gillum, Director of Administration

Subject: Adopt Resolution 2013-02, Adopting Proposed Budget for Fiscal Year 2013-14

RECOMMENDED ACTION

Adopt Resolution 2013-02, a Resolution adopting the proposed budget for fiscal year 2013-14.

DISCUSSION

Last month, the Board and public received my presentation of the proposed budget. Since then, the budget has been reduced slightly to reflect the California Waste Recovery Systems' (CWRS) final rate application which came in slightly lower than previously estimated due to the county not increasing their disposal fee. This change resulted in a reduction of $2,160; which translates to a .04% reduction in the increase to the average metered residential monthly bill making the average increase 4.55%.

Approval of the attached Resolution 2013-02 formally adopts the budget.

BACKGROUND

The following information is provided as a brief recap of the budget, although no Board discussion of individual items is anticipated.

Staff began the budget process in January 2013 for the fiscal year 2013-14 budget. It has been an iterative process up until the most recent draft budget presented to the Finance Committee in May. Staff has continued to work on fine tuning the proposed 2013-14 budget in an effort to keep rate increases at a minimal level while still providing the quality of services expected by the Rancho Murieta community.

At the March meeting, the Board approved removing the planned increase of $25,000 for Water Non-Routine Maintenance and reducing the projected collection of the proposed Van Vleck Ranch Permanent Irrigation Spray Fields project prefunding by approximately 50%. These approved changes reduced the monthly average increase for a residential metered lot from 7.9% to 5.15%. Since March, additional savings have been identified reducing the final average increase for a residential metered lot to 4.55%.

The following reductions have been identified (the reductions in bold type face are additions since the June Finance Committee):

	Savings
1. Premium reduction in Dental, Life, and Long-term Disability due to seeking competitive quotes	$ 2,547
2. AT&T telephone rate reduction due to review of current phone lines and placing them on the most competitive contract rate	$ 4,860
3. CAD System Software reduction in estimated purchase cost and related hardware needs	$ 6,800
4. **Reduction in Solid Waste contract services**	**$2,160**
5. California Waste Recovery Services reduction in projected rate increase	$ 5,040
Expense Reductions	**$21,407**
6. Property Tax Revenue increase related to annual adjustment to assessed values previously reduced under Prop 8	$12,720
Total Reductions	**$34,127**

Implementing the above reductions reduces the monthly average increase for a residential metered lot from 5.15% to 4.55%. Please refer to the attached Sample Bill and Budget Reports by Department for additional detail. This increase can be broken down as:

Operations Increase	$0.50	.27%
WTP1 Project Funding	$3.12	2.00%
VVR Permanent Spray Field Project Funding	$3.65	2.28%

Revenues

1. Property tax increase of $12,720 based on projections provided by Sacramento County. This increase is related primarily to an increase of approximately $22 million in tax base related to adjustments in assessed values for properties previously reduced by Prop 8 appeals.
2. No new development growth in 2013 – 14
3. Late charges are estimated at 1.1% of total service charges.
4. Water usage based on projected 2020 compliance usage (using 2010 as the base year and projecting a 2% reduction per year from base until the year 2020).
5. Continuation of the advance collection for funding a portion of the Water Treatment Plant 1 (WTP1) rehabilitation project (debt service prefunding) and the related reserve increase and reinstituting the advance collection for funding a portion of the Van Vleck Ranch Permanent Irrigation Fields project (debt service prefunding) and the related reserve increase. Recall that these advance collections are related to the upcoming major infrastructure projected for the WTP1 Rehab and VVR Permanent Irrigation Fields.

The following table shows the advance collection (debt service prefunding) plan compared to actual advance collections to date:

Water Treatment Plant 1 Rehab							
Principal Prefunding	10/11	11/12	12/13	**Interim Total**	Proposed 13/14	Projected 14/15	Total
Planned $	$ 36,500	$ 73,000	$ 109,500	**$ 219,000**	$ 146,000	$ 146,000	$ 511,000
Actual $	$ 25,061	$ 55,085	$ 53,196	**$ 133,342**	$ 144,529	$ 220,127	$ 497,998
Planned Rate							
Base Rate	$ 0.43	$ 1.03	$ 1.70		$ 2.45	$ 4.75	
Usage Rate	$ 0.0002	$ 0.0008	$ 0.0011		$ 0.0012	$ 0.0012	
Actual Rate							
Base Rate	$ 0.43	$ 0.75	$ 0.75		$ 2.25	$ 4.75	
Usage Rate	$ 0.0002	$ 0.0005	$ 0.0005		$ 0.0012	$ 0.0012	
Replacement Reserves	10/11	11/12	12/13	**Interim Total**	Proposed 13/14	Projected 14/15	Total
Planned $	$ 6,518	$ 13,140	$ 19,711	**$ 39,369**	$ 26,291	$ 26,291	$ 91,950
Actual $	$ 6,574	$ 9,844	$ 19,703	**$ 36,121**	$ 27,933	$ 27,933	$ 91,987
Planned Rate	$ 0.20	$ 0.40	$ 0.60		$ 0.80	$ 0.80	
Actual Rate	$ 0.20	$ 0.30	$ 0.60		$ 0.85	$ 0.85	

VVR Permanent Irrigation Fields							
Principal Prefunding	10/11	11/12	12/13	**Interim Total**	Proposed 13/14	Projected 14/15	Total
Planned $	$ 60,500	$ 121,000	$ 181,500	**$ 363,000**	$ 242,000	$ 242,000	$ 847,000
Actual $	$ 63,140	$ 98,520	$ -	**$ 161,660**	$ 103,446	$ 247,111	$ 512,217
Planned Rate	$ 1.84	$ 3.68	$ 5.53		$ 7.37	$ 7.37	
Actual Rate	$ 2.00	$ 3.00	$ -		$ 3.15	$ 7.50	
Replacement Reserves	10/11	11/12	12/13	**Interim Total**	Proposed 13/14	Projected 14/15	Total
Planned $	$ 10,837	$ 21,675	$ 32,512	**$ 65,024**	$ 43,349	$ 43,349	$ 151,722
Actual $	$ 10,861	$ 16,420	$ -	**$ 27,281**	$ 16,420	$ 57,659	$ 101,360
Planned Rate	$ 0.33	$ 0.66	$ 0.99		$ 1.32	$ 1.32	
Actual Rate	$ 0.30	$ 0.50	$ -		$ 0.50	$ 1.75	

Green shading denotes projected numbers

EXPENSES

1. Wages
    a. Provisions of OE3/District Memorandum of Understanding included
    b. Non-represented merit pool based on 5% of wages (total $36,700) (not meant to imply that every non-represented employee will receive a 5% salary increase)
    c. Operator in Training position, which was removed in the 2011-2012 budget, has not been reinstated for Water/Sewer/Drainage
2. Employer Costs
    a. PERS Employer Contribution rate for 2@55 plan is 12.608%, which is a 5.6% increase from last year's rate of 11.938%.
    b. PERS Employer Contribution rate for 2@62 plan (new plan in effect as of 1/1/13 for new PERS members) is 6.25%. Employee contribution for non-represented new PERS members is 6.25%. Represented new PERS members contribution is controlled by MOU at 3% until MOU expiration on 12/31/14.
    c. District's PERS Employer Paid Member Contributions at 4% for classic PERS members.
    d. Medical Insurance – Estimated 5% increase on January 1, 2014.
    e. Life, Dental and Vision – reflects premium reductions effective June 1, 2013.
    f. Other Post Employment Benefit (OPEB) funding continued at level to meet projected Annual Required Contribution (ARC) in 2013-14.
3. Workers Comp Insurance Premiums – no increase in rate; approx. $2,600 premium increase related to increased wages

General Fund – preliminary Operating Expenses projection is a net reduction of (.6)%

1. Liability and Property Insurance Premiums – no increase in rate; premium will increase if base value (i.e., covered property) increases. Reflects premium credit for participation in GSRMA's Loss Prevention Incentive Program.
2. Information Technology – reduction from 2012–13 budget reflects new IT Services contract rate.
3. Meetings increased $1,000 for GM mileage reimbursement.
4. Vehicle fuel reduced as a result of GM no longer being provided District vehicle.
5. Election cost – removed $5,000 because 2013-14 is a non-election year.
6. Other costs reduced $24,000 for credit card fees no longer paid by District. This is the reduction provided by transitioning to the online payment process powered by Paymentus.

Security – preliminary projection is a net increase of 2.1% in Total Expenses

1. Gate Information Technology reflects cost of remote hosting by ABDI for Security server (remote hosting is expected to reduce/eliminate support issues for the ABDI program).
2. Information Technology (Gate, Patrol and Administration) reflect reductions related to new IT Services contract (contract will be billed as an all-inclusive support rate to the General Fund).

3. SMUD Power cost – currently no rate increase expected.
4. Patrol Employers Cost increase of $12,000 due to employee no longer on Opt Out of health coverage.
5. Security Vehicle Lease – budgeted for 1 current lease vehicle and added 1 lease vehicle for replacement of 1 additional Security vehicle.

Water – preliminary projection is a net increase of 3.1% in Total Expenses

1. SMUD Power cost – currently no rate increase expected.
2. Water SOS – reduction of $10,000 in Chemicals for the treatment/prevention of Taste and Odor issues for using District employees for application of chemicals.
3. Water SOS – 4 Midge Fly treatments planned (in Chemicals line item).
4. Water Transmission & Distribution – increase of $6,700 in Other for sludge removal.
5. Water Administration – Legal/Consulting increased $15,000 for replacement/update of our General Permit for the application of herbicides/pesticides to meet new State requirements.
6. Water Administration – Vehicle Fuel estimated at $4.25 per gallon; budget includes Federal and State excise tax refund.
7. Water Administration – Information Technology decrease in previously projected cost for Auto-Cad software/system.
8. Water Administration – AT&T telephone cost reduction
9. Water Administration – removed Non-Routine Maintenance increase of $25k (third year of four year funding timeframe to eventually build total budget to $100,000; recall that the second year increase was also not implemented in 2011-12).

Sewer – preliminary projection is a net reduction of (.3)% in Total Expenses

1. SMUD Power cost – currently no rate increase expected.
2. Sewer Treatment & Disposal – Chemicals include additional cost for pH control.
3. Sewer Administration – Legal/Consulting removed net of $40,000 for the design of sludge removal improvements, which was a 2012-13 project.
4. Sewer Administration – Information Technology decrease in previously projected cost for Auto-Cad software/system.
5. Sewer Administration – AT&T telephone cost reduction
6. Sewer Administration – increased Non-Routine Maintenance by $20k (third year of four year funding timeframe to eventually build total budget to $80,000; recall that the second year increase was not implemented in 2011-12).

Drainage – preliminary projection is a net increase of 2.9% in Total Expenses

1. MS4 Permit increased $1,000 to meet actual cost in 2012-13.
2. SMUD Power cost – currently no rate increase expected.
3. Equipment Rental decreased $1,000.
4. Legal/Consulting decreased $1,000.

Solid Waste – preliminary projection is a net increase of 1.8% in Total Expenses

1. California Waste Recovery Services contract rate adjustment of approximately 1.8%
2. Sacramento County surcharge fee increase of 1.94%
3. Household Hazardous Waste Event kept at $12,000 per year with planned schedule on a bi-annual basis; making the next event to be held in fall 2014.

Sample Bill

The attached Sample Bill shows the proposed rate adjustments according to the most recent budget draft (also attached). The average monthly increase for a residential metered lot, based on the above recommendations, is 4.55%.

Budget Summaries by fund

Columns include a column showing percentage of variance between the current budget and the projected 2012-13 actuals through the end of this budget year. Another column shows the percent change from the projected actuals for 2012-13 to the proposed draft budget for 2013-14. And the last column shows the percent change from the adopted 2012-13 budget to the proposed draft budget for 2013-14.

Capital Project Listing

The Capital Project Listing for FY13/14 is attached. In 2013-14, there are two (2) new projects and fourteen (14) carryover projects. Work on one (1) of the carryover projects is in process.

RESOLUTION # 2013-02

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE RANCHO MURIETA COMMUNITY SERVICES DISTRICT APPROVING THE PROPOSED BUDGET FOR FISCAL YEAR 2013-14

WHEREAS, District departments have submitted estimates of budget requirements for Fiscal Year 2013-2014 and those estimates have been reviewed by the General Manager and Finance Committee; and

WHEREAS, the General Manager has submitted the tabulations of said estimates together with proposed revisions to the Board of Directors; and

WHEREAS, the Board of Directors has reviewed and considered the proposed budget for Fiscal Year 2013-2014; and

BE IT RESOLVED AND ORDERED that the proposed budget for Fiscal Year 2013-2014, as submitted by the District Finance Officer and as reviewed by the Board of Directors is a proper financial program for the budget period and constitutes the proposed budget for 2013-2014; and

BE IT FURTHER RESOLVED AND ORDERED that a public presentation was conducted for the budget for the Fiscal Year 2013-2014 on May 15, 2013 at 5:30 p.m. in the Board Room at 15160 Jackson Road, Rancho Murieta, California.

NOW, THEREFORE, it is resolved that the District's 2013-2014 Budget is hereby adopted and ordered filed with the County Auditor of Sacramento County in accordance with Section 5931 of the Government Code.

PASSED AND ADOPTED this 19th day of June 2013, by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Gerald Pasek, President of the Board
Rancho Murieta Community Services District

[SEAL]
Attest:

_____
Suzanne Lindenfeld, District Secretary

Sample Bill - Final

June 7, 2013

Rancho Murieta Community Services District

Average Monthly Customer Bill		Current Monthly Rates July 1, 2012	Proposed Monthly Rates July 1, 2013	% Change
Residential Metered Lot				
Water	Average Usage in CF	1,957	1,957	
Averaged over 12 months				
Residential Base		$ 35.42	$ 37.17	4.9%
old rate Water Usage	$.0145 per cubic foot	28.38		
new rate Water Usage	$.0152 per cubic foot		29.75	4.8%
Sewer		46.09	49.47	7.3%
Solid Waste (avg. 64 Gallon Container)		20.00	20.30	1.5%
Security Tax (Maximum Tax Ceiling $26.40)		25.55	25.93	1.5%
Drainage Tax (Maximum Tax Ceiling $4.64)		4.55	4.64	2.0%
		$ 159.99	$ 167.26	
% Change over prior year			4.55%	
Murieta Village Lot				
Water	Average Usage in CF	518	518	
Averaged over 12 months				
Residential Base		$ 35.42	$ 37.17	4.9%
old rate Water Usage	$.0145 per cubic foot	7.51		
new rate Water Usage	$.0152 per cubic foot		7.87	4.8%
Sewer		46.09	49.47	7.3%
Solid Waste (avg. 64 Gallon Container)		20.00	20.30	1.5%
Security Tax (Maximum Tax Ceiling $6.36)		6.15	6.24	1.5%
Drainage Tax (Maximum Tax Ceiling $3.10)		3.04	3.10	2.0%
		$ 118.21	$ 124.15	
% Change over prior year			5.03%	
Vacant or Unmetered Lot				
Security Tax (Maximum Tax Ceiling $20.71)		20.04	20.34	1.5%
* **Water Standby**	$10.00 PER YEAR	0.83	0.83	0.0%
* **Sewer Standby**	$10.00 PER YEAR	0.83	0.83	0.0%
Drainage Tax (Maximum Tax Ceiling $4.55)		4.55	4.64	2.0%
		$26.25	$26.64	
% Change over prior year			1.49%	

* This fee is billed annually at $10.00 and is shown as a monthly rate for comparison purposes only.

denotes increase in rates

June 7, 2013

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

BUDGET SUMMARY

COMBINED FUNDS

	Actual 2011-12	Adopted Budget 2012-13	Projected 2012-13	% Variance 2012-13	Proposed Budget 2013-2014	% Change Budget 2012-13
Revenues:						
Service Charges	4,570,251	**4,933,470**	4,971,716	0.8%	4,999,982	1.3%
Property Taxes	498,942	**501,840**	501,840	0.0	502,800	0.2%
Interest Earnings	533	**1,100**	931	-15.3	660	-40.0%
Other Charges / Reimbursements	102,305	**85,175**	127,985	50.3	93,030	9.2%
Total Revenues:	**5,172,030**	**5,521,585**	**5,602,472**	**1.5%**	5,596,471	**1.4%**
Expenditures:						
Total Operating Expenses:	**5,057,071**	**5,522,266**	**5,481,652**	**-0.7%**	5,596,600	**1.3%**
Initial Overage (Deficit)	*114,959*	***(681)***	*120,820*	-17852.8	(129)	-81.0
Trans from Misc Reserves	*0*	***0***	*0*	0.0	***0***	0.0
Trans from Rate Stab. Fund	*0*	***0***	*0*	0.0	***0***	0.0
Transfer from Fund Balance	*0*	***0***	*0*	0.0	***0***	0.0
Net Income (Loss)	**114,959**	**(681)**	**120,820**	**-17852.8**	(129)	**-81.0**
Rate Transfers to Repl Reserves	*417,000*	450,450	*472,123*	4.8	497,544	10.5
Add'l Transfers to Repl Reserves	*0*	***0***	*0*	0.0	0	0.0
Depreciation	1,106,100	**1,100,095**	1,117,038	1.5%	**1,117,665**	0.1%

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

BUDGET SUMMARY - WATER FUND

April 25, 2013

	Actual 2011-12	Adopted Budget 2012-13	Projected 2012-13	% Variance 2012-13	Proposed Budget 2013-14	% Change Projected 2012-13	% Change Budget 2012-13
Revenues:							
Residential Sales	1,405,770	**1,553,429**	1,586,736	2.1%	**1,589,840**	0.2%	2.3%
Commercial Sales	150,197	**171,756**	169,954	-1.0	**176,640**	3.9	2.8%
Other Sales	8,467	**8,415**	13,432	59.6	**8,410**	-37.4	-0.1%
Availability Fees	350	**350**	340	-2.9	**340**	0.0	-2.9%
Late Charges	14,749	**12,360**	17,092	38.3	**12,480**	-27.0	1.0%
Telephone Line Contracts	5,225	**5,195**	5,348	2.9	**5,350**	0.0	3.0%
Meter Installation Fees	400	**0**	400	0.0	**0**	-100.0	0.0%
Interest Income	(235)	**0**	94	0.0	**80**	-14.8	0.0%
Inspection Fees	127	**0**	127	0.0	**0**	-100.0	0.0%
Project Reimbursement	0	**0**	0	0.0	**0**	0.0	0.0%
Other	4,513	**4,500**	9,670	114.9	**6,000**	-38.0	33.3%
Operating Revenues	**1,589,563**	**1,756,005**	**1,803,193**	**2.7%**	**1,799,140**	**-0.2%**	**2.5%**

Expenditures:

Water Source of Supply	*11-12 Actual*	*12-13 Budget*	*Projected*	*Variance*	*13-14 Budget*	*Variance*	*Variance*
Wages	12,582	**9,876**	14,106	42.8%	**10,530**	-25.4%	6.6%
Employers Costs	5,888	**4,638**	7,562	63.1	**4,990**	-34.0	7.6%
Power	46,067	**45,400**	51,170	12.7	**47,000**	-8.1	3.5%
Dam Inspection	36,306	**37,000**	31,720	-14.3	**37,000**	16.6	0.0%
Chemicals - Routine	8,477	**6,500**	5,942	-8.6	**6,500**	9.4	0.0%
Chemicals - Taste & Odor	0	**50,000**	38,954	-22.1	**40,000**	2.7	-20.0%
Maint/Repairs	23,864	**15,000**	14,997	0.0	**10,000**	-33.3	-33.3%
Equipment Rental	3,827	**1,500**	8,111	440.8	**3,000**	-63.0	100.0%
Supplies	192	**500**	623	24.7	**600**	-3.8	20.0%
Other	126	**250**	250	0.0	**250**	0.0	0.0%
Subtotals	**137,328**	**170,664**	**173,436**	**1.6%**	**159,870**	**-7.8%**	**-6.3%**

Water Treatment	*11-12 Actual*	*12-13 Budget*	*Projected*	*Variance*	*13-14 Budget*	*Variance*	*Variance*
Wages	113,427	**113,910**	111,747	-1.9%	**121,460**	8.7%	6.6%
Employers Costs	38,938	**53,520**	51,763	-3.3	**57,590**	11.3	7.6%
Power	82,413	**82,570**	81,991	-0.7	**82,570**	0.7	0.0%
Chemicals	106,561	**123,800**	116,422	-6.0	**118,000**	1.4	-4.7%
Maint/Repairs	57,635	**45,070**	51,530	14.3	**45,070**	-12.5	0.0%
Lab Tests	33,741	**40,000**	34,446	-13.9	**36,000**	4.5	-10.0%
Equipment Rental	11,152	**8,000**	7,911	-1.1	**8,000**	1.1	0.0%
Taste & Odor Treatment	0	**11,000**	11,310	2.8	**11,000**	-2.7	0.0%
Supplies	18	**500**	500	0.0	**500**	0.0	0.0%
Other	0	**500**	500	0.0	**500**	0.0	0.0%
Subtotals	**443,884**	**478,870**	**468,119**	**-2.2%**	**480,690**	**2.7%**	**0.4%**

Water Transmission & Distr	*11-12 Actual*	*12-13 Budget*	*Projected*	*Variance*	*13-14 Budget*	*Variance*	*Variance*
Wages	179,742	**182,256**	186,670	2.4%	**194,330**	4.1%	6.6%
Employers Costs	61,752	**85,635**	86,284	0.8	**92,140**	6.8	7.6%
Maint/Repairs	14,076	**48,000**	48,990	2.1	**48,000**	-2.0	0.0%
Meters/Box/Valve	26,021	**55,000**	55,460	0.8	**54,000**	-2.6	-1.8%
Power	38,995	**36,480**	38,967	6.8	**36,480**	-6.4	0.0%
Equipment Rental	18,983	**12,000**	12,814	6.8	**12,000**	-6.4	0.0%
Post Repair Road Paving	28,535	**24,000**	24,145	0.0	**24,000**	-0.6	0.0%
Supplies	7,088	**4,000**	4,579	14.5	**4,000**	-12.6	0.0%
Other	10,817	**1,500**	12,739	749.3	**8,200**	-35.6	446.7%
Subtotals	**386,008**	**448,871**	**470,647**	**4.9%**	**473,150**	**0.5%**	**5.4%**

BUDGET SUMMARY - WATER FUND

April 25, 2013

	Actual 2011-12	Adopted Budget 2012-13	Projected 2012-13	% Variance 2012-13	Proposed Budget 2013-14	% Change Projected 2012-13	% Change Budget 2012-13
Water Administration	***11-12 Actual***	***12-13 Budget***	***Projected***	***Variance***	***13-14 Budget***	***Variance***	***Variance***
Wages	87,831	**104,040**	105,119	1.0%	**110,930**	5.5%	6.6%
Employers Costs	74,068	**48,886**	45,279	-7.4	**53,410**	18.0	9.3%
Permits	19,413	**32,000**	23,669	-26.0	**32,000**	35.2	0.0%
Equipment Maint	15,303	**8,000**	10,104	26.3	**8,000**	-20.8	0.0%
Legal/Consulting	53,074	**15,500**	15,076	-2.7	**30,500**	102.3	96.8%
Vehicle Fuel	23,961	**18,610**	16,568	-11.0	**18,860**	13.8	1.3%
Training/Safety	9,166	**9,140**	11,436	25.1	**7,500**	-34.4	-17.9%
Regional Water Authority	15,156	**11,410**	11,706	2.6	**11,410**	-2.5	0.0%
Central Ground Water Authority	3,250	**6,000**	6,000	0.0	**6,000**	0.0	0.0%
South Area Water Council	3,250	**6,000**	6,000	0.0	**6,000**	0.0	0.0%
Supplies	6,110	**5,500**	5,032	-8.5	**5,500**	9.3	0.0%
Telephones	7,365	**7,000**	7,957	13.7	**7,680**	-3.5	9.7%
Information Systems Maint	3,993	**6,000**	6,436	7.3	**7,200**	11.9	20.0%
Vehicle Maint.	21,652	**15,000**	20,268	35.1	**21,300**	5.1	42.0%
Tools	5,171	**4,000**	5,951	48.8	**4,000**	-32.8	0.0%
CIA Ditch Operations	77	**4,500**	3,350	-25.6	**3,500**	4.5	-22.2%
Uniforms	2,770	**3,800**	3,399	-10.5	**3,000**	-11.7	-21.1%
Conservation	15,588	**38,000**	37,562	-1.2	**38,000**	1.2	0.0%
Travel/Meetings	1,375	**2,500**	2,282	-8.7	**2,500**	9.5	0.0%
Memberships	2,880	**2,390**	2,442	2.2	**2,390**	-2.1	0.0%
Bad Debts	(313)	**500**	500	0.0	**500**	0.0	0.0%
Building Maint	1,614	**1,590**	1,583	-0.5	**1,680**	6.2	5.7%
Nonroutine Maint/Repair	0	**50,000**	46,171	-7.7	**50,000**	8.3	0.0%
Other	5,350	**6,000**	7,457	24.3	**6,000**	-19.5	0.0%
Subtotals	**378,103**	**406,366**	**401,348**	**-1.2%**	**437,860**	**9.1%**	**7.8%**
Operating Expenses	1,345,323	**1,504,771**	1,513,550	**0.6%**	**1,551,570**	**2.5%**	3.1%
Reserve Expenditures	163,314	**0**	48,068		**0**		
General Fund Net Alloc	211,528	**250,950**	231,036	-7.9	**247,570**	7.2	-1.3%
Total Expenses	**1,720,165**	**1,755,721**	**1,792,653**	**2.1%**	**1,799,140**	**0.4%**	**2.5%**
Initial Overage(Deficit)	(130,602)	**284**	10,540	3611.1%	**(0)**	-100.0%	-100.1%
Transfer from Fund Balance	0	**0**	0		**0**		
Transfer from Rate Stab Resr	0	**0**	0		**0**		
Net Income (Loss)	**(130,602)**	**284**	**10,540**		**(0)**		
Depreciation	473,658	**469,200**	483,420	3.0%	**484,062**		

Replacement Reserves and Debt Service Summary

Debt Service Prefunding Collected

Debt Service Repl Rsrv Collected

Water Reserves Collected

April 25, 2013

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

BUDGET SUMMARY - SECURITY FUND

	Actual 2011-12	Adopted Budget 2012-13	Projected 2012-13	% Variance 2012-13	Proposed Budget 2013-2014	% Change Projected 2012-13	% Change Budget 2012-13
Revenues:							
Residential Special Taxes	963,000	**1,001,998**	1,001,787	0.0%	1,016,930	1.5%	1.5%
Commercial Special Taxes	159,545	**165,900**	165,900	0.0	168,580	1.6	1.6%
Late Charges	29,499	**24,720**	34,183	38.3	27,480	-19.6	11.2%
Title Transfer Fees	3,700	**2,400**	4,600	91.7	3,000	-34.8	25.0%
Bar Code Income	7,360	**6,600**	7,340	11.2	7,000	-4.6	6.1%
Fines, Enforcement	2,100	**2,100**	2,100	0.0	2,100	0.0	0.0%
Special Events Permits	0	**0**	0	0.0	0	0.0	0%
Interest Income	546	**640**	598	-6.6	410	-31.4	-35.9%
Misc	4,687	**4,150**	6,015	44.9	4,150	-31.0	0.0%
Operating Revenues	**1,170,436**	**1,208,508**	**1,222,523**	**1.2%**	1,229,650	**0.6%**	**1.7%**
Expenditures:							
Security Gates	*11-12 Actual*	*12-13 Budget*	*Projected*	*Variance*	*13-14 Budget*	*Variance*	*Variance*
Wages	276,568	**283,000**	278,738	-1.5%	284,700	2.1%	0.6%
Employers Costs	150,117	**176,800**	168,354	-4.8	187,400	11.3	6.0%
Information Systems Maint	4,556	**6,700**	5,742	-14.3	2,800	-51.2	-58.2%
Equipment Repairs	18,894	**3,300**	3,171	-3.9	3,300	4.1	0.0%
Bar Codes	6,295	**5,360**	3,658	-31.8	5,000	36.7	-6.7%
Telephones	5,303	**4,850**	5,664	16.8	5,000	-11.7	3.1%
Building Maint	3,583	**2,950**	3,065	3.9	3,200	4.4	8.5%
Power	2,172	**2,810**	2,758	-1.8	2,820	2.2	0.4%
Uniforms	217	**2,400**	1,631	-32.0	2,400	47.2	0.0%
Supplies	34	**300**	75	-75.0	200	166.7	-33.3%
Training/Safety	0	**750**	190	-74.7	600	215.8	-20.0%
Other	2,198	**3,700**	6,188	67.3	3,200	-48.3	-13.5%
Subtotals	**469,937**	**492,920**	**479,234**	**-2.8%**	500,620	**4.5%**	**1.6%**
Security Patrol	*11-12 Actual*	*12-13 Budget*	*Projected*	*Variance*	*13-14 Budget*	*Variance*	*Variance*
Wages	234,663	**246,200**	239,225	-2.8%	253,100	5.8%	2.8%
Employers Costs	127,131	**130,500**	126,109	-3.4	153,700	21.9	17.8%
Vehicle Fuel	22,667	**20,460**	18,077	-11.6	20,560	13.7	0.5%
Off Duty Sheriff Patrol	2,761	**6,000**	5,663	-5.6	6,000	6.0	0.0%
Vehicle Maint.	9,068	**6,700**	9,065	35.3	6,700	-26.1	0.0%
Vehicle Lease	0	**5,400**	1,925	-64.3	5,970	210.1	10.6%
Information Systems Maint	227	**7,500**	2,018	-73.1	3,800	88.3	-49.3%
Training/Safety	1,534	**1,320**	2,108	59.7	1,500	-28.8	13.6%
Safety Center	2,638	**2,580**	2,297	-11.0	2,400	4.5	-7.0%
Uniforms	991	**2,400**	1,571	-34.6	2,400	52.8	0.0%
Telephones	3,280	**3,930**	3,394	-13.6	3,270	-3.7	-16.8%
Equipment Repairs	206	**1,100**	391	-64.5	1,100	181.7	0.0%
Supplies	34	**300**	129	-56.9	300	132.3	0.0%
Other	718	**2,000**	1,185	-40.8	2,000	68.8	0.0%
Subtotals	**405,920**	**436,390**	**413,157**	**-5.3%**	462,800	**12.0%**	**6.1%**

BUDGET SUMMARY - SECURITY FUND

	Actual 2011-12	Adopted Budget 2012-13	Projected 2012-13	% Variance 2012-13	Proposed Budget 2013-2014	% Change Projected 2012-13	% Change Budget 2012-13
Security Administration	***11-12 Actual***	***12-13 Budget***	***Projected***	***Variance***	***13-14 Budget***	***Variance***	***Variance***
Wages	81,077	**83,900**	85,903	2.4%	87,300	1.6%	4.1%
Employers Costs	38,831	**44,000**	36,453	-17.2	33,600	-7.8	-23.6%
Insurance	4,500	**4,500**	1,125	-75.0	0	-100.0	-100.0%
Legal/Consulting	11,604	**3,500**	6,560	87.4	3,500	-46.6	0.0%
Supplies	5,832	**5,000**	7,599	52.0	5,000	-34.2	0.0%
Telephones	398	**420**	377	-10.2	480	27.3	14.3%
Information System Maint	4,607	**3,000**	9,758	225.3	3,000	-69.3	0.0%
Training/Safety	1,421	**1,200**	1,350	12.5	1,200	-11.1	0.0%
Travel/Meetings	128	**800**	744	-6.9	800	7.5	0.0%
Uniforms	0	**400**	120	-70.0	400	233.3	0.0%
Bad Debts	(664)	**600**	600	0.0	600	0.0	0.0%
Equipment Maint	0	**600**	150	-75.0	600	300.0	0.0%
Other	4,246	**600**	1,626	170.9	600	-63.1	0.0%
Subtotals	**151,978**	**148,520**	**152,365**	**2.6%**	137,080	**-10.0%**	**-7.7%**
Operating Expenses	1,027,835	**1,077,830**	1,044,756	-3.1%	1,100,500	5.3%	2.1%
General Fund Net Allocation	110,386	**130,960**	120,566	-7.9	129,190	7.2	-1.4%
Total Expenses	**1,138,221**	**1,208,790**	**1,165,322**	**-3.6%**	1,229,690	**5.5%**	**1.7%**
Initial Overage(Deficit)	32,216	**(282)**	57,201	-20359.0%	(40)	-100.1%	-85.8%
Transfer from Misc Reserves	0	**0**	0		0		
Transfer from Rate Stab Resr	0	**0**	0		0		
Net Income (Loss)	**32,216**	**(282)**	**57,201**	**-20359.0%**	(40)	**-100.1%**	**-85.8%**
Depreciation	37,275	**36,300**	37,586	3.5%	38,014	1.1%	4.7%

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

BUDGET SUMMARY - SEWER FUND

April 25, 2013

	Actual 2011-12	Adopted Budget 2012-13	Projected 2012-13	% Variance 2012-13	Proposed Budget 2013-14	% Change Projected 2012-13	% Change Budget 2012-13
Revenues:							
Residential Service	1,018,722	**1,124,442**	1,125,999	0.1%	1,120,630	-0.5%	-0.3%
Commercial Service	107,832	**118,882**	118,885	0.0	116,700	-1.8	-1.8%
Availability Fees	410	**410**	410	0.0	410	0.0	0.0%
Late Charges	14,749	**12,360**	17,092	38.3	13,800	-19.3	11.7%
Interest Income	37	**180**	122	-32.5	140	15.2	-22.2%
Project Reimbursement	2,184	**2,190**	2,190	0.0	2,190	0.0	0.0%
Inspection Fees	127	**0**	127	0.0	0	-100.0	0.0%
Other	(4,122)	**0**	(4,122)	0.0	0	-100.0	0.0%
Operating Revenues	**1,139,938**	**1,258,464**	**1,260,701**	**0.2%**	1,253,870	**-0.5%**	**-0.4%**

Expenditures:

Sewer Collection	*11-12 Actual*	*12-13 Budget*	*Projected*	*Variance*	*13-14 Budget*	*Variance*	*Variance*
Wages	67,567	**106,316**	91,996	-13.5%	113,360	23.2%	6.6%
Employers Costs	25,861	**49,955**	44,321	-11.3	53,750	21.3	7.6%
Power	15,032	**17,450**	15,667	-10.2	17,450	11.4	0.0%
Maint/Repairs	46,080	**40,000**	59,192	48.0	40,000	-32.4	0.0%
Equipment Rental	5,061	**6,000**	14,391	139.9	6,000	-58.3	0.0%
Supplies	5,989	**3,000**	4,900	63.3	3,300	-32.7	10.0%
Other	0	**1,000**	2,205	120.5	1,000	-54.7	0.0%
Subtotals	**165,590**	**223,721**	**232,672**	**4.0%**	234,860	**0.9%**	**5.0%**

Sewer Treatment & Disposa	*11-12 Actual*	*12-13 Budget*	*Projected*	*Variance*	*13-14 Budget*	*Variance*	*Variance*
Wages	150,602	**144,286**	153,536	6.4%	153,850	0.2%	6.6%
Employers Costs	55,379	**67,795**	71,170	5.0	72,950	2.5	7.6%
Power	124,862	**126,510**	134,926	6.7	126,510	-6.2	0.0%
Maint/Repairs	100,386	**75,000**	79,192	5.6	75,000	-5.3	0.0%
Chemicals	68,957	**79,310**	55,367	-30.2	70,300	27.0	-11.4%
Lab Tests	37,789	**38,250**	38,257	0.0	38,250	0.0	0.0%
Supplies	769	**1,800**	1,353	-24.8	1,800	33.0	0.0%
Equipment Rental	20,516	**10,000**	9,126	-8.7	10,000	9.6	0.0%
Sludge Removal Off Site	8,626	**9,000**	14,134	57.0	9,000	-36.3	0.0%
Subtotals	**567,886**	**551,951**	**557,061**	**0.9%**	557,660	**0.1%**	**1.0%**

BUDGET SUMMARY - SEWER FUND

April 25, 2013

	Actual 2011-12	Adopted Budget 2012-13	Projected 2012-13	% Variance 2012-13	Proposed Budget 2013-14	% Change Projected 2012-13	% Change Budget 2012-13
Sewer Administration	***11-12 Actual***	***12-13 Budget***	***Projected***	***Variance***	***13-14 Budget***	***Variance***	***Variance***
Wages	62,170	**45,564**	48,455	6.3%	48,590	0.3%	6.6%
Employers Costs	50,420	**21,410**	20,028	-6.5	23,630	18.0	10.4%
Equipment Maint	21,643	**17,500**	17,759	1.5	17,500	-1.5	0.0%
Vehicle Fuel	11,244	**13,970**	11,525	-17.5	13,970	21.2	0.0%
Permits	25,690	**26,540**	29,878	12.6	27,300	-8.6	2.9%
Legal/Consulting	23,838	**70,000**	71,921	2.7	50,000	-30.5	-28.6%
Training/Safety	18,694	**14,200**	15,524	9.3	14,200	-8.5	0.0%
Supplies	4,806	**4,200**	4,141	-1.4	4,200	1.4	0.0%
Information Systems Maint	3,121	**8,250**	5,182	-37.2	6,000	15.8	-27.3%
Vehicle Maint.	2,779	**8,200**	7,417	-9.6	6,000	-19.1	-26.8%
Tools	7,282	**5,000**	4,715	-5.7	4,200	-10.9	-16.0%
Telephones	6,786	**6,600**	7,492	13.5	6,240	-16.7	-5.5%
Uniforms	3,037	**3,400**	3,244	-4.6	3,400	4.8	0.0%
Travel/Meetings	1,370	**2,000**	1,903	-4.8	2,000	5.1	0.0%
Building Maint	1,614	**1,590**	1,589	-0.1	1,630	2.6	2.5%
Copier Maintenance	966	**500**	500	0.0	500	0.0	0.0%
Memberships	880	**400**	992	148.0	400	-59.7	0.0%
Bad Debts	(320)	**600**	300	-50.0	600	100.0	0.0%
Sewer General Fine	400	**0**	0	0.0	0	0.0	0.0%
Nonroutine Maint/Repair	16,425	**40,000**	34,868	-12.8	40,000	14.7	0.0%
Other	3,101	**2,000**	1,828	-8.6	2,000	9.4	0.0%
Subtotals	**265,946**	**291,924**	**289,261**	**-0.9%**	272,360	**-5.8%**	**-6.7%**
Operating Expenses	999,421	**1,067,596**	1,078,994	1.1%	1,064,880	-1.3%	-0.3%
Reserve Expenditures	0	**0**	0		0		
General Fund Net Allocation	161,501	**191,600**	176,395	-7.9	189,020	7.2	-1.3%
Total Expenses	**1,160,922**	**1,259,196**	**1,255,389**	**-0.3%**	1,253,900	**-0.1%**	**-0.4%**
Initial Overage(Deficit)	(20,985)	**(732)**	5,312	-825.2%	(30)	-100.6%	-95.9%
Transfer from Misc Reserve	0	**0**	0		0		
Transfer from Rate Stab Res	0	**0**	0		0		
Net Income (Loss)	**(20,985)**	**(732)**	**5,312**		(30)		
Depreciation	595,167	**594,595**	596,032	0.2	595,589	-0.1	0.2

Replacement Reserves and Debt Service Summary

Debt Service Prefunding Collected

Debt Service Repl Rsrv Collected

Sewer Reserves Collected

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

BUDGET SUMMARY - DRAINAGE FUND

April 25, 2013

	Actual 2011-12	Adopted Budget 2012-13	Projected 2012-13	% Variance 2012-13	Proposed Budget 2013-14	% Change Projected 2012-13	% Change Budget 2012-13
Revenues:							
Residential Special Taxes	136,514	**148,254**	147,898	-0.2%	151,200	2.2%	2.0%
Commercial Special Taxes	26,448	**28,654**	28,636	-0.1	29,230	2.1	2.0%
Interest Income	185	**280**	118	-57.7	30	-74.6	-89.3%
Inspection Fees	0	**0**	0	0.0	0	0.0	0.0%
Other	(198)	**0**	0	0.0	0	0.0	0.0%
Operating Revenues	**162,949**	**177,188**	**176,652**	**-0.3%**	180,460	**2.2%**	**1.8%**
Expenditures:							
	11-12 Actual	*12-13 Budget*	*Projected*	*Variance*	*13-14 Budget*	*Variance*	*Variance*
Wages	52,716	**53,158**	50,516	-5.0	56,680	12.2	6.6%
Employers Costs	24,482	**24,980**	23,400	-6.3	26,990	15.3	8.0%
MS4 Permit	4,852	**4,000**	4,852	21.3	5,000	3.1	25.0%
Power	16,251	**15,500**	14,478	-6.6	15,500	7.1	0.0%
Chemicals	1,520	**5,400**	3,779	-30.0	5,400	42.9	0.0%
Maint/Repairs	6,774	**12,000**	11,738	-2.2	11,900	1.4	-0.8%
Equipment Rental	4,311	**5,500**	5,208	-5.3	4,500	-13.6	-18.2%
Improvements	8,011	**12,000**	12,000	0.0	12,000	0.0	0.0%
Legal/Consulting	2,280	**3,000**	3,000	0.0	2,000	-33.3	-33.3%
Uniforms	0	**200**	200	0.0	200	0.0	0.0%
Tools	2,325	**400**	400	0.0	400	0.0	0.0%
Bad Debts	2	**0**	0	0.0	0	0.0	0.0%
Other	301	**1,500**	566	-62.3	1,100	94.4	-26.7%
Subtotals	**123,825**	**137,638**	**130,137**	**-5.5%**	141,670	**8.9%**	**2.9%**
Operating Expenses	123,825	**137,638**	130,137	-5.5%	141,670	8.9%	2.9%
Reserve Expenditures	0	**0**	23,289		0		
General Fund Net Allocation	33,170	**39,350**	36,229	-7.9	38,820	7.2	-1.3%
Total Expenses	**156,995**	**176,988**	**189,655**	**7.2%**	180,490	**-4.8%**	**2.0%**
Net Income (Loss)	**5,954**	**200**	**(13,003)**	**-6593.9%**	(30)	**-99.8%**	**-114.8%**

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

BUDGET SUMMARY - SOLID WASTE FUND

June 7, 2013

	Actual 2011-12	Adopted Budget 2012-13	Projected 2012-13	% Variance 2012-13	Proposed Budget 2013-14	% Change Projected 2012-13	% Change Budget 2012-13
Revenues:							
Solid Waste Charges	592,996	**610,981**	611,739	0.1%	621,072	1.5%	1.7%
Other	386	**600**	411	-31.5	400	-2.7%	-33.3%
Operating Revenues	**593,383**	**611,581**	**612,150**	**0.1**	621,472	**1.5%**	**1.6%**
Expenditures:							
	11-12 Actual	*12-13 Budget*	*Projected*	*Variance*	*13-14 Budget*	*Variance*	*Variance*
CWRS Contract	508,738	**533,520**	534,897	0.3%	543,000	1.5%	1.8%
Sac. County Admin. Fee	32,834	**33,960**	33,461	-1.5	34,680	3.6%	2.1%
Consulting/Legal	0	**0**	1,113	0.0	0	-100.0%	0.0%
HHW Event	0	**12,000**	23,568	96.4	12,000	-49.1%	0.0%
Bad Debts	0	**0**	0	0.0	0	0.0%	0.0%
Total Expenses	**541,572**	**579,480**	**593,039**	**2.3**	589,680	**-0.6%**	**1.8%**
Operating Expenses	541,572	**579,480**	593,039	2.3	589,680	-0.6%	1.8%
General Fund Net Allocation	27,189	**32,260**	29,696	-7.9	31,820	7.2%	-1.4%
Total Expenses	**568,761**	**611,740**	**622,735**	**1.8**	621,500	**-0.2%**	**1.6%**
Net Income (Loss)	**24,622**	**(159)**	**(10,585)**	**6557.5**	(28)	**0.0%**	**-82.4%**

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

BUDGET SUMMARY - GENERAL FUND

April 25, 2013

	Actual 2011-12	Adopted Budget 2012-13	Projected 2012-13	% Variance 2012-13	Proposed Budget 2013-14	% Change Projected 2012-13	% Change Budget 2012-13
Revenues:							
Property Taxes	498,942	**501,840**	501,840	0.0%	502,800	0.2%	0.2%
Title Transfer Fees	6,500	**4,800**	9,050	88.5	6,000	-33.7	25.0%
Project Reimbursement	0	**0**	12,868	0.0	0	-100.0	0.0%
Interest	264	200	135	-32.5	80	-40.7	-60.0%
CIA Ditch Admin Service Charges	1,800	**1,800**	1,800	0.0	1,800	0.0	0.0%
Other	8,256	**1,200**	1,561	30.1	1,200	-23.1	0.0%
Total Operating Revenues	**515,762**	**509,840**	**527,254**	**3.4%**	511,880	**-2.9%**	**0.4%**

Expenditures:	*11-12 Actual*	*12-13 Budget*	*Projected*	*Variance*	*13-14 Budget*	*Variance*	*Variance*
Wages	482,044	**502,500**	505,942	0.7%	534,200	5.6%	6.3%
Director Meeting Stipends	12,100	**18,000**	14,800	-17.8	18,000	21.6	0.0%
Employers Costs	254,620	**275,200**	272,686	-0.9	292,300	7.2	6.2%
Liability Insurance	54,224	**54,060**	44,914	-16.9	45,000	0.2	-16.8%
Information Systems Maintenance	45,102	**95,400**	55,126	-42.2	79,000	43.3	-17.2%
Community Communications	12,023	**5,900**	5,115	-13.3	5,900	15.3	0.0%
Legal	20,385	**25,000**	26,847	7.4	25,000	-6.9	0.0%
Office Supplies	23,066	**19,200**	20,541	7.0	19,200	-6.5	0.0%
Building/Grounds Maintenance	20,332	**16,800**	32,025	90.6	16,800	-47.5	0.0%
Postage	19,302	**21,780**	20,935	-3.9	21,780	4.0	0.0%
Telephones	4,480	**4,320**	4,827	11.7	4,620	-4.3	6.9%
Contingency	0	**11,000**	11,000	0.0	11,000	0.0	0.0%
Audit	13,000	**15,100**	13,000	-13.9	13,500	3.8	-10.6%
Consulting	10,385	**3,600**	3,100	-13.9	3,600	16.1	0.0%
Memberships	9,416	**9,890**	8,624	-12.8	9,890	14.7	0.0%
Training/Safety	6,386	**6,000**	5,965	-0.6	6,000	0.6	0.0%
Power	8,421	**8,670**	8,011	-7.6	8,670	8.2	0.0%
Meetings	5,717	**7,000**	9,155	30.8	8,000	-12.6	14.3%
Director Expense Reimbursement	7,799	**5,200**	5,899	13.4	5,200	-11.8	0.0%
Vehicle Fuel	3,305	**4,590**	1,930	-58.0	1,200	-37.8	-73.9%
Equipment Maint	1,590	**2,000**	2,090	4.5	2,000	-4.3	0.0%
Election Costs	0	**5,000**	4,327	-13.5	0	-100.0	-100.0%
Mail Machine Lease	2,782	**2,840**	2,819	-0.7	2,840	0.8	0.0%
Copy Machine Maintenance	8,931	**8,100**	12,149	50.0	9,600	-21.0	18.5%
Vehicle Maint	3,908	**2,000**	2,281	14.1	2,000	-12.3	0.0%
Clerical Services	0	**0**	7,418	0.0	0	-100.0	0.0%
Other	29,809	**25,800**	19,649	-23.8	3,000	-84.7	-88.4%
Total Operating Expenses	**1,059,130**	**1,154,950**	**1,121,177**	**-2.9%**	1,148,300	**2.4%**	**-0.6%**
Overage(Deficit)	(543,368)	**(645,110)**	(593,922)	**-7.9%**	(636,420)	**7.2%**	-1.3%

2013 - 2014 Capital Improvement Projects List

	Project Number	Est Qtr	Project Description	Budget Amount	Funding Source	Life Years	Status
			Water / Sewer Department				
1	01-03-1		Geographical Information System (GIS)	100,000	Capital Improvement Reserves	N/A	
2	03-06-2		Security Access System - Water & Wastewater Facilities	40,000	Replacement Reserves - Water / Sewer	10	
3	03-07-1		Wastewater PLC upgrade	30,000	Sewer Replacement Reserves	10	*complete*
4	05-06-1		Granlees Site Access Restriction Improvements	100,000	Capital Improvement Reserves	20	
5	08-05-1		WTP Paint & Exterior Siding Repair	30,000	Replacement Reserves - Water	20	
6	08-07-1		Bobcat Compact Track Loader	54,000	Replacement Reserves - Water & Sewer		
8	10-05-1		Excavate Sediment out of Calero	20,000	Replacement Reserves		
9	11-01-1		Utility Cart (awd)	15,000	50/50 Water/Sewer Operating Budget	5	*complete*
10	11-02-1		Truck Purchase (1 ton, 4wd, tool box)	45,000	Replacement Reserves - Water	5	
11	11-03-1		Fueling Station	40,000	Replacement Reserves - borrow & repay	10	
12	12-01-2		Dump Truck	100,000	Capital Improvements Reserves (Water/Sewer)		
13	12-02-2		Wastewater Facility Fencing	25,000	Capital Improvements Reserves - Sewer		*complete*
14	12-03-2		Hole 15 Culvert Replacement	60,000	Drainage Reserves and Fund Balance		*complete*
15	12-04-2		Main Lift North Wet Well Rehabilitation	250,000	Sewer Replacement Reserves and Operating Budget		*in process*
16	12-05-2		Wastewater Facility Paving	45,000	Replacement Reserves - Sewer		*complete*
17	12-06-2		Wastewater Reclamation Plant Valve Replacement	35,000	Replacement Reserves - Sewer		*complete*
18	12-07-2		6B Generator Replacement	35,000	Replacement Reserves - Sewer		*complete*
19	13-xx-2		Hole 13 Culvert Replacement	25,000	Replacement Reserves - Drainage		
20	13-xx-2		WWRP Filter PLC Replacement	125,000	Replacement Reserves - Sewer		
			Department Subtotal	**$1,174,000**			
			Security Department				
19	05-12-3		Wireless Network Site Survey, Acquistion & Startup Costs	100,000	Capital Improvement Reserves	15	
			Department Subtotal	**$ 100,000**			
			Admin Department				
20	04-12-4		Records Storage Vault	20,000	Capital Improvement Reserves	25	
21	10-07-4		Electronic Document Management System	25,000	Unrestricted Cash		
22	10-08-4		Email Exchange Server	20,000	Unrestricted Cash		
			Department Subtotal	**$ 65,000**			
			2013-14 Grand Totals	**$1,339,000**			

Project number consists of AA-BB-C
AA - The year the project is to begin
BB - The actual project number assigned for the current year
C - The department requesting the project
1 - Water
2 - Sewer / Drainage
3 - Security
4 - Admin

CAPITAL EXPENDITURE REQUEST

Date: April 17, 2013

PROJECT REQUEST SUMMARY

Department: Sewer

PROJECT NAME: WWRP Filter PLC replacement

PROJECT CATEGORY: Sewer Replacement Reserves

PROJECT NUMBER: 13-XX-2

PROJECT STAFFING:
PLANNING: Paul Siebensohn / David Herrmann
DESIGN: N/A
CONSTRUCTION: N/A

PLANNING: RMCSD / TESCO

DESIGN: N/A

CONSTRUCTION:

WORK ORDERS:
PLANNING:
DESIGN:
CONSTRUCTION:

SCOPE/DESCRIPTION:

PLANNING: District staff / TESCO

ENVIRONMENTAL: N/A

DESIGN: TESCO

CONSTRUCTION: N/A

PHASE	START DATE	ESTIMATED COMPLETION DATE	ESTIMATED TIME REQUIRED
PLANNING	September 2013	October 2013	4 weeks
ENVIRONMENTAL	N/A		
BID	October 2013	November 2013	4 weeks
COMPLETION	January 2014	March 2014	

PROJECT OBJECTIVES:

Replace the no longer supported or available MODICON PLC's with modern supported PLC for long term viability of filtration control center, as well as for future tie-in to SCADA.

POTENTIAL BENEFITS:

TANGIBLE: Provides District with reliable and supportable equipment for long term use .

INTANGIBLE: Prevention of the potential for excessive down time due to equipment failure which could create a backup in secondary wastewater storage.

CAPITAL EXPENDITURE REQUEST

Date: April 17, 2013

PROJECT REQUEST SUMMARY

Department: Sewer

PROJECT NAME: WWRP Filter PLC replacement

PROJECT IMPACTS:

ENVIRONMENTAL: N/A

RIGHT OF WAY: N/A

AGENCY APPROVALS: N/A

WATER RIGHTS: N/A

OPERATING: N/A

CAPACITY: N/A

PROJECT BUDGET	PLAN	ENVIRON	DESIGN	COMPLETION	TOTAL
ORIGINAL BUDGET					
INITIAL PERIODS OF FUNDING	0	0	0		0
CURRENT PROJECT BUDGET	0	0		0	$0
ADJUSTED PROJECT BUDGET					
PROJECT FUNDING					
REPLACEMENT RESERVES					$125,000
UNRESTRICTED CASH	0				
CAPITAL IMPROVEMENT FEES	0				
DEVELOPER CONTRIBUTIONS	0				
OTHER					

PROJECT FUNDING COMMENTS:

Funding to come from Sewer Replacement Reserves.

CAPITAL EXPENDITURE REQUEST

Date: April 10, 2013

PROJECT REQUEST SUMMARY

Department: Drainage

PROJECT NAME: Hole 13 North Culvert Replacement

PROJECT CATEGORY: Fund balance / Reserves

PROJECT NUMBER: 13-XX-2

PROJECT STAFFING:
PLANNING: Paul Siebensohn
DESIGN: Paul Siebensohn
CONSTRUCTION: District staff and contractor

PLANNING: RMCSD / RMCC

DESIGN: Paul Siebensohn

CONSTRUCTION:

WORK ORDERS:
PLANNING:
DESIGN:
CONSTRUCTION:

SCOPE/DESCRIPTION:

PLANNING: District staff & RMCC

ENVIRONMENTAL: n/a

DESIGN: Drainage flow must accommodate watershed flow through two (2) 36" pipes as well as minimal flow during construction, utilizing long lasting materials at a reasonable cost.

CONSTRUCTION: n/a

PHASE	START DATE	ESTIMATED COMPLETION DATE	ESTIMATED TIME REQUIRED
PLANNING	July -August 2013	September 2013	2 weeks
ENVIRONMENTAL	N/A		
BID	September 2013	October 2013	3 weeks
COMPLETION	To be coordinated	with RMCC, by Nov.2013	3 weeks

PROJECT OBJECTIVES:

Replace two 36" squash CMP with two 36" HDPE pipes to restore functionality of collapsing drainage pipe.

POTENTIAL BENEFITS:

TANGIBLE: Function of drainage.

INTANGIBLE: Safety for golf course due to potential collapsing of existing pipes.

CAPITAL EXPENDITURE REQUEST

Date: April 10, 2013

PROJECT REQUEST SUMMARY

Department: Drainage

PROJECT NAME: Hole 13 North Culvert Replacement

PROJECT IMPACTS:

ENVIRONMENTAL: N/A

RIGHT OF WAY: Coordinate with RMCC for access

AGENCY APPROVALS: N/A

WATER RIGHTS: N/A

OPERATING: RMCC

CAPACITY: N/A

PROJECT BUDGET	PLAN	ENVIRON	DESIGN	COMPLETION	TOTAL
ORIGINAL BUDGET					
INITIAL PERIODS OF FUNDING	0	0	0		0
CURRENT PROJECT BUDGET	0	0		0	$0
ADJUSTED PROJECT BUDGET					
PROJECT FUNDING					
REPLACEMENT RESERVES					$25,000
UNRESTRICTED CASH	0				
CAPITAL IMPROVEMENT FEES	0				
DEVELOPER CONTRIBUTIONS	0				
OTHER					

PROJECT FUNDING COMMENTS:

Funding to come from Drainage Replacement Reserve.

MEMORANDUM

Date: June 13, 2013

To: Board of Directors

From: Darlene Gillum, Director of Administration

Subject: Adopt Ordinance 2013-01 Proposed Rate and Special Tax Adjustments

---

RECOMMENDED ACTION

1. Acknowledge the Second Reading of Ordinance 2013-01, and
2. Adopt Ordinance 2013-01, an ordinance amending Chapter 14 of the District Code, relating to Water; amending Chapter 15 of the District Code, relating to Sewer; amending Chapter 16 of the District Code, relating to Drainage; amending Chapter 16A of the District Code relating to Drainage Tax; amending Chapter 21 of the District Code, relating to Security, and amending Chapter 31 of the District Code relating to Solid Waste Collection and Disposal.

DISCUSSION

At last month's Board meeting, following the budget presentation, staff presented the proposed rate increases necessary to support funding of the FY 2013-14 budget.

A Public Hearing was held at last month's Board meeting, following staff's presentation of the proposed rate increases. No comments were received on the proposed rate increases at the public hearing.

The first reading of Ordinance 2013-01 was waived last month. Once published, no increase to the rates and maximum special taxes is allowed without republishing the ordinance. However, the Solid Waste rates recommended for adoption are slightly lower than the rates presented last month due to the final rate application received on May 29, 2013 from Cal-Waste Recovery Systems, which was slightly lower than projected.

The second reading of the ordinance and adoption of Ordinance 2013-01 formally approves the proposed rate increases.

BACKGROUND

The following information is provided as a brief recap of the proposed rate increases, although no Board discussion of individual rate increases is anticipated.

The budget previewed in March was the basis for rate adjustment notices to the community. To formally adopt new rates, various chapters of the District Code will be changed by approving the attached Ordinance 2013-01.

Rate Adjustment Overview

Staff is recommending the following increases to the Water, Sewer and Solid Waste enterprise funds and the Security and Drainage special tax rates based on the June budget draft (these rates are lower than those published in Ordinance 2013-01 and lower than the Prop 218 notice rates):

WATER

The proposed 2013-14 monthly bill changes for an average consumption residential metered lot are: **$3.12 per month,** which is related to the increase in the Water Treatment Plant 1 rehabilitation project contribution (i.e., debt service prefunding). **There is no increase in water rates for day-to-day operations.**

	Current Rate 2012-13	Proposed 2013-14
Base Charge (w/o reserve contribution)	$29.28	$30.78
Reserve Contribution	$6.14	$6.34
Usage Charge (per cf)	$.0145	$.0152
• Non-residential customers are charged one base charge per month per meter plus the reserve contribution times their Water EDU (equivalent dwelling unit) value plus usage		

SEWER

The proposed 2013-14 monthly bill changes for a residential metered lot are: **$3.38 per month** increase. $3.65 is related to the increase in the Van Vleck Ranch permanent reclaimed water irrigation field project contribution (i.e., debt service prefunding). **There is a $.27 reduction per month in the sewer rate for day-to-day operations.**

	Current Rate 2012-13	Proposed 2013-14
Base Charge (w/o reserve contribution)	$37.86	$40.74
Reserve Contribution	$8.23	$8.73
• Non-residential customers are charged the base charge plus the reserve contribution times their Sewer EDU (equivalent dwelling unit) value		

SOLID WASTE

The proposed 2013-14 monthly bill changes for a 64 gallon container are: **$.30 per month** increase (for the container and the Sacramento County Surcharge) inclusive of the operational increase in the California Waste Recovery Services and the increase in the Sacramento County Surcharge.

	Current Rate 2012-13	Proposed 2013-14
38 gallon container (T38)	$17.20	$17.45
64 gallon container (T64)	$18.84	$19.12
96 gallon container (T96)	$28.06	$28.47
Sac County Surcharge	$1.16	$1.18
Extra Cart (38 gallon)	$7.62	$7.88
Extra Cart (64 gallon)	$9.56	$9.82
Extra Cart (96 gallon)	$20.46	$20.88
Extra Recycle Cart	$6.02	$6.28
Extra Yard Waste Cart	$6.02	$6.28
Yard Waste Exemption	($2.00)	($2.00)

DRAINAGE

The proposed 2013-14 monthly bill changes for a residential metered lot are: **$.09 per month** increase for operational increases and MS4 permitting increase.

Developed Property	Current Rate 2012-13	Proposed 2013-14	Max Rate 2013-14
Residential (per lot)			
Metered	$4.55	$4.64	$4.64
Unmetered	$4.55	$4.64	$4.64
The Villas	$3.04	$3.10	$3.10
Murieta Village	$3.04	$3.10	$3.10
Non-Residential (per acre)			
1 Retail	$22.724	$23.178	$23.178
2 Industrial/Whse	$24.142	$24.625	$24.625
3 Light Industrial	$18.461	$18.830	$18.860
4 Office	$21.303	$21.729	$21.729
5 Landscape (golf course/park sites)	$4.261	$4.346	$4.346
6 Murieta Equestrian Center	$1.644	$1.677	$1.677
7 RMCC (club house and parking)	$0.000	$0.000	$0.000
8 Airport	$1.893	$1.931	$1.931
9 Geyer Property	$14.201	$14.485	$14.485
Undeveloped Property			
Residential & Non-Residential	$2.686	$2.740	$2.740

SECURITY

The proposed 2013-14 monthly bill changes for a residential inside-gate metered lot are: **$.38 per month** increase for operational increases.

Developed Property	Current Rate 2012-13	Proposed 2013-14	Max Rate 2013-14
Residential (per lot) Inside Gates			
Metered	$25.55	$25.93	$26.40
Unmetered	$20.04	$20.34	$21.12
Outside Gates	$6.15	$6.24	$6.36
Non-Residential (per Building square foot)			
1 Highway Retail	$.2303	$.2338	$.2378
2 Other Retail/comm.	$.0249	$.0253	$.0257
3 Industrial/Whse/Lt Industrial	$.0542	$.0550	$.0560
4 Office	$.0129	$.0131	$.0134
5 Institutional	$.0129	$.0131	$.0134
6 Public Utility	$.0413	$.0419	$.0426
7 Murieta Equestrian Center	$.0036	$.0037	$.0039
8 RMCC	$.0650	$.0660	$.0670
9 Airport	$.0165	$.0167	$.0170
Undeveloped Property (per acre)			
Inside Gates	$21.6382	$21.9628	$22.3319
Outside Gates	$3.2244	$3.2728	$3.3279

The average increase in the monthly bill for a residential metered lot is approximately 4.55% as a result of these recommended rate increases. Please refer to the attached Sample Bill.

ORDINANCE NO. 2013-01

AN ORDINANCE OF THE RANCHO MURIETA COMMUNITY SERVICES DISTRICT, AMENDING CHAPTER 14 OF THE DISTRICT CODE, RELATING TO WATER; AMENDING CHAPTER 15 OF THE DISTRICT CODE RELATING TO SEWER; AMENDING CHAPTER 16 OF THE DISTRICT CODE RELATING TO DRAINAGE; AMENDING CHAPTER 16A OF THE DISTRICT CODE RELATING TO DRAINAGE TAX; AMENDING CHAPTER 21 OF THE DISTRICT CODE RELATING TO SECURITY CODE; AND AMENDING CHAPTER 31 OF THE DISTRICT CODE RELATING TO SOLID WASTE COLLECTION AND DISPOSAL

BE IT ORDAINED by the Board of Directors of the Rancho Murieta Community Services District, Rancho Murieta, Sacramento County, California, as follows:

SECTION ONE:

I) The Water Code, Chapter 14, Section 7.00 Rates and Charges is amended as follows:

Section 7.05 Rates for Metered Service.

(a) General metered service shall be as follows:

MONTHLY CHARGES	
Basic service charge	$28.53/mo
Debt service prefunding	$ 2.25/mo
Reserve contribution	$ 6.39/mo
Total Basic Service Charge	$37.17/mo
Usage charge per cubic foot:	
Basic volumetric rate	$ 0.0140/cu. ft.
Debt service prefunding volumetric rate	$ .0012/cu. ft.
Total Usage Charge per cubic foot	$ .0152/cu. ft.

(b) Metered service to residential lots at Murieta Village shall be as follows:

MONTHLY CHARGES	
Basic service charge	$28.53/mo
Debt service prefunding	$ 2.25/mo
Reserve contribution	$ 6.39/mo
Total Basic Service Charge	$37.17/mo
Usage charge per cubic foot:	
Basic volumetric rate	$ 0.0140/cu. ft.
Debt service prefunding volumetric rate	$ .0012/cu. ft.
Total Usage Charge per cubic foot	$ .0152/cu. ft.

(c) Non-Residential metered service shall be as follows:

MONTHLY CHARGES

Basic service charge for non-residential shall be based on an EDU basis

Monthly Charges

Basic service charge for non-residential metered service shall be calculated on number of meters and an EDU basis for each customer multiplied by the basic service charge reflected in Section 7.05 a. above.

Usage charge per cubic foot:	
Basic volumetric rate	$ 0.0140/cu. ft.
Debt service prefunding volumetric rate	$ .0012/cu. ft.
Total Usage Charge per cubic foot	$ .0152/cu. ft.

II) The Sewer Code, Chapter 15, Section 7.00 Rates and Charges, is amended as follows:

Section 7.03 Rates and Charges for Service. The monthly service charge for each premise receiving sewer service from the District shall be:

Residential or other premises, each unit

Base rate	$37.59 per month
Debt service prefunding	$ 3.15 per month
Reserve contribution	$ 6.81 per month
CDO Reimbursement	$ 1.92 per month
Total monthly service charge	$49.47 per month

Murieta Village, per unit

Base rate	$37.59 per month
Debt service prefunding	$ 3.15 per month
Reserve contribution	$ 6.81 per month
CDO Reimbursement	$ 1.92 per month
Total monthly service charge	$49.47 per month

Non-Residential

Monthly service charge for non-residential sewer service shall be calculated on an EDU basis for each customer multiplied by the residential service charge.

III) The Drainage Code, Chapter 16, Section 7.00 Rates and Charges, is amended as follows:

Section 7.01 Rates and Charges: Drainage charges for operation and maintenance of the District's system shall be as set forth in Chapter 16A, Section 3.00.

The Drainage Code, Chapter 16A, Section 3.00 Drainage Tax, is amended as follows:

Section 3.00 Rates and Charges for Operation and Maintenance of the District's system shall be:

Commencing July 1, 2013, property within the District shall be assessed a monthly drainage tax as follows. The maximum monthly tax rates shown reflect annual adjustments, per Section 5.00.

/
/
/
/
/
/
/
/

LAND USE		Monthly Special Tax Rates Fiscal Year 2013-14	Monthly Special Tax Rates Maximum Ceiling Rate Year 2013-14
DEVELOPED PROPERTY			
Residential			
-Metered Developed	Per Lot	$ 4.64	4.64
-Unmetered Developed	Per Lot	$ 4.64	4.64
-The Villas	Per Lot	$ 3.10	3.10
-Murieta Village	Per Lot	$ 3.10	3.10
Non-Residential			
-Retail	Per Acre	$ 23.178	23.178
-Industrial/Warehouse	"	$ 24.625	24.625
-Light Industrial	"	$ 18.830	18.830
-Office	"	$ 21.729	21.729
-Landscaped Areas (golf course & park site)	"	$ 4.346	4.346
-Murieta Equestrian Center	"	$ 1.677	1.677
-RMCC (club house & parking)	"	$ 0.000	0.000
-Airport	"	$ 1.931	1.931
-Geyer Property	"	$ 14.485	14.485
UNDEVELOPED PROPERTY			
Uses Drainage System			
-Residential and Non-Residential	Per Acre	$ 2.740	2.740
Does Not Use Drainage System			
-Lakeview	"	$ 0.00	0.00
-PTF N of Cosumnes	"	$ 0.00	0.00

IV) The Security Code, Chapter 21, Section 5.00 Security Tax, is amended as follows:
Commencing July 1, 2013, property within the District shall be assessed a monthly security tax as follows. The maximum tax rates shown reflect annual adjustments, per Section 5.00:

		Monthly Special Tax Rates Fiscal Year 2013-14	Monthly Special Tax Rates Maximum Ceiling Rate Year 2013-14
DEVELOPED PROPERTY			
Residential			
Inside Gates			
- *Metered*	Per Lot	$ 25.93	26.40
- *Unmetered*	Per Lot	$ 20.34	21.12
Outside Gate	Per Lot	$ 6.24	6.36

/
/

Non-Residential			
- *Highway Retail*	Per Building Sq. Ft.	$ 0.2338	0.2378
- *Other Retail/Commercial*	"	$ 0.0253	0.0257
- *Industrial/Warehouse/Lt Industrial*	"	$ 0.0550	0.0560
- *Office*	"	$ 0.0131	0.0134
- *Institutional*	"	$ 0.0131	0.0134
- *Public Utility*	"	$ 0.0419	0.0426
- *Equine Complex*	"	$ 0.0037	0.0039
- *RMCC*	"	$ 0.0660	0.0670
- *Airport*	"	$ 0.0167	0.0170
UNDEVELOPED PROPERTY			
- Inside Gates	Per Acre	$21.9628	22.3319
- Outside Gates	Per Acre	$ 3.2728	3.3279

V) The Solid Waste Collection and Disposal Code, Chapter 31, Section 4.0 Collection Rates, is amended as follows:

Section 4.03 Collections Rates. The monthly service charge shall be:

(1) Garbage Collection Services (rates include Sacramento County Surcharge)

38 gallon cart	$ 17.45
64 gallon cart	$ 19.12
96 gallon cart	$ 28.47

(2) Additional Garbage Carts

38 gallon cart	$ 7.88
64 gallon cart	$ 9.82
96 gallon cart	$ 20.88

(3) Additional Recycling Cart (in excess of 1 recycled cart)

38 gallon cart	N/A
64 gallon cart	$ 6.28
96 gallon cart	$ 6.28

(4) Additional Green Waste Cart (in excess of 2 green waste carts)

38 gallon cart	N/A
64 gallon cart	$ 6.28
96 gallon cart	$ 6.28

(6) Sacramento County Surcharge $ 1.18

SECTION TWO:

To the extent the terms and conditions of this Ordinance may be inconsistent or in conflict with the terms and provisions of any prior District ordinances, resolutions, rules, or regulations the terms of this Ordinance shall prevail with respect to the terms and provisions thereof, and such inconsistent or conflicting terms and provisions of prior ordinances, resolutions, rules, and regulations are hereby repealed.

/
/
/

SECTION THREE:
This Ordinance shall be in full force and effect thirty (30) days after adoption and shall be published not less than once in a newspaper of general circulation published in the District within ten (10) days after adoption.

SECTION FOUR:
The establishment, modification, structuring, restructuring and approval of the fees, rates, tolls, or other charges as set forth herein are for the purposes of continuing to meet the District's costs for operation and maintenance, supplies and equipment, financial reserves, and capital replacement needs, and are necessary to maintain service within the District's existing service area.

PASSED AND ADOPTED by the Board of Directors of the Rancho Murieta Community Services District, Sacramento County, California, at a meeting held on June 19, 2013, by the following roll call vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Gerald Pasek, President of the Board
Rancho Murieta Community Services District

[seal]

ATTEST:

_____
Suzanne Lindenfeld, District Secretary

Sample Bill - Final

June 7, 2013

Rancho Murieta Community Services District

Average Monthly Customer Bill		Current Monthly Rates July 1, 2012	Proposed Monthly Rates July 1, 2013	% Change
Residential Metered Lot				
Water	Average Usage in CF	1,957	1,957	
Averaged over 12 months				
Residential Base		$ 35.42	$ 37.17	4.9%
old rate Water Usage	$.0145 per cubic foot	28.38		
new rate Water Usage	$.0152 per cubic foot		29.75	4.8%
Sewer		46.09	49.47	7.3%
Solid Waste (avg. 64 Gallon Container)		20.00	20.30	1.5%
Security Tax (Maximum Tax Ceiling $26.40)		25.55	25.93	1.5%
Drainage Tax (Maximum Tax Ceiling $4.64)		4.55	4.64	2.0%
		$ 159.99	$ 167.26	
% Change over prior year			4.55%	
Murieta Village Lot				
Water	Average Usage in CF	518	518	
Averaged over 12 months				
Residential Base		$ 35.42	$ 37.17	4.9%
old rate Water Usage	$.0145 per cubic foot	7.51		
new rate Water Usage	$.0152 per cubic foot		7.87	4.8%
Sewer		46.09	49.47	7.3%
Solid Waste (avg. 64 Gallon Container)		20.00	20.30	1.5%
Security Tax (Maximum Tax Ceiling $6.36)		6.15	6.24	1.5%
Drainage Tax (Maximum Tax Ceiling $3.10)		3.04	3.10	2.0%
		$ 118.21	$ 124.15	
% Change over prior year			5.03%	
Vacant or Unmetered Lot				
Security Tax (Maximum Tax Ceiling $20.71)		20.04	20.34	1.5%
* **Water Standby**	$10.00 PER YEAR	0.83	0.83	0.0%
* **Sewer Standby**	$10.00 PER YEAR	0.83	0.83	0.0%
Drainage Tax (Maximum Tax Ceiling $4.55)		4.55	4.64	2.0%
		$26.25	$26.64	
% Change over prior year			1.49%	

* This fee is billed annually at $10.00 and is shown as a monthly rate for comparison purposes only.

denotes increase in rates

California Special Districts Association
Districts Stronger Together

CALIFORNIA SPECIAL DISTRICTS ASSOCIATION

2013 BOARD ELECTIONS

MAIL BALLOT INFORMATION

Dear Member:

A mail ballot has been enclosed for your district's use in voting to elect a representative to the CSDA Board of Directors in your Region for Seat B. Each of CSDA's six (6) regional divisions has three seats on the Board. Each of the candidates is either a board member or management-level employee of a member district located in your geographic region. Each Regular Member (district) in good standing shall be entitled to vote for one (1) director to represent its region.

We have enclosed the candidate statements for each candidate who submitted one. Please vote for **only one** candidate to represent your region in Seat B and be sure to sign, date and fill in your member district information (*in some regions, there may only be one candidate)*. If any part of the ballot is not complete, the ballot will not be valid and will not be counted.

Please utilize the enclosed return envelope to return the completed ballot. Ballots must be received at the CSDA office at 1112 I Street, Suite 200, Sacramento, CA 95814 by **5:00pm on Friday, August 2, 2013.**

If you do not use the enclosed envelope, please mail in your ballot to:
California Special Districts Association
Attn: 2012 Board Elections
1112 I Street, Suite 200
Sacramento, CA 95814

Please contact Charlotte Lowe toll-free at 877.924.CSDA or charlottel@csda.net with any questions.

Ginger Root – CSDA Board of Directors, Region 2

It has been my privilege to serve on the CSDA Board of Directors for the last five years. The first two years I was appointed and the last three years I was elected. I have served the last two years as Treasurer of CSDA. I am currently a contract Clerk of the Board of Directors and CEO of three fire districts, Clerk of the Board of a fourth fire district, and Clerk of the Board and General Manager of one sanitary district. I live in Stockton - less than an hours' drive to the CSDA offices and have easy access to meetings. CSDA Board is a commitment of time and money and I want to continue that commitment and would be honored if you would vote for me.

Thank you,
Ginger Root

Candidate Statement

Gil Albiani
Cosumnes Community Services District – Director of the Board

A sincere thank you to my colleagues on the Cosumnes Community Services District for nominating me for a position on the California Special Districts Association Board.

Thank you also for your consideration and your support.

I have served as a Board member of the Cosumnes CSD since 2004 and I am a past President of the Board. I have extensive and varied board member experience, having served on the Board of the California Association of Realtors, the Sacramento Metro Chamber, where I currently serve as a PAC member and Methodist Hospital Sacramento.

I am a past Chair of the California State Fair Board of Directors having been appointed by two separate Governors. I served as President of the Board of the Sacramento Association of Realtors in 1990, the American Lung Association of Sacramento in 1999, and Mercy Foundation in 2004. I currently serve as a Board member of the Dignity Health Sacramento Service Area.

With this varied experience I bring to the position of Board member an understanding of the role a Board member plays. In every position I have been blessed to have served, I have always been looked upon as an idea person. I bring to the position of Board member the wisdom that comes with age, but the energy and enthusiasm of a teenager.

Your vote will be appreciated and you can rest assured that you will never regret it.

Sincerely,

Gil A. Albiani

Candidate Statement

David J. Pierson
For
2013 CSDA Board of Directors, Region 2, Seat B

I would appreciate your vote in this upcoming election to represent you on the CSDA Board.

I have experience dealing with the needs of special districts from serving as a Director on the Sacramento Metropolitan Fire District Board. I previously served as a union president and would bring a new perspective to the Board to help special districts in dealing with labor issues. With the recent budget cuts, our district like many others in the state has had to do more with less. I want to take these experiences and combine them to serve you on the CSDA Board and help you get the education and training necessary to ensure keeping your money local as well as maintaining a high level of service delivery.

I look forward to your support in this upcoming election.

Sincerely,

David J. Pierson

OFFICIAL BALLOT

CSDA BOARD OF DIRECTORS ELECTION 2013

All Fields Must Be Completed for ballot to be counted.

(Please vote for only one.)

REGION TWO

Seat B - term ends 2017

- ☐ **Ginger Root*** — *Lincoln Rural County Fire Protection District*
- ☐ **Gil Albiani** — *Cosumnes Community Services District*
- ☐ **Wesley Gilbert** — *Butte County Resource Conservation District*
- ☐ **Dave Pierson** — *Sacramento Metropolitan Fire District*

* *incumbent*

Signature: _____ Date: _____

Member District: _____

Must be received by 5pm, August 2, 2013. CSDA, 1112 I Street, Suite 200, Sacramento, CA 95814

CONFERENCE/EDUCATION SCHEDULE

Date: June 13, 2013

To: Board of Directors

From: Suzanne Lindenfeld, District Secretary

Subject: Review Upcoming Conference/Education Opportunities

This report is prepared in order to notify Directors of upcoming educational opportunities. Directors interested in attending specific events or conferences should contact me to confirm attendance for reservation purposes. The Board will discuss any requests from Board members desiring to attend upcoming conferences and approve those requests as deemed appropriate.

Board members must provide brief reports on meetings that they have attended at the District's expense. (AB 1234).

The upcoming conferences/educational opportunities include the following:

CALIFORNIA SPECIAL DISTRICT ASSOCIATION (CSDA)

CSDA Annual Conference	September 16 – 19, 2013	Monterey

GOLDEN STATE RISK MANAGEMENT ASSOCIATION (GSRMA)

GSRMA Annual Training Day	October 24, 2013	Rolling Hills Resort Corning, CA

SPECIAL DISTRICT AND LOCAL GOVERNMENT INSTITUTE (SDI)

No Information Currently Available on Upcoming Conferences.

ASSOCIATION OF CALIFORNIA WATER AGENCIES (ACWA)

No Information Currently Available on Upcoming Conferences.

WATEREUSE ASSOCIATION

No Information Currently Available on Upcoming Conferences.

AMERICAN WATER WORKS ASSOCIATION (AWWA)

No Information Currently Available on Upcoming Conferences.

ISC WEST

No Information Currently Available on Upcoming Conferences.

CALIFORNIA RURAL WATER ASSOCIATION

No Information Currently Available on Upcoming Conferences.