RANCHO MURIETA COMMUNITY SERVICES DISTRICT

15160 JACKSON ROAD
RANCHO MURIETA, CA 95683
916-354-3700
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AGENDA

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

REGULAR BOARD MEETING
SEPTEMBER 21, 2016
Open Session 5:00 p.m.
District Administration Building – Board Room
15160 Jackson Road
Rancho Murieta, CA 95683

BOARD MEMBERS

Gerald Pasek	President
Betty Ferraro	Vice President
Morrison Graf	Director
Michael Martel	Director
Mark Pecotich	Director

STAFF

Darlene J. Thiel	General Manager
Paul Wagner	Security Chief
Paul Siebensohn	Director of Field Operations
Eric Thompson	Controller
Suzanne Lindenfeld	District Secretary

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

SEPTEMBER 21, 2016
REGULAR BOARD MEETING
Open Session: 5:00 p.m.

All persons present at District meetings will place their cellular devices in silent and/or vibrate mode (no ringing of any kind). During meetings, these devices will be used only for emergency purposes and, if used, the party called/calling will exit the meeting room for conversation. Other electronic and internet enabled devices are to be used in the "silent" mode. Under no circumstances will recording devices or problems associated with them be permitted to interrupt or delay District meetings.

AGENDA

ESTIMATED RUNNING TIME

1. CALL TO ORDER - Determination of Quorum - President Pasek **(Roll Call)** 5:00

2. ADOPT AGENDA (Motion)

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.

3. SPECIAL ANNOUNCEMENTS AND ACTIVITIES

a. District's Candidates Night – October 13, 2016 at 7:00 p.m.

4. COMMENTS FROM THE PUBLIC

Members of the public may comment on any item of interest within the subject matter jurisdiction of the District and any item specifically agendized. Members of the public wishing to address a specific agendized item are encouraged to offer their public comment during consideration of that item. With certain exceptions, the Board may not discuss or take action on items that are not on the agenda.

If you wish to address the Board at this time or at the time of an agendized item, as a courtesy, please state your name and address. Speakers presenting individual opinions shall have 3 minutes to speak. Speakers presenting opinions of groups or organizations shall have 5 minutes per group.

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

All the following items in Agenda Item 5 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. August 17, 2016 Regular Board Meeting

b. Committee Meeting Minutes (Receive and File)
1. September 2, 2016 Security Committee Meeting

c. Approval of Bills Paid Listing

6. STAFF REPORTS (Receive and File)

a. General Manager's Report

b. Administration/Financial Report

c. Security Report

d. Water/Wastewater/Drainage Report

7. **CORRESPONDENCE**

8. **CONSIDER ADOPTION OF DISTRICT POLICY P2016-02, IMPLEMENTATION AND USE OF SECURITY IMPACT FEES** (Discussion/Action) (Motion) **(Roll Call Vote)** *(10 min.)*

9. **CONSIDER APPROVAL OF USE OF WATER SUPPLY AUGMENTATION FUNDS FOR STONEHOUSE ROAD FORCE MAIN ASSESSMENT** (Discussion/Action) (Motion) **(Roll Call Vote)** *(5 min.)*

10. **REVIEW OPERATIONS MANUAL FOR THE DELIVERY AND USE OF RECYCLED WATER AT RANCHO MURIETA COUNTRY CLUB** (Discussion/Action)

11. **RECEIVE STATUS REPORT ON SECURITY INFORMATION UPDATE** (Discussion/Action)

12. **DISCUSS STORMWATER BASINS WITHIN RANCHO MURIETA** (Discussion/Action)

13. **RECEIVE AND CONSIDER UPDATES** (Discussion/Action) *(15 min.)*
    - **a.** Parks Committee
    - **b.** Pending and Proposed Land Development Projects
    - **c.** Escuela Gate
    - **d.** Midge Fly Ad Hoc Committee
    - **e.** Solar Power Installation

14. **CONSIDER CONFERENCE/EDUCATION OPPORTUNITIES** (Discussion/Action) (Motion)

15. **REVIEW MEETING DATES/TIMES**
    - **a.** Communications – October 3, 2016 at 4:00 p.m.
    - **b.** Personnel – October 3, 2016 at 4:30 p.m.
    - **c.** Security – October 7, 2016 at 8:30 a.m.
    - **d.** Finance – October 7, 2016 at 9:00 a.m.
    - **e.** Improvements – October 7, 2016 at 9:30 a.m.
    - **f.** Regular Board Meeting – October 19, 2016 - open session at 5:00 p.m.

16. **DIRECTOR COMMENTS/SUGGESTIONS**
    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.*

17. **ADJOURNMENT** (Motion)

"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 September 16, 2016. Posting locations are: 1) District Office; 2) Rancho Murieta Post Office; 3) Rancho Murieta Association; 4) Murieta Village Association.

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

Board of Directors Meeting
MINUTES
August 17, 2016
Call to Order and Closed Session 4:00 p.m. - Open Session at 5:00 p.m.

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 4:00 p.m. in the District meeting room, 15160 Jackson Road, Rancho Murieta. Directors present were Gerald Pasek, Betty Ferraro, Morrison Graf, and Michael Martel. Also present were Darlene J. Thiel Gillum, General Manager; Paul Wagner, Security Chief; Paul Siebensohn, Director of Field Operations; Eric Thompson, Controller; Suzanne Lindenfeld, District Secretary; and Richard Shanahan, District General Counsel. Director Mark Pecotich was absent.

2. ADOPT AGENDA

Motion/Ferraro to adopt the agenda. **Second/Graf. Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

3. CLOSED SESSION

Under Government Code Section 54956.9(d)(2): Conference with Legal Counsel Regarding Anticipated Litigation – Significant Exposure to Litigation Involving one Potential Case, M & R Investment One Company Demand to Extend 1995 SHF Acquisition Corporation Reimbursement Agreement.

4. OPEN SESSION/REPORT ACTION FROM CLOSED SESSION

No action to report back.

5. SPECIAL ANNOUNCEMENTS AND ACTIVITIES

None.

6. COMMENTS FROM THE PUBLIC

None.

7. CONSENT CALENDAR

Motion/Ferraro to adopt the consent calendar with the change in wording to Agenda Item 7a1. **Second/Graf. Roll Call Vote: Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

8. STAFF REPORTS

No discussion.

9. CORRESPONDENCE

None.

10. CONSIDER EXTENSION OF 1995 SHF ACQUISITION CORPORATION REIMBURSEMENT AGREEMENT AS REQUESTED BY M&R INVESTMENT ONE CORPORATION

Darlene J. Thiel Gillum gave a brief summary of the recommendation to deny the request to extend the 1995 Reimbursement Agreement with SHF Acquisition Corporation and allow the Agreement to expire.

Randall Block, legal counsel for M&R Investment One Corporation, commented on the District having previously extended the exact same language extension and that he feels granting the extension now is the right thing to do. Extending the Agreement does not cost the District anything.

Director Martel commented that he feels the District has acted in good faith.

President Pasek commented on when the District granted the extension last year, it was with the understanding that all parties would get together and work out a resolution, which was not done.

Mr. Block stated that they have tried, unsuccessfully, to work with the District.

Motion/Martel to deny the request to extend the 1995 Reimbursement Agreement with SHF Acquisition Corporation and allow the Agreement to expire according to its terms on September 20, 2016. **Second/Ferraro. Roll Call Vote: Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

11. CONSIDER APPROVAL OF REIMBURSEMENT TO M&R INVESTMENT ONE CORPORATION FOR FOURTEEN (14) RETREATS WEST LOTS

Motion/Martel to approve reimbursement to M&R Investment One Corporation for fourteen (14) Retreats West lots in the amount of $32,018. Funding to come from Developer Deposit – Retreats. **Second/Ferraro. Roll Call Vote: Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

12. CONSIDER REQUEST FROM ROEBBELEN CONSTRUCTION, CONSTRUCTION MANAGER AT RISK, FOR AN ADJUSTMENT TO THE GUARANTEED MAXIMUM BUDGET FOR THE WATER TREATMENT PLANT EXPANSION PROJECT

Darlene J. Thiel Gillum gave a brief summary of the recommendation to increase the Guaranteed Maximum Budget for the Water Treatment Plant Expansion Project. Roebbelen is in the process of closing out the project with GE. All other trades have closed the project. Staff will continue to evaluate these and other change orders for possible deficiencies in the project plans and drawings.

Motion/Graf to approve the negotiated increase to the Guaranteed Maximum Budget of $150,243 for the Water Treatment Plant Expansion Project. Funding to come from Water Capital Replacement Reserves. **Second/Ferraro. Roll Call Vote: Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

13. PUBLIC HEARING TO CONSIDER PLACING DELINQUENT ACCOUNTS ON TAX ROLLS OF SACRAMENTO COUNTY FOR COLLECTION

Darlene J. Thiel Gillum gave a brief summary of the recommendation to place delinquent accounts on the Sacramento County tax rolls. The County purchases these delinquencies, using the Teeter Plan, and the District receives payment from the County dollar for dollar. This is done annually.

President Pasek opened the public hearing at 5:22 p.m. and asked for public comments. There were no comments.

President Pasek closed the public hearing at 5:23 p.m.

Motion/Ferraro to adopt Resolution R2016-10 placing delinquent water, sewer, solid waste, security and/or drainage charges/taxes on the Sacramento County tax rolls to be purchased by Sacramento County under the Teeter Plan. **Second/Graf. Roll Call Vote; Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

14. CONSIDER ADOPTION OF DISTRICT RESOLUTION R2016-11 COMMUNITY FACILITIES DISTRICT NO 2014-1 ANNUAL SPECIAL TAX LEVIES

Darlene J. Thiel Gillum gave a brief summary of the recommendation to adopt Resolution R2016-11 placing CFD #2014-1 annual bond levies on the Sacramento County Tax Rolls. This levy will be submitted annually to Sacramento County to be collected.

Motion/Ferraro to adopt Resolution R2016-11 for Community Facilities District No. 2014-1 placing the annual bond levies on the Sacramento County Tax Rolls for the 2016-2017 fiscal year. **Second/Graf. Roll Call Vote; Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

15. CONSIDER APPROVAL OF FUNDING OF ADMINISTRATION COMPUTER SERVER FROM RESERVE FUNDS

Darlene J. Thiel Gillum gave a brief summary of the recommendation to approve funding of the administration server from reserve funds. The replacement server was purchased on February 8, 2016 and has since been put into service. Once all of the associated costs were identified, the total exceeded the $5,000 Capital Asset threshold. Staff then realized that the old server was recorded as a Fixed Asset and is thereby eligible for use of Capital Replacement Reserve funding.

Motion/Graf Approve Administration Capital Replacement Reserve funding in the amount of $6,212.69 for the purchase and installation of a new data server from A Leap Ahead IT. **Second/Ferraro. Roll Call Vote; Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

16. CONSIDER APPROVAL OF CLOSING OF 1991 COMMUNITY FACILITIES DISTRICT #1 (CFD #1) BANK OF AMERICA AND CAMP ACCOUNTS

Darlene J. Thiel Gillum gave a brief summary of the recommendation to approve the closing of 1991 CFD#1 accounts and transfer the remaining monies to the Water and Sewer Capital Replacement Reserve accounts.

Motion/Graf to declare the funds held in the Bank of America Community Facilities District No. 1 redemption checking account and the funds held in the California Asset Management Program (CAMP) Community Facilities District No. 1 Special Tax Fund as surplus and approve the transfer of these surplus funds on a 50/50 basis to the Water and Sewer Capital Replacement Reserve accounts as allowed under the Mello-Roos Community Facilities Act of 1982, Section 53317 (j). **Second/Ferraro.**

Director Martel stated that the feels the funds should be refunded to the residents that contributed instead of reserves. The estimated amount would be $24.00 each. Darlene J. Thiel Gillum stated that it would cost more than that amount to process and issue checks and recommended the remaining monies go into reserves to support the facilities and infrastructure constructed with the CFD funds.

Roll Call Vote; Ayes: Pasek, Ferraro, Graf. Noes: Martel. Absent: Pecotich. Abstain: None.

17. CONSIDER APPROVAL OF RESERVE FUNDS FOR NEW SECURITY VEHICLE PURCHASE

Chief Wagner gave a brief summary of the recommendation to approve funding from Security Capital Reserves to pay for a new security vehicle. The new patrol vehicle will replace Vehicle #517 which is a 2006 Ford Escape with 174,024 miles. The engine in this vehicle no longer runs.

Motion/Martel to approve up to $20,400 for the purchase of a new Security patrol vehicle, which includes the cost of the vehicle, striping, signs, radio(s) etc. Funding to come from Security Capital Replacement Reserves. **Second/Ferraro. Roll Call Vote; Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

18. CONSIDER ADOPTION OF DISTRICT PERSONNEL MANUAL UPDATES

Darlene J. Thiel Gillum gave a brief summary of the recommendation to approve the proposed updates to the District Personnel Manual. The changes made are primarily for clarification of existing language and practice.

Motion/Ferraro to adopt the proposed District Personnel Manual updates. **Second/Graf. Roll Call Vote; Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

19. CONSIDER APPROVAL OF DISTRICT APPOINTMENT TO SACRAMENTO CENTRAL GROUNDWATER AUTHORITY BOARD

Darlene J. Thiel Gillum gave a brief summary of the recommendation to appoint a Director to the Sacramento Central Groundwater Authority Governing Board (SCGA). Although the District submitted a notice of non-participation, the SCGA has requested the District appoint a representative to their Governing Board, per the terms of the current SCGA Joint Powers Agreement until the JPA is modified.

Motion/Martel to appoint President Pasek as the District representative. **Second/Ferraro. Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

20. RECEIVE AND CONSIDER UPDATES

Parks Committee

Director Pecotich has requested that Rancho Murieta Association (RMA) schedule a Parks Committee meeting to discuss and review the revised Parks Operating Guidelines. The Greens Park bids should be received soon as well. A date has not yet been scheduled.

Pending Proposed Land Development Projects

On August 8, 2016, the Letter of Agreement regarding the Water Supply Augmentation Fees and Capital Improvement Fees study and payment of fees was sent to John Sullivan. The District received the fully executed Letter of Agreement back today.

Escuela Gate

Sacramento County will begin the Stonehouse Road at Escuela Drive Intersection Improvement Project in September 2016, with the estimated completion in October 2016. Stonehouse Road will be closed during construction for approximately four (4) weeks.

Solar Power Installations

Wastewater Treatment Plant Site

The photovoltaic (PV) panels were installed and all wiring completed between the panels and power inverters. The underground boring and pulling of five (5) three inch (3”) conduits between the PV site and the point of

interconnection at the wastewater control building was also completed without incident, avoiding numerous water, sewer, and power lines.

The next step is to install the electrical conduits for the power runs between the switchgear panels and transformers and then pour concrete pads for the panels and to pull and terminate wiring. SMUD has not provided a date for the delivery of the new transformer or running of the new power feed yet. At this point it is anticipated that the project may be online by the end of October 2016.

Water Treatment Plant Site

Solar City anticipates receiving a permit from Sacramento County to allow them to proceed at the Water Treatment Plant Site beginning next week. The District has notified Aspen Environmental of the possible construction start as it may be necessary to conduct a nesting bird and Swainson hawk survey prior to beginning construction activity.

Midge Fly Ad Hoc Committee

Director Ferraro gave a brief update on the Midge Fly Ad Hoc Committee. The Committee wishes to continue meeting through the end of next year. Director Ferraro recommended the Committee end at this time as originally agreed and if needed next season, the Committee can meet again. By consensus, the Board agreed.

Director Martel commented on his feeling that the District needs to be applying the same type treatments to all the areas in the community, not just Laguna Joaquin. Director Martel also commented on how he feels that the District is not following the Reclaimed Water Regulations and wants the Board to review those regulations at the September Board meeting.

21. CONSIDER CONFERENCE/EDUCATION OPPORTUNITIES

No discussion.

22. REVIEW MEETING DATES/TIMES

Director Graf will be out of town the beginning of September.

Director Ferraro will be out of town the beginning of October.

23. COMMENTS/SUGGESTIONS – BOARD MEMBERS AND STAFF

Director Ferraro thanked Paul Siebensohn for all the work his staff does and thanked Chief Wagner for his service to the community.

Darlene J. Thiel Gillum stated she will be on vacation August 18 – 22, 2016. Paul Siebensohn will be Acting General Manager while she is gone.

24. ADJOURNMENT

Motion/Ferraro to adjourn at 6:20 p.m. **Second/Graf. Ayes: Pasek, Ferraro, Graf, Martel. Noes: None. Absent: Pecotich. Abstain: None.**

Respectfully submitted,

Suzanne Lindenfeld
District Secretary

MEMORANDUM

Date: September 2, 2016

To: Board of Directors

From: Security Committee Staff

Subject: September 2, 2016 Security Committee Meeting

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1. CALL TO ORDER

Director Ferraro called the meeting to order at 8:30 a.m. Present were Directors Ferraro and Martel. Present from District staff were Darlene Thiel Gillum, General Manager; Paul Wagner, Security Chief; Eric Thompson, Controller; and Suzanne Lindenfeld, District Secretary.

2. COMMENTS FROM THE PUBLIC

None.

3. MONTHLY UPDATES

Operations

New Gate Officer started August 20, 2016 and is doing an excellent job. She is an excellent addition to the team.

Patrol Officer Interviews were held and a candidate has been made an offer of employment. He has many years of Law Enforcement as a Police Officer in the Central Valley as well as Security Supervisor experience. He will start his training September 17, 2016.

Purchase of a new District Patrol Vehicle (Jeep Patriot) has been completed. The signage and equipment are in the process of being installed.

After some research and consideration regarding the use and authority for amber lights to be mounted and displayed, Chief Wagner found that there is a Vehicle Code Section that does apply to the District having them, thus legally allowing their use. Vehicle Code Section 25277 states:

> *Any vehicle used by any police department, sheriff's office, or other governmental agency for the purpose of enforcing parking laws contained in the Vehicle Code or in a local ordinance or regulation may display flashing or revolving amber warning lights to the front, sides, or rear of the vehicle when actually engaged in the enforcement of such laws and when either necessarily stopped on a street, or when moving at a speed slower than the normal flow of traffic*.

This code section was forwarded to District Council, Richard Shanahan, who stated in an email, *"Section 25277 is a good find. The District is a government agency and, as you explain, the District from time to time enforces parking laws. Additionally, the Community Services District Law contains a special provision that authorizes the District to enforce the homeowners association CCRs (Govt. Code § 61105(e)) and the RMA CCRs include parking regulations and restrictions. I concur that section 25277 applies to the District for the parking enforcement-related purposes described in the statute and that it provides authority to justify and authorize the existence of the light bar on the security vehicles*."

Incidents of Note
Chief Wagner gave a brief overview of the incidents of note for August 2016.

RMA Citations/Admonishments
No discussion.

Rancho Murieta Association Compliance/Grievance/Safety Committee Meeting
The meeting is scheduled for September 12, 2016.

Security Data Update
All of the security data update forms have been sent out and almost all of them have been returned. Staff is in the process of inputting the information into the system (ABDI) and should be done soon.

Incident Map and Emergency Exit Map
Chief Wagner is still in the process of creating and finalizing the emergency map as well as the incident map.

5. REVIEW SECURITY IMPACT FEE POLICY
Darlene J. Thiel Gillum gave a brief summary of the draft Security Impact Fee Policy for the implementation and use of the Security Impact Fee funds. The Security Impact Fee is defined and authorized for collection in the 670 Financing and Services Agreement (FSA) and the Rancho North FSA. The District has started the collection of this fee and currently has $30,314 in the fund. This policy needs to be approved and adopted prior to expending any of the Security Impact Fee funds. The first proposed project for the use if these funds is the consulting engagement for the evaluation of the Security Department organization and design of the proposed surveillance camera system. This item will be on the District's September 21, 2016 Regular Board meeting agenda.

7. DIRECTOR & STAFF COMMENTS
No comments.

8. ADJOURNMENT
The meeting adjourned at 9:09 a.m.

MEMORANDUM

Date: September 14, 2016

To: Board of Directors

From: Eric Thompson, Controller

Subject: Bills Paid Listing

Enclosed is the Bills Paid Listing Report for **August 2016**. 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
California Waste Recovery Systems	Solid Waste Monthly Contract	$ 46,631.81	Operating Expense
Clean Harbors Env. Services Inc.	Hazardous Waste Collection	$ 17,139.66	Operating Expense
County of Sacramento	Solid Waste Disposal	$ 8,547.14	Operating Expense
County of Sacramento	Annual Permit: WTP	$ 7,014.00	Operating Expense
Kennedy/Jenks Consultants, Inc.	Recycled Water Program	$ 6,732.50	Water Supply Augmentation Reserves
M&R Investment One Company Inc	Prior Infrastructure Reimbursement	$ 32,018.00	Developer Deposit
Groeniger & Company	Repairs & Maintenance	$ 5,654.88	Operating Expense
Rancho Murieta 205, LP	Prior Infrastructure Reimbursement	$ 118,590.00	Developer Reimbursement
S. M. U. D.	Purchased Power	$ 33,316.02	Operating Expense
Wilbur-Ellis Company	Chemicals	$ 5,112.29	Operating Expense
Elk Grove Dodge	Security Vehicle Down Payment	$ 8,000.00	Operating Expense

PREPARED BY: Eric Thompson, Controller

REVIEWED BY: _____, *District Treasurer*

Rancho Murieta Community Services District
Bills Paid Listing for August 2016

Ck Number	Date	Vendor	Amount	Purpose
CM31088	8/1/2016	California Public Employees' Retirement Sys	$35,907.32	Payroll
CM31089	8/1/2016	Guardian Life Insurance	$5,139.06	Payroll
CM31090	8/1/2016	U.S. Postmaster	$653.75	Odd/Even Irrigation Schedule Change
CM31091	8/1/2016	Vision Service Plan (CA)	$456.63	Payroll
EFT	8/3/2016	Pitney Bowes	$500.00	Postage Machine Refill
CM31092	8/12/2016	A Leap Ahead IT	$3,479.15	IT Support
CM31093	8/12/2016	A&D Automatic Gate and Access	$161.88	Repairs & Maintenance
CM31094	8/12/2016	American Family Life Assurance Co.	$585.39	Payroll
CM31095	8/12/2016	Applications By Design, Inc.	$225.00	Security Data Backup
CM31096	8/12/2016	Aramark Uniform & Career Apparel, LLC	$250.92	Uniform Service - Water
CM31097	8/12/2016	Aspen Environmental Group	$4,398.08	CEQA Solar Power Project
CM31098	8/12/2016	Bartkiewicz, Kronick & Shanahan	$4,561.41	Legal Services
CM31099	8/12/2016	Borges & Mahoney	$1,359.55	Repairs & Maintenance
CM31100	8/12/2016	California Public Employees' Retirement Sys	$9,950.31	Payroll
CM31101	8/12/2016	California Public Employees' Retirement Sys	$33,544.23	Payroll
CM31102	8/12/2016	California Waste Recovery Systems	$46,631.81	Solid Waste Monthly Contract
CM31103	8/12/2016	CVCWA	$2,320.00	Membership Renewal
CM31104	8/12/2016	Clean Harbors Env. Services Inc.	$17,139.66	Hazardous Waste Collection
CM31105	8/12/2016	Coastland Civil Engineering	$1,117.20	Engineering Services
CM31106	8/12/2016	Capital One Commercial	$1,042.58	Supplies
CM31107	8/12/2016	County of Sacramento	$8,547.14	Solid Waste Disposal
CM31108	8/12/2016	County of Sacramento	$7,014.00	Annual Permit: WTP
CM31109	8/12/2016	Employment Development Department	$2,975.36	Payroll
CM31110	8/12/2016	Express Office Products, Inc.	$248.95	Office Supplies
CM31111	8/12/2016	Folsom Lake Fleet Services	$1,445.68	Vehicle Service: 216
CM31112	8/12/2016	Franchise Tax Board	$100.00	Payroll
CM31113	8/12/2016	Galls/Quartermaster	$412.08	Uniforms - Security
CM31114	8/12/2016	Hach Company	$800.49	Repairs & Maintenance
CM31115	8/12/2016	Hunt & Sons, Inc	$263.00	Fuel
CM31116	8/12/2016	Kennedy/Jenks Consultants, Inc.	$6,732.50	Recycled Water Program
CM31117	8/12/2016	Kyle Yates, Inc.	$390.00	Annual Flow Test
CM31118	8/12/2016	Legal Shield	$55.16	Payroll
CM31119	8/12/2016	Nationwide Retirement Solution	$1,957.00	Payroll
CM31120	8/12/2016	Operating Engineers Local Union No. 3	$598.08	Payroll
CM31121	8/12/2016	Pollardwater.com	$912.46	Tools
CM31122	8/12/2016	Rancho Murieta Ace Hardware	$248.24	Supplies
CM31123	8/12/2016	Romo Landscaping	$385.00	Landscaping
CM31124	8/12/2016	Santander Leasing	$240.00	Security Vehicle Lease
CM31125	8/12/2016	Sierra Chemical Co.	$2,493.77	Chemicals
CM31126	8/12/2016	State of California	$96.00	Pre-Employment Screening

Rancho Murieta Community Services District
Bills Paid Listing for August 2016

Ck Number	Date	Vendor	Amount	Purpose
CM31127	8/12/2016	TASC	$315.37	Payroll
CM31128	8/12/2016	TelePacific Communications	$633.17	Monthly Phone Bill
CM31129	8/12/2016	U.S. Bank Corp. Payment System	$3,754.77	Monthly Gasoline Bill & Supplies
CM31130	8/12/2016	U.S. HealthWorks Medical Group, PC	$160.00	Employee Screening
CM31131	8/12/2016	Univar USA Inc.	$821.68	Chemicals
CM31132	8/12/2016	Waterwise Consulting, INC	$140.00	WaterWise House Calls
CM31133	8/12/2016	Wilbur-Ellis Company	$3,017.09	Chemicals
EFT	8/12/2016	EFTPS	$11,447.27	Payroll
CM31134	8/18/2016	M&R Investment One Company Inc	$32,018.00	Prior Infrastructure Reimbursement
EFT	8/25/2016	Pitney Bowes	$1,500.00	Postage Machine Refill
CM31135	8/26/2016	Action Cleaning Systems	$1,172.00	Monthly Cleaning Service
CM31136	8/26/2016	American Family Life Assurance Co.	$547.51	Payroll
CM31137	8/26/2016	Aramark Uniform & Career Apparel, LLC	$237.24	Uniform Service - Water
CM31138	8/26/2016	AT&T	$46.03	Monthly Internet
CM31139	8/26/2016	AT&T	$967.07	Monthly Cell Phone
CM31140	8/26/2016	AT&T	$2,680.81	Monthly Phone Bill
CM31141	8/26/2016	Sally Beals	$100.00	Toilet Rebate
CM31142	8/26/2016	California Laboratory Services	$2,397.08	Monthly Lab Tests
CM31143	8/26/2016	California Public Employees' Retirement Sys	$1,300.00	GASB-68 Reports
CM31144	8/26/2016	Caltronics Business Systems	$946.21	Copier - Admin.
CM31145	8/26/2016	County of Sacramento	$54.00	Pre-Employment Screening
CM31146	8/26/2016	Daily Journal Corporation	$468.00	Notice of Public Hearing-Teeter
CM31147	8/26/2016	Paul DuVal	$100.00	WPRV Rebate
CM31148	8/26/2016	Employment Development Department	$2,703.42	Payroll
CM31149	8/26/2016	FedEx Office and Print Services	$1,213.50	Odd/Even Irrigation Schedule Change
CM31150	8/26/2016	Folsom Lake Fleet Services	$576.89	Vehicle Service: 520
CM31151	8/26/2016	Franchise Tax Board	$100.00	Payroll
CM31152	8/26/2016	Galls/Quartermaster	$755.12	Uniforms - Security
CM31153	8/26/2016	Golden State Flow Measurement	$1,199.00	Meters & Boxes
CM31154	8/26/2016	Government Finance Officers Assoc.	$160.00	Annual Membership
CM31155	8/26/2016	Greenfield Communications	$142.97	Internet/TV
CM31156	8/26/2016	Groeniger & Company	$5,654.88	Repairs & Maintenance
CM31157	8/26/2016	Hastie's Capitol Sand and Gravel Co.	$552.73	Repairs & Maintenance
CM31158	8/26/2016	Howe It's Done	$290.24	Board Meeting Dinner
CM31159	8/26/2016	KWA Safety & Hazmat Consultants, Inc.	$1,650.00	Training & Safety
CM31160	8/26/2016	Legal Shield	$43.21	Payroll
CM31161	8/26/2016	Les Schwab Tires	$975.13	Vehicle Service: Sewer Trailer
CM31162	8/26/2016	Anne H Long (DBA) Marion Leasing	$528.13	Copier Lease - Admin
CM31163	8/26/2016	Nationwide Retirement Solution	$1,857.00	Payroll
CM31164	8/26/2016	NTU Technologies, Inc.	$1,388.80	Chemicals

Rancho Murieta Community Services District
Bills Paid Listing for August 2016

Ck Number	Date	Vendor	Amount	Purpose
CM31165	8/26/2016	Operating Engineers Local Union No. 3	$573.16	Payroll
CM31166	8/26/2016	Pape Machinery	$839.27	Vehicle Service: Backhoe
CM31167	8/26/2016	Pirtek Power Inn	$291.60	Supplies
CM31168	8/26/2016	Public Agency Retirement Services	$300.00	Payroll
CM31169	8/26/2016	Rancho Murieta 205, LP	$118,590.00	Prior Infrastructure Reimbursement
CM31170	8/26/2016	Rancho Murieta Association	$150.00	Landscaping
CM31171	8/26/2016	Rancho Murieta Association	$465.60	Purchased Power
CM31172	8/26/2016	S. M. U. D.	$33,316.02	Purchased Power
CM31173	8/26/2016	Sacramento Bee	$350.48	Employment Advertising
CM31174	8/26/2016	Sierra Chemical Co.	$1,662.51	Chemicals
CM31175	8/26/2016	Sprint	$206.82	Monthly Air Cards
CM31176	8/26/2016	Streamline	$300.00	Website Hosting
CM31177	8/26/2016	TASC	$64.91	Payroll
CM31178	8/26/2016	TASC	$315.37	Payroll
CM31179	8/26/2016	UPS	$14.85	Postage
CM31180	8/26/2016	USA Blue Book	$3,893.57	Repairs & Maintenance
CM31181	8/26/2016	W.W. Grainger Inc.	$1,141.80	Repairs & Maintenance
CM31182	8/26/2016	Western Exterminator Co.	$546.50	Monthly Service & Rodent Control
CM31183	8/26/2016	Wilbur-Ellis Company	$5,112.29	Chemicals
CM31184	8/26/2016	Byron Wise	$200.00	Toilet Rebate
CM31185	8/26/2016	John Young	$100.00	HWRP Rebate
CM31186	8/26/2016	Elk Grove Dodge	$8,000.00	Security Vehicle Down Payment
EFT	8/26/2016	EFTPS	$10,727.52	Payroll
		TOTAL	**$477,115.43**	

Rancho Murieta Community Services District
Bills Paid Listing for August 2016

Ck Number	Date	Vendor	Amount	Purpose
		CFD#1 Bank of America Checking		
CM2766	8/12/2016	Bank of America	$75.11	CFD#1 Admin Cost
		TOTAL	**$75.11**	
		CFD 2014-1 Bank of America Checking		
CM2027	8/12/2016	Corelogic Solutions, LLC	$184.00	CFD 2014-1 Admin Cost
		TOTAL	**$184.00**	
		EL DORADO PAYROLL		
Checks: CM11499 to CM11509 and Direct Deposits: DD09067 to DD09129			$ 115,147.16	Payroll
EFT	8/31/2016	National Payment Corp	$130.40	Payroll
		TOTAL	**$115,277.56**	

PREPARED BY: Eric Thompson, Controller

REVIEWED BY: Darlene J. Gillum, *District Treasurer*

MEMORANDUM

Date: September 16, 2016

To: Board of Directors

From: Darlene J. Thiel, General Manager

Subject: General Manager's Report

Following are highlights since our last Board Meeting:

FINANCE
Larry Bain and a couple of auditing staff were onsite September 6 through September 9, 2016 to perform the audit fieldwork. Mr. Bain anticipates coming back onsite for an additional half day to complete some audit work for the District and for the CFD 2014-1. Due to some changes in how PERS prepared the GASB 68 actuarial reports related to pension liabilities for pooled agencies, the draft audit reports previously anticipated to be ready for the October Finance Committee, may be delayed.

COUNTY STAKEHOLDER MEETINGS
No word yet regarding the schedule for the fifth (5^{th}) County Stakeholder Meeting regarding the proposed Rancho North development.

DISTRICT ELECTION – CANDIDATES NIGHT
The moderator for our Candidates Night scheduled for October 13, 2016 will be a student from California State University – Sacramento. I am working with the Associated Students Office of Governmental Affairs in coordinating the volunteer student's schedule. I think this is a great opportunity to provide valuable experience to a student interested in communications, political science, and the election process.

TOWN HALL MEETING - SECURITY
No specifics to report on this as of yet.

PERSONNEL
Security is fully staffed with the hiring of a new Patrol Office, Steve Egesdal, who started on September 17.

Utility Worker, Michael McIntosh, has submitted his resignation notice effective September 23. Michael has accepted a position with El Dorado Irrigation District. Debby has posted the open position in the Sacramento Bee, on our website, and on the Administration Building bulletin board.

REGIONAL WATER AUTHORITY – REGIONAL WATER RELIABILITY PLAN PROJECT
I have entered into an agreement with the Regional Water Authority (RWA) for the District to participate in their Regional Water Reliability Plan Project. The cost of our participation is $1,200 for phase 1 and an additional $800 for phase 2 (a total not to exceed amount of $2,000) if other funding sources do not materialize before July 1, 2017. The benefit gained from the District's participation in this project is the identification of water supply vulnerabilities, identification of mitigation and response actions, and development of an implementation roadmap for a very low cost investment. The outcome from this project can be used as the needs assessment in the pursuit of future funding for implementation of identified mitigation and response actions.

NEW EMAIL SIGN-UP FEATURE ON DISTRICT WEBSITE

Suzanne has implemented a new feature on our District website for residents or other interested parties to sign up/register to receive District news updates. This feature is provided by Streamline (host of our website) free of charge for up to 2,000 registered email accounts.

MEMORANDUM

Date: September 14, 2016

To: Board of Directors

From: Eric Thompson, Controller

Subject: Administration / Financial Reports

Enclosed is a combined financial summary report for **August 2016**. 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	0.6%	2,524	2,531										
	Weighted average	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Cubic Feet	2,517	2,489	2,545										
Gallons per day	628	621	635										
Planning Usage GPD	**583**												

Lock-Offs **–** For the month of August, there were 18 lock-offs.

Connection Fees **–** There were no new connection fees received in August.

Aging Report **–** Delinquent accounts totaled $62,670 which was 10.1% of the total accounts receivable balance of $618,606. Past due receivables decreased 39.6% or $41,018 from the prior month. This decrease is due primarily to the receivables transferred to Sacramento County for collection under the Teeter plan.

Summary of Reserve Accounts as of August 31, 2016 **–** The District's reserve accounts increased $46,929 during the month of August and have increased $126,834 since the beginning of the fiscal year. Other than normal inter-fund borrowing repayments and reserve account funding, the only other transaction in reserves this month was an $8,000 transfer for the down payment of a new security vehicle. The total amount of reserves held by the District on August 31, 2016 was $4,914,756. See the table below for information by specific reserve account.

Reserve Fund Balances

Reserve Descriptions	*Fiscal Yr Beg Balance July 1, 2016*	*YTD Collected & Interest Earned*	*YTD Spent*	*Period End Balance Aug 31, 2016*
Water Capital Replacement (200-2505)	826,443	35,591	(0)	862,034
Sewer Capital Replacement (250-2505)	1,915,904	59,761	(0)	1,975,665
Drainage Capital Replacement (260-2505)	71,601	1,946	(0)	73,547
Security Capital Replacement (500-2505)	90,972	7,613	(12,786)	85,799
Admin Capital Replacement (xxx-2505-99)	57,174	0	(0)	57,174
Sewer Capital Improvement Connection (250-2500)	4,045	0	(0)	4,045
Capital Improvement (xxx-2510)	331,445	5,485	(0)	336,930
Water Supply Augmentation (200-2511)	1,758,673	13,821	(0)	1,772,494
WTP Construction Fund Reserve (200-2513)	(281,547)	31,243	(32,942)	(283,246)
Security Impact Fee Reserves (500-2513)	13,214	17,100	(0)	30,314
Total Reserves	*4,787,924*	*172,560*	*(45,728)*	*4,914,756*

Inter-fund Borrowing Balances

Inter-fund Borrowing	*Fiscal Yr Beg Balance July 1, 2016*	*YTD Interest*	*YTD Repayment*	*Period End Balance Aug 31, 2016*
Sewer Loan to WTP Construction Fund	1,277,709	1,274	(24,706)	1,254,277
WSA Loan to WTP Construction Fund	425,903	425	(8,235)	418,093
N. Gate Security Loan from Drainage Fund	86,039	85	(3,891)	82,233
Total Inter-fund Borrowing	*1,789,651*	*1,784*	*(36,832)*	*1,754,603*

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 July 31, 2016		
1-Month	3-Months	1-Year
2.57%	4.89%	3.82%

Financial Summary Report (year-to-date through August 31, 2016)

***Revenues*:**

Water Charges, year-to-date, are **above budget $35,327 or 8.7%**

Sewer Charges, year-to-date, are **below budget $1,440 or (0.7%)**

Drainage Charges, year-to-date, are **below budget $212 or (0.7%)**

Security Charges, year-to-date, are **below budget $1,250 or (0.6%)**

Solid Waste Charges, year-to-date, are **above budget $273 or 0.3%**

Total Revenue, which includes other income, property taxes, and interest income year-to-date, is **above** budget **$44,558 or 4.1%** (Water Conservation Efforts - YTD residential water usage is up 12.5% compared to budget).

Expenses: Year-to-date total operating expenses are **below budget $104,571 or (10.7%).** There have been no operational reserve expenditures so far this year. 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 (*including wages & employer costs*) year-to-date, are **below budget $31,795 or (10.0%).** The Water Department saw savings across most expense categories so far this year. Only wages, employer costs, and taste & odor chemicals were above budget. The largest savings were seen in the following categories: power, meters/boxes; repairs & maintenance; hazardous waste removal, consulting, legal, and equipment rental.

Sewer Expenses, year-to-date, are **below budget by $45,981 or (26.8%).** Savings were seen across most sewer expense categories, with the largest savings being seen in salaries & wages, employer costs, chemicals, repairs & maintenance, consulting, legal, and training. Sewer wages were under budget 29.8% due to personnel being allocated more to the Water Department during the month.

Drainage Expenses, year-to-date, are **below budget by $7,361 or (33.7%)**. Year-to-date wages & employer costs are below budget $2,029 for the same allocation reason mentioned above. Additional savings were seen in repairs & maintenance, chemicals, consulting, and improvements.

Combined Water/Sewer/Drainage Wages & Employer Costs, year-to-date, are **below budget by $5,177 or (2.5%)**. Utility personnel at the District allocate their time between the Water, Sewer and Drainage departments as needed and as directed. This section is being reported to help gauge overall utility personnel expenses versus budget.

Security Expenses, year-to-date, are **below budget by $8,372 or (4.6%).** The security department has seen savings in wages, employer costs, vehicle maintenance, equipment repairs, bar codes, and office supplies so far this fiscal year.

Solid Waste Expenses, year-to-date, are **above budget by $608 or 0.6%**. Solid waste revenues and expenses are both slightly over budget through the end of August.

General Expenses, year-to-date, are **below budget by $11,670 or (6.4%).** Savings were seen across most expense categories so far this year, with the biggest savings being in salaries & wages, director meeting payments, employer costs, consulting, and office supplies. Insurance and legal expenses were the Admin Department's biggest line items that were over-budget.

Net Income: Year-to-date unadjusted net income, before depreciation, is $255,684 versus a budget of $106,555. Net income/(Loss) adjusted for estimated depreciation expense is $68,055. The full-year expected net operating income (loss) before depreciation, per the 2016-2017 budget is ($110).

Rancho Murieta Community Services District

Summary Budget Performance Report
YTD THROUGH AUGUST 2016

	% of Total	Annual Budget	% of Total	YTD Budget	YTD Actuals	% of Total	YTD VARIANCE Amount	YTD VARIANCE %
REVENUES								
Water Charges	32.4%	$1,939,830	37.7%	$407,754	$443,081	39.3%	$35,327	8.7%
Sewer Charges	21.9%	1,312,546	20.2%	218,608	217,168	19.3%	(1,440)	(0.7%)
Drainage Charges	3.2%	189,270	2.9%	31,546	31,334	2.8%	(212)	(0.7%)
Security Charges	21.2%	1,268,890	19.5%	211,480	210,230	18.7%	(1,250)	(0.6%)
Solid Waste Charges	10.7%	640,000	9.9%	106,668	106,941	9.5%	273	0.3%
Other Income	1.8%	108,420	1.6%	17,066	28,849	2.6%	11,783	69.0%
Interest Earnings	0.1%	3,580	0.0%	270	346	0.0%	76	28.1%
Property Taxes	8.9%	531,760	8.2%	88,626	96,240	8.5%	7,614	8.6%
Property Taxes (Reserve Alloc)	0.0%		0.0%		(7,613)	-0.7%	(7,613)	0.0%
Total Revenues	***100.0%***	***5,994,296***	***100.0%***	***1,082,018***	***1,126,576***	***100.0%***	***44,558***	***4.1%***
OPERATING EXPENSES								
Water/Sewer/Drainage								
Wages	15.2%	911,000	14.3%	139,600	136,340	15.7%	(3,260)	(2.3%)
Employer Costs	7.4%	445,010	7.3%	71,000	69,084	7.9%	(1,916)	(2.7%)
Power	6.3%	379,540	5.1%	49,790	42,355	4.9%	(7,435)	(14.9%)
Chemicals	3.3%	194,340	4.2%	41,285	31,776	3.6%	(9,509)	(23.0%)
Maint & Repair	5.7%	340,150	5.6%	55,060	35,162	4.0%	(19,898)	(36.1%)
Meters/Boxes	0.9%	54,000	0.8%	8,250	1,199	0.1%	(7,051)	(85.5%)
Lab Tests	0.7%	44,200	0.7%	6,700	5,907	0.7%	(793)	(11.8%)
Permits	1.2%	73,100	1.0%	10,215	9,657	1.1%	(558)	(5.5%)
Training/Safety	0.4%	21,500	0.6%	6,250	2,040	0.2%	(4,210)	(67.4%)
Equipment Rental	0.6%	35,930	0.4%	3,950		0.0%	(3,950)	(100.0%)
Other	7.8%	466,550	12.3%	120,087	93,530	10.7%	(26,557)	(22.1%)
Subtotal Water/Sewer/Drainage	**49.6%**	**2,965,320**	**52.5%**	**512,187**	**427,050**	**49.0%**	**(85,137)**	**(16.6%)**
Security								
Wages	11.3%	677,600	10.4%	101,800	98,522	11.3%	(3,278)	(3.2%)
Employer Costs	6.5%	389,600	6.3%	61,500	57,543	6.6%	(3,957)	(6.4%)
Off Duty Sheriff Patrol	0.1%	4,000	0.3%	2,700	1,527	0.2%	(1,173)	(43.4%)
Other	2.1%	128,330	1.7%	16,918	16,954	1.9%	36	0.2%
Subtotal Security	**20.1%**	**1,199,530**	**18.8%**	**182,918**	**174,546**	**20.0%**	**(8,372)**	**(4.6%)**
Solid Waste								
CWRS Contract	9.3%	555,700	9.5%	92,616	93,220	10.7%	604	0.7%
Sacramento County Admin Fee	0.6%	34,800	0.6%	5,800	5,804	0.7%	4	0.1%
HHW Event	0.3%	15,710	0.0%			0.0%		0.0%
Subtotal Solid Waste	**10.1%**	**606,210**	**10.1%**	**98,416**	**99,024**	**11.4%**	**608**	**0.6%**
General / Admin								
Wages	8.7%	518,100	7.9%	76,800	68,782	7.9%	(8,018)	(10.4%)
Employer Costs	4.6%	276,500	4.5%	43,900	41,094	4.7%	(2,806)	(6.4%)
Insurance	1.4%	86,400	1.5%	14,400	15,417	1.8%	1,017	7.1%
Legal	**1.0%**	60,000	1.0%	10,000	15,404	1.8%	5,404	54.0%
Office Supplies	0.4%	22,800	0.4%	3,800	1,199	0.1%	(2,601)	(68.4%)
Director Meetings	0.3%	18,000	0.3%	3,000	1,500	0.2%	(1,500)	(50.0%)
Telephones	0.1%	5,400	0.1%	900	1,563	0.2%	663	73.7%
Information Systems	1.3%	77,450	1.1%	10,972	11,477	1.3%	505	4.6%
Community Communications	0.1%	5,900	0.1%	900	468	0.1%	(432)	(48.0%)
Postage	0.4%	21,600	0.4%	3,600	3,200	0.4%	(400)	(11.1%)
Janitorial/Landscape Maint	0.3%	17,040	0.3%	2,865	2,608	0.3%	(257)	(9.0%)
Other	1.6%	97,320	1.1%	10,805	7,560	0.9%	(3,245)	(30.0%)
Subtotal General / Admin	**20.2%**	**1,206,510**	**18.7%**	**181,942**	**170,272**	**19.6%**	**(11,670)**	**(6.4%)**
Total Operating Expenses	***100.0%***	***5,977,570***	***100.0%***	***975,463***	***870,892***	***100.0%***	***(104,571)***	***(10.7%)***
Operating Income (Loss)	***100.0%***	***16,726***	***100.0%***	***106,555***	***255,684***	***100.0%***	***149,129***	***140.0%***
Non-Operating Expenses								
Sewer Reserve Expenditure	100.0%	16,836	0.0%			0.0%		0.0%
Total Non-Operating Expenses	***100.0%***	***16,836***	***0.0%***			***0.0%***		***0.0%***
Net Income (Loss)	***100.0%***	***(110)***	***100.0%***	***106,555***	***255,684***	***100.0%***	***149,129***	***140.0%***

PREPARED BY: Eric Thompson, Controller

REVIEWED BY: _____, *District Treasurer*

Rancho Murieta Community Services District

Budget Performance Report by FUND
YTD THROUGH AUGUST 2016

	% of Total	Annual Budget	% of Total	YTD Budget	YTD Actuals	% of Total	YTD VARIANCE Amount	YTD VARIANCE %
WATER								
REVENUES								
Water Charges	98.4%	$1,939,830	99.0%	$407,754	$443,081	97.2%	$35,327	8.7%
Interest Earnings	0.1%	2,530	0.0%	30	151	0.0%	121	403.3%
Other Income	1.4%	28,160	1.0%	4,210	12,625	2.8%	8,415	199.9%
Total Water Revenues	**100.0%**	**1,970,520**	**100.0%**	**411,994**	**455,857**	**100.0%**	**43,863**	**10.6%**
EXPENSES (excluding depreciation)								
Wages	28.8%	491,940	23.6%	75,384	90,272	31.4%	14,888	19.7%
Employer Costs	14.1%	240,620	12.0%	38,340	43,213	15.0%	4,873	12.7%
Power	14.9%	254,240	10.8%	34,490	23,027	8.0%	(11,463)	(33.2%)
Chemicals	7.3%	124,100	6.9%	21,885	15,806	5.5%	(6,079)	(27.8%)
T&O - Chemicals/Treatment	0.4%	7,200	0.8%	2,400	7,375	2.6%	4,975	207.3%
Maint & Repair	8.3%	142,000	9.7%	31,060	19,173	6.7%	(11,887)	(38.3%)
Meters/Boxes	3.2%	54,000	2.6%	8,250	1,199	0.4%	(7,051)	(85.5%)
Lab Tests	1.6%	28,000	1.3%	4,000	2,430	0.8%	(1,570)	(39.3%)
Permits	1.9%	32,000	1.6%	5,000	3,185	1.1%	(1,815)	(36.3%)
Training/Safety	0.5%	9,300	0.4%	1,350	954	0.3%	(396)	(29.3%)
Equipment Rental	1.2%	21,000	0.6%	2,000		0.0%	(2,000)	(100.0%)
Other Direct Costs	17.7%	301,140	29.7%	94,885	80,615	28.1%	(14,270)	(15.0%)
Operational Expenses	**100.0%**	**1,705,540**	**100.0%**	**319,044**	**287,249**	**100.0%**	**(31,795)**	**(10.0%)**
Water Income (Loss)	**15.5%**	**264,980**	**29.1%**	**92,950**	**168,608**	**58.7%**	**75,658**	**81.4%**
38.9% Net Admin Alloc	**15.5%**	**265,061**	**11.5%**	**36,847**	**32,168**	**11.2%**	**(4,679)**	**(12.7%)**
Total Net Income (Loss)	***0.0%***	***(81)***	***17.6%***	***56,103***	***136,440***	***47.5%***	***80,337***	***143.2%***
SEWER								
REVENUES								
Sewer Charges	98.6%	1,312,546	98.7%	218,608	217,168	98.0%	(1,440)	(0.7%)
Interest Earnings	0.0%	180	0.0%	30	151	0.1%	121	403.3%
Other Income	1.4%	18,500	1.3%	2,864	4,247	1.9%	1,383	48.3%
Total Sewer Revenues	**100.0%**	**1,331,226**	**100.0%**	**221,502**	**221,566**	**100.0%**	**64**	**0.0%**
EXPENSES (excluding depreciation)								
Wages	31.9%	355,290	31.8%	54,444	38,214	30.5%	(16,230)	(29.8%)
Employer Costs	15.6%	173,280	16.2%	27,690	21,012	16.8%	(6,678)	(24.1%)
Power	10.4%	115,500	8.3%	14,300	18,317	14.6%	4,017	28.1%
Chemicals	5.2%	58,040	9.0%	15,500	7,841	6.3%	(7,659)	(49.4%)
Maint & Repair	16.7%	186,250	12.8%	22,000	15,989	12.8%	(6,011)	(27.3%)
Lab Tests	1.5%	16,200	1.6%	2,700	3,477	2.8%	777	28.8%
Permits	3.2%	35,100	3.0%	5,215	6,472	5.2%	1,257	24.1%
Training/Safety	1.1%	12,200	2.9%	4,900	1,086	0.9%	(3,814)	(77.8%)
Equipment Rental	0.9%	10,200	1.1%	1,950		0.0%	(1,950)	(100.0%)
Other Direct Costs	13.5%	149,960	13.2%	22,587	12,897	10.3%	(9,690)	(42.9%)
Operational Expenses	**100.0%**	**1,112,020**	**100.0%**	**171,286**	**125,305**	**100.0%**	**(45,981)**	**(26.8%)**
Sewer Income (Loss)	**19.7%**	**219,206**	**29.3%**	**50,216**	**96,261**	**76.8%**	**46,045**	**91.7%**
29.7% Net Admin Alloc	**18.2%**	**202,373**	**16.4%**	**28,132**	**24,560**	**19.6%**	**(3,572)**	**(12.7%)**
Reserve Expenditures	**1.5%**	**16,836**	**0.0%**			**0.0%**		**0.0%**
Total Net Income (Loss)	***0.0%***	***(3)***	***12.9%***	***22,084***	***71,701***	***57.2%***	***49,617***	***224.7%***
DRAINAGE								
REVENUES								
Drainage Charges	100.0%	189,270	100.0%	31,546	31,334	100.0%	(212)	(0.7%)
Interest Earnings	0.0%	50	0.0%	15		0.0%	(15)	(100.0%)
Total Drainage Revenues	**100.0%**	**189,320**	**100.0%**	**31,561**	**31,334**	**100.0%**	**(227)**	**(0.7%)**
EXPENSES (excluding depreciation)								
Wages	43.2%	63,770	44.7%	9,772	7,854	54.2%	(1,918)	(19.6%)
Employer Costs	21.1%	31,110	22.7%	4,970	4,859	33.5%	(111)	(2.2%)
Power	6.6%	9,800	4.6%	1,000	1,011	7.0%	11	1.1%
Chemicals	3.4%	5,000	6.9%	1,500	754	5.2%	(746)	(49.7%)
Maint & Repair	8.1%	11,900	9.2%	2,000		0.0%	(2,000)	(100.0%)
Permits	4.1%	6,000	0.0%			0.0%		0.0%
Equipment Rental	3.2%	4,730	0.0%			0.0%		0.0%
Other Direct Costs	10.5%	15,450	12.0%	2,615	18	0.1%	(2,597)	(99.3%)
Operational Expenses	**100.0%**	**147,760**	**100.0%**	**21,857**	**14,496**	**100.0%**	**(7,361)**	**(33.7%)**
Drainage Income (Loss)	**28.1%**	**41,560**	**44.4%**	**9,704**	**16,838**	**116.2%**	**7,134**	**73.5%**
6.1% Net Admin Alloc	**28.1%**	**41,565**	**26.4%**	**5,778**	**5,044**	**34.8%**	**(734)**	**(12.7%)**
Total Net Income (Loss)	***0.0%***	***(5)***	***18.0%***	***3,926***	***11,794***	***81.4%***	***7,868***	***200.4%***
SECURITY								
REVENUES								
Security Charges	94.8%	1,268,890	94.8%	211,480	210,230	94.1%	(1,250)	(0.6%)
Interest Earnings	0.0%	400	0.0%	100		0.0%	(100)	(100.0%)
Property Tax	1.4%	19,360	1.4%	3,226	10,840	4.9%	7,614	236.0%
Property Tax (Reserve Alloc)	0.0%		0.0%		(7,613)	-3.4%	(7,613)	0.0%

Rancho Murieta Community Services District

Budget Performance Report by FUND
YTD THROUGH AUGUST 2016

	% of Total	Annual Budget	% of Total	YTD Budget	YTD Actuals	% of Total	YTD VARIANCE Amount	YTD VARIANCE %
Other Income	3.7%	$49,160	3.7%	$8,192	$9,843	4.4%	$1,651	20.2%
Total Security Revenues	**100.0%**	**1,337,810**	**100.0%**	**222,998**	**223,300**	**100.0%**	**302**	**0.1%**
EXPENSES (excluding depreciation)								
Wages	56.5%	677,600	55.7%	101,800	98,522	56.4%	(3,278)	(3.2%)
Employer Costs	32.5%	389,600	33.6%	61,500	57,543	33.0%	(3,957)	(6.4%)
Equipment Repairs	0.4%	4,900	0.4%	734	162	0.1%	(572)	(77.9%)
Vehicle Maintenance	0.8%	9,600	0.9%	1,600	577	0.3%	(1,023)	(63.9%)
Vehicle Fuel	1.4%	16,800	1.5%	2,800	2,790	1.6%	(10)	(0.4%)
Off Duty Sheriff Patrol	0.3%	4,000	1.5%	2,700	1,527	0.9%	(1,173)	(43.4%)
Other	8.1%	97,030	6.4%	11,784	13,425	7.7%	1,641	13.9%
Operational Expenses	**100.0%**	**1,199,530**	**100.0%**	**182,918**	**174,546**	**100.0%**	**(8,372)**	**(4.6%)**
Security Income (Loss)	**11.5%**	**138,280**	**21.9%**	**40,080**	**48,754**	**27.9%**	**8,674**	**21.6%**
20.3% Net Admin Alloc	**11.5%**	**138,322**	**10.5%**	**19,229**	**16,787**	**9.6%**	**(2,442)**	**(12.7%)**
Total Net Income (Loss)	***0.0%***	***(42)***	***11.4%***	***20,851***	***31,967***	***18.3%***	***11,116***	***53.3%***
SOLID WASTE								
REVENUES								
Solid Waste Charges	100.0%	640,000	99.9%	106,668	106,941	100.0%	273	0.3%
Interest Earnings	0.0%	300	0.1%	75		0.0%	(75)	(100.0%)
Total Solid Waste Revenues	**100.0%**	**640,300**	**100.0%**	**106,743**	**106,941**	**100.0%**	**198**	**0.2%**
EXPENSES (excluding depreciation)								
CWRS Contract	91.7%	555,700	94.1%	92,616	93,220	94.1%	604	0.7%
Sacramento County Admin Fee	5.7%	34,800	5.9%	5,800	5,804	5.9%	4	0.1%
HHW Event	2.6%	15,710	0.0%			0.0%		0.0%
Operational Expenses	**100.0%**	**606,210**	**100.0%**	**98,416**	**99,024**	**100.0%**	**608**	**0.6%**
Solid Waste Income (Loss)	**5.6%**	**34,090**	**8.5%**	**8,327**	**7,917**	**8.0%**	**(410)**	**(4.9%)**
5.0% Net Admin Alloc	**5.6%**	**34,069**	**4.8%**	**4,736**	**4,135**	**4.2%**	**(601)**	**(12.7%)**
Total Net Income (Loss)	***0.0%***	***21***	***3.6%***	***3,591***	***3,782***	***3.8%***	***191***	***5.3%***
OVERALL NET INCOME(LOSS)	***100.0%***	***(110)***	***100.0%***	***106,555***	***255,684***	***100.0%***	***149,129***	***140.0%***

PREPARED BY: Eric Thompson, Controller

REVIEWED BY: _____, *District Treasurer*

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

INVESTMENT REPORT

CASH BALANCE AS OF AUGUST 31, 2016

INSTITUTION	YIELD	BALANCE
CSD FUNDS		
EL DORADO SAVINGS BANK		
SAVINGS	0.03%	$ 531,750.61
CHECKING	0.02%	$ 51,344.03
PAYROLL	0.02%	$ 17,176.62
BANNER BANK		
EFT	0.00%	$ 66,101.28
LOCAL AGENCY INVESTMENT FUND (LAIF)		
UNRESTRICTED	0.61%	$ 1,398,830.42
RESTRICTED RESERVES	0.61%	$ 4,032,386.05
CALIFORNIA ASSET MGMT (CAMP)		
OPERATION ACCOUNT	0.59%	$ 600,949.94
UNION BANK		
PARS GASB45 TRUST (balance as of 7/31/16)		$ 1,157,334.95
TOTAL		$ 7,855,873.90
BOND FUNDS		
COMMUNITY FACILITIES DISTRICT NO. 1 (CFD)		
BANK OF AMERICA		
CHECKING	0.00%	$ 18,627.34
CALIFORNIA ASSET MGMT (CAMP)		
SPECIAL TAX	0.59%	$ 8,342.76
COMMUNITY FACILITIES DISTRICT NO. 2014-1 (CFD)		
BANK OF AMERICA		
CHECKING	0.00%	$ 525,912.35
WILMINGTON TRUST (balance as of 3/31/16)		
BOND RESERVE FUND	0.02%	$ 391,636.41
BOND ADMIN EXPENSE	0.02%	$ 40,413.65
BOND SPECIAL TAX FUND	0.02%	$ 238,430.67
BOND ACQ & CONSTRUCTION	0.02%	$ 862.64
BOND REDEMPTION ACCOUNT	0.02%	$ -
BOND COI	0.02%	$ -
BOND SURPLUS	0.02%	$ -
		$ 1,224,225.82
TOTAL ALL FUNDS		$ 9,080,099.72

The investments comply with the CSD adopted investment policy.

PREPARED BY: Eric Thompson, Controller

REVIEWED BY: Darlene J. Gillum *District Treasurer*

Change Order Detail

Shared Cost Change Orders (Split between CSD/CFD#1/CFD2014-1):

Completed (Shared) Change Orders:

#	Status	Description	Amt	Remaining
0.028	COMPLETE	Bid Div 28 SCADA console Allowance	$ 1,738	$ -
1	COMPLETE	Remove proj contigency from trade contr	$ -	
2	COMPLETE	JDP - Drying bed extension shotcrete	$ 5,648	$ -
3	COMPLETE	KGW/JDP - FM change of material	$ 2,888	$ -
4	COMPLETE	JDP - 2" Conduit for Fiber	$ 26,264	$ -
5	COMPLETE	JDP - CLSM trench at lower yard	$ 3,300	$ -
6	COMPLETE	JDP - drying bed clean out	$ 1,882	$ -
7	COMPLETE	Boring of 2" FM (IBA)	$ -	$ -
8	COMPLETE	RFI #024, replace corroded FCA	$ 6,623	$ -
9	COMPLETE	RFI #009, TW Booster pump station slab	$ 6,029	$ -
10	COMPLETE	ASI #01, check valve/concrete fillet	$ 7,018	$ -
11	COMPLETE	NAOH added slab at tank yard	$ 4,091	$ -
14	COMPLETE	RFI #28, conduit & chem trench vault conflict	$ 11,700	$ -
15	COMPLETE	SWPPP Maintenance	$ -	$ -
16	COMPLETE	16" Water Main Repair	$ 7,000	$ -
17	COMPLETE	Addl gunite for drying bed extension	$ 2,946	$ -
18	COMPLETE	KGW - Door 302 added lockset	$ 345	$ -
19	COMPLETE	Zenon - GE dimension Clar.Support Grate	$ 2,815	$ -
21	COMPLETE	RFI #19, Transformer Relocation	$ 1,542	$ -
22	COMPLETE	Unsuitable soil delays	$ 17,041	$ -
23	COMPLETE	Temp Power Switchover	$ 3,070	$ -
24	DELETION	RFI #024, deleted ARV at sta 227+47	$ (5,008)	$ -
26	COMPLETE	SWPPP Maintenance	$ -	$ -
27	DELETION	Upper Tank Yard Pad Prep	$ (492)	$ -
30	COMPLETE	RFI #060, relocate 12" line for stair conflt	$ 1,725	$ -
35	COMPLETE	RFI #041, CIP Line Relocation	$ 5,561	$ -
36	COMPLETE	GE Upgraded Maintenance Table	$ 5,013	$ -
38	COMPLETE	CIP Heater Control MCC	$ 4,415	$ -
39	COMPLETE	FS Structural Consulting	$ 1,093	$ -
40	COMPLETE	Additional Spare Parts	$ 2,600	$ -
42	COMPLETE	RFI#043.1 Flocculation covers	$ 29,745	$ -
43	COMPLETE	RCMS Trailer Power Hookup	$ -	$ -
44	COMPLETE	Temp 3" & 4" hot tap at 16" TW	$ 8,794	$ -
45	COMPLETE	1" Motorized ball valves for chlorination equip	$ 5,306	$ -
46	COMPLETE	Temp Lab Water Connection (Operations Expense)	$ 4,501	$ -
47	COMPLETE	Generator Pad Size Changes	$ 8,317	$ -
49	COMPLETE	ASI#03 additional eyewash/shower in basin	$ 1,855	$ -
52	COMPLETE	BWW & reject Flow Meters	$ 26,653	$ -
57	COMPLETE	SWPPP Maintenance	$ -	$ -
58/180	COMPLETE	Temp Filter Trailer Connections (Operations Expense)	$ 94,781	$ -
60	COMPLETE	AER (E) Fan Demo and Plywood Vents	$ 5,860	$ -
61	COMPLETE	Clay Pipe at pump station	$ 6,487	$ -
62	COMPLETE	Unsuitable material under pump station	$ 6,124	$ -
63	COMPLETE	R&R Siding at West Side Plant 1	$ 2,120	$ -
64	COMPLETE	Additional Painting Control Room Ceiling & Walls	$ 2,230	$ -
65	DELETION	Delete control panels & VFD for KGW pumps	$ (9,300)	$ -
67	COMPLETE	Dewatering for FM at front of plant	$ 567	$ -
69	COMPLETE	RFI #084, Pump Station Bar Beams	$ 286	$ -
70	DELETION	Paint (E) Chlorine Room	$ 3,280	$ -

#	Status	Description	Amt	Remaining
72	COMPLETE	Modify Crane Stops	$ 4,700	$ -
75	COMPLETE	RFI#037, chemical conduit trench pathway	$ 38,430	$ -
81	COMPLETE	Lightpole at Pump Station	$ 4,104	$ -
83	COMPLETE	Wall opening at backwash basins	$ 4,939	$ -
86	COMPLETE	Pipe gallery valves and bolts replacement	$ 5,360	$ -
87	DELETION	Reverse CE#70 paint (E) chlorine room	$ (3,280)	$ -
89	COMPLETE	RFI#102 Underdrain wall elevation descrpancy	$ 1,240	$ -
90	COMPLETE	2" FM ARV at septic tank	$ 1,483	$ -
93	COMPLETE	Concrete fillet at backwash basin conflick with ladder	$ 659	$ -
94	COMPLETE	RFI#081 Waterstop at wet well	$ 1,185	$ -
95	COMPLETE	TW bell restrain	$ 549	$ -
97	COMPLETE	Slide Gates at flocc basin	$ 10,328	$ -
98	COMPLETE	Clean CCT basin	$ 9,946	$ -
99	COMPLETE	Grating at overflow channel	$ 4,976	$ -
100	COMPLETE	Cable Tray rack in basin (power & signal)	$ 1,823	$ -
102	COMPLETE	IP camera upgrade	$ 456	$ -
106	COMPLETE	Flocculator surrounding concreete uneven	$ 3,966	$ -
107	COMPLETE	Modify flocculation covers for relocated slide gates	$ 4,025	$ -
114	COMPLETE	Flocc motor power/signal conduit	$ 12,533	$ -
115	COMPLETE	Phone line from (e) termination board to (N) PLC	$ 3,417	$ -
116	COMPLETE	Generator Slab duck bank conflict	$ 425	$ -
117	COMPLETE	RFI#122 Chemical injectors	$ 2,829	$ -
118	COMPLETE	Temp Filter Trailer Disassembly	$ 2,627	$ -
119	COMPLETE	Handrail extension	$ 1,247	$ -
120	COMPLETE	Generator control peripheral module	$ 2,791	$ -
121	COMPLETE	RFI#110 safety air exhaust valves	$ 1,724	$ -
122	COMPLETE	Plug holes at feed channel pvc	$ 2,142	$ -
125	COMPLETE	RFI#145 gable end canopy supports	$ 11,425	$ -
127	COMPLETE	Metal studs attachment to structure	$ 19,148	$ -
129	COMPLETE	RFI#139 ACH & CLS chemical diffusers	$ 1,612	$ -
132	COMPLETE	Replace siding ancillary room & flocc basin	$ 3,680	$ -
133	COMPLETE	RFI#133 RW sample pump	$ 4,119	$ -
134	COMPLETE	Retaining Wall at pipe gallery	$ 1,467	$ -
135	COMPLETE	ASI#03 HCL acid fume scrubber	$ 1,701	$ -
136	COMPLETE	RFI#144 Neutralization tank LIT connection	$ 916	$ -
138	COMPLETE	Future pump pad	$ 1,349	$ -
139	COMPLETE	TWPS hatch drain relocation	$ 516	$ -
140	COMPLETE	Membrane covers modify attachment	$ 2,504	$ -
144	COMPLETE	Collapsed shoring hole at TWBPS	$ 3,209	$ -
145	COMPLETE	Unload & reorganize filters	$ 2,630	$ -
146	COMPLETE	Overflow through equip blockout	$ 989	$ -
148	COMPLETE	Replace lamps of (E) light poles with LED	$ 2,531	$ -
151	COMPLETE	RFI#130.1 Modify control room ductwork	$ 2,024	$ -
152	COMPLETE	Field fabricate weir for TWBPS	$ 929	$ -
153	COMPLETE	Plant 2 at (E) doorway dryrot (Operations Expense)	$ 2,020	$ -
154	COMPLETE	Plant 1 siding dryrot at roof line & control room window	$ 6,005	$ -
155	COMPLETE	Air compressor switching panel	$ 3,664	$ -
156	COMPLETE	2" bulkhead fitting at upper tank yard	$ 841	$ -
158	COMPLETE	ZO & LAC lines relocated	$ 2,257	$ -
159	COMPLETE	Replacement of 12" FCA in pipe gallery	$ 8,129	$ -
160	COMPLETE	Relocate SCADA server to hallway	$ 2,195	$ -
166	COMPLETE	Chemical pipe enclosures	$ 932	$ -
167	COMPLETE	Access hatch hold opens	$ 1,033	$ -
168	COMPLETE	ASI#2 added backpulse LIT	$ 12,224	$ -

#	Status	Description	Amt	Remaining
169	COMPLETE	Add room id signage per submittal	$ 758	$ -
171	COMPLETE	Interconnect to district internet	$ 1,165	$ -
172	COMPLETE	RFI#168 RW pipe encasement & slab modification	$ 10,212	$ -
174	COMPLETE	Additional control wires to plate settler	$ 899	$ -
175	COMPLETE	RFI#149 PD line routing modification	$ 5,662	$ -
176	COMPLETE	RFI#098 Heat Trace TWBPS	$ 12,880	$ -
177	COMPLETE	Relocate RW cyanometer	$ 4,477	$ -
178	COMPLETE	Temp piping for comissioning	$ 1,697	$ -
181	COMPLETE	ASI#02 piping changes to system	$ 20,066	$ -
182	COMPLETE	20-FV-350 control wires to LCP-CON-1002	$ 1,517	$ -
183	COMPLETE	TW Sample Line	$ 1,263	$ -
184	COMPLETE	Temp CL bypass	$ 408	$ -
185	COMPLETE	RFI#175 High level alarm in sump pump	$ 8,186	$ -
187	COMPLETE	CIP heater relay box relocation	$ 3,624	$ -
188	COMPLETE	NaOH tank heat trace panel	$ 2,824	$ -
189	COMPLETE	Blower flow switch 24V POWER	$ 1,446	$ -
190	COMPLETE	Lower yard vermin hole exposed during pave prep	$ 1,500	$ -
191	COMPLETE	Screens at flash mix overflow	$ 652	$ -
192	COMPLETE	AIT-PH-1750, AIT-PH-101 CIF pump signal to GE Panel	$ 3,207	$ -
194	COMPLETE	Membrane filter installation	$ 6,923	$ -
195	COMPLETE	RFI#1181 relocate feed channel LIT	$ 1,008	$ -
196	COMPLETE	RFI#180 Existing pipe gallery sump	$ 1,090	$ -
197	COMPLETE	Relocate backpulse LIT	$ 952	$ -
203	COMPLETE	Extra Excavation for 18" FLT tie in	$ 4,785	$ -
213	COMPLETE	Owner Directed Change Order contingency reimbursemer	$ 150,243	$ -
			$ 796,570	**$ -**

Non-Completed (Shared) Change Orders:

#	Status	Description	Amt	Remaining
179	APPROVED	Bird netting at canopy	$ 28,051	$ 28,051
207	APPROVED	Owner Change Order #17 Offset	$ (50,241)	$ (38,047)
157	APPROVED	Ancillary room (E) soffit opening infill	$ 2,390	$ 2,390
			$ (19,800)	**$ (7,606)**

CSD-Only Change Orders:

Completed (CSD-Only) Change Orders:

#	Status	Description	Amt	Remaining
25	COMPLETE	Drying Bed cleanout and sand infill (CSD only)	$ 13,482	**$ -**
34	COMPLETE	Plant 2 SLC Ethernet connection (CSD only)	$ 8,527	$ -
12	COMPLETE	Siding Replacement-Hardie Board (CSD only)	$ 91,466	$ -
			$ 113,475	**$ -**

Non-Completed (CSD-Only) Change Orders:

#	Status	Description	Amt	Remaining

Period ending: August 31, 2016

HARD CONSTRUCTION COSTS *(via Roebbelen)*

Project Construction Summary							Source of Funding		
Contractor	Work Type	Contract Amount	% Billed to Date	Amount Billed to Date	Amount Billed This Month	Contract Amount Remaining	CSD $4.358 million	R&B LOC $4.136 million	CFD 2014 $3.818m Ph 1 $0.540m Ph 2
Roebbelen Construction Management Services	General Conditions	781,205	100%	778,393	5,000	2,812	283,343	249,361	245,689
River City Painting	Painting	291,000	100%	291,000	-	-	108,803	84,454	97,744
GE Technology	Membrane Supplier	2,173,800	100%	2,173,800	-	-	776,751	713,767	683,282
JD Pasquetti	Sitework	555,659	100%	555,659	-	-	315,436	117,474	122,749
Roebbelen Construction	Fencing	53,640	100%	53,640	-	-	43,254	5,402	4,984
KG Walters Construction	Mechanical & Plumbing	4,893,000	100%	4,893,000	-	-	1,768,515	1,578,949	1,545,537
Bockmon & Woody Electric	Electrical	2,370,266	100%	2,369,266	4,000	1,000	846,761	782,171	740,334
Marquee	Fire Protection	42,500	100%	42,500	-	-	20,319	2,142	20,039
Contract Changes	Hardie Board, Temp Filtration, Bird Netting, Taxes, Etc.	483,136	94%	455,086	150,243	28,051	304,843	-	-
Total Construction Contracts (with 534,318 Contingency = 11,911,705)		**11,644,206**	**100%**	**11,612,344**	**159,243**	**31,863**	**4,468,025**	**3,533,719**	**3,460,357**

Change Order Summary									
APPROVED CHANGE ORDERS:									
Max Contract Change Order Amount		534,318							
Shared Completed Change Orders (Invoiced/Paid)		534,502					261,218	109,130	164,153
CSD Only Completed Change Orders (Invoiced/Paid)*		26,510					26,510		
Approved Change Orders (Not Invoiced)		(35,657)							
	Total Completed/Approved CO	**525,355**							
	Amount CO remaining	**8,963**							
PROPOSED CHANGE ORDERS:		-							
	Amount CO remaining *(if Proposed COs are approved)*	**8,963**							
OTHER:									
Bay Area Coating Consulting Services	**Contigency amt outside of Roebbelen contract *(approved BOD 11/19/15)*	15,000	91%	13,622	-	1,378	4,822	4,577	4,223
Sholl Construction	**Membrane Sealing contingency amt oustide of Roebbelen contract	4,576	100%	4,576	-	-	1,620	1,538	1,419

** CSD Only Change Orders are in addition to the CSD share of $4.358m*

Total Adjusted Construction Contracts *(hard costs + CO's)*	**12,189,137**				**Total Billed to Date**	**4,762,195**	**3,648,964**	**3,630,152**

SOFT CONSTRUCTION COSTS *(CSD Direct Expenses to be shared equally)*

Service Cost Summary							Source of Funding		
Item	Company/Agency	Estimated Soft Cost	Contract/Actual Soft Cost	Amount Billed to Date	Amount Billed This Month	Contract Amount Remaining	CSD $4.358 million	R&B LOC $4.136 million	CFD 2014 $3.818m Ph 1 $0.540m Ph 2
Preconstruction CM Assistance	Roebbelen CMS	49,049	49,049	49,049	-	-	17,363	16,480	15,205
Design Engineering	HDR Engineering	240,000	239,982	239,982	-	-		239,982	
CEQA NOI/MND	HDR Engineering	40,000	71,070	63,559	-	7,511	5,583	53,088	4,889
Design Geotech	Youngdahl and Associates	3,000	2,600	2,600	-	-	920	874	806
Construction Engineering Assistance	HDR Engineering	150,000	276,328	276,324	-	4	110,247	78,243	87,834
Special Construction Inspection	Youngdahl and Associates	50,000	48,603	48,167	-	436	17,547	15,292	15,328
Misc Fees				709	-	-	251	238	220
SMUD Service	SMUD	5,000	31,632	31,632	-	-	11,198	10,628	9,806
Generator Permit	Sac County Air Quality Mgmt	5,000	5,000	-	-	5,000	-		-
State Clearinghouse for CEQA	State of CA	3,000	3,000	-	-	3,000	-		-
Fish & Wildlife Agency Permits	State of CA	2,000	2,000	921	-	1,079	326	310	286
Ca Dept Health Review	State of CA	5,000	5,000	-	-	5,000	-		-
Road Mitigation	RMA	8,000	12,000	12,000	-	-	4,248	4,032	3,720
CSD Admin, Legal and Engineering (CFD 2014 Max per FSA = $50K)	CSD	50,000	50,000	275,678	-	-	157,710	67,968	50,000
Total		**610,049**	**796,264**	**1,000,621**	**-**	**22,030**	**325,393**	**487,135**	**188,093**

Grand Total (Construction and soft costs) **12,974,788** **13,192,175**

Additional Info	
Total Retainage to Date:	171,186

Note:
-- As of September 30, 2015, R&B LOC funding cap had been reached.
-- As of February 29, 2016, CFD 2014-1 funding cap had been reached.

		*See Note	
Total Hard/Soft Costs	5,087,588	4,136,099	3,818,245
Less: Funds Received		(4,136,099)	(3,818,245)
Pending Draw Request		0	0
Total Outstanding Amount		**0**	**0**

***CFD 2014-1 Draw Amount Based on Cashflow per FSA*

MEMORANDUM

Date: September 12, 2016

To: Board of Directors

From: Paul Wagner, Security Chief

Subject: Security Report for the Month of August 2016

OPERATIONS

The new Gate Officer started on August 20, 2016 and is doing an excellent job. I believe she will be an excellent addition to the team.

Patrol Officer interviews were held and a candidate has been made an offer of employment. He has many years of law enforcement as a police officer in the Central Valley as well as security supervisor experience. He will start his training September 17, 2016.

Purchase of a new District patrol vehicle (Jeep Patriot). The signage and equipment are in the process of being installed. Once the new vehicle has been signed, the "old" Patriot will be taken to the company that installs the radio equipment and lights. In turn, once that vehicle has been completed, the new vehicle will have the equipment installed. I expect both new vehicles will be fully patrol ready within 2-3 weeks.

After some research and consideration regarding the use and authority for amber lights to be mounted and displayed, we have come to the conclusion that there is a Vehicle Code Section that does apply to the District having them, thus legally allowing their use. Vehicle Code Section 25277 states:

> *Any vehicle used by any police department, sheriff's office, or other governmental agency for the purpose of enforcing parking laws contained in the Vehicle Code or in a local ordinance or regulation may display flashing or revolving amber warning lights to the front, sides, or rear of the vehicle when actually engaged in the enforcement of such laws and when either necessarily stopped on a street, or when moving at a speed slower than the normal flow of traffic*.

I forwarded this section to District Council, Richard Shanahan, who agreed with my finding. He stated in an email, *"Section 25277 is a good find. The District is a government agency and, as you explain, the District from time to time enforces parking laws. Additionally, the Community Services District Law contains a special provision that authorizes the District to enforce the homeowners association CCRs (Govt. Code § 61105(e)) and the RMA CCRs include parking regulations and restrictions. I concur that section 25277 applies to the District for the parking enforcement-related purposes described in the statute and that it provides authority to justify and authorize the existence of the light bar on the security vehicles*."

I have an existing quote from "Emergency Vehicles Outfitters" in Elk Grove for the complete install of the radios/light bar and equipment for each of the new Patriots at $2,814 per vehicle. I estimate that each light bar ($1,100 included in the estimate) will last approximately 10 years of service and several patrol vehicles and can be removed and installed on new vehicles.

INCIDENTS OF NOTE

August 2, assist at the Country Store for a stolen vehicle pulled over by California Highway Patrol (CHP).

August 12, domestic incident at Country Store parking lot. Male and female argument with both parties separating and family picking up the female half from the store.

August 20, hit and run. Unknown vehicle backed into victim's vehicle in driveway. No subject vehicle information.

August 22, trespass at the Murieta Village pool. Resident was notified by management regarding revoked access of the common areas, and was inside the pool area. Subject was advised by Sergeant Scarzella and left.

August 24, suspicious circumstance. Intoxicated WFA attempted to enter a residence she thought was hers. The female was contacted by Security Patrol and became argumentative and slightly combative. Sacramento County Sheriff's Department (SSD) was called and took the WFA into custody for 647 (f) PC (Public Intoxication).

RANCHO MURIETA ASSOCIATION COMPLIANCE/GRIEVANCE/SAFETY COMMITTEE MEETING

The meeting is scheduled to be held on September 12, 2016. I will be on vacation at that time, however Sergeant Scarzella will attend.

SECURITY DATA UPDATE

All of the security data update forms have been sent out and we have received almost all of them back. We are in the process of inputting them into the system (ABDI) and should be done soon.

INCIDENT MAP AND EMERGENCY EXIT MAP

I am still in the process of creating and finalizing the emergency map as well as the incident map. The plan is to add an Incident Map and Emergency Exit Map to the District website. The Incident Map will show locations of incidents of note, such as thefts and vandalism. This will help track any patterns of incidents to help direct patrol resources to those areas. The Emergency Exit Map will show additional exit locations, such as locked gates, that could allow vehicle traffic out of the North and South residential areas in the event of an emergency.

MEMORANDUM

Date: September 8, 2016

To: Board of Directors

From: Paul Siebensohn, Director of Field Operations

Subject: Water/Wastewater/Drainage Report

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

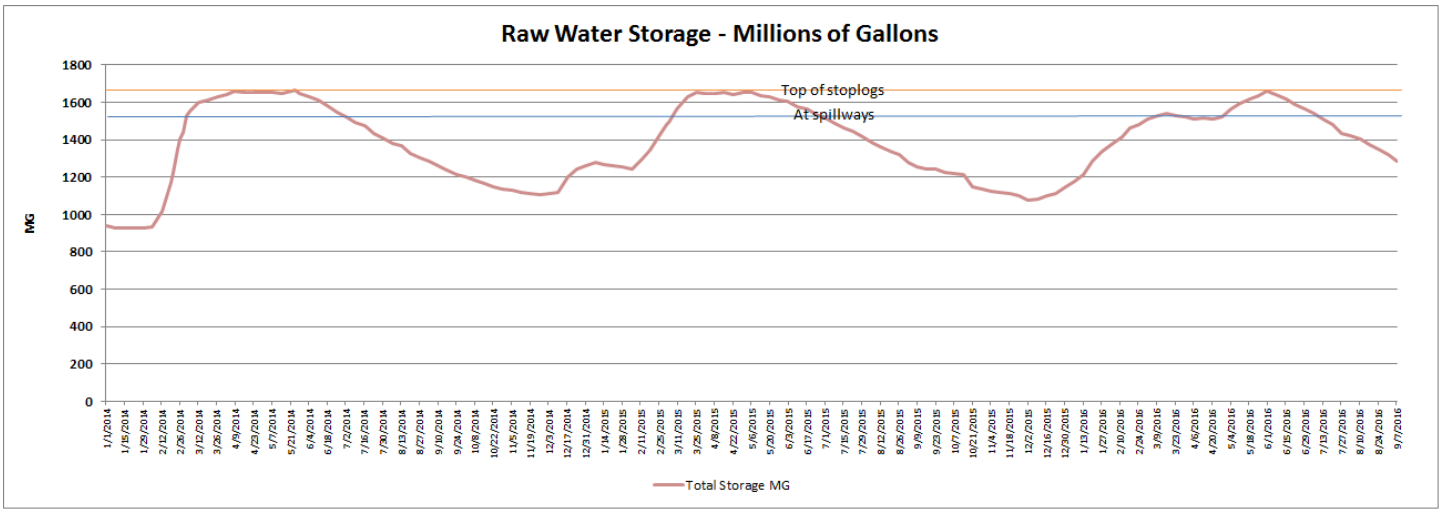
WATER

Plant 1 (the ultrafiltration plant) is operating at 1.0 million gallons per day (mgd) and Plant 2 is operating at 1.0 mgd to provide the District's water needs, which recently averaged around 1.98 mgd. Water treatment plant production flow for August was 63,205,000 gallons (194 acre-feet). Plant 2 is continuing to operate in conjunction with Plant 1 as testing of the SCADA control system of each facility continues.

WATER SOURCE OF SUPPLY

The combined raw water storage for Calero, Chesbro, and Clementia Reservoirs, on September 7, 2016, measured approximately 1,284.2 MG (3,941.4 AF) of which 1,120.3 MG (3,438.3 AF) is usable due to dead storage. For Calero and Chesbro Reservoirs alone, the storage measured 988.7 MG (3,034.3 AF), or 939.3 MG (2,581.3 AF) usable. Rainfall totaled 0.0" and evaporation measured 8.79". Calero Reservoir was treated for algae prevention on August 16, 2016. Despite the seasonal warming of the reservoirs, algae and taste and odor compounds from them have been under control and minimally detectable.

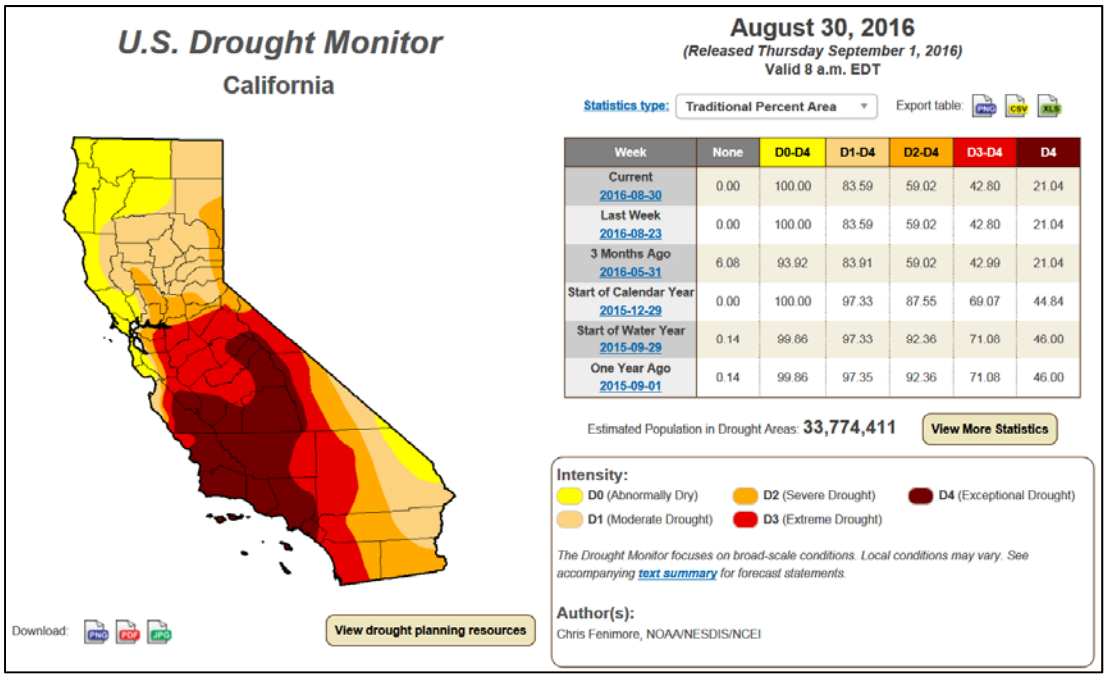
Below is a graphical representation of the storage reservoir levels this year to date.

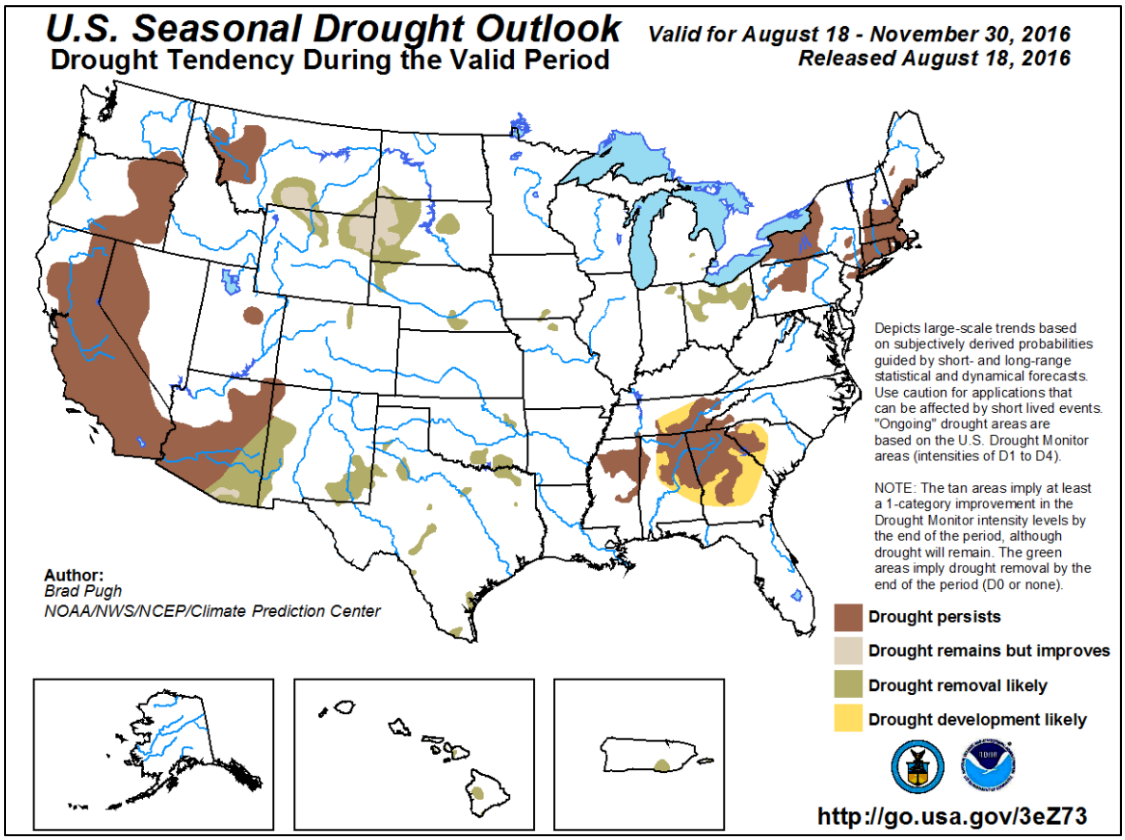


CONSERVATION

For August, water consumption was 8.7% less than in 2013 with a year to date savings average of 20.4%. The residential gallons per capita per day usage was at 296.

The US Drought Monitor graphic for California and Outlook for our area continues to show that the drought in our region persists and we remain in a severe drought.



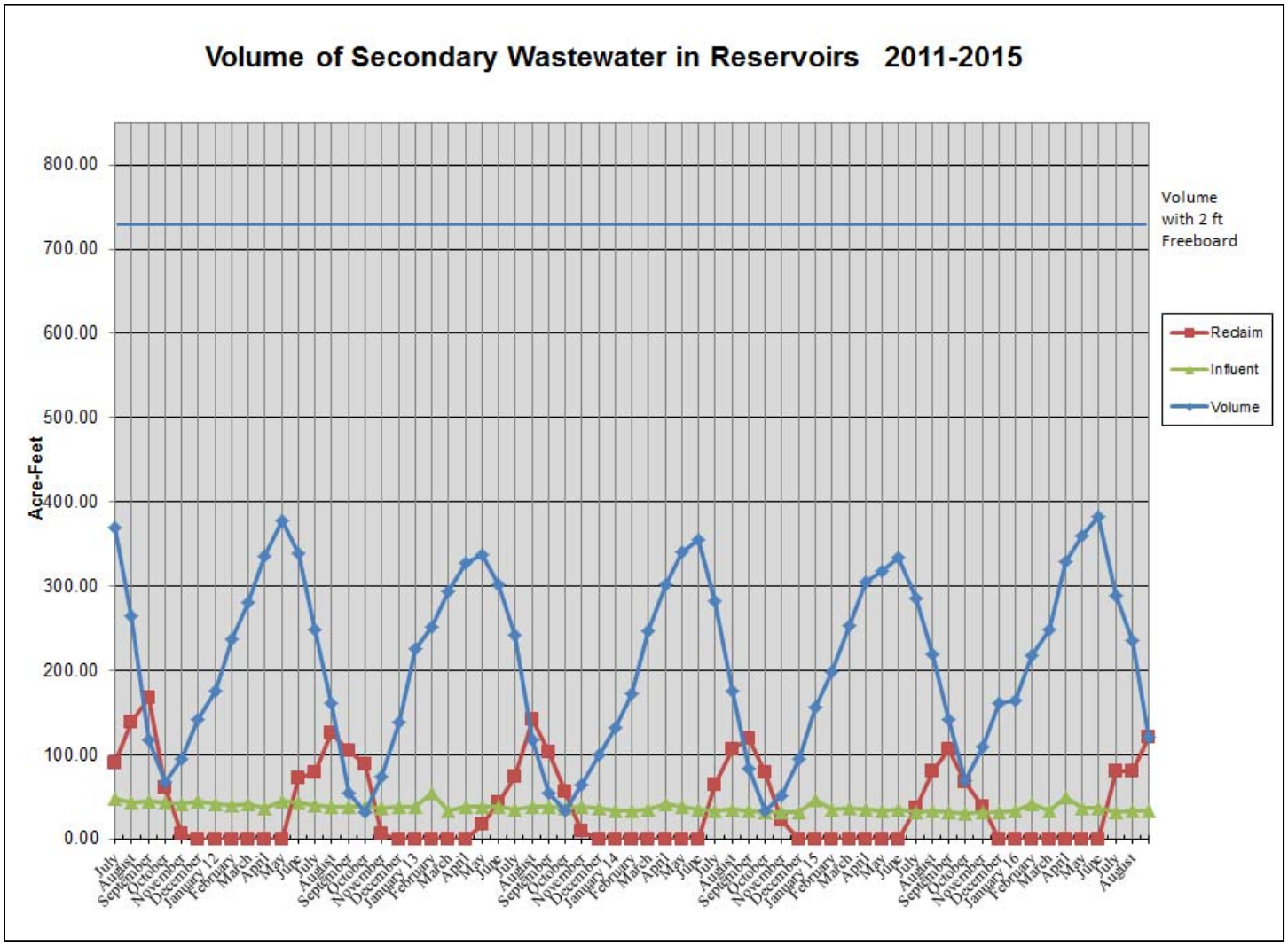


WASTEWATER TREATMENT, COLLECTION AND RECLAMATION

Influent wastewater flow averaged 0.35 million gallons a day, for a total of 10.89 MG, (33.4 AF). This is approximately 137 gpd per sewer connection. Secondary wastewater storage measured 39.2 MG (120.4 AF) on September 7, 2016 of which 34.4 MG (105.4 acre-feet) is usable volume.

We delivered 33,089,000 gallons of recycled water to Rancho Murieta Country Club (RMCC) for their irrigation needs and 3,260,000 gallons to the Van Vleck Ranch for our disposal needs in August.

The graph below shows where our secondary storage is compared to previous years, measured on the first Wednesday of each month.



Maintenance this past month included repairing the West DAF recirculation pump #2, spraying weeds, cutting brush around the wastewater ponds and reservoirs, and pulling rags/debris out of Pond 1 aerators.

SEWER COLLECTION

Utility staff has used our CCTV camera to inspect the sewer lines along Domingo Drive, Domingo Court, and across the golf course Hole #17 over to Terreno Drive in Unit 2 as continued preventative maintenance. Staff is

in the process of cleaning those lines as well. No sewer problems occurred in the District's system this past month. Staff did have one call out which turned out to be on the homeowner's side.

DRAINAGE

Staff spent 77 hours continuing to cut vegetation in the drainage system in August, mainly in North drainage Zone 2, sections A, B, C, G, and H, from Puerto down to lower Guadalupe Drive. Staff also cut and sprayed the vegetation at the basins at Bent Grass Court and Basin 5, and a drainage channel at Bermuda Court in the South community.

Laguna Joaquin was treated for algae around Rancho Murieta Association's (RMA) intake, per their request. Staff removed previously sprayed aquatic primrose and picked up some trash from the shorelines as well.

CIA DITCH

The CIA ditch flow from the Cosumnes River is being shared between the Hutchison and Schneider ranches and to the Anderson Ranch on alternating weeks, under riparian rights.

WATER METERING AND UTILITY STAFF WORK

Utility staff replaced fourteen (14) ¾" water meters and seven (7) water service lines this past month. Staff is proactively replacing service lines alongside lines that are leaking while the streets are open in the area to allow the replacements to occur. Also completed were fifty-one (51) Utility Star work orders and twenty-six (26) underground service alerts (USAs) that were primarily requested by Greenfield Communications.

Utility staff excavated around two (2) places on the old 12" sewer force main going up Stonehouse Road to prepare it to be tested for its viability for future use. Parts for the testing were special ordered due to the infrequently used size to accommodate this old pipe. Staff hopes to begin the testing as soon as the parts arrive the week of September 12, 2016.

MEMORANDUM

Date: September 12, 2016

To: Board of Directors

From: Security Committee Staff

Subject: Consider Adoption of District Policy P2016-02, Implementation and Use of Security Impact Fees

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RECOMMENDED ACTION

Adopt District Policy P2016-02, Implementation and Use of Security Impact Fees.

BACKGROUND

The attached is the first draft of the Security Impact Fee Policy for the implementation and use of the Security Impact Fee funds. The Security Impact Fee is defined and authorized for collection in the 670 Financing and Services Agreement (FSA) and the Rancho North FSA. The District has started the collection of this fee and currently has $30,314 in the fund. This policy needs to be approved and adopted prior to expending any of the Security Impact Fee funds. The first proposed project for the use of these funds is the consulting engagement for the evaluation of the Security Department organization and design of the proposed surveillance camera system.

The Security Committee recommends adoption.

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

Category:	Financial	**Policy** #P2016-02
Title:	Implementation and Use of Security Impact Fees	

PURPOSE

The Rancho Murieta Community Services District ('District') Security Impact Fee policy is a financial policy that establishes the guidelines and parameters regarding the expenditure of the Security Impact Fees collected by the District as authorized in the following Financing and Services Agreements:

1) dated May 27, 2014 with Cosumnes River Land, LLC, Murieta Industrial Park, LLC, Murieta Lakeside Properties, LLC, and Murieta Highlands, LLC (the 'Rancho North FSA') and

2) dated March 28, 2014 with CSGF Rancho Murieta, LLC (Residences East), BBC Murieta Land, LLC (Residences West), Murieta Retreats, LLC (Retreats), Elk Grove Bilby Partners, LP (Lakeview), and PCCP CSGF RB Portfolio, LLC (Riverview) ('the 670 FSA').

POLICY

1.0 Security Impact Fee

The Security Impact Fee is collected at the time of water permit issue for all new development subject to the Rancho North FSA and the 670 FSA at the following rates:

Property outside of gates	$750 per lot (residential) $750 per commercial/retail EDU
Property behind gates (North and South)	$1,200 per lot (residential)

2.0 Authorization to Expend Security Impact Fees

The District's Board of Directors shall approve all expenditures of the Security Impact Fee funds.

3.0 In Lieu Offset for Developer Installed Public Security Improvements

The District's Board of Directors may consider security improvements of a public nature that are consistent with this policy and that are paid for and installed by the developer or property owner, and dedicated to the District, as in lieu offset to the payment of the Security Impact Fee. Approval of any in lieu offset is solely at the discretion of the District's Board of Directors. Any such approval is required prior to the issue of the water permit(s) for the affected property.

4.0 USE OF THE SECURITY IMPACT FEE

The Security Impact Fee funds shall be used to support and improve the provision of Security services to the Rancho Murieta community through the provision of technology, facilities, and physical assets with the fundamental goal of protecting the people and property within the District. The District will work closely with landowners and residential and commercial owners associations on the planning, design and implementation of projects approved for funding with the Security Impact Fee funds. However, final decision and approval of projects is solely at the discretion of the District's Board of Directors.

The Security Impact Fee funds shall be predominately used for non-operating expenses with the goals of protecting life safety, deploying technology in such a manner as to act as a force multiplier improving Security response, protecting property, and benefitting landowners, homeowners and property owners and businesses from which the funds are derived in addition to the entire Rancho Murieta community.

Such uses of the Security Impact Fee funds shall be for, but not limited to, items of the following nature:

- Security Surveillance Camera System consistent with the May 2015 Surveillance Camera Implementation, Integration, and Expansion Plan (to include, cost of design and implementation of the system and necessary infrastructure)
- Consultant studies and fees to evaluate Security Department organization and surveillance camera system design
- Purchase of one patrol vehicle (to include equipping and striping)
- New locker room/training room
- Other non-operational security enhancements as identified in the future

Approved by Rancho Murieta Community Services District's Board of Directors	

MEMORANDUM

Date: September 16, 2016

To: Board of Directors

From: Darlene J. Thiel, General Manager

Subject: Consider Approval of Use of Water Supply Augmentation Funds for Stonehouse Road Force Main Assessment

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RECOMMENDED ACTION

Approve use of Water Supply Augmentation Funds for the Stonehouse Road Force Main Assessment in an amount not to exceed $17,595, which includes a 10% contingency.

BACKGROUND

Due to the critical timing of conducting this Sewer force main pressure testing prior to, or in conjunction with, the construction work on Stonehouse Road I authorized the work proposed by JD Pasquetti, see attached proposal, on September 2, 2016 by Purchase Order C21650. This approval currently authorizes this expenditure as an operational expense. As this work is related to the Recycled Water System in getting recycled water to Stonehouse Park, it is reasonable that the cost of this work be paid out of Water Supply Augmentation funds, which requires District Board approval.

JD Pasquetti Engineering, Inc.
3032 Thunder Valley Court
Lincoln, Ca. 95648
Phone 916-543-9401…..Fax 916-543-9426

Bid Item Breakdown

To **Rancho Murieta Community Services District**
15160 Jackson Road
P.O. Box 1050
Rancho Murieta, CA 95683

August 31, 2016

Bid #16-104

Attn: **Ron Greenfield**
Phone (916) 354-3700 Fax (916) 354-2082

Job ***12" Sewer Main Testing***
Eng. None
Soils. None

Item	Description		Total
A	**Sewer**		
1	JDP has figured 5 working days for this bid, if it takes longer than 5 days it will be a price per day. JDP will supply a 2 man crew to snap the existing 12" asbestos cement pipe at 2 locations. JDP will install 2 temporary blow off valves on the test side of the pipe and 2 install caps on the non test side of pipe.JDP will load the existing 12" sewer line with water, provided to JDP from RMCSD, and attempt to pressure test the existing pipeline to 150 PSI. RMCSD to dig, provide shoring, a backhoe & operator along with 1 labor to assist JDP crew. The existing 12" line that has been buried and not in use since 1979. JDP can not guarantee that we will be able to get water to the end or be able to pressure test the line.		8,375.00
2	Pipe Material for tempoary caps	$	6,050.00
3	Pipe Material (if you want the pipe connected back together)	$	1,570.00
		$	**15,995.00**

Conditions and / or Exclusions

1. Site access available at all times, with one anticipated mobilization.
2. No erosion control, SWPPP program, reports or monitoring .
3. No Dust Control .
4. Dewatering due to groundwater infiltration is not included.
5. Surveying, engineering, as builts, bonds, permits, dewatering plans, soils and asphalt testing fees are not included.
6. JDP shall not be responsible for removal, cleanup, damage or loss due to hazardous materials. Any offhaul or special handling of the abestos cement pipe is excluded.
7. Unless otherwise stated, this bid is based on regular hourly rates, no overtime.
8. Retention withhold, if any, shall be due and payable within 30 days of acceptance by utility companies, county or city within.
9. This proposal is good for 60 days from the date referenced above.

MEMORANDUM

Date: September 16, 2016

To: Board of Directors

From: Paul Siebensohn, Director of Field Operations

Subject: Review Operations Manual for the Delivery and Use of Recycled Water at Rancho Murieta Country Club

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RECOMMENDATION ACTION

No recommendation – review and provide direction to staff.

BACKGROUND

At the August 17, 2016 Board meeting Director Michael Martel voiced a concern that the District is not following recycled water regulations. He also noted he had provided some information to Darlene Thiel, General Manager, regarding his concerns.

The information given was a copy of the Operations Manual for the Delivery and Use of Recycled Water at the Rancho Murieta Country Club, May 2010 (Operations Manual), which had areas highlighted which were his concerns. Those highlighted areas are attached with numbers drawn in in red font to address each of them.

The Operations Manual was initiated by the request of Ed Crouse and completed by HydroScience Engineers (HSE) in an effort to get better communication, delineation of responsibilities and input from the Rancho Murieta Country Club (RMCC) at the time regarding their use of recycled water. It was mostly based on a shared Waste Discharge Requirement (old WDR Order No.5-01-124) for the District and the RMCC and supplemented with information put together by HSE, District staff, and RMCC staff. It generally concerns the communication for use and monitoring of recycled water between the District and RMCC. It was not a legal requirement to follow this Operations Manual but it was endeavored to be followed. It is no longer utilized as we have a new Waste Discharge Requirement (WDR) and Monitoring and Reporting Plan (MRP), communications between the District and RMCC are going well. I have provided the RMCC a spreadsheet to fill out and submit to me monthly, which the Greens Superintendent has been doing regularly without delay. We are legally required to follow the requirements of the California Regional Water Quality Control Board Order R5-2014-0149, which is available for review on the District's website.

Recycled water (also known as reclaimed water) is water that has passed through the wastewater treatment process, cleaned by filtration and disinfection, and made available for irrigation use.

The District and RMCC has followed and continues to follow the Waste Discharge Requirements and Monitoring and Reporting Programs of the Central Valley Regional Water Quality Control Board for the District as described and outlined in Order R5-2014-0149.

I am providing this memo response to clarify each highlighted area of concern:

1) Item 1A – Irrigation Seasons: "RMCC may not discharge recycled water 24 hours before precipitation, during periods of precipitation, and for at least 24 hours after cessation of precipitation, **or when soils are saturated** (*emphasis added).*"

   Response: No issues with violating this requirement.

   This item specifically references a discharge specification word for word in the previous WDR. We now follow the new adopted WDR and MRP that came with the adoption in December 2014 of Order R5-2014-0149.

   We have followed this item and the RMCC has reported to as well. I've also kept records of weather reports in an effort to show compliance with this and keep copies in the District network drive.

2) Item #1 B – Irrigation Water Sources and Volumes. "Recycled water constitutes the primary source of irrigation water for the golf course. However, the tertiary treatment facilities at the RMCSD treatment facilities are not in operation when the demand for irrigation water is minimal or intermittent. During these periods, if the lake levels in Bass Lake and Lake 10/11 are such that additional water is required in the lakes, raw water can be pumped to Bass Lake and to Lake 10/11 from the pump in the Cosumnes River; water from Lake Clementia can also be fed to Lake 10/11.

   There are conditions in the water diversion permits that affect the times of the year that surface water may be diverted; the rates at which water may be diverted, and the amounts of surface water that may be diverted. These limitations have been incorporated in the Standard Procedure for the Diversion of Raw Water to the Golf Course Lakes (Appendix 2). The basic regiment for the supply of irrigation water is summarized in **Table 2-3**, below."

   Response: The RMCC has a riparian right and an appropriative water right which allows them to supply a portion of their water needs from the river for irrigation which span year round as well as recycled water from the District.

3) Item 2A: Containment of Recycled Water. "i) There shall be no discharge to surface waters from Bass Lake, Lake 10, Lake 11, Lake 16 and Lake 17 and any golf course lake, pond, or water feature that receives recycled water for either storage or aesthetic purposes. And ii) Not less than two (2) feet of freeboard shall be maintained in all lakes and ponds that contain recycled water.

   Health and Aesthetic Considerations: i) Aid in mosquito control by controlling weeds, dead algae and lake circulation. And ii) Prevent nuisance odors by maintaining adequate dissolved oxygen levels in the lakes."

   Response to Containment of Recycled Water: That has been and still is the requirement which is being followed. Weekly measurements were conducted under the old WDR and some weekly and some monthly measurements are now recorded per the new WDR to confirm adequate freeboard levels.

   Response to Health and Aesthetic Considerations: These items are restatements from the Operations Manual Discharge Prohibitions, #5 & #6 in old WDR and #8 & #12 in new WDR, which have been and continue to be followed.

4) Item 2B Operating Considerations and Parameters: “The 100-year, 365 day rainfall of 45 inches, together with other hydrologic data, has been used to calculate water balances for the lakes and the volume of water that must be stored during the 100 year event. The water balances for the Bass Lake and Lake 10/11 watersheds are presented in the Appendix 3. The water balances are based upon a number of assumptions, including the distribution of the 45 inches of rainfall monthly. Therefore, the Golf Course Superintendent must take care to observe and report any significant variations in the water levels estimated by the water balances and those observed so that the reasons for any differences may be determined and the water balances re-calibrated, if necessary.”

   Item 3 Lake Levels and beginning of Wet Season: “In order to assure that there will be no overflow of the lakes for any water year, (the period July 1 to June 30) having rainfall less than the 100-year, 365 day event, the water level in the lakes at the beginning of the wet season must be such that the useful operational storage capacity in the lake (the maximum volume that could be stored with an allowance for two feet of freeboard) is greater that the water that will enter the lake due to direct rainfall and the runoff that will enter the lake during the wet season, less any irrigation and evaporation that may be expected during the 100 year event.

   Based upon the water balances at the start of the wet season (October 1), Bass Lake and Lakes 10/11 should be drawn down to levels of 7.9 feet and 7.4 feet below their respective overflow elevations- the spillway elevation of 187.75 feet in Bass Lake and the stand pipe overflow elevation of 153.00 feet in Lake 10/11. See Figures 3-1 and 3-2 for a graphic depiction of the water levels in the lakes at the start of the wet season. “

   Response to 2B and 3: The District and RMCC have coordinated to make sure adequate storage levels have been maintained to accept inflow from a 100 year precipitation event. The exception was back in 2006, before my arrival, when recycled water was discharged to Bass Lake.

5) Item 4A:“1) Daily Monitoring of Lakes for Odors: The Golf Course Superintendent will monitor daily or cause his staff to monitor the golf course lakes daily for odors and complete the attached Daily Odor Monitoring Worksheet (1).”

   Response: The Operations Manual set up to expand odor monitoring to the RMCC ponds whereas the old and new WDR require “Objectionable odors shall not be perceivable beyond the limits of the WWRP property at an intensity that creates or threatens to create nuisance conditions.” The RMCC recorded their pond odor monitoring. The new WDR now requires monthly odor monitoring at the storage ponds, which is conducted by District staff and provided on the monthly reports.

6) Item 4B: “2) Weekly Monitoring of Lakes for Freeboard, Dissolved Oxygen and pH: The Golf Course Superintendent will monitor weekly, or cause his staff to monitor weekly, for freeboard, dissolved oxygen and pH and complete the attached Weekly RMCC Lakes Monitoring Worksheet (2).”

   Response: This was done at the RMCC ponds by the RMCC under the old WDR, sometimes with the assistance of the District, and given to the District to incorporate into the monthly reports to the Regional Board. The District has always monitored its own ponds and reservoirs. It is all now done solely by District staff under the new WDR, and is continued to be reported monthly to the Regional Board.

7) Item 4C: "3) Golf Crouse Reclamation Monitoring: This task consists of daily monitoring of the volume of water applied to the golf courses, rainfall, and the calculations of nitrogen and dissolved solids applied to the golf course on a monthly basis.

   i) The Golf Course Superintendent enters the daily values for columns 2, 3, 5, and 9 of the Golf Course Reclamation Monitoring Worksheet (3).

   ii) The Director of Field Operations enters the values of the monthly grab samples for Total Nitrogen (Total Kjeldalh nitrogen + Nitrate nitrogen) and Total Dissolved Solids.

   iii) The values for the daily entries in columns 7, 10, 11 and 12 will then be automatically calculated, as will be the reportable monthly totals in columns 11 and 12."

   Response: RMCC has and continues to monitor its water use on a daily basis. The District conducts monthly readings of their usage as well, along with daily rainfall. The calculations for Nitrogen and Total Dissolved Solids are done automatically as set up in our monthly report spreadsheet after input of water use and water quality results for those items.

8) Item 5A: "4) The Golf Course Superintendent shall transmit worksheets 1, 2, and 3 in electronic format to the Director of Field Operations by the 7th day of the following month for which the worksheets apply."

   Response: This was an item of request by the Operations Manual for RMCC to give the District its data to allow the District adequate time to put together the monthly reports to the Regional Board. It generally has not been an issue.

9) Item 5B: "5) The Director of Field Operations shall compile the information provided with the monitoring and reporting data required of the RMCSD and transmit the Joint Monthly Monitoring Report to the RWQCB by 23rd of the month, co-signed by RMCC Golf Course Superintendent or authorized representative. A copy of the Joint Monthly Monitoring Report shall be provided to the Golf Course Superintendent."

   Response: This has been and continues to be done on a monthly basis.

Should anyone wish to discuss or review anything further I'll make myself available.

2.2 Irrigation Seasons 1A

There are no regulations or rules controlling the seasons of the year that the golf course may be irrigated. Irrigation of the golf courses, rather, depends on the hydrologic conditions and the resulting moisture of the soil.

For example, the golf courses may be irrigated with either recycled water during the winter, which is generally considered the wet season, if there has not been sufficient rainfall. Conversely, even during the dry season, the golf courses may not be irrigated under certain conditions relating to periods of anticipated precipitation, or following actual precipitation. Specifically, Reclamation Requirements # 7 of WDR No. 5-01-124 (Appendix 2) provides:

> RMCC may not discharge recycled water 24 hours before precipitation, during periods of precipitation, and for at least 24 hours after cessation of precipitation, **or when soils are saturated** (*emphasis added*).

For a typical rainfall year (a range of 22-26 inches), with normal distribution - regular (daily or nearly daily) irrigation of the golf courses would be expected to start in late March or early April, with perhaps occasional irrigation of the golf courses during dry periods throughout the winter season; irrigation would be anticipated to be curtailed significantly by mid-October and cease (except for the occasional irrigation during extended dry periods) by mid November.

For a wet year, irrigation of the golf courses will likely not commence until late April or early May, while in a dry year the golf courses will require intermittent irrigation throughout the fall and winter and be regularly irrigated with the onset of warm weather.

2.3 Irrigation Water Sources and Volumes 1B

Recycled water constitutes the primary source of irrigation water for the golf course. However, the tertiary treatment facilities at the RMCSD treatment facilities are not in operation when the demand for irrigation water is minimal or intermittent. During these periods, if the lake levels in Bass Lake and Lake 10/11 are such that additional water is required in the lakes, raw water can be pumped to Bass Lake and to Lake 10/11 from the pump in the Cosumnes River; water from Lake Clementia can also be fed to Lake 10/11.

There are conditions in the water diversion permits that affect the times of the year that surface water may be diverted; the rates at which water may be diverted, and the amounts of surface water that may be diverted. These limitations have been incorporated in the Standard Procedure for the Diversion of Raw Water to the Golf Course Lakes (Appendix 2). The basic regiment for the supply of irrigation water is summarized in **Table 2-3**, below.

3.0 Criteria for Operation of Golf Course Lakes Containing Recycled Water 2A

The WDR contains the requirements for the operation of the golf course lakes that contain recycled water. These include:

- Containment of Recycled Water

  i.) There shall be no discharge to surface waters from Bass Lake, Lake 10, Lake 11, Lake 16 and Lake 17 and any golf course lake, pond, or water feature that receives recycled water for either storage or aesthetic purposes.

  ii.) *Not less than two (2) feet of freeboard shall be maintained in all lakes and ponds that contain recycled water.*

- Health and Aesthetic Considerations

  i.) Aid in mosquito control by controlling weeds, dead algae and lake circulation.

  ii.) Prevent nuisance odors by maintaining adequate dissolved oxygen levels in the lakes.

3.1 Operating Considerations and Parameters

The containment criteria for the RMCC recycled water storage lakes is based on the 100-year, 365 day rainfall event, which is approximately 45 inches. That is, 45 inches of rainfall over the course of a year is expected to occur only once in 100 years, and this amount of rainfall and resulting runoff into the lakes that store recycled water must be contained. If the lakes overflow during a year having rainfall that will be exceeded less frequently than once in 100 years (i.e. 50 inches of rainfall occurs less frequently than the once in 100 years, 45 inch event) the discharge from the lakes is not considered a violation of the WDR.

The 100-year, 365 day rainfall of 45 inches, together with other hydrologic data, has been used to calculate water balances for the lakes and the volume of water that must be stored during the 100 year event. The water balances for the Bass Lake and Lake 10/11 watersheds are presented in the Appendix 3. The water balances are based upon a number of assumptions, including the distribution of the 45 inches of rainfall monthly. Therefore, the Golf Course Superintendent must take care to observe and report any significant variations in the water levels estimated by the water balances and those observed so that the reasons for any differences may be determined and the water balances re-calibrated, if necessary. See **Table 3-1** for estimated minimum freeboard required through the course of the 100-year, 365 day rainfall event. 2B

3.1.1 Lake Levels at Beginning of Wet Season

3

In order to assure that there will be no overflow of the lakes for any water year (the period July 1 to June 30) having rainfall less than the 100-year, 365 day event, the water level in the lakes at the beginning of the wet season must be such that the useful operational storage capacity in the lake (the maximum volume that could be stored with an allowance for two feet of freeboard) is greater than the water that will enter the lake due to direct rainfall and the runoff that will enter the lake during the wet season, less any irrigation and evaporation that may be expected during the 100 year event.

Based upon the water balances, at the start of the wet season (October 1), Bass Lake and Lakes 10/11 should be drawn down to levels of 7.9 feet and 7.4 feet below their respective overflow elevations- the spillway elevation of 187.75 feet in Bass Lake and the stand pipe overflow elevation of 153.00 feet in Lake 10/11. See **Figures 3-1** and **3-2** for a graphic depiction of the water levels in the lakes at the start of the wet season.

Standard Procedure for Preparation of the Monthly Monitoring Report

Purpose: This procedure identifies the data to be collected by RMCC and the schedule for transmittal of the data to the RMCSD for inclusion in the Monthly Monitoring Report submitted to the Regional Water Quality Control Board.

Personnel: RMCC - Golf Course Superintendent or authorized representative

RMCSD - Director of Field Operations or authorized representative

Overview: The Waste Discharge Requirements (WDR) issued jointly to the RMCSD and the RMCC requires that the permittees submit a joint Monthly Monitoring Report to the RWQCB (Revised Monitoring and Reporting Program No. 5-01-124; copy attached).

The RMCSD Director of Field Operations will compile the data required to be reported by the RMCSD together the data required of the RMCC, which is provided by the RMCC Golf Course Superintendent pursuant to the procedure outlined below.

The RMCC is required to monitor and report on:

1. Reclaimed Water Storage Lakes
2. Golf Course Reclamation Monitoring

Procedure:

1) Daily Monitoring of Lakes for Odors: The Golf Course Superintendent will monitor daily, or cause his staff to monitor the golf course lakes daily for odors and complete the attached Daily Odor Monitoring Worksheet (1). 4A

2) Weekly Monitoring of Lakes for Freeboard, Dissolved Oxygen and pH:

The Golf Course Superintendent will monitor weekly, or cause his staff to monitor weekly for freeboard, dissolved oxygen and pH and complete the attached Weekly RMCC Lakes Monitoring Worksheet (2). 4B

3) Golf Course Reclamation Monitoring: This task consists of daily monitoring of the volume of water applied to the golf courses, rainfall, and 4C

the calculation of nitrogen and dissolved solids applied to the golf course on a monthly basis.

i) The Golf Course Superintendent enters the daily values for columns 2, 3, 5, and 9 of the Golf Course Reclamation Monitoring Worksheet (3).

ii) The Director of Field Operations enters the values of the monthly grab samples for Total Nitrogen (Total Kjeldalh nitrogen + Nitrate nitrogen) and Total Dissolved Solids.

iii) The values for the daily entries in columns 7, 10, 11 and 12 will then be automatically calculated, as will be the reportable monthly totals in columns 11 and 12.

5A 4) The Golf Course Superintendent shall transmit worksheets 1, 2 and 3 in electronic format to the Director of Field Operations by the 7th day of the following month for which the worksheets apply.

5B 5) The Director of Field Operations shall compile the information provided with the monitoring and reporting data required of the RMCSD and transmit the Joint Monthly Monitoring Report to the RWQCB by 23rd of the month, co-signed by RMCC Golf Course Superintendent or authorized representative. A copy of the Joint Monthly Monitoring Report shall be provided to Golf Course Superintendent.

MEMORANDUM

Date: September 19, 2016

To: Board of Directors

From: Paul Wagner, Security Chief

Subject: Receive Status Report on Security Information Update

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RECOMMENDED ACTION

No action – receive update.

BACKGROUND

Most of the Security Data request forms have been received. We are about ¾ of the way through inputting the updated information we received into the system (ABDI). There are some forms we need to dig deeper on because we received them back "return to sender". Once all the information/forms we have are in put into the system, we will tackle the few remaining forms that need additional communication from and possibly resend some to the correct address/owners. I believe we should have all the forms back and input into the system within the next few weeks (mid October).

Determining the volume of email addresses captured versus the total number of bar codes issued is not a readily available piece of information. The ABDI system has a predefined set of reports available and culling out those records with email addresses is not a standard report. Staff will verify through District General Counsel our ability to use the email addresses collected for District communication and will report back to the Communications Committee in October. In addition, ideas and suggestions for the type of communications to be sent out via mass-email will be discussed at the October Communications Committee meeting.

MEMORANDUM

Date: September 15, 2016

To: Board of Directors

From: Paul Siebensohn, Director of Field Operations

Subject: Discuss Stormwater Basins within Rancho Murieta

RECOMMENDATION ACTION

No recommendation – review and provide direction to staff.

BACKGROUND

Rancho Murieta Storm Drainage System

In 1988 The District created and adopted the Storm Drainage & Flood Control Master Plan. (Attachment 1) It provides a description of the system and its operation and maintenance by the District. Also adopted that year was the Drainage Code which set the guidelines for future amendments of the Drainage Code for the District's operation of the storm drainage system.

The storm drainage system for Rancho Murieta is comprised of natural vegetated and manmade swales, extended basins, ponds, pipelines and flood control levees. The key principles that guide the system are:

- To protect life and property and minimize inconvenience to the public,
- To create a realistic balance between inconvenience and protection against a hazard,
- To provide adequate measures to protect the natural resources within the community and
- To protect the community's drinking water supplies from urban runoff contamination.
-

In the past, storm drainage and flood control jurisdiction had been the overlapping responsibility of property owners and homeowners associations, Sacramento County and the District. In the mid 1980's, the District's latent authority to provide drainage and flood control services was exercised. The District de-annexed from the County storm drainage maintenance district and began providing drainage services to the community.

Significant storm drainage facilities within a community include natural drainage courses which convey seasonal run-off, 100 year flood protection levees along the Cosumnes River, perennial storm drainage detention basins and marsh and wetland areas. In addition small to large diameter pipelines and pump stations convey runoff to the ditches and river.

The level of protection provided by the storm drainage system is:

- Protection of developable areas from the 100 -year flood event.
- Street drainage systems are designed for the 10-year storm.
- Culverts, open channels and natural streams are designed for the 100-year storm.
- Finished floor elevation should be a minimum of 1 foot above the 100-year storm water surface.

Maintenance of this system includes those factors that are essential to keep the drainage system in good condition, maintaining an adequate staff to accomplish the work and instituting practices and procedures for maintenance of existing and future structures and facilities.

The annual maintenance program includes inspections and periodic maintenance by mechanical equipment of the natural drainage courses and ditches, cleaning of silt, branches, weeds and other debris from ditches, natural courses and pipelines. In addition, the District provides periodic inspections of the levees and weekly monitoring and maintenance of drainage pumping facilities.

Storm water from urban runoff is one of the leading causes of pollution in creeks, rivers, and lakes. In fields and forests, most rain water is absorbed by the soil and taken up by plants and trees. However, developed areas contain impermeable surfaces like roofs, parking lots, and streets that cause rainwater to runoff (storm water) and collect pollutants. Storm water that flows from those impermeable surfaces and into storm drains or other conveyance structures without first flowing through best management practices (BMPs), such as grass lined swales or detention basins, goes untreated directly into our creeks, rivers, lakes, deltas and eventually, the ocean.

Storm water is a resource and is ultimately part of the hydrologic cycle, along with our potable water, so it is imperative to keep it as clean as possible. Storm water can become polluted by pesticides, paint, fertilizers, pet waste, litter, oil and other automotive fluids, eroded soil and household chemicals. Even small amounts of pollutants that accumulate on roads, parking lots, and sidewalks can be transported into nearby streams and rivers. Identifying sources of storm water pollution and keeping this pollution away from storm drains and ditches is the best and most economical way to keep storm water clean - which ultimately protects our vital water resources.

Vegetated Swales

Vegetated swales are open, shallow channels with vegetation covering the side slopes and bottom that collect and slowly convey runoff flow to downstream discharge points. They are designed to treat runoff through filtering by the vegetation in the channel, filter through a subsoil matrix, and/or infiltration in to the underlying soils. Swales can be natural or manmade. They trap particulate pollutants, promote infiltration, and reduce the flow velocity of stormwater runoff. The residents of Rancho Murieta tend to prefer a manicured look to the community, including the drainage.

Therefore the District endeavors to cut vegetation in the drainage system during the summer months. In some areas some residents request we leave them be as they enjoy the habitat they sometimes provide for wildlife such as redwing blackbirds, deer, etc. We leave the vegetation alone in the rainy season to allow the vegetation to do its job…catch, filter, and slow down stormwater runoff.

Basins

The District's drainage system has both wet and dry basins.

Dry basins, also known as infiltration basins, are shallow impoundments that are designed to allow infiltration of stormwater into the ground. They use the natural filtering ability of the soil to remove pollutants in stormwater runoff. Under heavy flow they store flow until they eventually percolate into the water table, and are designed for flow through of excessively heavy rainfall periods with small openings down low, to meter out flow, and larger ones up high to protect from flooding. This practice has high pollutant removal efficiency and can help recharge groundwater.

Dry Basins in south community
Greens (Bentgrass Ct)
Basin 12
Basin 14
Basin 15
Basin 4 (Riverview park)

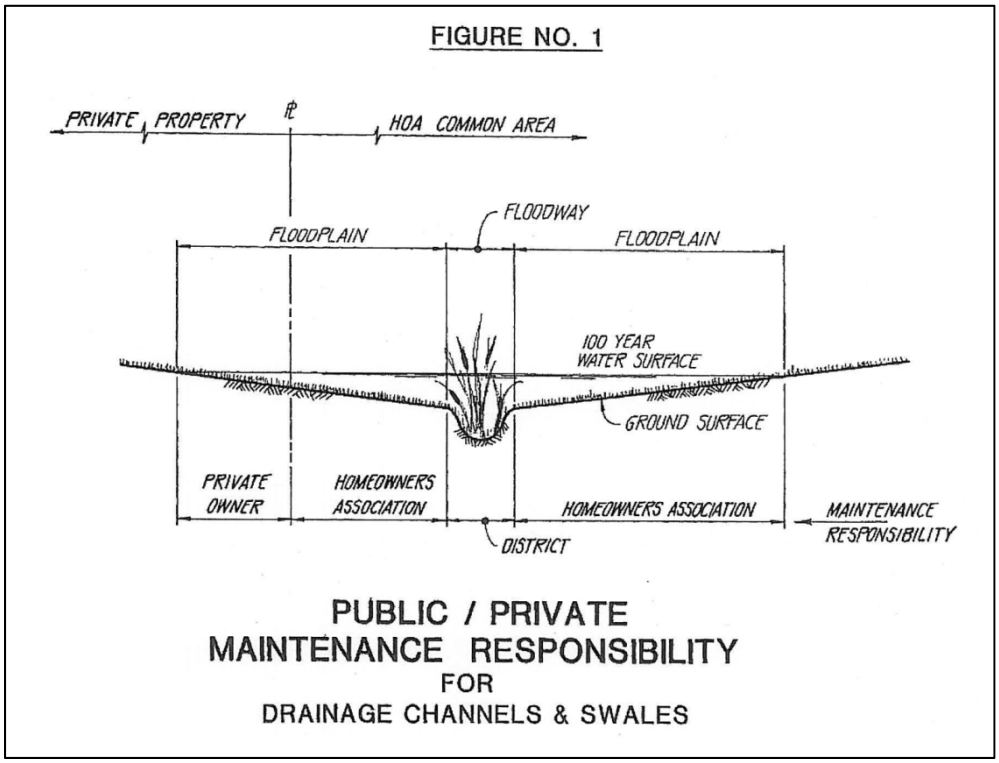
Wet basins, also known as retention basins, capture stormwater runoff but have water in them typically all year round. Rancho Murieta has several wet basins which include Clementia, Guadalupe, Laguna, Basin 5, Granlee and 6B (hole 1 north) basins. Wet basins have overflows which allow high water events to discharge to the river, while retaining water and allowing heavier sediments to settle out within them.

Laguna, mentioned later in this memo, is a multifunction basin which acts as retention and irrigation basin for the RMA.

Basins capture stormwater runoff and allow sediment to be captured vs flowing straight through to receiving waters, such as the Cosumnes River.

Area of Responsibilities

Many times, the District is called out for drainage problems outside their purview. The division of responsibility between the District and private property owners, whether individuals or homeowners associations, is as follows:



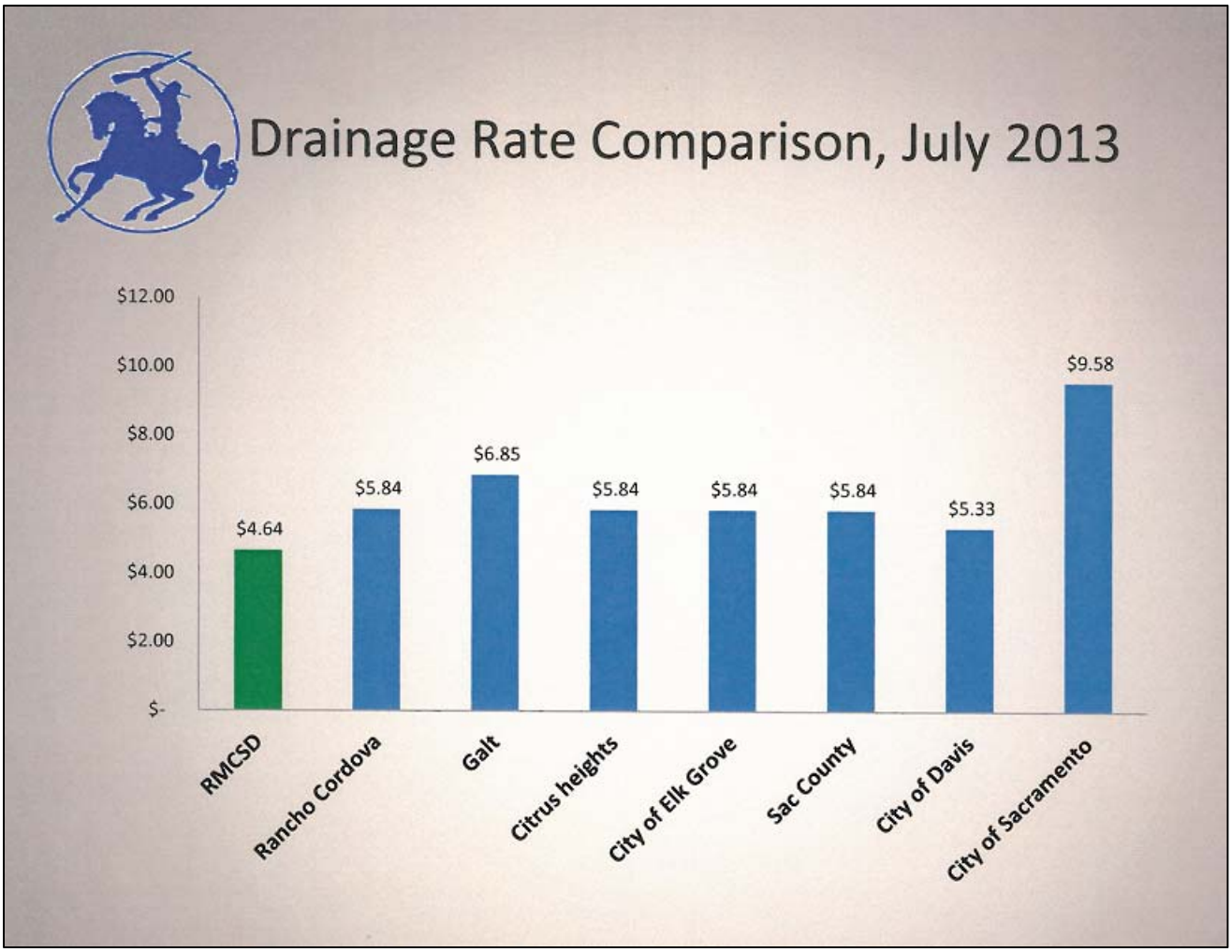
Further detail of responsibilities are in specific agreements later in this memo.

Drainage concerns between neighbors

The first step in resolving a problem is to have a friendly conversation with the neighbor, who might not realize there is a problem and might readily agree to fix it. The uphill owner "has a natural easement that permits him or her to discharge surface waters through ... a 'natural swale, hollow or depression.' The upper landowner's right is limited to disposition of the water the way nature intended." The uphill owner is liable if their changes cause damage to the downhill property. They're also is liable if they remove something that protects the downhill property or builds something that allows flooding downhill.

Level of Service/Funding:

The District and its Board and staff have historically endeavored to keep of its service rates low and standard of service high. As noted in the District's Storm Drainage & Flood Control Master Plan, "The desired level of service will have the most significant influence on the capital and maintenance costs of the system." As shown in the last drainage rate survey conducted in 2013, the District's drainage rate is the lowest around and none of these other areas provide Midge Fly control or multiple cuttings of their drainage systems. They all follow the general best management practices of keeping drainage channels and basins in their natural states to catch, filter, and slow down stormwater runoff, only keeping inlets and outlets of culverts clear, which we do as well during the rainy season.



I conducted a review of area basins and drainage channels as a comparison to Rancho Murieta. (Attachment 2) As can be seen, they are left in their natural states as wetlands which allow natural vegetation to provide nutrient uptake of nitrogen and phosphorus, sedimentation, percolation and filtration of drainage waters. The District Board hired a consultant to conduct a reserve study in 2014 to see at what level the District's infrastructure was funded for replacements. For over a million dollars of drainage assets it noted that the District is 7.6% funded. (Attachment 2A)

Levees (Flood Control)

The District maintains two levees in the community. One is known as Airport Levee (8068) in the commercial and Village area. The other is the Michigan Bar Levee (8069) in the South community. These levees protect the surrounding areas from inundation during a 100 year flood event along the Cosumnes River.

The levees were deemed a Provisional Accredited Levee (PAL) by FEMA in 2009 pending submittal of a levee certification study and analysis. In December 2010 a levee certification analysis and evaluation, prepared by Carlton Engineering, was submitted to FEMA. This analysis documents the levee's ability to meet minimum freeboard requirements and to structurally withstand a 100 year flooding event. Following FEMA's review the levees were certified by FEMA as an Accredited Levees providing 100 year flood protection in a letter dated July 28, 2011. (Attachment 3)

Storm water flow within each levee typically flows via gravity lines to outfalls at the Cosumnes River. The gravity lines have a flap valve located on the discharge end of the pipe to prevent backflow into the community. Under high water conditions the flap valves remain closed and stormwater within the levee systems are pumped from pump stations operated and maintained by the District.

Regulations

In 1987, the Clean Water Act was amended to require that the US Environmental Protection Agency advance NPDES (National Pollution Discharge Elimination System) regulations for stormwater discharges. By 1990, federal regulations required municipalities with greater than 100,000 people obtain an NPDES permit. By 1999, that requirement applied to municipalities with a population fewer than 100,000. The NPDES regulates the composition of stormwater entering natural drainages to minimize local and regional impacts to water quality. In California, these permits are issued by the California Regional Water Quality Control Board, Central Valley Region. Sacramento County was re-issued an NPDES permit in 1996. It was renewed again in December 2002 and most recently in 2008.

The District operates and manages the water systems in the District under multiple water rights and regulatory requirements. A simple summary of the Water Rights periods of use attached in Attachment 4. The District was required to comply with new SWRCB stormwater regulations and thus followed the necessary guidelines to be granted a Phase II MS4 (Municipal Separate storm Sewer System) permit in 2009. The MS4 permit for smaller systems is similar in nature to the County's NPDES permit. A Storm Water Management

Plan (SWMP) was developed to address MS4 permitting requirements. Shortly thereafter, as it became too difficult for the SWRCB to review and manage all of the separate permits from the various MS4 permits. The SWRCB then required that all small MS4s adopted a General permit order from the State. I completed a Notice of Intent (NOI) to comply with SWRCB Water Quality Order No.2013-0001-DWQ, NPDES General Permit No.CAS000004 for the District in 2013 and received Waste Discharger Identification number (WDID) 5S34M200009 from the SWRCB.

Another compliance issue we now face as a result of treating for midge flies in the Laguna Joaquin basin is to comply with regulations from the California Department of Pesticide Regulation and the SWRCB. I developed and submitted a Pesticide Application Plan and a NOI to comply with the Statewide NPDES for Biological and Residual Pesticide Discharges. The District received WDID#534AP00032 for permitting. This has been periodically been updated as the General NPDES has had revisions, new NOIs are then submitted and approved.

To treat bodies of water in the community with approved chemicals, I had to create an Aquatic Pesticide Application Plan (APAP) and submit it with another NOI to comply with another Statewide NPDES Permit for Residual Aquatic Pesticide Discharges to Waters of The United States From Algae and Aquatic Weed Control Applications. The District was assigned General Order Number 2004-009-DWQ-R5s-066 for coverage.
To be able to purchase and use products for the aforementioned, I had to take and pass tests from the California Department of Pesticide Regulation Licensing Program, for categories of Aquatics and Right of Ways. I also have certification categories for Microbial Pest Control and Sewer Line Root Control for Water and Sewer treatment.

Agreements:
Around 1987 the District and RMA set out to define the areas of responsibilities between each other and the RMCC which resulted in the following agreements, with some key items bulleted:

-1987 Easement Agreement -*defines responsibilities for District and RMA and handling of charges* (Attachment 5)

- RMA Owns the lakes and land on which they're on, maintains above the high water line, and roadways
- District is responsible for water quality and vegetation below high water lines.
- RMA to pay District reasonable costs for water usage and service
-

-1988 Agreement for Availability of Recycled Water (shows matrix of responsibilities and summarizes easements) (Attachment 6)

-1988 Storm Drainage Flood Control Master Plan (Att.1)
-1994 Second Amendment to Agreement for Availability and Use of Reclaimed Water (shows updated matrix of responsibilities) (Attachment 7)

-1999 Lake Guadalupe Replenishment Water (Attachment 8)

- Developer in that area contributed $11,000 to RMA
- RMA solely responsible for maintenance
- RMA supplemental assesses developed lots for expenses

Vector Concerns

The Sacramento-Yolo Mosquito & Vector Control District manages vector *(disease carrying pests such as mosquitos)* control issues in the District. Although the Vector Control District does an excellent job managing the vector issues throughout Rancho Murieta, the District will formally request that mosquito fish (Gambusia affinis) be deposited, or other control methods be use, into certain areas. Typically when the Vector Control District staff has been at District facilities to harvest the mosquito fish, District staff asks them to put fish in Basin 5 & Laguna Joaquin. The effectiveness of using the fish is questionable due to the introduction of larger predatory fish, such as bass and bluegill, in the basins by area residents.

Residents may submit concerns directly to them via the web link for the Sacramento-Yolo Mosquito & Vector Control District at http://www.fightthebite.net/

Laguna Joaquin

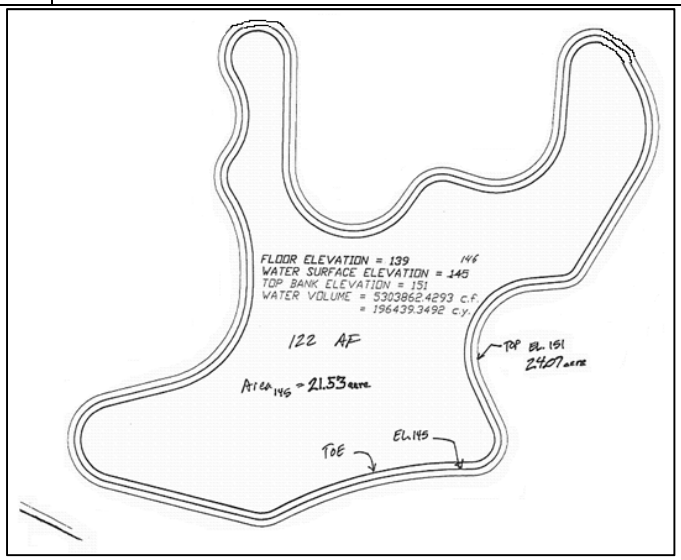
Description:
It is a relatively large body of water located on the North side of the Rancho Murieta community within the gates of the Rancho Murieta Association's home owners association (RMA). Laguna Joaquin is owned by the RMA, but the Rancho Murieta Community Services District (District) has an Easement for Operation & Maintenance of it.

Laguna Joaquin serves several purposes for the community of Rancho Murieta. For the District it is a drainage detention basin serving north side developments Units 1, 2, 3, and 4. For the Cosumnes Irrigation Association (CIA) it may serve as a temporary water storage basin for downstream ranch irrigation. For the Home Owner's Association it is a source of water for irrigation of common ground landscaping, an aesthetic amenity, and for fishing recreation.

Seasonal storms, typically November – March, can create enough stormwater runoff to fill and spill the basin. Overflow from the basin flows over a manmade spillway *(photo below)* and channel and into a drainage ditch that flows onto the Anderson Ranch property south west of Rancho Murieta. Approximately a mile downstream from Laguna Joaquin is another catch basin located on the Anderson Ranch. From that catch basin the drainage ditch then may flow another mile to the Cosumnes River.

Size:

Laguna Joaquin	Area 21.53 – 24.07 acres, volume 122 acre-feet Shoreline 1.14 miles long



Laguna History:

Laguna Joaquin basin was constructed in 1970 by the Operating Engineers to have a place to store water for irrigation of the north golf course areas that were not covered under the riparian water rights.

To build the lake and use the Cosumnes Irrigation Association Ditch to move the water from the Granlee's Dam to the lake, it was agreed that the ranches within the District could store irrigation water for 30 days at a time during the summer months. (This is within water rights allowances as regulatory storage.)

The basin was also used to store drainage runoff water and to store water from the river for golf course irrigation, as time went on more and more water was being passed through the lake from the drainage system. In 1988 the RMCC rebuilt the north course and turned the pump station on Laguna Joaquin over to RMA for common area irrigation.

In 1987 the District and RMA developed an Easement Agreement for various bodies of water and revised subsequent agreements through 1994. For Laguna it notes that the water users at Laguna Joaquin would pay all District costs to maintain the water quality or do any cleanup of the lake. As RMA is the only user of the water out of Laguna Joaquin they would pay the cost for any water quality improvements. The District is granted responsibility for the operations at Laguna while RMA retains right for recreation use.

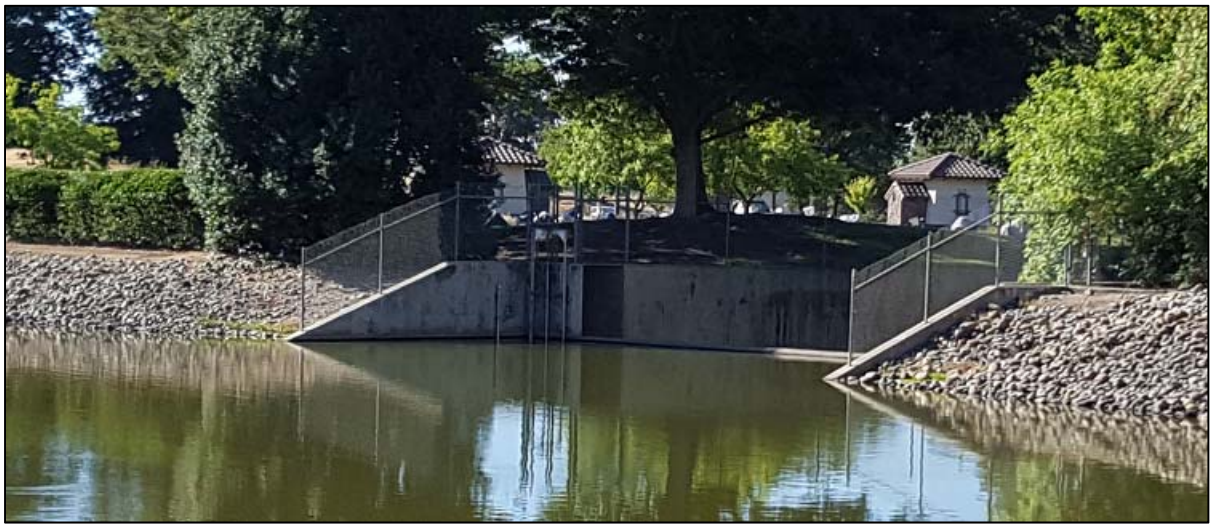


Photo of Spillway at Laguna Joaquin with staff gauge and drain valve on left side

Laguna Operations:

Per the 1987 Easement Agreement granted by the RMA to the District, the District is responsible for water quality and control of aquatic growth and for maintaining the water level in Laguna below the high water line; endeavors to keep the water level within 18" of the spillway (*which is weather and water availability dependent*); is responsible for the inlets and outlets and dam; the District recovers its cost for operation and maintenance by direct billing to its customers, which in the case of Laguna is RMA. The District is periodically asked by RMA staff to treat for algae around their pump intake. Currently costs for service are built into the District's Raw Water rate.

RMA is responsible for controlling the vegetation above the high water line and service roads around all lakes and reservoirs. The District may elect to perform RMA's duties and seek reimbursement for those duties, if the District first notifies the RMA and allows them adequate time to perform those duties.

Water flow into Laguna may be from rainfall, stormwater and over irrigation runoff, and diversion of water flow from the Cosumnes Irrigation Association ditch. In instances of drought the District and RMA coordinate

to determine request that the District provide water from Lake Clementia, through the CIA ditch system to Laguna. This is discussed with the RMA to balance the needs between Clementia and Laguna.

Midge Flies at Laguna

Despite its large size, it is a fairly shallow drainage basin with a soft silty bottom. This is unfortunately an ideal breeding ground for midge fly larvae. The Midge fly, commonly referred to as blind mosquitoes, do not bite but are a severe nuisance to the community adjacent to the basin.

The District was approached by residents at the north end of Laguna Joaquin to deal with swarms of midge flies that periodically emerge from the Laguna Joaquin basin. As a result the District Board required that District staff treat the basin for midge flies, budgeted $5,000 per year in drainage to deal with it, and asked the landowner (RMA) and those most directly affected (Murieta Townhomes Association) to participate. No participation or sharing of costs had occurred the past several years.

Initially we had Clean Lakes Inc. give us a proposal to perform the service for treating midge flies at Laguna Joaquin at a cost of $3,337.50 per treatment. It would typically require four treatments thus totaling the cost at $13,350. Due to the extreme cost the Board rejected approving the treatments.

I was asked to contact Fish & Game and the Vector Control District for help to look for a potential solution to this problem. Fish & Game doesn't normally work on issues such as this but they suggested adding fish that may eat the emerging midge flies which we already have done. Also, I reviewed the life cycle of the midge fly and part of its success in continuing its species is to hatch an extraordinary amount of offspring to survive a gauntlet of predators. I then contacted the Vector Control District who said that they only focus on eliminating disease carrying organisms such as mosquitoes with their tight budget and would not help with non-biting midge flies.

I found another contractor to treat the midge flies treated in Laguna. As the cost was high I filed for the Vector Control NPDES as noted in the Regulations section above. This allowed us to increase treatments from 2 times to 4 times per year. Treatments were generally working well until the past few years of drought. Due to lack of flow through with limited water availability and warm water, midge flies proliferated despite treatments. The exception was that it had always been reported as being ok around the 4th of July each year, as I set up treatments to prepare for it, by timing one the first week of June and another the 4th week.

This past year a Midge Fly Ad Hoc Committee was formed in an effort to seek out other solutions. A new solution proposed and carried out was to add catfish and bluegill, which the RMA and MTI paid for. Another idea was to use a pelletized version of the product we already use. It was purchased by the District and used, with the only complaints this year coming shortly after its use. The direction of most of the committee members is request that the District budget for and use more pelletized product in the upcoming year.

Basin 5 (Lost Lake)

Basin 5 is a 1.31 acre wet basin that holds water all year round. It has two direct outfalls that flow to the Cosumnes River, a low flow outlet with a flap gate on the end of its discharge, and a high flow outlet that feeds the stormwater pump station just south of the pedestrian bridge.

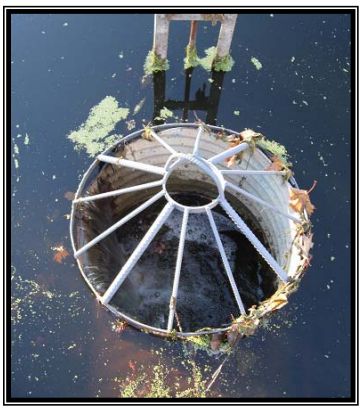


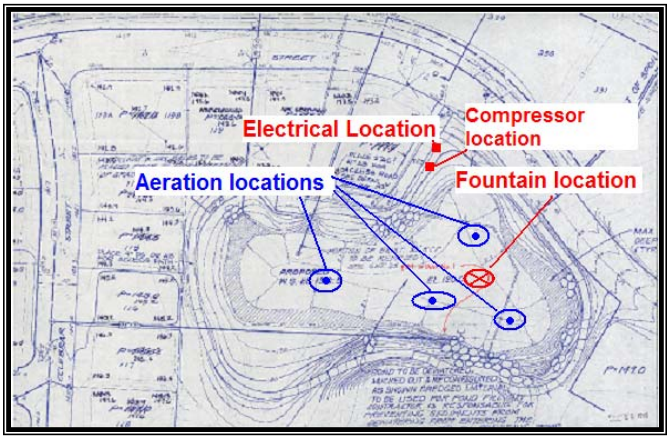
photo of inlet to Low Flow outlet

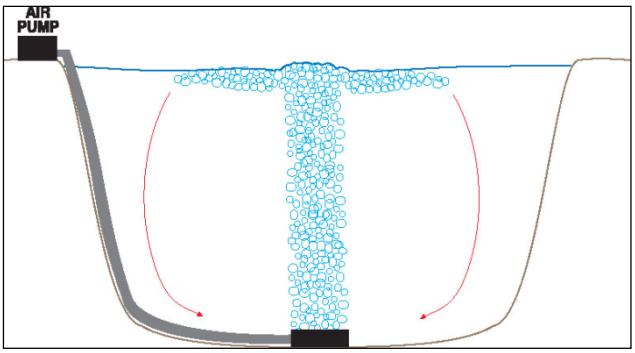
& High Flow Outlet

It has functioned very well for stormwater control releasing relatively clear water; however some surrounding residents have issue with its appearance and sometimes odor. The original aesthetic and functional design of Basin 5 included the planting of cattails or tules (Typha) and primrose along the shorelines, and various native trees around the outer perimeter effectively hiding it, thus originally giving it the nickname *Lost Lake*. Typha and primrose are throughout the state in drainage basins as they effectively help to clean the basin water by nutrient uptake before the water releases to receiving waters such as the Cosumnes. However due to residential complaints for aesthetics they were removed approximately in 1998. The shoreline was excavated at a sharp incline at that time to help prevent the re-growth of cattails.

Again to deal with aquatic vegetation aesthetic concerns, a permit was obtained and sterile grass carp were planted in the basin to eat the vegetation, permit TCG 2-00085. The District pays an annual stocking fee the Department of Fish and Wildlife for these fish. Their effect is sometimes minimal as the surface vegetation grows a high rate.

Continuing to address concerns, on Sept.23, 2010 the District met with the residents that surround the basin to discuss what had been done in the past to address their concerns for the basin's aesthetics, as well as odor that they reported that comes from the basin. Through multiple meetings with the residents, District Board, and RMA, a final attempt at a solution was proposed which was an aeration and fountain system. The District purchased the system at a cost of just under $10,000 and had it installed. It was verbally agreed upon with the residents at a meeting held by them at the basin, that should this system fail to meet the 80% overall reduction in algae and aquatic vegetation the District would no longer continue to maintain its operation. So far it appears to be meeting that goal on an average basis. As per a Statement of Mutual Understanding signed by both the District and RMA Board president at the time, the District is responsible for the operation of the aeration system and RMA for the fountain.





System Operation is generally as follows:
Fountain: RMA will operate the fountain and have control and access to the timer. The hours of operation may be subject RMA discretion, although the intention is to run the fountain during daylight hours. Control of the fountain is from an irrigation type timer, locked by a District 3207 Master Lock. The red pins turn the fountain off and the green pins turn the timer on. If the fountain is not operating during its scheduled run time, a ground fault interrupter (gfi) may be tripped either on the timer or where it is plugged into and outlet. Push in gfi reset to restart.

Aerators: The District will operate the aeration system as per the supplier's recommendation, which is slightly before the pond becomes biologically active at a temperature of 63 degrees or above, typically between spring-fall. Periodic testing of the temperature should be done to determine when to turn on the aeration system. Control of the fountain is from an irrigation type timer with on/off toggle pins, locked by a District 3207 Master Lock. When in operation, District staff should periodically check the operation of the system to ensure its functionality.

Bodies of Water in District *(map from District APAP)*
Per the request of a board member to provide a list of the bodies of water that the District manages, the below diagram and table is provided which I put together for the APAP.

Rancho Murieta Community Services District - Vacintiy Map for NOI
Key for water bodies attached

Name	Surface Area (acres), Volume
1) Calero	110 -114 acres, 2622 acre-feet

2)	Chesbro	62- 64 acres, 1130.7 acre-feet
3)	Clementia	71-76 acres, 907.1 acre-feet; Swim hole area is 2.5 acres
4)	Laguna Joaquin	21.53 – 24.07 acres, 122 acre-feet
5)	Basin 5	1.3 acres at 16.5 foot average depth
6)	Guadalupe	1.3 acres
7)	Bass Lake	6.2 acres, 6 foot average depth
8)	Hole 10 North Pond	1.0 acres, 4 foot average depth
9)	6B Basin	0.2 acres, 4.6 foot average depth
10)	South Hole 10 Pond	1.4 acres, 5 feet average depth
11)	South Hole 11 Pond	6.3, 5.5 foot average depth
12)	South Hole 6	0.28 acres
13)	South Hole 16 Pond	0.34 acres, >10 foot depth
14)	South Hole 17 Pond	0.27 acres, >10 foot depth
15)	North Hole 2 Pond	0.34 acres, 3.4 foot average depth
16)	Reclamation Plant Secondary Reservoir 1 & 2	Reservoir 1 – 27.51 acres, 626 acre-feet Reservoir 2 – 7.03 acres, 141.97 acre-feet
17)	Reclamation Plant Secondary Ponds	Pond 1 – 1.06 acres, P2 – 2.8 acres, P3 - 2.29 acres, P4 – 2.94 acres, P5 – 2.25 acres

There is also Lake Jean, which is just east of Clementia and feeds into it. It is left in a natural state.

STORM DRAINAGE
&
FLOOD CONTROL
MASTER PLAN

Rancho Murieta Community Services District

GIBERSON & ASSOCIATES
Planning • Engineering • Project Management

2724 Kilgore Rd., Suite B, Rancho Cordova, CA 95670 (916) 638-4060

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

STORM DRAINAGE

&

FLOOD CONTROL

MASTER PLAN

June 10, 1988

PREPARED BY:
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TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

In August, 1987, the District Board of Directors established a Drainage Committee. The Committee was directed to work with Staff in the preparation of a Storm Drainage and Flood Control Master Plan and a Drainage Ordinance. This Master Plan document is the result of the Drainage Committee's work over the last several months.

This Master Plan document evaluates many important aspects of drainage and flood control. The key principles that have guided this work are as follows:

1. The major functions of a storm drainage system are to protect life and property and to minimize inconvenience to the public.
2. The District should create a realistic balance between elimination of inconvenience and protection against hazard.
3. The storm drainage system should include adequate measures to protect the natural resources within the community.
4. The community's drinking water supplies should be protected against urban runoff contamination.
5. The storm drainage system should be properly maintained to provide the desired level of service.

6. Public and private responsibilities for operation and maintenance of the drainage system should be clearly delineated.
7. The restricted access rights of the community's private streets should not be violated.
8. The District should adopt minimum design and construction standards for future drainage and flood control improvement.

The annual cost to operate and maintain the existing public drainage system is estimated at $76,000. This annual cost does not include allowances for depreciation and replacement of facilities which are estimated to be an additional $35,000-53,000 per year. The Master Plan includes a preliminary rate structure to pay for the annual maintenance of the existing system. The District will need to develop a capital reserves funding program for depreciation and replacement of the system.

The existing drainage system shows signs of deferred maintenance. In addition, some remedial repairs are needed. The costs of these repairs have been estimated at $46,000. The District will need to develop a funding program for remedial repairs.

Finally, the Master Plan discusses the merits of various programs to fund the extension of the drainage system. The District will need to develop a program for funding of future extensions of the drainage system.

2. INTRODUCTION

A. HYDROLOGIC SETTING:

Rancho Murieta is located on the east side of the Sacramento Valley at the general area where the foothills of the Sierra Nevada range begin. The 3,500-acre community is divided by the Cosumnes River, which flows from east to west with a slight southerly trend.

The Storm Drainage and Flood Control Master Plan exhibit (Exhibit No. 1) indicates the major hydrologic features within the community. This exhibit also shows the major components of the drainage system. This system includes natural streams and man-made drainage and flood control facilities.

The Community varies in elevation from about 110-feet to about 330-feet above sea level. Slopes within the foothill region range from 8-25%. The soils within the community have a moderate to high potential for erosion. Natural vegetation within the community includes grasslands, oak woodlands, and riparian woodlands.

The Cosumnes River is a virtual wild river in that only about 4% of the 536-square-mile watershed upstream of Rancho Murieta is controlled by a dam and reservoir. As a result, the vast majority of the watershed's 38 inches of mean seasonal precipitation flows through Rancho Murieta uncontrolled. Previous hydrologic studies have estimated the 1% change peak flow (100 year peak flow) of the Cosumnes River at Rancho Murieta is 62,000 cubic feet per second (CFS).

The U.S.G.S. stream gage at Michigan Bar has recorded the peak flows in the Cosumnes River since the early 1900's. This gaging station is located one mile upstream of Rancho Murieta. The peak flow recorded to date occurred February, 1986 when the Cosumnes River reached 45,100 CFS. It appears that this peak flow may have been exceeded to some degree by the March, 1907 flood, but accurate flow data is not available to estimate the peak flow in that year.

The stream gage records indicate that significant river flows have occurred in recent history. These peak flows are shown below:

DATE	PEAK FLOW
December, 1955	42,000 CFS
January, 1969	18,800 CFS
January, 1980	19,000 CFS
February, 1982	25,400 CFS
March 1983	18,400 CFS
December, 1984	19,800 CFS

The January, 1980 flood inundated portions of the South Golf Course. As a result of the damage to Fairway Numbers 10 and 11, the developer constructed a dike around these fairways to protect them from the 25-year design flow of the river.

The mean seasonal precipitation at Rancho Murieta is 20 inches. The relatively steep slopes of the foothills and this amount of precipitation result in a medium to very rapid runoff potential. The community is transversed by a series of naturally occurring streams, tributaries and swales which, acting together, comprise the area's natural surface water drainage system.

The significant hydrologic features within the community include:

* Primary natural drainage courses which convey seasonal runoff.
* The 100-year floodplain limits of the Cosumnes River.
* Perennial water bodies, both man-made and natural, such as reservoirs, lakes and rivers.
* Marsh and wetland areas.
* Seasonal transient water such as areas where persistent runoff ponding occurs.

B. DRAINAGE & FLOOD CONTROL SERVICE:

Of the 3,500 acres within Rancho Murieta, approximately one-half of the area has undergone urbanization of one degree or another. The areas that have not been urbanized are more or less still in their natural state. Those areas of the community that have been urbanized include:

* Residential subdivisions (a total of 1,775 dwelling units in Units 1, 2, 3, 3B, 4, Murieta Village, and Murieta Lodge)
* Man-made lakes and reservoirs
* Golf courses and Country Club
* Agricultural lands
* Water & wastewater treatment facilities
* Commercial lands, including Murieta Plaza, RMTC, airport and Equestrian Center.

Drainage and flood control facilities have been developed in the urbanized areas. These facilities include:

* Drainage channels (improved and unimproved)
* Drainage pipelines, culverts, etc.
* Flood control levees
* Drainage flood control structures

In the past, storm drainage and flood control jurisdiction has been the overlapping responsibility of property owners, homeowner associations, Sacramento County and the District. The respective areas of responsibility between these entities were not well defined. Collectively, the effort of these entities in providing these services has been minimal. There is a large need to provide this service in an organized manner to benefit the present and future residents of Rancho Murieta.

The District has voter-approved latent authority to provide drainage and flood control service. In addition to the latent authority, the District's 1983 de-annexation from Sacramento County's Metropolitan Storm Drainage Maintenance District ("Metro") obligated the District to provide drainage service to those areas that had been previously annexed to Metro, principally Unit No. 1 and Murieta Village.

In August, 1987, the District Board of Directors established a Drainage Committee to work with staff in the preparation of a Drainage Master Plan and Drainage Ordinance that could be adopted by the District. This Master Plan document is the result of the Drainage Committee's work over the last several months.

3. DRAINAGE & FLOOD CONTROL

A. STORM DRAINAGE SYSTEMS:

In an undeveloped area, the storm drainage system is provided by nature. Some storm water stands where it falls and some percolates into the ground. The remainder gradually or quickly collects in quantity and speed as it hurries down the watershed through swales and streams to its ultimate destination - the river and then the sea. This simple yet complex natural system is constantly undergoing change to accommodate severe storms.

As urbanization occurs, new drainage systems are required due to the increased runoff rates that result from the placement of large, impervious surfaces over natural areas that were relatively pervious. The problem faced by man as a result of urbanization is an increasing level of inconvenience and/or loss of life or property from increased runoff flows.

Ideally, an urban storm drainage system should remove runoff as quickly as possible to minimize inconvenience and the loss of life or property. These two objectives are not mutually achievable without extremely high "cost". The need is obvious - to strike a realistic balance between elimination of inconvenience and protection against hazard.

The existing storm drainage and flood control system within Rancho Murieta has been developed in an attempt to achieve such a balance. The system is composed of both natural and man-made elements. The system has major and minor functions. The major

function of the system is to minimize loss of life or property during an infrequent storm. The minor function is to minimize inconvenience that results from more frequently occurring, less significant storms.

The planning of new developments should make maximum use of existing open channels and natural streams as a part of the drainage system. In addition to the resulting lower total system costs, the stream corridors are preserved as open space and recreational areas.

Within the system there are facilities that are designed to avoid inconvenience to the public in the smaller sections of the system during a minor storm, for example, a street intersection. During a major storm, the capacity of many of these convenience-oriented facilities will be exceeded, while major components of the system are designed to provide safety and to minimize loss of life or property. It must be recognized and emphasized that a total storm drainage system subject to an infrequent major storm cannot be expected to totally prevent inconvenience and minor property damage.

The provision of drainage and flood control service comes with an inherent liability. Flooding, minor or major in nature, can result in property damage and loss of life. The prediction of peak storm runoff quantities is as much an art as it is a science. Even the peak runoff from a 1% chance (100-year) design storm will be exceeded at some point in time. The resulting loss of property and life can be significant.

While the utilization of generally accepted engineering standards in the design of the drainage and flood control facilities should minimize the probability of flooding during the design storm, there is always the chance that some flooding will occur.

It is for this reason that the drainage purveyor has a liability. Proper levels of insurance should be carried by the purveyor to protect against this liability.

B. NATURAL STREAMS:

One major component of Rancho Murieta's storm drainage system is the extensive amount of natural swales, streams and tributaries. These natural components are made up of floodplains and floodways. The floodway is the main channel portion of the stream that carries floodwaters away. The floodplain is that portion of the stream adjoining the floodway that may be periodically submerged by floodwaters.

A major function of the stream floodways is to provide the necessary drainage of storm water runoff in the area. During the wet winter season, the often-dry floodplains are filled by rainwater as it drains from higher ground to stream channels. Once every hundred years on the average, a major storm will occur which will fill the floodplain out to a line defined as the one hundred-year floodplain. Any development within the hundred year floodplain will be subject to flooding and harm by the one hundred year storm. Storms of lesser intensity will result in less severe flooding on a periodic basis.

The drainage capacity and natural character of the streams are being significantly changed by urban development in the area. The impervious surfaces, drainage alterations, and land filling activities associated with development can cause some serious alterations in the hydrology of the natural streams. This results in an increase in runoff and stream flows, and in many instances a decrease in the carrying capacity of the waterways. Flood hazards are increased by these hydrologic changes. Although the

impact of higher and faster flows may not be damaging at a point of origin upstream, the flows can be damaging to property as they accumulate at a downstream location.

The development of residential lots in natural settings can result in building envelopes that are separated from the adjoining street by a drainage swale or channel. In this case, it is important that the District consider the establishment of control mechanisms over the construction of driveway culverts. Improperly designed or constructed culverts can create severe upstream flooding.

The development of urban areas should be directed away from the one hundred year floodplain of natural streams and other significant hydrologic features within Rancho Murieta for the following reasons:

1. To minimize loss of life and property.
2. To minimize environmental disruption.
3. To preserve or enhance the aesthetic qualities of natural drainage courses in their natural state.
4. To prevent encroachment of fills and structures into the floodplain.

Exhibit No. 1 indicates the extent of the significant natural streams that make up the natural drainage system within Rancho Murieta. The natural system has been extensively incorporated into the drainage system in urbanized areas.

C. WATER QUALITY:

The quality of storm drainage runoff is a function of the level of natural and man-made pollutants that exist within the watershed. The cleansing action of a storm washes these pollutants from the watershed and transports them through the drainage system

to the lakes and rivers.

The quality of water in the drainage system changes as urbanization occurs. The urban storm water draining from streets, roofs and storm drains into the system has higher levels of organic and inorganic pollutants than natural storm water. The dumping of trash and refuse into the system degrades the quality of the water when the dumpings are carried off by storm waters. Erosion and sedimentation are also increased by development activities which disturb the natural protective covers of the land and add loosely compacted fills.

Pollutants are frequently generated throughout a watershed, a process known as "non-point source discharges." A second source of pollutants known as "point source discharges" are specific properties or individuals within a watershed. These sources can be any business storage yards, industrial sites, or residences where pollutants are stored or used in large quantities.

Pollution loads are the result of:

* soil erosion and dissolving of minerals in the natural ground cover;
* overland flow which picks up fertilizer, animal droppings, and organic material;
* flow on parking lots, roofs and streets which carries petroleum products, trash, dust fall and debris from cars and trucks into the drainage system, and;
* accidental or willful discharge of toxics or pollutants from storage areas or transportation modes.

Three basic methods of treatment can be used:

* The first controls pollution loads at their source. For example, proper erosion control and sediment control will

reduce the suspended solids levels. Also, periodic street cleaning will reduce pollution loads.

* Storm water runoff can be treated at the source. Temporary storage of runoff to allow suspended solids to settle out is one example. The fact that most runoff pollution results from the "first flush" of runoff should be considered when planning source treatment facilities.

* Treatment of storm water runoff at a centralized plant downstream is the third alternative. This is usually the most costly method because of the vast volume of water requiring treatment. Consideration may be given to storage facilities enabling storm water to be released to treatment plants at a gradual rate after the runoff peak has passed.

It is quite obvious that the least costly method of treatment is to control pollution at its source. Treatment of runoff pollution loads is probably unnecessary for most low-density residential development. It also seems obvious that the cost of such treatment will be high, so it follows that treatment should not be considered unless there is documentation of the need and a demonstration that the benefits from treatment will be consistent with its costs.

The U. S. Environmental Protection Agency (EPA) is in the process of requiring small communities such as Rancho Murieta to obtain drainage discharge permits. These drainage discharge permits may require compliance with discharge requirements, including quality standards. Small communities will have to have the necessary permits in place by 1992. The State Central Valley Regional Water Quality Control Board will be administering the

permit process for EPA. It is too early to determine what discharge requirements, if any, will be set for Rancho Murieta.

The District should consider creating a permit procedure to monitor and control large users of chemicals, pesticides, fertilizers, etc. Enforcement mechanisms could be adopted that will discourage willful or accidental discharge of pollutants into the storm drainage system.

D. PROTECTION OF DOMESTIC WATER SUPPLY RESERVOIRS:

Rancho Murieta's domestic water supply reservoirs, Lakes Chesbro, Calero and Clementia, are surrounded by small, medium and large watersheds, respectively. Runoff from these watersheds enters the reservoirs and mixes with stored water. As urbanization of these watersheds occurs, the potential for contamination of the community's water supply increases.

As explained earlier, runoff from developed areas can contain high levels of pollutants. Potentially, these pollutants can enter the community's domestic water supply undetected. It is important that proper steps be taken in the handling of runoff from developed areas to minimize the potential for contamination of the community's drinking water supply.

1) Lake Chesbro:

Lake Chesbro is one of the community's two primary drinking water storage reservoirs. The water stored in this reservoir is delivered directly to the District's water treatment plant in order to meet the consumption demands of the community. Contamination of this lake would have an immediate and adverse effect on the quality of the water consumed by the District's customers.

The California State Department of Health Services (DOHS), first advised the District of their concerns regarding the potential contamination of Lake Chesbro in late 1984. The District, in conjunction with the developer and his engineer, Raymond Vail & Associates, developed a mitigation program for the western shoreline of Lake Chesbro in early 1985. This program was approved by the DOHS in mid-1985.

Implementation of the southern portion of this mitigation program has been completed. The northern portion of this program will be implemented with the development of the currently proposed Unit No. 4A.

The Lake Chesbro mitigation program includes a lake perimeter ditch system to intercept and divert urban runoff outside the lake's watershed. Lake Chesbro's watershed is very small and diversion is easily accomplished. Similar mitigation measures will be required around the remainder of Lake Chesbro as further development occurs in its watershed.

The critical link in the Lake Chesbro protection system is the perimeter interceptor and diversion ditch system. It is vital that this ditch system be kept free of blockages to prevent the accidental discharge of urban runoff into the reservoir. The District should exercise very tight control over urban encroachment into or over the ditch system.

This ditch system is located on the uphill side of the lake's maintenance and pedestrian/bicycle path. The lake is a major recreational feature within the community. Adequate provisions should be made for maintenance and recreational access to the lake while still providing the necessary protection of the water supply.

Individual crossings of the interception and diversion ditch system from adjoining lakeview lots should not be allowed. The District should develop a few combined maintenance and recreational access points around the lake's perimeter. Strategic placement of these access points would provide convenient access to this recreational amenity while not jeopardizing the integrity of the lake's protective ditch system.

Potential access points to Lake Chesbro have been shown on Exhibit No. 1. The District, in coordination with Rancho Murieta Association (RMA), should develop these access points and prohibit any other encroachments or crossings of the protective ditch system.

2) Lake Calero:

The protection of Lake Calero is equally important but it may be somewhat more difficult to implement. Lake Calero's watershed is much larger than that of Lake Chesbro. The volume of runoff that would have to be intercepted and diverted is considerably larger than that of Lake Chesbro. The topography around Lake Calero does not allow for convenient discharge of intercepted runoff outside of its watershed.

Like Lake Chesbro, Lake Calero is a principal domestic water supply reservoir. Water stored in this lake is delivered directly to Lake Chesbro to make up the quantity of water drawn from Lake Chesbro into the treatment system. There is as a direct link between urban runoff into Lake Calero and the potential for contamination of the drinking water treatment and distribution system as exists with Lake Chesbro.

The physical constraints to diversion of urban runoff from Lake Calero's watershed may require the development of an expensive

mitigation program to prevent urban runoff contamination of this important reservoir. While this issue will require further study, it is important to note that urbanization of Lake Calero's watershed should not occur until a feasible method to prevent urban runoff contamination of the lake is developed.

3) Lake Clementia:

Lake Clementia is the community's secondary water supply reservoir. The water stored in this reservoir is the last choice of water supply due to the following reasons:

a) The lake is relatively shallow and suffers from algae and other aquatic plant growth during the summer.
b) The water in storage is typically of poorer quality and taste than water stored in the District's primary reservoirs.
c) The lake is utilized for body contact water sports by the community's residents.

The watershed of Lake Clementia is in excess of two (2) square miles in size. The vast majority of this large watershed is located outside of the District and therefore, out of the District's control with regards to water quality of storm runoff.

As the community continues to grow, there is an increasing likelihood that the water stored in Lake Clementia will need to be used for domestic consumption. While nearly all of this reservoir's extensive watershed is undeveloped at this time, the District should continue to monitor the land uses within the watershed and the resulting levels of contaminants in the reservoir. In this way the District will be able to reasonably anticipate the treatment requirements that will be necessary to purify Lake Clementia water for domestic consumption.

E. EROSION CONTROL:

Erosion and sediment movement and deposition are parts of a natural cycle in which land forms are built up, worn down, and again built up. Most of the time the cycle is slow, thereby providing enough time for nature and special segments of the ecosystem to adjust to the changing landscape. Man is a participant in these adjustments.

Urbanization changes the lay of the land and the types of vegetation found on the land. It also increases the rate of storm runoff from the watershed. These changes upset the delicate balance and speed up the natural erosion cycle. The result of upsetting this balance can often cause a large increase in the rate of erosion.

As mentioned earlier, Rancho Murieta's soils have a moderate to high potential for erosion. Once disturbed these native soils will erode and the resulting sediment is transported through the drainage system. The sediment settles in streams, pipes and lakes within the system, is highly undesirable, and requires expensive maintenance work to clean up the system.

This erosion problem exists both during the construction of streets and utilities (short-term) and, to a lesser degree, on a continuing basis from home and landscape construction (long-term). Special erosion control measures can be very successful in minimizing short and long-term erosion problems.

Measures should be taken to preserve the natural streams within Rancho Murieta. This should include a strong emphasis on "natural" engineering and land planning techniques, which will not only preserve and enhance natural features of the land, but protect them. Natural streams should be used as a design theme within the

community and adequate steps should be taken to control erosion within these natural resources.

The design of culverts and drainlines should include adequate provision for the dissipation of energy at their outlets. Energy dissipators will significantly reduce the potential for erosion in the downstream channel.

With the resulting increase in peak flows that occurs with urbanization, there is an increased potential for erosion of the banks of natural channels. Natural channels should be evaluated during the design of each phase of development to determine the type and extent of mechanical erosion protection that may be needed to minimize the potential for channel erosion.

Underground utility trenching within Rancho Murieta generates large volumes of shot rock spoils. This material cannot be used as trench backfill and it must be disposed of at a high cost to the developer. Shot rock makes excellent erosion control material as rip rap. This material should be used for erosion control along drainage channels and at the discharge of drain pipes and culverts. This material could be utilized as much as possible to create "natural" appearing erosion control structures in each development. Excess material could be stockpiled for future use by the District in erosion repair work.

Appendix A contains a copy of "Principles of Reduced Erosion and Sediment from Developing Areas", which was prepared by the High Sierra Resource Conservation and Development Council. Appendix B contains a copy of "Measures to Control Soil Erosion in Rancho Murieta", which was prepared by Raymond Vail & Associates. The successful implementation of these types of programs on a community-wide basis will significantly reduce the potential for erosion related problems at Rancho Murieta.

F. GRADING CONTROL:

Proper control of grading activities can significantly reduce drainage and erosion problems. While Rancho Murieta is currently under the jurisdiction of the County's Grading Ordinance, past history indicates that the County has not exercised its authority sufficiently to control some grading activities. Some significant drainage and erosion control problems have resulted.

In addition, the County Building Department has not historically exercised significant authority over on-site grading and drainage in conjunction with the construction of structures. Significant drainage problems exist around many homes within the community as a result of this lack of exercise of authority provided to Sacramento County by the Uniform Building Code (UBC).

The District's drainage ordinance should include prohibitions on certain grading and drainage activities that can result in the creation of grading and drainage problems on private property. The adopting of such prohibitions should not pre-empt the County's authority nor require the District's review and approval of grading and site plans.

The District should encourage the County and the Architectural Review Board of the various homeowner's associations to actively enforce their existing requirements. In this way, drainage and lot grading problems can be minimized in the future.

G. OPEN SPACE & RECREATION:

The most important function of Rancho Murieta's drainage system is to minimize the loss of life and property from flooding. Besides the important function in the drainage system, natural

stream corridors provide open space, scenic, and recreational opportunities to the citizens of Rancho Murieta, healthy living environments for wildlife, air cooling and cleansing, and improvements to water quality. Neighborhood parks and off-street bicycle, hiking, and riding trails could be established along the stream corridors.

Urban development has a major effect on the recreational potential of the stream corridors. Uncoordinated urban development may completely preclude the construction of recreational facilities by using up necessary land and access points. Often, the homeowners themselves become obstacles to the development of recreational facilities because of their concerns about privacy, vandalism, noise and litter. Financial constraints can also hamper recreational development.

The quality of life within Rancho Murieta is greatly enhanced by the community's natural setting. The development of the community utilizing sound environmental planning concepts that complement the natural setting, including natural stream corridors, will greatly contribute to the overall quality of life within the community.

Open space areas within the community can be developed as active recreational areas. The network of natural stream corridors has the potential to connect these recreational areas with an off-street trail system.

Footpaths connecting these areas may be both established, as in a surfaced or landscaped path, or meandering, such as may become established by repetitive use by children playing or families walking to visit adjacent areas. Footpaths have been contemplated around the lakes and reservoirs. In some instances, specifically around the larger reservoirs, these paths parallel or follow the

same path as maintenance roads.

The design of lotting patterns should make allowances for the opportunity for future development of foot and bicycle paths in common space areas by the homeowner's association`s or the District as they deem necessary to meet the needs of the community's residents.

This Master Plan envisions that recreational and aesthetic improvements will be made within the stream corridors so long as they do not restrict the capacity of the drainage system. For example, improvements to Lake Guadalupe could be made for recreational or aesthetic benefits without interfering with the capacity and function of this component of the drainage system.

H. LEVEL OF SERVICE:

The desired level of service will have the most significant influence on the capital and maintenance costs of the drainage and flood control system. The establishment of excessive design requirements will result in the greatest protection against flood hazard, but at a very large construction cost. The reverse is also self-evident. Substandard design requirements will result in a significantly less expensive system, higher maintenance costs, and a very low level of protection from flood hazard.

The goal is to establish levels of service that balance the need for an adequate level of protection with reasonable construction and maintenance costs. This dilemma has been addressed many times before by other communities. A level of service that balances these opposing interests has become somewhat standard.

The level of service envisioned in this Master Plan is as follows:

1. Protection of developable areas from the 100-year peak flow of the Cosumnes River.
2. Street drainage systems should be designed for the 10-year design storm.
3. Curbs and street drainage should be designed for the 100-year design storm when the buildable portion of the adjoining lot is below the top of the curb.
4. Culverts, open channels, and natural streams should be designed for the 100-year design storm.
5. Finish floor elevations of habitable structures should be a minimum of 1-foot above the 100-year water surface.
6. Structures and fills should not encroach into the 100-year plain.
7. Drainage easements should be obtained for all areas within the 100-year flood plain.

I. MAINTENANCE:

Maintenance includes those factors that are essential to keeping the drainage system in good condition, maintaining an adequate staff to accomplish the work, and common practices and procedures that should be used for the maintenance of structures and facilities within the system. The objectives of the drainage system maintenance should be to:

1. Keep the system in top operating condition at all times through proper maintenance;
2. Obtain the longest life and greatest use of the system's facilities; and,
3. Achieve the foregoing two objectives at the lowest possible cost.

Maintenance factors should be considered in the design of the drainage system and not relegated to living with the resulting

maintenance problems of a short-sighted design. Total life cycle costs should be evaluated in the design of drainage facilities, as they commonly are with water and sewer systems.

The level of maintenance should be sufficient to keep the drainage system operating at all times to provide the desired level of service. This requires that the maintenance program should be based on the understanding of the level of protection and convenience desired by the community.

In addition to the impacts from development and use of the natural stream corridors, there are several important public concerns relating to the maintenance of the natural stream areas. Maintenance of the stream channels consists mainly of removing drainage obstructions, abating weeds, making repairs, and collecting refuse.

The maintenance of channels and swales in homeowner's association's common areas also deserves special discussion. Typically, maintenance activities of channels and swales is utility-oriented. The work is focused on keeping the drainage course free of debris and growth that may cause flow blockage during a storm, not on the aesthetic appearance of the facility.

Due to neighborhood concerns regarding aesthetics, it is anticipated that the homeowner's associations will continue to perform maintenance activities in the floodplain portion of the drainage courses. Their activities will keep these areas aesthetically pleasing to neighboring residents. These aesthetic maintenance activities will have a beneficial side effect of reducing the growth of grasses and weeds in the floodplain that can impede flows.

Maintenance of flood control levees should be limited to the utility aspects of the levee, namely structural stability for flood protection. While maintenance of landscaping along a levee is the choice of the private landowner for aesthetic reasons, the District should control the extent and nature of landscaping activities, including tree planting, to insure that the structural stability of the levee is not jeopardized.

The District should maintain only those portions of the drainage system that are operated and maintained by the District. In addition, the District should maintain only those facilities contained in proper easements and that have been properly dedicated to the District.

While the development of a maintenance program is beyond the scope of this Master Plan, it is important to point out at this time the major components of such a maintenance program. A drainage maintenance program should, at a minimum, include:

1. ANNUAL MAINTENANCE PROGRAM -
   An annual preventative maintenance program should be designed to keep the system operating. This program could include periodic maintenance of mechanical equipment, cleaning of silt, brush, trees, weeds and debris from the system, repair of deteriorated facilities, periodic inspections of levees, etc.

2. EMERGENCY RESPONSE PLAN -
   A plan on how to respond with trained personnel in the event of a major storm or failure of a key facility that may result in serious flooding.

3. STAFF & EQUIPMENT PLAN -
A plan to adequately staff, train and equip a maintenance crew to insure that the desired level of service can be maintained.

4. POST EVENT INSPECTIONS -
A plan to inspect the drainage and flood control system after major storms to identify areas in need of immediate repair or maintenance.

An evaluation of the anticipated cost for annual maintenance of the existing drainage system is presented in a later section of this Master Plan.

Private landowners and the various homeowner associations should develop maintenance programs for their respective drainage systems. Significant problems can result if the private portions of the community's drainage system are not properly maintained.

J. DIVISION OF PUBLIC & PRIVATE RESPONSIBILITIES:

One of the problems faced by a public agency which provides drainage and flood control services is the determination of the limit of public responsibilities in the provision of service to private lands. Since each drainage purveyor has had to struggle with this problem, a rather standard understanding of the limit of public responsibility has developed.

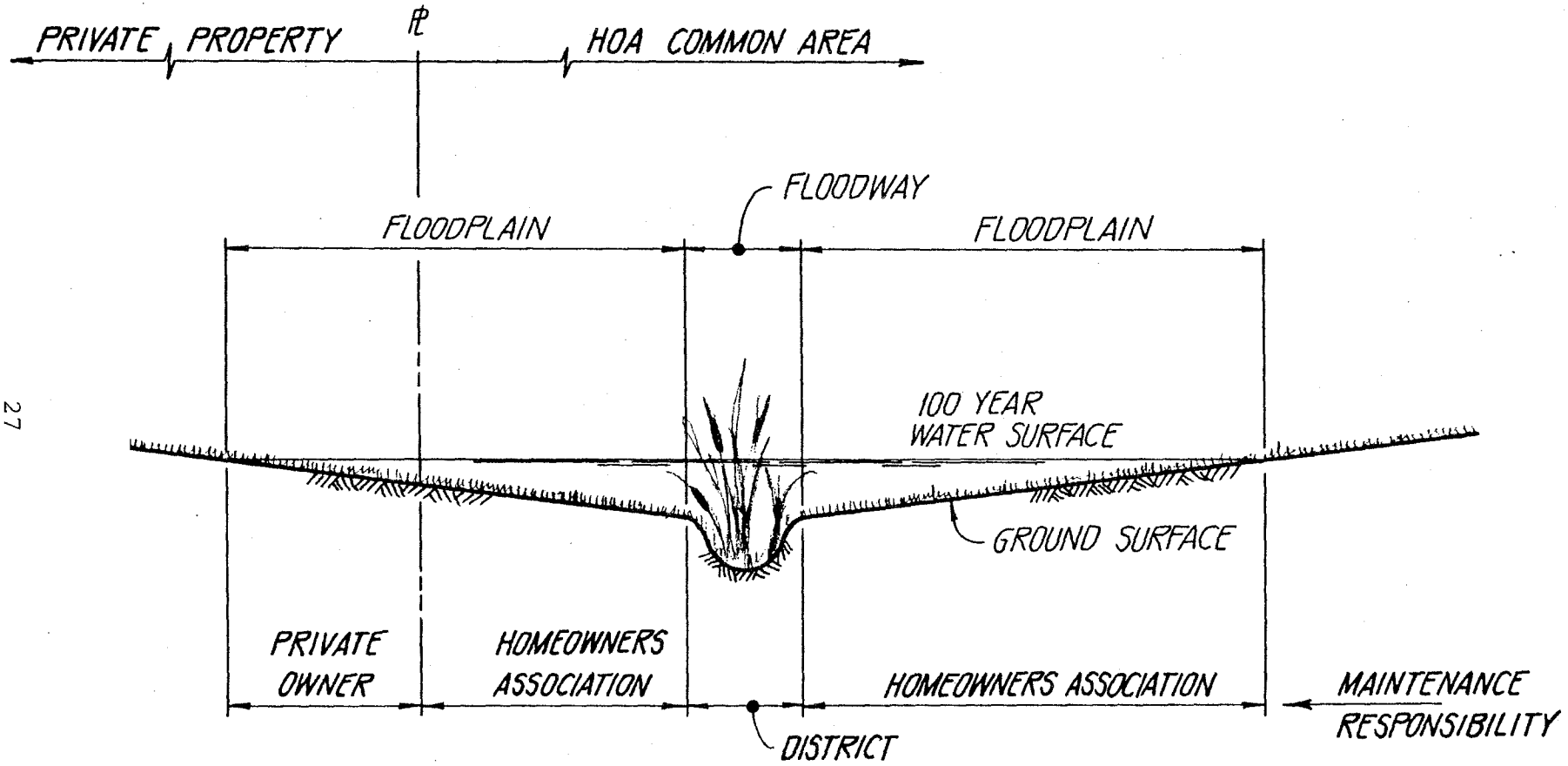
Drainage law has evolved over time to allow the owner of a higher parcel to use his property in a reasonable manner and to discharge runoff from his lands onto an owner of a lower parcel. In essence, the higher land has an "easement" over the lower land for drainage.

Rancho Murieta is somewhat unique due to the private nature of the streets and common areas. Since the streets and drainage channels are a significant component of the drainage system, it is important for the District to develop a mutually acceptable understanding of the point of interface between public and private responsibilities for drainage and flood control.

The District should work closely with the various homeowner associations in developing mutually agreeable limits of public and private responsibilities. Care should be taken not to violate the restricted access rights enjoyed by the residents within the various homeowner's associations.

The division of public and private maintenance responsibilities for drainage channels and swales is depicted in Figure No. 1. It is proposed that the District perform all maintenance activities in the floodway. The respective property owner or homeowner's association would then be responsible for maintenance of the remainder of the floodplain. The District should maintain some enforcement authority to insure that the floodplain will be properly maintained by the respective private parties.

FIGURE NO. 1



PUBLIC / PRIVATE MAINTENANCE RESPONSIBILITY FOR DRAINAGE CHANNELS & SWALES

Golf course drainage facilities also deserve special discussion. Typically, these facilities have been designed to handle only small intensity storms and summer time nuisance flows. During periods of high intensity runoff, these facilities are designed to overtop, thereby allowing floodwaters to flow across the surface of the fairways. The siting of homes on the upstream side of these facilities has been designed to prevent inundation when the golf course fairways are overtopped during a high intensity storm.

It is the recommendation of this Master Plan that the following criteria be used to define the point of interface between public and private responsibilities for drainage:

1. The District be responsible for drainage within the floodway of natural channels and streams, for man-made drainage channels, culverts, and public drainage pipelines equal to or larger than 10-inches in diameter, except golf course drainage facilities.
2. The District be responsible for drainage below the theoretical plane of the top of the grate of a drainage inlet on private streets.
3. The District be responsible for flood control levees designed to protect from the 100-year peak flow of the Cosumnes River.
4. The private party be responsible for drainage across private parcels and common areas to the point of discharge into a drainage channel or public drainage pipeline.
5. The private party be responsible for maintenance within the floodplain of natural channels and streams.
6. The District establish certain grading and drainage requirements to minimize drainage and erosion problems within the District.

7. The homeowner's associations continue to be responsible for control and coordination of architectural and landscape design, including site grading and drainage.

K. STATE & FEDERAL REGULATIONS:

The District's authority over drainage and flood control is not exclusive. Several State and Federal agencies have at least some control over or influence over the rivers and streams within the District. It is easiest to understand the overlapping areas of authority by listing these agencies and their area of authority as it relates to drainage and flood control.

The list of State and Federal agencies is as follows:

1. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA):
FEMA is responsible for identifying special flood hazards from the 100 and 500-year events. In order for land-owners to be eligible for federal flood insurance, a local city or county must institute certain zoning requirements on those properties identified by FEMA as having a potential for inundation from the 100-year flood. FEMA requirements are enforced by Sacramento County.

2. U.S. CORPS OF ENGINEERS:
The Corps is responsible, in conjunction with other federal agencies, for protection of the nation's waterways and wetlands. Any project that proposes to modify or alter a waterway or wetland requires the approval of the Corps. The Corps approval is frequently issued in conjunction with the approval of the U. S. Fish & Wildlife Services.

3. CALIFORNIA STATE DEPARTMENT OF FISH & GAME:
The Department is responsible for the protection of the State's streams, rivers, waterways, wetlands and fisheries. Any project that proposes to alter or modify a stream or wetland requires the Department's approval.

4. CALIFORNIA STATE BOARD OF RECLAMATION:
The Board is responsible for protection of the State's rivers and waterways. Any project that proposes to alter the capacity of a stream, river or waterway requires the approval of the Board.

5. CALIFORNIA STATE REGIONAL WATER QUALITY CONTROL BOARD:
The Regional Board is responsible for water quality within the waterways of the State. The Board has authority to control the discharge of wastes into these waterways. Any project proposing to discharge wastes to the State's waterways requires the Board's approval.

L. FEMA 100-YEAR FLOOD PLAIN:

FEMA Flood Insurance Rate Maps for the portion of Sacramento County surrounding Rancho Murieta indicate the extent of the 100-year flood hazard area along the Cosumnes River. The flood hazard area generally covers the areas immediately adjacent to the river, the Clementia Valley below Clementia Dam, Fairways 1, 10 and 11 of the South Golf Course, the airport and the vast majority of the agricultural lands within the community. This area of inundation has been shown on Exhibit No. 1.

Other areas within the community are also subject to inundation of lesser degrees during major storms. While localized flooding may occur during higher intensity storms, the drainage system has been designed to prevent localized flooding from causing

significant property damage. These areas are not significant enough to warrant inclusion on the FEMA maps.

4. THE SYSTEM

A. THE EXISTING SYSTEM:

The existing storm drainage and flood control system within Rancho Murieta has been constructed in conjunction with development activities that started in the early 1970's. The existing system primarily serves the developed areas within the community. These developed areas constitute approximately 30% of the total acreage within the District.

The major components of the existing system are listed below and shown as Exhibit No. 1:

1. Flood control levee protecting the South Course.
2. Flood control levee protecting the commercial areas, including the Business Park, Training Center, Murieta Village, Murieta Plaza, Equestrian Center, etc.
3. Laguna Joaquin acts as a detention pond to reduce peak flows from the developed areas north of Jackson Road.
4. The Laguna Joaquin Drainage channel.
5. The natural and man-made channels and swales in Unit No's. 1-4.
6. Major culverts at street crossings of natural and man-made channels and swales in Unit No's. 1-4.
7. Major drainage channels around the new water and wastewater treatment plant sites and downstream of Lake Clementia.
8. The drainage pump station under construction in the Murieta Airport Business Park.

The existing system has been designed and constructed under the jurisdiction of Sacramento County Department of Public Works. The older portions of the system, principally the commercial area and Unit No. 1, were designed in accordance with Sacramento County's then standard hydrologic runoff criteria.

Subsequent engineering studies determined that the hydrologic conditions in the Rancho Murieta area result in higher runoff flows than those predicted by the County standard criteria. Starting in about 1978, all new facilities were designed to handle the higher runoff flows that are predicted by the use of site-specific Intensity-Duration-Frequency Curves. This new criteria has resulted in a better designed drainage system.

According to the new criteria, the portions of the system that were constructed from designs based on the County`s standard criteria are inadequately sized. During the early 1980's, the project developer authorized an analysis of the adequacy of the older portions of the system to identify critical "capacity deficiencies" that resulted from the adoption of new design criteria. This analysis revealed that several major culverts in Unit No. 1 were inadequate. The developer subsequently funded the construction of additional improvements to provide adequate capacity at these critical points.

The analysis also identified that major components of the commercial area storm drainage system were inadequate under the new design criteria. The analysis indicated that a separate river outfall was needed to serve the undeveloped 52-acre commercial area located south of Murieta Drive and west of Jackson Road. Once this additional outfall is constructed, the existing system will adequately serve the existing portions of the commercial area, including the Mobile Home Village, RMTC and Murieta Plaza.

Over the years several minor drainage facilities have experienced capacity problems. No significant property losses or inconveniences have been reported. This Master Plan does not envision remedial repairs to increase the capacity of these minor facilities unless it can be demonstrated that sufficient economic benefit would result from the capital investment.

A May 1988 reconnaissance level inspection of the existing system revealed that the system is in very good condition overall. The inspection revealed many conditions that are typical of systems experiencing deferred maintenance. These conditions are as follows:

1. Minor erosion of channels.
2. Buildup of weeds, brush and trees in areas of standing water.
3. Debris from home building activities.
4. Debris from landscaping activities.
5. Fallen tree limbs.
6. Lot grading fills encroaching into the flood plain and floodways.
7. Silt buildup in low velocity areas.
8. Driveway and lot drainage pipes discharging in the channels.

These conditions can be easily rectified by periodic routine maintenance activities. These conditions do not present a significant reduction in the system's effectiveness.

The inspection also revealed the following conditions that may require immediate maintenance attention or remedial repairs to insure proper operation of the system:

1. The commercial area 60-inch diameter river outfall pipe is partially filled with silt that is significantly reducing its effective capacity. This needs prompt maintenance attention.
2. The Laguna Joaquin Discharge Channel is choked with growth significantly reducing its effective capacity. This channel needs prompt maintenance attention.
3. Channel and bank erosion along approximately 1,500 lineal feet of channels in Unit No.'s 1-4. This will require remedial repair work in the near future.
4. Evidence of home building related concrete dumping partially clogging drainage pipes. This needs prompt maintenance attention.
5. Automation of the operation of the slide gate that protects the commercial area, including Murieta Village, Murieta Plaza & RMTC, from flooding during periods of high flood stages in the Cosumnes River. This will require remedial repairs in the near future.
6. Replacement of the trash rack on the Lake Guadalupe spillway to eliminate the potential of flow blockage. This will require remedial repairs in the near future.

B. THE FUTURE SYSTEM:

It is anticipated that future extensions of the system will be very similar in nature to the existing system. Future residential subdivisions on the undeveloped lands within the District will, for the most part, incorporate the same planning concepts that have been used to date within Rancho Murieta.

The resulting drainage systems will therefore make extensive utilization of the natural channels and swales shown on Exhibit No. 1. These future systems will experience the same types of problems that are common to the existing system. Maintenance requirements

on the future systems will therefore be very similar to those of the existing system.

Future system extensions should be designed in accordance with the new drainage criteria to accommodate the higher intensity storms that frequent the Rancho Murieta area. Construction of future system components should comply with the requirements of District design and construction standards. The requirements for future system extensions will need to be closely coordinated with the architectural control requirements of the various homeowner associations with regards to roof and yard drainage.

Future major components of the drainage and flood control system include the following:

1. An existing major drainage channel along the east side of Fairway No's. 11 & 12 of the South Golf Course.
2. A major drainage pump station to be located near the No. 3 Tee of the South Golf Course.
3. A major drainage pump station to be located on the 52-acre commercial parcel on Murieta Drive.
4. Extensive natural and man-made drainage channels and drainage culverts to serve the future development.

It is beyond the scope of this Master Plan study to estimate the size and location of all of the future facilities that will make up the drainage and flood control system. The development of the system will require the close coordination of the project proponent, the responsible homeowner's associations, and the District. Future improvements will be designed and constructed incrementally as development within the community progresses.

C. DESIGN & CONSTRUCTION STANDARDS:

The District will need to adopt minimum design and construction standards for future drainage and flood control improvements. Minimum design and construction standards closely modeled after those of Sacramento County will result in an excellent set of standards at minimal expense to the District.

Over the years, the developer's engineers have used Sacramento County standards, modified for site specific conditions, to guide the design and construction of storm drainage and flood control facilities at Rancho Murieta. The formal adoption of similar standards should not pose an undue hardship on the design professional, the developers or their contractors.

While the development of minimum design and construction standards is beyond the scope of this Master Plan study, it is important to note the significant differences between the County's minimum standards and the standards that have been used at Rancho Murieta. The significant differences are as follows:

1. Storm runoff quantities for small watersheds are estimated by the modified rational method utilizing site specific Intensity-Duration-Frequency curves.
2. Storm runoff quantities for large watersheds are estimated utilizing the Soil Conservation Service methodology and site specific Intensity-Duration-Frequency curves.
3. A 100-year flood surface profile is developed for drainage channels and swales.
4. Lots adjacent to drainage channels and swales are assigned a minimum finished floor elevation of at least 1-foot above the projected 100-year water surface.

5. Side opening curb galleries are allowed on drainage inlets to increase their inlet capacity.
6. Minimum slopes on streets and pipes are steeper creating higher velocities to assist in cleaning silts off the streets and out of drainage pipes.
7. Compaction of trenches is done by mechanical methods, jetting is not permitted.

5. FUNDING

A. OPERATION AND MAINTENANCE:

In order for the drainage and flood control system to meet its objective of protecting life and property and to minimize inconvenience to the public, it must be properly maintained. Preventative maintenance will assure that the system is in full and complete working order during periods of high runoff.

It is important to note that the District's maintenance budget will be predicated on utility orientated maintenance activities required to properly maintain the existing system. The budget is not intended to maintain the natural drainage system within the undeveloped portions of the District. The homeowner's associations will have an on-going responsibility to perform aesthetic maintenance of the non-floodway portions of the drainage channels and swales.

The homeowner's associations will also have to keep the streets and drainage inlet grates free of debris. The potential for localized flooding resulting from clogged inlet grates is certainly real. Each year localized flooding and property damage occurs in Sacramento County due to clogged drainage inlet grates.

The annual costs of operating and maintaining the existing system have been estimated. These costs are based on cost data supplied by Sacramento County reflecting their costs to operate the County's drainage system. In some cases, the estimated

maintenance costs are based upon engineering cost estimates to meet the specific needs of the existing system.

The estimated annual maintenance costs contained in Table No. 1 represent the direct costs of maintenance. In addition to these direct costs, the District should anticipate incurring indirect labor, administrative and insurance expenses.

Table No. 1
Estimated Annual Maintenance Cost
Existing Drainage and Flood Control System

Item No	Description	Quantity	Unit Price	Est Cost
1.	Flood Control Levee	12,000 LF	$0.75/LF	$ 9,000
2.	Drainage Pipe	48,000 LF	$0.05/LF	2,400
3.	Manholes	130 Ea	$4.00/Ea	500
4.	Drainage Inlets	280 Ea	$4.00/Ea	1,100
5.	Lined Channels	7,000 LF	$0.25/LF	1,800
6.	Earthen Channels	6,000 LF	$0.40/LF	2,400
7.	Natural Channels & Swales	31,000 LF	$0.30/LF	9,300
8.	Drainage Pump Station	1 Ea	$3,000/Ea	3,000
9.	Emergency Response	5 Ea	$ 500/Ea	2,500
			Total Direct Cost	$32,000

The District has estimated the annual indirect labor, administrative and insurance expenses as follows:

Indirect Labor Expenses	$15,000
Administrative & Supervision Expenses	12,000
Insurance Expenses	17,000
Total Indirect Cost	$44,000

Accordingly, the total annual direct and indirect expenses to maintain the existing drainage and flood control system are estimated at $76,000. This estimated cost does not include allowances for depreciation and replacement of facilities.

The value of the existing drainage and flood system has been roughly estimated at $3.5 million, with an average design life of 75 years. An annual allowance of at least 1 - 1-1/2% of the system's value should be reserved to fund system repair and replacement. This reserve would represent an additional $35,000 - 53,000 per year in service charges.

For the purpose of discussion we prepared a benefit/cost analysis for an annual maintenance budget of $76,000. This analysis may be helpful in the establishment of equitable rate structures for drainage service within the District. A summary of this benefit/cost analysis is shown in Table No. 2. This analysis is preliminary and will require refinement before the establishment of rate structures.

Table No. 2
Drainage and Flood Control
Benefit/Cost Analysis

Land Use	Benefit Ratio	Prorata Cost	Unit Basis	Approx Cost/Unit
Residential	70%	$53,200/Yr	1775± DU	$30.00/DU/Yr
Commercial & Industrial	20%	15,200/Yr	120± AC	$126.70/AC/Yr
Undeveloped	10%	7,600/Yr	1000± AC	$7.60/AC/Yr
	100%	$76,000/Yr		

B. REMEDIAL REPAIRS

The items identified during the reconnaissance survey that are in the need of remedial repair should be programmed for repair during the first year of operation of the system. The estimated cost of remedial repairs is shown in Table No. 3. For the most part this work can be accomplished by the District's maintenance staff.

Table No. 3
Estimated Costs of
Remedial Repairs to System

Item No.	Description	Estimated Cost
1.	Channel & Bank Erosion Repairs (1,500 LF)	$30,000
2.	Automation of Slide Gate at Airport Entrance	15,000
3.	Replace Trash Rack at Lake Guadalupe	1,000
	Total Remedial Repairs	$46,000

The District will need to fund these repairs in the near future. This could be done with an incremental increase in rate structures or from the establishment of a development fee structure, among others.

C. PERMIT AND COMPLIANCE:

The adoption of a drainage ordinance will require the District to perform technical review and approval of drainage plans. The District will also have to perform compliance inspections during construction.

The District should adopt a permit and inspection fee structure for drainage. This fee structure could be modeled after the fee structures currently used by the District for sewer and water system extensions.

D. FUTURE SYSTEM EXTENSIONS:

The District will need to develop a funding program for future extensions of the storm drainage and flood control system. Funding alternatives include:

1. Developer dedications
2. Development fees
3. Benefit assessments

The estimated cost of the future system is beyond the scope of this Master Plan study. Let it suffice to say that the cost of the system could vary significantly depending on the final land uses utilized in the development of the undeveloped areas within the District. Exhibit No. 1 indicates the future major components of the drainage and flood control system in a schematic manner.

Dedications from project proponents is perhaps the simplest approach. Under this approach the applicant would be required to construct system extensions to District standards and dedicate them for operation and maintenance. Since the vast majority of the undeveloped lands within the District are owned by one developer, this approach would be equitable.

Development fees could be levied on land as it is developed to generate the needed funds. Accurate estimates of the future cost of the system would have to be made to insure that adequate funds would be generated to pay for the system. The District would be responsible for funding system extensions either through direct contract or reimbursement procedures. Such an approach places a large responsibility on the District to be sure that funding levels

are adequate in light of the rather limited quantity of land yet to be developed. Should funding levels not be adequate, the District could be faced with a serious financial dilemma.

Benefit assessment proceedings could also be used to fund system extensions. In addition to fiscal responsibility issues similar to those discussed above, the costs of utilizing public financing programs can create a significant financial burden on the community.

It would appear that the developer dedication approach would be the simplest and most efficient method available to the District to extend the system. The District should evaluate the merits of the various funding alternatives and establish a policy on this matter.

APPENDIX A

Principles of Reduced Erosion and Sedimentation From Developing Areas

The following five principles can be integrated into an effective system of erosion and sedimentation control. This system consists of vegetative and structural measures and management practices. The development and use of this system can reduce the damage of erosion caused by land development and reduce costly clean-up procedures.

1. Plan the development to fit the particular topography, soils, waterways, and natural vegetation at a site.

Slope length and gradient are key elements in determining the volume and velocity of the runoff and erosion. Where possible, steep slopes should be left undisturbed. Erosion hazards and runoff volumes and velocity can be reduced by limiting the length and steepness of slopes.

Soils high in silt and very fine sands are generally the most erodible. Erodibility decreases as the percentage of clay or organic matter content increases. Even a highly erodible soil may show little evidence of erosion, by reducing the length and steepness of a given slope. Long steep slopes should be broken by benching, terracing or constructing diversion structures.

Natural vegetation is extremely important in controlling erosion since it: (a) shields the soil surface from rain, (b) increases infiltration, (c) reduces the velocity of runoff and (d) holds the soil in place as well as acting as a filter.

2. Expose the smallest practical area of land for the shortest possible time.

When the soil is to be disturbed and vegetation removed, keep the site and duration of exposure to a minimum. Phase the project so that only the areas currently being developed are left exposed. Grading should be completed as soon as possible. Vegetation (temporary or permanent) with mulching should be in place before the rainy season starts (about October 15).

After the best decision has been made as to land use, and the development process begins, effective erosion control and sediment reduction depends upon careful site planning,

judicious selection of conservation practices, adequate design, accurate installation in a timely fashion and sufficient maintenance to insure the intended results.

3. Apply "Soil Erosion" control practices as a first line of defense against on-site damage.

Numerous practices can be used on site to minimize potential damage. These practices can be used independently or with other methods. Soil should be kept covered as much as possible with temporary or permanent vegetation or with various mulches. Other practices include diversions to keep surface runoff from exposed areas and grade stabilization structures to control surface water. When erosion is not adequately controlled, sediment control is more difficult and expensive.

4. Apply "Sediment Control" practices as a perimeter protection to prevent off-site damage.

Control sediment once it is produced to prevent it from leaving the site. Diversion ditches, sediment traps, vegetative filters and sediment basins are examples. Generally, sediment can be retained by two methods: (a) filtering runoff as it flows through an area and (b) impounding the sediment laden water to settle it out.

5. Implement a thorough maintenance and follow up operation.

A site cannot be effectively controlled without thorough, periodic checks of the erosion and sediment control practices.

APPENDIX B

"MEASURES TO CONTOL SOIL EROSION IN RANCHO MURIETA"

The fundamental principle for minimizing soil erosion is to minimize the area of bared soils and the duration of exposure to natural erosive forces. During the construction phase of a project, this is best achieved by scheduling and limiting the extent of clearing, grading, trenching, etc., so as to assure completion of construction and soil stabilization prior to significant rainfall. Disturbed soils should be protected with mulch and/or vegetation, as best suits the situation, and runoff velocity should be controlled using structural measures. Up-slope diversion structures should be used to reduce the volume of runoff across denuded areas and prepared drainage ways should be constructed to handle the increased runoff due to placement of impervious coverage. However, some erosion usually occurs in spite of erosion control measures. For this reason, it may be desirable to construct temporary or permanent sediment basins to capture most of this suspended eroded material to prevent downstream siltation. Finally, a construction site should be inspected frequently to assure that control measures are maintained adequately.

Up to this point, the discussion has been conceptual in nature and is intended to elucidate the principles to be followed for controlling soil erosion during future development at Rancho Murieta. The remainder of this discussion is to describe more specific guidelines to be followed:

- All cut and fill banks will be left rough and will not exceed a slope of 1-1/2:1 (horizontal:vertical) as recommended by the Soil Conservation Service.

- Existing vegetation will be retained, protected and supplemented whenever possible. When vegetation must be removed, the method used will be one that will minimize soil disturbance and will be limited to the area required for immediate construction operations.

- Areas with the highest erosion hazard will be scheduled for disturbance when significant rainfall is least likely to occur.

- Excavated material from trenches will be stockpiled up-slope from the trench if there is a possibility of rain before backfilling. In this manner, the trench acts as a sediment catch basin if it rains.

- All areas where runoff concentrates will be protected from erosive forces by installing storm sewers, culverts, diversions, berms, drains, sediment traps, and grass or rip-rap lined channels as appropriate. Interceptor and roadside ditches will be lined with rip-rap, asphalt concrete or other suitable material when ditch flow-line slope exceeds two percent.

- If a time shortage should occur, a quick, short-term vegetation stand will be established on newly cleared areas by seeding with barley or wheat then raking lightly into surface soil. Permanent cover vegetation, which

takes longer to become established, may be seeded simultaneously for long-term protection. Table 1 will be used as a seeding guide. At the time of seeding or within 15 days prior, fertilizer will be applied uniformly at a minimum rate of two pounds of available nitrogen and two pounds of phosphoric acid per 1000 square feet. Using a fertilizer composition of 10-10-0 (nitrogen-phosphorus-potassium), this would be the equivalent to 20 pounds per 1000 square feet. As a substitute, 10 pounds of 16-20-0 fertilizer may be used. Scraped topsoil from grading operations will be stockpiled to apply later on areas otherwise unsuited for establishing vegetation. Stockpiles will be protected from erosive forces during the rainy season by plastic sheeting or equivalent protection.

- In the Central Valley, statistics show that planting a vegetative cover by September 15 provides a 98 percent probability that seeds will be in the ground in time for the first rain adequate to cause seed germination. There will also be a 90 percent probability that the first rain adequate to cause significant erosion will not occur for over 45 days. By comparison, planting by October 1 provides a 90 percent probability that seeds will be in the ground in time for the first germination-causing rain, and a 90 percent probability that the first erosive rain will

not occur for over 30 days.

- If scheduling permits, permanent vegetation cover may be established initially; omitting temporary measures. In which case, all road cut and fill areas and other disturbed areas will be seeded as recommended in Table 1 for long-term stands. After application, seeds will be raked lightly into soil and fertilized as described earlier with 20 pounds per 1000 square feet of 10-10-0 fertilizer or 10 pounds of 16-20-0 fertilizer. In the more level areas, the soil may be tilled two to four inches deep to prepare a seed bed then drill seeds to a depth not to exceed 1/2-inch with a range seed drill across slope or broadcast seeds and follow with a light harrow. Either method of seeding will be followed with a seed bed roller.

- An application of straw or wood fiber mulch to the seed bed not only aids in establishing vegetation cover, but provides temporary erosion control until permanent vegetation is established. Straw mulch, if used, would be spread at a rate of approximately 100 pound per 1000 square feet. On the more steep slopes, straw will be anchored in placed by "tucking" into soil with a spade or secured with fiber netting. If wood fiber mulch is used, it would be applied at a rate of 35 pounds per 1000 square feet and may be applied simultaneously with seed and fertilizer in a slurry (hydro-mulching).

- If a vegetative cover is used for stabilizing cut and fill banks, slopes will not be steeper than 50 percent (2:1 horizontal to vertical). Where slopes exceed 33 percent (3:1), seed beds with straw mulch will be secured with heavy jute netting of one-half to two-inch mesh. The mesh will be stapled together and anchored to the slope.

- If scheduling should warrant, "winterizing" the site may become necessary, in which case, the following measures may be implemented as most appropriate:
  - Plastic sheeting (i.e., Visqueen) or other suitable material may be used, if necessary, as an emergency measure to stabilize bare road cut and fill banks.
  - Temporary diversion ditches will be constructed, if needed, to divert runoff away from exposed banks toward protected drainage channels, e.g., pavement, grass, or rip-rap lined channels, street gutters, etc.
  - Where slopes do not exceed 30 percent, straw, peat moss, or wood chips will be applied to bare soil, if needed, for stabilization. A one-inch layer of wood chips or three inches of straw or peat moss worked into the top two or three inches of soil is a proven erosion control measure.

- If it is determined during final engineering studies that increased runoff due to placement of impervious cover could be substantial, some type of mitigation would be implemented. This could be in the form of storm water retention basins, infiltration trenches, or the installation of perforated pavement in place of conventional pavement.

- If construction occurs during the wet season, vehicle traffic will be limited to as few routes as possible across a construction site. The purpose is to minimize the accelerating effect on erosion caused by traffic. Preferably, temporary routes will be aligned where future roads or driveways are planned. In severe erosion hazard conditions, a few inches of gravel will be applied along temporary routes to provide additional protection.

- Typically, any soil erosion problems has a solution; however, due to economic or environmental costs created by some solutions, they may not be acceptable. Consequently, the erosion hazard at Rancho Murieta will be minimized by avoiding disturbance of erosive soils on slopes exceeding 30 percent. By not disturbing these fragile areas, naturally established vegetation will provide effective erosion control at no cost.

TABLE 1

SEEDING GUIDE

Seed 1/	Application Rate In Pounds Per 1000 Square Feet	Planting Date	Method of Application
SHORT-TERM STAND (one to two years):			
Wimmera 62 Ryegrass (or) Annual Ryegrass (or) Barley (or) Wheat	1 (or) 1 (or) 2 (or) 2	Sept. 15 to Oct. 15	Broadcast by hand or use mechanical spreader.
LONG-TERM STAND			
Rose Clover (or) Red Brome (or) Blando Brome (or) Alta Tall Fescue	1/2 (or) 1/2 (or) 1 (or) 1	Prior to Sept. 15	(seed drill)

Source: U.S.D.A. Soil Conservation Services

1/ All seed will be delivered to the site tagged and labed in accordance with the California Agricultural Code and shall be acceptable to the County Agricultural Commissioner. Seed shall have a minimum pure live seed content of 80 percent and contain no more than 0.5 percent weed seed.

REFERENCES

1. Residential Storm Water Management (Objectives, Principles and Design Considerations) (1975) - Urban Land Institute

2. Residential Erosion and Sediment Control (Objectives, Principles and Design Considerations) (1978) - Urban Land Institute

3. County of Sacramento Master Drainage Plan (1961) - George S. Nolte Consulting Engineers, Inc.

4. Natural Streams Plan (1980) - County of Sacramento

5. Measures to Control Soil Erosion in Rancho Murieta-Raymond Vail & Associates

6. Rancho Murieta Master Plan Update Policy Document (1983) - Raymond Vail & Associates

7. Erosion & Sediment Control Guidelines for Developing Areas of the Sierras (1981) - High Sierra Resource Conservation and Development Council

8. The Sacramento County General Plan (1985) - County of Sacramento

9. 100-Year Flood Stage - Cosumnes River (1970) - George S. Nolte & Associates

10. Cosumnes River 100-Year Flood Plain Study (1979) - Raymond Vail & Associates

11. Rancho Murieta Environmental Constraints Mapping & Analysis (Hydrology) (1982) - Raymond Vail & Associates

12. Rancho Murieta General Plan Amendment Final Environmental Impact Report (1984) - County of Sacramento

13. Operational and Maintenance Irrigation and Drainage Systems (1980) - American Society of Civil Engineers

14. Flood Insurance Rate Maps for Sacramento County (Community Panel Nos. 060262 0275 B and 060262 0400 B) (April 21, 1981) -

Federal Emergency Management Agency

15. Sacramento County Drainage Ordinance (February 8, 1983) - Sacramento County Water Agency

16. Sacramento County Grading Ordinance - Sacramento County Department of Public Works.

17. Water Resources Data Book for California (1967-1987) - U.S. Geodetic Survey.

U.S. Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

FEMA

July 28, 2011

Mr. Paul Siebensohn
Rancho Murieta Community Services District
15160 Jackson Road
Rancho Murieta, California 95683

Dear Mr. Siebensohn:

This correspondence is in reference to the January 19, 2011, letter and data submission to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding certification of the City of Rancho Murieta Michigan Bar and Airport Levee System within Sacramento County in order to meet the criteria of the Code of Federal Regulations, Title 44, Section 65.10 (44 CFR 65.10). The pertinent information regarding the specific levees is listed below.

Identifier: Airport Levee and Michigan Bar Levee System (Levee ID Nos. 8068 and 8069)

Flooding Source: Cosumnes River

FIRM panel affected: 06067C0400H

In support of the Michigan Bar and Airport Levee System certifications the following information was submitted:

1. A Levee Certification Summary titled: *Rancho Murieta CSD Levee Evaluation,* prepared by Carlton Engineering Inc. Signed by Nathan L. Bowersox, P.E., and David B. Jermstad, P.G., *dated December, 2010*
2. A Provisionally Accredited Levee Agreement titled: *Provisionally Accredited Levee (PAL)Agreement Form for Sacramento County,* prepared by the Rancho Murieta Community Services District, Signed by Paul Siebensohn, P.E., , *dated January 12, 2009*
3. A Levee Operations and Maintenance Plan prepared by the Rancho Murieta Community Services District.

The report by Carlton Engineering Inc. was reviewed to verify if the information required under 44 CFR 65.10 was included. The following is a summary of the review:

1. Freeboard: Analysis and Supporting Documentation was reviewed and found to be in compliance with 44 CFR 65.10(b)(1).
2. Closures: Analysis and Supporting Documentation was reviewed and found to be in compliance with 44 CFR 65.10(b)(2).

The report by Rancho Murieta Community Services District was reviewed to verify if the information required under 44 CFR 65.10 was included. The following is a summary of the review:

1. Embankment Protection: Analysis and Supporting Documentation was reviewed and found to be in compliance with 44 CFR 65.10(b)(3).
2. Embankment and Foundation Stability: Analysis and Supporting Documentation was reviewed and found to be in compliance with 44 CFR 65.10(b)(4).
3. Settlement: Analysis and Supporting Documentation was reviewed and found to be in compliance with 44 CFR 65.10(b)(5).

The Operation and Maintenance Manual prepared by the Rancho Murieta Community Services District, was reviewed to verify that the information required under 44 CFR 65.10 was included as well as the maintenance records. The following is a summary of the review:

1. Maintenance Plans and Criteria: Supporting Documentation was reviewed and found to be in compliance with 44 CFR 65.10(d).

All of the above documentation and data, along with the previously submitted documentation, have been reviewed and based on receipt of this information the Michigan Bar and Airport Levee System (Levee ID Nos. 8068 and 8069) as shown on the attached Sacramento County Levee Status Map, meet the minimum certification criteria outlined in 44 CFR 65.10. Therefore, we plan to fully accredit this levee system on the new Digital Flood Insurance Rate Map (FIRM) as providing protection from the 1-percent-annual-chance (base) flood. The area protected from the base flood by this levee will continue to be mapped as a shaded Zone X and a note will be placed in that area, warning of the flood risk that still exists.

Please be advised that levee systems and the estimated level of protection provided by these systems can and do change with time. Future map updates may require the levee system to be certified again at the time of update. Also, design, construction, operation, and/or maintenance documents may be requested at any time. Deviations from the documentation and data submitted to FEMA could result in the levee system no longer being mapped as providing protection from the base flood on future FIRMs. If at any point additional information is provided to FEMA that shows the levee systems no longer meets certification criteria as outlined in 44 CFR 65.10, we will contact the levee owner and community about the possibility of de-accrediting the levee system.

Even though we have mapped the referenced levees as providing protection from the 1-percent-annual-chance flood, it is important to note that levees are only designed to provide a specific level of protection. They can be overtopped or fail in larger flood events. Levee systems require regular maintenance and periodic upgrades to retain their level of protection. When levees do fail, they fail catastrophically, and damage may be more significant than if the levee was not there. Therefore, we encourage you to annually discuss the status and condition of your levees with your governing body. Additionally, it is highly recommended that you consider this risk in your local emergency management plans, including creating evacuation plans for this area.

Everyone should understand the risk to life and property that resides behind levees—risk that even the best flood-control system can not completely eliminate. For this reason, FEMA encourages people to understand their risk. The National Flood Insurance Program (NFIP) was created to reduce flood damages by identifying flood risks, encouraging sound community floodplain management practices, and

providing flood insurance to lessen the financial impact of flooding. Through the NFIP, property owners in participating communities are able to purchase flood insurance that will insure against flood losses. We hope that you will encourage property owners to purchase flood insurance.

If you have any questions regarding this matter, please do not hesitate to contact me by telephone at (510) 627-7129 or by email at kathleen.schaefer@dhs.gov.

Sincerely,

Kathleen Schaefer

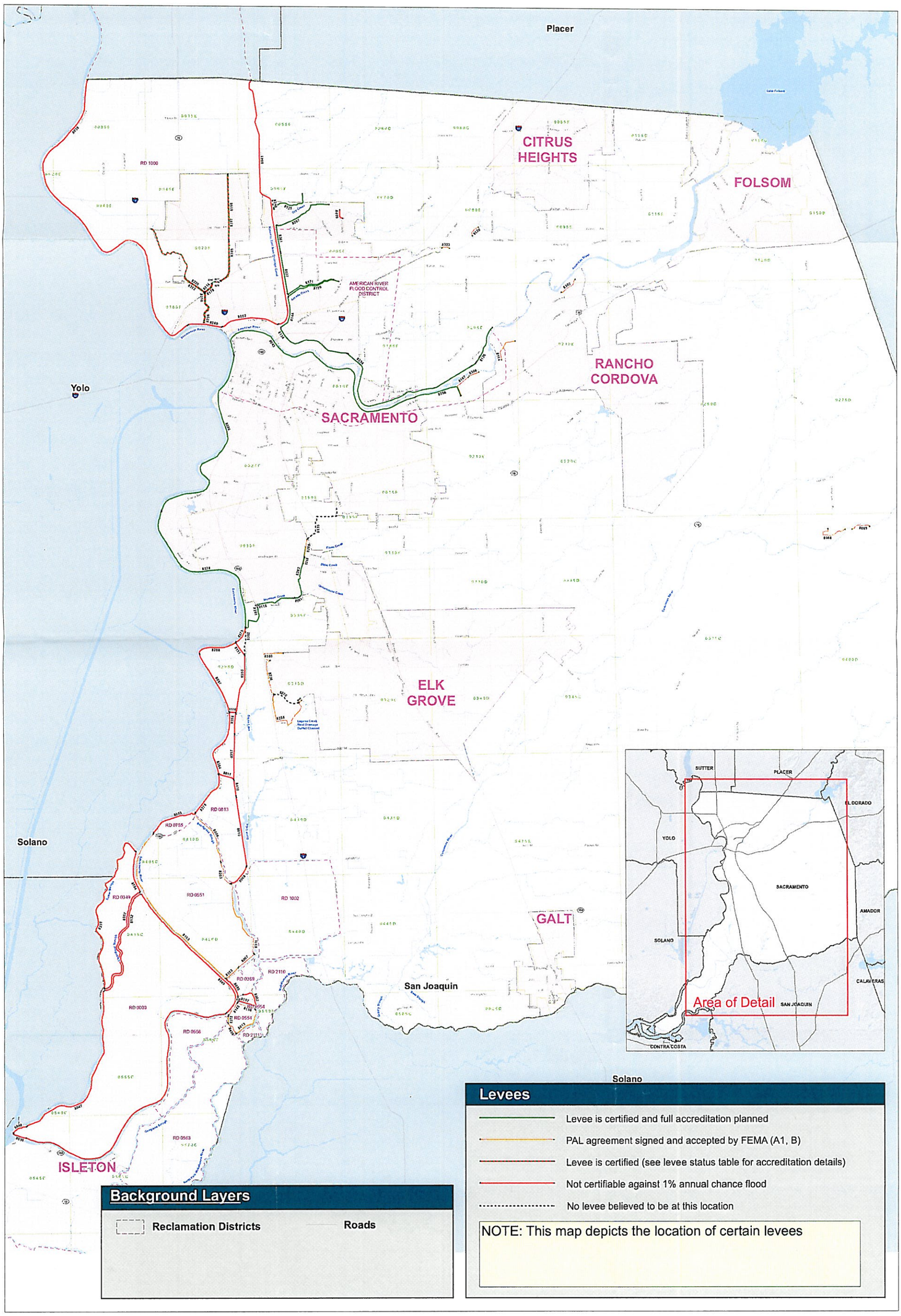
Kathleen Schaefer, Engineer
Mitigation Division

Copies Furnished:

Edward R. Crouse, General Manager, Rancho Murieta Community Services District
Herb Niederberger, Director of Water Resources, Sacramento County
Michael Peterson, Drainage Principal Civil Engineer, Sacramento County
George H. Booth, Senior Civil Engineer, Sacramento County Department of Public Resources
Jay Punia, General Manager, Central Valley Flood Protection Board
Ricardo Pineda, Chief, CA DWR NFIP State Coordinator, Floodplain Management Branch
Lisa Messano, Michael Baker Jr., Inc.
Marc McIntosh, Water Resources Engineer, URS Corporation

FEMA

Sacramento County Levee Status



Levees

- Levee is certified and full accreditation planned
- PAL agreement signed and accepted by FEMA (A1, B)
- Levee is certified (see levee status table for accreditation details)
- Not certifiable against 1% annual chance flood
- No levee believed to be at this location

NOTE: This map depicts the location of certain levees

Background Layers

- Reclamation Districts
- Roads

WATER RIGHTS PERIODS OF USE EACH YEAR

	APPLICATION	/ PERMIT	/ LICENSE	NAME/LOCATION	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1	*23416*	*16762*		Calero - Chesbro Clementia												
					Direct diversion to storage Nov. 1st to May 31st											
2	*23417*	*16763*	*13150*	Laguna Joaquin												
					Impound local runoff up to 130 AF for recreational and stockwatering											
3	*23418*	*16764*		Peralta Reservoir												
					No construction as yet											
4	*23419*	*16765*	*13285*	Clementia												
					Pump diversion to storage impound local runoff 1240 AF for recreational and stockwatering											
5	*16142*	*10144*	*6238*	Bass Lake Lake 10												
					1.24 CFS diversion to storage and 50% riparian water right for irrigation											
6	*19477*	*12680*	*7744*	Calero												
					Original Calero for storage of 49.3 acre feet											
7	*1838*	*1030*	*537*	Laguna Joaquin												
					Irrigate 22.5 acres - Move .28 CFS down CIA ditch into Laguna Joaquin (4.5 ac at Laguna Joaquin; 5 ac at RMTC; 13 ac at Murieta Village)											
8	*24085*		*11117*	Ranch Ponds												
					97.0 acre feet of storage in Anderson Ranch Ponds											
9		*S - 9696*		Laguna Joaquin												
					Riparian right to move water down CIA ditch to Laguna Joaquin including 30 day storage for irrigation of downstream ranches											
10		*S - 9697*		Bass Lake Lake 10												
					Riparian right to place water in storage for irrigation											
11	*2296*	*1320*	*2629*	CIA Ditch												
					To move water down ditch for irrigation of farm crops											
12	*200057*	*13162*	*8013*	Lake Guadalupe												
					To collect and store water for recreation 8 acre feet											
13	*22603*	*15348*	*9925*	Lake Guadalupe												
					To collect and store water for irrigation 5 acre feet											
14	*16143*	*10145*	*6239*	Lake Jean												
					To collect and store water for wildlife and recreation 20 acre feet											
15	*23416*	*16762*		Yellow Bridge Pump												
					Part of 6 CFS direct diversion for irrigation around Country Club											
16	*23416*	*16762*		Rock Crusher Pump												
					Part of 6 CFS direct diversion for O.E. Pond west of office dust control											
17		*Batter Boards*		Calero - Chesbro Clementia												
					Install 2' of batter boards in lake spill ways											

87 1222 2036

Easement

334138

Re-recorded to reflect correct paginations of (2) separate documents recorded simultaneously.

OFFICIAL RECORDS SACRAMENTO COUNTY, CALIF.
1988 FEB -2 PM 2:55
CORRECTLY RECORDED

NO FEE A

Recording Requested By

Rancho Murieta Community Services District

When Recorded Return To:

Rancho Murieta Community Services District
P.O. Box 1050
Rancho Murieta, CA 95683

022408

FEE $ A

BOOK 88 02 2 PAGE 1258

EASEMENT AGREEMENT

Preamble

This Agreement made and entered into on November 22, 1987, by and between Rancho Murieta Association, a nonprofit homeowners' association {"RMA"), and Rancho Murieta Community Services District ("District").

Recitals

WHEREAS, RMA is the owner of real property ("the Property") which includes certain lakes and reservoirs in an unincorporated area of Sacramento County, California. Such lakes and reservoirs are commonly known as Calero, Chesbro, Bass, Clementia, Laguna Joaquin, and Guadalupe. The general size and location of these lakes and reservoirs are shown on the Rancho

Murieta Water Resources Map dated February 12, 1981, attached hereto as Exhibit "A" and incorporated herein;

WHEREAS, District desires to acquire certain rights in the Property and RMA is willing to grant such rights to District;

NOW, THEREFORE, it is agreed as follows:

Description of Easement

1. RMA hereby grants to District an easement for District to use the Calero, Chesbro, Clementia, Bass, Laguna Joaquin and Guadalupe lakes and reservoirs for the purpose of water storage and irrigation.

Use of Easement by the District

2. The easement granted herein includes the following use of the Property:

(a) District has the right to make use of the lakes and reservoirs described above in Section 1 for storage and impoundment of water supplied by the District and for the temporary storage and distribution of water acquired through the riparian, prescriptive or appropriative rights of the District.

(b) The District shall operate the dams and reservoirs (Calero, Chesbro, Clementia, Bass, Laguna Joaquin and Guadalupe) shown on Exhibit "A" and regulate the water levels therein. The District shall endeavor to maintain the water in the lakes so that the level thereof below the crest elevations of the emergency spillway shall not be more than eighteen (18) inches.

(c) District has the right during summer months when storage space is available in Calero, Chesbro, Clementia or Laguna Joaquin Reservoir, at the request of Cosumnes Irrigation Association ("CIA") to divert to temporary storage (not over 30 days) such water as CIA may claim under riparian water rights for re-release and use by CIA within the District.

Exclusiveness of Easement

3. The easement granted herein is exclusive unless the District in writing first assigns all or part of its rights to others with RMA's written consent. RMA shall retain the right to use the lakes and reservoirs described herein for recreational purposes by members of Rancho Murieta Association and others as designated and described in the Declaration of Covenants, Conditions and Restrictions for Rancho Murieta Unit No. 1, recorded in the Official Records of Sacramento County on March 4, 1974, in Book 74-03-08 at page 358, et seq., as amended and restated from time to time, provided that such recreational uses comply with applicable laws and regulations, including the requirements of the Department of Health Services, State of California and the District, as amended from time to time.

Maintenance, Repair & Replacement

4. The easement granted herein includes the rights and obligations of maintenance, repair, and replacement described as follows:

(a) District shall be solely responsible for inspection, maintenance, repair and restoration of dams, spillways, outlet works, pumping stations, subdrains and other installations within the dam structure in Exhibit "A", and as listed in paragraph 2(b) above.

(b) District shall be responsible for controlling vegetation and aquatic growth below the high water line solely in the lakes and reservoirs commonly known as Calero, Chesbro, Clementia, Laguna Joaquin and Bass Lake. RMA shall be responsible for controlling vegetation in the area between the high water line and service roads around all lakes and reservoirs described in Exhibit "A", except Calero, Chesbro and Clementia, as well as for controlling water quality, vegetation and aquatic growth below the high water line in Lake Guadalupe. In controlling such vegetation, District and RMA shall comply with requirements of the Department of Health Services, State of California, and District rules and regulations.

(c) The District, at its sole option, may elect to perform any or all of RMA's duties under this Agreement if RMA should fail to perform its duties in a reasonable and timely manner if the District has notified the RMA promptly and given RMA agrees to reimburse the District for the District's actual costs of performing any duties of RMA which the District elects to perform. The District's performance of any or all of RMA's duties shall not constitute the District's waiver of RMA's obligation to perform such duties nor the District's commitment to continue to perform such duties of RMA as the District may elect to perform from time to time.

and a reasonable time for correction.

Water Usage by RMA

5. District and RMA agree that RMA shall pay reasonable charges for the District's cost of providing water service to RMA and its facilities. RMA agrees that District may install, at RMA's cost, one or more meters to determine the amount of RMA's water usage.

Secondary Easements

6. District shall have reasonable rights of access and be entitled to make use of the Property in any way reasonably relating to the exercise of the easement granted by RMA in Section 1 herein. Such reasonably related uses include but are not limited to water lines, gate valves, pumping stations, sewer lines and manholes, drainage facilities, spillway overflows and electric and telephone lines and communication facilities. These facilities include, but are not limited to, those identified in Exhibit B. District shall first obtain the written consent of RMA, which consent shall not be unreasonably withheld, before locating a new facility for a related use on the Property. In constructing such facility, District shall comply with any applicable architectural requirements adopted by the RMA Architectural Review Committee.

Indemnification

7. (a) District agrees to indemnify, hold harmless and defend RMA, its agents, employees or independent contractors from and against any and all liabilities, claims, suits and any costs and expenses incident thereto, including cost of defense, settlement, and reasonable attorneys' fees, which it may hereafter incur (i)

as a result of death or bodily injuries to any person, destruction or damage to any property, caused in whole or in part by (a) District's breach of any part or provision of this agreement; or (b) any negligent or willful act or omission of District, its employees, agents, or subcontractors in the performance of this agreement; or (ii) as a result of exercising its right during summer months, at the request of Cosumnes Irrigation Association to divert to temporary storage such water as CIA may claim under riparian or other water rights, for re-release and use by CIA.

(b) RMA agrees to indemnify, hold harmless and defend District, its agents, employees or independent contractors from and against any and all liabilities, claims, suits and any costs and expenses incident thereto, including costs of defense, settlement, and reasonable attorneys' fees, which it may hereafter incur as a result of death or bodily injuries to any person, destruction or damage to any property, caused in whole or in part by (i) RMA's breach of any part or provision of this agreement; or (ii) any negligent or willful act or omission of RMA, its employees, agents, or subcontractors in the performance of this Agreement.

Arbitration

8. Any controversy or claim arising out of or relating to this Agreement or the breach thereof shall be settled by arbitration in accordance with the Rules of the American Arbitration Association and judgment on the award rendered by the

arbitrator(s) may be entered into any court having jurisdiction thereof. The compensation of the arbitrator(s) and all expenses of arbitration shall be borne by the parties equally.

Entire Agreement

9. This instrument contains the entire agreement between the parties relating to the rights herein granted and the obligations herein assumed. Any oral representations or modifications concerning this instrument shall be of no force and effect unless a subsequent written modification is signed by both parties to this Agreement.

Attorney Fees

10. In the event of any controversy, claim, or dispute relating to this instrument or the breach thereof, the prevailing party shall be entitled to recover from the losing party reasonable expenses, attorney's fees,and costs.

Notice

11. Any notice to be given under this Agreement shall be in writing and delivered to the address of the respective parties below:

RANCHO MURIETA COMMUNITY SERVICES DISTRICT
General Manager
Rancho Murieta Community Services District
7248 Murieta Drive, Suite B-8
Rancho Murieta, CA 95683

RANCHO MURIETA ASSOCIATION
General Manager
Rancho Murieta Association
7220 Murieta Drive
Rancho Murieta, CA 95683

Binding Effect

12. This instrument shall bind and inure to the benefit of the respective heirs, personal representatives, successors, and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this instrument the day and year first above written.

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

By: Richard E. Graft
Title: PRESIDENT
Date: 11/22/87

RANCHO MURIETA ASSOCIATION

By: D. Leightal
Title: President
Date: 11/22/87

Rancho Murieta

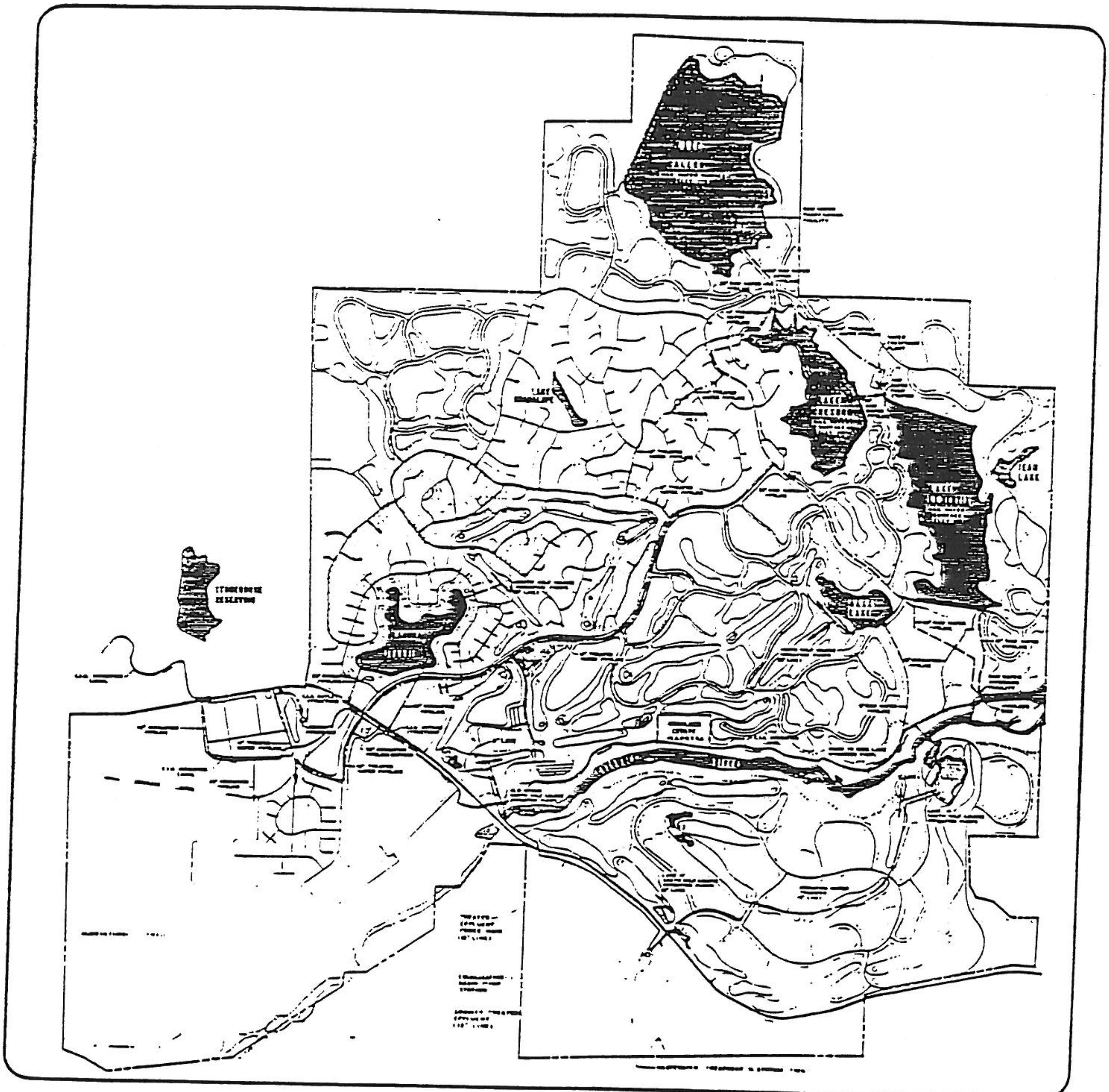


EXHIBIT "A" — LAKES AND RESERVOIRS

LAKE	SURFACE AREA	STORAGE VOLUME
[illegible]	[illegible] ACRES	[illegible] ACRE FEET
[illegible]	[illegible] ACRES	[illegible] ACRE FEET
[illegible]	[illegible] ACRES	[illegible] ACRE FEET

RESERVOIR	STORAGE VOLUME
[illegible]	[illegible]
[illegible]	[illegible]

DESCRIPTION OF FACILITIES

[illegible]

RVR

Rancho Murieta

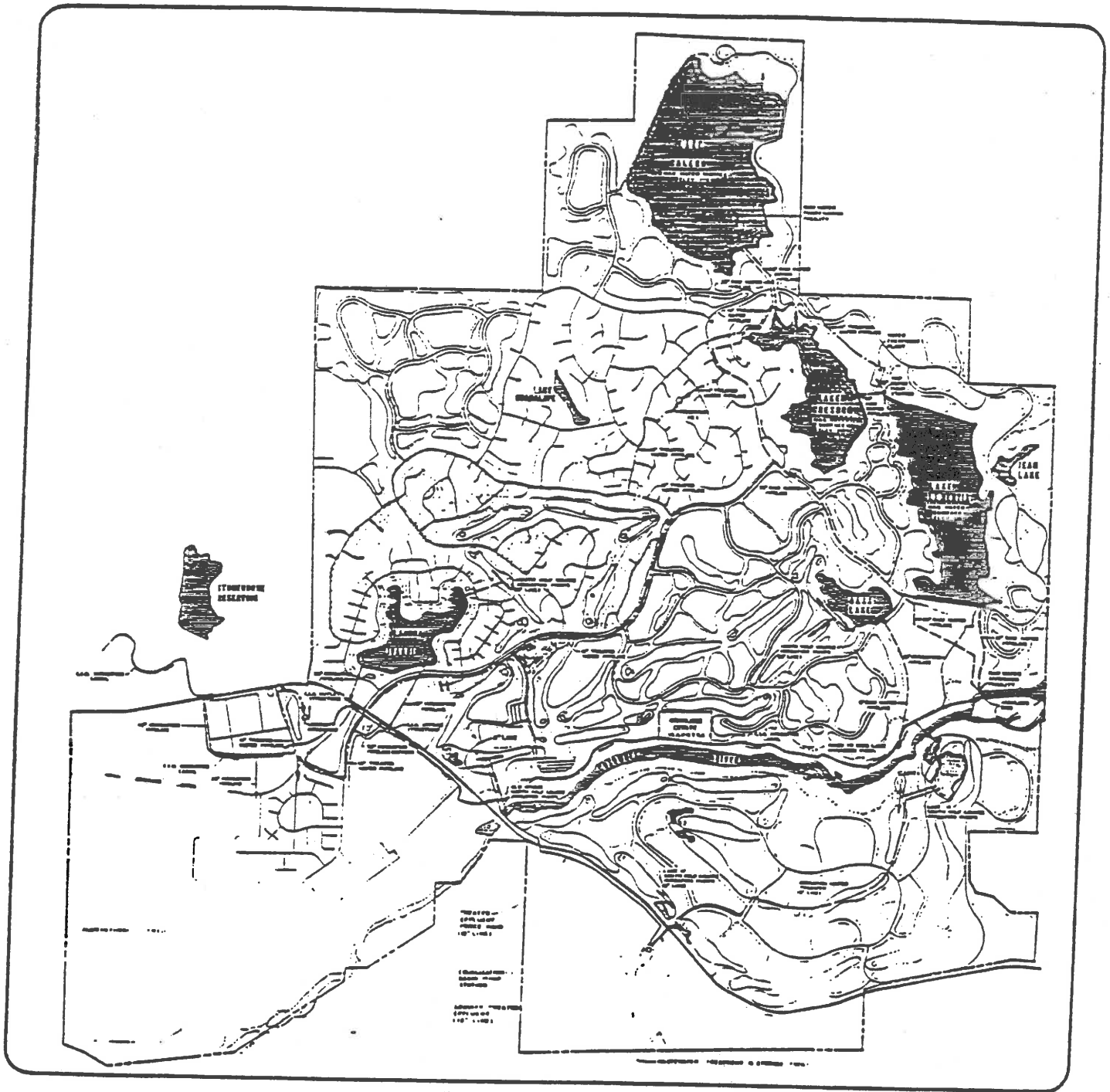


EXHIBIT "A" — LAKES AND RESERVOIRS

LAKE	SURFACE AREA	STORAGE VOLUME
[illegible]	[illegible] ACRES	[illegible] ACRE FEET
[illegible]	[illegible] ACRES	[illegible] ACRE FEET
[illegible]	[illegible] ACRES	[illegible] ACRE FEET

RESERVOIR	STORAGE VOLUME
[illegible]	[illegible]
[illegible]	[illegible]

DESCRIPTION OF FACILITIES

[illegible]

SCALE: [illegible]

RVA [illegible]

PAGE 1 OF [illegible]

EXHIBIT "B"

Portions of the following described facilities fall within the Property of RMA and are hereby granted as easements in accordance with the provisions of Section 1 herein:

Description No.	Easement Name
B	Clementia 21" Raw Water Supply Line Easement
C	Clementia to Lake Ten 10" A.C.P. Easement
D	Bass Lake Pump and Water Line Easement
G-1	Chesbro Spillway Easement
G-2	Chesbro Drainage Easement
G-3	Chesbro North Dam Drainage Easement
H	Clementia Dam Spillway Easement
H-1	Clementia Drainage Easement
I-1	Calero West Dam Drainage Pump Station No. 1 Easement
I-2	Calero West Dam Drainage Pump Station No. 2 Easement
I-3	Calero East Dam Drainage Pump Station No. 3 Easement
I-4	Calero Emergency Spillway Easement
J	Water Treatment Plant Access Road Easement
K	Chesbro Treated Water Waterline Easement
R	Clementia Drain Pump Electric Line Easement

These statements being more particularly described as follows:

Recording Requested By:

Rancho Murieta Community
Services District

When Recorded Return To:

Rancho Murieta Community
Services District
P. O. Box 1050
Rancho Murieta, California 95683

103731

NO FEE

AGREEMENT FOR AVAILABILITY AND USE
OF RECLAIMED WASTEWATER

THIS AGREEMENT is made and entered into on the date below written by and between Rancho Murieta Community Services District (hereafter "District"), Rancho Murieta Country Club (hereafter "RMCC"), Rancho Murieta Properties, Inc. (hereafter "RMPI") and CBC Builders, Inc. (hereafter "CBC").

WHEREAS, the State Water Resources Control Board, in granting Application 23416, Permit 16762 for use of water from the Cosumnes River for the Rancho Murieta Project has conditioned the permit to require the use of reclaimed wastewater for irrigation purposes (par. 3, page 38, Order WR 79-13, dated June 7, 1979); and

WHEREAS, the California Regional Water Control Board, Central Valley Region, by its Order No. 82-052, dated May 28, 1982, and superseded by Order No. 86-161, dated August 8, 1986, (Order No. 86-161 is attached as Exhibit A and incorporated herein), establishing Waste Discharge Requirements for the Rancho Murieta Project, prohibits the direct discharge of

treated or untreated wastes to surface waters or surface water drainage courses; and further requires that reclaimed wastewater shall remain within the disposal areas designated by the Central Valley Regional Water Quality Control Board ("Regional Board"), and those disposal areas currently include those areas listed in Exhibit A: the North Golf course, the South Golf Course, the treatment plant and storage pond area, the proposed Rancho Murieta Homeowners' Association corporation yard, and the proposed community park, as identified on Exhibit B attached hereto and incorporated herein; and

WHEREAS, the Board of Supervisors of the County of Sacramento in adopting the Ordinance for the Rancho Murieta Planned Development, limited the total number of dwelling units in the Rancho Murieta Project to 5,000 dwelling units and 209 Mobile Homes (Ord. No. 73-PD-2, Section 17(a), dated May 30, 1973), which said Ordinance was subsequently revised to limit the project to 5,000 dwelling units and 189 Mobile Home lots; and

WHEREAS, RMPI, through Raymond Vail and Associates, Engineers for the Rancho Murieta Project, prepared the Rancho Murieta Wastewater Disposal Program (April 1981) and as subsequently amended, identified the North and South Golf Courses, the future Rancho Murieta Community Park and the future Homeowners' Association Corporation Yard as wastewater disposal sites; and

WHEREAS, the Board of Supervisors of the County of Sacramento approved a Special Use Permit dated December 10, 1981, granting permission to use Assessor's Parcel Nos.

RONICK, MOSKOVITZ, IEDEMANN & GIRARD
PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
PIO L STREET, SUITE 1200
MENTO, CALIFORNIA 95814-3343
ELEPHONE (916) 444-6926
LECOPIER: (916) 444-8418

073-180-10 and 11 to relocate the wastewater treatment facilities subject to, among other conditions, the condition (No. 10) that the primary use of the recycled water shall be for watering golf courses; and

WHEREAS, construction of the Wastewater Treatment Plant located on the South side of Highway 16, about 3,000 feet southeast of the Cosumnes River, is now completed, and it is now necessary that arrangements for disposal of reclaimed wastewater on the North and South Golf Courses and other lands be formalized to accommodate continuing disposal of reclaimed wastewater; and

WHEREAS, RMCC leases from RMPI much of the land which the Regional Board has designated as disposal areas;

NOW, THEREFORE, District, RMCC, RMPI and CBC hereby agree as follows:

ARTICLE ONE - PURPOSE

(a) District agrees to make the reclaimed wastewater from Rancho Murieta available to those lands designated by the Regional Board as disposal areas for the District's reclaimed wastewater and District agrees to allow those disposal areas to be used for those uses approved by the Regional Board and permissible under applicable federal, state, local and District laws, rules and regulations, as amended from time to time. RMPI, RMCC and CBC each agree on behalf both of themselves, and of any of their successors-in-interest, assigns or lessees, to be bound to take and use such reclaimed wastewater under the following terms of this Agreement.

(b) Responsible Party

RONICK, MOSKOVITZ, DIEMANN & GIRARD
PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
770 L STREET SUITE 1200
SACRAMENTO CALIFORNIA 95814-3363
TELEPHONE (916) 444-6920
TELECOPIER (916) 444-8418

Prior to the delivery of wastewater to a disposal site, the owner or owners, and any lessee or licensee of that disposal area shall agree among themselves, subject to the District's written approval, which of them shall be designated the individual or entity responsible for performance of the reclaimed wastewater user's obligations required under this Agreement that pertain to delivery of reclaimed wastewater to that disposal area. This individual or entity shall be known as the "Responsible Party." If there is no lessee, licensee or co-owner of a disposal area, the sole owner shall automatically be considered the Responsible Party.

The Responsible Party shall promptly notify the District in writing of its designation. Such notice shall be given no later than five (5) business days after such designation. In the event that the owner and any lessee or licensee fail to agree upon or designate the Responsible Party, or notify the District within the five (5) business day period, the District shall have the right to select the Responsible Party.

RMPI and CBC warrant that RMPI currently owns -- either directly or through RMPI's wholly owned subsidiary, CBC -- all of the disposal areas identified in Exhibits A and B that are not owned by the District with the exception of the Driving Range portion of the North Golf Course. RMPI leases to RMCC many of these disposal areas. RMPI, CBC and RMCC hereby designate the following Responsible Parties for the five initial non-District owned disposal areas hereinafter designated "Golf Courses and Lands":

RONICK, MOSKOVITZ, TIEDEMANN & GIRARD
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
770 L STREET, SUITE 1200
SACRAMENTO, CALIFORNIA 95814-3363
TELEPHONE (916) 444-6920
TELECOPIER: (916) 444-8678

Disposal Area	General Location	Responsible Party
1. North Golf Course & Driving Range	Section 3, T.7 N., R.8 E. & Sections 34 & 35, T.8 N., R.8 E., M.D.M.	RMCC
2. South Golf Course	Sections 2 & 3, T.7 N., R. 8 E., M.D.M.	RMCC
3. Proposed Rancho Murieta Home-owner's Association Corporation Yard	Section 3, T. 7 N., R. 8 E., M.D.M.	RMPI
4. Proposed Community Park	Section 35, T. 8 N., R. 8 E., M.D.M.	RMPI
5. Proposed Third Golf Course	Sections 34 & 35, T. 8 N., R. 8 E., M.D.M.	RMPI

In the event of the assignment of any interest in a disposal area by a Responsible Party, that assignor and assignee shall notify the District as to any change in the identity of the Responsible Party. Such notice shall be delivered to the District in writing within five (5) business days of the assignment.

ARTICLE TWO - AVAILABILITY AND USE OF RECLAIMED WASTEWATER

(a) District does not guarantee the quantity of reclaimed wastewater which it will make available to RMPI and RMCC or other Responsible Party. However, if wastewater generated from the Rancho Murieta Wastewater Treatment Plant is inadequate to meet the irrigation needs of a Responsible Party on the Golf Courses and Lands, District agrees to deliver and supply to the Responsible Party additional raw water sufficient to meet that Responsible Party's additional reasonable irrigation needs on such Golf Courses and Lands, provided that

SONICK, MOSKOVITZ, EDEMANN & GIRARD
PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
770 L STREET SUITE 1200
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FACSIMILE (916) 444-8615

such withdrawals do not impair District's ability either to provide water to its customers or to operate, maintain, and implement sound water management procedures.

(b) Each Responsible Party agrees to take, up to the amount it can beneficially use on those Golf Courses and Lands for which it is a Responsible Party, all the reclaimed wastewater which District makes available to it.

(c) During the term of this Agreement, unless otherwise agreed in writing, the Responsible Party shall advise District not less than five (5) days in advance of its need to take reclaimed wastewater and District shall advise the Responsible Party not less than fifteen (15) days in advance of its need to deliver reclaimed wastewater to Golf Courses and Lands.

(d) RMPI and RMCC agree that District may make reclaimed wastewater available to others; provided that District, with concurrence of RMPI and RMCC, shall first determine that such water use by others does not infringe upon the satisfaction of the reasonable needs and requirements of RMPI and RMCC for use of water on the Golf Courses and Lands.

(e) RMPI, CBC and RMCC agree for themselves and for any future Responsible Party that the District will not incur or bear any of the capital costs of any necessary extension of the disposal systems on the Golf Courses and Lands. Such capital costs shall include such items as any pumps, pipes, storage ponds, irrigation sprinklers, or other such equipment or facilities used to bring or apply water from the District's

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point of delivery to the Golf Courses and Lands. RMPI and CBC agree to complete, at their expense, the reclaimed wastewater delivery and distribution systems necessary to distribute reclaimed wastewater to the Golf Courses and Lands.

(f) RMPI, CBC, RMCC and other Responsible Parties and District mutually agree that the North Golf Course, including its driving range, and the South Golf Course shall have first and equal priority to the use of reclaimed wastewater to satisfy their reasonable irrigation needs. RMPI, CBC, RMCC and other Responsible Parties and District further mutually agree that, in the event that the proposed Third Golf Course is developed, the three golf courses, including associated driving ranges and appurtenant facilities, shall have first and equal priority to the use of reclaimed wastewater to satisfy their reasonable irrigation needs. Provided that if the District, RMPI and RMCC agree that another source of water is available to any portion of any of said golf courses, and is less expensive to the Responsible Party who will be using that water, then, subject to the provisions of Article Twelve and subject to compliance with SWRCB requirements on the District's water rights, there shall be no obligation that such portion of such golf course be irrigated with wastewater.

ARTICLE THREE - FEES AND EXPENSES

(a) The Responsible Party agrees to pay District, upon District's written request for payment, the costs and expenses of delivering reclaimed wastewater to Responsible Party and to those portions of Golf Courses and Lands for which that

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Party is responsible. The costs of treating the reclaimed wastewater and delivering it to District's Reclaimed Wastewater Equalization Pond ("Equalization Pond") shall be borne exclusively by the District. The reasonable costs of drawing the reclaimed wastewater out of the Equalization Pond and delivering the reclaimed wastewater to the place of use shall be borne exclusively by the Responsible Party, unless otherwise set forth in Article 5 of this Agreement or attachments thereto. Additional costs and expenses (including consultant, legal and related costs) to be borne by the Responsible Party include, but are not limited to: (1) the preparation of necessary data in a manner usable by District for direct incorporation into periodic reports required of the District regarding the reclaimed wastewater; (2) any revisions, renewals or changes to the discharge permit issued by the Regional Board that are caused by, or made at the request of, or made for the benefit of the Responsible Party; and, (3) any revisions or changes in disposal methods or practices required by the Regional Board.

(b) The Responsible Party shall pay District for the District's cost to divert to, store at and deliver raw water from storage in Calero, Chesbro, or Clementia Reservoirs that is used for irrigation of Responsible Party's portion of Golf Courses and Lands. Such raw water shall only be used pursuant to District ordinances, rules and regulations, as amended from time to time.

(c) The Responsible Party shall pay District for the District's costs to divert, store and deliver raw water under

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any riparian rights or any appropriative water rights that are prior in time to Application 23416 (1969).

(d) Billing and collection of costs and expenses owed to District by Responsible Party shall be according to District ordinances, rules and regulations, as amended from time to time.

ARTICLE FOUR - TERM

This Agreement shall commence on the date set forth below and shall continue in effect until forty (40) years from the date set. Upon the expiration of this forty (40) year period, this Agreement shall automatically be renewed for additional twenty (20) year periods unless the then current Responsible Parties mutually agree in writing to terminate or modify this Agreement.

ARTICLE FIVE - OPERATION AND MAINTENANCE

(a) In accordance with Exhibit C, attached hereto and incorporated herein, and subject to the provisions for revisions of this Exhibit C discussed in paragraph (c) below, RMPI, CBC, RMCC and other Responsible Parties and District agree that the ownership and responsibility for maintenance, repair, and replacement of the reclaimed wastewater delivery and distribution systems shall be as shown and designated in Exhibit C.

(b) In the event that Exhibit C identifies more than one individual or entity as the party responsible for bearing the costs of performing the duties required by this Article, those costs shall be apportioned in the following manner: if the

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District shares responsibility for an item with one or more Responsible Parties, half of the costs of such item shall be borne by the District and the other half borne by the Responsible Party or parties. If more than one Responsible Party is listed as responsible for bearing any costs for an item, such costs shall be apportioned among such Responsible Parties pro rata, in the ratio of that Responsible Party's volume of use of that facility to the total volume of use made of that facility by all Responsible Parties.

(c) Exhibit C may be revised from time to time by written agreement between District and the Responsible Party or Parties affected by such revisions.

ARTICLE SIX - WARRANTIES

(a) The Responsible Party warrants that it shall perform its responsibilities under this Agreement in accordance with Order No. 86-161 (Exhibit A) and as such Order may be revised, amended or superseded from time to time. The Responsible Party warrants that it understands that, pursuant to Order No. 86-161, the direct discharge of wastes or wastewater to surface waters or surface water drainage courses is prohibited; the use of reclaimed wastewater for purposes other than irrigation is prohibited; and reclaimed wastewater shall be discharged only to Golf Courses and Lands in accordance with applicable provisions of Order No. 86-161 (including subsequent revisions, amendments, or superseding provisions) and all federal, state, local and District laws, rules and regulations, as amended from time to time.

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(b) District warrants that the reclaimed wastewater delivered to Responsible Party shall be treated in accordance with applicable provisions of Order 86-161 (including subsequent revisions, amendments, or superseding provisions) and all federal, state, local and District laws, rules, and regulations, as amended from time to time.

(c) Responsible Party and District warrant that each will obtain at their own expense all permits and licenses necessary to carry out the provisions of this Agreement. District agrees to make, at its own expense, the periodic reports to the Regional Board referred to in Article 3(a) above. The Responsible Party agrees to supply timely, at its own expense, and in a form suitable for direct incorporation by the District into such reports, any data or other information necessary for the District to make such reports.

ARTICLE SEVEN - RECLAIMED WASTEWATER TESTING

District shall comply with requirements of the Regional Board and the Department of Health Services, State of California, with respect to monitoring and testing of reclaimed wastewater. RMPI, RMCC and other Responsible Parties and District mutually agree to establish a monitoring program, with results available to the Responsible Parties and District. The complete terms of such monitoring program shall be set forth in a separate writing, but such separate writing shall contain the following provisions:

> Any monitoring requested by a Responsible Party and agreed to by District which is different from, or in addition to, monitoring required of District by a state or federal agency, shall be paid

for by the Responsible Party. Requests for any such different or additional monitoring shall be in writing. Copies of monitoring and testing requirements imposed by state or federal agencies, as they may be revised from time to time, shall be furnished by District to Responsible Party upon written request, or upon receipt by District of revisions to such requirements by the Regional Board.

ARTICLE EIGHT - METERS

The Responsible Parties agree to allow District to install District-approved meters on each pump station now existing to measure the volume of raw water used by each Responsible Party on that Party's portion of Golf Courses and Lands. The Responsible Parties agree to reimburse the District for the actual costs incurred by the District to purchase and install such meters. At the written request of a Responsible Party, the District will recoup that Responsible Party's share of meter expenses through collection of a charge of $100 per month per meter from such Responsible Party, until the costs have been fully recouped. Meters on existing pump stations shall be installed and operational no later than August 1, 1988, or as soon thereafter as District can reasonably perform; District approved meters on future pump stations shall be installed by the Responsible Party and shall be operational no later than the time when such pump stations become operational. The District shall have reasonable access to all such meters at all times. If the Responsible Party fails to install or maintain the meters as set forth herein, District shall have the

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option of performing such work itself and charging the Responsible Party the District's costs incurred therein.

ARTICLE NINE - INDEMNIFICATION

(a) The Responsible Party agrees to indemnify, hold harmless and defend District, its agents, employees or independent contractors from and against any and all liabilities, claims, penalties, forfeitures, suits and expenses incident thereto, including costs of defense, settlement, and reasonable attorney's fees, which it may hereafter incur, become responsible for or pay out as a result of death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment, or any violation of governmental laws, regulations or orders, caused in whole or in part by (i) the Responsible Party's breach of any part or provision of this Agreement; or (ii) any negligent or willful act or omission of the Responsible Party, its employees, agents or subcontractors in the performance of this Agreement.

(b) District agrees to indemnify, save harmless and defend the Responsible Party, its agents, employees or independent contractors, from and against any and all liabilities, claims, penalties, forfeitures, suits, and the expense incident thereto, including costs of defense, settlement, and reasonable attorney's fees, which it may hereafter incur, become responsible for or pay out as a result of death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment, or any violation of governmental laws, regulations,

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or orders, caused in whole or in part by, (i) District's breach of any part or provision of the Agreement; or (ii) any negligent or willful act or omission of District, its employees, agents or independent contractors in the performance of this Agreement.

ARTICLE TEN - NOTICE

(a) Administrative Notice

Any notice to be given under this Agreement (other than notices respecting operations or emergencies) shall be in writing and delivered to the address of the respective parties below:

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

Name: General Manager
Rancho Murieta Community
Services District
Post Office Box 1050
Rancho Murieta, CA 95683

RANCHO MURIETA COUNTRY CLUB

Name: General Manager
Rancho Murieta Country Club
Post Office Box 980
Rancho Murieta, CA 95683

RANCHO MURIETA PROPERTIES, INC.

Name: General Manager
Rancho Murieta Properties, Inc.
14813 Jackson Road
Rancho Murieta, CA 95683

CBC BUILDERS, INC.

Name: General Manager
CBC Builders, Inc.
14813 Jackson Road
Rancho Murieta, CA 95683

(b) Operations and Emergency Notice.

Each Responsible Party shall designate to the District in writing from time to time the name, title, and telephone number of (1) three persons who shall be authorized to

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act on short notice on behalf of that Responsible Party respecting emergencies which may arise under this Agreement; and (2) at least one person who shall coordinate all operational matters under this Agreement with the District.

ARTICLE ELEVEN - RESPONSIBLE PARTY'S COMPLIANCE WITH REGIONAL BOARD ORDERS

(a) Notwithstanding any other provision of this Agreement, should a Responsible Party fail to comply with Regional Board's Order No. 86-161 (Exhibit A) as revised, amended or superseded, or any subsequent Orders regarding discharge of reclaimed wastewater by District on Golf Courses and Lands, District shall, in addition to any other legal or equitable remedies available to it, have the option of entering the Responsible Party's portion of Golf Courses and Lands and operating and maintaining the wastewater disposal systems located therein, including, but not limited to, golf course irrigation systems. In such event, the District shall recover from the Responsible Party the actual costs incurred by the District in entering, operating and maintaining such disposal systems.

(b) The District agrees:

(1) Except in an emergency as described below, prior to exercise of its option under this Article, the District shall give the Responsible Party written notice of violation and of the District's intent to exercise its option. If, after receipt of such notice, the Responsible Party still fails to perform its duties in a timely, reasonable and prudent manner,

the District may proceed to exercise its option under this Article without further notice. Unless the District agrees in writing to the contrary, the Responsible Party shall perform its duties within ten (10) days of receipt of the District's notice. In the event that an emergency exists, as determined by the District, that directly endangers health or property, the District shall be able to exercise its option without need either for notice or for a time for the Responsible Party to perform.

(2) The District shall solely exercise its option under this Article to ensure proper operation and maintenance of the disposal systems in conformance with the requirements of Order No. 86-161, including subsequent revisions, amendments, or superseding provisions thereto.

(3) Determination of the timeliness and reasonableness of the Responsible Party's performance shall be at the sole discretion of the District.

(c) Notwithstanding any other provision of this Agreement, District shall have the right to enter at any time and without notice upon Golf Courses and Lands to inspect the operation of a Responsible Party's wastewater disposal system. District may perform emergency repairs to those wastewater disposal systems, after reasonable notification pursuant to Article 11(b), so as to avoid a violation of Order No. 86-161 (including subsequent revisions, amendments and superseding provisions thereto), or of any federal, state, local or District law, rule and regulation as amended from time to time. The

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costs incurred by the District in making any such emergency repairs shall be paid by the Responsible Party.

ARTICLE TWELVE - USE OF PROPERTIES

Current uses of Golf Courses and Lands include, but are not limited to, North and South Golf Courses and driving range. Proposed uses of Golf Courses and Lands include a community park, a Home Owners' Association yard and a third golf course. The Responsible Party shall be entitled to make any use of that person or entity's share of Golf Courses and Lands which does not significantly decrease, increase, impair or otherwise modify that Responsible Party's current or projected need for reclaimed wastewater. At least 90 days prior to any such change in use by a Responsible Party from the use as set forth in the now-existing Sacramento County approved Master Plan, which Plan is attached hereto as Exhibit D and incorporated herein, when such change may increase, decrease, impair or otherwise modify the Responsible Party's current or projected need for reclaimed wastewater, that Responsible Party shall give written notice to the District of its intent and the nature of the proposed change in use. If the District determines that the proposed change in use would adversely affect the District's ability to dispose on Golf Courses and Lands its ultimate projected reclaimed wastewater supply in compliance with the Regional Board's requirement, the Responsible Party agrees that the District may prohibit the proposed change in use, unless and until District and the Responsible Party are able to agree in writing upon a plan of

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use which will not adversely affect the District's ability to use reclaimed wastewater on Golf Courses and Lands. The priority of usage of reclaimed wastewater among the Responsible Parties shall be as set forth in Article Two.

ARTICLE THIRTEEN - LAW TO APPLY

The validity, interpretation and performance of this Agreement shall be governed and construed in accordance with the laws of California.

ARTICLE FOURTEEN - MISCELLANEOUS PROVISIONS

This Agreement represents the entire understanding among the parties relative to the services specified herein, and no modification hereof shall be effective unless and until such modification is evidenced by a writing signed by District; by RMPI, or any single individual or entity that is its successor-in-interest or assign, so long as RMPI or that single individual or entity owns 51% or more (by acres) of Golf Courses and Lands; and by RMCC, or any single individual or entity that is its successor-in-interest or assign, so long as RMCC or that single individual or entity either owns, or leases from RMPI or any of RMPI's successors-in-interest or assigns, or owns and leases, 51% or more (by acres) of Golf Courses and Land. Other than the separate writing governing the terms of the monitoring program, as described above in Article 7, there are no understandings, agreements, conditions, representations, warranties or promises with respect to the subject matter of this Agreement except those contained in or referred to in this writing. If any provision of this Agreement is held to be

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unenforceable, the remainder of this Agreement shall be severable and not affected thereby.

ARTICLE FIFTEEN - INFORMAL DISPUTE SETTLEMENT

In addition to and not as a replacement of any right or remedy of the parties respecting disputes that may arise concerning performance of this Agreement, the parties agree to use best efforts to follow the nonbinding, informal dispute mechanism set forth in this Article. When a party becomes aware of a dispute or potential dispute respecting performance of any aspect of this Agreement, it shall bring the matter to the attention of the other parties involved. If the parties involved are unable to resolve the dispute to their satisfaction, they may request that each party appoint one person to a panel which shall render an advisory, nonbinding decision as to how the dispute should be resolved.

ARTICLE SIXTEEN - BINDINGNESS

This Agreement shall bind and inure to the benefit of the respective heirs, successors and assigns of the parties hereto including subsequent purchasers and/or lessees of Golf Courses and Lands from RMPI, CBC or RMCC. The parties hereto agree that this Agreement shall be recorded in the Sacramento County Recorder's Office and shall run with the land designated herein as Golf Courses and Lands. In addition, RMPI, CBC and subsequent owners of Golf Courses and Lands shall be obligated to provide copies of this Agreement to any lessees and to any subsequent purchasers of part or all of Golf Courses and Lands.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives on this 16th day of May, 1988.

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

By: Richard E Brandt

Title President

Date: 5-16-88

State of California)
) ss.
County of Sacramento)

On the 16th day of May, 1988, before me, the undersigned, a Notary Public in and for the State of California, with principal office in Sacramento County, personally appeared Richard E. Brandt known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to and who executed this instrument, and acknowledged that he executed the same.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my seal in the City of Sacramento, County of Sacramento the day and year in this certificate first above written.

Carole S. Pugh

NOTARY PUBLIC,
State of California

My Commission Expires 10-25-91

OFFICIAL SEAL
CAROLE S PUGH
NOTARY PUBLIC - CALIFORNIA
SACRAMENTO COUNTY
My comm. expires OCT 25, 1991

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BOOK PAGE

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RANCHO MURIETA COUNTRY CLUB

By: [signature]

Title: President

Date: 5-5-88

State of California)
) ss.
County of Sacramento)

On the 5th day of May, 1988, before me, the undersigned, a Notary Public in and for the State of California, with principal office in Sacramento County, personally appeared Bill Curien known to me (or proved on the basis of satisfactory evidence) to be the President of the corporation described in and that executed the within instrument, and also known to me to be the person who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the same C.S.P..

IN WITNESS WHEREOF I have hereunto set my hand and affixed my seal in the City of Sacramento County of Sacramento the day and year in this certificate first above written.

OFFICIAL SEAL
CAROLE S PUGH
NOTARY PUBLIC - CALIFORNIA
SACRAMENTO COUNTY
My comm. expires OCT 25, 1991

Carole S. Pugh

NOTARY PUBLIC,
State of California

My Commission Expires Oct 25, 1991

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HEDEMANN & GIRARD
PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
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TELEPHONE (916) 444-8820

RANCHO MURIETA PROPERTIES, INC.

By: Erik J. Talstrom

Title: VICE-PRESIDENT

Date: 4/20/88

State of California)
) ss.
County of Sacramento)

On the 26TH day of APRIL, 1988, before me, the undersigned, a Notary Public in and for the State of California, with principal office in Sacramento County, personally appeared ERIK J. TALSTROM known to me (or proved on the basis of satisfactory evidence) to be the VICE-PRESIDENT of the corporation described in and that executed the within instrument, and also known to me to be the person who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the same _____.

IN WITNESS WHEREOF I have hereunto set my hand and affixed myu seal in the City of Sacramento, County of Sacramento the day and year in this certificate first above written.

OFFICIAL SEAL
JANNETTE RAE SCHMIDT
NOTARY PUBLIC - CALIFORNIA
SAN JOAQUIN COUNTY
My Comm. Expires Sept. 30, 1988

Jannette Rae Schmidt

NOTARY PUBLIC,
State of California

My Commission Expires 9/30/88

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PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
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CBC BUILDERS, INC.

By: Erik J. Tollstrom

Title: VICE-PRESIDENT

Date: 4/26/88

State of California)
) ss.
County of Sacramento)

On the 26TH day of APRIL, 1988, before me, the undersigned, a Notary Public in and for the State of California, with principal office in Sacramento County, personally appeared ERIK J. TOLLSTROM known to me (or proved on the basis of satisfactory evidence) to be the VICE-PRESIDENT of the corporation described in and that executed the within instrument, and also known to me to be the person who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the same _____.

IN WITNESS WHEREOF I have hereunto set my hand and affixed myu seal in the City of Sacramento, County of Sacramento the day and year in this certificate first above written.

OFFICIAL SEAL
JANNETTE RAE SCHMIDT
NOTARY PUBLIC - CALIFORNIA
SAN JOAQUIN COUNTY
My Comm. Expires Sept. 30, 1988

Jannette Rae Schmidt

NOTARY PUBLIC,
State of California

My Commission Expires 9/30/88

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TIEDEMANN & GIRARD
PROFESSIONAL CORPORATION
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Exhibit A

88 0517 1895

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 86-161

WASTE DISCHARGE REQUIREMENTS
FOR

RANCHO MURIETA COMMUNITY SERVICES DISTRICT
WASTEWATER RECLAMATION FACILITY
SACRAMENTO COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board), finds that:

1. Rancho Murieta Community Services District (hereafter Discharger) submitted a Report of Waste Discharge, dated 7 May 1985, and a geotechnical investigation report, dated April 1981.

2. The Board, on 28 May 1982, adopted Order No. 82-052 which prescribed requirements for a discharge from a tertiary treatment plant to two golf courses and open space within the community.

3. The north golf course is surrounded by homes. The tertiary treatment of reclaimed wastewater is in accordance with Section 60313(b), Article 4, Division 4, Title 22 of the California Administrative Code (CAC). No housing is planned along the south course for several years. Therefore, treatment of reclaimed wastewater for south course irrigation is specified in Section 60313(a).

4. The Rancho Murieta Community is a 3,500 acre development, which is 20 miles east of the City of Sacramento. The community is bisected by both the Cosumnes River and State Highway 16.

5. The Discharger discharges .6 million gallons per day from the treatment ponds to the treated wastewater equalization reservoirs. Depending upon daily irrigation demand, up to 1.5 mgd can be returned from the reservoirs and treated as specified in finding 3. above. Ultimate tertiary treatment capacity will be 3.0 mgd. The treatment project has a 40-year life expectancy.

6. The development and treatment facilities are in Sections 2 and 3, T7N, R8E, and Section 34, T8N, R8E, MDB&M, with surface water drainage to the Cosumnes River.

7. The beneficial uses of the Cosumnes River are municipal, agricultural and industrial supply; recreation; esthetic enjoyment; ground water recharge; fresh water replenishment; and preservation and enhancement of fish, wildlife, and other aquatic resources.

8. The beneficial uses of the ground water are municipal, industrial, agricultural supply.

9. The Board, on 25 July 1975, adopted a Water Quality Control Plan for the Sacramento-San Joaquin Delta Basin (5B) which contains water quality objectives for all waters of the Basin. These requirements are consistent with that Plan.

10. The County of Sacramento has approved a Negative Declaration in accordance with the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), and the State Guidelines.

11. The Board has reviewed the Negative Declaration and concurs there are no significant impacts on water quality.

12. Sacramento County has issued a use permit to Rancho Murieta indicating the primary use of recycled water shall be for watering the golf course.

13. The State Water Resources Control Board's Water Rights' permit for Rancho Murieta requires use of wastewater for irrigation purposes in lieu of water from other sources when the flow of wastewater reaches 424 acre-feet per annum.

14. A soils investigation of the site showed an abundance of clay with in situ permeabilities to 2×10^{-6} cm/sec (about 0.2 inches/year), and fine silts and sands in lower regions. Ponds have been constructed using compacted clays.

15. The action to amend waste discharge requirements for this water reclamation facility is exempt from the provisions of the California Environmental Quality Act, in accordance with Section 15301, Title 14, CAC.

16. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge.

17. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Order No. 82-052 be rescinded, and Rancho Murieta Community Services District, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions:

1. The direct discharge of wastes to surface waters or surface water drainage courses is prohibited.

2. The by-pass or overflow of untreated or partially treated waste is prohibited.

3. The use of reclaimed wastewater for purposes other than irrigation is prohibited.

B. Discharge Specifications:

1. Neither the treatment nor disposal of wastes shall cause a pollution or nuisance as defined by the California Water Code, Section 13050.

2. The discharge shall not cause degradation of any water supply.

3. Reclaimed wastewater treated in accordance with Section 60313(b), Article 4, Division 4, Title 22, CAC may be discharged in the following designated areas: a) the north golf course; b) the south golf course, the treatment plant; c) equalization reservoirs; d) the proposed Rancho Murieta Homeowner's Association Corporation yard; and e) the proposed community park. Reclaimed wastewater treated in accordance with Section 60313(a), Article 4, Division 4, Title 22, CAC, shall be discharged only in the areas as listed under 3(b) and (c) listed here.

4. The annual discharge shall not exceed 1095 million gallons.

5. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer.

6. Reclaimed wastewater shall meet the criteria contained in Title 22, Division 4, CAC (Section 60301, et seq.).

7. Constituents and characteristics of the filtered reclaimed wastewater treated as specified in Section 60313(b), Article 4, Division 4, Title 22, of the CAC shall not exceed the following limits during irrigation of the north golf course:

Constituent or Characteristic	Units	Monthly Mean	Monthly Median	Maximum
Total Coliform Organisms	MPN/100 ml	--	2.2	23
Turbidity*	NTU	2	--	5

* Not to exceed 5, more than 5% of the time during 24-hour period.

8. Constituents and characteristics of the filtered reclaimed wastewater treated, in accordance with Section 60313(a), Title 22, CAC (south golf course discharge), shall not exceed the following limits during irrigation of the south golf course:

Constituent or Characteristic	Units	Monthly Mean	Monthly Median	Maximum
Total Coliform Organisms	MPN/100 ml	--	23	240

9. The dissolved oxygen content of any wastewater treatment ponds shall not be less than 1.0 mg/l for 16 hours in any 24-hour period.

10. Conveyance and storage facilities shall be maintained to minimize the generation of vectors.

11. Reclaimed wastewater conveyance lines shall be clearly marked.

12. Reclaimed wastewater operations shall be well managed to minimize erosion and runoff.

C. Provisions:

1. The Discharger may be required to submit technical reports as directed by the Executive Officer.

2. The Discharger shall comply with the attached Monitoring and Reporting Program No. 86-161.

3. The Discharger shall comply with the Standard Provisions and Reporting Requirements, dated 1 September 1985, which are a part of this Order.

4. The Discharger shall provide certified wastewater treatment plant operators in accordance with regulations adopted by the State Water Resources Control Board.

5. The Discharger shall report promptly to the Board any material change or proposed change in character, location, or volume of the discharge.

6. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.

WASTE DISCHARGE REQUIREMENTS
RANCHO MURIETA COMMUNITY SERVICES DISTRICT
WASTEWATER RECLAMATION FACILITY
SACRAMENTO COUNTY

7. The Board will review this Order periodically and may revise requirements when necessary.

I, WILLIAM H. CROOKS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 8 August 1986.

William H. Crooks

WILLIAM H. CROOKS, Executive Officer

5/28/86:MAC:jec

Attachment

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 86-161

FOR

RANCHO MURIETA COMMUNITY SERVICES DISTRICT
WASTEWATER RECLAMATION FACILITY
SACRAMENTO COUNTY

EFFLUENT WASTE MONITORING

Samples and flows shall be taken prior to discharge of the two irrigation systems. Effluent samples shall be representative of the volume and nature of the discharge. The monitoring program shall be as follows:

Constituent	Units	Type of Sample	Sampling Frequency
Flow	mgd	Continuous	Daily
pH	pH Units	Grab	Weekly
Settleable Solids	ml/l	Grab	Twice Weekly
Coliform Organisms	MPN/100 ml	Grab	Daily
Residual Chlorine	mg/l	Grab	Daily
Turbidity	NTU	Continuous	Daily

REPORTING

Quarterly monitoring reports shall be submitted to the Regional Board by the 15th day of the following quarter. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly the compliance with waste discharge requirements.

Quarterly monitoring reports shall be submitted to the Regional Board by the 15th day of the following month.

The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Board.

MONITORING AND REPORTING PROGRAM
RANCHO MURIETA COMMUNITY SERVICES DISTRICT
WASTEWATER RECLAMATION FACILITY
SACRAMENTO COUNTY

The Discharger shall implement the above monitoring program on the effective date of this Order.

Ordered by: William H. Crooks
WILLIAM H. CROOKS, Executive Officer

8 August 1986
(Date)

5/28/86:MAC:jec

INFORMATION SHEET

RANCHO MURIETA COMMUNITY SERVICES DISTRICT
WASTEWATER RECLAMATION FACILITY
SACRAMENTO COUNTY

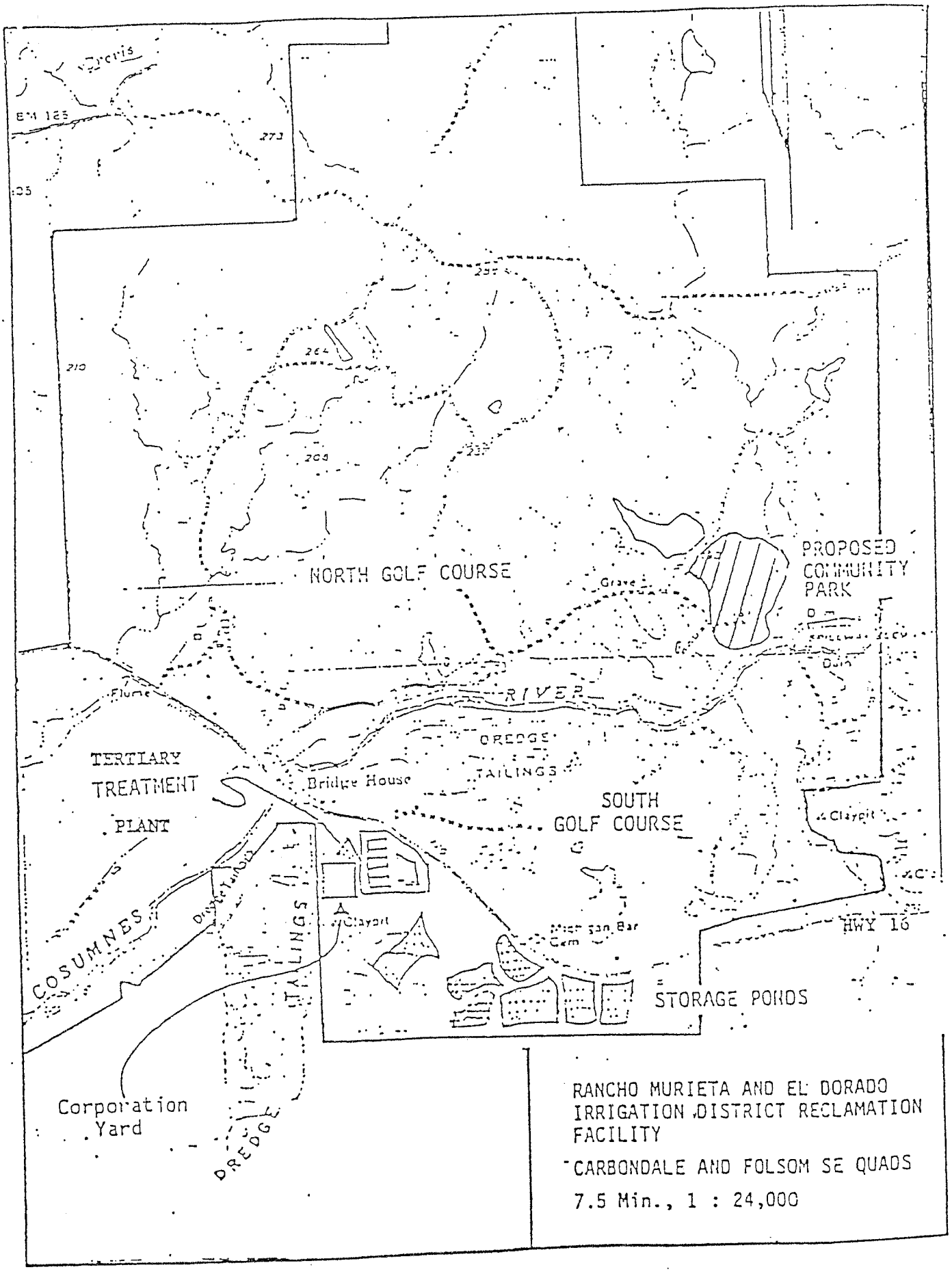
The Pension Trust Fund for Operating Engineers has constructed a development about 20 miles east of Sacramento, called Rancho Murieta (see location map). Rancho Murieta is a 3500 acre planned development with ultimate capacity consisting of 5,000 housing units, two golf courses, seven parks, five schools, recreation and shopping centers, and several lakes. Approved requirements will govern Phase I construction (approximately 50% complete), with an anticipated maximum sewage flow of 1.5 mgd.

The area is in rolling hills, and is traversed by the Cosumnes River. The sewage treatment facilities have been built on the Ione formation consisting of sand, silt, and some gravel. The Ione formation is considered essentially nonwater bearing. Locally it produces at low rates, but the water is generally of poor quality.

This Order distinguishes two separate reclaimed wastewater discharges. The main treatment train consists of a series of oxidation ponds, flow equalization reservoirs, a dissolved air flotation unit, filtration, and finally, chlorination. The only difference in process control between the north golf course and south golf course is the addition or absence of polymer, respectively. The addition of polymer ahead of the dissolved air flotation unit reduces the turbidity, which improves the reliability of pathogen destruction.

Under certain conditions when the risk to human exposure to reclaimed wastewater increases (i.e., the north course surrounded by homes), the California Department of Health Services requires a higher degree of disinfection. Therefore, whenever the Services District irrigates the north course, the more restrictive effluent requirements will be used.

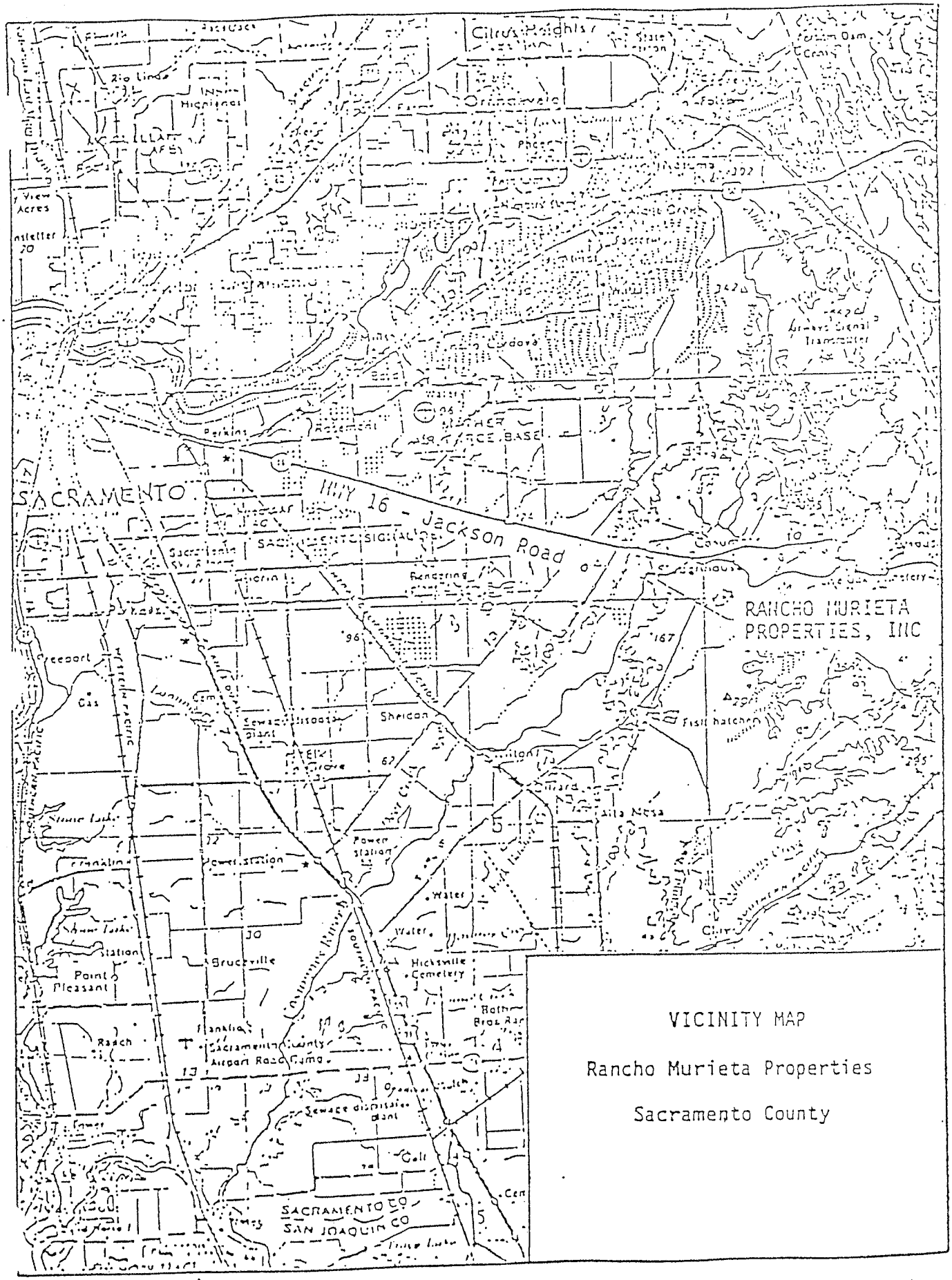
MAC:jec



RANCHO MURIETA AND EL DORADO IRRIGATION DISTRICT RECLAMATION FACILITY

CARBONDALE AND FOLSOM SE QUADS

7.5 Min., 1 : 24,000



VICINITY MAP

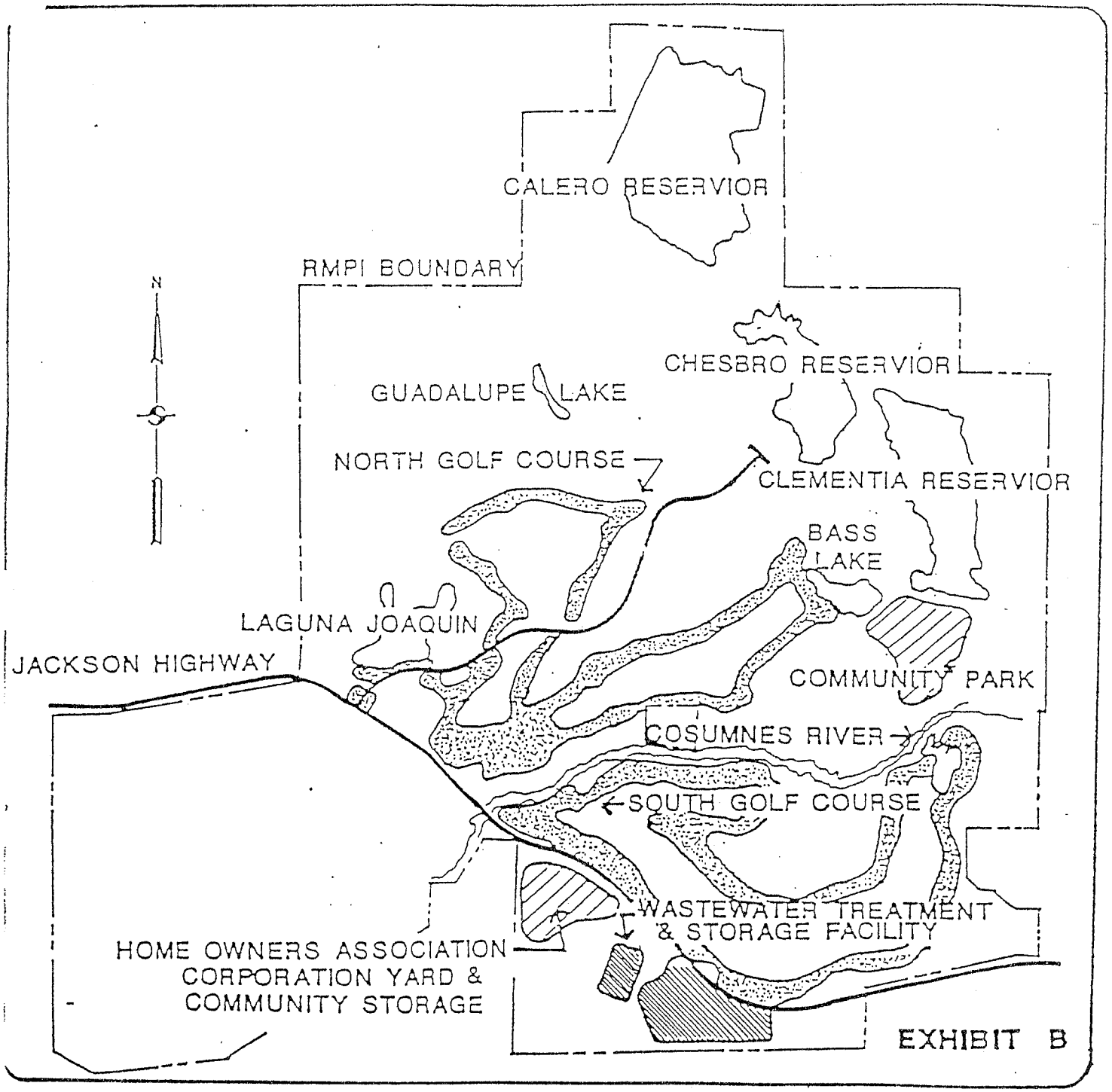
Rancho Murieta Properties

Sacramento County

BB 0517 1904

Exhibit B

Rancho Murieta



Wastewater Reclamation Project

Legend

- EXISTING IRRIGATED AREAS TO RECEIVE RECLAIMED WASTEWATER
- PROPOSED IRRIGATED AREAS TO RECEIVE RECLAIMED WASTEWATER
- RANCHO MURIETA WASTEWATER TREATMENT / STORAGE FACILITY

THIS EXHIBIT DEPICTS THE AREAS TO RECIEVE RECLAIMED WASTEWATER AS DESIGNATED ON THE NOV 1981 "WASTEWATER RECLAMATION PROJECT" EXHIBIT PREPARED BY RAYMOND VAIL & ASSOCIATES (W.O. #1205.15B) ON FILE IN THE OFFICE OF THE MANAGER OF R.M.C.S.D.

NOV. 1987 2250.08

88 0517 1907

Exhibit C

Exhibit

RECLAIMED WASTEWATER & RAW WATER DELIVERY SYSTEMS

OPERATION AND MAINTENANCE

RESPONSIBILITY MATRIX

4/21/88

No	Facility	A. TYPE		B. OWNERSHIP		C. OPERATION AND MAINTENANCE		D.COST OF O & M		E. WATER QUALITY		F. POINT OF SERVICE	G. REMARKS
		Reclaimed Wastewater	Raw Water	Dis-trict	Non Dist.	District	Non District	District	Non District	Dis-trict	Non District		
1	Reclaimed Wastewater Equalization Pond	o		o		o		o		o		n/a	Pond Level Controlled by District
2	Equalization Pond-Lakes 16/17 (South Course) Pipeline	o		o		o		4	4	o		Pipeline Discharge Structure at Lake 16	
3	Lake 10-16/17 (South Course) Transfer Pipeline	o	o		RMPI		RMCC		RMCC		RMCC	n/a	Lake Level Controlled by RMCC via Adjustable Probes and Auto-Valves
4	Lakes 10 & 16/17 (South Course)	o	o		RPMI		RMCC		RMCC		RMCC	n/a	Lake Level Controlled by RMCC via Ajustable Probes and Auto-Valves
5	North Course Irrigation System	o	o		RMPI		RMCC		RMCC		RMCC	n/a	
6	South Course Irrigation System	o	o		RMPI		RMCC		RMCC		RMCC	n/a	
7	North Course Pumps at Equalization Pond	o		o		o			RMCC	o		Pump Station Intake Structure at Equalization Pond	Pumps Controlled by Irrigation System
8	North Course Treated Effluent Force Main	o		o		o		4	4	o		North Course Side of PRV near Yellow Bridge	
9	Bass Lake River Pump and Pipeline to Bass Lake		o	o		o		6		o		Pipeline Discharge Structure at Bass Lake	Water Quality Dictated by Cosumnes River quality

Exhibit "L"

RECLAIMED WASTEWATER & RAW WATER DELIVERY SYSTEMS

OPERATION AND MAINTENANCE

RESPONSIBILITY MATRIX

4/21/88

No	Facility	A. TYPE		B. OWNERSHIP		C. OPERATION AND MAINTENANCE		D.COST OF O & M		E. WATER QUALITY		F. POINT OF SERVICE	G. REMARKS
		Reclaimed Wastewater	Raw Water	Dis-trict	Non Dist.	District	Non District	District	Non District	Dis-trict	Non District		
10	Bass Lake River Pump and Pipeline to Lake 10 South Course		o	o		o		6		o		Pipeline Discharge Structure at Lake 10	Water quality dictated by Cosumnes River quality
11	Bass Lake		o	1		1		1		1		n/a	Lake Level Controlled by District
12	Bass Lake Irrigation Pump Station		o		RMPI		RMCC		RMCC		RMCC	Pump Station Intake Line	Pumps Controlled by Irrigation System
13	Cosumnes Irrigation Association System		o	2		2		2		2		n/a	System Includes Granlees Dam, CIA Ditch, Pipelines & Appurtenances
14	Laguna Joaquin		o	1		1		1		1		n/a	Lake Level Controlled by District
15	Laguna Joaquin Pump Station		o		RMPI		5		5		5	Pump Station Intake Line	Pumps Controlled by Irrigation System
16	River Pump @ Old Bridge		o		RMPI		RMCC		RMCC		RMCC	n/a	Water Quality Dictated by Cosumnes River Quality
17	Lake Clementia		o	3		3		3		3		n/a	Lake Level Controlled by District
18	Lake Clementia-Lake 10 (South Course) Pipeline		o	o		o		4	4	o		Pipeline Discharge Structure at Lake 10	

88 0517 1909

EXHIBIT "C"

Footnotes:

1. Bass Lake and Laguna Joaquin are owned by Rancho Murieta Association (RMA), but the District has an Easement for Operation and Maintenance of the lakes. District is responsible for water quality and control of aquatic growth and for maintaining the water level in the lakes. The District recovers its cost for operation and maintenance by direct billing to its customers.

2. The system is owned by the Cosumnes Irrigation Association (CIA), but the District is authorized by the CIA to operate and maintain the facilities. The District charges CIA for its expenses and CIA in turn prorates this expense to its members on a benefit basis. Since the District is a member of CIA, the District in turn bills its customers for their respective share of these expenses. Water quality in CIA system is dictated by Cosumnes River quality.

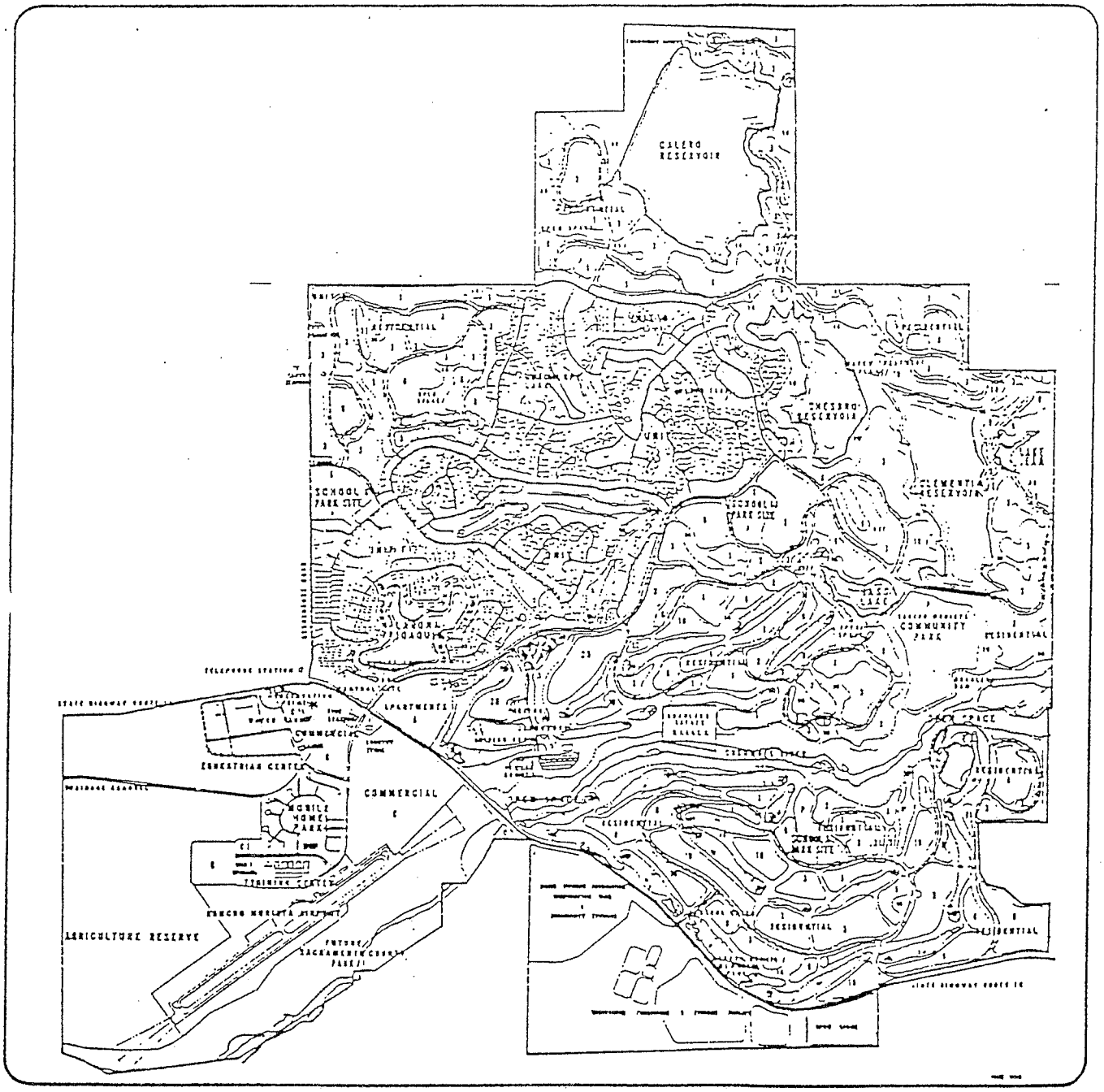
3. Lake Clementia is owned by RMA, but the District has an easement from RMA for operation and maintenance of the lake. The District is responsible for maintaining water level within limits of water rights, water quality and control of aquatic growth below the high water line of the lake and for maintenance and control of vegetation above the high water line of the lake. The District recovers its cost for diversion, storage and release of water by meter charges to its customers.

4. District and RMCC agree to share the Operation and Maintenance costs of these facilities on a 50/50 basis.

5. RMCC and RMA will share the responsibilities and costs on a mutually agreeable prorata basis.

6. The District recovers its cost for operation and maintenance of this facility by direct billing to its customers.

Rancho Murieta



Master Plan

Legend

RESIDENTIAL/EXISTING DENSITIES

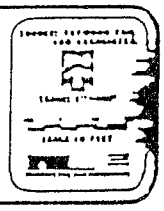
- ESTATE LOTS 3 PER ACRE MAXIMUM
- CIRCLE LOTS 3 PER ACRE MAXIMUM
- COTTAGE LOTS 8 PER ACRE MAXIMUM
- TOWNHOUSES 18 PER ACRE MAXIMUM
- APARTMENTS 25 PER ACRE MAXIMUM

RESIDENTIAL/PROPOSED DENSITIES

- 3 PER ACRE MAXIMUM
- 8 PER ACRE MAXIMUM
- 18 PER ACRE MAXIMUM
- 25 PER ACRE MAXIMUM

- PARKS *
- OPEN SPACE
- COMMERCIAL
- SCHOOL SITES
- MOBILE HOME PARK
- GOLF COURSE

- EXISTING STREETS
- PROPOSED STREETS
- RESERVOIRS
- RESOURCE PROTECTION LINE
- RANCHO MURIETA BOUNDARY
- UNIT BOUNDARIES



5/14/87

EXHIBIT "B"

MAINTENANCE AND REPAIR

OF

PIPELINES AND WATERWORKS

The pipelines and waterworks of common interest to COUNTRY CLUB and DISTRICT shall be maintained and repaired in accordance with the following information and attached map:

1) Lake Clementia - Underlying land is owned by RMA; DISTRICT maintains water levels, and releases to Lake 10, South Golf Course; COUNTRY CLUB requests water service from DISTRICT if needed.

2) Bass Lake River Pump - DISTRICT maintains pump at COUNTRY CLUB expense. Installs pump in Spring, removes and stores in Fall. Cost is billed to COUNTRY CLUB.

3) Bass Lake - Underlying land is owned by RMA. DISTRICT maintains water levels. COUNTRY CLUB operates and maintains pump out of Bass Lake to Golf Course.

4) Granlees Dam - Cosumnes Irrigation Association owns the dam. DISTRICT operates and maintains the dam at Cosumnes Irrigation Association cost.

5) Cosumnes Irrigation Association Canal- Cosumnes Irrigation Association owns the canal and easement. DISTRICT operates and maintains the canal at CIA cost.

6) Laguna Joaquin - RMA owns underlying land; DISTRICT maintains water levels with flows from CIA canal; COUNTRY CLUB and/or RMA operates and maintains the pumps taking water to the golf courses and RMA common area.

7) River Pump at Yellow Bridge - COUNTRY CLUB operates and maintains this facility.

8) Reclaimed Water Storage Equalization Pond- DISTRICT owns, operates, and maintains this facility.

9) Pumps at North End of Equalization Pond- DISTRICT owns pumps. COUNTRY CLUB pays power bills for pumping.

10) Pipeline from Equalization Pond Along Highway 16 to Yellow Bridge (North Golf Course reclaimed water delivery) - DISTRICT owns and operates the pipeline to the pressure reducing valve on the north side of the Yellow Bridge. COUNTRY CLUB maintains pipeline outward from the pressure reducing station into the north golf course.

11) Pipeline from Equalization Pond Across Highway 16 to Ponds 16 and 17 - DISTRICT owns and operates the pipeline across Highway 16 to Pond 17. COUNTRY CLUB operates water levels in Ponds 16 and 17 by setting probes in Pond 16.

12) Transfer pipeline, Pond 10 to Ponds 16 and 17 and reverse. This pipeline is interior to the south Golf Course and is operated and maintained by COUNTRY CLUB.

BOOK PAGE
94 05-4 0873

RECORDED AT THE REQUEST OF
AND WHEN RECORDED RETURN TO:

OFFICIAL RECORDS
SACRAMENTO COUNTY, CALIF

94 MAY -4 AM 8:48

COUNTY CLERK-RECORDER

Marion Cravens, General Manager
Rancho Murieta Community Services District
P. O. Box 1050
Rancho Murieta, CA 95683

NO FEE D 9

AMENDMENT TO AGREEMENT FOR AVAILABILITY AND USE OF RECLAIMED WATER

THIS AMENDMENT is made and entered into on the date below between RANCHO MURIETA COMMUNITY SERVICES DISTRICT ("District"), RANCHO MURIETA COUNTRY CLUB ("RMCC"), RANCHO MURIETA PROPERTIES, INC. ("RMPI") and CBC BUILDERS, INC. ("CBC").

Recitals

A. On or about May 16, 1988, the parties entered into an Agreement For Availability and Use of Reclaimed Water (the "Agreement"), which is recorded in Book 880517 at Page 1871, of the Official Records of Sacramento County, California. Under the Agreement, the District agreed to provide, and RMCC agreed to take reclaimed wastewater for use on golf courses leased by RMCC from RMPI.

B. RMCC has made an application to the District that would permit reclaimed wastewater to be delivered to and stored at Bass Lake. Such reclaimed wastewater would then be used by RMCC to irrigate the golf courses leased by RMCC from RMPI.

C. Among other things, the District's approval of RMCC's application is subject to the amendment of the Agreement to reflect the delivery and storage of reclaimed wastewater in Bass Lake.

D. The parties now desire to amend the Agreement reflecting the above matters.

NOW, THEREFORE, the parties mutually agree to amend the Agreement as follows:

Agreement

1. Delivery and Storage of Reclaimed Wastewater in Bass Lake. The Agreement is hereby amended to permit the District to deliver and store reclaimed wastewater in Bass Lake during the months of April through October, inclusive; subject to the limitation that the District, at the request of RMCC, shall endeavor to maintain the water in Bass Lake so that the level thereof below the crest elevations of the emergency spillway shall not be more than eighteen (18) inches. Such reclaimed wastewater shall be used for irrigation purposes, as provided in the Agreement.

2. Amended Exhibit C. Exhibit C of the Agreement, captioned Reclaimed Wastewater & Raw Water Delivery Systems Operation and Maintenance Responsibility Matrix, is hereby amended and replaced in its entirety with Exhibit C attached hereto and incorporated herein by this reference.

3. Entire Agreement. This amendment represents the entire agreement of the parties with respect to the matters described herein, and except as specifically amended herein, the Agreement remains in full force and effect.

IN WITNESS WHEREOF, the parties have caused this amendment to be executed by their duly authorized representatives on this 9th day of December, 1992.

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

By _____
President, Board of Directors

ATTEST:

By _____
Secretary, Board of Directors of Rancho Murieta Community Services District

--AND--

RANCHO MURIETA COUNTRY CLUB

By:_____
Its:_____

RANCHO MURIETA PROPERTIES, INC.

By: Earl J. Tallman
Its: VICE-PRESIDENT

CBC BUILDERS, INC.

By: Earl J. Tallman
Its: VICE-PRESIDENT

STATE OF CALIFORNIA)
) ss
COUNTY OF SACRAMENTO)

On December 8 c.s.p., 1992, before me the undersigned, a notary public, personally appeared W. Corey Trench and _____,

(✓) personally known to me, or
( ) proved to me on the basis of satisfactory evidence

to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

WITNESS my hand and official seal.

Signature Carole S. Pugh

OFFICIAL SEAL
CAROLE S. PUGH
Notary Public-California
SACRAMENTO COUNTY
My Commission Expires
October 25, 1995

STATE OF CALIFORNIA)
) ss
COUNTY OF SACRAMENTO)

On December 9, 1992, before me the undersigned, a notary public, personally appeared W. Corey Trench

(✓) personally known to me, or
( ) proved to me on the basis of satisfactory evidence

to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Carole S. Pugh

OFFICIAL SEAL
CAROLE S. PUGH
Notary Public-California
SACRAMENTO COUNTY
My Commission Expires
October 25, 1995

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT No. 5193

State of California
County of Sacramento

On Feb. 12, 1993 (DATE) before me, Carole S. Pugh, Notary Public (NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC"),

personally appeared Erik J. Tallstrom, RMPI - Vice President (NAME(S) OF SIGNER(S)),

☒ personally known to me - **OR** - ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Carole S. Pugh
SIGNATURE OF NOTARY

OFFICIAL SEAL
CAROLE S. PUGH
Notary Public-California
SACRAMENTO COUNTY
My Commission Expires
October 25, 1995

OPTIONAL SECTION
CAPACITY CLAIMED BY SIGNER
Though statute does not require the Notary to fill in the data below, doing so may prove invaluable to persons relying on the document.

☐ INDIVIDUAL
☒ CORPORATE OFFICER(S) Vice-President (TITLE(S))
☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
☐ ATTORNEY-IN-FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)

OPTIONAL SECTION
THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED AT RIGHT:

Though the data requested here is not required by law, it could prevent fraudulent reattachment of this form.

TITLE OR TYPE OF DOCUMENT Amendment to agreement for availability and use of Reclaimed Water
NUMBER OF PAGES 5 DATE OF DOCUMENT No Date
SIGNER(S) OTHER THAN NAMED ABOVE RMCC, Signature

AmRecWater/RMCS

02Dec92 DLK

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

No. 5193

State of California
County of Sacramento

On Feb. 12, 1993 (DATE) before me, Carole S. Pugh, Notary Public (NAME, TITLE OF OFFICER E.G., "JANE DOE, NOTARY PUBLIC"),

personally appeared Erik J. Tollstrom CBC Builders, V.P. (NAME(S) OF SIGNER(S)),

☒ personally known to me - **OR** - ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Carole S. Pugh
SIGNATURE OF NOTARY

OFFICIAL SEAL
CAROLE S. PUGH
Notary Public-California
SACRAMENTO COUNTY
My Commission Expires
October 25, 1995

OPTIONAL SECTION

CAPACITY CLAIMED BY SIGNER

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☐ INDIVIDUAL
☒ CORPORATE OFFICER(S) Vice-President (TITLE(S))
☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
☐ ATTORNEY-IN-FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)

OPTIONAL SECTION

THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED AT RIGHT:

Though the data requested here is not required by law, could prevent fraudulent reattachment of this form.

TITLE OR TYPE OF DOCUMENT Amendment to Agreement for Availability and Use of Reclaimed Water

NUMBER OF PAGES 5 DATE OF DOCUMENT No Date

SIGNER(S) OTHER THAN NAMED ABOVE RMCC, Signatures

RANCHO MURIETA COUNTRY CLUB

By: _____
Its: PRESIDENT

RANCHO MURIETA PROPERTIES, INC.

By: _____
Its: _____

CBC BUILDERS, INC.

By: _____
Its: _____

STATE OF CALIFORNIA)
) ss

ACKNOWLEDGMENT

STATE OF CALIFORNIA)
) ss.
COUNTY OF SACRAMENTO)

On February 17, 1993, before me, ROBERTA A. BECKER, Notary Public, personally appeared GREGORY W. BAUGHER, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

OFFICIAL SEAL
ROBERTA A. BECKER
NOTARY PUBLIC - CALIFORNIA
SACRAMENTO COUNTY
My Comm. Expires Dec. 2, 1994

Signature: Roberta A Becker (SEAL)

EXHIBIT C
RECLAIMED WASTEWATER & RAW WATER DELIVERY SYSTEMS
OPERATION AND MAINTENANCE
RESPONSIBILITY MATRIX

		A. TYPE		B. OWNERSHIP		C. OPERATION AND MAINTENANCE		D. COST OF O & M		E. WATER QUALITY		F. POINT OF SERVICE	G. REMARKS
No.	Facility	Reclaimed Wastewater	Raw Water	District	Non District	District	Non District	District	Non District	District	Non District		
1	Reclaimed Wastewater Equalization Pond	0		0		0		0		0		n/a	Pond level controlled by District
2	Equalization Pond-Lakes 16/17 (South Course) Pipeline	0		0		0		4	4	0		Pipeline Discharge Structure at Lake 16	
3	Lake 10-16/17 (South Course) Transfer Pipeline	0	0		RMPI		RMCC		RMCC		RMCC	n/a	Lake level controlled by RMCC via Adjustable Probes and transfer pumps
4	Lakes 10 & 16/17 (South Course)	0	0		RMPI		RMCC		RMCC		RMCC	n/a	Lake level controlled by RMCC via Adjustable Probes and Transfer Pumps
5	North Course Irrigation System	0	0		RMPI		RMCC		RMCC		RMCC	n/a	
6	South Course Irrigation System	0	0		RMPI		RMCC		RMCC		RMCC	n/a	
7	North Course Pumps at Equalization Pond	0		0		0			RMCC	0		Pump Station Intake Structure at Equalization Pond	Pumps controlled by Irrigation System
8	North Course Treated Effluent Force Main (Wastewater treatment plant to Yellow Bridge)	0		0		0		4	4	0		North Course Side of PRV near Yellow Bridge	
9	Bass Lake River Pump and Pipeline to Bass Lake		0		RMPI	0		6		0		Pipeline Discharge Structure at Bass Lake	Water quality dictated by Cosumnes River quality

		A. TYPE		B. OWNERSHIP		C. OPERATION AND MAINTENANCE		D. COST OF O & M		E. WATER QUALITY		F. POINT OF SERVICE	G. REMARKS
No.	Facility	Reclaimed Wastewater	Raw Water	District	Non District	District	Non District	District	Non District	District	Non District		
10	Bass Lake Pipeline/Lake Clementia - Lake 10 Pipeline Intertie		0		RMPI	0		6		0		Lake Clementia - Lake 10 Pipeline Intertie	Water quality dictated by Cosumnes River quality
11	Bass Lake	0	0	1		1		1		1		n/a	Lake level controlled by District upon request of RMCC
12	Bass Lake Irrigation Pump Station	0	0		RMPI		RMCC		RMCC		RMCC	Pump Station Intake Line	Pumps controlled by Irrigation System
13	Cosumnes Irrigation Association System		0	2		2		2		2		n/a	System includes Granlees Dam, CIA Ditch; Pipelines & Appurtenances
14	Laguna Joaquin		0	1		1		1		1		n/a	Lake level controlled by District
15	Laguna Joaquin Pump Station		0		RMPI		5		5		5	Pump Station Intake Line	Pumps controlled by Irrigation System
16	River Pump at Old Bridge		0		RMPI		RMCC		RMCC		RMCC	n/a	Water quality dictated by Cosumnes River quality
17	Lake Clementia		0	3		3		3		3		n/a	Lake level controlled by District
18	Lake Clementia-Lake 10 (South Course) Pipeline		0	0		0		4	4	0		Pipeline Discharge Structure at Lake 10	
19	North Course Treated Effluent Force Main (Yellow Bridge to Bass Lake)	0			RMPI		RMCC		0	0		North Course side of PRV near Yellow Bridge	

Footnotes:

1. Bass Lake and Laguna Joaquin are owned by Rancho Murieta Association (RMA), but the District has an Easement for Operation and Maintenance of the lakes. District is responsible for water quality and control of aquatic growth and for maintaining the water level in the lakes. The District recovers its cost for operation and maintenance by direct billing to its customers.

2. The system is owned by the Cosumnes Irrigation Association (CIA), but the District is authorized by the CIA to operate and maintain the facilities. The District charges CIA for its expenses and CIA in turn prorates this expense to its members on a benefit basis. Since the District is a member of CIA, the District in turn bills its customers for their respective share of these expenses. Water quality in CIA system is dictated by Cosumnes River quality.

3. Lake Clementia is owned by RMA, but the District has an easement from RMA for operation and maintenance of the lake. The District is responsible for maintaining water level within limits of water rights, water quality and control of aquatic growth below the high water line of the lake and for maintenance and control of vegetation above the high water line of the lake. The District recovers its cost for diversion, storage and release of water by meter charges to its customers.

4. District and RMCC agree to share the Operation and Maintenance costs of these facilities on a 50/50 basis.

5. RMCC and RMA will share the responsibilities and costs on a mutually agreeable pro rata basis.

6. The District recovers its cost for operation and maintenance of this facility by direct billing to its customers.

February 23, 1999

Greg Vorster
Rancho Murieta Association
7191 Murieta Parkway
Rancho Murieta, CA 95683

Subject: Lake Guadalupe Replenishment Water

Dear Greg:

Enclosed is my analysis of the water replenishment costs and availability. Since I used the rough water needs you gave me, my analysis should be considered preliminary until additional operational parameters are defined.

Aside from the costs and operations, long-term water availability is an issue. All water in the District is committed to specific uses and parcels and therefore, no water is available for new uses. To make water available for Guadalupe Lake replenishment, water must be found from pervious commitments. My analysis shows the RMA parks water commitments and the effects of Guadalupe replenishment water on the water availability for future RMA parks.

If you agree with my analysis, I will be able to present this project to our Improvements Committee for a heads-up and conceptual approval. We will need to finalize a water use agreement once all parties agree on the project.

Please call if you have any questions.

Sincerely,

Edward R. Crouse
General Manager

cc: Steve Rosetta

GUADALUPE LAKE REPLENISHMENT ANALYSIS & COSTS

1. Lake area

970 ft.X 140 ft. = 135800 sf = **3.12 acres**

2. Fill schedule and amount

Assume 2 ft in July and August

3. Fill quantity

Fill amount 2 ft

2 feet X 3.1 acres = 6.2 acre-ft.

Ditch loss at 100% fill amount = 6.2 acre-ft.

Total 12.2 acre-ft.

X 2 months 24.4 acre-ft.

Say **25 acre-ft.**

4. Water costs

Calero raw water at $ 38.10 acre-ft.

25 acre-ft. @ $ 38.10 acre-ft. = $ **953**

OR

Treated water at $ 0.0078 cubic ft. = $ 340 acre-ft.

13 acre-ft. @ $ 340 acre-ft. = $ **4,417**

5. Pumping costs from Calero

4 inch pump at 1200 gpm = 231,000 cf/day

12 acre-ft. pumped at 231,000 cf/day = 2.26 days

Pump rental costs = $ 550 per week X 2 month = $ **1,100**

Diesel Fuel

4.53 days @ 9.6 gal/hr X 24 hr X $.80/gal X 2 refills = $ **834**

Diesel tank rental

Tank rental per month = $ 325 X 2 months = $ **650**

CSD staff

2 men X 2 hr/day X5 days @ $42/hr = $ **840**

Total pumping costs $ **3,424**

6. Total costs to replenish Guadalupe Lake

Calero raw water = $ 953 + $ 3,424 = $ **4,377**

OR

Treated water = $ 4,417 = $ **4,417**

7.Equivalent Dwelling Unit (EDU) calculation

25 acre-ft. = 1,089,000 cf, and

1 EDU = 750 gallons/day/unit = 36,600 cf/EDU/yr

Therefore

25 acre-ft. = 29.8 EDU's say **30 EDU's**

8. RMA water availability

Per Water Supply and Acquisition Agreement, water allocated to RMA

Park	Acres	Allocated	EDU's Used	Available
RMPI North				
Clementia Community	14	50		50
Clementia Lakeside	7	25		25
Murieta Pkwy	10	36		36
Escuela	4	14		14
Stonehouse athletic	16	57	57	0
Calero lakeside	7	25		25
Riverview	6	22	11	11
Remote south	2	7		7
Total	66	**236**	**68**	**168**

Less Guadalupe replenishment	**30**
Total EDU's after Guadalupe replenishment	**138**

RECORDED REQUESTED BY, AND
WHEN RECORDED, MAIL TO:

Weintraub Genshlea & Sproul
400 Capitol Mall, Suite 1100
Sacramento, CA. 95814
Attn: Curtis C. Sproul, Esq

(Space Above For Recorder's Use)

ASSESSMENT AND MAINTENANCE AGREEMENT

This Assessment and Maintenance Agreement (the "Agreement") is entered into on July 28, 1999 by and among RANCHO MURIETA ASSOCIATION, a California nonprofit mutual benefit corporation (the "Association"), STEVE and MARIE ROSETTA, DUANE and MYRTLE THOMPSON, PETER and LINDA GORDON, EUGENE and MARGO WONG, "MS COMMUNITIES, LLC", and the RANCHO MURIETA COMMUNITY SERVICES DISTRICT, a governmental agency ("RMCSD") hereby agree as follows:

RECITALS

A. The Association is a nonprofit corporation which owns, manages and maintains the common area parcels within that certain real estate common interest development located in Sacramento County, California and commonly referred to as "Rancho Murieta", which is sometimes referred to herein as the "development". The residential lots and common areas of Rancho Murieta are subject to a Second Restated Declaration of Covenants, Conditions and Restrictions for Rancho Murieta recorded on February 10, 1998, in the Official Records of Sacramento County, California as Instrument No. 19980210773 (the "Declaration"). Among other things, the Declaration imposes covenants, conditions and restrictions on the lands within Rancho Murieta and empowers the Association to levy assessments against its members who are the owners of residential Lots within the development.

B. Part of the Common Area of Rancho Murieta which is owned by the Association, is a lake commonly known as "Guadalupe Lake" surrounding which are clusters of townhouse style residences and single family home sites. The Common Area in which Guadalupe Lake is located is more particularly described in Exhibit "A", attached hereto and incorporated herein by reference (the "Guadalupe Common Area").

C. "Rosetta, Thompson, Gordon, Wong" and "MS COMMUNITIES" (collectively, the "Developer") are owners of several townhouses and single family residential Lots adjacent to the Guadalupe Common Area which are more particularly described in Exhibit "B-1" the ("Townhouse Lots") and Exhibit "B-2" (the "MS COMMUNITIES Lots") (collectively, the Townhouse Lots and the MS Communities Lots being referred to herein as the ("Developer Lots"). In order to enhance the value, attractiveness and desirability of the homes constructed on the Developers' Lots, the Developers are willing to contribute funds to the Association, as described in Paragraph 1, below, which shall be used by the Association to install a fountain in the lake to improve the circulation and the quality of water. Collectively, these projects are referred to below as the "Developer Projects" and are more particularly described in Exhibit "C", attached hereto.

D. The Association believes that the Developer Projects will enhance the attractiveness of Guadalupe Lake as a visual and recreational feature of the Rancho Murieta development and for that reason the Association is willing to cooperate with the Developers in the Developer Projects on the terms and conditions set forth below. Such terms and conditions are intended to benefit the Guadalupe Common Area described in Exhibit "A" and to both benefit and burden the Developer Lots so as to constitute covenants running with the lands described in those three Exhibits and to be binding on the Association, the Developers, and the heirs, successors and assigns of the Association and each of the Developers, and the heirs, successors and assigns of the Association and each of the Developers who acquire title to any portion of such lands.

1. **Developers' Contribution on Account of Developer Projects.** As more fully presented in Exhibit "C", the Developers shall upon execution of this Agreement, pay the Association the sum of $11,000.00 as their full contribution to the Developer Projects pursuant to this Agreement. Any additional expense of installing and completing the Developer Projects shall be the sole responsibility of the Association.

2. **Installation of Developer Projects.** Upon receipt of the Developers' contribution pursuant to Paragraph 1, above, the Association shall be responsible for installation of the fountain, the electrical service lines and the components required to operate the fountain. Installation of the fountain in Guadalupe Lake and the electrical service lines servicing the fountain shall be the responsibility of the Association, either through the use of its own personnel or independent contractors.

3. **Future Maintenance and Repair Responsibility.** All responsibility for the future repair, maintenance eventual replacement, and cost of operation of the improvements defined herein as the Developer Projects shall be the sole responsibility of the Association and shall be considered as an Association Common Expense as that term is defined in the Declaration, which Common Expense shall be funded in the manner described in Paragraph 4, below.

4. **Supplemental Assessment on Developer Lots.** The Developer Lots are subject to the Declaration and therefore the Owners of such Lots are liable for the payment of Assessments to the Association in accordance with Article IV of the Declaration. In addition to the assessment liability of the Owners of the Developer Lots pursuant to Article IV of the Declaration, the Developers and successor Owners of the Developer Lots agree that they shall be liable for payment to the Association of all expenses (including regular contributions to capital replacement reserves as and to the extent required by California Civil Code section 1366 or comparable superseding statute) related to the Association's obligation to maintain, repair,

operate and replace the facilities, equipment and improvements defined herein as the Developer Projects. Such costs shall include adding two feet of water twice a year to the lake. Such expenses shall constitute a supplemental assessment appurtenant to the Developer Lots and the aggregate annual amount of such expenses shall be allocated to and divided among the Developer Lots equally. This Supplemental Assessment shall be collected from the Owners of the Developer Lots at the same time as the Association's Regular Assessments and shall be subject to the provisions of Article IV of the Declaration to the same extent as any other Regular or Special Assessment of the Association with the following modifications:

The collection of this Supplemental Assessment shall commence on the first day of June 1999.

a) To the extent that a Special Assessment or an Emergency Assessment (as those terms are defined in the Declaration at Article IV, section 3 and 8, respectively) is required to fund any expense associated with the repair, maintenance or restoration of the improvements defined herein as Developer Projects, the Assessment shall be allocated among and assessed solely against the Developer Lots and the Owners of those Lots, rather than against all Lots subject to Assessment pursuant to Article IV of the Declaration; and

b) In the event that Member approval is required by Civil Code section 1366 to approve an increase in the Regular Supplemental Assessment or any Special Assessment relating solely to the repair, maintenance or replacement of improvements defined herein as Developer Projects, the required affirmative vote shall be the affirmative vote of the majority of the votes cast at a meeting or by written ballot by Association Members who are liable for payment of the Supplemental Assessment or Special Assessment under the terms of this Agreement, when the number of Members who are owners of Developers Lots attending the meeting or casting written ballots equals or exceeds a majority of all such Members.

5. **Covenants Running With the Land.** As stated in Recital "D", the above, it is the intention of the parties that the agreements set forth herein, including without limitation the future maintenance and repair obligations of the Association and the obligation of current and future owners Rosetta, Thompson, Gordon, Wong and MS Communities to pay the

Supplemental Assessments described in Paragraph 3, above, shall constitute covenants running with the lands described in Exhibit "A" "B-1" and "B-2" within the meaning of Civil Code Section 1468. As such the agreements and covenants benefit the land described in Exhibits "A" and benefit and burden the lands described in Exhibits "B-1" and"B-2" so as to be binding on the present and future owners of such lands.

6. **Effect of Unavailability of Water.** Installation of the Developer Projects improvements will necessitate the allocation by the RMCSD of additional 14.5 equivalent dwelling units (EDU's) of water to Guadalupe Lake from parks at other locations within the Common Areas of Rancho Murieta. It is the current intention of the Association to transfer those 14.5 EDU's from the allocation to the Clementia Community Park site to Guadalupe Lake. However, in the event that it becomes necessary at some future time to revert the appropriate EDU's to Clementia Community Park or their other point of origin, the Association, in its sole discretion, shall be entitled to do so, subject only to the obligation to reduce the Supplemental Assessment obligations of the Owners of Developer Lots to reflect any reduced Association expenses associated with the Developer Project improvements or their operation, including reduced expenses related to filling Guadalupe Lake.

7. **Assignment of Developer's Obligations**. If either Rosetta, Thompson, Gordon, Wong or MS COMMUNITIES make a bulk sale of any portion of the Lots they own which are described in Exhibits "B-1" and "B-2" respectively, to other developers or builders, Rosetta, Thompson, Gordon, Wong and MS Communities shall remain jointly and severally bound by this Agreement to install the Developer Projects unless the Association, in its sole discretion, consents to an assignment of either Developer's obligations hereunder.

8. **Enforcement of Agreement: Attorneys Fees.** If legal action by the Association is necessary to enforce the Developers' obligations hereunder, other than the payment of Assessments pursuant to Paragraph 5, above, the Developer or Developers who are in default agree to pay the Association reasonable attorneys fees and costs of suit. If either Developer or

its successor in interest as to any Developer Lot is in default in payment of any Supplemental, Special or Emergency Assessment described in Paragraph 5, above (as default in the payment of assessments being defined as provided in Article IV, section 10, of the Declaration), the Association shall be entitled to pursue all remedies described in Article IV, section 10, of the Declaration to the same extent as applicable to other delinquent Association Assessment obligations.

9. **Capitalized Terms.** Any terms which are capitalized in this Agreement which are not defined herein shall have the same meaning as ascribed to those terms in Article I of the Declaration.

RANCHO MURIETA ASSOCIATION, a California mutual benefit corporation

By: _____
Signature

_____
Title

_____
Print name

7/28/99
Dated

STEVE ROSETTA

By: _____
Signature

7-28-99
~~Title~~

MARIE ROSETTA

Marie Rosetta
Print name

7-28-99
Dated

DUANE G. THOMPSON

By: _____
Signature

Duane G Thompson
Title

MYRTLE D. THOMPSON

Myrtle D. Thompson
Print name

7-30-99
Dated

PETER ALAN GORDON

Signature

8/12/99

Date

LINDA JO GORDON

Signature

8/12/99

Date

EUGENE WONG

Signature

9/14/99

Date

MARGO WONG

Signature

9/14/99

Date

MS COMMUNITIES LLC, a California limited liability corporation

By: _____
Signature

By: Stephen Overhoff As General Manager of Ron McKim Construction, Inc. Its Managing Member
Title

_____
Print Name

_____
Date

Read and Approve

RANCHO MURIETA COMMUNITY SERVICES DISTRICT

By: _____
Signature

_____
Title

_____
Print name

_____
Date

EXHIBIT "C"

Developer Contribution

- 5 horsepower floating fountain including (4) 500-watt underwater lights.
- Three tier fountainhead.
- One 230-volt single phase 50 amperage service and panel.
- Twice per year, the lake will be filled with two feet of water each fill.

EXHIBIT "B-1"

Legal Descriptions of Guadalupe Lake Lots

Lot #	Legal Description	Legal Owner
1690C	Lot 1690C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC
1694C	Lot 1694C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC
1696C	Lot 1696C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC
1700C	Lot 1700C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC
1702C	Lot 1702C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC
1706C	Lot 1706C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC
1708C	Lot 1708C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC
1712C	Lot 1712C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC
1713C	Lot 1713C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC

EXHIBIT "B-1"

Legal Descriptions of Guadalupe Lake Lots

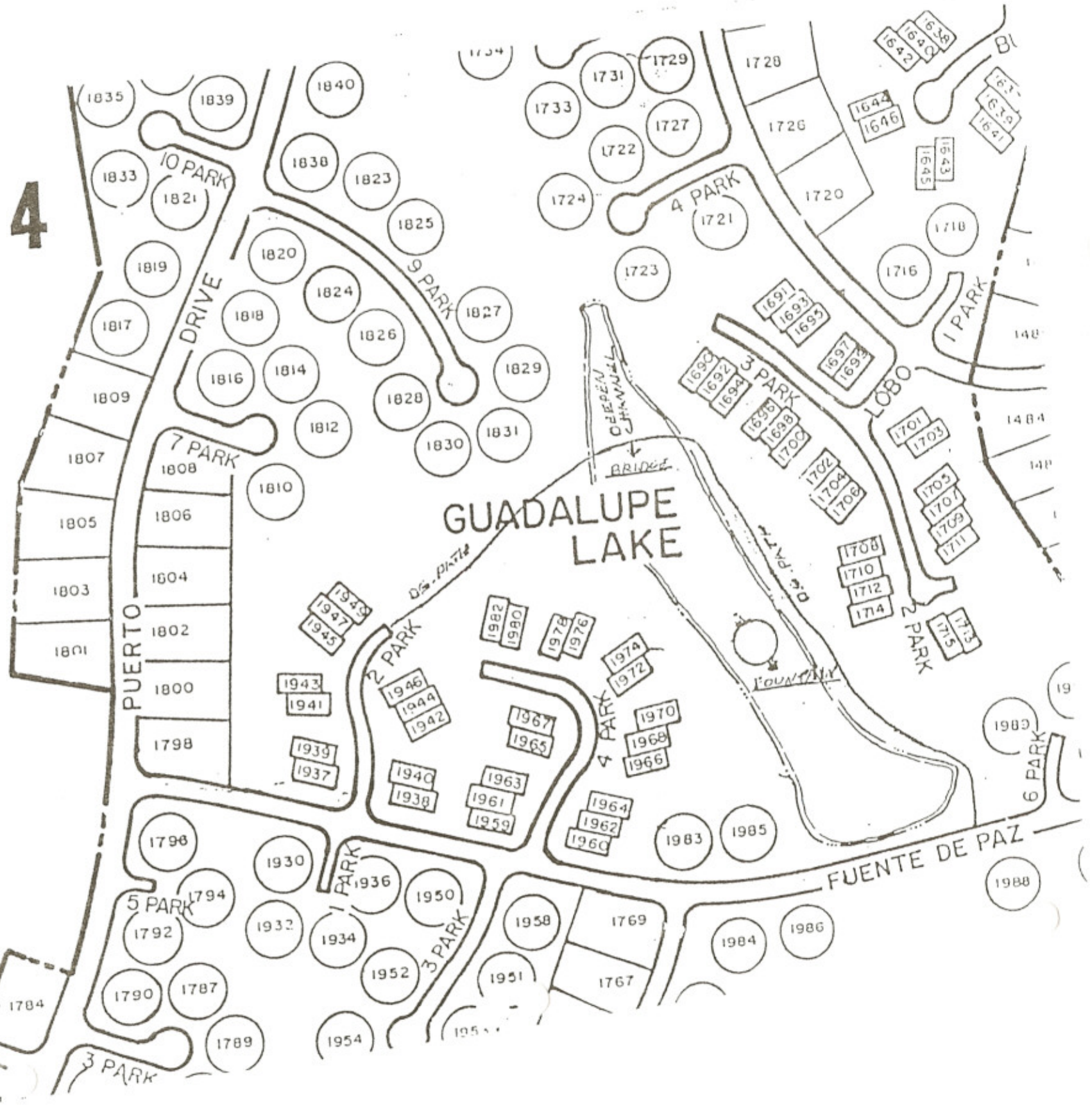
Lot #	Legal Description	Legal Owner
1980C	Lot 1980C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC
1976C	Lot 1976C as said lot is shown on the map filed in Book 57 of Surveys, Map No. 32, Records of Sacramento County, California	MS COMMUNITIES, LLC

EXHIBIT "B-2"

Legal Descriptions of Guadalupe Lake Lots

Lot #	Legal Description	Legal Owner
1968T	All that portion of Lots 1968T and 1970T and Lot "C", as said Lots are shown on that map entitled "Rancho Murieta Unit No. 4", recorded in book 142 of Maps, Map No. 9, Official Records of the County of Sacramento, State of California	Eugene Wong and Margo Wong, Husband and Wife
1970T	All that portion of Lots 1970T and Lot "C", as said Lots are shown on that map entitled "Rancho Murieta Unit No. 4", recorded in Book 142 of Maps, Map No. 9, Official Records of the County of Sacramento, State of California	Duane G. Thompson and Myrtle D. Thompson, as Trustee of the Duane G. Thompson and Myrtle D. Thompson Revocable Living Trust dated 8/4/89
1972T	All that portion of Lots 1972T as shown on the map entitled "Rancho Murieta Unit No. 4", recorded in Book 142 of Maps, Map No. 9, Official Records of the County of Sacramento, State of California	Steve J. Rosetta and Marie Rosetta, as trustees of the Rosetta Family Living Trust dated May 28, 1977
1974T	All that portion of Lots 1974T as shown on the map entitled "Rancho Murieta Unit No. 4", recorded in Book 142 of Maps, Map No. 9, Official Records of the County of Sacramento, State of California	Peter Alan Gordon and Linda Jo Gordon, Husband and Wife as Joint Tenants

UNIT 4


GUADALUPE LAKE
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CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

No. 5907

State of California

County of Sacramento

On July 30, 1999 (DATE) before me, Danise D. Mahnke, Notary Public (NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC")

personally appeared Myrtle Dorothy Thompson (NAME(S) OF SIGNER(S)),

☐ personally known to me - **OR** - ☑ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

DANISE D. MAHNKE
COMM. #1072560
NOTARY PUBLIC - CALIFORNIA
FRESNO COUNTY
My Comm. Expires Sept. 17, 1999

WITNESS my hand and official seal.

Danise D. Mahnke
SIGNATURE OF NOTARY

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

☒ INDIVIDUAL
☐ CORPORATE OFFICER

_____
TITLE(S)

☐ PARTNER(S) ☐ LIMITED ☐ GENERAL

☐ ATTORNEY-IN-FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)

_____

DESCRIPTION OF ATTACHED DOCUMENT

assessment & maintenance agreement - Guadalupe Lake
TITLE OR TYPE OF DOCUMENT

twelve
NUMBER OF PAGES

July 28 1999
DATE OF DOCUMENT

Rancho Murieta Assn, Rosetta, Thompson, Gordon, Young, MS Communities, Rancho Murieta C&D.
SIGNER(S) OTHER THAN NAMED ABOVE

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

No. 5907

State of California

County of Sacramento

On July 28, 1999 (DATE) before me, Danise D. Mahnke, Notary Public (NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC")

personally appeared Charles J Christian (NAME(S) OF SIGNER(S)),

☒ personally known to me - OR - ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

DANISE D. MAHNKE
COMM. #1072560
NOTARY PUBLIC - CALIFORNIA
FRESNO COUNTY
My Comm. Expires Sept. 17, 1999

WITNESS my hand and official seal.

Danise D Mahnke
SIGNATURE OF NOTARY

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

☐ INDIVIDUAL
☒ CORPORATE OFFICER
President
TITLE(S)
☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
☐ ATTORNEY-IN-FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)
Rancho Murieta Ass'n.

DESCRIPTION OF ATTACHED DOCUMENT

assessment and maintenance agreement - Guadalupe Lake
TITLE OR TYPE OF DOCUMENT

twelve
NUMBER OF PAGES

July 28, 1999
DATE OF DOCUMENT

Rosetta, Thompson, Gordon, Wong, MS Communities and Rancho Murieta CSD
SIGNER(S) OTHER THAN NAMED ABOVE

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

No. 5907

State of California

County of Sacramento

On July 28, 1999 (DATE) before me, Danise D. Mahnke, Notary Public (NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC")

personally appeared Duane G. Thompson (NAME(S) OF SIGNER(S)),

☐ personally known to me - **OR** - ☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

DANISE D. MAHNKE
COMM. #1072560
NOTARY PUBLIC - CALIFORNIA
FRESNO COUNTY
My Comm. Expires Sept. 17, 1999

WITNESS my hand and official seal.

Danise D. Mahnke
SIGNATURE OF NOTARY

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

☒ INDIVIDUAL
☐ CORPORATE OFFICER

_____
TITLE(S)

☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
☐ ATTORNEY-IN-FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)
Self

DESCRIPTION OF ATTACHED DOCUMENT

assessment & maintenance agreement - Guadalupe Lake
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twelve
NUMBER OF PAGES

July 28, 1999
DATE OF DOCUMENT

Rancho Murieta Association, Rosetta, Wang, Thompson, MS Communities, Rancho Murieta C.S.D.
SIGNER(S) OTHER THAN NAMED ABOVE

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

No. 5907

State of California

County of Sacramento

On July 28, 1999 (DATE) before me, Danise D. Mahnke, Notary Public (NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC")

personally appeared Steve Rosetta and Marie Rosetta (NAME(S) OF SIGNER(S)),

☒ personally known to me - OR - ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

DANISE D. MAHNKE
COMM. #1072560
NOTARY PUBLIC - CALIFORNIA
FRESNO COUNTY
My Comm. Expires Sept. 17, 1999

WITNESS my hand and official seal.

Danise D. Mahnke
SIGNATURE OF NOTARY

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

☒ INDIVIDUALS
☐ CORPORATE OFFICER

_____
TITLE(S)

☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
☐ ATTORNEY-IN-FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)
self

DESCRIPTION OF ATTACHED DOCUMENT

assessment and maintenance agreement - Guadalupe Lake
TITLE OR TYPE OF DOCUMENT

twelve
NUMBER OF PAGES

July 28, 1999
DATE OF DOCUMENT

Rancho Murieta Association, Thompson, Gordon, Wong, MS Communities, & Rancho Murieta CSD.
SIGNER(S) OTHER THAN NAMED ABOVE

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Placer } ss.

On 08/12/99 (Date), before me, Veronica C. Alvarez, notary public (Name and Title of Officer (e.g., "Jane Doe, Notary Public"))
personally appeared Peter Gordon and Linda Jo Gordon (Name(s) of Signer(s))

☐ ~~personally known to me~~
☒ proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Veronica C. Alvarez
Signature of Notary Public

VERONICA C. ALVAREZ
Commission # 1170785
Notary Public - California
Placer County
My Comm. Expires Jan 24, 2002

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document
Title or Type of Document: Assessment + Maintenance Agt Guadalupe Lake
Document Date: 07/28/99 Number of Pages: 12
Signer(s) Other Than Named Above: Rancho Murieta Assn, Rosetta Thompson Wong, MS Communities, Rancho Murieta CSD.

Capacity(ies) Claimed by Signer
Signer's Name: Peter Gordon and Linda Jo Gordon
☑ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Placer } ss.

On 8/20/99 (Date), before me, Marcie Katsules Notary Pubic (Name and Title of Officer (e.g., "Jane Doe, Notary Public")),
personally appeared Stephen Overhoff (Name(s) of Signer(s)),

☒ personally known to me
~~☐ proved to me on the basis of satisfactory evidence~~

to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(ies), and that by his/~~her/their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

MARCIE KATSULES
Commission # 1199945
Notary Public - California
Placer County
My Comm. Expires Oct 29, 2002

Place Notary Seal Above

WITNESS my hand and official seal.

Marcie Katsules
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer

Signer's Name: _____

☐ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

No. 5907

State of California

County of Sacramento

On Sept. 14, 1999 (DATE) before me, Danise D. Mahnke, Notary Public (NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC")

personally appeared Eugene Wong & Margo Wong (NAME(S) OF SIGNER(S)),

☐ personally known to me - **OR** - ☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) ~~is~~/are subscribed to the within instrument and acknowledged to me that ~~he/she~~/they executed the same in ~~his/her~~/their authorized capacity(ies), and that by ~~his/her~~/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

DANISE D. MAHNKE
COMM. #1072560
NOTARY PUBLIC - CALIFORNIA
FRESNO COUNTY
My Comm. Expires Sept. 17, 1999

WITNESS my hand and official seal.

Danise D. Mahnke
SIGNATURE OF NOTARY

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

☒ INDIVIDUAL S
☐ CORPORATE OFFICER

_____
TITLE(S)

☐ PARTNER(S) ☐ LIMITED ☐ GENERAL

☐ ATTORNEY-IN-FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

DESCRIPTION OF ATTACHED DOCUMENT

assessment & maintenance agreement - Guadalupe Lake.
TITLE OR TYPE OF DOCUMENT

twelve
NUMBER OF PAGES

July 28 1999
DATE OF DOCUMENT

Rancho Marietta Assoc.
Rosetta, Thompson, MS
Communities, RDA CSD
SIGNER(S) OTHER THAN NAMED ABOVE

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)
self

Statement of Mutual Understanding

The RMA Board of Directors understand that RMA Maintenance personnel met with CSD Maintenance personnel and residents that live near Drainage Basin 5 ("Basin 5") for the purpose of investigating possible solutions that would mitigate the problems of the unsightly appearance of Basin 5 and emission of unpleasant odors from Basin 5.

RMA and CSD Maintenance Department personnel and the subject residents agreed on the following solution with their respective Board approvals:

CSD will purchase and install all of the required equipment.

RMA will allow CSD to connect the equipment to an RMA power source.

After the equipment is installed the RMA maintenance department will assume maintenance responsibility for the fountain (only).

RMA will pay for 50% of the power requirements each month for the fountain operation.

All parties enter into this freely, so there is no reason to bring in legal resources to prepare hold harmless or release of liability documents and add to our expenses.

We agree to the above principles so as to continue our mutual respect and goodwill for one another and their organizations.

Roberta J. Belton

Roberta Belton, Board President
Rancho Murieta CSD

Jim Moore, Board President
Rancho Murieta Association

3- Minute Executive Summary

Name: RMCSD - Drainage **Assoc. #: 27003-0 DRAINAGE**

Location: Rancho Murieta, CA
# of Units: 1
Report Period: July 1, 2015 through June 30, 2016

Results as-of 7/1/2015:

Projected Starting Reserve Balance:	**$96,766**
Fully Funded Reserve Balance:	**$1,275,143**
Average Reserve Deficit (Surplus) Per Unit:	**$1,178,377**
Percent Funded:	**7.6%**
Recommended 2015/16 monthly Reserve Contribution:	**$14,500**
Recommended 2015/16 Special Assessment for Reserves:	**$350,000**
Most Recent Reserve Contribution Rate:	**$4,551**

Economic Assumptions:

Net Annual "After Tax" Interest Earnings Accruing to Reserves	**1.00%**
Annual Inflation Rate	**3.00%**

- **This is a "Full" Reserve Study (original, created "from scratch").**
- **The information in this Reserve Study is based on our site inspection on August 4, 2014.**
- **This Reserve Study was prepared by, or under the supervision of, a credentialed Reserve Specialist (RS).**
- **Because your Reserve Fund is at 7.6% Funded, this means the CSD's special assessment & deferred maintenance risk is currently high.**
- **Your multi-year Funding Plan is designed to gradually bring you to the 100% level, or "Fully Funded".**
- **Based on this starting point, your anticipated future expenses, and your historical Reserve contribution rate, our recommendation is to increase your Reserve contributions.**
- **We are also recommending a one-time special assessment in 2015/16 to help strengthen the Reserve fund.**
- **No assets appropriate for Reserve designation were excluded.**

Table 1: Executive Summary					27003-0 DRAINAGE
#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost	Future Average Cost
312	Storm water Outfall Struct. Repair	30	7	$815,750	$1,003,270
501	Levees - Repair	100	62	$400,000	$2,500,161
1001	Backflow Devices - Replace 50%	5	1	$98,650	$101,610
1005	Drain Valve - Replace	20	12	$55,000	$78,417
1005	Equipment - Replace	10	5	$15,150	$17,563
1007	Fire hydrants - Replace (Partial)	25	5	$165,550	$191,918
1009	Drainage Culverts - Repair	5	1	$93,500	$96,305
1011	Main Lift South - Repair/Replace	20	10	$125,000	$167,990
1012	Crest Lift Station - Repair	20	10	$45,000	$60,476
1013	Greens Lift Station - Repair	20	10	$45,000	$60,476
1014	FAA Lift Station - Repair	20	10	$45,000	$60,476
2113	CIA Ditch - Maintain	10	6	$130,000	$155,227
12	Total Funded Components				

Note 1: Yellow highlighted line items are expected to require attention in initial year.
Note 2: a Useful Life of “N/A” means a one-time expense, not expected to repeat.


Private Pond in
front of business
on Iron Pt Rd

MEMORANDUM

Date: ~~September 16, 2016~~ September 19, 2016

To: Board of Directors

From: Darlene J Thiel, General Manager and
Paul Siebensohn, Director of Field Operations

Subject: Project updates

PARKS COMMITTEE
No word yet on the scheduling of the next Park Committee meeting.

PENDING AND PROPOSED LAND DEVELOPMENT PROJECTS
Renewed activity is occurring on the Riverview and Murieta Hills - Residences East developments. The developers of these two projects are seeking an extension of their tentative maps. ~~and~~The Lakeview request for tentative map extension will be on the CCPAC agenda for September 28, 2016.

ESCUELA GATE
Weber General Engineering has been awarded the contract for the Stonehouse at Escuela Drive Improvement Project by the County of Sacramento. The project consists of roadway grading, drainage improvements, new asphalt pavement sections, striping, and signage. The contract duration of work is 30 working days, which began September 12, 2016 with an expected completion date of October 24, 2016.

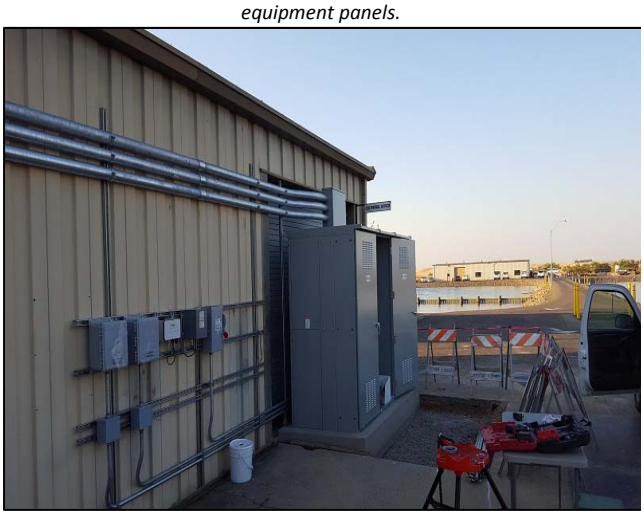
Stonehouse Road is closed to through traffic from September 15, 2016 through the completion date. Access will be made for emergency vehicles. Detour signage is out.

MIDGE FLY AD HOC COMMITTEE
Update to be provided by Director Ferraro.

SOLAR POWER INSTALLATIONS
Wastewater Treatment Plant Site
The subcontractor for Solar City has pulled the power cables from the inverters at the solar field to the switchgear panels at the Wastewater Plant Control building. SMUD's remote monitoring equipment was delivered and installed as well.

The next step is to install the electrical conduits for the power runs between the switchgear panels and transformers and then pour concrete pads for the panels and to pull and terminate wiring. SMUD has not provided a date for the delivery of the new transformer or running of the new power feed yet. At this point, it is anticipated that the project may be online by the end of October of this year.

Photo of new switchgear and breaker panel and SMUD monitoring equipment panels.



Water Treatment Plant Site

Solar City is reporting that they anticipate receiving a permit from Sacramento County to allow them to proceed at the Water Treatment Plant Site beginning next week. The apparent hold up on getting approval is the review from the Fire Department which is being done by a third party reviewer.

CONFERENCE/EDUCATION SCHEDULE

Date: September 13, 2016

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)

Annual Conference	October 10-13, 2016	San Diego

GOLDEN STATE RISK MANAGEMENT ASSOCIATION (GSRMA)

GSRMA's 12th Annual Training	October 20-21, 2016	Corning, CA

ASSOCIATION OF CALIFORNIA WATER AGENCIES (ACWA)

ACWA 2016 Regulatory Summit	October 3-4, 2016	Sacramento