BOARD OF DIRECTORS
SAN LORENZO VALLEY WATER DISTRICT
AGENDA
July 21, 2016

MISSION STATEMENT: Our Mission is to provide our customers and future generations with reliable, safe and high quality water at an equitable price; to create and maintain outstanding service and community relations; to manage and protect the environmental health of the aquifers and watersheds; and to ensure the fiscal vitality of the San Lorenzo Valley Water District.

Notice is hereby given that a regular meeting of the Board of Directors of the San Lorenzo Valley Water District will be held on **Thursday, July 21, 2016 at 6:00 p.m.,** at the Operations Building, 13057 Highway 9, Boulder Creek, California.

In compliance with the requirements of Title II of the American Disabilities Act of 1990, the San Lorenzo Valley Water District requests that any person in need of any type of special equipment, assistance or accommodation(s) in order to communicate at the District's Public Meeting can contact the District Secretary's Office at (831) 430-4636 a minimum of 72 hours prior to the scheduled meeting.

Agenda documents, including materials related to an item on this agenda submitted to the Board of Directors after distribution of the agenda packet, are available for public inspection and may be reviewed at the office of the District Secretary, 13060 Highway 9, Boulder Creek, CA 95006 during normal business hours. Such documents are also available on the District website at www.slvwd.com subject to staff's ability to post the documents before the meeting.

1. Convene Meeting/Roll Call

2. Additions and Deletions to Agenda:
   Additions to the Agenda, if any, may only be made in accordance with California Government Code Section 54954.2 (Ralph M. Brown Act) which includes, but is not limited to, additions for which the need to take action is declared to have arisen after the agenda was posted, as determined by a two-thirds vote of the Board of Directors (or if less than two-thirds of the members are present, a unanimous vote of those members present).

3. Oral Communications:
   This portion of the agenda is reserved for Oral Communications by the public for items which are on the Closed Session portion of the Agenda. Any person may address the Board of Directors at this time, on Closed Session items. Normally, presentations must not exceed three (3) minutes in length, and individuals may only speak once during Oral Communications. No actions may be taken by the Board of Directors on any Oral Communications presented; however, the Board of Directors may request that the matter be placed on a future agenda. Please state your name and town/city of residence at the beginning of your statement for the record.

4. Adjournment to Closed Session:
   At any time during the regular session, the Board may adjourn to Closed Session in compliance with, and as authorized by, California Government Code Section 54956.9 and Brown Act, Government Code Section 54950. Members of the public will be given the opportunity to address any scheduled item prior to adjourning to closed session.

   a. CONFERENCE WITH LEGAL COUNSEL-EXISTING LITIGATION
      Government Code Section 54956.9(d)(1)
      Case Number CV180394-Bruce Holloway, Plaintiff, v. Terry Vierra; San Lorenzo Valley Water District; Showcase Realty Agents, Inc.; Gregory Dildine; Edwige Dildine; and Does 1 to 25, Defendants.

5. Convene to Open Session at 7:00 p.m. (time certain)

6. Report of Actions Taken

7. Additions and Deletions to Agenda:
   Additions to the Agenda, if any, may only be made in accordance with California Government Code Section 54954.2 (Ralph M. Brown Act) which includes, but is not limited to, additions for which the need to take action is declared to have arisen after the agenda was posted, as determined by a two-thirds vote of the Board of Directors (or if less than two-thirds of the members are present, a unanimous vote of those members present).

8. Oral Communications:
   This portion of the agenda is reserved for Oral Communications by the public for items which are not on the Agenda. Please understand that California law (The Brown Act) limits what the Board can do regarding issues raised during Oral Communication. No action or discussion may occur on issues outside of those already listed on today's agenda. Any person may address the Board of Directors at this time, on any subject that lies within the jurisdiction of the District. Normally, presentations must not exceed three (3) minutes in length, and individuals may only speak once during Oral Communications. Any Director may request that the matter be placed on a future agenda or staff may be directed to provide a brief response.

9. Written Communications:

   a. LETTER OF CONGRATULATIONS – Mark Stone, Assemblymember

   b. EMAIL FROM LOMPICO CUSTOMER - David

10. Consent Agenda:
    The Consent Agenda contains items which are considered to be routine in nature and will be adopted by one (1) motion without discussion. Any Board member may request that an item be withdrawn from the Consent Agenda for separate discussion.

    a. MINUTES OF THE BOARD OF DIRECTORS MEETING FROM JUNE 16, 2016
       Consideration and possible action by the Board to approve minutes for the June 16, 2016 Board of Directors meeting.

b. BILL LIST FOR PERIOD ENDNG JULY 21, 2016
Consideration and possible action by the Board regarding the Bill List for the period ending July 21, 2016.

c. MULTIPLE USER VARIANCE RENEWAL FOR 2016/17.
Consideration and possible action by the Board regarding the Multiple User Variance Renewal for 2016/17.

d. FINANCIAL SUMMARY FOR PERIOD ENDING 5/31/16.
Consideration and possible action by the Board regarding the Financial Summary for period ending 5/31/16.

e. QUARTERLY LEAK ADJUSTMENTS-June 30, 2016
Consideration and possible action by the Board regarding the Quarterly Leak Adjustments-June 30, 2016.

f. ACCEPTANCE OF WATER DISTRIBUTION IMPROVEMENTS APN 082-343-16
Consideration and possible action by the Board regarding the acceptance of water distribution improvements APN 082-343-16.

g. OFFICIAL NOTICE OF PREPARATION AND INTENT TO ADOPT THE 2015 URBAN WATER MANAGEMENT PLAN
Consideration and possible action by the Board regarding the official notice of preparation and intent to adopt the 2015 UWMP.

h. SWIM TANK REPLACEMENT PROJECT - PUBLIC COMMENT PERIOD NOTICE
Consideration and possible action by the Board regarding the Swim Tank public comment period.

i. CLASSIC WATERSHED EDUCATION GRANT – FINAL REPORTS
Consideration and possible action by the Board regarding the Classic Watershed Education Grant – Final Reports

j. REQUEST FOR COUNTY ELECTIONS TO CONDUCT THE NOVEMBER 8, 2016 ELECTION
Consideration and possible action by the Board regarding November 8, 2016 Elections.

k. BANK OF THE WEST CREDIT CARDS
Consideration and possible action by the Board regarding Bank of the West credit cards.

11. Unfinished Business:

Members of the public will be given the opportunity to address each scheduled item prior to Board action. The Chairperson of the Board may establish a time limit for members of the public to address the Board on agendum.

a. OLYMPIA INVASIVE SPECIES MANAGEMENT PLAN
Discussion and possible action by the Board regarding the Olympia Broom Management Plan.

12. New Business:
Members of the public will be given the opportunity to address each scheduled item prior to Board action. The Chairperson of the Board may establish a time limit for members of the public to address the Board on agendum.

a. LOMPICO OVERSIGHT COMMITTEE
Discussion and possible action by the Board regarding the Lompico Oversight Committee.

b. OLYMPIA PATROLLING REPORT
Discussion and possible action by the Board regarding the Olympia Patrolling Report.

c. AUTHORIZATION TO PURCHASE EQUIPMENT FOR BEAR CREEK ESTATES WASTEWATER TREATMENT
Consideration and possible action by the Board regarding authorization to purchase equipment of Bear Creek Estates wastewater treatment.

d. CONTRACT WITH MWH ENGINEERING SERVICES
Discussion and possible action by the Board regarding as-needed contract with MWH Engineering Services.

13. District Manager Reports:
Information reports by the District Manager, Staff, Committee and Board of Directors.

a. MANAGER

(1) Department Status Reports
Receipt and consideration by the Board of Department Status Reports regarding ongoing projects and other activities.

(i) Q & A from prior Board Meetings
(ii) Administration/Engineering
(iii) Environmental
(iv) Finance
(v) Operations

b. COMMITTEE/DIRECTOR REPORTS:

(1) Future Committee Agenda Items

(2) Committee Meeting Notes

14. Informational Material:

a. SHOULD STATE LIMIT SMALL WATER AGENCIES– Santa Cruz Sentinel – June 19, 2016

b. Press Banner Articles – June 17, 2016

15. Adjournment

Certification of Posting

I hereby certify that on July 14, 2016 I posted a copy of the foregoing agenda in the outside display case at the District Office, 13060 Highway 9, Boulder Creek, California, said time being at least 72 hours in advance of the meeting of the Board of Directors of the San Lorenzo Valley Water District (Government Code Section 54954.2).

Executed at Boulder Creek, California on July 14, 2016

_____
Holly B. Morrison, Dist. Secretary
San Lorenzo Valley Water Dist.

COMMITTEES
BANKING AND FINANCE
HUMAN SERVICES
NATURAL RESOURCES

SELECT COMMITTEES
CHAIR: COASTAL PROTECTION
CHAIR: EXPANDING ACCESS TO CALIFORNIA'S NATURAL RESOURCES

Assembly
California Legislature

Agenda: 7.21.16
Item: 9a

MARK STONE
CHAIR, JUDICIARY
ASSEMBLYMEMBER, TWENTY-NINTH DISTRICT

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0029
(916) 319-2029
FAX (916) 319-2129

DISTRICT OFFICES
701 OCEAN STREET, SUITE 318B
SANTA CRUZ, CA 95060
(831) 425-1503
FAX (831) 425-2570

99 PACIFIC STREET, SUITE 575G
MONTEREY, CA 93940
(831) 649-2832
FAX (831) 649-2935

June 8, 2016

6/13/16

Brian Lee, District Manager
San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, CA 95006

Dear Mr. Lee and Board Members:

Congratulations on receiving the District Transparency Certificate of Excellence from the Special District Leadership Foundation. I applaud your commitment to being open and accessible to customers, constituents and local stakeholders. It is a huge achievement when a Special District can demonstrate such a high level of accountability by completing all the elements necessary to receive this honor.

On behalf of our mutual constituents, thank you for the community engagement projects and transparency reviews you have conducted. Your agency truly serves as a model of best practices for other special districts in California.

Again, congratulations on this well-deserved honor.

Sincerely,

Mark Stone
Assemblymember
Twenty-Ninth District

Holly Morrison

From: Holly Morrison
Sent: Tuesday, July 05, 2016 3:52 PM
To: Holly Morrison
Subject: Thank you!!!!!!

Sent: Wednesday, June 29, 2016 10:44 PM
To: Customer Service <CustomerService@slvwd.com>
Subject: Thank you!!!!!!

Good Morning/Evening,

I am one of your new accounts from Lompico. Just wanted to say thank you and that I am so happy to be rid of Lompico water district.

In addition as I'm sure you are getting quite a few angry emails from my fellow Lompico-ites, who don't know a good thing when it hits them, apologies on their behalf.

Your website is so nice compared to having to send letters and lick envelopes.

Anyway, have a happy fourth of July, Thanks again!

David

SAN LORENZO VALLEY WATER DISTRICT
BOARD MEETING MINUTES
June 16, 2016
6:00 p.m.

CONVENE MEETING/ROLL CALL:

President Brown convened the meeting at 6:00 p.m.

Dirs. Hammer, Baughman, Ratcliffe and Bruce were present. District Manager Lee, Director of Operations Rogers and Legal Counsel Hynes were also present.

ORAL COMMUNICATION: None

ADJOURNMENT TO CLOSED SESSION:

President Brown adjourned to closed session at 6:02 p.m.

RECONVENE TO OPEN SESSION:

Pres. Brown reconvened the meeting to open session at 7:00 p.m.

Roll call showed Dirs. Bruce, Ratcliffe, Hammer and Baughman and were present. District Manager Lee, Director of Operations Rogers and Legal Counsel Hynes were also present.

REPORT ACTIONS TAKEN IN CLOSED SESSION:

President Brown said that the Board had no actions to report.

ADDITIONS AND DELETIONS TO AGENDA:

None.

ORAL COMMUNICATIONS:

Lois Henry, Lompico, addressed the Board to say that she had attended a Budget and Finance Committee meeting and she said that Dir. Baughman told her that she wasn't on the agenda and the time for negotiation is past. She said that she believes that the Lompico surcharge should be reduced.

District Counsel Hynes noted that discussion of this matter will require that it be agendized for a future meeting.

WRITTEN COMMUNICATION:

DM Lee noted the letter from a customer commending Ben Beasley. He also noted a letter from the BC Fire Chief to thank the District Secretary for her assistance. Finally he noted the compilation of congratulations from the public for the Transparency Certificate of Excellence.

CONSENT AGENDA:

Best practices suggest that item 10b Minutes of the 6/2/16 Meeting be pulled from the Consent Agenda because a Board member was absent.

Dir. Hammer commented that the minutes clearly state that Dir. Baughman made a recommendation to agendize the Lompico discussion at the next Budget & Finance Committee meeting. He thinks that if the Board is not going to follow through, it should be explained to the public.

Dir. Bruce made a motion to approve items 10a, 10c and 10d of the Consent Agenda.

10a MINUTES FROM MAY 19, 2016 BoD

10c BILL LIST FOR PERIOD ENDNG JUNE 16, 2016

10d FINANCIAL SUMMARY FOR PERIOD ENDING APRIL 30, 2016

ROLL CALL:
Ayes: Hammer, Brown, Baughman, Ratcliffe, Bruce
Noes:
Abstain:
Absent:

10b MINUTES FROM JUNE 2, 2016 BoD

Dir. Ratcliffe made a motion to approve item 10b of the Consent Agenda.

ROLL CALL:
Ayes: Bruce, Brown, Baughman, Ratcliffe
Noes:
Abstain: Hammer
Absent:

UNFINISHED BUSINESS:

11a 2016 STRATEGIC PLAN

DM Lee noted that the last time this item was before the Board he requested that the Board concentrate on format, not content. He would like the Board to look at page 92, he proposed a change in the wording to read, 'due to age and deferred maintenance'. Other changes on page 113, a Groundwater Sustainability element is to be added. On page 108 add 5.6 Fiscal Transparency. DM Lee requested that the Board schedule an October

review of the Strategic Plan and then every three months it come back to the Board for review.

Dir. Bruce requested that "Agendas in Development" be put on the website.

Pres. Brown thinks it would be a positive step for transparency.

DM Lee suggested that the Board make comments or questions one on one to the Dist. Manager and if necessary the information will be brought to the Board on future agendas.

NEW BUSINESS:

12a CSDA 2016 BOARD ELECTIONS

The Board agreed that no action would be taken.

12b BOARD OF DIRECTORS MEETING JULY 7, 2016

President Brown said that he thought that cancelling the July 7th meeting is a good idea. A special meeting can be called if necessary.

Dir. Hammer made a motion to cancel to the July 7, 2016 BoD meeting.

ROLL CALL:
Ayes: Bruce, Brown, Baughman, Ratcliffe, Hammer
Noes:
Abstain:
Absent:

12c SOLAR LOAN

DM Lee described this item. Staff recommends that the District purchase the solar equipment with a 120 month loan.

Dir. Hammer made a motion to purchase the solar equipment with a 120 month loan and to look for a loan without a pre-payment penalty.

ROLL CALL:
Ayes: Bruce, Brown, Baughman, Ratcliffe, Hammer
Noes:
Abstain:
Absent:

12d AUDIT SERVICES – LOMPICO

DM Lee described this item. Staff recommends that the Board approve the audit proposal from Fedak & Brown for Lompico.

Dir. of Operations, Rogers, noted that this is an unexpected expense of the merger.

Dir. Hammer made a motion to accept the proposal for the Lompico audit services.

ROLL CALL:

Ayes: Hammer, Brown, Baughman, Ratcliffe, Bruce
Noes:
Abstain:
Absent:

DISTRICT MANAGER REPORTS:

DM Lee said that Finance Status Report speaks for itself.

Dir. of Ops, Rogers, shared the highlights from the Operations Status Report. He noted that no trucks have been purchased.

Dir. Ratcliffe shared information from the Temp & Flow meeting and the Santa Cruz Mountain Stewardship meeting.

Dir. Baughman shared information from the Semper Virens meeting.

Pres. Brown noted that he and Dir. Baughman attended a meeting on the San Lorenzo River.

Dir. Bruce attended a meeting regarding the structure of the JPA and shared information from the meeting.

INFORMATIONAL MATERIAL:

Pres. Brown noted the article by Betsy Herbert regarding Rob Menzies was well written.

ADJOURNMENT:

President Brown adjourned the meeting at 8:09 p.m.

Accounts Payable

Outstanding Invoices

User: KendraNegro
Printed: 7/7/2016 - 11:54 AM
Date Type: JE Date
Date Range: 06/09/2016 to 07/07/2016

BILL LIST SUMMARY
Check Register Total : $301,293.82 AP
Outstanding Total: $243,959.99 Payroll
6/22: $92,457.93
Payroll 7/06: $208,929.39
Wire to SVWD 6/30: $1,005,000
TOTAL FOR APPROVAL: $1,851,641.13

San Lorenzo Valley WATER DISTRICT
13060 Highway 9
Boulder Creek, CA 95006-9119
(831) 338-2153 phone
(831) 338-7986 fax

Vendor

Account Number	JE Date	Invoice Date	Invoice No	Journal Entry	Amount	Description
00047 - SOIL CONTROL LAB						
01-800-5202	6/30/2016	6/8/2016	6060185	00173-12-2016	145.00	WATER ANALYSIS - GEN PHYSICAL
01-800-5202	6/30/2016	6/17/2016	6060186	00173-12-2016	39.00	WATER ANALYSIS - TOTAL PHOSPHATE
01-800-5202	6/30/2016	6/10/2016	6060187	00173-12-2016	40.00	WATER ANALYSIS - HARDNESS
01-800-5202	6/30/2016	6/10/2016	6060188	00173-12-2016	430.00	WATER ANALYSIS - ALKALINITY, GEN PHYSICAL, HARDNESS
01-800-5202	6/30/2016	6/16/2016	6060396	00173-12-2016	145.00	WATER ANALYSIS - GEN PHYSICAL
01-800-5202	6/30/2016	6/17/2016	6060397	00173-12-2016	39.00	WATER ANALYSIS -TOTAL PHOSPHATE
01-800-5202	6/30/2016	6/24/2016	6060475	00173-12-2016	510.00	WATER ANALYSIS - SEMI-ANNUAL GROUNDWATER
01-800-5202	6/30/2016	6/24/2016	6060751	00173-12-2016	145.00	WATER ANALYSIS - GEN PHYSICAL
01-800-5202	6/30/2016	6/24/2016	6060752	00173-12-2016	37.00	WATER ANALYSIS - METALS DIGESTION, MAGANESE
01-800-5202	6/30/2016	6/24/2016	6060753	00173-12-2016	117.00	WATER ANALYSIS - TOTAL PHOSPHATE
01-800-5202	6/30/2016	6/24/2016	6060754	00173-12-2016	39.00	WATER ANALYSIS - TOTAL PHOSPHATE
01-800-5202	6/30/2016	6/24/2016	6060755	00173-12-2016	87.00	WATER ANALYSIS - GEN PHYSICAL
Total for Vendor 00047 - SOIL CONTROL LAB:					1,773.00	
00057 - AFSCME COUNCIL 57						
01-000-2205	6/30/2016	6/30/2016	JUL 16	00172-12-2016	855.20	UNION DUES_JULY 2016
Total for Vendor 00057 - AFSCME COUNCIL 57:					855.20	
00099 - JOEL BUSA						
01-100-5147	6/30/2016	6/30/2016	JUL 16	00172-12-2016	125.00	CALPERS MEDICAL
Total for Vendor 00099 - JOEL BUSA:					125.00	
00115 - ATKINSON-FARASYN						
01-100-5210	6/30/2016	6/30/2016	JUL 16	00172-12-2016	3,500.00	LEGAL SERVICES
Total for Vendor 00115 - ATKINSON-FARASYN:					3,500.00	
00124 - BRUCE BARTON PUMP						

Vendor / Account Number	JE Date	Invoice Date	Invoice No	Journal Entry	Amount	Description
00124 - BRUCE BARTON PUMP						
01-000-1565	6/30/2016	6/20/2016	88959	00173-12-2016	8,109.22	BOOSTER PUMP
Task Label: CAP-1516009A		Type: E		PO Number: 0000100579		
Total for Vendor 00124 - BRUCE BARTON PUMP:					8,109.22	
00147 - EMERSON PROCESS MANAGEMENT						
01-000-1565	6/30/2016	6/15/2016	9060377	00173-12-2016	88,681.24	LYON PLANT HARDWARE UPG - PCP1, PCP2 HARDWARE UPGRADE QUOTI
Task Label: CAP-1516006A		Type: E		PO Number: 0000100328		
01-400-5300	6/30/2016	6/17/2016	9060427	00173-12-2016	4,217.10	PRESSURE TRANSMITTERS
Task Label: CAP-1516009A		Type: E		PO Number: 0000100566		
Total for Vendor 00147 - EMERSON PROCESS MANAGEMENT:					92,898.34	
00148 - SOQUEL CREEK WATER DIST						
01-500-5620	6/30/2016	6/13/2016	1495911	00173-12-2016	800.00	SHARED PSA ADS
Total for Vendor 00148 - SOQUEL CREEK WATER DIST:					800.00	
00164 - FIRST ALARM						
01-800-5200	6/30/2016	6/15/2016	930328	00172-12-2016	279.24	ALARM SERVICE - 232 KINGS VILLAGE
01-400-5200	6/30/2016	6/15/2016	930522	00172-12-2016	90.06	ALARM SERVICE - OPS
01-800-5200	6/30/2016	6/15/2016	930620	00172-12-2016	115.38	ALARM SERVICE - MADRONE DR
01-400-5200	6/30/2016	6/15/2016	930714	00172-12-2016	511.59	ALARM SERVICE - QUAIL HOLLOW
02-600-5200	6/30/2016	6/15/2016	932327	00172-12-2016	333.57	ALARM SERVICE - BCEWW
01-800-5200	6/30/2016	6/15/2016	932329	00172-12-2016	162.30	ALARM SERVICE - 600 SAN LORENZO
01-800-5200	6/30/2016	6/15/2016	932330	00172-12-2016	159.00	ALARM SERVICE - 195 KIRBY ST
Total for Vendor 00164 - FIRST ALARM:					1,651.14	
00220 - BAY BUILDING JANITORIAL,INC						
01-100-5420	6/30/2016	6/16/2016	28588	00173-12-2016	424.42	JANITORIAL SERVICE FOR JUNE
Total for Vendor 00220 - BAY BUILDING JANITORIAL,INC:					424.42	
00266 - TERMINIX						
01-100-5420	6/30/2016	6/20/2016	1617	00172-12-2016	279.00	PEST CONTROL - 8/1/16 - 8/31/17
Total for Vendor 00266 - TERMINIX:					279.00	
00329 - GRAINGER						
01-400-5300	6/30/2016	6/10/2016	9136708188	00173-12-2016	113.47	BLUE MARKING FLAGS
Task Label:		Type:		PO Number: 0000100629		

Vendor / Account Number	JE Date	Invoice Date	Invoice No	Journal Entry	Amount	Description
Total for Vendor 00329 - GRAINGER:					113.47	
00450 - EUROFINS EATON ANALYTICAL, INC						
01-800-5202	6/30/2016	6/8/2016	267753	00173-12-2016	80.00	6/2 PASO ARSENIC TOTALS
01-800-5202	6/30/2016	6/23/2016	269873	00173-12-2016	60.00	6/8 PASO ARSENIC TOTALS
01-800-5202	6/30/2016	6/23/2016	269874	00173-12-2016	60.00	6/16 PASO ARSENIC TOTALS
01-800-5202	6/30/2016	6/29/2016	270834	00173-12-2016	30.00	MANANA WOODS TESTING
Total for Vendor 00450 - EUROFINS EATON ANALYTICAL, INC:					230.00	
00511 - MUNIQUIP, LLC						
01-400-5300	6/30/2016	6/13/2016	103480	00173-12-2016	167.93	SCADA SOLAR KITS
Task Label: CAP-1516009A		Type: E		PO Number: 0000100626		
Total for Vendor 00511 - MUNIQUIP, LLC:					167.93	
00550 - HACH COMPANY						
01-800-5300	6/30/2016	6/8/2016	9964613	00173-12-2016	850.93	LAB SUPPLIES
Task Label:		Type:		PO Number: 0000100639		
Total for Vendor 00550 - HACH COMPANY:					850.93	
00560 - COSTCO WHOLESALE						
01-100-5631	6/30/2016	6/30/2016	JUL 16	00172-12-2016	110.00	MEMBERSHIP - JULY 2016
Total for Vendor 00560 - COSTCO WHOLESALE:					110.00	
00581 - NATIONAL METER & AUTOMATION						
01-000-1565	6/30/2016	6/17/2016	S1072338.001	00173-12-2016	4,230.20	LOMPICO METERS - 1"
Task Label: CAP-1516009A		Type: E		PO Number:		
01-000-1565	6/30/2016	6/21/2016	S1072388.003	00173-12-2016	107,982.63	LOMPICO METERS - 5/8"
Task Label: CAP-1516009A		Type: E		PO Number:		
Total for Vendor 00581 - NATIONAL METER & AUTOMATION:					112,212.83	
00589 - ALLARD'S SEPTIC						
01-800-5200	6/30/2016	6/18/2016	7164	00173-12-2016	300.00	KIRBY WTP HOLDING TANK
Total for Vendor 00589 - ALLARD'S SEPTIC:					300.00	
00662 - JAMES A. MUELLER						
01-100-5147	6/30/2016	7/1/2016	JUL 16	00172-12-2016	50.00	CALPERS MEDICAL

Vendor / Account Number	JE Date	Invoice Date	Invoice No	Journal Entry	Amount	Description
Total for Vendor 00662 - JAMES A. MUELLER:					50.00	
00679 - WATERTRAX						
01-800-5200	6/30/2016	5/18/2016	4006 50569	00172-12-2016	8,697.68	ANNUAL WATERTRAX LICENSE
Total for Vendor 00679 - WATERTRAX:					8,697.68	
00703 - DATAFLOW BUSINESS SYSTEMS, INC						
01-100-5600	6/30/2016	6/13/2016	186052	00173-12-2016	7.50	SHIP FEE - TONER
Total for Vendor 00703 - DATAFLOW BUSINESS SYSTEMS, INC:					7.50	
00729 - ALPHA ANALYTICAL LABS						
02-600-5202	6/30/2016	6/16/2016	6062196	00173-12-2016	926.00	WASTEWATER MONITORING
02-600-5202	6/30/2016	6/28/2016	6063170	00173-12-2016	330.00	WASTEWATER MONITORING
02-600-5202	6/30/2016	6/29/2016	6063280	00173-12-2016	330.00	WASTEWATER MONITORING
Total for Vendor 00729 - ALPHA ANALYTICAL LABS:					1,586.00	
00738 - GOLDAK, INC						
01-400-5200	6/30/2016	6/15/2016	115354	00173-12-2016	143.63	LOCATOR REPAIR
Task Label:		Type:	PO Number:	0000100640		
Total for Vendor 00738 - GOLDAK, INC:					143.63	
00785 - REGIONAL WATER MANAGEMENT						
01-100-5200	6/30/2016	6/22/2016	IRWM CS MEAN	00173-12-2016	7,435.00	WATER RESOURCE STRATEGY DEVELOPMENT
Total for Vendor 00785 - REGIONAL WATER MANAGEMENT:					7,435.00	
10067 - NBS						
01-100-5200	6/30/2016	6/13/2016	61600028	00173-12-2016	1,250.00	CONSULTING SERVICES
Task Label: EXP-1516003A		Type: S	PO Number:			
Total for Vendor 10067 - NBS:					1,250.00	
10086 - PPD MULTIMEDIA, INC.						
01-100-5640	6/30/2016	6/20/2016	24937	00173-12-2016	389.70	METRO BUS ADS
Total for Vendor 10086 - PPD MULTIMEDIA, INC.:					389.70	

Vendor / Account Number	JE Date	Invoice Date	Invoice No	Journal Entry	Amount	Description
Report Total:					243,959.99	

Accounts Payable

Checks by Date - Detail by Check Number

User: KendraNegro
Printed: 7/7/2016 11:51 AM

San Lorenzo Valley WATER DISTRICT
13060 Highway 9
Boulder Creek, CA 95006-9119
(831) 338-2153 phone
(831) 338-7986 fax

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
11295	00074	A SIGN ASAP!	06/17/2016		
	160351	FACILITY SIGNS			1,002.68
			Total for Check Number 11295:	0.00	1,002.68
11296	00589	ALLARD'S SEPTIC	06/17/2016		
	7152	KWTP SEPTIC PUMP OUT			300.00
			Total for Check Number 11296:	0.00	300.00
11297	00729	ALPHA ANALYTICAL LABS	06/17/2016		
	6061201	WASTEWATER MONITORING			390.00
			Total for Check Number 11297:	0.00	390.00
11298	10025	BADGER METER, INC	06/17/2016		
	80006982	BEACON CELLULAR STANDARD			80.99
			Total for Check Number 11298:	0.00	80.99
11299	01080	BC ELEMENTARY PARENTS CLUB	06/17/2016		
	053116	WATERSHED EDUCATION GRANT - 90%			2,250.00
			Total for Check Number 11299:	0.00	2,250.00
11300	00342	BRASS KEY LOCKSMITH	06/17/2016		
	944540	DISTRICT LOCK REPLACEMENT - OPS			4,126.35
	944540	DISTRICT LOCK REPLACEMENT - WTP			4,126.35
	944567	DISTRICT LOCKS			17.00
			Total for Check Number 11300:	0.00	8,269.70
11301	00566	C S S C	06/17/2016		
	16050	ANSWERING SERVICE			244.02
			Total for Check Number 11301:	0.00	244.02
11302	00415	CA BANK & TRUST/GOV SVC DEPT	06/17/2016		
	JUNE 2016	1976 SAFE DRINKING WATER BANK FEE			15.00
	JUNE 2016	1976 SAFE DRINKING WATER INTEREST			3,738.14
	JUNE 2016	1976 SAFE DRINKING WATER PRINCIPAL			11,828.29
			Total for Check Number 11302:	0.00	15,581.43
11303	00273	CORELOGIC, INC.	06/17/2016		
	81694867	REALQUEST SERVICE - ENG			93.75
	81694867	REALQUEST SERVICE - FINANCE			93.75
			Total for Check Number 11303:	0.00	187.50
11304	00037	COUNTY OF SANTA CRUZ	06/17/2016		
	1500494	INTERTIES 2,3,4			2,655.05

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
	3103	INTERTIES 2,3,4			1,406.84
	3104	INTERTIES 2,3,4			15,352.92
			Total for Check Number 11304:	0.00	19,414.81
11305	00343	ERNIE'S SERVICE CENTER	06/17/2016		
	51377	TRUCK #280 MAINTENANCE			1,117.63
			Total for Check Number 11305:	0.00	1,117.63
11306	00450	EUROFINS EATON ANALYTICAL, INC	06/17/2016		
	265871	WATER ANALYSIS - PASO, BOB'S LN			120.00
	266197	WATER ANALYSIS - VARIOUS AREAS			800.00
	266198	WATER ANALYSIS - MIRA FLORES			200.00
	266199	WATER ANALYSIS - 7301 HWY 9			400.00
	266424	WATER ANALYSIS - PASO, BOB'S LN			80.00
			Total for Check Number 11306:	0.00	1,600.00
11307	00210	FISHER SCIENTIFIC	06/17/2016		
	3168781	LAB SUPPLIES			109.38
			Total for Check Number 11307:	0.00	109.38
11308	00365	FREITAS + FREITAS	06/17/2016		
	16005	LAFCO MAPS FOR LOMPICO MERGER			7,663.75
			Total for Check Number 11308:	0.00	7,663.75
11309	00080	GRANITE CONSTRUCTION CO	06/17/2016		
	977682	BASE ROCK			245.51
			Total for Check Number 11309:	0.00	245.51
11310	00550	HACH COMPANY	06/17/2016		
	9930436	W/Q PARTS			4,192.05
			Total for Check Number 11310:	0.00	4,192.05
11311	00236	IDEXX DISTRIBUTION CORP	06/17/2016		
	3002847634	UV VIEWING CABINET			487.63
			Total for Check Number 11311:	0.00	487.63
11312	00247	INDEPENDENT ELECTRIC SUPPLY	06/17/2016		
	S102735720.001	MOTOR STARTER			2,904.71
			Total for Check Number 11312:	0.00	2,904.71
11313	00367	INFOSEND, INC	06/17/2016		
	104755	NORTH SYSTEM FLUSHING MAILERS			669.63
	104759	SOUTH SYSTEM FLUSHING MAILERS			499.79
			Total for Check Number 11313:	0.00	1,169.42
11314	00695	PAUL JENSEN	06/17/2016		
	052716	SURVEY WORK FOR DISTRICT - LOST ACR			4,500.00
			Total for Check Number 11314:	0.00	4,500.00
11315	00336	LAND TRUST OF SANTA CRUZ CNTY	06/17/2016		
	5-2016	OLYMPIA WATERSHED PATROL SERVICE			716.70

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
			Total for Check Number 11315:	0.00	716.70
11316	00006	MATHESON TRI-GAS, INC.	06/17/2016		
	13402189	WELDING SUPPLIES			92.05
			Total for Check Number 11316:	0.00	92.05
11317	00511	MUNIQUIP, LLC	06/17/2016		
	103467	LOMPICO SCADA SYSTEM			2,061.31
	103469	LOMPICO SCADA SYSTEM			17,478.33
			Total for Check Number 11317:	0.00	19,539.64
11318	00581	NATIONAL METER & AUTOMATION	06/17/2016		
	S1071500.003	BADGER METERS			5,213.31
	S1071980.001	METER 5/8"X3/4" BADGER MODEL 25			4,389.54
	S1071980.001	METER 2" BADGER MODEL 120			752.88
	S1071980.001	METER 1" BADGER MODEL 55			1,561.51
	S1071980.001	METER 1 1/2" BADGER MODEL 120			552.07
			Total for Check Number 11318:	0.00	12,469.31
11319	10067	NBS	06/17/2016		
	51600108	DE LOACH LABOR COSTS			4,500.00
	51600109	COST OF SERVICE STUDY SERVICES			2,240.00
			Total for Check Number 11319:	0.00	6,740.00
11320	00152	NORTH GLASS	06/17/2016		
	136052	JOHNSON BUILDING MAINTENANCE			452.53
			Total for Check Number 11320:	0.00	452.53
11321	00625	OFFICE DEPOT	06/17/2016		
	84049733001	OFFICE SUPPLIES - STORAGE BOXES			107.95
			Total for Check Number 11321:	0.00	107.95
11322	00944	PDN CONSULTING	06/17/2016		
	1222	MONTHLY BACKUP & ANTI VIR---MONTH			415.00
			Total for Check Number 11322:	0.00	415.00
11323	00302	POLLARDWATER.COM	06/17/2016		
	44050	DCHLOR TABS			493.43
			Total for Check Number 11323:	0.00	493.43
11324	00263	RAYNE WATER CONDITIONING	06/17/2016		
	053116	KIRBY ST WATER SOFTENER SERVICE			31.75
			Total for Check Number 11324:	0.00	31.75
11325	00046	RED WING SHOE STORE	06/17/2016		
	2762	BOOTS FOR 175			600.80
			Total for Check Number 11325:	0.00	600.80
11326	10001	RUTAN AND TUCKER, LLP	06/17/2016		
	747078	LEGAL SERVICES - THROUGH 4/30/16			34.00

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			Total for Check Number 11326:	0.00	34.00
11327	00746	SCOTTS VALLEY BANNER	06/17/2016		
	30715	HELP WANTED AD			25.20
			Total for Check Number 11327:	0.00	25.20
11328	01057	SILKE COMMUNICATIONS	06/17/2016		
	50687	TRUCK RADIO			860.51
			Total for Check Number 11328:	0.00	860.51
11329	00751	SLV ELEMENTARY	06/17/2016		
	053116	WATERSHED EDUCAITON GRANT			2,250.00
			Total for Check Number 11329:	0.00	2,250.00
11330	00047	SOIL CONTROL LAB	06/17/2016		
	6050473	WATER ANALYSIS - TOTAL PHOSPHATE			39.00
	6050729	WATER ANALYSIS - GENERAL PHYSICAL			145.00
	6050730	WATER ANALYSIS - METALS DIGESTION			145.00
	6050800	WATER ANALYSIS - TOTAL SUSPENDED SC			77.00
	6050877	WATER ANALYSIS - GENERAL PHYSICAL			145.00
	6050878	WATER ANALYSIS - TOTAL PHOSPHATE			39.00
	6050879	WATER ANALYSIS - METALS DIGESTION			98.00
			Total for Check Number 11330:	0.00	688.00
11331	00266	TERMINIX	06/17/2016		
	052016	PEST CONTROL - ADMIN			120.00
			Total for Check Number 11331:	0.00	120.00
11332	00510	TOM'S SEPTIC CONSTRUCTION	06/17/2016		
	2763	ANNUAL SEPTIC TANK INSP.			350.00
			Total for Check Number 11332:	0.00	350.00
11333	00768	USA BLUEBOOK	06/17/2016		
	961146	WASTEWATER PUMP			1,020.16
			Total for Check Number 11333:	0.00	1,020.16
11334	00268	WATTS ON	06/17/2016		
	11732	GEN.REPAIR			1,215.30
			Total for Check Number 11334:	0.00	1,215.30
11335	00037	COUNTY OF SANTA CRUZ	06/21/2016		
	062016	LOMPICO ENCROACHMENT PERMIT			882.00
			Total for Check Number 11335:	0.00	882.00
11336	00162	ANTHEM BLUE CROSS	06/21/2016		
	060216	RETIRED EMPLOYEE MEDICAL			630.14
			Total for Check Number 11336:	0.00	630.14
11337	00767	ANTHEM BLUE CROSS	06/21/2016		
	926696111	MEDICARE RX - RETIRED EMPLOYEE			132.00

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
			Total for Check Number 11337:	0.00	132.00
11338	10023	AT & T CAPITAL SERVICES, INC	06/21/2016		
	2988512	TELEPHONE SYSTEM MAINTENANCE			396.07
			Total for Check Number 11338:	0.00	396.07
11339	00055	AT&T	06/21/2016		
	060116	TELEPHONE SERVICE_OPS			3,068.34
	060116	TELEPHONE SERVICE_WT			1,595.47
	060116	TELEPHONE SERVICE_ADMIN			138.03
	060116	TELEPHONE SERVICE_BCEWW			77.74
			Total for Check Number 11339:	0.00	4,879.58
11340	00687	AT&T U-VERSE	06/21/2016		
	060516	INTERNET SERVICE - 13057 HWY 9			70.00
	060616	INTERNET SERVICE - MANANA WOODS			82.00
	060716	INTERNET SERVICE - 345 QUAIL TERRACE			72.30
			Total for Check Number 11340:	0.00	224.30
11341	00378	BANK OF THE WEST	06/21/2016		
	042716	LUNCHEON MEETING			17.00
	042916	EXCEL TRAINING			250.00
	050116	PDM STEEL TANK BRACKETS			951.75
	050416	REALQUEST SERVICES			88.00
	050516	SECURITY CAMERAS			53.04
	050516A	OPS SECURITY CAMERAS			2,080.00
	050616	MONSTER.COM - ADVERTISING			290.00
	050716	SANTACRUZ JOBS.COM - ADVERTISING			149.50
	050916	CLOUD SERVICE			138.60
	051116	CREDIT - SEMINAR			-620.00
	051316	MANANA WOODS LUNCH-SCOTTS VALLE			53.96
	051716	CELLULAR BOOSTER			450.94
	051816	BROWN & CALDWELL - ADVERTISING			200.00
	051916	TRANSITTALENT.COM - ADVERTISING			145.00
	052216	LUNCHEON MEETING			27.00
	052316	LUNCHEON MEETING			18.42
	052416	CONTRACT SERVICES - MAILCHIMP			50.00
	052516	LUNCHEON MEETING			57.72
			Total for Check Number 11341:	0.00	4,400.93
11342	00145	BATTERIES PLUS	06/21/2016		
	300814	BATTERY BACK-UP			144.63
			Total for Check Number 11342:	0.00	144.63
11343	00216	BOULDER CREEK AUTO PARTS	06/21/2016		
	77749	TIE DOWNS			41.02
			Total for Check Number 11343:	0.00	41.02
11344	00788	COMCAST	06/21/2016		
	060516	INTERNET SERVICE_545 FALL CREEK DR			162.11
			Total for Check Number 11344:	0.00	162.11
11345	00290	CONTRACTOR COMPLIANCE & MONI	06/21/2016		
	6657	PHASE 2 - INTERTIE 2,3,4			3,750.00

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
	7103	PHASE 2 - INTERTIE 2,3,4			429.00
			Total for Check Number 11345:	0.00	4,179.00
11346	00061	DHS PUBLIC HEALTH LAB	06/21/2016		
	958	TICK TEST FOR LYME			62.00
			Total for Check Number 11346:	0.00	62.00
11347	UB*00146	JEAN HANSEN	06/21/2016		
		Refund Check			5.77
			Total for Check Number 11347:	0.00	5.77
11348	00020	HARO, KASUNICH & ASSOCIATES	06/21/2016		
	16050	LOST ACRES DR WATER TANK PROJECT			5,509.90
			Total for Check Number 11348:	0.00	5,509.90
11349	UB*00145	Rick Hochler	06/21/2016		
		Refund Check			13.59
		Refund Check			51.79
		Refund Check			9.42
			Total for Check Number 11349:	0.00	74.80
11350	10005	ICMA RETIREMENT C/O M & T RETIRI	06/21/2016		
	102172235	RETIREMENT WITHHOLDING			1,535.00
			Total for Check Number 11350:	0.00	1,535.00
11351	00539	MILLER-MAXFIELD, INC	06/21/2016		
	0416SLVB	PUBLIC OUTREACH CONSULTING SERVIC			275.00
			Total for Check Number 11351:	0.00	275.00
11352	00581	NATIONAL METER & AUTOMATION	06/21/2016		
	S1071980.002	METER 3/4"X3/4" BADGER MODEL 35			2,487.04
			Total for Check Number 11352:	0.00	2,487.04
11353	00350	HOWARD OLIPHANT	06/21/2016		
	060216	REIMBURSEMENT- T-2 RENEWAK FEE'S F(			60.00
			Total for Check Number 11353:	0.00	60.00
11354	00054	PACIFIC GAS & ELECTRIC	06/21/2016		
	060316	ELECTRIC CHARGES - 140 ELENA CT			9.86
			Total for Check Number 11354:	0.00	9.86
11355	UB*00147	RON PIETROWSKI	06/21/2016		
		Refund Check			0.65
		Refund Check			2.46
		Refund Check			15.25
			Total for Check Number 11355:	0.00	18.36
11356	00428	RCD OF SANTA CRUZ COUNTY	06/21/2016		
	2014FCC-08	FALL CREEK FISH LADDER			1,686.19
			Total for Check Number 11356:	0.00	1,686.19

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
11357	UB*00148	GARETH RUSSELL-LANNING	06/21/2016		
		Refund Check			79.53
			Total for Check Number 11357:	0.00	79.53
11358	00044	STAPLES	06/21/2016		
	053016	FEES			46.64
			Total for Check Number 11358:	0.00	46.64
11359	UB*00149	Nathan & Amanda Thompson	06/21/2016		
		Refund Check			1.98
		Refund Check			8.69
		Refund Check			4.21
			Total for Check Number 11359:	0.00	14.88
11360	00721	UNITED SITE SVCS.,INC	06/21/2016		
	4080325	QUAIL 5 TOILET - SERVICE AND CLEANIN			157.18
			Total for Check Number 11360:	0.00	157.18
11361	10082	UNITED WAY OF SANTA CRUZ	06/21/2016		
	5607	SEMINAR - J MICHELSEN			350.00
			Total for Check Number 11361:	0.00	350.00
11362	10080	RICARDO VILLA	06/21/2016		
	010116	BOOTS-RICARDO VILLA			157.69
			Total for Check Number 11362:	0.00	157.69
11363	00599	WEX BANK	06/21/2016		
	45628467	FUEL - WT			990.18
	45628467	FUEL - OPS			2,582.16
			Total for Check Number 11363:	0.00	3,572.34
11364	00545	AFLAC	06/27/2016		
	JUNE 2016	SUPPLEMENTAL INSURANCE_JUNE 2016			445.52
			Total for Check Number 11364:	0.00	445.52
11365	00309	AT&T IP SERVICES	06/27/2016		
	061116	IP SERVICES_WTP			242.20
	061116	IP SERVICES_ADMIN			242.20
	061116	IP SERVICES_OPS			242.20
			Total for Check Number 11365:	0.00	726.60
11366	00686	AT&T LONG DISTANCE	06/27/2016		
	061616L	LONG DISTANCE_LOMPICO			100.44
			Total for Check Number 11366:	0.00	100.44
11367	00687	AT&T U-VERSE	06/27/2016		
	061516	INTERNET SERVICE - GRAHAM HILL			70.00
	061516A	INTERNET SERVICE - 365 MADRONE			57.00
			Total for Check Number 11367:	0.00	127.00
11368	00566	C S S C	06/27/2016		
	062216L	ANSWERING SERVICE_LOMPICO			67.00

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			Total for Check Number 11368:	0.00	67.00
11369	00178	CALPERS	06/27/2016		
	2053	MEDICAL INSURANCE_W.SHED			1,713.47
	2053	MEDICAL INSURANCE_FINANCE			5,663.06
	2053	MEDICAL INSURANCE_ADMIN			3,087.01
	2053	MEDICAL INSURANCE_WTP			7,462.20
	2053	MEDICAL INSURANCE_DEPENDENT WITH			3,888.19
	2053	MEDICAL INSURANCE_RETITRD EMPLOY			613.35
	2053	MEDICAL INSURANCE_OPS			18,856.75
			Total for Check Number 11369:	0.00	41,284.03
11370	00788	COMCAST	06/27/2016		
	060416	INTERNET SERVICE_LOMPICO			177.01
	061116	INTERNET SERVICE_23 SUMMIT AVE			138.92
	061616	INTERNET SERVICE_264 ORCHARD ST			136.08
			Total for Check Number 11370:	0.00	452.01
11371	00050	COUNTY OF SANTA CRUZ	06/27/2016		
	06560315	LIEN RELEASE FEE			15.00
			Total for Check Number 11371:	0.00	15.00
11372	10084	CUMMINS PACIFIC	06/27/2016		
	053116L	PARTS FOR LOMPICO WTP			1,016.00
			Total for Check Number 11372:	0.00	1,016.00
11373	00133	DASSEL'S	06/27/2016		
	385236	PROPANE_LOMPICO			838.79
			Total for Check Number 11373:	0.00	838.79
11374	00312	DOCTORS ON DUTY	06/27/2016		
	061016	PERSONNEL RECRUITMENT			225.00
			Total for Check Number 11374:	0.00	225.00
11375	00076	ERNIE'S AUTO CENTER	06/27/2016		
	661455	TRUCK 264 MAINTENANCE			18.51
			Total for Check Number 11375:	0.00	18.51
11376	00343	ERNIE'S SERVICE CENTER	06/27/2016		
	51830	OIL AND BRAKES --TRUCK 325			489.01
			Total for Check Number 11376:	0.00	489.01
11377	00701	RANDY FITZGERALD	06/27/2016		
	291703	HOLIDAY WINDOWS			60.00
			Total for Check Number 11377:	0.00	60.00
11378	00016	GREENWASTE RECOVERY,INC	06/27/2016		
	2130484	BUILDING MAINTENANCE -SPOIL REMOV			262.82
			Total for Check Number 11378:	0.00	262.82
11379	00208	LEONARD KUHNLEIN	06/27/2016		
	061716	EMPLOYEE REIMBURSMENT_D1 CERT FO			50.00

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
			Total for Check Number 11379:	0.00	50.00
11380	00608	LLOYD'S TIRE SERVICE, INC	06/27/2016		
	305420	TIRES--TRUCK 309			1,072.10
	305475	NEW TIRES-TRUCK 222			1,201.60
			Total for Check Number 11380:	0.00	2,273.70
11381	00313	MET LIFE	06/27/2016		
	061616	DENTAL_WTP			612.03
	061616	DISABILITY_WTP			172.61
	061616	LIFE INSURANCE_OPS			203.13
	061616	DISABILITY_OPS			342.53
	061616	DENTAL_FINANCE			731.26
	061616	LIFE INSURANCE_WTP			79.92
	061616	DENTAL_ADMIN			304.56
	061616	LIFE INSURANCE_FINANCE			83.25
	061616	DISABILITY_ADMIN			96.76
	061616	LIFE INSURANCE_ADMIN			41.63
	061616	DISABILITY_W.SHED			20.81
	061616	LIFE INSURANCE_W.SHED			8.31
	061616	DISABILITY_FINANCE			145.24
	061616	DENTAL_OPS			1,815.08
	061616	DENTAL_W.SHED			61.07
			Total for Check Number 11381:	0.00	4,718.19
11382	00625	OFFICE DEPOT	06/27/2016		
	843062766001	SUPPLIES			73.25
	843072864001	INKJET CARTRIDGES			47.62
			Total for Check Number 11382:	0.00	120.87
11383	00054	PACIFIC GAS & ELECTRIC	06/27/2016		
	061716L	ELECTRIC CHARGES_LOMPICO			1,636.97
			Total for Check Number 11383:	0.00	1,636.97
11384	10004	PETTY CASH - CHELSEA SLADWICK	06/27/2016		
	062216	OFFICE SUPPLIES - OPS			2.70
	062216	SUPPLIES-WTP			40.15
	062216	VEHICLE MAINT-#175			19.50
	062216	OFFICE SUPPLIES-FINANCE			11.55
	062216	SUPPLIES - OPS			3.78
			Total for Check Number 11384:	0.00	77.68
11385	00428	RCD OF SANTA CRUZ COUNTY	06/27/2016		
	3014FCC-07	FALL CREEK LADDER			1,190.25
			Total for Check Number 11385:	0.00	1,190.25
11386	00746	SCOTTS VALLEY BANNER	06/27/2016		
	30718L	ADVERTISING_LOMPICO			81.40
			Total for Check Number 11386:	0.00	81.40
11387	10085	SPOK, INC.	06/27/2016		
	062116L	CLOUD_LOMPICO			138.70

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			Total for Check Number 11387:	0.00	138.70
11388	00011	VERIZON WIRELESS	06/27/2016		
	061316	CELL CHARGES - WTP			602.05
	061316	TABLET/CELL CHARGES - OPS			347.72
	061316A	TABLET CREDIT			-310.17
			Total for Check Number 11388:	0.00	639.60
11389	00055	AT&T	07/01/2016		
	061916F	TELEPHONE CHARGES - FELTON ACRES			85.16
	061916L	TELEPHONE CHARGES - LOMPICO			50.13
			Total for Check Number 11389:	0.00	135.29
11390	00309	AT&T IP SERVICES	07/01/2016		
	061916	IP SERVICES_WTP			381.28
	061916	IP SERVICES_OPS			382.28
	061916	IP SERVICES_ADMIN			381.27
			Total for Check Number 11390:	0.00	1,144.83
11391	00686	AT&T LONG DISTANCE	07/01/2016		
	061316	LONG DISTANCE - ADMIN			7.79
	061316	LONG DISTANCE - OPS			42.03
	061316	LONG DISTANCE - WTP			44.52
			Total for Check Number 11391:	0.00	94.34
11392	00145	BATTERIES PLUS	07/01/2016		
	1723304-01	CELL PHONE REPAIR-TAYLOR			219.60
			Total for Check Number 11392:	0.00	219.60
11393	00342	BRASS KEY LOCKSMITH	07/01/2016		
	944579	LOMPICO REPLACEMENT LOCKS			953.33
	944580	RE-KEY DIST. LOCKS/ FAC2			272.00
	944629	SERVICE ALL LYON DOOR HANDLES			1,032.00
	944646	DISTRICT LOCKS			476.67
	944671	DISTRICT LOCKS			51.00
			Total for Check Number 11393:	0.00	2,785.00
11394	00566	C S S C	07/01/2016		
	16060	ANSWERING SERVICE - ON CALL			284.07
			Total for Check Number 11394:	0.00	284.07
11395	00788	COMCAST	07/01/2016		
	061916	INTERNET SERVICE - 7400 HWY 9			141.08
			Total for Check Number 11395:	0.00	141.08
11396	00265	COMMUNITY TELEVISION OF	07/01/2016		
	2303	MEETING COVERAGE - 5/19/16			275.00
			Total for Check Number 11396:	0.00	275.00
11397	00384	D.W. ALLEY & ASSOCIATES	07/01/2016		
	616-02	STREAM MONITORING PROJECT			683.20
	616-03,237-03	STREAM MONITORING PROJECT -6/11 -6/1			1,855.85

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
	616-03,238-03	STREAM MONITORING PROJECT			12,525.20
			Total for Check Number 11397:	0.00	15,064.25
11398	00760	DYNAMIC PRESS	07/01/2016		
	20616	FUEL LOG CARDS			98.70
			Total for Check Number 11398:	0.00	98.70
11399	00118	FARMER BROTHERS COFFEE	07/01/2016		
	63762485	COFFEE-OPPS			256.90
			Total for Check Number 11399:	0.00	256.90
11400	00507	GARDEN FAIRE	07/01/2016		
	2016-02	GARDEN FAIRE SPONSORSHIP			2,500.00
			Total for Check Number 11400:	0.00	2,500.00
11401	00080	GRANITE CONSTRUCTION CO	07/01/2016		
	987410	BASE ROCK-MAIN REPAIR			35.07
	987599	BASE ROCK-MAIN REPAIR			33.88
	989474	HOT MIX			224.06
			Total for Check Number 11401:	0.00	293.01
11402	10005	ICMA RETIREMENT C/O M & T RETIRI	07/01/2016		
	062916	RETIREMENT WITHOLDING - ADJUSTMEN			100.00
	81637	RETIREMENT WITHOLDING			1,635.00
			Total for Check Number 11402:	0.00	1,735.00
11403	00367	INFOSEND, INC	07/01/2016		
	106402	POSTAGE FOR STATEMENTS			2,542.88
	106402	MAILING SERVICES			1,093.43
			Total for Check Number 11403:	0.00	3,636.31
11404	10079	INSTRUMENT TECHNOLOGY CORP	07/01/2016		
	12871	GROUND MIC			542.69
	12888	FREIGHT			12.00
			Total for Check Number 11404:	0.00	554.69
11405	00022	JOHNS ELECTRIC MOTOR	07/01/2016		
	13424	FIREHOUSE BOOSTER #1- MOTOR REPAIR			1,954.44
	13451	GENERATOR REPAIR			63.00
			Total for Check Number 11405:	0.00	2,017.44
11406	10083	NINA MOORE	07/01/2016		
	060616	EDUCATION GRANT - 1ST DISBURSEMENT			2,700.00
			Total for Check Number 11406:	0.00	2,700.00
11407	00054	PACIFIC GAS & ELECTRIC	07/01/2016		
	062416	ELECTRIC CHARGES_LAZYWOODS			63.67
	062416A	ELECTRIC CHARGES_ZAYANTE/ROSEBLO			1,774.82
			Total for Check Number 11407:	0.00	1,838.49
11408	00569	PITNEY BOWES GLOBAL FIN.LLC	07/01/2016		
	3100250191	MAIL MACHINE LEASE - 3/30/16 - 6/29/16			465.56

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
			Total for Check Number 11408:	0.00	465.56
11409	10001	RUTAN AND TUCKER, LLP	07/01/2016		
	748947	LEGAL SERVICES RENDERED THROUGH 5			5,056.32
			Total for Check Number 11409:	0.00	5,056.32
11410	01057	SILKE COMMUNICATIONS	07/01/2016		
	50657	TRUCK 155			400.00
	50743	LOMPICO TRK. RADIO			231.87
	50744	TRUCK 180			200.00
			Total for Check Number 11410:	0.00	831.87
11411	00407	UNIVAR USA	07/01/2016		
	396906	CHLORINE DRUM CREDIT			-760.00
	751045	CHLORINE			3,643.45
			Total for Check Number 11411:	0.00	2,883.45
11412	00768	USA BLUEBOOK	07/01/2016		
	970571	WASTEWATER PUMP			990.31
	971890	CHEM FEED PUMPS			1,050.06
			Total for Check Number 11412:	0.00	2,040.37
11413	00011	VERIZON WIRELESS	07/01/2016		
	060316L	CELL PHONE CHARGES - LOMPICO			141.62
	061316	CELL PHONE CHARGES - OPS			650.00
	061316	CELL PHONE CHARGES - ADMIN			85.44
	061316	CELL PHONE CHARGES - ENG			85.44
	061316	CELL PHONE CHARGES - WTP			314.15
			Total for Check Number 11413:	0.00	1,276.65
11414	10072	WATER SYSTEMS CONSULTING, INC	07/01/2016		
	2012	UWMP - 5/1/ - 5/31/16			3,011.25
			Total for Check Number 11414:	0.00	3,011.25
11415	UB*00150	J PUENT & T HOFVENDAHL	07/01/2016		
		Refund Check			18.13
			Total for Check Number 11415:	0.00	18.13
11416	00216	BOULDER CREEK AUTO PARTS	07/05/2016		
	78441	GAS CAP TRK 485			15.62
	78451	AUTOMOTIVE SUPPLIES			47.68
			Total for Check Number 11416:	0.00	63.30
11417	00397	FERGUSON ENTERPRISES, INC	07/05/2016		
	1183815	METER BOX B16			592.56
	1183890	NIPPLE BRASS 1" X 0"			16.30
	1183890	GATE VALVE 3/4"			86.06
	1183890	NIPPLE BRASS 3/4" X 0"			17.26
	1183890	4" NUT & BOLT SET PLATED 150#			42.22
	1183890	CHECK VALVE METER SPUD 3/4"			410.81
	1183890	MTR CPLG PIPE-MTR 3/4" X 2"			101.32
	1183890	MTR CPLG PIPE-MTR 3/4" X 2.50"			109.77
	1183890	GATE VALVE 1"			125.03

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
	1183890	1" METER RESETTER			191.93
	1183890	6" NUT & BOLT SET PLATED 150#			57.81
	1183890	REGULATOR 2" 25 AUB			430.08
			Total for Check Number 11417:	0.00	2,181.15
11418	00711	ROBERTS & BRUNE CO.	07/05/2016		
	S1265790.001	PLUMBING			1,820.00
	S1543965.001	LOMPICO METER INSTALLATION			27,970.31
	S1562927.001	METER BOX LID B16 FIBERLYTE-TOUCHR			1,965.63
	S1562927.002	METER BOX LID B9 FIBERLYTE-TOUCHRE			1,126.25
	S1564370.001	4 X 3'6" FLG X FLG DI SPOOL			199.75
	S1564370.001	4 FLG 45 DI C110			331.50
	S1564370.001	4 X 4'0" FLG X FLG DI SPOOL			216.75
	S1564370.001	4 FF NEOPRENE GASKET 1/3 150#			18.59
	S1564370.001	4 X 1'0" FLG X PE DI SPOOL			82.88
	S1564370.001	4 PLATED HEX BOLT & NUT KIT			22.32
	S1564370.001	4 FLG 22-1/2 DI C110			454.75
	S1564370.001	4 X 4'0" FLG X PE DI SPOOL			180.62
	S1564370.002	4 SDR11 IPS HDPE PIPE PE4710 CL200			243.94
	S1564370.002	4 SDR11 IPS FLANGE ADAPT HDPE BUTT F			34.00
	S1564370.002	4 SDR11 IPS DI EPOXY BACKING RING			20.62
	S1564370.003	4 HYMAX GRIP 890-56-04111-06			446.25
	S1566588.001	14" TIGER TOOTH DIAMOND SAW BLADES			1,142.19
	S1569610.001	BLUE PAINT WATERBASE #3620			54.32
			Total for Check Number 11418:	0.00	36,330.67
11419	00142	SAN LORENZO LUMBER	07/05/2016		
	70229	LOMPICO SIGN PARTS			12.89
	70558	MISC PARTS FOR LEWIS TANK			182.63
	70643	LOMPICO SIGN PARTS - RETURN CREDIT			-143.12
	71259	EAST CREEK PROJECT			148.52
	71305	LOMPICO PARTS			31.92
			Total for Check Number 11419:	0.00	232.84
11420	00125	SCARBOROUGH LUMBER	07/05/2016		
	271369	FLUSHING SIGNS			59.97
	271397	CONCRETE			59.02
	271483	PARTS			67.06
	271621	LINE REPAIR			11.84
	272158	WEED TRIMMER STRING			18.21
	272159	WEED WHACKER STRING			18.21
	272192, 96	LEWIS TANK,			58.31
	272435	STAIN REMOVAL			31.59
	272504	WEED ABATEMENT			42.85
	272611	TRUCK 280			60.77
	272615	SCADA INSTALL			241.08
	272647	SCADA INSTALL			45.04
	272729	LOMPICO RETURN CREDIT			-50.34
	272837	SCADA INSTALL-SCREWS			9.48
	272896	MISC. TOOLS			50.58
	272897	MISC. TOOLS			272.72
	546624	METAL FILE			7.23
	546822	GLOVES FOR 201			24.27
	546822	LOMPICO SIGN MATERIALS			21.78
	546882	FIREHOUSE BOOSTER-PUMP REPAIR-INST			26.48
	546944	BEAR CREEK WASTWATER-GLOVES AND			33.20
	547020	SUPPLIES			28.89

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
	547025	VEGITATION CONTROL			23.13
	547029	PAINT			11.50
	547396	METAL FILE			43.49
	547397	LOMPICO RETURN CREDIT			-43.49
	547398	SOLAR PANEL SCADA INSTALL			62.77
	547536	OP. BLDG FURNACE FILTERS			40.70
	547567	ADMIN. BUILDING. NEW HOTWATER HEA			203.60
	547575	HACKSAW - FOR BCE METER INSTALL			9.15
			Total for Check Number 11420:	0.00	1,489.09
11421	00168	SCOTTS VALLEY SPRINKLER	07/05/2016		
	144600	LOMPICO INTERTIE			476.58
			Total for Check Number 11421:	0.00	476.58
			Report Total (127 checks):	0.00	301,293.82

0087 A87P-7177 San Lorenzo Valley Water District

CASH REQUIREMENTS

THIS REPORT SUMMARIZES YOUR PAYROLL TRANSACTIONS FOR THE CHECK DATE 06/22/16. IT DOES NOT REFLECT MISCELLANEOUS ADMINISTRATIVE CHARGES. PLEASE REFER TO YOUR INVOICE(S) FOR THE TOTAL CASH REQUIRED FOR THIS CHECK DATE.

TRANSACTION DETAIL

ELECTRONIC FUNDS TRANSFER - *Your financial institution will initiate transfer to Paychex **at or after 12:01 A.M.** on transaction date.*

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		BANK DRAFT AMOUNTS & OTHER TOTALS
06/21/16	WELLS FARGO BANK, NA	xxxxxx1358	Direct Deposit	Net Pay Allocations	40,048.25	40,048.25
06/21/16	WELLS FARGO BANK, NA	xxxxxx1358	Taxpay®	Employee Withholdings		
				Social Security	5,783.39	
				Medicare	1,352.56	
				Fed Income Tax	10,452.00	
				CA Income Tax	3,356.53	
				CA Disability	839.55	
				Total Withholdings	**21,784.03**	
				Employer Liabilities		
				Social Security	5,783.38	
				Medicare	1,352.55	
				Fed Unemploy	34.33	
				Total Liabilities	**7,170.26**	**28,954.29**
06/21/16	WELLS FARGO BANK, NA	xxxxxx1358	401(k) Traditional	PXROTH 401 EEPO	980.80	
				PX401 EECU		
				PX401 ERMTCH		
				PXROTH 401 EECU		
				PX401 ERCUM		
				PX401 EEPRE	898.56	**1,879.36**
06/21/16	WELLS FARGO BANK, NA	xxxxxx1358	Section 125	PXDCA EE PRE	443.16	
				PXUME EE PRE	350.00	**793.16**
					EFT FOR 06/21/16	**71,675.06**
					TOTAL EFT (Does not reflect administrative charges)	**71,675.06**

NEGOTIABLE CHECKS - *Check amounts will be debited when payees cash checks. Funds must be available on check date.*

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		TOTAL
06/22/16	WELLS FARGO BANK, NA	xxxxxx1358	Payroll	Check Amounts	20,782.87	
					TOTAL NEGOTIABLE CHECKS	**20,782.87**

0087 A87P-7177 San Lorenzo Valley Water District

CASH REQUIREMENTS

THIS REPORT SUMMARIZES YOUR PAYROLL TRANSACTIONS FOR THE CHECK DATE 06/22/16. IT DOES NOT REFLECT MISCELLANEOUS ADMINISTRATIVE CHARGES. PLEASE REFER TO YOUR INVOICE(S) FOR THE TOTAL CASH REQUIRED FOR THIS CHECK DATE.

REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES - *Paychex does not remit these funds.You must ensure accurate and timely payment of applicable items.*

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		TOTAL
06/22/16	Refer to your records for account Information		Payroll	Employee Deductions		
				Advance	580.58	
				Aflc/Col Post	55.11	
				Aflc/Col Pre	302.75	
				Calper 457	125.00	
				DPer	5,948.61	
				Health	2,007.78	
				ICMA	1,635.00	
				Life Ins	14.00	
				Union dues	427.60	
				Total Deductions	**11,096.43**	

TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES (Does not reflect administrative charges) **11,096.43**

PAYCHEX WILL MAKE THESE TAX DEPOSIT(S) ON YOUR BEHALF - *This information serves as a record of payment.*

DUE DATE	PRODUCT	DESCRIPTION	
06/29/16	Taxpay®	FED IT PMT Group	24,723.88
06/29/16	Taxpay®	CA IT PMT Group	4,196.08

0087 A87P-7177 San Lorenzo Valley Water District

CASH REQUIREMENTS

THIS REPORT SUMMARIZES YOUR PAYROLL TRANSACTIONS FOR THE CHECK DATE 07/06/16. IT DOES NOT REFLECT MISCELLANEOUS ADMINISTRATIVE CHARGES. PLEASE REFER TO YOUR INVOICE(S) FOR THE TOTAL CASH REQUIRED FOR THIS CHECK DATE.

TRANSACTION DETAIL

ELECTRONIC FUNDS TRANSFER - *Your financial institution will initiate transfer to Paychex **at or after 12:01 A.M.** on transaction date.*

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		BANK DRAFT AMOUNTS & OTHER TOTALS
07/05/16	WELLS FARGO BANK, NA	xxxxxx1358	Direct Deposit	Net Pay Allocations	43,666.89	**43,666.89**
07/05/16	WELLS FARGO BANK, NA	xxxxxx1358	Taxpay®	Employee Withholdings		
				Social Security	6,697.68	
				Medicare	1,566.38	
				Fed Income Tax	24,390.76	
				CA Income Tax	8,762.48	
				CA Disability	933.23	
				Total Withholdings	**42,350.53**	
				Employer Liabilities		
				Social Security	6,697.70	
				Medicare	1,566.41	
				Total Liabilities	**8,264.11**	**50,614.64**
07/05/16	WELLS FARGO BANK, NA	xxxxxx1358	401(k) Traditional	PXROTH 401 EEPO	1,495.37	
				PX401 EECU		
				PX401 ERMTCH		
				PXROTH 401 EECU		
				PX401 ERCUM		
				PX401 EEPRE		**1,495.37**
					EFT FOR 07/05/16	**95,776.90**
					TOTAL EFT (Does not reflect administrative charges)	**95,776.90**

NEGOTIABLE CHECKS - *Check amounts will be debited when payees cash checks. Funds must be available on check date.*

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		TOTAL
07/06/16	WELLS FARGO BANK, NA	xxxxxx1358	Payroll	Check Amounts	20,514.70	
					TOTAL NEGOTIABLE CHECKS	**20,514.70**

PAYCHEX WILL MAKE THESE TAX DEPOSIT(S) ON YOUR BEHALF - *This information serves as a record of payment.*

DUE DATE	PRODUCT	DESCRIPTION	
07/13/16	Taxpay®	FED IT PMT Group	40,918.93

0087 A87P-7177 San Lorenzo Valley Water District

CASH REQUIREMENTS

THIS REPORT SUMMARIZES YOUR PAYROLL TRANSACTIONS FOR THE CHECK DATE 07/06/16. IT DOES NOT REFLECT MISCELLANEOUS ADMINISTRATIVE CHARGES. PLEASE REFER TO YOUR INVOICE(S) FOR THE TOTAL CASH REQUIRED FOR THIS CHECK DATE.

PAYCHEX WILL MAKE THESE TAX DEPOSIT(S) ON YOUR BEHALF (cont.) - *This information serves as a record of payment.*

DUE DATE	PRODUCT	DESCRIPTION	
07/13/16	Taxpay®	CA IT PMT Group	9,695.71

0087 A87P-7177 San Lorenzo Valley Water District

CASH REQUIREMENTS

THIS REPORT SUMMARIZES YOUR PAYROLL TRANSACTIONS FOR THE CHECK DATE 07/06/16. IT DOES NOT REFLECT MISCELLANEOUS ADMINISTRATIVE CHARGES. PLEASE REFER TO YOUR INVOICE(S) FOR THE TOTAL CASH REQUIRED FOR THIS CHECK DATE.

TRANSACTION DETAIL

ELECTRONIC FUNDS TRANSFER - *Your financial institution will initiate transfer to Paychex **at or after 12:01 A.M.** on transaction date.*

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		BANK DRAFT AMOUNTS & OTHER TOTALS
07/05/16	WELLS FARGO BANK, NA	xxxxxx1358	Direct Deposit	Net Pay Allocations	42,372.72	**42,372.72**
07/05/16	WELLS FARGO BANK, NA	xxxxxx1358	Taxpay®	Employee Withholdings		
				Social Security	5,804.67	
				Medicare	1,357.52	
				Fed Income Tax	10,407.38	
				CA Income Tax	3,330.58	
				CA Disability	779.94	
				Total Withholdings	**21,680.09**	
				Employer Liabilities		
				Social Security	5,804.65	
				Medicare	1,357.52	
				Fed Unemploy	37.22	
				Total Liabilities	**7,199.39**	**28,879.48**
07/05/16	WELLS FARGO BANK, NA	xxxxxx1358	401(k) Traditional	PXROTH 401 EEPO	1,056.16	
				PX401 EECU		
				PX401 ERMTCH		
				PXROTH 401 EECU		
				PX401 ERCUM		
				PX401 EEPRE	898.56	**1,954.72**
07/05/16	WELLS FARGO BANK, NA	xxxxxx1358	Section 125	PXDCA EE PRE	443.16	
				PXUME EE PRE	350.00	**793.16**
				EFT FOR 07/05/16		**74,000.08**
				TOTAL EFT (Does not reflect administrative charges)		**74,000.08**

NEGOTIABLE CHECKS - *Check amounts will be debited when payees cash checks. Funds must be available on check date.*

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		TOTAL
07/06/16	WELLS FARGO BANK, NA	xxxxxx1358	Payroll	Check Amounts	18,637.71	
				TOTAL NEGOTIABLE CHECKS		**18,637.71**

0087 A87P-7177 San Lorenzo Valley Water District

CASH REQUIREMENTS

THIS REPORT SUMMARIZES YOUR PAYROLL TRANSACTIONS FOR THE CHECK DATE 07/06/16. IT DOES NOT REFLECT MISCELLANEOUS ADMINISTRATIVE CHARGES. PLEASE REFER TO YOUR INVOICE(S) FOR THE TOTAL CASH REQUIRED FOR THIS CHECK DATE.

REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES - *Paychex does not remit these funds.You must ensure accurate and timely payment of applicable items.*

TRANS. DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		TOTAL
07/06/16	Refer to your records for account Information		Payroll	Employee Deductions		
				Advance	580.58	
				Aflc/Col Post	55.11	
				Aflc/Col Pre	302.75	
				Calper 457	125.00	
				DPer	6,140.82	
				Health	1,923.45	
				ICMA	1,635.00	
				Life Ins	14.00	
				Union dues	427.60	
				Total Deductions	**11,204.31**	

TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES (Does not reflect administrative charges) **11,204.31**

PAYCHEX WILL MAKE THESE TAX DEPOSIT(S) ON YOUR BEHALF - *This information serves as a record of payment.*

DUE DATE	PRODUCT	DESCRIPTION		
07/13/16	Taxpay®	FED IT PMT Group	65,650.67	REPLACEMENT
07/13/16	Taxpay®	CA IT PMT Group	13,806.23	REPLACEMENT

M E M O

TO: Board of Directors

FROM: District Manager

PREPARED BY: Finance Dept.

SUBJECT: MULTIPLE USER VARIANCE RENEWALS FOR 2016/2017

DATE: July 21, 2016

RECOMMENDATION:

It is recommended that the Board of Directors review this memo and approve a one-year variance from Multiple User Status for the following property owners:

005855-000	006659-000	007704-000
006125-000	006696-000	007913-000
006196-001	006823-000	008357-000
006282-000	006838-000	008684-000
006304-000	006855-000	009988-000
006309-000	006901-000	010183-000
006337-000	006933-000	010856-000
006402-000	006934-000	010935-000
006497-000	006935-000	011089-000
006498-000	006966-000	011384-000
006512-000	006979-000	012286-000
006560-000	007114-000	012426-000
006643-000	007194-000	013523-000
006657-000	007223-000	

BACKGROUND:
The Customer Service Department has completed its annual review of the accounts that have been given a variance from Multiple User Status, as provided in Ordinances 43 and 47. Those who qualify for the exemption are charged the $34.00 monthly basic fee as a single-family dwelling, while those who are multiple users are charged $56.50 monthly basic service fee.

One (1) accounts were removed from the variance list because the property changed ownership, the unit was found to be a permanent single-family dwelling both units are occupied, or because the owner failed to send back the necessary compliance form. It is recommended that the accounts listed above and on the attached list be approved for a one-year variance from Multiple User Status. A resolution is attached.

STRATEGIC PLAN:
Element 1.0 – Water Supply Management

FISCAL IMPACT:
Less than $1,000

SAN LORENZO VALLEY WATER DISTRICT

RESOLUTION NO. 1 (16-17)

SUBJECT: **MULTIPLE USER VARIANCE RENEWALS FOR 2016/2017**

WHEREAS, the Customer Service Department has completed its annual review of the accounts that have been given a variance from multiple user status as provided in Ordinance 43 and 47; and

WHEREAS, those accounts who qualify for the exemption are charged the $34.00 monthly basic fee as a single family dwelling, while those who are multiple users are charged a $56.50 monthly basic service fee; and

WHEREAS, the Board of Directors has reviewed the multiple users variance list and desires to grant approval of a one-year variance from multiple user status;

NOW THERFORE BE IT RESOLVED by the Board of Directors of the San Lorenzo Valley Water District that the accounts listed on the attached multiple user variance list be granted approval of a one-year variance from multiple user status.

* * * * * * * * * *

PASSED AND ADOPTED by the Board of Directors of the San Lorenzo Valley Water District, County of Santa Cruz, State of CA, on the 21th day of July, 2016 by the following vote of the members thereof:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Holly Morrison, District Secretary
San Lorenzo Valley Water District

M E M O

TO: Board of Directors

FROM: District Manager

PREPARED BY: Finance Manager

SUBJECT: FINANCIAL SUMMARY

DATE: July 8, 2016

RECOMMENDATION:

It is recommended that the Board of Directors review and file the Financial Summary Report.

BACKGROUND:

The District does a hard year end close, through that process there are yearend expenses that are booked in June and not represented in the monthly expenses. There are also monthly reviews of transactions, so it is not un-common for a prior month balance to change slightly throughout the year as accounts are reconciled.

As you can see from the Monthly Usage by Class graph, May consumption is in line with this time of the year. May is typically where we begin to see usage go up as we leave rainy season. The Water Billings graphs show how the rate increase and drought surcharge are helping with the revenue gap.

STRATEGIC PLAN:
Element 1.0 – Water Supply Management

FISCAL IMPACT:
None

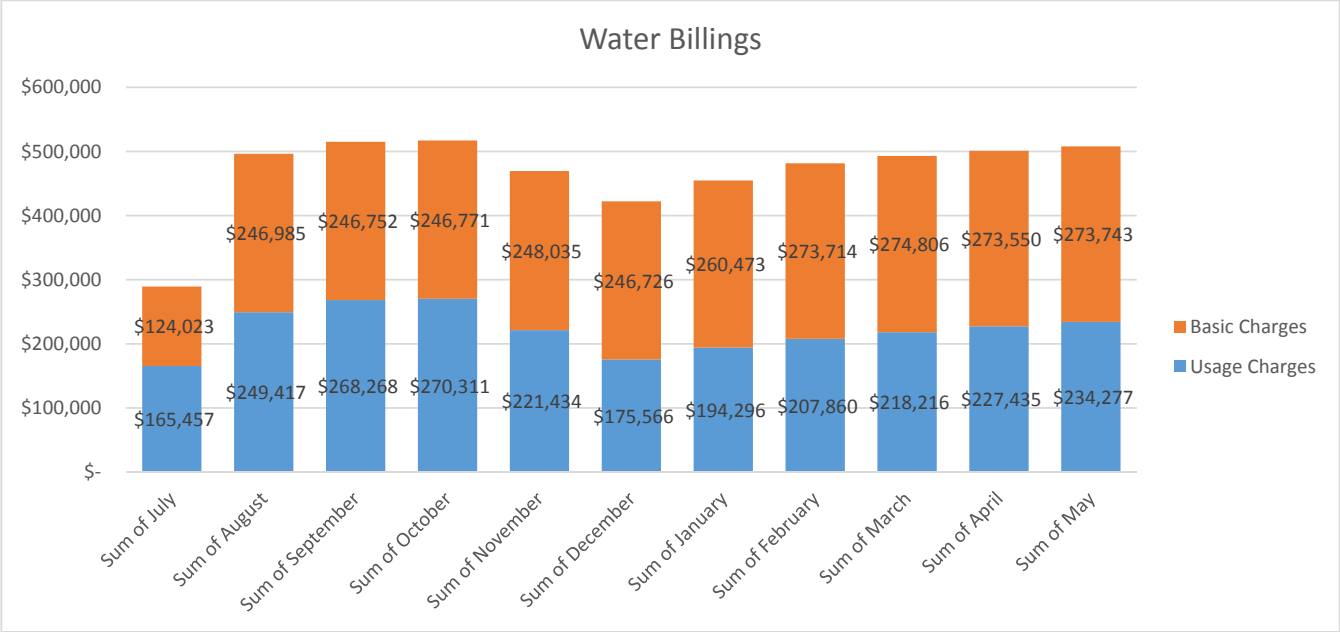
San Lorenzo Valley WATER DISTRICT
13060 Highway 9
Boulder Creek, CA 95006-9119
(831) 338-2153 phone
(831) 338-7986 fax

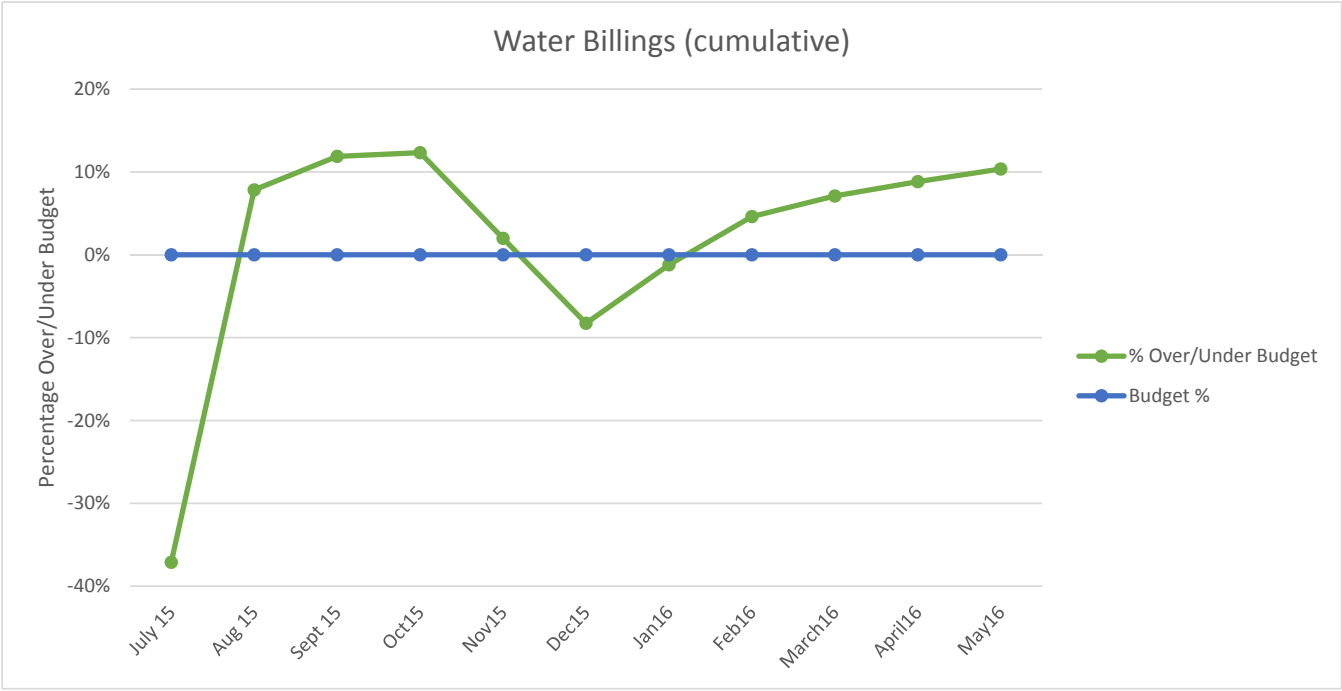
OPERATING INCOME FINANCIAL SUMMARY

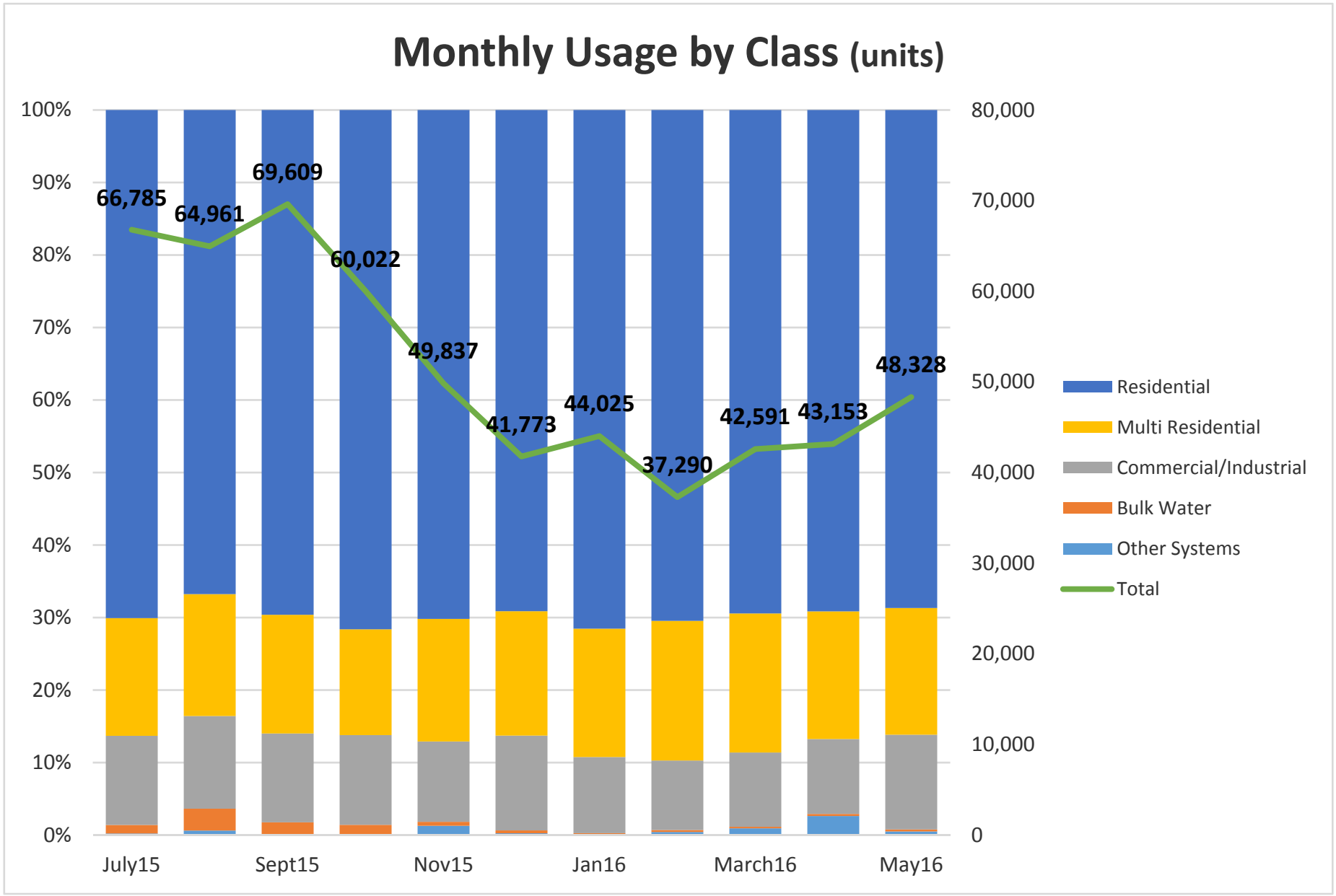
[A]	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	YTD	FY1516 BUDGET	*% of Budget*
OPERATING REVENUE	[B]													
Water Basic	124,023	246,985	246,752	246,771	248,035	246,726	260,473	273,714	274,806	273,550	273,743	2,715,579		
Water Usage	165,457	249,417	268,268	270,311	221,434	175,566	194,296	207,860	218,216	227,435	234,277	2,432,537		
Water Fees	2,610	4,000	9,545	7,740	7,815	7,815	6,600	6,580	6,640	5,060	5,895	70,300		
Water Misc	(4,913)	16,984	13,632	23,405	2,270	14,104	2,234	509	9,215	7,598	18,843	103,883		
Sewer	-	8,209	8,195	8,195	8,195	8,130	8,257	8,195	8,195	8,195	8,200	81,967		
Sewer Misc	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL OPERATING REVENUE	**287,178**	**525,594**	**546,393**	**556,423**	**487,749**	**452,342**	**471,861**	**496,858**	**517,072**	**521,837**	**540,957**	**5,404,265**	**5,710,000**	***94.6%***
OPERATING EXPENSES:														
Salaries & Benefits	428,353	237,421	382,794	247,158	207,562	284,167	211,877	210,379	376,407	320,370	233,434	3,139,922		
Materials & Services	221,432	219,491	100,321	222,557	189,739	163,209	157,470	141,051	149,967	116,398	226,784	1,908,419		
TOTAL OPERATING EXPENSES	**649,785.13**	**456,912.49**	**483,114.41**	**469,715.14**	**397,300.35**	**447,375.50**	**369,347.85**	**351,429.90**	**526,374.44**	**436,768**	**460,218**	**5,048,341**	**5,849,755**	***86.3%***
OPERATING INCOME (LOSS)	**(362,607)**	**68,682**	**63,278**	**86,708**	**90,448**	**4,967**	**102,513**	**145,428**	**(9,302)**	**85,070**	**80,739**	**355,924**	**(139,755)**	***-254.7%***

[A] There are still some journal entries to be made from the conversion of data. For example, Water Misc. in July will not have a negative balance once all journal entries are posted.

[B] The switch to two billing cycles causes July to appear to only have one billing cycle have gone out since the second cycle was billed 8/5/15. This will cause this fiscal year to look off half a cycle since revenue is booked as it is invoiced.

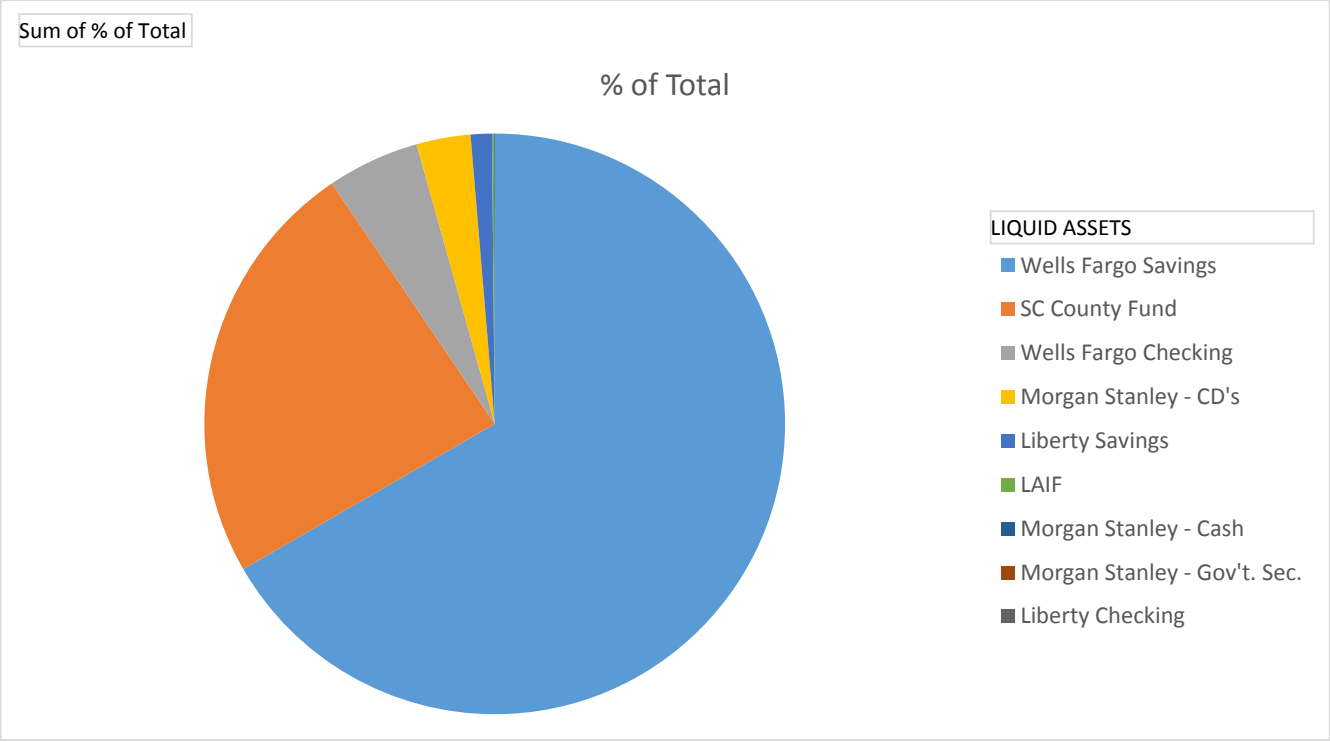

Water Billings
$600,000
$500,000
$400,000
$300,000
$200,000
$100,000
$-
$124,023
$165,457
$246,985
$249,417
$246,752
$268,268
$246,771
$270,311
$248,035
$221,434
$246,726
$175,566
$260,473
$194,296
$273,714
$207,860
$274,806
$218,216
$273,550
$227,435
$273,743
$234,277
Sum of July
Sum of August
Sum of September
Sum of October
Sum of November
Sum of December
Sum of January
Sum of February
Sum of March
Sum of April
Sum of May
Basic Charges
Usage Charges


Water Billings (cumulative)
Percentage Over/Under Budget
20%
10%
0%
-10%
-20%
-30%
-40%
July 15
Aug 15
Sept 15
Oct15
Nov15
Dec15
Jan16
Feb16
March16
April16
May16
% Over/Under Budget
Budget %


Monthly Usage by Class (units)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
66,785
64,961
69,609
60,022
49,837
41,773
44,025
37,290
42,591
43,153
48,328
July15
Sept15
Nov15
Jan16
March16
May16
Residential
Multi Residential
Commercial/Industrial
Bulk Water
Other Systems
Total

AS OF 5/31/16

LIQUID ASSETS	$ Amount	*% of Total*	*Ave Interest Rate*
Wells Fargo Checking	171,894	*5.1%*	*0.180%*
Wells Fargo Savings	2,228,484	*66.7%*	*0.260%*
Liberty Checking	-	*0.0%*	*0.001%*
Liberty Savings	39,456	*1.2%*	*0.150%*
Morgan Stanley - Cash	1,625	*0.0%*	*0.010%*
Morgan Stanley - Gov't. Sec.	-	*0.0%*	*0.010%*
Morgan Stanley - CD's	100,562	*3.0%*	*0.830%*
SC County Fund	797,674	*23.9%*	*0.683%*
LAIF	3,363	*0.1%*	*0.460%*
	$ 3,343,059	*100%*	



Morgan Stanley

CLIENT STATEMENT | For the Period May 1-31, 2016

STATEMENT FOR:
SAN LORENZO VALLEY WATER DIST

Morgan Stanley Smith Barney LLC. Member SIPC.

025094 MSGDD503

#BWNJGWM
00025094 01 AV 0.373 01 TR 00146 MSGDD503 000000
SAN LORENZO VALLEY WATER DIST
13060 HIGHWAY 9
BOULDER CREEK CA 95006-9119

TOTAL VALUE OF YOUR ACCOUNT (as of 5/31/16) **$102,186.54**
Includes Accrued Interest

Your Financial Advisor
Christopher Hoe
Associate Vice President
Christopher.Hoe@morganstanley.com
650 926-7647

Your Branch
6004 LA MADRONA DR
SANTA CRUZ, CA 95060-1040
Telephone: 831-440-5200 ; Alt. Phone: 800-488-3436 ; Fax: 831-440-5201

Client Service Center (24 Hours a Day; 7 Days a Week): 800-869-3326

Access Your Account Online: www.morganstanley.com/online

Standard Disclosures

The following Disclosures are applicable to the enclosed statement(s). Expanded Disclosures are attached to your most recent June and December statement (or your first Statement if you have not received a statement for those months). The Expanded Disclosures are also available by selecting Account Documents when you log on to www.morganstanley.com/online or, call 800-869-3326.

Questions?

Questions regarding your account may be directed to your Financial Advisor or the Branch Manager for the branch office where you maintain your account. If you require further assistance, call Client Service Center at (800) 869-3326 or for account-related concerns call our Client Advocate at (866) 227-2256.

Errors and Inquiries

It is your responsibility to review your statement promptly and to seek immediate clarification about entries that you do not understand or believe were made in error by contacting the Branch Manager of the office where you maintain your account. Oral communications regarding any inaccuracy or discrepancy in this statement should be re-confirmed in writing to further protect your rights, including rights under the Securities Investor Protection Act (SIPA). Your statement will be deemed correct unless we receive a written inquiry of a suspected error. See your account documentation for special rules regarding your rights and responsibilities with respect to erroneous electronic fund transfers, including a description of the transfers covered.

Availability of Free Credit Balances and Financial Statements

Under the customer protection rules of the SEC [17 CFR §240.15c3-3], we may use funds comprising free credit balances carried for customer accounts here, provided that these funds are payable to customers on demand (i.e., are free of a lien or right of set-off in our favor or on behalf of some third party to whom you have given control). A financial statement of this organization is available for your personal inspection at its offices, or a copy will be mailed to you upon your written request.

Listed Options

Information with respect to commissions and other charges related to the execution of options transactions has been included in confirmations of such transactions previously furnished to you and such information will be made available to you promptly at your request. Promptly advise us of any material change in your investment objectives or financial situation.

Important Information if you are a Margin Customer(not available for certain retirement accounts)

If you have margin privileges, you may borrow money from us in exchange for pledging assets in your accounts as collateral for any outstanding margin loan. The amount you may borrow is based on the value of the eligible securities in your margin accounts. If a security has eligible shares, the number of shares pledged as collateral will be indicated below the position.

Margin Interest Charges

We calculate interest charges on margin loans as follows: (1) multiply the applicable margin interest rate by the daily close of business net settled debit balance, and (2) divide by 360 (days). Margin interest accrues daily throughout the month and is added to your debit balance at month-end. The month-end interest charge is the sum of the daily accrued interest calculations for the month. We add the accrued interest to your debit balance and start a new calculation each time the applicable interest rate changes and at the close of every statement month. For interest rate information, log into your Morgan Stanley account at morganstanley.com/online. Select your account with a Margin agreement and click Interest Rates for more information.

Information regarding Special Memorandum Account

If you have a Margin Account, this is a combined statement of your Margin Account and Special Memorandum Account maintained for you under Section 220.5 of Regulation T issued by the Board of Governors of the Federal Reserve System. The permanent record of the Special Memorandum Account as required by Regulation T is available for your inspection at your request.

Important Information About Auction Rate Securities

For certain Auction Rate Securities there is no or limited liquidity. Therefore, the price(s) for these Auction Rate Securities are indicated by N/A (not available). There can be no assurance that a successful auction will occur or that a secondary market exists or will develop for a particular security.

Structured Investments Risks and Considerations

Structured Investments (Structured Products) are complex products and may be subject to special risks. Investors should consider the concentration risk of owning the related security and their total exposure to any underlying asset. Structured Investments, which may appear in various statement product categories and are identified on the Position Description Details line as “Asset Class: Struct Inv,” may not perform in a manner consistent with the statement product category where they appear and therefore may not satisfy portfolio asset allocation needs for that category.

Security Measures

This statement features several embedded security elements to safeguard its authenticity. One is a unique security mark-a blue rectangle printed in heat-sensitive ink on the back of every page. When exposed to warmth, the blue rectangle will disappear, and then reappear.

SIPC Protection

We are a member of Securities Investor Protection Corporation (SIPC), which protects securities of its customers up to $500,000 (including $250,000 for claims for cash). An explanatory brochure is available upon request or at www.sipc.org. Losses due to market fluctuation are not protected by SIPC and assets not held with us may not be covered by SIPC protection. To obtain information about SIPC, including an explanatory SIPC brochure, contact SIPC at 1-202-371-8300 or visit www.sipc.org.

Transaction Dates and Conditions

Upon written request, we will furnish the date and time of a transaction and the name of the other party to a transaction. We and/or our affiliates may accept benefits that constitute payment for order flow. Details regarding these benefits and the source and amount of any other remuneration received or to be received by us in connection with any transaction will be furnished upon written request.

Equity Research Ratings Definitions and Global Investment Manager Analysis Status

Some equity securities may have research ratings from Morgan Stanley & Co. LLC or Standard & Poor’s. Research ratings are the research providers’ opinions and not representations or guarantees of performance. For more information about each research provider's rating system, see the Research Ratings on your most recent June or December statement (or your first statement if you have not received a statement for those months), go to www.morganstanley.com/online or refer to the research provider’s research report. Research reports contain more complete information concerning the analyst's views and you should read the entire research report and not infer its contents from the rating alone. If your account contains an advisory component or is an advisory account, a GIMA status will apply.

Credit Ratings from Moody's Investors Service and Standard & Poor's

The credit rating from Moody's Investors Service and Standard & Poor's may be shown for certain securities. All credit ratings represent the opinions of the provider and are not representations or guarantees of performance. Your Financial Advisor will be pleased to provide you with further information or assistance in interpreting these credit ratings.

Revised 03/2016

Account Summary

Basic Securities Account
136-022962-098

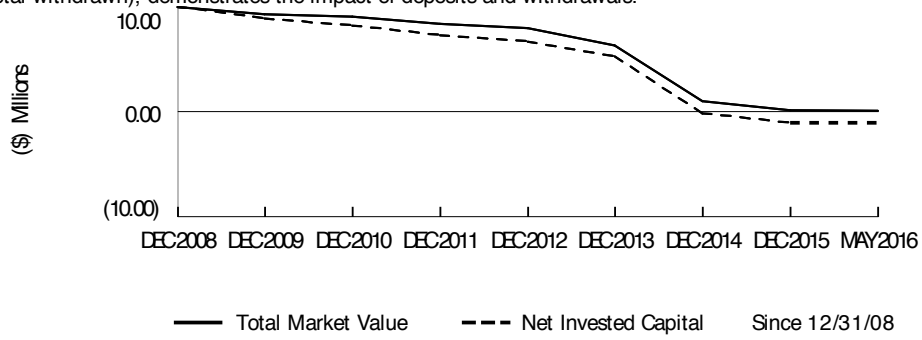
SAN LORENZO VALLEY WATER DIST
13060 HIGHWAY 9

CHANGE IN VALUE OF YOUR ACCOUNTS (includes accrued interest)

	This Period (5/1/16-5/31/16)	This Year (1/1/16-5/31/16)
TOTAL BEGINNING VALUE	**$102,126.78**	**$136,780.83**
Credits	—	—
Debits	—	(35,000.00)
Security Transfers	—	—
Net Credits/Debits/Transfers	**—**	**$(35,000.00)**
Change in Value	**59.76**	**405.71**
TOTAL ENDING VALUE	**$102,186.54**	**$102,186.54**

CHANGE IN VALUE OVER TIME

The display of market value (total account value) and net invested capital (total amount invested minus total withdrawn), demonstrates the impact of deposits and withdrawals.

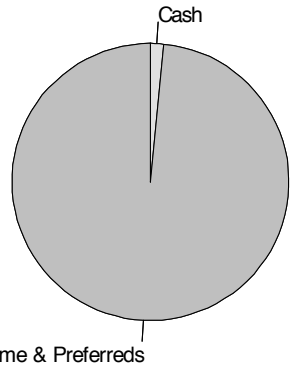


This graph does not reflect corrections to Net Invested Capital or Market Value made subsequent to the dates depicted. It may exclude transactions in Annuities or positions where we are not the custodian, which could delay the reporting of Market Value or affect the Net Invested Capital.

ASSET ALLOCATION (includes accrued interest)

	Market Value	Percentage
Cash	$1,624.69	1.59
Fixed Income & Preferreds	100,561.85	98.41
TOTAL VALUE	**$102,186.54**	**100.00%**

FDIC rules apply and Bank Deposits are eligible for FDIC insurance but are not covered by SIPC. Cash and securities (including MMFs) are eligible for SIPC coverage. See Expanded Disclosures.
Values may include assets externally held, which are provided to you as a courtesy, and may not be covered by SIPC. For additional information, refer to the corresponding section of this statement.



This asset allocation represents holdings on a trade date basis, and projected settled Cash/ BDP and MMF balances. These classifications do not constitute a recommendation and may differ from the classification of instruments for regulatory or tax purposes.

Morgan Stanley

Account Summary

Basic Securities Account
136-022962-098

SAN LORENZO VALLEY WATER DIST
13060 HIGHWAY 9

BALANCE SHEET (^ includes accrued interest)

	Last Period (as of 4/30/16)	This Period (as of 5/31/16)
Cash, BDP, MMFs	$1,460.29	$1,624.69
Certificates of Deposit^	100,666.49	100,561.85
Total Assets	**$102,126.78**	**$102,186.54**
Total Liabilities (outstanding balance)	—	—
TOTAL VALUE	**$102,126.78**	**$102,186.54**

INCOME AND DISTRIBUTION SUMMARY

	This Period (5/1/16-5/31/16)	This Year (1/1/16-5/31/16)
Interest	$164.40	$1,023.34
Total Taxable Income And Distributions	**$164.40**	**$1,023.34**
Total Tax-Exempt Income	**—**	**—**
TOTAL INCOME AND DISTRIBUTIONS	**$164.40**	**$1,023.34**

Taxable and tax exempt income classifications are based on the characteristics of the underlying securities and not the taxable status of the account.

CASH FLOW

	This Period (5/1/16-5/31/16)	This Year (1/1/16-5/31/16)
OPENING CASH, BDP, MMFs	**$1,460.29**	**$601.35**
Sales and Redemptions	—	35,000.00
Income and Distributions	164.40	1,023.34
Total Investment Related Activity	**$164.40**	**$36,023.34**
Electronic Transfers-Debits	—	(35,000.00)
Total Cash Related Activity	**—**	**$(35,000.00)**
CLOSING CASH, BDP, MMFs	**$1,624.69**	**$1,624.69**

GAIN/(LOSS) SUMMARY

	Realized This Period (5/1/16-5/31/16)	Realized This Year (1/1/16-5/31/16)	Unrealized Inception to Date (as of 5/31/16)
Long-Term Gain	—	—	$406.00

The Gain/(Loss) Summary, which may change due to basis adjustments, is provided for informational purposes and should not be used for tax preparation. Refer to Gain/(Loss) in the Expanded Disclosures.

Account Detail

Basic Securities Account
136-022962-098

SAN LORENZO VALLEY WATER DIST
13060 HIGHWAY 9

Investment Objectives†: Capital Appreciation, Income, Aggressive Income, Speculation

Brokerage Account

† Inform us if your investment objectives, as defined in the Expanded Disclosures, change.

HOLDINGS

This section reflects positions purchased/sold on a trade date basis. "Market Value" and "Unrealized Gain/(Loss)" may not reflect the value that could be obtained in the market. Fixed Income securities are sorted by maturity or pre-refunding date, and alphabetically within date. Estimated Annual Income a) is calculated on a pre-tax basis, b) does not include any reduction for applicable non-US withholding taxes, c) may include return of principal or capital gains which could overstate such estimates, and d) for securities that have a defined maturity date within the next 12 months, is reflected only through maturity date. Actual income or yield may be lower or higher than the estimates. Current yield reflects the income generated by an investment, and does not reflect changes in its price. Structured Investments, identified on the Position Description Details line as "Asset Class: Struct Inv," may appear in various statement product categories. When displayed, the accrued interest, annual income and current yield for those with a contingent income feature (e.g., Range Accrual Notes or Contingent Income Notes) are estimates and assume specified accrual conditions are met during the relevant period and payment in full of all contingent interest. For Floating Rate Securities, the accrued interest, annual income and current yield are estimates based on the current floating coupon rate and may not reflect historic rates within the accrual period.

CASH, BANK DEPOSIT PROGRAM AND MONEY MARKET FUNDS

Cash, Bank Deposit Program, and Money Market Funds are generally displayed on a settlement date basis. You have the right to instruct us to liquidate your bank deposit balance(s) or shares of any money market fund balance(s) at any time and have the proceeds of such liquidation remitted to you. Estimated Annual Income, Accrued Interest, and APY% will only be displayed for fully settled positions.

Description	Market Value	7-Day Current Yield %	Est Ann Income	APY%
MORGAN STANLEY BANK N.A. #	**$1,624.69**	—	—	0.010

	Percentage of Holdings	Market Value	Est Ann Income
CASH, BDP, AND MMFs	**1.59%**	**$1,624.69**	**$0.00**

 # Bank Deposits are held at Morgan Stanley Bank, N.A. and/or Morgan Stanley Private Bank, National Association, affiliates of Morgan Stanley Smith Barney LLC and each a national bank and FDIC member.

CERTIFICATES OF DEPOSIT

Security Description	Trade Date	Face Value	Orig Unit Cost / Adj Unit Cost	Unit Price	Orig Total Cost / Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income / Accrued Interest	Current Yield %
WORLD FINANCIAL NETWORK BANK (JUMBO) WILMINGTON DE	9/13/11	100,000.000	$100.000	$100.406	$100,000.00			$667.00	0.66
CD			$100.000		$100,000.00	**$100,406.00**	$406.00 LT	$155.85	

Coupon Rate 2.000%; Matures 09/21/2016; CUSIP 981999U11

Interest Paid Monthly Oct 02; Yield to Maturity .668%; Issued 09/21/11; Maturity Value = $100,000.00; Asset Class: FI & Pref

025094 MSGDD503

Account Detail

Basic Securities Account
136-022962-098

SAN LORENZO VALLEY WATER DIST
13060 HIGHWAY 9

	Percentage of Holdings	Face Value	Orig Total Cost / Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income / Accrued Interest	Current Yield %
CERTIFICATES OF DEPOSIT		**100,000.000**	**$100,000.00** **$100,000.00**	**$100,406.00**	**$406.00 LT**	**$667.00** **$155.85**	**0.66%**
TOTAL CERTIFICATES OF DEPOSIT (includes accrued interest)	**98.41%**			**$100,561.85**			

	Percentage of Holdings	Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income / Accrued Interest	Current Yield %
TOTAL MARKET VALUE		**$100,000.00**	**$102,030.69**	**$406.00 LT**	**$667.00** **$155.85**	**0.65%**
TOTAL VALUE (includes accrued interest)	**100.00%**		**$102,186.54**			

Unrealized Gain/(Loss) totals only reflect positions that have both cost basis and market value information available. Cash, MMF, Deposits and positions stating 'Please Provide' are not included.

ALLOCATION OF ASSETS (^ includes accrued interest)

	Cash	Equities	Fixed Income & Preferred Securities	Alternatives	Annuities & Insurance	Structured Investments	Other
Cash, BDP, MMFs	$1,624.69	—	—	—	—	—	—
Certificates of Deposit^	—	—	$100,561.85	—	—	—	—
TOTAL ALLOCATION OF ASSETS^	**$1,624.69**	**—**	**$100,561.85**	**—**	**—**	**—**	**—**

ACTIVITY

CASH FLOW ACTIVITY BY DATE

Activity Date	Settlement Date	Activity Type	Description	Comments	Quantity	Price	Credits/(Debits)
5/2		Interest Income	WORLD JUMBO CD 2000 16SP21	CUSIP: 981999U11			$164.38
5/31		Interest Income	MORGAN STANLEY BANK N.A. (Period 05/01-05/31)				0.02
NET CREDITS/(DEBITS)							**$164.40**

Account Detail

Basic Securities Account
136-022962-098

SAN LORENZO VALLEY WATER DIST
13060 HIGHWAY 9

MONEY MARKET FUND (MMF) AND BANK DEPOSIT PROGRAM ACTIVITY

Activity Date	Activity Type	Description	Credits/(Debits)
5/2	Automatic Investment	BANK DEPOSIT PROGRAM	$164.38
5/31	Automatic Investment	BANK DEPOSIT PROGRAM	0.02
NET ACTIVITY FOR PERIOD			**$164.40**

REALIZED GAIN/(LOSS) DETAIL

LONG-TERM GAIN/(LOSS)

Security Description	Date Acquired	Date Sold	Quantity	Sales Proceeds	Orig / Adj Total Cost	Realized Gain/(Loss)	Comments
COLE TAYLOR BANK 2.150 1-12-16	01/06/11	01/12/16	35,000.000	$35,000.00	$35,000.00	$0.00	
Long-Term This Period				**$0.00**	**$0.00**	**$0.00**	
Long-Term Year to Date				**$35,000.00**	**$35,000.00**	**$0.00**	
Net Realized Gain/(Loss) This Period				**$0.00**	**$0.00**	**$0.00**	
Net Realized Gain/(Loss) Year to Date				**$35,000.00**	**$35,000.00**	**$0.00**	

Treasury regulations require that we report on Form 1099-B a) adjusted cost basis on the sale of covered securities acquired on or after 1/1/11 (or the applicable date for the type of security), b) the gain or loss as either long-term or short-term, and c) basis adjustments on covered securities due to wash sales, certain corporate actions and transfers by gift or inheritance. This section may not reflect all the basis adjustments required when filing your tax return. Refer to the Expanded Disclosures.

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Local Agency Investment Fund
P.O. Box 942809
Sacramento, CA 94209-0001
(916) 653-3001

SAN LORENZO VALLEY WATER DISTRICT

DISTRICT MANAGER
13060 HIGHWAY 9
BOULDER CREEK, CA 95006

PMIA Average Monthly Yields

Tran Type Definitions

May 2016 Statement

Account Summary

Total Deposit:	0.00	Beginning Balance:	3,362.69
Total Withdrawal:	0.00	Ending Balance:	3,362.69

G/L Balances

Criteria: As Of = 5/31/2016; Fund = 76644

G/L Account	Title	Beginning Balance	Year-To-Date Debits	Year-To-Date Credits	End Balance
Fund 76644 -- SAN LORENZO VALLEY WATER TRUST					
101	EQUITY IN POOLED CASH	256,226.11	1,055,642.90	(514,194.59)	797,674.42
201	VOUCHERS PAYABLE (VENDOR)	0.00	500,000.00	(500,000.00)	0.00
220	DEFERRED CREDITS	0.00	0.00	(500,000.00)	(500,000.00)
344	Fund Balance	(256,226.11)	514,325.72	(555,774.03)	(297,674.42)
Total Fund 76644		0.00	2,069,968.62	(2,069,968.62)	0.00

M E M O

TO: Board of Directors

FROM: District Manager

PREPARED BY: Finance Manager

SUBJECT: ONE TIME LEAK ADJUSTMENT STATUS REPORT

DATE: July 8, 2016

San Lorenzo Valley Water District realizes that leaks occasionally occur that will cause the customer's bill to be extraordinarily high. The District adopted Ordinance No. 85 (and amended by Ordinance Nos. 97, 101 and 102) to assist customers with a one-time leak adjustment per account. To obtain a one-time leak adjustment, the customer must submit a written leak adjustment request. After review and approval, adjustments can be made to the customer's account.

During the time frame from April 1, 2016 to June 30, 2016, there were 13 leak adjustments processed. Typical to this time frame are leaks associated with irrigation systems beginning to be used. I do not know exactly how many of these were due to that, but I do know a few of them were.

STRATEGIC PLAN:
Element 6.0 – Public Affairs

FISCAL IMPACT:
$2,274

Utility Billing

Transactions by Date

LEAK ADJUSTMENT - Q4 2016

13060 Highway 9
Boulder Creek, CA 95006-9119
(831) 338-2153 phone
(831) 338-7986 fax

Date Range: From: 04/01/2016 To: 06/30/2016
Batch Type: Adj & Fees
Billing Cycle: 001, 002, 999

Account No / Reference No	Journal Entry Date / Tran Type	Amount	Units Above Ave.
LEAK			
005502-000	05/17/2016	$ (149.25)	50
120202000	Adjustment		
005699-000	05/17/2016	$ (91.39)	38
140685000	Adjustment		
005786-000	05/17/2016	$ (202.02)	84
210039001	Adjustment		
007342-000	06/16/2016	$ (104.48)	35
280010000	Adjustment		
012508-000	05/17/2016	$ (179.10)	60
860650004	Adjustment		
012550-000	05/17/2016	$ (413.66)	172
860692002	Adjustment		
008331-000	05/04/2016	$ (313.43)	105
510043003	Adjustment		
008590-000	05/17/2016	$ (146.27)	49
520260003	Adjustment		
008591-001	05/04/2016	$ (98.51)	33
660798000	Adjustment		
009388-000	05/17/2016	$ (146.71)	61
610049000	Adjustment		
009459-000	05/17/2016	$ (132.28)	55
610099002	Adjustment		
010923-000	05/24/2016	$ (161.19)	54
720260001	Adjustment		
011659-000	05/17/2016	$ (135.36)	48
750871002	Adjustment		
LEAK TOTAL		**$ (2,273.65)**	**844**
# Leak Adj		**13**	
FY1516 YTD Totals		**$ (10,848.79)**	
# Leak Adj		**54**	

In accordance with District Ordinance 85, authorizing water bill adjustments adopted October 10, 1991 and amended by Ordinance 97 adopted April 20, 2000, Ordinance 101 adopted January 6, 2005 and Ordinance 102 adopted March 3, 2005, District staff has adjusted the above accounts for the period stated above.

MEMO

TO: Board of Directors

FROM: District Manager

WRITTEN BY: Director of Operations

DATE: July 13, 2016

SUBJECT: Acceptance of Water Distribution Improvements APN 082-343-16, 199 Hillside Street, Boulder Creek

RECOMMENDATION:

It is recommended that the Board of Directors review and approve the attached resolution accepting the main line extension and appurtenances as property of the District.

BACKGROUND:

On May 7, 2015 the Board of Directors approved Resolution No. 46 (14-15) Agreement for Water Distribution System Improvements APN 082-343-16, 199 Hillside Street, Boulder Creek.

Construction of the mainline and appurtenances has been inspected and completed in accordance with the agreement. The Board needs to adopt the attached Resolution accepting improvements as property of the District.

FISCAL IMPACT:
None

STRATEGIC ELEMENT:
1.0 – Water Supply Management

SAN LORENZO VALLEY WATER DISTRICT
RESOLUTION NO. 4 (16-17)

SUBJECT: **RESOLUTION FOR WATER DISTRIBUTION SYSTEM IMPROVEMENTS, APN 082-343-16**

WHEREAS, Anne M. Hanson and Lauretta Kaefer requested water service to their home APN 082-343-16, 199 Hillside Street, Boulder Creek; and

WHEREAS, to provide water service a water main extension was required; and

WHEREAS, May 7, 2015 the District adopted Resolution 46 (14-15) entering into an agreement for water distribution improvements at that location; and

WHEREAS, in June 2016 the water distribution system improvements were installed and inspected by the District in accordance with subject agreement;

NOW THEREFORE BE IT RESOLVED that the Board of Directors accepts as property of the District, water system improvements to 199 Hillside Street, Boulder Creek.

* * * * * * * * * * * *

PASSED AND ADOPTED by the Board of Directors of the San Lorenzo Valley Water District, County of Santa Cruz, State of California, on the 21st day of July, 2016, by the following vote of the members thereof:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Holly Morrison, District Secretary
San Lorenzo Valley Water District

SAN LORENZO VALLEY WATER DISTRICT
RESOLUTION NO. 46 (14-15)

SUBJECT: **RESOLUTION FOR WATER DISTRIBUTION SYSTEM IMPROVEMENTS, APN 082-343-16**

WHEREAS, Anne M. Hansen and Lauretta Kaefer, the owners of APN 082-343-16 desire domestic water service from the District and to install approximately 135 feet of 2" polyethylene water main required to provide that water service; and

WHEREAS, staff has determined that the cost of said installation and materials for said 2" water main extension should be the property owner's responsibility; and

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the San Lorenzo Valley Water District hereby agrees to the installation of approx. 135 feet of 2" polyethylene water main to APN 082-343-16. The cost of said installation and materials for said 2" water main extension should be the property owner's responsibility. The District Manager is hereby authorized and directed to execute said agreement between the District and Anne M. Hanson and Lauretta Kaefer and carry out all necessary actions to fulfill said agreement.

* * * * * * * * * * * *

PASSED AND ADOPTED by the Board of Directors of the San Lorenzo Valley Water District, County of Santa Cruz, State of California, on the 7th day of May, 2015, by the following vote of the members thereof:

AYES: Baughman, Hammer, Bruce, Brown, Ratcliffe
NOES:
ABSTAIN:
ABSENT:

_____
Holly Morrison
District Secretary
San Lorenzo Valley Water District

Recorded by and for the
Benefit of:
SAN LORENZO VALLEY
WATER DISTRICT

And when recorded mail to:
Rob Menzies
Engineering Department
13060 Highway 9
Boulder Creek CA 95006-9119

AGREEMENT FOR INSTALLATION OF WATER DISTRIBUTION FACILITIES FOR APN 082-343-16

THIS DOCUMENT IS EXEMPT, FROM CALIFORNIA DOCUMENTARY TRANSFER TAX, TRANSFER TAX IS $0.00, PURSUANT TO SECTION 11929 OF THE CALIFORNIA REVENUE TAXATION CODE. THIS DOCUMENT IS EXEMPT FROM RECORDING FEES PURSUANT TO SECTION 27838 OF THE CALIFORNIA GOVERNMET CODE.

THIS AGREEMENT is made this_____day of_____, 2015, by and between the SAN LORENZO VALLEY WATER DISTRICT, hereinafter referred to as "DISTRICT" and ANNE M. HANSON AND LAURETTA KAEFER, hereinafter referred to as "APPLICANT."

W I T N E S S E T H

WHEREAS, APPLICANT desires to obtain water service for a APN 082-343-16; and

WHEREAS, APPLICANT'S property is located within the boundaries of the San Lorenzo Valley Water District at 199 Hillside St., Boulder Creek, California; and

WHEREAS, a two-inch water main extension is needed to provide water service to APN 082-343-16; and

WHEREAS, DISTRICT code requires the extension of a water main along the road right of way to the parcel;

NOW, THEREFORE, in consideration of their mutual promises, obligations and covenants hereinafter contained, the parties hereto agree as follows:

1. TERM. The term of this Agreement shall be from the date this Agreement

is made and entered, as first written above, until two (2) years after date of this Agreement. This Agreement may be extended in writing by the District Manager. This extension shall not exceed one (1) year.

APPLICANT'S OBLIGATIONS

2. TIME OF INSTALLATION. APPLICANT agrees that the water main and facilities shall be installed within two (2) years of the date of this Agreement. Should the work not be so completed, this Agreement shall become void. Any refund of connection charges and deposit will be made in accordance with the DISTRICT'S rules, regulations and specifications.

3. PAYMENT. APPLICANT shall pay the cost of the complete installation and inspection of the water main, and all appurtenances as detailed herein.

4. PAYMENT FOR WATER SERVICES. The fee for the new water service connection is based upon the size of the meter to be installed in accordance with the following schedule:

a)	Connection Charge for (5/8" meter)	$ 4,966.00
b)	Meter Installation Charge	90.00
c)	Account Deposit	75.00
d)	Account Establishment	20.00
e)	Inspection Deposit	500.00
	Total Fees	$ 5,651.00

Additional connection fees shall be required should the plumbing plan of actual house require larger meter in compliance with DISTRICT code. Any additional connection fee shall be in accordance with the fee schedule in effect at the time of plan submittal. APPLICANT shall submit required plumbing plans prior to request for service.

5. DESCRIPTION OF FACILITIES. APPLICANT or APPLICANT'S designated agent shall install at their own expense approximately ± 135 lineal feet of two inch high density polyethylene water main (SDR 11) and appurtenances as shown on the map marked Exhibit A attached hereto and by this reference incorporated herein. Payment of standby fees for the water service connection stub-out shall begin upon installation, and shall be paid by APPLICANT.

6. EASEMENTS. All necessary easements required are the responsibility of APPLICANT, and must be submitted, reviewed, approved and accepted by DISTRICT. The necessary easements shall be recorded with the County of Santa Cruz prior to construction of water mains and appurtenances.

7. DRAWING OF WATER DISTRIBUTION FACILITIES. DISTRICT shall provide a drawing layout of these water distribution facilities. The drawing shall include a plan view drawing, appropriate notes and titles, details, and all existing and proposed underground utilities. DISTRICT shall furnish plans and specifications to APPLICANT for bidding purposes.

8. DEPOSIT FOR DISTRICT COSTS. APPLICANT shall pay to DISTRICT the full amount of all DISTRICT costs incurred in connection with or directly attributable to APPLICANT'S work. Within thirty (30) calendar days of execution of this Agreement, APPLICANT shall deposit with DISTRICT the sum of $500.00. Said sum is a deposit for the estimated cost of DISTRICT inspection service expenses to be incurred by DISTRICT pursuant to this Agreement. Should the actual costs of inspection service expenses incurred by DISTRICT be in excess of the deposit, APPLICANT shall pay the amount of such excess to DISTRICT within thirty (30) calendar days of said demand. The demand shall be accompanied by an accounting of DISTRICT expenses. Should DISTRICT expenses be less than the amount deposited, DISTRICT shall refund to APPLICANT the difference upon completion of the work and its acceptance by DISTRICT. DISTRICT shall pay APPLICANT any sums due pursuant to this Article within thirty (30) calendar days of acceptance by the DISTRICT.

9. OWNERSHIP. All of the improvements shall, after inspection by the DISTRICT and acceptance by its Board of Directors, become the property of the DISTRICT and, except as hereinafter provided, shall thereafter be maintained by DISTRICT. However, prior to acceptance, APPLICANT or APPLICANT'S contractor, shall deposit with the DISTRICT a bond, with the DISTRICT named as additional insured, in an amount equal to ten percent (10%) of the total cost of construction as certified by APPLICANT, to be maintained in full force and effect for a period of one (1) year after the acceptance of the improvements, to protect and insure the DISTRICT against losses or damages resulting from defective materials and workmanship on the project for the one (1) year period.

10. HOLD HARMLESS. Except to the extent caused by the willful misconduct of DISTRICT, APPLICANT agrees that they shall assume the defense of, and indemnify and save harmless the DISTRICT and its officers, agents and employees from all suits, actions, damages or claims of every name and description, to which the DISTRICT may be subjected or put by reason of damage or injury to persons or property arising out of or

resulting from this Agreement, including, but not limited to, the execution of the work; the negligence or carelessness on the part of the APPLICANT, their agents or employees; or by or on account of any act or omission of APPLICANT, their agents or employees, including any failure to fulfill the terms of all laws and regulations which apply to this Agreement.

11. INSURANCE. APPLICANT or APPLICANT'S contractor shall provide evidence of adequate Worker's Compensation and $1,000,000 in Liability Insurance, prior to the start of construction, which shall be maintained in full force and effect until the improvements are accepted by the DISTRICT, and which would provide sufficient limits of liability for defense and indemnification of the DISTRICT. The DISTRICT shall be named as an additional insured on a certificate of insurance for this project with the thirty (30) day cancellation notice to DISTRICT, mailed with return receipt requested.

12. SPECIFICATIONS. All work and related improvement thereto shall be in conformance with DISTRICT'S construction standards.

13. FEES. APPLICANT shall pay all fees incurred by APPLICANT or the DISTRICT which are due to this installation of water distribution facilities.

14. ADDITIONAL CONNECTION FEE. At any time in the future should additional dwelling units be added to the subject parcel, additional connection fees shall be collected by the DISTRICT and paid by APPLICANT in accordance with DISTRICT ordinance. APPLICANT shall not connect any additional dwelling units to this service without prior written approval of the DISTRICT.

15. COMPLIANCE. APPLICANT shall comply with all other DISTRICT rules, regulations or ordinance not expressly waived by this agreement.

DISTRICT'S OBLIGATIONS

16. INSPECTION. The DISTRICT shall provide inspection during the course of construction and a final inspection to insure compliance with DISTRICT'S standards. The costs of said inspection services shall be borne by APPLICANT, in accordance with existing DISTRICT policy. All work shall be subject to inspection by the DISTRICT, as provided for in the DISTRICT'S rules and regulations, and in the event a dispute arises, the decision of the DISTRICT shall be final.

17. MAINTENANCE AND OPERATION. After the installation has been completed and the main and facilities have been accepted by the DISTRICT, all mains, facilities and appurtenances so installed shall be the property of the DISTRICT and part

of its system, and thereafter the DISTRICT may make extensions therefrom and laterals thereto at any point thereon. The DISTRICT agrees that upon the acceptance of the main extension, the DISTRICT shall operate, maintain, and manage the same as part of its system, subject to the DISTRICT'S rules and regulations and to the rates and charges the DISTRICT establishes from time to time.

18. NOTICE. All written notices to the parties hereto shall be sent United States mail, postage prepaid by registered mail, return receipt requested, addressed as follows:

DISTRICT:
Brian C. Lee, District Manager
San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek CA 95006-9119
(831) 338-2153

APPLICANTS:
Anne M. Hanson
42 McLellan Ave
San Mateo, CA 94403
(650) 200-6325

Lauretta Kaefer
38695 Chrisholm
Fremont, CA 94536

Changes to the above addresses and persons can be made by the same form of notice.

19. INCORPORATION BY REFERENCE. The DISTRICT'S Specifications are hereby incorporated in and made a part of this Agreement.

20. APPLICANT'S PARCEL. APPLICANT'S parcel number is 082-343-16.

21. AUTHORITY TO EXECUTE AGREEMENT. Both DISTRICT and APPLICANT do covenant that each individual executing this Agreement on behalf of each party is a person duly authorized and empowered to execute Agreement for such party. Signature by APPLICANT or her agent in this Agreement shall be notarized and shall make the APPLICANT or her agent personally liable for any unpaid costs. APPLICANT agrees to pay all legal fees necessary in recovering any unpaid balance.

SAN LORENZO VALLEY WATER DISTRICT:

_____
Brian C. Lee
District Manager
San Lorenzo Valley Water District

APPLICANTS:

_____
Anne M. Hanson
42 McLellan Ave
San Mateo, CA. 94403

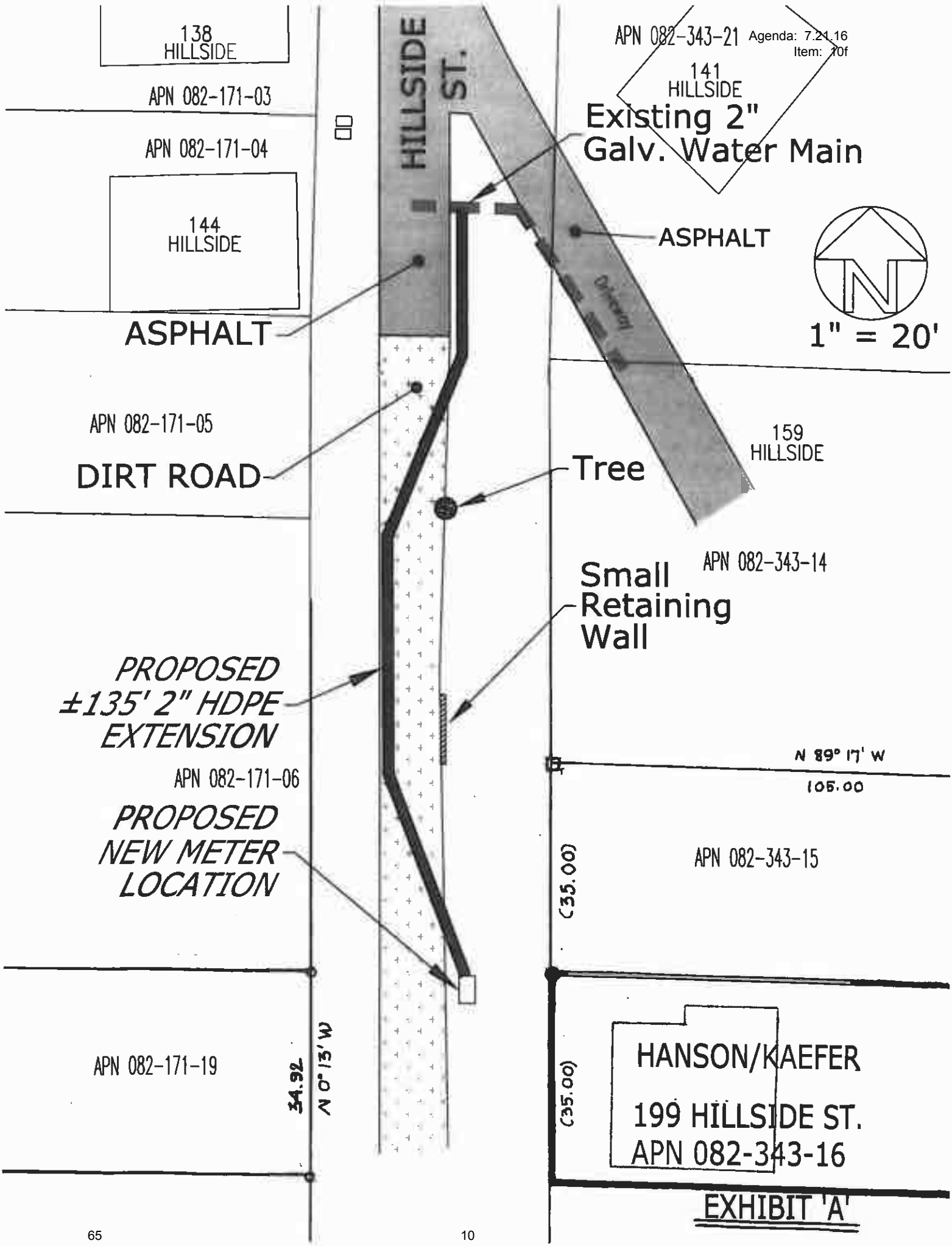
_____
Lauretta Kaefer

38695 Chrisholm
Fremont, CA 94536

Attest:

_____

District Secretary
San Lorenzo Valley Water District


138
HILLSIDE
APN 082-171-03
APN 082-171-04
144
HILLSIDE
ASPHALT
APN 082-171-05
DIRT ROAD
APN 082-171-06
PROPOSED
NEW METER
LOCATION
APN 082-171-19
34.92
N 0° 13' W
HILLSIDE ST.
APN 082-343-21
141
HILLSIDE
Existing 2"
Galv. Water Main
ASPHALT
Overhead
159
HILLSIDE
Tree
APN 082-343-14
Small
Retaining
Wall
PROPOSED
±135' 2" HDPE
EXTENSION
N 89° 17' W
105.00
(35.00)
APN 082-343-15
(35.00)
HANSON/KAEFER
199 HILLSIDE ST.
APN 082-343-16
EXHIBIT 'A'
N
1" = 20'

MEMO

TO: Board of Directors

FROM: District Manager

PREPARED BY: Environmental Programs Manager

SUBJECT: UPDATE: 2015 Urban Water Management Plan (UWMP)

DATE: July 21, 2016

RECOMMENDATION:
It is recommend that the Board of Directors review this memo, review the attached documentation and note that the Notice of Intent to Adopt the 2015 Urban Water Management Plan has been distributed to all neighboring agencies (distribution list attached).

BACKGROUND
Urban Water Management Plans are prepared by California's urban water suppliers to support their long-term resource planning, and ensure adequate water supplies are available to meet existing and future water demands.

Every urban water supplier that either provides over 3,000 acre-feet of water annually, or serves more than 3,000 urban connections is required to assess the reliability of its water sources over a 20-year planning horizon, and report its progress on 20% reduction in per-capita urban water consumption by the year 2020, as required in the Water Conservation Bill of 2009 SBX7-7.

On July 11, 2016 staff distributed notifications to all neighboring agencies with an official notice of preparation and intent to adopt the 2015 UWMP in an effort to encourage collaboration with interested agencies. The letter and distribution list are attached.

CWC 10621
Every urban water supplier required to prepare a plan shall… at least 60 days prior to the public hearing on the plan … notify any city or county within which the supplier provides waters supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.

It is expected a draft of the UWMP will be available for review in August 2016.

2015 STRATEGIC PLAN:
Strategic Element 1.0 – Water Supply Management
Strategic Element 2.0 – Watershed Stewardship

FISCAL IMPACT:
Department: 01 – Administration
Account: 5020, Contract/Professional Services
Cost: $43,099 up to $55, 499
Budgeted: $10,000

SAN LORENZO VALLEY WATER DISTRICT
13060 Highway 9 • Boulder Creek, CA 95006-9119
Office (831) 338-2153 • Fax (831) 338-7986
Website: www.slvwd.com

July 11, 2016

5th District Supervisor
Bruce McPherson
SC County Board of Supervisors
701 Ocean Street, Rm. 500
Santa Cruz, CA 95060

Subject: San Lorenzo Valley Water District 2015 Urban Water Management Plan

Dear Supervisor McPherson:

San Lorenzo Valley Water District (District) is in the process of preparing its 2015 Urban Water Management Plan (UWMP) as required by the Urban Water Management Planning Act (UWMP Act). The UWMP Act requires the District to notify cities and counties within its service areas that it is preparing its 2015 UWMP 60 days prior to holding a public hearing thereby encouraging public involvement and agency coordination. The District will notice the specific date, time, and location of this public hearing two weeks prior to its occurrence.

This letter serves as your official notice of preparation and intent to adopt the UWMP. A draft of the UWMP will be available for review in August 2016. Until that time, if you have any questions or comments regarding the District's 2015 UWMP please contact Water Systems Consulting, Inc., the consultant responsible for the preparation of the UWMP at:

Water Systems Consulting, Inc.
Attn. Spencer Waterman, Staff Planner
3765 South Higuera St. Suite 102
San Luis Obispo, California 93401
(805) 457-8833 ext. 102
swaterman@wsc-inc.com

Sincerely,

Jen Michelsen
Environmental Programs Manager
San Lorenzo Valley Water District

2015 UWMP Distribution List

5th District Supervisor
Bruce McPherson
SC County Board of Supervisors
701 Ocean Street, Rm. 500
Santa Cruz, CA 95060

John Ricker
Environmental Health Services
Santa Cruz County
701 Ocean Street, Room 312
Santa Cruz, CA 95060

Chris Berry
Watershed Compliance Manager
City of Santa Cruz Water Department
715 Graham Hill Road
Santa Cruz, CA 95060

Rosemary Menard
Water Director
City of Santa Cruz Water Department
212 Locust Street, Suite A
Santa Cruz, CA 95060

Toby Goddard
Water Conservation Manager
City of Santa Cruz Water Department
212 Locust Street, Suite B
Santa Cruz, CA 95060

Jim Moore
General Manager
Big Basin Water Company
P.O. Box 197
Boulder Creek, CA 95006

Piret Harmon
General Manager
Scott's Valley Water District
2 Civic Center Dr.
Scotts Valley, CA 95066

Ron Duncan
General Manager
Soquel Creek Water District
5180 Soquel Drive
Soquel, CA 95073

Shelly Flock
Conservation and Customer Service Field Manager
Soquel Creek Water District
5180 Soquel Drive
Soquel, CA 95073

MEMO

TO: Board of Directors

FROM: District Manager

PREPARED BY: Environmental Programs Manager

SUBJECT: Swim Tank Replacement Project – Public Hearing to Adopt Mitigated Negative Declaration

DATE: July 21, 2016

RECOMMENDATION

It is recommended that the Board of Directors review this memo and note the public comment period has opened for the Mitigated Negative Declaration and Initial Study for the Swim Tank Replacement Project.

BACKGROUND

The District owns and maintains two 20,000-gallon water storage tanks, referred to as the “Swim Water Storage Tanks” that are part of the original water distribution system acquired by the District in 1965 from Citizens Utilities Company for the area in which the tanks are located. The existing storage tanks are located off a steep embankment and provide water service to approximately seventy-nine (79) connections in the Swim Zone (Zone 18). The District's Spring Booster also is located on this parcel. The Spring Booster supplies water from Swim Zone (Zone 18) to the Spring Zone (Zone 19).

The existing tanks are old and require ongoing maintenance to control leakage, which is difficult given limited access to the facilities. The current tanks do not meet current seismic stability requirements. Furthermore, the tanks do not provide sufficient storage for the area they serve. The District estimates that the zone needs about 60,000 gallons of water storage.

Project Description:

The proposed project consists of replacing the two existing 20,000 gallon redwood storage tanks with one 62,000 gallon bolted steel storage tank. The new tank would be approximately 16 tall and 29 feet in diameter and is located between and to the north of the current tank locations. See Figure 4 for location of existing tanks. A preliminary site plan is shown on Figure 5, and a schematic of the proposed replacement tank is shown on Figure 6.

The new tank will have a reinforced concrete ring foundation. A retaining wall will be constructed around three sides of the new tank to support excavations necessary to construct the new tank pad. Other project features include relocation of booster pumps

to a new concrete pad and constructing a new 4-foot wide stairway from Country Club Drive to the tank site. A truck pullout will also be constructed at the intersection of Country Club Drive and Woodland Drive to accommodate service vehicles. A retaining wall will be constructed at the new roadside pullout. Grading for the project will consist of sub- excavation of soil in the tank pad and engineered fill placement and compaction for the tank pad, driveway, and associated improvements.

The existing tanks and booster pump will remain in operation during construction to maintain water service to the existing pressure zones. The two existing wooden tanks will be removed after installation of the new steel tank is complete.

Construction is anticipated to begin in the spring of 2017 and is expected to take six months. Construction staging will be within the existing roadway.

UPDATE

The Notice of Intent to Adopt a Mitigated Negative Declaration (MND), with copies of the MND and the Board approved Initial Study (attached) has been distributed to the attached distribution list. A legal ad was posted in the Sentinel on July 14, 2016 (see attached). The public comment period opened on July 14, 2016 and will close August 12, 2016 to satisfy the 30 days required by CEQA regulations. Following the close of the public comment period, the District will respond to any comments. A public hearing has been scheduled for October 6, 2016 for the board to consider adoption of the Mitigated Negative Declaration. If approved, the MND will be submitted to the county the following week.

FISCAL IMPACT:
None

2015 STRATEGIC PLAN:
Strategic Element 1.0 – Water Supply Management
Strategic Element 3.0 – Capital Facilities

SAN LORENZO VALLEY WATER DISTRICT
13060 Highway 9 • Boulder Creek, CA 95006-9119
Office (831) 338-2153 • Fax (831) 338-7986
Website: www.slvwd.com

SAN LORENZO VALLEY WATER DISTRICT
Notice of Intent to
Adopt a Mitigated Negative Declaration

The San Lorenzo Valley Water District is preparing to adopt a Mitigated Negative Declaration for the following proposed project:

Project: Swim Tank Replacement Project

Project Location: 1045 Country Club Drive north of the town of Ben Lomond in the San Lorenzo Valley in unincorporated Santa Cruz County

Project Applicant: San Lorenzo Valley Water District

Project Description: The proposed project consists of replacing the two existing 20,000-gallon redwood storage tanks with one 62,000 gallon bolted steel storage tank. The new tank would be approximately 16 feet tall and 29 feet in diameter and is located between and to the north of the current tank locations.

Significant Effects on the Environment: Potential significant impacts were identified related to biological resources and geology and soils, which can be mitigated to a less-than-significant level with mitigation measures included in the Mitigated Negative Declaration. The San Lorenzo Valley Water District has reviewed the proposed project and has determined that the project, with mitigation measures as conditions of project approval, will not have a significant effect on the environment.

A copy of the Mitigated Negative Declaration and Initial Study may be reviewed or obtained at the address below or is available online at www.slvwd.com

San Lorenzo Valley Water District
RE: Swim Tank Replacement Comments
13060 Highway 9
Boulder Creek, CA 95006-9119

Comments on the Mitigated Negative Declaration should be in writing to the San Lorenzo Valley Water District address listed above or by email to bod@slvwd.com from July 14, 2016 through August 12, 2016. The San Lorenzo Valley Water District Board of Directors will consider the proposed Mitigated Negative Declaration at a public hearing following the comment period on October 6, 2016 at 7:00 PM at the regularly scheduled Board of Directors meeting located at 13057 Hwy 9, Boulder Creek, CA.

If you have any questions or comments, please contact Holly Morrison at (831) 338-2153 or at bod@slvwd.com.

Mitigated Negative Declaration

San Lorenzo Valley Water District

The San Lorenzo Valley Water District has prepared this Mitigated Negative Declaration for the following described project:

Project: Swim Tank Replacement Project

Project Location: 1045 Country Club Drive (See map in attached Initial Study)

Project Description: The proposed project consists of replacing the two existing 20,000 gallon redwood storage tanks with one 62,000 gallon bolted steel storage tank. The new tank would be approximately 16 tall and 29 feet in diameter and is located between and to the north of the current tank locations.

Applicant: Not Applicable

FINDINGS: The San Lorenzo Valley Water District has reviewed the proposed project and has determined, based on the attached Initial Study, that the project will have a less-than-significant impact on the environment with implementation of mitigation measures. Consequently, adoption of a Mitigated Negative Declaration is appropriate. An Environmental Impact Report is not required pursuant to the *California Environmental Quality Act of 1970 (CEQA)*. This environmental review process was conducted and the attached Initial Study was prepared in accordance with the State *CEQA Guidelines* and the local City of Santa Cruz *CEQA Guidelines and Procedures*.

BASIS OF FINDINGS: The Initial Study finds that all potentially significant impacts that could be caused by the project can be reduced to less-than-significant levels with implementation of mitigation measures as described in the attached Initial Study and to be incorporated into the project plans and specifications. The following mitigation measures will be incorporated into the project design or as conditions of approval, to ensure that any potential environmental impacts will not be significant.

Impact	Mitigation
Biological Resources: Tree removal and/or construction noise have the potential to cause death or injury to nesting birds if they are nesting at the time of tree removal and/or construction.	**MITIGATION MEASURE 1:** To avoid potential direct and indirect impacts to nesting migratory birds, schedule tree removal and construction in late summer and fall (i.e. after August 1 and before March 1), which is outside the nesting season. If this schedule is not possible, the SLVWD shall hire a qualified biologist to survey for nesting birds no more than 30 days prior to vegetation removal. If any raptors or migratory birds are nesting on or adjacent to the site, the biologist shall determine a buffer area around the nest that is adequate to protect the nesting birds until fledging of young is complete. No construction shall take place within the buffer zone until the biologist determines fledging is complete.

Geology and Soils: Grading and excavation may result in erosion if not properly managed.	**MITIGATION MEASURE 2:** Incorporate erosion control measures in the project construction plans and specifications and implement during construction, including but not limited to measures outlined in the geotechnical report, including but not limited to: limiting the area of ground disturbance and vegetation removal at any one time during construction; installing silt fences or other barriers to prevent soils from leaving the project site; conducting work prior to the rainy season if possible and protecting disturbed areas during the rainy season; and immediately revegetating disturbed areas.
Geology and Soils: The geotechnical investigation concluded that the proposed construction of a replacement water tank is acceptable from a geotechnical standpoint, provided the geotechnical criteria and recommendations are incorporated into the design and construction of the project, including removal of topsoil and the top four feet of soil and replacement non-expansive engineered fill.	**MITIGATION MEASURE 3:** Require implementation of recommendations set forth in the September 2014 "Geotechnical Investigation" for the project site by Haro, Kasunich and Associates, site preparation, foundation design, drainage, and all other recommendations.

By: Brian Lee, District Manager
San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, CA 95006-9119

July 8, 2016
Date

INITIAL STUDY / ENVIRONMENTAL CHECKLIST

SAN LORENZO VALLEY WATER DISTRICT

CONTENTS

I. BACKGROUND & PROJECT DESCRIPTION

1. **Project Title:** Swim Tank Replacement Project
2. **Lead Agency Name and Address:**
   San Lorenzo Valley Water District
   13060 Highway 9
   Boulder Creek, CA 95006-9119
3. **Contact Person and Phone Number:** Brian C. Lee, District Manager, 831-338-2153; blee@slvwd.com
4. **Project Location:** 1045 Country Club Drive north of the town of Ben Lomond in the San Lorenzo Valley (APN 078-261-07); see Figures 1 and 2[1].
5. **Project Applicant's/Sponsor's Name and Address:**
   San Lorenzo Valley Water District – SAME ADDRESS AS ABOVE
6. **General Plan Designation:** Rural Residential (R-R)
7. **Zoning:** R-1-15 (Single-Family Residential)
8. **Public Agencies Whose Approval or Review Is Required:**
   - California Water Resources Control Board, Drinking Water Branch: Review/Approval of Change in Water System Operation Permit
   - County of Santa Cruz: Potential Encroachment Permit for Work in Public Right-of-way

   As a public water service district, the San Lorenzo Valley Water District is not required to obtain development permits from the County of Santa Cruz [pursuant to Santa Cruz County Code section 13.10.140(b) and California Government Code section 53091(e)].
9. **Initial Study Preparation:** Strelow Consulting with Biotic Resources Group

[1] All figures are included at the end of the document for ease of reference.

10. **Background:** The San Lorenzo Water District (SLVWD) was established in 1941 and serves several communities within the 136 square-mile San Lorenzo River watershed. The SLVWD owns, operates, and maintains three water systems that supply separate service areas from separate water sources. The North Service Area includes the unincorporated communities of Boulder Creek, Brookdale, and Ben Lomond, the area in which the proposed project is located. The District serves an average of approximately 1.7 million gallons of water per day (MG/D) to approximately 7,300 service connections and a population of more than 22,000 (SOURCE V.1a[2]). The District's service area boundaries are shown on Figure 3.

    The SLVWD owns and maintains two 20,000-gallon water storage tanks, referred to as the "Swim Water Storage Tanks" that are part of the original water distribution system acquired by the District in 1965 from Citizens Utilities Company for the area in which the tanks are located. The existing storage tanks are located off a steep embankment and provide water service to approximately seventy nine (79) connections in the Swim Zone (Zone 18). The District's Spring Booster also is located on this parcel. The Spring Booster supplies water from Swim Zone (Zone 18) to the Spring Zone (Zone 19) (SOURCE V.5).

    The existing tanks are old and require ongoing maintenance to control leakage, which is difficult given limited access to the facilities. The current tanks do not meet current seismic stability requirements. Furthermore, the tanks do not provide sufficient storage for the area they serve. The District estimates that the zone needs about 60,000 gallons of water storage (SOURCE V.5).

11. **Project Description:** The proposed project consists of replacing the two existing 20,000 gallon redwood storage tanks with one 62,000 gallon bolted steel storage tank. The new tank would be approximately 16 tall and 29 feet in diameter and is located between and to the north of the current tank locations. See Figure 4 for location of existing tanks. A preliminary site plan is shown on Figure 5, and a schematic of the proposed replacement tank is shown on Figure 6.

    The new tank will have a reinforced concrete ring foundation. A retaining wall will be constructed around three sides of the new tank to support excavations necessary to construct the new tank pad. Other project features include relocation of booster pumps to a new concrete pad and constructing a new 4-foot wide stairway from Country Club Drive to the tank site. A truck pullout will also be constructed at the intersection of Country Club Drive and Woodland Drive to accommodate service vehicles. A retaining wall will be constructed at the new roadside pullout. Grading for the project will consist of sub-excavation of soil in the tank pad and engineered fill placement and compaction for the tank pad, driveway, and associated improvements.

    The existing tanks and booster pump will remain in operation during construction to maintain water service to the existing pressure zones. The two existing wooden tanks will be removed after installation of the new steel tank is complete.

[2] All source (document) references are summarized in SECTION V.

Construction is anticipated to begin in the spring of 2016, and is expected to take six months. Construction staging will be within the existing roadway.

II. ENVIRONMENTAL SETTING

The approximate 0.14-acre (6,081 square feet) project site is located southwest of the intersection of Country Club Drive, Woodland Drive, and Scenic Way in Ben Lomond, southwest of the unincorporated town of Ben Lomond and west of Highway 9 and Highlands County Park. Single-family homes on larger lots are located in the vicinity in an area that is generally characterized as semi-rural. The site is bordered by Woodland Drive and Country Club Drive on the east, single-family dwellings on the west and northwest, a private road and residence on the south, and an undeveloped parcel to the north.

The existing tanks are located on a moderately steep east facing slope with no vehicular access onto the site. The existing site topography and features, including the siting of the existing facilities, are shown on Figure 4. The existing 14-foot diameter redwood water tanks spaced are spaced about 60 feet apart on the southern portion of the parcel. Minor cuts have been made on the parcel to make the tank pads less steep and to construct concrete pads for electrical panels and pumps.

The parcel has an average slope gradient of about 50 percent (SOURCE V.7). The property supports small second-growth redwood trees and tan oaks. East of the parcel, the slope continues to a steep 4-foot by 6-foot high cut slope along Woodland Drive. A short distance beyond the south property line, slopes descend to a drainage channel which flows toward Woodland Drive.

III. ENVIRONMENTAL CHECKLIST

Environmental Factors Potentially Affected by the Project: The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by an asterisk (*) below and on the checklist on the following pages.

	Aesthetics		Agricultural & Forest Resources	✓	Air Quality
✓*	Biological Resources		Cultural Resources	✓*	Geology / Soils
✓	Greenhouse Gas Emissions		Hazards & Hazardous Materials	✓	Hydrology / Water Quality
	Land Use / Planning		Mineral Resources	✓	Noise
	Population / Housing		Public Services		Recreation
	Transportation / Traffic		Mandatory Findings of Significance		

Instructions to Environmental Checklist

1. A brief explanation is required (see VI. “Explanation of Environmental Checklist Responses”) for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question (see V. Source List, attached). A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

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

4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier Analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case a discussion should identify the following on attached sheets:
    a) *Earlier Analysis used*. Identify earlier analyses and state where they are available for review.

b) *Impacts adequately addressed*. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
c) *Mitigation measures.* For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

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

8. The explanation of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluation each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL IMPACTS Issues (and Supporting Information Sources):	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?				✓
b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓
2. AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement Methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (V.3)				✓
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				✓

ENVIRONMENTAL IMPACTS Issues (and Supporting Information Sources):		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.	**AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:**				
a)	Conflict with or obstruct implementation of the applicable air quality plan?				✓
b)	Violate any air quality standard or contribute to an existing or projected air quality violation?			✓	
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				✓
d)	Expose sensitive receptors to substantial pollutant concentrations?			✓	✓
e)	Create objectionable odors affecting a substantial number of people?				✓
4.	**BIOLOGICAL RESOURCES. Would the project:**				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				✓
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			✓	
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		✓		
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓

ENVIRONMENTAL IMPACTS Issues (and Supporting Information Sources):	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓
5. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				✓
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?			✓	
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓
d) Disturb any human remains, including those interred outside of formal cemeteries?				✓
e) Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?				✓
6. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (V.Ic) ii. Strong seismic ground shaking? iii. Seismic-related ground failure, including liquefaction? iv. Landslides?			✓ ✓	✓ ✓
b) Result in substantial soil erosion or the loss of topsoil?		✓		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		✓		

ENVIRONMENTAL IMPACTS Issues (and Supporting Information Sources):	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓
7. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				✓
8. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				✓
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				✓
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ miles of an existing or proposed school?				✓
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓

ENVIRONMENTAL IMPACTS Issues (and Supporting Information Sources):		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
9.	**HYDROLOGY AND WATER QUALITY. Would the project:**				
a)	Violate any water quality standards or waste discharge requirements?				✓
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (for example, the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				✓
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				✓
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				✓
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			✓	
f)	Otherwise substantially degrade water quality?			✓	
g)	Place housing within a 100-year flood-hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				✓
h)	Place within a 100-year flood-hazard area structures which would impede or redirect flood flows?				✓
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓
j)	Inundation by seiche, tsunami, or mudflow?				✓
10.	**LAND USE AND PLANNING. Would the project:**				
a)	Physically divide an established community?				✓
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or				✓

ENVIRONMENTAL IMPACTS Issues (and Supporting Information Sources):		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
	mitigating an environmental effect?				
c)	Conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan?				✓
11.	**MINERAL RESOURCES. Would the project:**				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (V.2c)				✓
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				✓
12.	**NOISE: Would the project:**				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?				✓
b)	Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?				✓
c)	Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				✓
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓
13.	**POPULATION AND HOUSING. Would the project:**				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓

ENVIRONMENTAL IMPACTS Issues (and Supporting Information Sources):	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓
14. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physical altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
a) Fire protection?				✓
b) Police protection?				✓
c) Schools?				✓
d) Parks?				✓
e) Other public facilities?				✓
15. RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				✓
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✓
16. TRANSPORTATION/TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				✓
b) Conflict with an applicable congestion management program, including, but not limited to level of service standard and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				✓
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?				✓
d) Substantially increase hazards due to a design feature (for example, sharp curves or dangerous intersections) or incompatible uses (for example, farm				✓

ENVIRONMENTAL IMPACTS Issues (and Supporting Information Sources):	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
equipment)?				
e) Result in inadequate emergency access?				✓
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				✓
17. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				✓
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction or which could cause significant environmental effects?				✓
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				✓
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				✓
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				✓
g) Comply with federal, state, and local statutes and regulations related to solid waste?				✓
18. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:				
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				✓
b) Have impacts that are individually limited, but				✓

ENVIRONMENTAL IMPACTS Issues (and Supporting Information Sources):	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects.)				
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				✓

DISCUSSION OF ENVIRONMENTAL CHECKLIST

See Section **VI--ENVIRONMENTAL EVALUATION** for discussion.

IV. DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	✓
I find that the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	

Brian Lee
District Manager

July 8, 2016
Date

V. REFERENCES AND DATA SOURCE LIST

Agency Plans & Reports

1. San Lorenzo Valley Water District.
   a) May 2015. *San Lorenzo Valley Water District 2010 Urban Water Management Plan*. ADMINISTRATIVE DRAFT. Prepared by Nicholas M. Johnson. Available Online at: http://www.slvwd.com/pdf/SLVWD%202010%20UWMP%20final%20draft.pdf
   b) May 11, 2009. *Watershed Management Plan, Part I: Existing Conditions Report*. Final Version. Available Online at: http://www.slvwd.com/watershed.htm

2. County of Santa Cruz.
   a) Adopted by Board of Supervisors 5/24/94. Certified by "California Coastal Commission 12/5/94. *1994 General Plan and Local Coastal Program for the County of Santa Cruz, California*. Available Online at: http://www.sccoplanning.com/PlanningHome/SustainabilityPlanning/GeneralPlan.aspx
   b) Approved by Board of Supervisors February 23, 2013. *Climate Action Strategy*. Prepared by Planning Department. Available Online at: http://www.sccoplanning.com/Portals/2/County/Planning/policy/Climate%20Action%20Strategy/Climate%20Action%20Strategy.pdf
   c) 2015. County of Santa Cruz Geographic Information System (GIS). Available Online at: http://www.co.santa-cruz.ca.us/default.aspx?tabid=93

3. California Department of Conservation. 2013. "Farmland Mapping and Monitoring Program." Available Online at: http://www.conservation.ca.gov/dlrp/fmmp/Pages/county_info.aspx

4. Monterey Bay Unified Air Pollution Control District.
   a) 2015. "NCCAB Area Designations and Attainment Status." Available Online at: http://mbuapcd.org/wp-content/uploads/2015/01/attainment-status-january-2015.pdf\
   b) April 17, 2013, Adopted. "Triennial Plan Revision 2009 – 2011." Final.
   c) August 2008. *2008 Air Quality Management Plan for the Monterey Bay Region*.
   d) February 2008. "CEQA Air Quality Guidelines."
   e) April 30, 2012, "Update on District GHG Threshold Development".

Project Plans & Studies

5. Freitas + Freitas. Preliminary 11/29/14. "Feasibility Report for swim Tank Replacement San Lorenzo Valley Water District Boulder Creek, California."

6. Biotic Resources Group. May 26, 2015. "Swim Tank Replacement Project, San Lorenzo Valley Water District Santa Cruz County, Ca Biological Report. "

7. Haro, Kasunich and Associates. September 2014. "Geotechnical investigation for APN 078-261-07, Swim Tanks Site, Ben Lomond, California."

Initial Study Preparation: Stephanie Strelow, Strelow Consulting

VI. EXPLANATION OF ENVIRONMENTAL CHECKLIST RESPONSES

1. Aesthetics

(a) Scenic Views – *No Impact*. The project site is located in a rural mountainous area in San Lorenzo Valley. The project site is not located within a scenic vista or view corridor as designated by the County of Santa Cruz (SOURCE V.2a & 2b), and there are no officially designated scenic highways in the immediate vicinity of the project site. Highway 9 (State Route 9) is located approximately one mile to the east of the project site and is eligible for designation as a scenic highway[3]. Highway 9 is a designated scenic road in the County of Santa Cruz General Plan (SOURCE V.2a).

The project site is not visible from Highway 9. Due to the steep terrain, the site is not visible from any public viewpoints, but only is visible within the immediate adjacent surrounding properties. The project site is not visible from a designated vista point nor is it within a scenic view. The project is generally screened from view by existing topographical and elevation changes as well as tree cover. The project would not obstruct or remove scenic views as none exist in the area, and therefore, the project would have no effect on scenic views.

(b) Scenic Resources – *No Impact*. The project site is located within a wooded area, consisting of primarily second-growth redwoods. The project site contains approximately 27 trees of which 13 are small tan oak trees that are generally 13 inches in diameter or less in size. The remainder of onsite trees are second-growth redwoods that are generally about 25± inches in diameter, although a few are smaller and three are approximately 30 inches in diameter.

The project will result in removal of nine trees to accommodate the new tank site. These include four redwood and five tan oak trees. The remainder of the onsite trees (18 trees), including approximately eight redwood trees at the front of the property adjacent to Woodland Drive are proposed to be retained. The oak trees to be removed are small, and the redwoods are second-growth trees. While any tree may possess aesthetic qualities, the trees that would be removed are not unusual for their species or visually distinctive or prominent from a wide area or from public view corridors. Therefore, the trees are not considered scenic resources, and the removal would not result in an impact to a scenic resource.

(c) Effects on Visual Character of Surrounding Area – *Less-than-Significant Impact*. The project site is located within a second-growth redwood forest in the Santa Cruz Mountains. The visual character of the surrounding area is characterized by mountainous terrain, redwoods, and single-family homes on larger lots. Due to the steep terrain in the area and intervening topography and

[3] California Department of Transportation. Updated December 19, 2013. "Eligible (E) And Officially Designated (OD) Routes." Online at: http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm.

tree cover, the project site is not visible from any public viewpoints, but only is visible within the immediate adjacent surrounding properties.

Impact Analysis. The proposed project would result in installation of a new steel water storage tank that would replace two smaller redwood tanks. The new tank would be located in between the two existing tanks and would be 29 feet in diameter and 16 feet in height. The existing tanks are 14 feet in diameter and approximately 14 feet in height. The new tank would be about twice the size in diameter as the existing tanks, but only slightly taller. A concrete retaining wall is proposed around most of the tank, so that from upper elevations only the top of the tank would be visible (see Figures 5 and 6). The tank site is not visible from any public location and only is visible in the immediate area. While larger than the existing tanks, the site is of limited visibility and water storage facilities are part of the water system infrastructure and aesthetic landscape in the San Lorenzo Valley. The District plans to paint the tank and retaining wall in a muted color that blends with the surrounding forest colors, which would further reduce the visual prominence of the structure. Thus, the proposed project would not result in a substantial degradation to the visual quality of the site or surrounding area due to the limited visibility of the structure and muted colors, and the project would not result in a significant impact. No mitigation measures are required.

(d) Create New Source of Substantial Lighting or Glare – *No Impact*. The proposed replacement water storage tank does not include lighting. The facility and retaining wall will be painted in a muted color/tone that blends with the surrounding forest colors. Thus, the project would not result in impacts related to creation of a new source of light or glare.

2. Agriculture & Forest Resources

(a, b, e) Agricultural Lands – *No Impact*. The project site is located in a forested rural area and is not in agricultural production or located adjacent to or near agricultural lands. The project site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. In addition, the project does not contain Farmland of Local Importance or Grazing Land that would be converted to a non-agricultural use. The project site is designated "Other Land", which is not an agricultural designation (SOURCE V.3). There are no Williamson Act contracts on the property. Thus, the proposed project would not result in or lead to the conversion of agricultural lands.

(c, d, e) Forest Resources – *No Impact*. The project site is not zoned as Timberland Preserve, and is not located adjacent to lands zoned Timberland Preserve. Thus, the project would not conflict with zoning of lands that have a Timberland Preserve designation. The site is not identified as having timber resources in the County's GIS mapping system (SOURCE V.2c). The project would result in replacement of two water storage tanks with one larger tank, but would not result in loss of or conversion of forest land. As indicated above in subsection 1(b), nine trees would be removed, half of which are small tan oak trees and the others are second-growth redwood trees.

These trees are not considered to be forest resources or forest land under state definitions; the site and surrounding forestland are not managed for the production of forest products or traditional forest uses, but are comprised of residential uses within a wooded setting. Thus, the proposed project would not result in or lead to conversion of forest lands.

3. Air Quality

(a) Consistency with Air Quality Plans – *No Impact*. The Monterey Bay Unified Air Pollution Control District (MBUAPCD) prepares and updates an air quality plan, which addresses attainment of the state and federal emission standards. The plan accommodates growth by projecting growth in emissions based on different indicators, such as population and housing growth. The project consists of replacement of water storage tanks to serve existing development. The project will not result in new structural development, and will not result in new population growth. Thus, the project would not conflict with or obstruct implementation of the existing air quality management plan for the region.

(b-c) Project Emissions – *Less-than-Significant Impact*. Federal and state ambient air quality standards (AAQS) address six criteria pollutants, including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, fine particulate matter (both PM_{10} and $PM_{2.5}$, which refer to particles less than 10 microns and 2.5 microns, respectively), and lead. The state standards, which are generally more stringent than the federal standards, apply to the same pollutants as the federal standards do, but also include sulfate, hydrogen sulfide, and vinyl chloride.

The North Central Coast Air Basin (NCCAB), in which the project site is located, is under the jurisdiction of the MBUAPCD and includes Santa Cruz, Monterey and San Benito Counties. The NCCAB is currently in attainment or unclassified for the all federal criteria pollutant standards (SOURCE V.4a). The basin is designated non-attainment for the state ozone and PM_{10} standards, and is in attainment for all other state standards, except for carbon monoxide for which it is unclassified (SOURCE V.4b).

Impact Analysis. The proposed project would result in replacement of existing water storage tanks. The project would not result in new structural development. Minimal emissions would occur from periodic Water District staff maintenance trips to the site, but the project would not result a new of stationary source of emissions and would have no significant long-term operational phase impacts on air quality.

Project construction would result in short-term, localized increases in exhaust emissions due to construction activities, but would not exceed construction emission thresholds as explained below. This is considered a less-than-significant impact as discussed below. Construction projects generally have the potential to cause short-term increases in exhaust emissions from worker trips to and from the construction site, construction equipment, and grading and site preparation activities that can generate fugitive dust, which may increase volatile organic compounds (VOC) or nitrogen oxides (No_x), the precursors of ozone. The

MBUAPCD does not generally require projects to quantify VOC and NO_x emissions from typical construction equipment, because these temporary emissions have been accommodated in State and federally required air plans (SOURCE V.4c).

Construction activities would involve limited equipment and site disturbance. Equipment expected to be used is limited to a small grader/excavator for grading and installation of retaining wall and storage tank building pad. Project construction would result in grading and site disturbance of approximately 0.15 acres for installation the new water storage tank. The MBUAPCD and its CEQA Air Quality Guidelines indicate that 8.1 acres may be graded per day with minimal earthmoving or 2.2 acres per day with grading and excavation without exceeding the PM_{10} threshold of 82 lbs/day, which could result in a significant effect. The area of disturbance, grading or excavation, are well below these thresholds. Therefore, no significant impacts related to emissions would occur, and no mitigation measures are required.

(d) Sensitive Receptors – *Less-than-Significant Impact*. The project site is located within a rural residential area with single-family homes to the west, east and south of the project site. As indicated above, the proposed project would not result in stationary emissions. Thus, the proposed project will not expose sensitive receptors to substantial pollutant concentrations. For CEQA purposes, a sensitive receptor is defined as any residence, including private homes, condominiums, apartments, and living quarters; education resources such as preschools and kindergarten through grade twelve (k-12) schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes (SOURCE V.4d).

Diesel particulate matter was identified as a toxic air contaminant (TAC) by the State of California in 1998. Diesel exhaust is emitted from a broad range of on- and off-road diesel engines. Following the identification of diesel as a TAC, the California Air Resources Board (CARB) developed a comprehensive strategy to control diesel PM emissions. The "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (approved by CARB in September 2000) set goals to reduce diesel PM emissions in California by 75% by 2010 and 85% by 2020. This objective would be achieved by a combination of approaches (including emission regulations for new diesel engines and low sulfur fuel program). Since approval of the "Diesel Risk Reduction Plan," CARB has adopted adopted regulations for in-use, off-road diesel vehicles that will significantly reduce particulate matter emissions. In July 2007, the ARB adopted regulations for in-use, off-road diesel vehicles that will significantly reduce particulate matter emissions by requiring fleet owners to accelerate turnover to cleaner engines and install exhaust retrofits.

Impact Analysis. Project grading and construction could involve the use of diesel trucks and equipment that will emit diesel exhaust, including diesel particulate matter, which is classified as a toxic air contaminant. Nearby residents could potentially be exposed to construction-related diesel emissions. However, construction activities that would use diesel equipment would be temporary and of short-term duration. Thus, potential exposure to adjacent sensitive receptors is considered a less-than-significant impact as explained below.

Construction-related diesel emissions would be of limited duration (i.e., primarily during grading) and would be temporary. CARB has identified diesel exhaust particulate matter as a toxic air contaminant, and assessment of toxic air contaminant cancer risks is typically based upon a 70-year exposure period. Project grading and construction activities that would utilize diesel-powered equipment would expose receptors to possible diesel exhaust for a very limited number of days over the estimated 6-month construction period. Because exposure to diesel exhaust will be well below the 70-year exposure period, and given the limited, intermittent and short-term duration of construction activities that would use diesel equipment, construction-related diesel emissions are not considered significant. Furthermore, the State has been implementing emission standards for different classes of on- and off-road diesel vehicles and equipment that applies to off-road diesel fleets and includes measures such as retrofits that continue to reduce diesel emissions. Additionally, Title 13 of the California Code of Regulations (section 2485(c)(1)) prohibits idling of a diesel engine for more than five minutes in any location.

Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations. Potential exposure of sensitive receptors to diesel emissions and associated risks is considered a less-than-significant impact, and no mitigation measures are required.

(e) Odors – *No Impact*. According to the MBUAPCD CEQA Guidelines, land uses associated with odor complaints typically include landfills, agricultural uses, wastewater treatment plants, food processing plants, chemical plants, refineries, and landfills (SOURCE V.4d). The proposed project does not include construction activities that are generally associated with the creation of objectionable odors. Upon completion of construction, there would be no long-term operations associated with the water storage tanks that would result in generation of odors.

4. Biological Resources

One plant community type was observed within the project area: coast redwood forest. The forest occupies the ridge within the project area as well as slopes supporting nearby residential development. Tree cover is dominated by second-growth coast redwood (*Sequoia sempervirens)*; other tree species observed include tan oak (*Notholithocarpus densiflorus)* and California bay (*Umbellularia californica)*. The forest understory is sparse (SOURCE V.6).

(a) Special Status Species – *No Impact*. The wildlife value of the redwood forest habitat is moderated by the proximity of the site to roads and residential development (SOURCE V.6). The project site was not observed to support any special status plant species or micro that could support special status species. The May 2015 field survey was sufficient in determining presence or absence of special status species as these species would be identifiable during this survey period. The site lacks habitat for special status wildlife species. No species status plant or animal species were observed or are expected to occur in the project area (SOURCE V.6).

(b-c) Sensitive Habitats – *Less-than-Significant Impact*. Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. The project site does not contain riparian or wetland habitat, and there would be no impacts to these habitats (SOURCE V.6).

The California Department of Fish and Wildlife (CDFW) classifies and ranks the State's natural communities to assist in the determining the level of rarity and imperilment. Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1-S3, all associations within the type are considered to be highly imperiled. A vegetation alliance ranked as S4 or S5 is generally considered common enough to not be of concern; however, it does not mean that certain associations contained within them are not rare (SOURCE V.6).

The coast redwood forest is identified as S3, a plant community with an imperiled status; however, this forest is typically considered sensitive when supporting old-growth tree groves, residual old-growth trees, or large-size second growth. The project site does not contain these forest characteristics (SOURCE V.6). The project would result in removal of nine trees (five tan oaks and four coast redwoods) within the coast redwood forest, a plant community identified as imperiled (rank S3) by CDFW. Due to the small stature of these trees and the second-growth condition of the redwood forest, the removal of these trees is not considered a significant impact to regional botanical resources. No mitigation measures are required (SOURCE V.6).

(d) Wildlife Movement/Breeding – *Less-than-Significant Impact With Mitigation*. Some bird species may use the onsite and/or adjacent trees for nesting. Nesting birds are protected under CDFW codes and the Migratory Bird Treaty Act. Bird nesting season generally occurs between March 1st and the end of July (SOURCE V.6).

Impact Analysis. Tree removal and/or construction noise have the potential to cause death or injury to nesting birds if they are nesting at the time of tree removal and/or construction. Impacts to birds potentially nesting that are protected under the Migratory Bird Treaty Act would be considered a potentially significant impact. No other protected or special status wildlife species will be impacted by this project because none occur in the project area. Implementation of the following measures will reduce the impact to a less-than-significant level.

MITIGATION MEASURE 1: To avoid potential direct and indirect impacts to nesting migratory birds, schedule tree removal and construction in late summer and fall (i.e. after August 1 and before March 1), which is outside the nesting season. If this schedule is not possible, the SLVWD shall hire a qualified biologist to survey for nesting birds no more than 30 days prior to vegetation removal. If any raptors or migratory birds are nesting on or adjacent to the site, the biologist shall determine a buffer area around the nest that is adequate to protect the nesting birds until

fledging of young is complete. No construction shall take place within the buffer zone until the biologist determines fledging is complete.

(e) Tree Removal/Conflict with Local Regulations – *No Impact*. The project site is located within wooded area, consisting of primarily second-growth redwoods. The project site contains approximately 27 trees, and the proposed project will result in removal of nine trees to accommodate the new tank site. As indicated in Section I.10 above, as a public water service district, the San Lorenzo Valley Water District is not subject to local zoning regulations. However, it is noted that the tree removal required for the proposed project does not conflict with the County's "Significant Trees Protection" regulations (Chapter 16.34) as the trees do not qualify as "significant" trees. Outside the Urban Services Line or Rural Services, a "significant" tree is defined as any tree visible from a scenic road, beach, or within a designated scenic resource area that is 40 inches dbh (diameter at breast height) in size (County Code section 16.34.030). The trees to be removed are not visible from a scenic road or designated scenic and are less than 40 inches in diameter. Therefore, although not applicable to the project, the proposed tree removal would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation ordinance.

(f) Conflicts with Plans – *No Impact*. There are no known adopted Habitat Conservation or Natural Community Conservation Plans in the project vicinity.

5. Cultural Resources

(a) Historical Resources – *No Impact*. The first residents of the San Lorenzo River watershed were the Ohlone Indians, who were nomadic hunters and gatherers. They managed grasslands with fire to encourage the growth of seed-bearing annuals and to facilitate hunting. After colonial settlement, from the 1860s through the 1890s, logging was the major land use in the San Lorenzo River watershed. By 1899, Boulder Creek was the fifth largest shipper of timber in the country. Old-growth stumps are found throughout the watershed (SOURCE V.1b). As the San Lorenzo Valley was settled in the mid-1800s, populations in Ben Lomond, Brookdale and Boulder Creek formed their own water systems (Ibid.).

The existing redwood water tanks on the project site are thought to have been constructed in the early 1960s due to their condition and design. The tanks are is similar to other tanks constructed at this time that still exist within the Water District's service area. There is no unique feature of the tank, and there is no known link to historical events or nearby historic structures associated with the existing tank. Thus, the tanks are considered historical resources, and removal and replacement would not result in a significant impact to a historical resource.

(b,d,e) Archaeological and Tribal Cultural Resources – *Less-than-Significant Impact*. With regards to pre-historic Ohlone settlements, no archeological sites have been observed on lands owned by the San Lorenzo Valley Water District, and no archaeological sites were identified by an archeological survey completed in 1993 (SOURCE V.1b). According to County Geographic

Information System (GIS) data, the site is not located within an archaeological resource area (SOURCE V.2c).

State Assembly Bill 52, effective July 1, 2015, recognizes that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities. The law establishes a new category of resources in the California Environmental Quality Act called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation. Public Resources Code section 21074 defines a "tribal cultural resource" as either:

(1) Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Nature American tribe that is either listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or

(2) A resource determined by the lead agency chooses, in its discretion and supported by substantial evidence, to treat as a tribal cultural resource.

The California Public Resources Code section 21084.2 now establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." The Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project.

Impact Analysis. The project site is not located within an area of known archaeological sensitivity or archaeological resources. The project consists of removal and replacement of existing water storage tanks on a site previously disturbed by logging operations and installation of the existing water tanks. It is not expected that archeological resources would be encountered during the limited grading for and installation of the replacement tank or that a significant impact would occur. However, in the event that unknown resources are uncovered during construction, the following measure recommended for inclusion in the Project Construction Specifications.

There are no known resources on or adjacent to the site that would be considered a tribal cultural resource. No California Native American tribe that is traditionally and culturally affiliated with this geographic area has contacted the San Lorenzo Valley Water District and requested consultation. Therefore, the project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.

RECOMMENDED CONSTRUCTION SPECIFICATION: If archaeological resources or human remains are accidentally discovered during construction, work shall be halted within 50 meters (150 feet) of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented. Disturbance shall not

resume until the significance of the archaeological resources is determined and appropriate mitigations to preserve the resource on the site are established. If human remains are encountered during construction or any other phase of development, work in the area of discovery must be halted, the Santa Cruz County coroner notified, and the provisions of Public Resources Code 5097.98-99, Health and Safety Code 7050.5 carried out. If the remains are determined to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours as required by Public Resources Code 5097.

(c) Paleontological/Unique Geological Resources – *No Impact*. No unique geologic features have been identified in plans or observed on the site. The site is not identified as having paleontological resources in the County's GIS mapping system (SOURCE V.2c). The limited depth of grading and area of disturbance for the proposed project would be minimal, and the project would have no effect on any unanticipated paleontological resources.

6. Geology and Soils

(a-i) Fault Rupture – *No Impact*. The project site is located in a seismically active region of California and the region is considered to be subject to very intense shaking during a seismic event. The active San Andreas Fault Zone and the potentially active Zayante Fault Zone and Ben Lomond Fault, are located about 6.8 miles, 2.5 miles, and 0.3 miles from the project site, respectively. Since no known faults cross the project site, the potential for surface ground rupture is low (SOURCE V.7).

(aii-iii) Seismic Hazards – *Less-than-Significant Impact*. A geotechnical investigation was conducted to evaluate the soil and bedrock conditions at the tank site and develop geotechnical design criteria and recommendations for the proposed replacement water tank foundation and associated improvements. Potential seismic hazards include liquefaction and damage from strong seismic shaking. As indicated above, since no known faults cross the project site, the potential for surface ground rupture is low. Because of the stiff to very stiff consistency of the weathered siltstone and clayey siltstone and hard siltstone underlying the project site, the potential for seismically-induced liquefaction at the site is low. The most current California Building Code (CBC) edition design considerations, specifically the seismic factors and coefficients from Chapter 16, Volume II, will be followed during design and construction of the projects.

Impact Analysis. The project would be subject to seismic shaking. The project will not result in construction of any habitable structures, and thus would not expose people or habitable structures to seismic hazards. During a major earthquake there is potential for severe ground shaking at this site. However, the geotechnical investigation concluded that structures designed in accordance with the most current California Building Code (2013 CBC) should perform adequately during strong seismic shaking (SOURCE V.7).Therefore, exposure to seismic hazards would be less than significant.

(aiv, c) Geologic & Soils Hazards – *Less-than-Significant Impact*. The site is mapped as Tm: Monterey Formation (middle Miocene), and the project site is underlain by loose sandy silt and silty lean clay topsoil from the surface to depths of 2 to 4 feet. Below the topsoil, stiff to very stiff lean clay, clayey silt and siltstone was found at depths of 13 to 16 feet. (SOURCE V.7).

No visual indications of instability of the moderately steep natural slopes at the tank site were observed during the geotechnical investigation. However, the geotechnical investigation indicates that the project site is located in an area mapped as a large probable landslide deposit of about 450 acres (±) in size as shown on the "Preliminary Map of Landslide Deposits in Santa Cruz County" (Cooper-Clark, 1974), which encompasses hundreds of occupied parcels (SOURCE V.7). The investigation indicates that the existing water storage tanks have been on the site for many years and do not appear to have experienced damage as a result of slope instability. The geotechnical report also indicated that a geologic report for another property within the suspected landslide deposit noted the deposit was not mapped on a regional geologic map and in an examination of stereo aerial photographs, concluded there was no evidence in the aerial photographs to support the existence of the landslide, notably the absence of a landslide headscarp (SOURCE V.7).

The geotechnical investigation for the proposed project did not observe any indications of slope instability on the site nor did conditions encountered in soils borings indicate potential instability (SOURCE V.7). However, a quantitative analysis of the static and seismic stability of the site and large landslide was not included in the geotechnical investigation. The geotechnical investigation did not include recommendations for further investigation, and concluded that the proposed construction of a replacement water tank on the project site is acceptable from a geotechnical standpoint provided the geotechnical criteria and recommendations outlined in the geotechnical report are incorporated into the design and construction of the project (SOURCE V.7). Specifically, the investigation recommends that concentrated surface runoff from the project site not be allowed to flow onto the slopes at the site, and roof and surface runoff be directed to collection facilities and conveyed to the paved road downslope of the site. MITIGATION MEASURE 3 requires implementation of all geotechnical report recommendations; see subsection 6(f) below.

(b) Erosion – *Less-than-Significant Impact With Mitigation*. According to the 1980 Soil Conservation Survey of Santa Cruz County (U.S. Department of Agriculture), the hazard of erosion is very high for the soils on the project site and surrounding area (Nisene-Aptos Complex-158). The project geotechnical report also indicates that soils at the project site has potential for erosion where unvegetated (SOURCE V.7).

> *Impact Analysis.* The project site will be graded to construct a reinforced concrete ring foundation for the new water tank; a retaining wall will be constructed to support excavations necessary to construct the new tank pad. The project may also include the construction of a base rock surfaced or paved driveway. Grading for the project will consist of sub-excavation of soil in the tank pad and engineered fill placement and compaction for the tank pad, driveway, and associated improvements. Excavation may result in erosion if not properly managed, although the construction site is not situated directly adjacent to a

water body. This is a potentially significant impact. An erosion control plan has not yet been completed, but the District has indicated that construction would commence after winter rainy season. Implementation of standard erosion control measures during construction, including but not limited to, recommendations in the geotechnical report regarding erosion would reduce the potential impact to a less-than-significant level.

MITIGATION MEASURE 2: Incorporate erosion control measures in the project construction plans and specifications and implement during construction, including but not limited to measures outlined in the geotechnical report, including but not limited to: limiting the area of ground disturbance and vegetation removal at any one time during construction; installing silt fences or other barriers to prevent soils from leaving the project site; conducting work prior to the rainy season if possible and protecting disturbed areas during the rainy season; and immediately revegetating disturbed areas.

(f) Expansive Soils – *Less-than-Significant Impact With Mitigation.* The geotechnical investigation included drilling three exploratory borings and laboratory testing of soil samples. The tank site is underlain by loose sandy silt and silty lean clay topsoil from the surface to depths of 2 to 4 feet (SOURCE V.7). Below the topsoil, stiff to very stiff lean clay, clayey silt and siltstone was found at depths of 13 to 16 feet. Test results indicate the soil has 55 to 75 percent fines (clay and silt). The fine grained soils are moderately expansive, difficult to compact and unsuitable for use as structural fill.

Impact Analysis. The geotechnical report indicates that the soil and geotechnical considerations at project site include the presence of loose near surface soil, providing firm uniform bearing support for the tank foundations, slope stability, the potential for strong seismic shaking, and providing adequate site drainage. The site also contains moderately expansive soils. The geotechnical investigation concluded that the proposed construction of a replacement water tank is acceptable from a geotechnical standpoint, provided the geotechnical criteria and recommendations are incorporated into the design and construction of the project, including removal of topsoil and the top four feet of soil and replacement non-expansive engineered fill. Impacts related to exposure of unstable or expansive soils would be mitigated to a less-than-significant level with implementation of Mitigation Measure 3.

MITIGATION MEASURE 3: Require implementation of recommendations set forth in the September 2014 "Geotechnical Investigation" for the project site by Haro, Kasunich and Associates, site preparation, foundation design, drainage, and all other recommendations.

(e) Use of Septic Systems – *No Impact*. The project consists of replacement and upgrading of existing water storage facilities owned and operated by the San Lorenzo Valley Water District. The project will not require sanitary sewer service and will not use septic systems.

7. Greenhouse Gas Emissions

(a) Greenhouse Gas Emissions – *Less-than-Significant Impact*. Climate change refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and alter the surface and features of the land. Significant changes in global climate patterns have recently been associated with global warming, an average increase in the temperature of the atmosphere near the Earth's surface, attributed to accumulation of greenhouse house gas (GHG) emissions in the atmosphere. Greenhouse gases trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. Climate change models predict changes in temperature, precipitation patterns, water availability, and rising sea levels, and these altered conditions can have impacts on natural and human systems in California that can affect California's public health, habitats, ocean and coastal resources, water supplies, agriculture, forestry, and energy use.

The State of California passed the Global Warming Solutions Act of 2006 (AB 32), which requires reductions of GHG emissions generated within California. The Governor's Executive Order S-3-05 and AB 32 (Health & Safety Code, § 38501 et seq.) both seek to achieve 1990 emissions levels by the year 2020. Executive Order S-3-05 further requires that California's GHG emissions be 80 percent below 1990 levels by the year 2050. AB 32 defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrocarbons, perfluorocarbons and sulfur hexafluoride.

The California Air Resources Board (CARB) is the lead agency for implementing AB32. In accordance with provisions of AB 32, CARB has completed a statewide Greenhouse Gas (GHG) Inventory that provides estimates of the amount of GHGs emitted to, and removed from, the atmosphere by human activities within California. In accordance with requirements of AB32, a Scoping Plan was adopted by CARB in December 2008 and updated in 2014. The Scoping Plan and 2014 Update identify emissions reduction measures and actions related to energy, transportation, agriculture, water conservation and management, waste management, natural resources, green building, and cap-and-trade actions.

The San Lorenzo Valley Water District Board of Directors approved a climate change resolution in 2008 that commits the District to address aspects of climate change, mitigation and adaptation. In terms of mitigation, the Board's climate change resolution commits the District to reducing GHGs to levels defined in California law AB 32. Approximately 71% of the District's total emissions can be attributed to indirect electricity, purchased from PG&E. The District's primary use of electricity is from ground-water pumping (SOURCE V.1b).

Impact Analysis. The project consists of replacement of two existing water storage tanks totaling 40,000 gallons with one new tank with a slightly expanded capacity of 60,000

gallons. The project will not result in new structural development, and will not result in new population or growth. The project will not result in new vehicular or stationary emissions. The existing booster pump will be upgraded with the most current energy efficient equipment. Thus, it is likely that the indirect electrical use and greenhouse emissions associated with the pump equipment would be reduced as a result of the proposed project, resulting in a less-than-significant or no impact related to GHG emissions. Thus, further quantification and analysis of greenhouse gas emissions was not deemed necessary.

(b) Conflict with Applicable Plans – *No Impact*. The project would not conflict with state plans adopted for the purpose of reducing greenhouse gas emissions. The State's "Scoping Plan" includes strategies for transportation, energy, water and other sectors that are not directly applicable to the proposed project.

In 2013, the Santa Cruz County Board of Supervisors approved a Climate Action Strategy (CAS), which includes a GHG emissions inventory for Santa Cruz County, targets for GHG reduction, and strategies and implementing actions to achieve the targets. Based on a 2005 community emissions inventory, 1990 emissions levels for Santa Cruz County were estimated, and Santa Cruz County has already met the target for 2020 due to the closing of the Davenport cement plant (SOURCE V.2b). GHG reduction strategies are proposed for the three sectors with the highest emissions: transportation, energy, and solid waste. The report indicates that the emissions targets for 2035 and 2050 can be met, but that a sustained commitment to full implementation of the strategies will be required (Ibid.). The largest reduction will come from state and federal standards for fuel efficiency and vehicle emissions and from the California renewable energy portfolio standard (58 percent), followed by a cleaner energy supply from Community Choice Aggregation (CCA) if that type of regional energy authority is formed (22 percent), energy efficiency (9 percent), transportation and land use planning (5 percent), green business (3 percent), and electric vehicles (3 percent).

The proposed project does not conflict with County measures to reduce GHG emissions as set forth in the County's Strategy, although the Strategy is not directly applicable to the project. Of the specific strategies outlined, the upgraded booster pump that is expected to be more energy efficient than the existing facility would be consistent with Strategy E-2 to Increase energy efficiency in new and existing buildings and facilities.

8. Hazards & Hazardous Materials

The project site is not located near an airport or air strip. The project would not result in construction of habitable structures that would be exposed to wildland fire hazards.

(a,c) Use/Create Hazardous Materials – *No Impact*. The project consists of replacement of existing water storage tanks. The project will not result in new structural development, and will not result in new population or employee growth. The project would not result in the use, transport or disposal of hazardous materials. Thus, the project will not result in operations that would create

risks associated with hazardous material use. Construction would not include development that would store or use hazardous materials. The project is not located within ¼ mile of an existing or proposed school, and would not result in a stationary source of emissions.

8. Hydrology and Water Quality

(a-b) Waste Discharge Requirements Quality and Groundwater – *No Impact*. The proposed consists of replacement of two existing water storage tanks with one new tank with a slightly greater capacity. The project does not involve new discharges that would violate any water quality standards or waste discharge requirements. According to County Geographic Information System (GIS) data, the site is not located within a groundwater recharge area (SOURCE V.2c), and would have no effect on groundwater resources.

(c-d) Alteration of Stream Channel – *No Impact*. Neither the County GIS nor the USGS maps depict a creek at the site or in close proximity; no drainage features were observed during the site visit. The proposed project would not result in direct alterations to existing streams or result in indirect impacts that would alter the course of a stream.

(e) Stormwater Runoff – *Less-than-Significant Impact*. The proposed project would result in a minimal increase of surface runoff from the impervious surfaces of the slightly expanded water storage tank footprint. The potential increase would be considered minor to the minimal net increase in surface area and would not result in a significant increase in runoff that would exceed capacity of existing facilities as drainage in the area is via sheet flow.

(f) Water Quality – *No Impact*. The proposed replacement of existing water storage tanks with a one tank would not result in a permanent use that would generate runoff with the potential to carry pollutants into downstream water bodies. The project would not result in new habitable structures or population increases, and no parking lots or vehicle use would occur, except for intermittent Water District staff maintenance.

(g-h) Flood Hazards – *No Impact*. The project site is not located near a stream or within a designated flood hazard zone.

j) Tsunami Inundation – *No Impact*. The project site is not located in proximity to the coast or subject to potential tsunami inundation.

10. LAND USE AND PLANNING

(a) Divide a Community – *No Impact*. The project is located within an unincorporated area of Santa Cruz County. The proposed project consists of replacement of existing water storage tanks and would not result in new structural development and or not divide an established community. The project is not subject to

(b-c) Consistency with Local Policies/ Plans – *No Impact*. The proposed project consists of upgrading existing water storage facilities. The project is not affected by nor will it affect existing and planned land uses in the area. There are no known policies, plans or regulations adopted for the purpose of mitigating an environmental impact with which the project would potentially be in conflict.

(c) Conflict with Habitat Conservation Plan – *No Impact*. The project site is not located within an area covered by an adopted Habitat Conservation Plan or Natural Community Conservation Plan.

11. MINERAL RESOURCES

The proposed project is located in a rural, forested area. The site is not designated for mineral extraction in the County's General Plan and is not located within, adjacent to or near existing mining operations or known mineral resources.

12. NOISE

The project site is not located near an airport or private airstrip.

(a-b) Exposure to Noise – *No Impact*. The project consists of replacement of existing water storage tanks. The project will not result in new structural development, and will not result in new population or growth. The project will not result in new structural development, and thus, would not expose residents, workers or visitors to noise levels above compatibility standards.

(d) Temporary Construction Noise – *Less-than-Significant Impact*. The proposed project would result in short-term construction equipment noise, but would not result in a substantial temporary increase in ambient noise levels. The construction of the proposed replacement water tank is expected to take six months. Construction noise levels would be temporary and fluctuate over the construction period and on any given day. Construction would occur during normal business hours. Given the short-term duration of construction and fluctuation of noise level throughout the construction period, construction would not substantially affect nearby residences, and construction noise is considered a less-than-significant impact. No mitigation measures are required.

13. Population and Housing

The project consists of implementation of replacement of existing water storage tanks. The project will not result in new structural development, and will not result in new residential development or population growth. The project will not result in displacement of housing units or residents as none exist on the project site.

14. Public Services

The project consists of implementation of replacement of existing water storage tanks with a slightly expanded capacity. The project will not result in new structural development, population or growth or demand for services.

15. Recreation

The project consists of implementation of replacement of existing water storage. The project will not result in new structural development, population or growth or demand for recreational services.

16. Transportation/Traffic

There are no adopted congestion management programs for the project area, and the project would not conflict with adopted policies, plans or programs that support alternative transportation. The project is not located near an airport. The project consists of replacement of existing water storage tanks. The project will not result in new structural development, and will not result in new population or growth. The project will not result in new structural development or generation of vehicular trips. Periodic trips by District staff for facility maintenance would continue as currently occurs.

17. Utilities & Service Systems

The project consists of implementation of replacement of existing water storage tanks. The project will not result in new structural development, population or growth or demand for services. The project will not result in new structural development or increased demand for sewer or water service or result in solid waste generation.

18. Mandatory Findings of Significance

(a) Quality of the Environment – *No Impact*. The proposed project would result in a significant effect on biological resources (nesting birds) with implementation of the mitigation as discussed in subsection 4 above. The project would not result in impacts related to fish or wildlife or reduce fish

or wildlife habitat and species populations. The project would not result in significant impacts to cultural resources ore eliminate important examples of major periods of California history or prehistory as discussed in section 5 above.

(b) Cumulative Impacts – *No Impact*. There are no known cumulative projects in the area to which the project would contribute cumulative impacts.

(c) Substantial Adverse Effects on Human Beings – *No Impact*. No environmental effects have been identified that would have direct or indirect substantial adverse effects on human beings.

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FIGURE 1: Regional Location

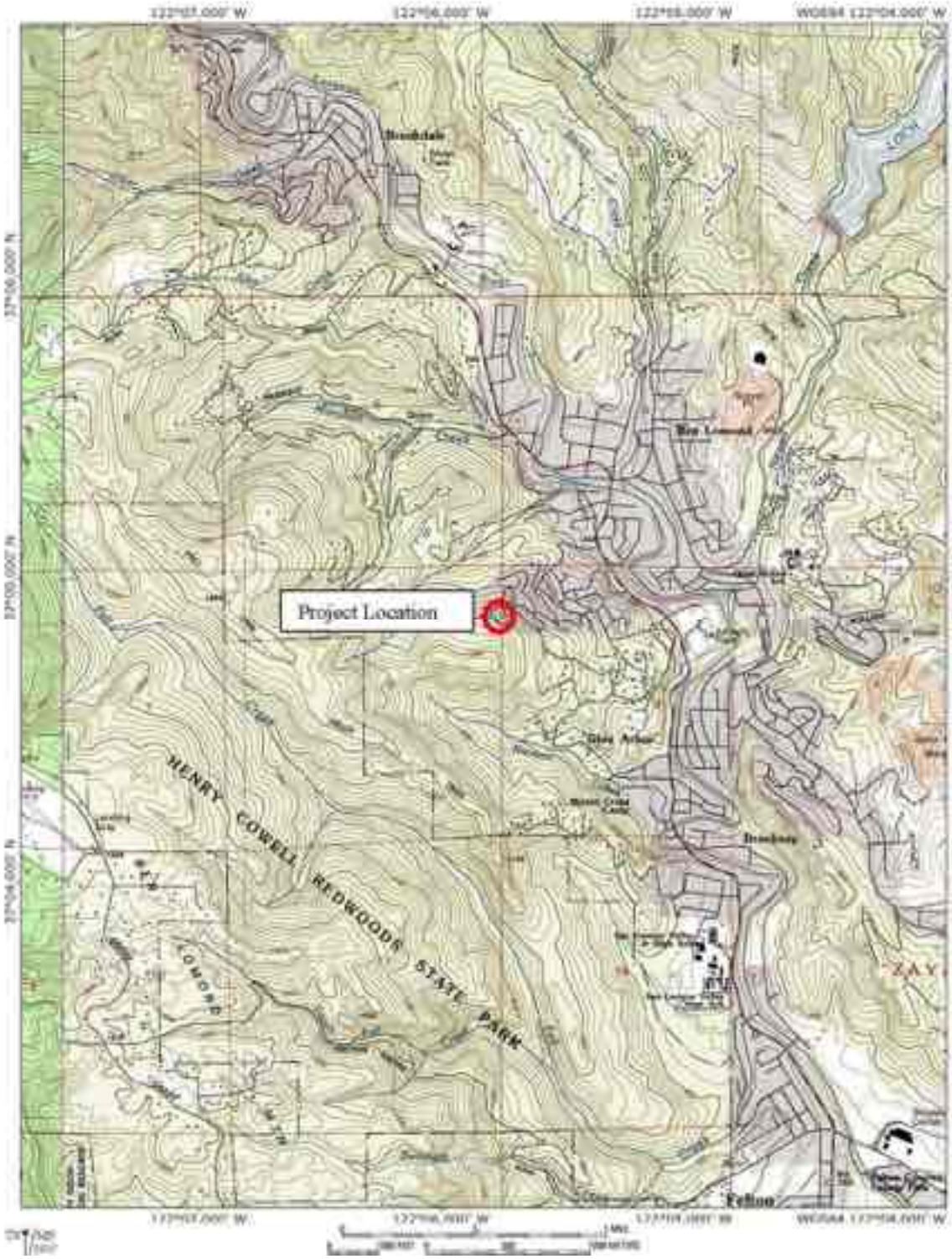


FIGURE 2: Vicinity Location

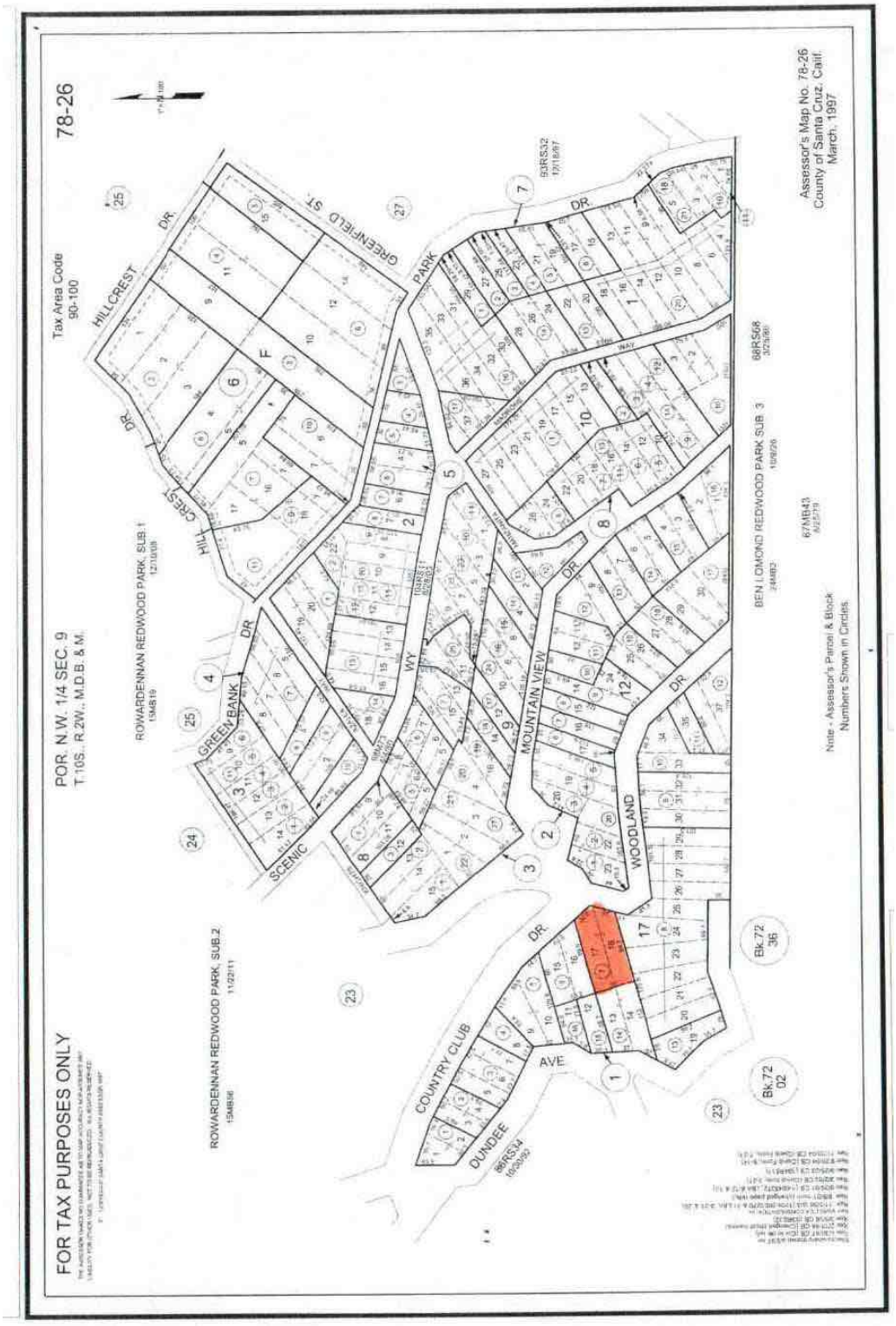


FIGURE 3: San Lorenzo Valley Water District

Service Area Boundaries

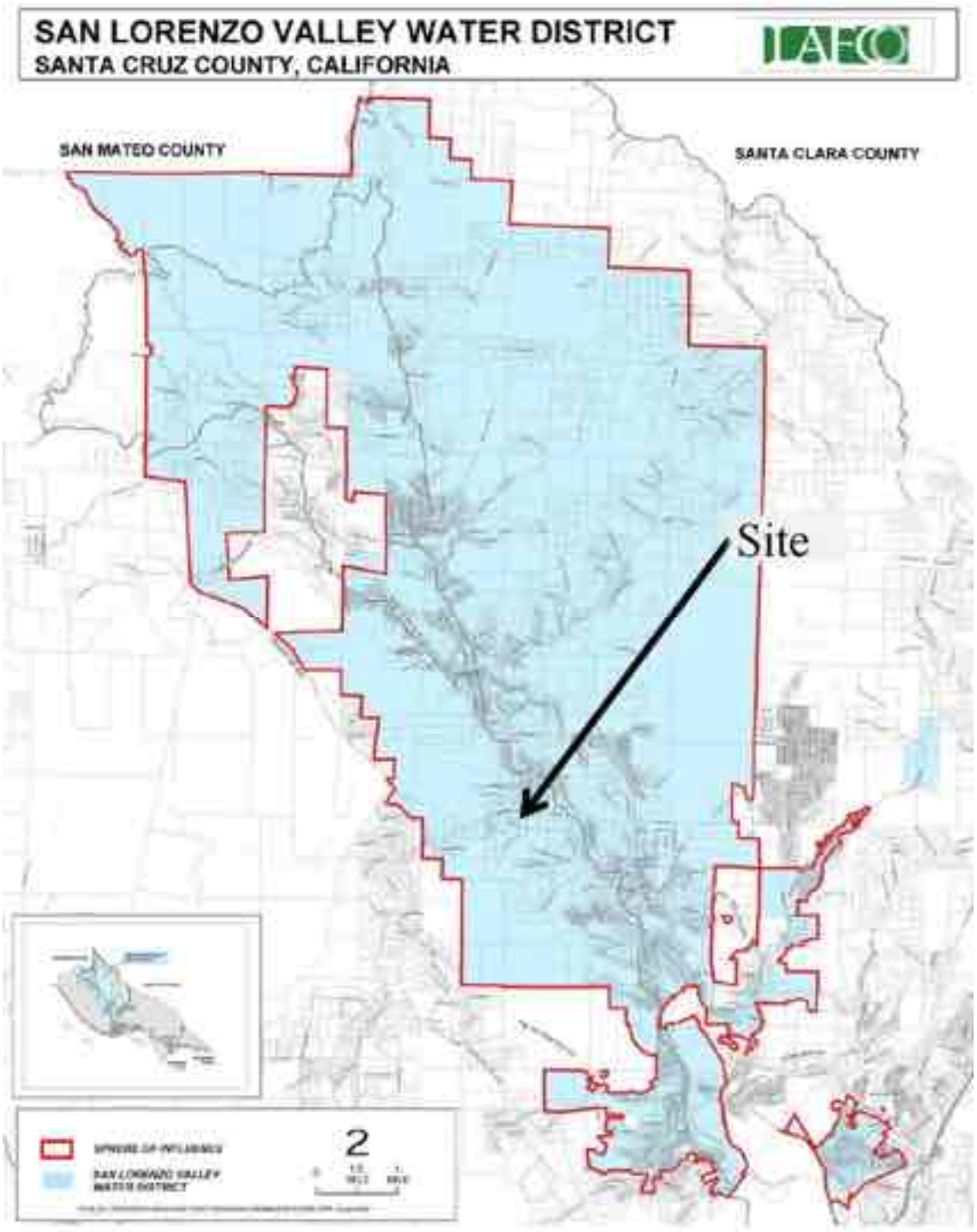


FIGURE 4: Site Topography and Existing Conditions

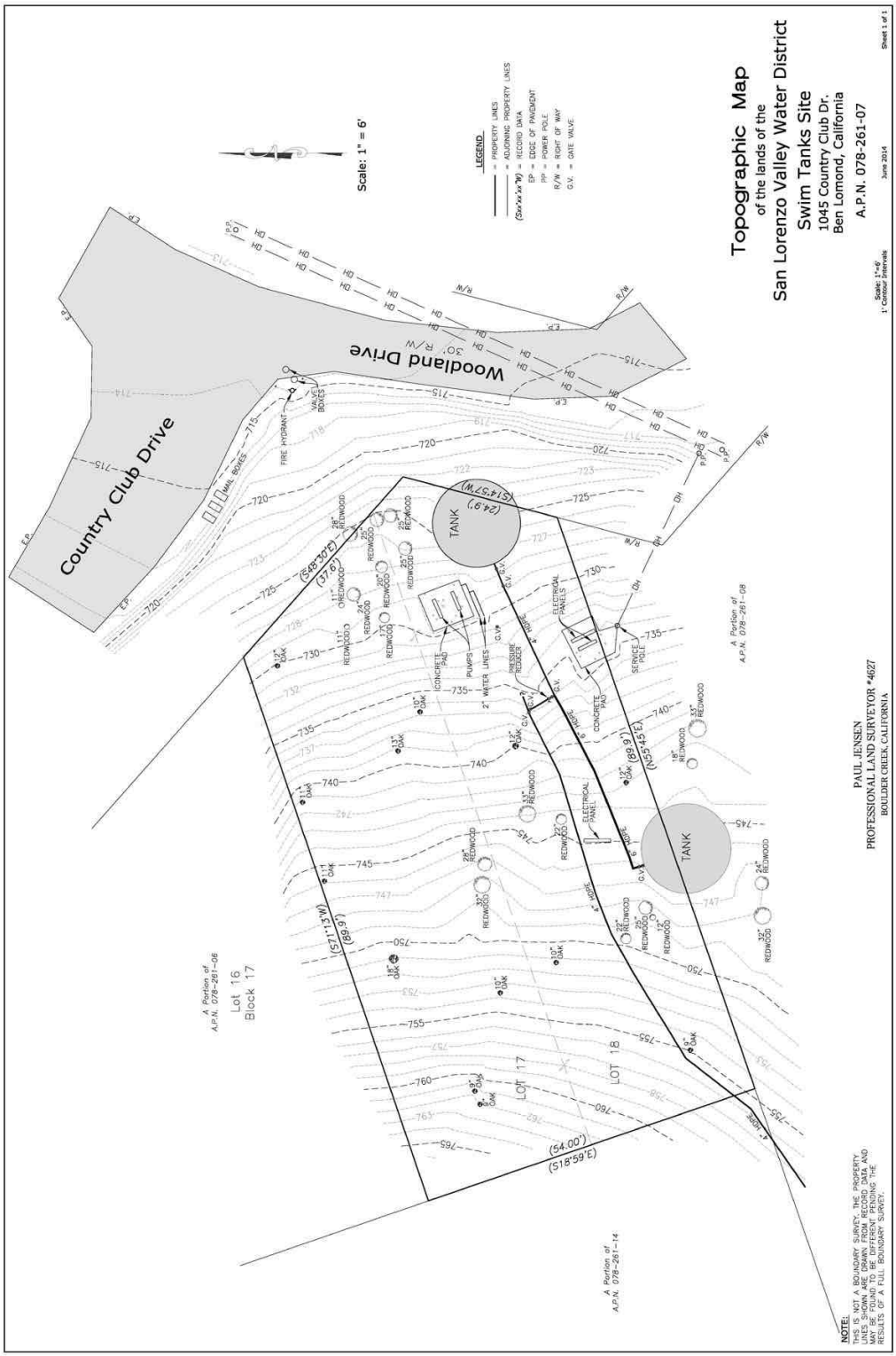


FIGURE 5: Preliminary Project Site Plan

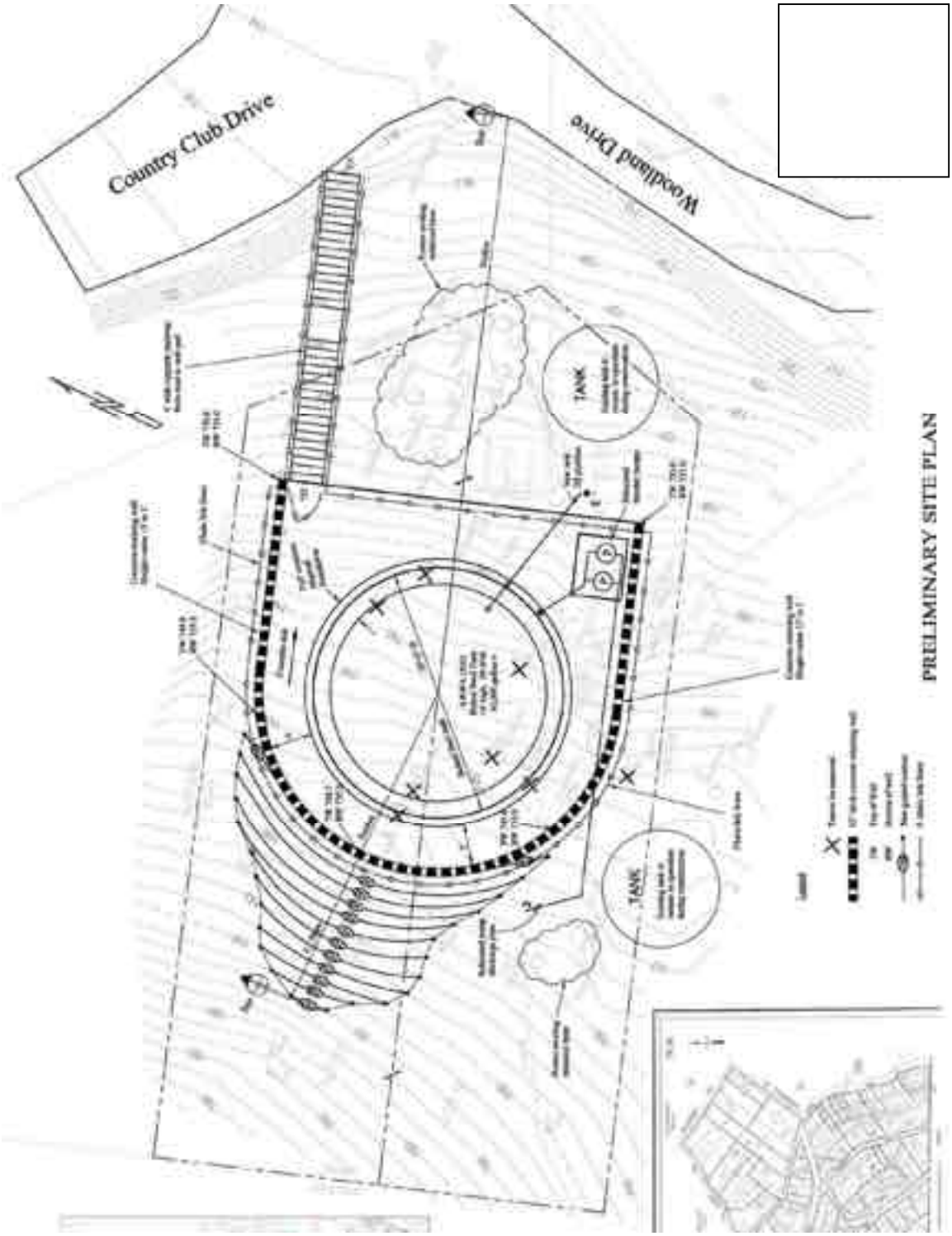
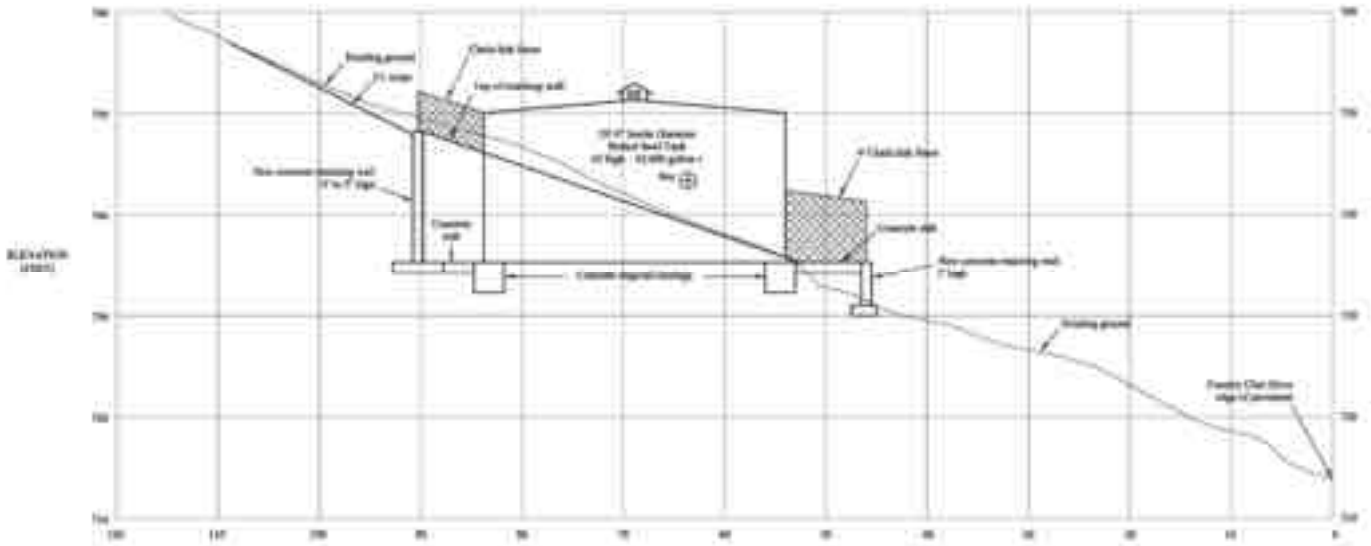
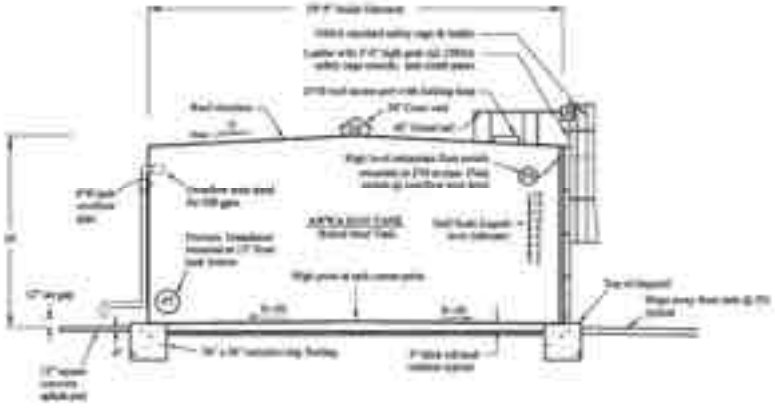


FIGURE 6: Preliminary Plan Details



TANK SITE SECTION ELEVATION



TANK ELEVATION

MND/Initial Study DISTRIBUTION LIST FOR
SLVWD Swim Tank Replacement Project

15 copies to State Clearinghouse via FedEx/overnight delivery for first morning delivery:
State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Mail NOI and MND-IS to:

AMBAG
P.O. Box 2453
Seaside, CA 93955

5th District Supervisor,
Bruce McPherson
SC County Board of Supervisors
701 Ocean Street, Room 500
Santa Cruz, CA 95060

Santa Cruz County
Environmental Health Department
701 Ocean St., Rm. 312
Santa Cruz, CA 95060

Santa Cruz County Planning Dept.
Kathy Previsich, Director
701 Ocean Street, 4th Floor
Santa Cruz, CA 95060

Santa Public Works Dept.
John Presleigh, Director
701 Ocean Street, Room 410
Santa Cruz, CA 95060

Michael Freitas
Freitas + Freitas
3233 Valencia Avenue, A1
Aptos, CA 95003

Mail in advance or deliver NOI on day public review period starts to :

County Clerk NOI ONLY
c/o Clerk of the Board
701 Ocean Street, Room 500
Santa Cruz, CA 95060

Mail NOI only to:

Contiguous Property Owners – Not Required, but Recommended
(Note: no adjacent lots are buildable, the two listed are closest neighbors, including across the Country Club Drive on Woodland Drive)

To Whom It May Concern:
920 Woodland Drive
Ben Lomond, CA 95005

To Whom It May Concern:
1120 Dundee Ave
Ben Lomond, CA 95005

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Santa Cruz Sentinel

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External Ad Number	Pick Up	Art Type	Released for Publication
		Legal Liner	

Advertising Order Confirmation

Santa Cruz Sentinel

Notice To Adopte a Mitigated Negative Declaration

The San Lorenzo Valley Water District is preparing to adopt a Mitigated Negative Declaration for the Swim Tank Replacement Project.

Project Location: 1045 Country Club Drive, Ben Lomond in the San Lorenzo Valley in unincorporated Santa Cruz County.

Project Description: The proposed project consists of replacing the two existing 20,000-gallon redwood storage tanks with one 62,000 gallon bolted steel storage tank. The new tank would be approximately 16 feet tall and 29 feet in diameter and is located between and to the north of the current tank locations.

The public comment period is open from July 14, 2016 through August 12, 2016.

A scheduled public hearing by the SLVWD Board of Directors to consider the proposed the Mitigated Negative Declaration will be held on October 6, 2016 at 7:00PM at the San Lorenzo Valley Water District 13057 Hwy 9, Boulder Creek, CA 95006

A copy of the Mitigated Negative Declaration and Initial Study may be reviewed or obtained at the address below and is available online at www.slvwd.com.

San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, CA
95006-9119

Please submit comments to bod@slvwd.com or

San Lorenzo Valley Water District
RE: Swim Tank Replacement Project
13060 Highway 9
Boulder Creek, CA
95006-9119

Questions or comments please contact Jen Michelsen (831) 430-4627
7/14/16 5773156

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MEMO

To: Board of Directors

From: District Manager

Prepared by: Environmental Programs Manager

SUBJECT: FINAL REPORT FOR THE SAN LORENZO VALLEY HIGH SCHOOL "ENVIRONMENTAL MONITORING" AND THE FINAL REPORT FOR BOULDER CREEK ELEMENTARY PARENT'S CLUB "FIFTH GRADERS TO SCIENCE CAMP"

DATE: July 21, 2016

RECOMMENDATION

It is recommended that the Board of Directors review this memo and accept the 2015 Final Report for the San Lorenzo Valley High School "Environmental Monitoring" and the 2016 Final Report for the Boulder Creek Elementary Parent's Club "Fifth Graders to Science Camp" Watershed Education Grant.

BACKGROUND

June 2015 your Board awarded a Classic Watershed Education Grant in the amount of $2,900 to San Lorenzo Valley High School for the "Environmental Monitoring" Program. And on April 7, 2016 your Board awarded a Classic Watershed Education Grant in the amount of $2,500 to Fifth Graders to Science Camp, Watershed Education Grant.

In July and June 2016 the San Lorenzo Valley Water District received the respective final reports (attached). It is recommended that your Board receive and accept the respective 2015 & 2016 Final Report for the Environmental Monitoring & the Boulder Creek Elementary Parent's Club "Fifth Graders to Science Camp."

FISCAL IMPACT:
$5,400

STRATEGIC PLAN:
Strategic Element 2.4 Watershed Stewardship – Environmental Education Program

Final Project Report: Environmental Monitoring 7/2016
Primary Contact: Jane Orbuch

Thanks again to the San Lorenzo Valley Water District for supporting the Environmental Monitoring Program at San Lorenzo Valley High School, without your support this course would not have been possible. This past year, I started with 28 students and 12 projects—the greatest number ever! Through normal attrition, we ended the school year with 11 projects and 26 student participants. (See attached Abstracts.)

All students participated in the Santa Cruz County Science Fair and most won awards. .7 projects were chosen to represent Santa Cruz County at the California State Science Fair and 5 projects attended. Our atmospheric monitoring project earned an Honorable Mention in the Environmental Science category Senior Division at the state fair. All students participated in the Poster Review session and presented at the Science Symposium.

Next year there are are about 18 continuing students and 6 new students participating. We are also adding a project that hasn't been on the books for a few years; Sudden Oak Death, mentored by Dr. Michael Loik. Last year, the school district agreed to increase my teaching contract salary by 10% to support the large class of monitoring students; therefore, this year I did not take a salary from the Water Department grant—all funds were used to support projects. This coming school year, the district will continue to support environmental monitoring with a 10% position as I will again have over 20 students. The high school also agreed to provide $500 in supply money for the program, as funding has been very tight. This school district support will allow me to continue to use the Water Department funding for equipment, refreshments for events and mentor stipends.

Five additional mentors were recruited this year: Alex Rinkert (an x-monitor and UCSC graduate) for the bird project, Dan Merritt for the Sand Crab project and Tanya Diamond and Ahiga Snyder for the Wildlife Tracking project. Also, a UCSC environmental science graduate student, Elissa Olimpi, was recruited to provide assistance with statistical analysis. She conducted 2 sessions for students and was available through email. The mentors are the most crucial aspect of Water Department support; they really make this program work without them I could not support students with the necessary detailed information and skills for each of their projects. Plus students learn to interact with a professional in their scientific field.

Budget: (spreadsheet attached)

- Mentor stipends were budgeted at $700 and actually came to $1350 for 8 mentors (one mentor assisted with 3 projects and was awarded an extra $150.)
- Junior Science and Humanities Symposium was budgeted at $350 and was cancelled.
- Poster board printing was budgeted at $210.00 and only one was printed at a cost of $67.09.
- Students who attended the State Science Fair did not require financial support so none of the budgeted $150 was used for this purpose.
- The school picked up the cost of van gas, so none of the $90 budgeted was spent on gas.
- Poster Review and Symposium refreshments/meeting supplies budgeted at $250 and I spent $272.07.
- Equipment and monitoring Supplies budgeted $650 and spent approximately $1205.48—much of which funded new waders for all the new students.
- Balance of remaining funds $72.45 going to Jane Orbuch as a stipend, though some of these funds may be used over the summer to purchase more coliform media, waders and refund students for new sand crab equipment.

Monitoring Website: (Site was moved and is being updated) https://sites.google.com/a/slvusd.org/environmental-monitoring-web/

***Note**: Please send the second disbursement to Jane Orbuch at her home address*
2105 Branciforte Dr, Santa Cruz, CA 95065

Environmental Monitoring Project Abstracts 2016

San Lorenzo Valley High School

Special Thanks to San Lorenzo Valley Water Department and San Lorenzo Valley Unified School District for their support.

Ackemann, Cassie, Annika Bauerle, and Ava Badger

What's The Stink In Shingle Mill Creek? : The Sequel

Shingle Mill Creek has been identified as a non-point source of fecal coliform pollution into the San Lorenzo River (SLR). Last year, we determined that the coliform originates from an upstream location, where the density of houses is the highest. This year, our investigative question is to determine the source of the fecal contamination in Shingle Mill Creek. We hypothesize that the coliform is most likely coming from faulty septic systems, as coliform bacteria can easily leach through the relatively sandy soil present along Shingle Mill Creek. We collect water samples bimonthly from five sites along the creek. In the lab, we are still using the membrane filtration technique but are incubating our filters on a new media, which is specific for E. coli rather than the broad group of fecal coliform bacteria we tested for last year. To further pinpoint the source of contamination, we have begun to monitor the nitrate levels in the creek which can be indicative of malfunctioning septic systems. We are also collecting rainfall data; high rainfall events should correlate with septic system failure. This year, we continue to find increased E. coli contamination upstream, along with increased nitrate levels. As El Nino begins, we hypothesize the fecal coliform concentrations and nitrate levels will increase. We would like to thank Steve Peters and Sam Blakesley for their invaluable support and assistance.

Gallagher, Ian, Quinn Lydon, Halie Davis

Will El Niño Impact the Phytoplankton in the Monterey Bay?

Last year, we monitored phytoplankton to determine correlations between temperature, turbidity, and the likelihood of a phytoplankton bloom; however, we did not find an obvious correlation. This year, we are continuing our data collection and hope to find a correlation between the El Niño phenomena and the abundance and diversity of the phytoplankton in the Monterey Bay. We predict El Niño will increase the abundance of specific species of phytoplankton due to the warm band of water from the Southern Oscillation. We commute bi-monthly to Santa Cruz harbor where we use a 20 micron phytoplankton net to retrieve our phytoplankton samples, as well as thermometers, a secchi disk, and a refractometer to record environmental data. In the lab using a microscope, we determine the type and abundance of phytoplankton species in our samples. We also collect water color data for the Santa Cruz Water Colors project, a regional effort to compare ocean color and phytoplankton occurrence. In addition, we mail phytoplankton samples to the California Department of Public Health where they are analyzed for the presence or absence of harmful algal blooms species (HABS). Finally, we are maintaining a blog, in conjunction with UCSC, to communicate our findings to the community. As El Niño has just recently started, we have not yet finished our data analysis, but we look forward to sharing it at the Science Fair. We would like to thank our mentors, Kendra Negrey, Gregg Langlois, and Vanessa Zubkousky, for their invaluable assistance.

Hill, Carly and Mira Lion

Effect of Sea Surface Temperature on the Presence of Acanthocephalan Parasites in *Emerita analoga*

Sand crabs are generally regarded as an indicator species of the health of sandy beach ecosystems. Sand crabs are also the intermediate hosts of acanthocephalan parasites that are hazardous to the health of seabirds and marine mammals such as otters when ingested. The goal of our project this year is to determine if there is a correlation between sea surface temperature and abundance of acanthocephalan parasites in *Emerita*. We hypothesize that there will be a greater number of acanthocephalan parasites this year due to the warm water of El Niño and the "Blob". This year we are continuing to gather data monthly on number and sex of sand crabs at Seabright beach following limpets protocols. In addition, beginning summer 2015, we started collecting and dissecting sand crabs to quantify the parasite load. To determine if there are a high number of parasite eggs in the water, we will use mortality rates of otters and sea and shorebirds which are hosts of the parasites.We follow the LiMPETS (Long-term Monitoring Program and Experiential Training for Students) protocols for Sandy Beach Monitoring to survey the distribution and abundance of *Emerita* at Seabright beach. We also use these procedures to dissect the sand crabs and discover the prevalence of parasites seasonally. We started our project in fall of 2014 and we found that sand crabs are most abundant during spring. Thus far this year, we have found that sea surface temperature does not affect abundance of Acanthocephalan parasites. We would like to thank Emily Gottlieb, and Dan Merritt who have assisted us with this project.

Huxley, Kyla and Lockwood, Charlotte

Davenport Landing Anemone Plot Monitoring: Impact of This Year's El Niño In this project, we are monitoring the changes El Niño may bring to the diversity and abundance of intertidal species at Davenport Landing. We hypothesize that big storms generated by the El Niño will rip out sessile (attached) species such as mussels, anemones, and algae opening up the space for different species to colonize the substrate. We also hypothesize that the warm water, and low nutrients which accompany El Niño will be detrimental to the algae and mussel populations that feed on phytoplankton. We follow the LiMPETS (Long-term Monitoring Program and Experiential Training for Students) protocols for monitoring the anemone plot at Davenport Landing. Bimonthly, we randomly place a quadrat inside the permanent area of the anemone plot and count designated species, two to six times per visit. We also intend to compare our data to previously collected data on the LiMPETS web site to determine El Niño's impacts and to look for species recovery post El Niño. Thus far, we have found an abundance of anemones, mussels, turban snails and algae which represent an improvement in their abundance from past data collections. We would like to thank our mentors Dr. John Pearse (UCSC) and Emily Gottlieb (LiMPETS) for their advice, guidance, and assistance.

Jeffrey, Robert A. and Chloe A. Zehr.

Will El Nino Save the Salamanders?

Amphibian populations, specifically salamanders, have been declining, depriving ecosystems of integral species. Our objective is to compare the effects of El Niño conditions in two different ecosystems in Henry Cowell State Park, to determine if the additional rainfall increases salamander abundance. We hypothesize that because of increased rainfall from El Niño conditions, we will find more salamanders than previously found in Henry Cowell State Park during drought years. We collect data from five stations in Henry Cowell State Park, two of which are in Fall Creek State Park. Each station consists of two transects, and each transect has five artificial cover objects (ACOs). Our ACOs are five-ply plywood boards (0.46 x 0.46 meters), spaced 3 meters apart along each fifteen-meter transect. We monitor bimonthly, recording the number of salamanders under each ACO. At each transect, using a Vernier LabPro, we measure temperature and relative humidity, and at every board we measure soil moisture and temperature. A previous team has collected the same abiotic and biotic data from the same transects for the past three drought years. While comparing our data with previous data, we have found a higher abundance of salamanders this Fall and Winter than found during the drought years. As the project continues and we collect more data, we will be able to better ascertain the state of local salamander populations. We would like to thank our mentor Stefanie Bourcier, without whom this project would not have been possible.

Keesaw, Natalie J. and Sophia E. Magliato

Effects of El Niño and the Blob on the Abundance and Distribution of Honeycomb Tube Worms

We are monitoring the abundance and distribution of intertidal organisms at Davenport Landing Beach. Our goal is to observe whether conditions generated by the expected El Niño and the Blob in 2015-16, disrupt the abundance and distribution of the Honeycomb Tube Worm at the Vertical Transect site at Davenport Landing Beach. We hypothesize that these anomalous conditions will specifically disrupt the abundance and distribution Honeycomb Tube Worms. Furthermore, we predict that this particular species will recover over the next two years (2016-18). We monitor twice a month, following LiMPETS, (Long-term Monitoring Program and Experiential Training for Students) procedures, for the Vertical Transect site at Davenport Landing. We place our one meter square-gridded quadrat every three meters along a pre-established twenty-one meter transect. We count species both individually and by squares according to the LiMPETS data sheet. Thus far, we have observed Honeycomb Tube Worms thriving only in upper intertidal zone. Over the next two years, we plan to collect more data in order to prove our hypothesis. We would like to thank our mentors Dr. John Pearse (UCSC) and Emily Gottlieb (LiMPETS) for their assistance and advice.

Maness, Lily M., Veronica R. Varner, and Harena Z. Haile

Nothing Germinated? What The Heck Happened?

The Zayante Sandhills are a unique habitat, home to many endemic and endangered species in Santa Cruz County. Three years ago, we began this project by inventorying and assessing the natural recovery of native flora at the Olympia Quarry (a degraded Sandhills habitat). We also collected primarily endemic plant seeds for future revegetation efforts. Our purpose had been to observe the recovery of endemic plant species after their habitat was destroyed by the sand quarry, recreational activities, and the introduction of non-native invasive species. In Winter and Fall of 2014, we planted individual and mixed seeds collected in 2013 in degraded areas at the quarry. After our seeds did not germinate in Spring of 2015, we wanted to discover "why?". Our objective this year is to investigate whether the drought was the most important factor influencing the lack of seed germination. We hypothesize that if we water sandhill endemic seeds following a normal rainfall year pattern (1998-99), that we will see more germination and more vigorous growth than the same seeds watered following a drought watering schedule (2014-15). In a greenhouse in October 2015, we set up a controlled experiment to test this hypothesis using previously collected Ben Lomond Wallflower seeds. Our experiment consists of 3 sets of seeds each following a different a watering regime: one set of 24 seeds is watered every day (a control), another set follows the rainfall pattern of 2014-15 (a drought year), and the final group matches the rainfall of 1998 (an average rain year). Our preliminary results indicate that the control group has the largest number of germinated seeds and the most vigorous growth, while the 2014-15 and 1998 groups have almost equal amounts of germination. We need to continue to water and measure seedling growth through the winter and spring to reach a definitive conclusion. We would like to thank our wonderful mentor, Suzanne Schettler, for her assistance.

Manseau, Julianna, Kate Ussat

The Birds of San Lorenzo Valley High School: Garden vs. Urban

We monitor the bird species of San Lorenzo Valley High School in order to compare the diversity of birds in garden and urban settings. We categorize our sites as garden or urban based on the amount of foliage in each plot. Our hypothesis is that the more urbanized a plot, the less birds will be recorded due to lack of vegetation and food in the immediate area. For our study at the high school, we designated six circular, fifty meter radius plots (three urban and three garden) separated by at least one hundred fifty meters to avoid duplicate bird counts. A bird is recorded in our data sheet, if the bird is heard, seen, or flushed from the plots. We also record abiotic factors at each plot, including temperature, wind speed, cloud cover and noise level. We have been monitoring since late October 2015, and so far our results indicate greater diversity and abundance of birds in garden plots. As birds are key indicator species, this project informs us about the diversity of species and the environmental health of our campus. We would like to thank Alex Rinkert, our mentor, and Jeff Smith, for their advice and bird expertise.

Wade, Caitlyn and Cassidy White

El Nino: The Effects on a Sea Mussel Population

Davenport Landing's diverse intertidal zone is currently experiencing El Nino weather patterns that could have major effects on all populations, particularly the abundant sea mussel, *Mytilus californianus.* Our goal is to compare current sea mussel populations to mussel populations in years without El Nino. We hypothesize that because of the predicted El Nino conditions, we will see a decrease in the abundance of mussels due to increased storm frequency and resultant larger waves jarring them loose from their substrate. We will also be investigating the impact of the loss of mussels on other tidepool inhabitants. Another factor limiting mussel abundance is lack of food (plankton) due to reduced upwelling and warmer water from El Nino. We monitor bimonthly within a 15 by 3 meter plot at Davenport Landing. Following LiMPETS procedures, we randomly place our quadrat within the plot and count species individually or by square. We will compare our data set to data from as far back as 1976, to look for a correlation between mussel abundance and El Nino occurrences. However, so far this year there have been no large El Nino events so we cannot reach any conclusions. We would like to thank our mentors, John Pearse and Emily Gottlieb, for their assistance.

Yanowitz Jordan, Aiden le Roux, and Jared Rembao

Wildlife Monitoring Using Camera Traps In Olympia Quarry

We have been collecting data using camera traps since October 2015, on what animals are frequenting Olympia Quarry and examining the biodiversity of this environment. Olympia Quarry is part of the Sandhills Chaparral, a unique environment found solely in Santa Cruz County, and an important aquifer site for the San Lorenzo Valley Water District (SLVWD). The goal of this project is to assist the SLVWD in determining the richness and abundance of species in the Olympia Quarry. As we accumulate more data from our camera traps, we will formulate a more specific hypothesis about the wildlife diversity in the Quarry. As of May 2016, we have 5 camera traps on the property. We monitor bimonthly, collecting camera trap data and repositioning the traps as necessary based on our data. We are currently entering our camera trap data into a database with which we will be able to analyze our results, construct a hypothesis and make a conclusion about the biodiversity of the Quarry. We would like to thank the San Lorenzo Valley Water District for their financial help, and Tanya Diamond, Ahiga Snyder, and Bryan Largay for their invaluable assistance.

Zinkievich M. , Ashley Welch

Spare The Air Days: Are They Real And Does Anyone Know About Them?

The purpose of our project is to determine the validity of the “Spare the Air Days”, predicted by the Monterey Bay Unified Air Pollution Control District (MBUAPCD), in the San Lorenzo Valley. A “Spare the Air Day” is called when the PM (particulate matter) 2.5 reaches an unhealthy level caused by an atmospheric inversion layer trapping the particulates in the valley. We hypothesize that when the MBUAPCD calls a “Spare the Air Day” there will be an inversion present and an increased amount of PM 2.5. On “Spare the Air Days”, we will launch a radiosonde, attached to a 200g balloon, into the atmosphere from San Lorenzo Valley High, and analyze the data collected to determine if an inversion is indeed present. Secondly, we will collect particulate data from the BAM (Beta Attenuation Monitor) located on the tri-school campus. Therefore, we will be able to determine the validity of the declaration of a “Spare the Air Day”. We will also be launching on non-inversion days to prove that the PM 2.5 is within the acceptable range and to demonstrate that there is no inversion. In addition, we will develop a marketing campaign to further educate our local community about the perils of PM 2.5 and “Spare the Air Days.” We have not yet had enough “Spare the Air Days” to accurately test our hypothesis; this year’s El Nino may negatively impact the number of inversions that will occur. We would like to thank our mentors: Amy Clymo, Bob Nunes and Scott Norton, from the MBUAPCD.

SLV water district grant 15/16			$2,900	1st check $2610	2nd $290	
Date	Item	Amount	Status	Stipends	Amount	Status
8/17/15	(2)Waders size 7-amazon	$146.67	credit card	Suzanne Shettler	$150.00	check #2093 6/17/16
8/18/15	(2) Waders size 6-amazon	$129.90	credit card	Stefanie Bourcier	$150.00	check #2095 6/17/16
9/23/15	digital thermometer/handheld anenometer	$39.43	credit card amazon	John Pearse	$300.00	check 2094 6/17/16
2/25/16	Proline felt sole hip waders (2 pair)	$119.60	credit card amazon	Sam Blakesley		
10/3/15	Trophy cam/security box/memory card	$204.81	credit card amazon	Kendra Negrey	$150.00	check # 2096 6/17/16
9/29/15	Nitrate Probe vernier	$196.75	credit card	Alex Rinkert	$150.00	check 2097 6/17/16
12/13/15	30 meter open reel tape	$11.88	credit card amazon	Jeff Smith	$150.00	check 2098 6/17/16
2/16/16	Safeway Poster Review	$22.33	credit card amex	Elissa Olimpi	$150.00	paid 3/5/16-check #2085
2/16/16	Office Max Poster Review	$31.60	credit card amex	Dan Merritt	$150.00	check # 2099 6/17/16
2/16/16	Costco Poster Review	$110.86	credit card amex		$1,350.00	$150 per project--max $30
3/21/16	Hach--coliform media-whirl pak bags	$169.75	credit card amex			$25/50 per talk
2/25/16	Dicks sporting--2 waders	$119.60	credit card amex			
5/22/16	Poster Printing	$67.09	check to Mara Hill 2091			
2-Jun	Costco refreshments symposium	$107.28	credit card amex			
	Total equipment/refreshments/supplies	**$1,477.55**				
	stipends	**$1,350.00**				
	total grant expenditures	**$2,827.55**				

Final report Classic Watershed Education Grant 2016

Boulder Creek Elementary Parent's Club

Fifth Graders to Science Camp

This year, thanks to the Classic Watershed Education Grant from the San Lorenzo Valley Water District all fifth grade students and three fifth grade teachers at Boulder Creek Elementary had the opportunity to attend YMCA Camp Campbell Outdoor Science School in Boulder Creek. These students and teachers were able to immerse themselves in the San Lorenzo River ecosystem. They studied habitats, water quality and plant and animal life in the San Lorenzo River and the San Lorenzo Valley. In addition students learned about conservation efforts and ways that they can make a difference in our environmental and water quality through good stewardship. The students and teachers participated in a variety of hikes and exploratory curriculum throughout the four days of camp attendance. The support of the SLVWD is greatly appreciated by Boulder Creek Elementary Parents Club, students, staff and families of BCE.

BCE students looking for organisms.

A BCE student identifying an organism.

BCE students exploring the San Lorenzo River

Financial report Classic Watershed Education Grant 2016

Boulder Creek Elementary Parent's Club

Fifth Graders to Science Camp

74 students @ $260 each before fundraising + 3 teachers @ $150 each before fundraising

Full Scholarships needed for 6 students

Total Camp Cost based on 74 students + 3 teachers	$19,690.00
Additional Cost for lunch during extra time allowed at Camp on Friday	$301.98
Less Financial Assistance from YMCA Camp Campbell for student Scholarships	($520.00)
Less portion of fundraising proceeds used for deposit, teacher attendance and general fund contributions	($3,195.00)
Less family contributions and additional family donations	($13,776.98)
Less SLVWD Grant for general fund	($2,500.00)
Total	($0.00)

M E M O

TO: Board of Directors

FROM: District Manager

DATE: July 21, 2016

SUBJECT: ORDERING AN ELECTION, REQUESTING COUNTY ELECTIONS TO CONDUCT THE ELECTION AND REQUESTING CONSOLIDATION OF SUCH ELECTION

RECOMMENDATION:

It is recommended that the Board of Directors review this memo and adopt attached resolution Ordering an Election, Requesting Santa Cruz County Elections to Conduct the Election, and Requesting Consolidation of Such Election for San Lorenzo Valley Water District.

BACKGROUND:

The terms of 2 of the San Lorenzo Valley Water District Board of Directors will be up for election on November 8, 2016. According to Santa Cruz County Election Department records the following directors are up for election on November 8, 2016:

4 Year Terms
Margaret Bruce
Randall Brown

Prior to the election, state law requires special districts to file a Notice of Election with the County Clerk verifying which offices are up for election, as well as other pertinent information.

It is recommended that the Board of Directors review this memo and adopt the attached resolution Ordering an Election, Requesting Santa Cruz County Elections to Conduct the Election, and Requesting Consolidation of Such Election for San Lorenzo Valley Water District.

STRATEGIC PLAN:

Element 6.0 – Public Affairs

FISCAL IMPACT:

$40,400

SAN LORENZO VALLEY WATER DISTRICT

RESOLUTION NO. 3 (16-17)

SUBJECT: **RESOLUTION ORDERING AN ELECTION, REQUESTING COUNTY ELECTIONS CONDUCT THE ELECTION AND REQUESTING CONSOLIDATION OF SUCH ELECTION FOR SAN LORENZO VALLEY WATER DISTRICT**

WHEREAS, pursuant to Election Code Section 10002, the governing body of any city or district may by resolution request the Board of Supervisors of the county to permit the county elections official to render specified services to the city or district relating to the conduct of an election; and

WHEREAS, the resolution of the governing body of the city or district shall specify the services requested; and

WHEREAS, pursuant to Elections Code Section 10002, the city or district shall reimburse the county in full for the services performed upon presentation of a bill to the city or district; and

WHEREAS, pursuant to Elections Code Section 10400, whenever two or more elections, including bond elections, of any legislative or congressional district, public district, city, county, or other political subdivision are called to be held on the same day, in the same territory, or in territory that is in part the same, they may be consolidated upon the order of the governing body or bodies or officer or officers calling the elections; and

WHEREAS, pursuant to Election Code Section 10400, such election for cities and special district may be either completely or partially consolidated; and

WHEREAS, pursuant to Elections Code Section 10403, whenever an election called by a district, city, or other political subdivision for the submission of any question, proposition, or office to be filled is to appear upon the same ballot as that provided for that statewide election, the district, city or other political subdivision shall, at least 88 days prior to the date of the election, file with the board of supervisors, and a copy with the elections official, a resolution of its governing board requesting the consolidation, and setting forth the exact form of any question, proposition, or office to be voted upon at the election, as it is to appear on the ballot, acknowledging that the

consolidation election will be held and conducted in the manner prescribed in Section 10418. Upon such request, the Board of Supervisors may order consolidation; and

WHEREAS, pursuant to Elections Code Section 10418, if consolidated, the consolidated election shall be held and conducted, election boards appointed, voting precincts designated, candidates nominated, ballots printed, polls opened and closed, voter challenges determined, ballots counted and returned, returns canvassed, results declared, certificates of election issued, recounts conducted, election contests presented, and all other proceedings incidental to and connected with the election shall be regulated and done in accordance with the provisions of law regulating the statewide or special election, or the election held pursuant to Section 1302 or 1303, as applicable.

WHEREAS, the resolution requesting the consolidation shall be adopted and filed at the same time as the adoption of the ordinance, resolution, or order calling the election; and

WHEREAS, various district, county, state and other political subdivision elections may be or have been called to be held on November 8, 2016;

NOW, THEREFORE, BE IT RESOLVED AND ORDERED THAT THE Board of Directors of the San Lorenzo Valley Water District hereby orders an election be called and consolidated with any and all elections also called to be held on November 8, 2016 insofar as said elections are to be held in the same territory or in territory that is in part the same as the territory of the San Lorenzo Valley Water District and requests the Board of Supervisors of the County of Santa Cruz to order such consolidation under Elections Code Section 10401,10403 and 10418;

BE IT FURTHER RESOLVED AND ORDERED that the Board of Directors of the San Lorenzo Valley Water District hereby requests the Board of Supervisors to permit the Santa Cruz County Elections Department to provide any and all services necessary for conducting the election and agrees to pay for said service; and

BE IT FURTHER RESOLVED AND ORDERED that the Santa Cruz County Elections Department conducts the election for the following offices on the November 8, 2016 ballot:

Randall Brown	Elected Official Board of Directors	4 Year Term
Margaret Bruce	Elected Official Board of Directors	4 Year Term

* * * * * * * * * * * * *

PASSED AND ADOPTED by the Board of Directors of the San Lorenzo Valley Water District, County of Santa Cruz, State of California, on the 21st day of July, 2016, by the following vote of the members thereof:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Randall Brown, President
San Lorenzo Valley Water District

Attested: _____
Holly B. Morrison, District Secretary
San Lorenzo Valley Water District

Contact Information/Incumbent Roster

Name of District: San Lorenzo Valley Water District

Contact Person: Holly B. Morrison, District Secretary

Mailing Address: 13060 Highway 9, Boulder Creek, CA 95006

Telephone: (831) 430-4636 **Fax:** (831) 338-7986

E-Mail: hmorrison@slvwd.com

Website: www.slvwd.com

Incumbents Name/Address	Date Elected/Appointed	Term of Office
Charles Baughman 13060 Highway 9 Boulder Creek, CA 95006	Nov. 2014	4 years
Randall Brown 13060 Highway 9 Boulder Creek, CA 95006	Nov. 2012	4 years
Margaret Bruce 13060 Highway 9 Boulder Creek, CA 95006	July 2012	4 years
Eric Hammer 13060 Highway 9 Boulder Creek, CA 95006	Nov. 2014	4 years
Gene Ratcliffe 13060 Highway 9 Boulder Creek, CA 95006	Nov. 2014	4 years

M E M O

TO: Board of Directors

FROM: District Manager

PREPARED BY: District Secretary

SUBJECT: BANK OF THE WEST CREDIT CARD COMPLIANCE

DATE: July 21, 2016

RECOMMENDATION:

It is recommended that the Board of Directors review this memo and approve Bank of the West credit card compliance.

BACKGROUND:

California Special Districts Association (CSDA) sponsors a credit card through Bank of the West for its members. San Lorenzo Valley Water District (District) has two CSDA, Bank of the West credit cards for the District Manager and the Director of Operations. These cards are used for on-line purchases, travel, registrations, etc. for employees and Board members of the District.

To comply with new banking rules, the Bank of the West now requires a resolution by the Boards of each CSDA member using their credit cards.

STRATEGIC PLAN:
Element 9.0 – Administrative Management

FISCAL IMPACT:
None

SAN LORENZO VALLEY WATER DISTRICT

RESOLUTION NO. 2 (16-17)

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN LORENZO VALLEY WATER DISTRICT AUTHORIZING AGREEMENT WITH BANK OF THE WEST TO PARTICIPATE IN THE CSDA DISTRICT PURCHASING CARD PROGRAM

WHEREAS, credit cards and purchasing cards are mechanisms for purchasing goods and services for the convenience of the San Lorenzo Valley Water District (District); and

WHEREAS, the California Special Districts Association (CSDA) has negotiated with Bank of the West to provide a Purchasing Card Program for vendor payments, purchasing , travel or fleet transactions, and

WHEREAS, the CSDA District Purchasing Card Program (Program) is available to members of the CSDA and the District is a member of the CSDA; and

WHEREAS, the Program requires an application for credit approval, a resolution by the District Governing Board, and District policy and procedures regarding the use of the credit cards; and

WHEREAS, the District has a Standard Practice of procedures for using credit cards as required by the Program,

NOW THEREFORE BE IT RESOLVED, that the Governing Board of the San Lorenzo Valley Water District directs the following actions:

1. Authorize participation with Bank of the West in the CSDA District Purchasing Card program;
2. Authorize the application to the Program for credit cards or purchasing cards;
3. Authorize the Board President to execute any necessary agreements,

BE IT FURTHER RESOLVED, that this Resolution shall take effect immediately upon adoption.

PASSED AND ADOPTED by the Board of Directors of the San Lorenzo Valley Water District, County of Santa Cruz, State of CA, on the 21th day of July, 2016 by the following vote of the members thereof:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Holly Morrison, District Secretary
San Lorenzo Valley Water District

M E M O

TO: Board of Directors

FROM: District Manager

PREPARED BY: Environmental Programs Manager

SUBJECT: 2015 DATA COLLECTION/ RESTORATION GRANT PROGRAM FINAL PROJECT REPORT: "INVASIVE BROOMS AND ACACIA MANAGEMENT PLAN FOR THE OLYMPIA WELLFIELD."

DATE: July 21, 2016

RECOMMENDATION:

It is recommended that the Board of Directors review this memo and accept the 2015 Data Collection/ Restoration Grant Program final project report from Greening & Associates "Invasive Brooms & Acacia Management Plan for the Olympia Wellfield; applicable to the management of Brooms (Genista spp.) infestations on the District's Olympia Watershed property.

TECHNICAL INFORMATION

Sand Parkland Community

The sandy Zayante Soils in the lower elevation western half of the Olympia Wellfield provides the substrate that supports extremely rare biotic communities, known as sand chaparral and sand parkland. This community harbors six rare/endangered species that exist nowhere in the world outside of Santa Cruz County. These include the Zayante band-winged grasshopper, Mount Hermon June beetle, Ben Lomond spineflower, and Ben Lomond buckwheat. Of the 83 sandhills plants known to exist, 56 have been identified at the Olympia Watershed property (Schettler, 2011). Sand parkland is an extraordinarily rare community, occurring on fewer than 200 acres in the world (McGraw, 2004).

In some areas of the Olympia Wellfield property, this rare biotic community has been impacted by an aggressive, exotic, infestation of invasive plant species including French broom (Genista monspessulana) and Portuguese broom (Cytisus striatus), eucalyptus sp or spp, yellow-star thistle (Centaurea solstitialis), and silver wattle (Acacia dealbata). In 2000, the District (District) successfully removed Silver Wattle (*Acacia dealbata*) trees in an effort to restore habitat for the Sand Specialty plants. Currently, the dense infestation of invasive broom is shading-out the sandy soil, inhibiting growth of Sand Specialty plant species which are relatively small herbaceous plants that require full sun, thus changing the habitat for this unique biotic community. The Watershed Management Plan has identified the eradication of invasive species to enhance the sandhills communities as a priority for management and effective stewardship of the property.

Eradication Effort

Seed of French Broom is known to remain viable in the soil and then germinate after more than 40 years. The eradication of invasive broom species will require a long-term management plan with ongoing effort for over 40 (forty) years in order to address the seed bank established in the

soil. Due to the life-cycle of the Mount Hermon June Beetle which spends most of it's life underground, greater than 6 (six) inches below the surface and the deep root systems of existing mature broom plants, pulling large plants will not be permitted by the US Fish and Wildlife Service.

Two methods have been proposed to address the mature broom plants which include:
1. Cut Stump method; where the stumps will be cut and a small amount of diluted herbicide will be applied to the cut, which will prevent re-sprout of mature plants.
2. Cutting Below Ground; where the sand is removed to 3 inches below soil level and the base of the plant is cut and then buried, preventing sun exposure. Ideally the plant will not re-sprout, but trials have not been conducted.

An anticipated 2,434 hours of labor will be required in the first year to reduce the number of large established broom and acacia plants. In order to realize a significantly reduced effort for the following year, a small amount of diluted herbicide should be applied to the cut stump to inhibit future growth. If the Cut Stump method is applied in the first year, Licensed Pesticides Applicators will be required to do the work. 2000 hours of licensed professional hours will be necessary. If the second method, Cutting Below Ground is applied in the first year, the labor can be conducted by non-licensed individuals but may require more time. At the time of writing, the estimated labor hours for the Cutting Below Ground method had not been tested, and may result in significantly more time thereby increasing cost.
In the 2nd year following the initial treatment and for subsequent years, very little or no pesticide should be required, and the initial effort should result in significantly lower densities of mature plants. Seedlings can be treated with alternative treatments such as manual pulling, or flaming (detailed in the Plan). Following the first year effort, the District will pursue a long-term internship/volunteer program as part of its upcoming Data Collection/ Restoration Grant Program to minimize costs.

Cost

Labor costs vary, if, for example, the average pay per licensed pesticide applicator is $20 per hour, the initial cost for Priority Zones 1 – 5 will be $48.680.00 excluding time to mobilize and demobilize. In future years, if ongoing management efforts persist, it will be anticipated that labor hours and costs will be greatly reduced.

HerbicideToxicity

Concerns regarding herbicide use were raised at the EEP Committee Meeting on June 29, 2016. Materials Safety Data Sheets have been provided as part of the plan. For purposes of our discussion, a summary of the toxicity for the two herbicides proposed is provided below:

TRICLOPYR 4E aka. Garlon,

Triclopyr is used for the control of undesirable woody and herbaceous weeds.

ENVIRONMENTAL SUMMARY: This pesticide is toxic to fish. Shall not be applied directly to water, to areas where surface water is present. This chemical can contaminate groundwater when applied to permeable soils where the water table is shallow. Triclopyr BEE ester rapidly hydroloizes to the parent acid. Triclopyr acid is slightly persistent with soil half life of 1.1 to 90 days depending on soil type and weather conditions. This chemical is water soluble and mobile in soil.

Half-life: the time required for half of the compound to degrade. 1 half-life=50% remaining 2 half-lives=25% remaining 3 half-lives=12% remaining 4 half-lives= 6% remaining 5 half-lives= 3% remaining The amount of chemical remaining

after a half-life will always depend on the amount of the chemical present initially.

CA Department of Pesticide Regulation:

Soil: In soil, TBEE rapidly hydrolyzes to triclopyr acid with a half-life of three hours (Bidlack,1978). The major route of triclopyr dissipation in soil is microbial degradation. Increases in temperature and moisture, cause microbial activity and degradation to increase (DowElanco meeting, 1996). Aerobic degradation in soil produces the metabolites 3,5,6-trichloro-2-pyridinol (TCP), 3,5,6-trichloro-2-methoxypyridine (TMP) and CO2 (Cryer et al., 1993) . The relative amounts of these products in a lab soil-column study at 54 days were 4% triclopyr, 88%TCP, and 15%TMP for triclopyr acid treated soil, and 6% triclopyr, 88% TCP and 7%TMP for TBEE treated soil (Lee et al., 1986). Unlike microbial degradation, soil photolysis is a minor route of dissipation (Swann and Unger, 1981). Another study performed in anaerobic soil conditions found that TBEE hydrolyzed to triclopyr within one day and then slowly converted to TCP (Laskowski and Bidlack, 1984). Both TCP and TMP eventually convert to CO2 (Ghassemi et al., 1981).

Human Toxicity: Triclopyr is poorly absorbed through the skin. No reports of humans poisoned by eating triclopyr were found. The U.S. EPA has classified triclopyr as a group D chemical, that is, not classifiable as to human carcinogenicity.

Fish Toxicity: (BEE ester formulation) 96 hour LC50 Rainbow Trout – 1.3 ppm
Avian Toxicity: Dietary LC50 Mallard duck: >10,000 ppm
Bee Toxicity: >100 ug (micrograms)

For more information:
National Pesticide Information Center
http://npic.orst.edu/factsheets/triclogen.pdf

CA Department of Pesticide Regulation:
http://www.cdpr.ca.gov/docs/emon/pubs/fatememo/triclopyr.pdf

Monsanto Company Roundup Pro Herbicide aka. Glyphosate

Glyphosate is a non-selective, non-residual broad-spectrum, foliar applied, postemergence herbicide that is highly effective against emerged grasses, brush and broad-leaf weeds. The summarized studies indicate that glyphosate is adsorbed to mineral clays and organic matter and is excluded from these sites by inorganic phosphate. Glyphosate has limited preemergence herbicidal activity in most soils because of its tendency to adsorb strongly to soil. A low Koc is an indication that glyphosate will not move readily through soil, and under conditions of the summarized studies, glyphosate would not leach into non-target areas. Glyphosate is inactivated in soil and water by microbial degradation. When applied to foliage, glyphosate is readily absorbed and translocated to various parts of plant via the phloem. Recent data indicate that glyphosate appears to be relatively nontoxic to mammals, birds, and fish and shows no signs of bioaccumulation in the food chain. Glyphosate herbicide is used predominantly in two ways for managing forest vegetation. A broadcast application by ground equipment is performed to control or partially control woody brush, trees and herbaceous woods for site preparation; a targeted application is made to selectively control competing vegetation once conifers are established.

Physical/Chemical Properties: Glyphosate is sparingly soluble in common organic solvents. The alkali metal and amine salts are readily soluble in water.

CA Department of Pesticide Regulation

Soil: In general, glyphosate is moderately persistent in soil. The primary reason crops can be planted or seeded directly into treated areas following application is that glyphosate exhibits essentially no preemergent activity even when applied at high rates (Franz et al. 1997). Soil studies have determined glyphosate half-lives ranging from 3 to 130 days (U.S. EPA, 1990; USDA, 1984). The soil field dissipation half-life averaged 44-60 days (Kollman and Segawa, 1995; WSSA, 1989).

In the soil environment, glyphosate is resistant to chemical degradation, is stable to sunlight, is relatively nonleachable, and has a low tendency to runoff (except as adsorbed to colloidal matter). It is relatively immobile in most soil environments as a result of its strong adsorption to soil particles. Ghassemi et al. (1981) found that less than one percent of the glyphosate in the soil is absorbed via the roots. The Accord® label stated that, it is not available for plant uptake and will not harm off-site vegetation where roots grow onto the treatment area or if the soil is transported off-site (Accord® label). Sprankle et al. (1975) found that the prime factor in determining the amount of glyphosate adsorbed to soil particles is the soil phosphate level and that glyphosate is bound to soil through the phosphonic acid moiety. Glyphosate competes with inorganic phosphate for soil binding sites and the degree of binding depends on availability of unoccupied phosphate binding sites.

Dissipation Soil, field: Half life: 2 - 174 days Koc: 884 - 60,000 L/kg Adsorbs strongly to soil.

Toxicity: Single-dose acute oral studies conducted for the U.S. EPA's RED indicate that glyphosate is practically non-toxic to upland birds and only slightly toxic to waterfowl. Tests on warm and cold water fish indicate that technical glyphosate is slightly to practically non-toxic to both types.

The U.S. EPA has set a drinking water Health Advisory (HA) for glyphosate. The lifetime HA for an adult is 800 ppb for effects other than cancer risk. Glyphosate is listed in EPA's group D for cancer risk, which means there is not enough evidence and not enough data to demonstrate that it is a cancer risk (1988).

Fish Toxicity: 96 hour LC50 Rainbow Trout – 38 mg/L (ppm)
Avian Toxicity: Dietary LC50 Mallard duck: 5,620 mg/kg (ppm)
Bee Toxicity: >100 ug (micrograms)

For more information:
National Pesticide Information Center
http://npic.orst.edu/factsheets/archive/glyphotech.html

CA Department of Pesticide Regulation:
http://www.cdpr.ca.gov/docs/emon/pubs/fatememo/glyphos.pdf

BACKGROUND

On August 15, 2013 the Board awarded Education Grant Program funds in the sum of $6,450 to Ecological Concerns, Inc. for a Data Collection/Restoration Grant project entitled, “French Broom Management & Monitoring Plan for the Olympia Watershed Site.” Following months of discussions with the Environmental Committee and the public, in January 2104 and again in March 2015 your Board voted not to accept the Final Report or French Broom Management Plan based on concerns regarding, inaccuracies, inadequate mapping of priority zones and inaccurate estimates of control effort required to manage broom and incompleteness.

In fall of 2015 your Board awarded another Education Grant Program Funds in the amount of $5,400 to Greening Associates to re-write the management plan, to specifically address the Olympia site, with special consideration of the rare and endangered sandhills and sand parkland communities at the property.

Staff distributed the report at the Environmental, Engineering & Planning Committee meeting on June 29, 2016. Ms. Schettler presented the report and answered questions. The Committee voted 2 – 1 to recommend the report be considered by the full Board, at the July 21, 2016 Board meeting.

It has been with great consideration that the proposed Invasive Broom and Acacia Management Plan incorporate currently known means to eradicate the aggressive, exotic, broom species with the most environmentally responsible methods available. It has been reviewed by and incorporates comments provided by the US Fish and Wildlife Services (USFWS). With regard to the methods used for the initial broom removal, it is recommended that the plan continue to provide all options listed in the plan, with the option for the District to determine which method is best once demonstrated effectiveness is proven.

RECOMMENDATION

It is recommended that the Board of Directors review this memo and accept the 2015 Education Grant Program Final Project Report from Greening Associates titled: “ INVASIVE BROOMS AND ACACIA MANAGEMENT PLAN FOR THE OLYMPIA WELLFIELD.”

INVASIVE BROOMS AND ACACIA MANAGEMENT PLAN FOR THE OLYMPIA WELLFIELD

SAN LORENZO VALLEY WATER DISTRICT

JULY 2016

Items in green font need GIS input

Greening associates

PLAN TO CONTROL INVASIVE BROOMS AND ACACIA AT THE OLYMPIA WELLFIELD

Prepared for

San Lorenzo Valley Water District
Jen Michelsen, Environmental Programs Manager
13060 Highway 9
Boulder Creek, CA 95006
Tel. 831/430-4627

Prepared by

Greening Associates
Suzanne Schettler, Principal
P.O. Box 277
Ben Lomond, CA 95005
Tel. 831/336-1745

JULY 2016

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FIGURES

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PLAN TO CONTROL INVASIVE BROOMS AND ACACIA AT THE OLYMPIA WELLFIELD SAN LORENZO VALLEY WATER DISTRICT

1. INTRODUCTION AND BACKGROUND

The Olympia Wellfield comprises 180 acres, much of which was mined for gravel and fine quality sand for about 30 years starting in 1937. The quarry operation closed before the Surface Mining and Reclamation Act took effect in 1976. No reclamation was required or performed, although several species of non-native conifers were planted to improve the appearance of denuded areas. For another three decades, there was no vegetation management of the site and during this time invasive non-native species colonized large portions of the property.

Although it was much degraded and fragmented by mining and the spread of invasive woody plants, the site still retained a unique assemblage of plant species – ranging from common species to rare/endangered species, as well as local endemic forms of relatively widespread plants. This unique assemblage has been termed Sand Specialty plants (R. Morgan 1983). Of the 83 Sand Specialty plants identified by Morgan, 56 occur on the Wellfield property as mapped in 2011 (S. Schettler 2011).

The San Lorenzo Valley Water District (District) began to remove Silver Wattle (*Acacia dealbata*) trees in 2000 in an effort to restore habitat for the Sand Specialty plants. Most of the Sand Specialty plants are relatively small herbaceous plants that require full sun and are easily shaded out by invasive trees and shrubs. Tens of thousands of Silver Wattle, French Broom (*Genista monspessulana*), and Portuguese Broom (*Cytisus striatus*) plants were removed during the decade that followed. A hiatus in control resulted in stands of the two Broom species becoming re-established, as well as scattered young Acacia plants.

The current status of the Brooms is that the large majority are mature and are producing seed; perhaps two-thirds of them are now too large to be eliminated by uprooting them. French Broom is widespread at the Wellfield; Portuguese Broom is less so. Young Acacias are sparsely but widely scattered.

The site also supports two federally Endangered animals, Mount Hermon June Beetle (*Polyphylla barbata*) and Zayante Band-Winged Grasshopper (*Trimerotropis infantilis*). Animals receive stronger protection under the federal Endangered Species Act than plants. "Take" of a listed species is prohibited unless a Habitat Conservation Plan (HCP) has been approved and an Incidental Take permit has been issued consistent with Section 10(a)(1)(B) of the Endangered Species Act. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The permit also must prevent harm to breeding, feeding, or sheltering by the covered species. This plan describes vegetation control methods that will avoid take of the listed insects and thus avoid the need for a federal permit.

FIGURE 1. *Polyphylla* larvae are large, as grubs go. This one is Mt. Hermon June Beetle or a sibling species. Photo by S. Schettler.

FIGURE 2. The Zayante Band-winged Grasshopper is well camouflaged against the Zayante sand. It is small – males are about 1/2" long, females closer to an inch. The lower hind legs (not visible here) are blue-gray. Photo by S. Schettler.

2. CONTROL METHODS

Four vegetation treatments will be used to control Brooms and Acacias at the Wellfield : uprooting, cutting below ground, cut stump treatment, and thermal weeding. These methods are customized to avoid harming ground-dwelling insects.

2.1. PULLING SMALL PLANTS

The simplest way to eliminate unwanted plants up to a certain size is to uproot them, either pulling them by hand or using a specialized tool. Uprooting is particularly suitable for French Broom, which is typically shallow-rooted. Because of the high temperature of the Sandhills substrate, larvae of the June Beetle are presumed to occur only at depths greater than 6" (C. Mitcham [USFWS] pers. comm. 2016), where the sand is cool compared to the surface. In order to avoid harming larvae of the June Beetle, uprooting will be limited to plants with roots less than 6" deep.

Small seedlings of the Brooms or Acacia are easily pulled by hand. Tools such as the Weed Wrench or the Extractigator® are unlikely to come into play at the Wellfield because they are designed for plants with roots deeper than 6".

2.2. CUTTING BELOW GROUND

Broom plants up to 1" in diameter at the base can be cut below the ground surface. A small bowl 2-3" deep is excavated around the base of the plant, exposing the root. Then the upper part of the root system is cut off with carpenter's pincers or nippers that are designed to cut nails and wire. The cutting tool must be kept away from the sand surface to prevent dulling it. To complete the process, loose sand is filled back in over the remainder of the root system.

Deprived of light and their photosynthetic green stems, brooms do not resprout as they do when cut above the ground surface.

2.3. CUT AND APPLY SYSTEMIC HERBICIDE – CUT STUMP METHOD

This technique is applicable for plants of the invasive woody species addressed in this plan whose roots are deeper than 6 inches, and is highly effective. First the duff is removed around the base of the plant. The plant is cut a short distance above the exposed base of the stem or trunk, so that the cutting tool is not dulled by working in sand. Immediately – within one minute – a 50% solution of either Roundup PRO® or Triclopyr 4e and water is applied to the cambium. Triclopyr 4e is an emulsion, so the container must be shaken frequently. Although the label recommends using Triclopyr 4e full strength, a 50% solution is equally effective at half the cost (K. Moore, pers. comm. 2016).

Persons who apply herbicides must hold a Qualified Applicator License and use appropriate Personal Protective Equipment (PPE). The licensee can work side by side with non-licensed personnel who cut and stack the vegetation. The California Department of Pesticide Regulation maintains a list of Qualified Applicator Licensees.

Cut stump treatments will not be conducted when rain is forecast within the next 24 hours.

2.4. THERMAL WEEDING

After a stand of French Broom is removed, abundant small seedlings typically appear from the seed bank, too dense and numerous to be managed by controlling individual plants. These young seedlings respond well to thermal weeding, sometimes referred to as “flaming”. This technique has long been used for weed control in agriculture.

A propane torch is passed over young French broom seedlings up to 20 cm in height. The heat does not cause the seedling to ignite but within a day the seedling is wilted and dead. This treatment is effective on a wide variety of unwanted plant species. There is an informative short video describing thermal weeding at https://youtu.be/_2BLHhCWgOE (Flame Cultivation for Weed Control). Additional materials concerning thermal weeding are at https://ag.umass.edu/fact-sheets/flame-cultivation-for-weed-control.
A common misconception is that flame equipment should “burn” or consume the weeds with fire during treatment. Thermal weed control is based on flash heating to rupture cell membranes within the weed, thus shutting down the plant’s capacity for photosynthesis. When applied correctly to young, vigorous green weeds with minimal dead material there should be very little, if any, smoke from the treated area (Smith, K. Western Farm Press. http://westernfarmpress.com/another-look-thermal-technology-weed-control).

As of early 2016, there are currently no carpets of young Broom seedlings at the Wellfield. Thermal weeding may not be applicable but will be a backup control method if large numbers of Broom seedlings appear in the future after stands of adult Brooms have been removed. Modest numbers of seedlings may be controlled by hoeing.

Because of the obvious hazard of working with fire, the timing of flaming is critical. It is performed only when vegetation at the site is too wet to carry a fire; during a light rain is ideal. The aim is not to actually burn the seedlings, but to heat them enough to break their cell walls. The torch passes briefly over any given point, limiting impact to ground-dwelling organisms. No chemicals contaminate the site.

The Zayante Fire Department is adjacent to the Wellfield. As a courtesy and a safety measure, fire personnel should be contacted in person or by phone (831-335-5100) when flaming is to be carried out.

3. SPECIAL CASES

3.1 NO SOIL DISTURBANCE DEEPER THAN 6”

In order not to harm larvae of Mt. Hermon June Beetle (Figure 1), all soil disturbance will be limited to a maximum depth of 6 inches.

3.2 ZAYANTE BAND-WINGED GRASSHOPPPER

Adult grasshoppers are mobile, although the Zayante Band-winged Grasshopper (ZBWG) also relies on camouflage (Figure 2). It visually blends in with the sand, and does not have particularly colorful flight wings as some grasshoppers do. Besides its small size compared to other grasshoppers, its most distinguishing trait is the crepitating sound when it flies, resembling the sound of a bug-zapper. The USFWS recommends that a) informal surveys for ZBWG be conducted concurrent with vegetation treatment and b) if a ZBWG is observed, work that may disturb the species would not take place (C. Mitcham [USFWS] pers. comm. 2016).

3.3 PORTUGUESE BROOM

Portuguese Broom plants produce prolific branches right at the soil level, which limits access for cutting tools. The lower branches need to be individually cut away in order to get at the main plant. Its roots also splay out in all directions immediately belowground. While the cut stump treatment is effective, it is sometimes simpler to remove modest-sized Portuguese Broom by cutting apart the root system one root at a time. A hand mattock is employed to expose roots to a maximum depth of 6” (so as not to harm June Beetle larvae) and then the individual roots are cut to release the upper portion of the plant for removal from the site.

3.4 ACACIA

The lateral roots of *Acacia dealbata* often produce new sprouts, even after the main trunk has been killed by a cut-stump treatment. The new shoots may be immediately adjacent to the stump or some distance away. A young plant may be either a seedling or a root sprout. To test, give the plant a few short sharp tugs. If it starts to come out, continue pulling to uproot it. If it

doesn't start to come out, clear the duff and soil away from the base of the plant. Then cut the plant ¼" above the soil, maintaining a sharp edge on the cutting tool by keeping it free of ground contact, and apply 50% RoundupPRO® or Triclopyr 4e to the cut surface.

3.5 NO HERBICIDE TREATMENT BEFORE RAIN

Cut stump treatments will not be conducted when rain is forecast within the next 24 hours.

4. TIMING OF WEED CONTROL

With the exception of thermal weeding, control methods may be implemented at any season. The best time of year to uproot Broom plants is March and April, when they are flowering and easy to spot but for the most part have not yet produced seed for the current year. RoundupPRO® or Triclopyr 4e can be applied in any season but may be most effective in the fall when the plant's reserves are depleted by the dry summer.

During late spring and summer it can become dangerously hot for personnel to work in the Sandhills, risking heat exhaustion or heat stroke. Radiant heat from the sun is reflected up from the white sand, and the heat of the sand itself can de-laminate boot soles (S. Schettler, pers. obs.).

There is a mildly effective natural ally in the campaign to eliminate French Broom. The larvae of Genista Broom Moth (*Uresiphita reversalis*) defoliate random plants, sometimes causing death.

FIGURE 3. Caterpillar (larva) of Genista Broom Moth with chewed foliage. Photo by Chuck Baughman.

FIGURE 4. French Broom plants killed by Genista Broom Moth caterpillars and/or gophers at the Wellfield

5. PRIORITY AREAS FOR CONTROLLING ACACIAS AND BROOMS

The Sand Specialty Species were mapped in 2011 under an Educational Grant from the San Lorenzo Valley Water District to fill a data gap in developing the management plan for the Olympia Wellfield. That mapping forms the basis for prioritizing the locations to control Acacias and Brooms. The priority ratings are based on several factors:

- Sites with greatest species richness of Sand Specialty plants
- Highest quality degraded sites, including locations of unique species occurrences
- Moderate quality degraded sites
- Remainder of areas mapped as Sand Parkland or Sand Parkland (Degraded)
- Areas along service roads
- Expansion areas outside the areas mapped as Sand Parkland or Sand Parkland (Degraded)

5.1. PRIORITY ZONE 1. SOUTHERN EDGE OF PROPERTY

The areas containing the highest species richness of Sand Specialty plant species (as many as 33 species per site, median 19 species) are located where there has been least disturbance of the ground in the past. These areas also have the lightest populations of invasive species. These are the areas where it is ecologically most important, and least costly, to control Acacia and Brooms. The Mayer easement and a mitigation site for replacement of the Probation Tank are included in the Priority 1 zone.

Because there have been various interpretations of where the southern property line actually lies and it has never been surveyed to an engineering standard, Priority Zone 1 includes all locations north of the old Cemex/Lonestar access road parallel to the District's southern property line. This alignment does not match the existing fence lines but is readily identified in the field. The old road itself can function as a buffer between Cemex vegetation management and District management. Permission has been requested from Cemex to work on this far northern edge of their property and the request will be followed up.

5.2. PRIORITY ZONE 2. HIGHEST QUALITY DEGRADED SITES

These are areas containing 12 or more Sand Specialty plant species. These also include unique locations of species that are not found elsewhere on the Wellfield property.

5.3. PRIORITY ZONE 3. MODERATE QUALITY DEGRADED SITES

Areas containing 11 or fewer Sand Specialty plant species occurring in dense clusters.

5.4. PRIORITY ZONE 4. OTHER SAND PARKLAND SITES

Priority Zone 4 comprises the rest of the areas mapped as Sand Parkland or Sand Parkland (Degraded).

5.5. PRIORITY ZONE 5. ROADSIDES

This zone comprises all areas within 30 feet of service roads and other vehicle access routes. It includes gated routes that formerly provided vehicle access and could potentially be used again in the future. There are two rationales for including roadsides as a priority: seeds of Brooms and Acacias are readily transported by tires of vehicles that routinely use the service roads; and the routes that are currently closed and gated will provide access for control work and for disposition of the plants removed. Re-opening these former access routes may require light blading, which will be limited to maximum 6" depth in order not to harm larvae of the Mt. Hermon June Beetle.

NOTES: Where a vehicle route passes through an area designated Priority Zone 1, 2, 3, or 4, that segment of the vehicle route will be cleared of Brooms and Acacias at the same time as the rest of the Priority Zone. Also, the mapping of the roadsides is schematic rather than detailed; Brooms and Acacias are not consistently present in some portions of the locations shown.

5.6. PRIORITY ZONE 6. EXPANSION AREAS

Over time, control of invasive Brooms and Acacias will be gradually expanded outward beyond Priority Zones 1 - 5. The increments will be planned in such a way that each increment can regularly receive follow-up treatment on an annual basis. Regular follow-up control is at least as

****INSERT FIGURE 5. 11" x 17" MAP OF PRIORITY ZONES*****

important as initial removal, but on a per-acre basis is far less expensive than the initial removal or re-starting after a hiatus in control work. As with Priority Zone 5 (Roadsides) the mapping of the Expansion Areas is schematic rather than detailed; some areas may be inaccessible or contain no Brooms or Acacia.

The detailed map of Sand Specialty Plants that was developed in 2011 contains sensitive information. The map that will be available to the public is the generalized map included in this plan (Figure5) minus the concentrations of Sand Specialty Plants. The map that will be used in the field is a detailed 24" x 36" version of that map including the polygons of Sand Specialty species.

Regrettably, the District's GIS specialist passed away unexpectedly during the preparation of this plan. Given his passing, Figure 5 was drawn by hand. The current map needs one deletion on the 11 x 17 version -- the layer showing Dense Sand Specialty Plants. The map also needs several additions:

- Contour lines to assist with identifying sites in the field
- A labeled grid to identify the "addresses" of individual areas where Brooms and Acacia will be controlled
- A scale bar

5.7. COMMENTS ON PRIORITIES

In addition to the ecological importance of managing invasive species at the relatively intact southern end of the District property, the Priority Zone 1 is also administratively important. It has been identified as Option 1 for off-site mitigation for the impacts of replacing the Probation Tank (J. McGraw 2015), since not all the impacts created by replacing the Probation Tank can be mitigated at that site.

The priority zones are not mutually exclusive when it comes to the timing of treatment. Because Zones 1 through 3 have the lightest population of Acacia and Brooms, they can all be treated simultaneously during the initial control work. Depending on the available budget, additional priority zones may be manageable in the first year.

There could be a "Priority 1A" designation: any single isolated Broom or Acacia plant that is observed far from others should be removed to forestall it founding a new population.

Two areas that would qualify as Priority 2 or 3 are *not* targeted for control of invasive Acacias and Brooms. One is at the remote north end of the SLVWD property, and is mostly on a neighboring parcel. The other is the large slope of drifted sand below the eastern highwall that supports Sand Specialty plants along with a widespread population of Childing Pink (*Petrorhagia prolifera,* formerly called *Tunica prolifera*. This is a non-native annual that is difficult to eradicate. During the course of mobilizing and demobilizing to work below the highwall, its seed would likely be spread to sites where it currently does not occur. A high number of the Sand Specialty plants are native annuals and could be vulnerable to competition from a non-native annual if this species spreads to other locations.

6. DISPOSAL OF THE CUT/PULLED PLANTS

The cut or pulled plants will be piled for future burning or removal by District personnel. As much as feasible, the piles will be located outside the Priority zones – and preferably near a vehicle route where they can either be removed from the site or burned while a truck stands by with a tank of water and a pump.

Different species handled by different methods will be stacked separately so approximate numbers may be tallied at the end of each segment of work and recorded on the Daily Work Log (Appendices A-B). This is important information for budgeting the work in subsequent years.

The smallest or sparsest plants need not be stacked and may be left on the ground where they were growing.

7. STEEP SLOPES

Some of the steep slopes included in the zones prioritized for control of Brooms and Acacia can be accessed on foot. Others will be accessed on ropes – but only by personnel with climbing experience. The cliff just north of the main east-west service road should not be accessed at all because it is crumbly; working on it would create damage to the slope and possibly to the service road, and it would be unduly hazardous and costly to work on.

There is a cliff on the northwest edge of the southwest pit that *should* be included in the removal of Acacia and Brooms. After a thick stand of Acacias was removed at the top of the hill, the single small remnant population of Pussy Paws (*Calyptridium monospermum*) expanded dramatically and has moved down into the southwest pit. Refer to the aerial photo at Figure 6 for orientation. Other steep slopes will be evaluated on an individual basis for the feasibility of initial removal and ongoing follow-up. In some cases, cleaning up the steep slopes will provide sufficient benefit to the flatter areas below to justify working on them. In others, the weed control may have to be limited to continuing control on the flatter areas below unmanageable steep slopes.

FIGURE 6. Overview of the quarried pits at the Olympia Wellfield.

8. RECORD-KEEPING

A key component of this plan is a procedure to quantify, on an ongoing basis, the level of control effort and the results. The Management Plan for the Olympia Wellfield acknowledges that eradication of invasive exotic vegetation is not feasible without a continued and dedicated effort over decades. Seed of French Broom is known to remain viable in the soil for 40 years or more (K. Moore, pers. comm. 2016). It will be necessary to record daily reports of the invasive species work while onsite in order for the District to plan for, and budget for, continuing invasive species control. The California Department of Parks uses a daily work log which has been modified for the Olympia Wellfield site. Examples are shown at Appendices A - C.

A grid will be superimposed on the field map, with the X and Y axis numbered and lettered such that each block will have an identification code. The identification code for the treatment block will be recorded, with a tag indicating the year of initial treatment. The latitude and longitude at or near the center of each block will be recorded so that every block can be relocated and progress of the given block can be tracked over time; this central location will be photographed before work begins and used for future reference in the field. These records will facilitate planning and budgeting for each subsequent round of control work, and will be essential for monitoring progress over time.

The treatment methods for the three target invasive species differ, and the amount of labor required for each treatment varies. Therefore, separate records will be kept for French Broom, Portuguese Broom, and Silver Wattle Acacia. The exact number of plants need not be counted each day, rather they can be recorded in categories (1 to 10, 11 to 100, 101 to 1,000).

9. PERSONNEL

There are a number of potential work crews available to carry out the control of invasive Acacia and Brooms at the Olympia Wellfield. Current crew availability and hourly fees should be investigated so that field work can begin in a timely manner.

American Conservation Experience
333 Soquel Avenue, Santa Cruz, CA 95062
Vasiliki Vassil, Director of ACE California
Phone: 831/427-1091
v.vassil@usaconservation.org

AmeriCorps National Civilian Community Corps
1400 10th Street
Sacramento, CA 95814
Karen Baker, Chief Service Officer
Phone: 888/567-SERV
reception@CaliforniaVolunteers.ca.gov
californiavolunteers.org

Ben Lomond Conservation Camp 45
13575 Empire Grade
Santa Cruz, CA 95060
Phone: 831/426-1610

C12 Restoration
Qualified Applicator licensee
Chris Spohrer, owner
1610 El Dorado Avenue
Santa Cruz, CA 95062
Phone: 831/359-7420

California Conservation Corps
757 Green Valley Road, Watsonville, CA 95076
Janet Wohlgem
Phone: 831/768-0150
jwohlgem@ccc.ca.gov

Shelterbelt Builders Inc.
401 Terry A. Francois Blvd., Suite 220
San Francisco, CA 94158
Mark Heath, CEO
Phone: 415/357-1500
www.shelterbeltbuilders.com

In addition to these resources, high school and college students are often interested in internships. They are typically available during the summer between school terms and some will accept unpaid positions in exchange for valuable experience.

In addition to receiving safety training prior to the beginning of field work, each worker will be provided with a copy of the Handbook of Sandhills Plants that was prepared in 2012 under an Educational Grant from the District. The Handbook was developed to acquaint District personnel with the more conspicuous Sand Specialty plants at the Wellfield. Photos of the other Sand Specialty plants, especially the smaller or more uncommon ones, will also be provided to each worker for reference in the field.

10. SUCCESS CRITERIA

After a given treatment plot has received the full array of appropriate control methods (uprooting, cutting below ground, cut stump, and thermal weeding), success criteria will apply. The initial success criterion after the first – and most extensive – treatment will be zero percent cover by the three target invasive species immediately following treatment. Subsequent treatments will also result in zero cover by the Brooms and Acacia at the completion of annual treatment.

The most significant measurement of cover will be made at the *beginning* of each annual treatment after the initial clearing, for comparison with the previous year. Each treatment plot is expected to decrease in percent cover of Brooms and Acacias by 3% per year, and the cost of control will decrease by 5% per year.

If at any time a given treatment block appears to be clear of Acacias and Brooms of all sizes, it will continue to be monitored annually on at least a reconnaissance basis. After 15 years of a clean slate it may be deemed to be free of these invasive woody plants. It will still be patrolled annually, because deer are known to widely disperse seed of Portuguese Broom in particular, which is present on nearby properties. However, at that point, minimal control work will be sufficient to keep the treated areas clean of invasive woody species.

11. MONITORING AND REPORTING

The detailed field map will be overlaid with a grid, much like metropolitan street maps, so that every treatment area will have a permanent address where progress can be tracked over time.

11.1. MONITORING

Monitoring will be performed twice a year, both before and after the control work.

In January - February, all the grid blocks that have been controlled in the past will be monitored and either the number or percent cover (Appendix D) of Brooms and Acacia present will be estimated. The population of plants present at the beginning of each year's work is expected to decline over time. This pre-treatment monitoring will provide a measurement of progress.

Every two weeks during the season of the removal work, there will be an inspection of each grid unit that has recently been treated. The purpose of this inspection will be to assess the effectiveness of the work. Immediately after treatment, a given area should contain zero Broom or Acacia plants. If there are any, the work crew will be called back to finish the work. New seedlings that may germinate after 100% effective treatment will be addressed the following year.

Each treated grid unit will be inspected at a reconnaissance level and at least one estimate of cover will be made for every 10,000 square feet of treatment area, or approximately 100 feet by 100 feet. ***Verify with scale bar added to the map**** Illustrations for estimating proportions of cover are shown at Appendix E. The identification code for each treatment block will be recorded, with a tag indicating the year of initial treatment.

All of the areas mapped as Sand Parkland or Sand Parkland (Degraded) will be walked annually to find any other invasive species that may appear over time. If they do appear, control methods will be developed for the additional species and they will be incorporated into the vegetation management program.

11.2. REPORTING

A written annual report will be submitted before Thanksgiving each year to the San Lorenzo Valley Water District's Environmental Programs Manager and to the U. S. Fish and Wildlife Service. A narrative will describe the work done, observations, and problems encountered. The Daily Work Log will be summarized on the Monitoring and Reporting Form (Appendix C). The data presented on the Monitoring and Reporting Form will provide cumulative records of the progress of controlling Brooms and Acacia. The total hours worked in each grid unit are expected to decrease each year.

Photographs will be included to illustrate the most successful sites, average sites, and particularly troublesome spots. The report will include recommendations for changes in invasive species management that may become appropriate over time.

12. REMEDIAL MEASURES

If the success criteria are not met in any year, that will be an indication that either the budget appears to be inadequate or the work has been sloppy. In the former case, the work plan and budget for the subsequent year will be adjusted to pull back from the lower priority treatment

zones and temporarily concentrate the work effort on the higher priority areas. In the latter case, a staffing and/or supervision change will be made in order to achieve more effective control of Brooms and Acacia.

13. TIMELINE OF WORK UNDER THIS PLAN

Seed of French Broom is known to remain viable in the soil and then germinate after more than 40 years (K. Moore, pers. comm. 2016). Therefore, this plan will be in effect for half a century after it is approved – or longer if Brooms or Acacia are still showing up from the seed bank.

14. ADAPTIVE MANAGEMENT

Given the long timeline of this plan, new weed control methods may be developed over time. Ways to reduce costs while retaining the effectiveness of the field work may also evolve. Appropriate revisions to this plan will be made upon agreement between the field contractor, District personnel, and the U.S. Fish and Wildlife Service.

Adjustments may also be recommended for specific field conditions; for instance, the 30-foot clearance along vehicle routes may need to be widened in some places. Because seed of the Brooms is partially dispersed by gravity, some far-flung downslope locations may be less important for control than upslope areas.

15. COST

Cost estimates were attached to an earlier plan to manage and monitor French Broom at the Wellfield (Ecological Concerns, Inc., undated). However, that plan addressed only French Broom, which is the simplest to manage of the three species addressed in this plan. It also did not address the constraints imposed by the Endangered Species Act, which limits control work because of potential impacts on the listed ground-dwelling insects.

A comparison of the cost of control methods follows at Table 1. It is based on the key cost of the work: an estimate of person-hours needed to implement each technique for each target species. The amount of labor translates directly to the price of the control work and will vary according to the hourly cost of the labor involved. Each labor pool (Section 8.1) will charge different hourly fees for crew members, crew supervisor, chainsaw operator, and pesticide licensee. If, for example, the average pay per crew member is $20 per hour, the initial cost for Priority Zones 1 – 5 will be $48.680.00 excluding time to mobilize and demobilize.

The person-hours required for the work will be updated based on records of the initial work on each species at each work site (see Section 8 above), and then updated annually. With consistent follow-up, the cost of control will drop steadily and may eventually approach zero.

Estimated costs for the effective control methods can be translated from the person-hours in Table 1 based on conservative estimates of the current populations:

- Approximately 20,000 French Broom plants are currently present in the Sandhills areas of the Wellfield and along vehicle routes. Most of these are rooted more than 6" deep or larger than 1" diameter at the base and will require the cut stump treatment rather than uprooting.
- There are approximately 2,000 plants of Portuguese Broom, most of them rooted more than 6" deep and thus requiring the cut stump treatment rather than uprooting.
- Full-sized Acacia trees were removed in the past but there are approximately 1,000 young seedlings and root-sprouts in widely scattered locations.

It should be noted for planning purposes that a work day is functionally 6.5 hours, when a half hour each is subtracted for mobilizing, demobilizing, and a lunch break.

Table 1 follows on the next page.

TABLE 1. COMPARISON OF CONTROL METHODS

ASSUMES A LARGE ENOUGH LABOR POOL
TO ADDRESS PRIORITY ZONES 1-5 IN THE FIRST YEAR

SPECIES	CONTROL METHOD	ESTIMATED NUMBER OF PLANTS*	APPROX. PERSON-HOURS PER PLANT excludes mobilize/demobilize	TOTAL PERSON-HRS
French Broom seedlings <20 cm	thermal weeding	tbd after large plants are removed	0.0015	
French Broom small plants w/ roots <6" deep	uproot and stack	1,000	**0.07** (4 minutes)	70
French Broom all sizes	cut, apply 50% RoundupPRO® or Triclopyr 4e to cambium, stack	18,000	**0.10** (6 minutes)	1,800
Portuguese Broom small plants	pull	400	**0.07** (4 minutes)	28
Portuguese Broom medium plants	dismantle roots & stack plant	800	0.20 (12 minutes)	160
Portuguese Broom large plants	remove lower branches for access; then cut, apply 50% RoundupPRO® or Triclopyr 4e to cambium, stack plant	800	0.17 (10 minutes)	136
Acacia test: seedling or root sprout?	if seedling: pull by hand	500	0.14 (8 minutes); includes locating widely scattered small plants	70
	if root sprout: cut, apply 50% RoundupPRO® or Triclopyr 4e to cut surface	500	0.17 (10 minutes); includes locating widely scattered small plants	70
All 3 species: plants up to 1" diameter at base	Excavate a small bowl around the plant, cut stem below ground, cover with sand	1,000	**0.10** (6 minutes)	100
TOTAL PERSON-HOURS				2,434
*The estimated number of plants excludes Priority Zone 6, the Expansion Areas, where the number of French Broom plants may be higher than anywhere else on the Wellfield.				
Bold print in Table 2 indicates the lowest cost treatments. Treatments for Acacias and for Portuguese Broom are more costly than for French Broom because of their re-sprouting growth habit and their structural form, respectively.				

There is some overlap and choice among treatments. When there is a choice, the lower cost treatment will be selected.

The draft HCP for the Probation Tank replacement identifies a cost of $5,000 per year to manage and monitor habitat within the 5.5-acre habitat set-aside located in the Olympia Wellfield, or $909 per acre. This set-aside area contains by far the lightest populations of Broom and Acacia plants at the Wellfield. The acreage occupied by Priority Zones 1 through 5 will be calculated from the GIS data in the District files. Extrapolating from the maintenance cost of the 5.5-acre habitat set-aside, the acreage of Priority Zones 1 through 5 will be multiplied by $3,600 per acre to budget for the annual cost of controlling invasive Broom and Acacia species at most of the Wellfield, where their populations are higher and the seed bank is heavy.

Grant funding may be available for initial removal of Brooms and Acacia under such programs as the federal Partners for Wildlife program. However, funders are unlikely to support ongoing maintenance. The decades of follow-up maintenance work must be funded by annual District budgets or by an endowment.

16. RECOMMENDATION

It is recommended that, as soon as possible the District should

- Investigate potential grant funding, and
- Resume the control of invasive woody species at the Olympia Wellfield.

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APPENDICES

DAILY WORK LOG: SMALL PLANTS PULLED									
Date	Recorder	Site hrs.	No. crew	Crew hrs.	Supvsr hrs.	Grid location	Species	No. plants	Notes
1/2/2017	CM	2	4	8	2	H-30-2016			training
1/2/2017	CM	6	4	24	6	H-30-2016	Fr. Broom	11-100	
							Port. Broom	1 -10	
							Acacia	1-10	
1/3/2017	CM	8	4	32	8	H-31-2016	Fr. Broom	1-10	
							Port. Broom	1-10	
							Acacia	1-10	
1/4/2017	KR	8	4	32	8	H-28-2016	Fr. Broom	11-100	
							Port. Broom	1-10	
							Acacia	1-10	
continue									
					E X A M P L E				
2/26/2017	CM	8	4	32	8	K-14-2016	Fr. Broom	100-1,000	
							Port. Broom	11-100	
							Acacia	1-10	
continue									

APPENDIX A
SMALL PLANTS PULLED

DAILY WORK LOG: PLANTS CUT BELOW GROUND									
Date	Recorder	Site hrs.	No. crew	Crew hrs.	Supvsr hrs.	Grid location	Species	No. plants	Notes
1/2/2017	CM	2	4	8	2	H-30-2016			training
1/2/2017	CM	6	4	24	6	H-30-2016	Fr. Broom	11-100	
							Port. Broom	1 -10	
							Acacia	1-10	
1/3/2017	CM	8	4	32	8	H-31-2016	Fr. Broom	1-10	
							Port. Broom	1-10	
							Acacia	1-10	
1/4/2017	KR	8	4	32	8	H-28-2016	Fr. Broom	11-100	
							Port. Broom	1-10	
							Acacia	1-10	
continue									
					E X A M P L E				
2/26/2017	CM	8	4	32	8	K-14-2016	Fr. Broom	100-1,000	
							Port. Broom	11-100	
							Acacia	1-10	
continue									

APPENDIX B
PLANTS CUT BELOW GROUND

DAILY WORK LOG: PLANTS TREATED BY CUT STUMP METHOD									
Date	Recorder	Site hrs.	No. crew	Crew hrs.	Supvsr hrs.	Grid location	Species	No. plants	Notes
1/2/2018	CM	2	4	8	2	H-30-2016			training
1/2/2018	CM	6	4	24	6	H-30-2016	Fr. Broom	11-100	
							Port. Broom	1 -10	
							Acacia	1-10	
1/3/2018	CM	8	4	32	8	H-31-2016	Fr. Broom	101-1,000	
							Port. Broom	1-10	
							Acacia	1-10	
1/4/2018	KR	8	4	32	8	H-28-2016	Fr. Broom	11-100	
							Port. Broom	11-100	
							Acacia	1-10	
					E X A M P L E				
2/26/2018	CM	8	4	32	8	K-14-2016	Fr. Broom	100-1,000	
							Port. Broom	11-100	
							Acacia	1-10	
continue									

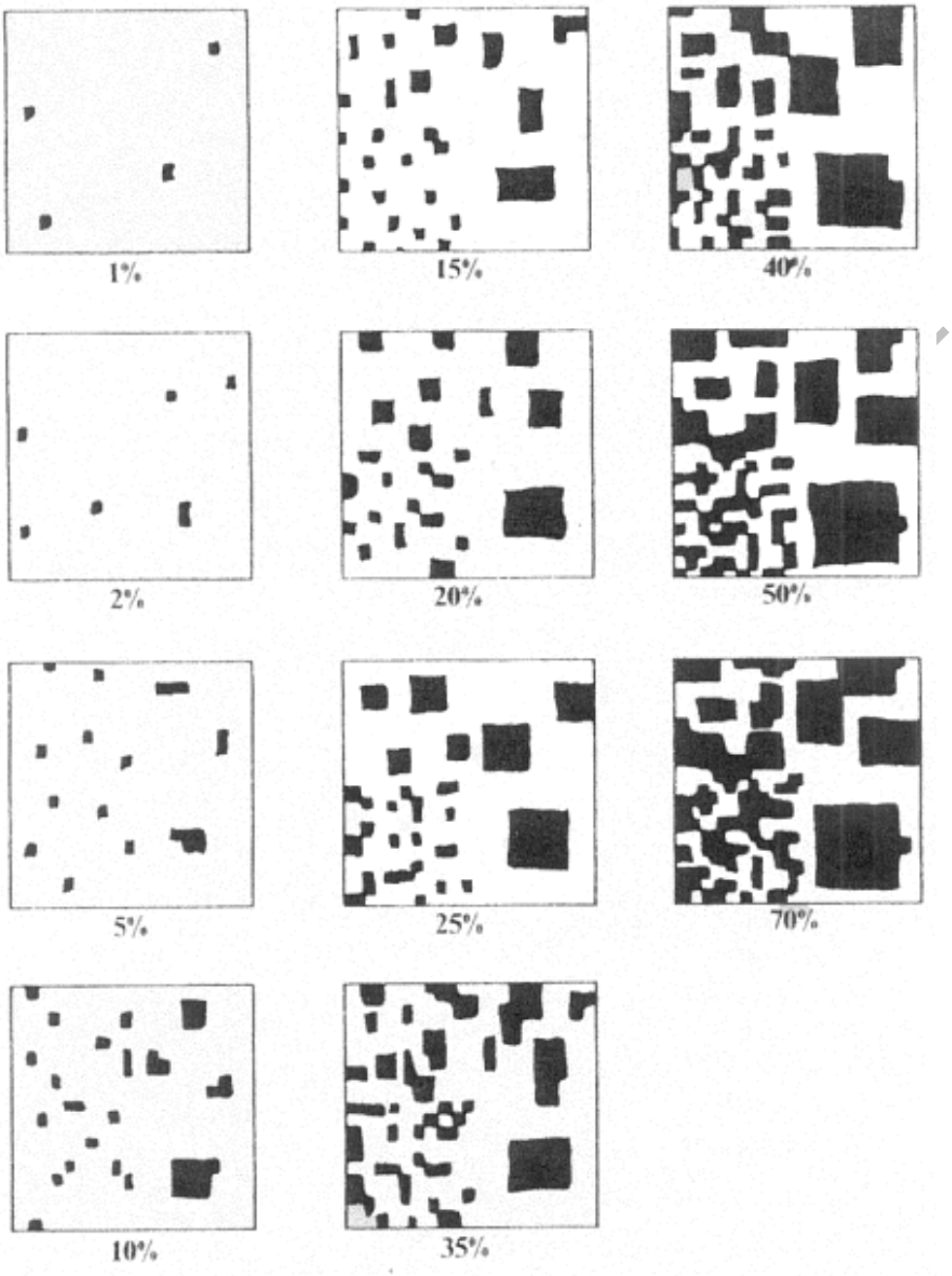
APPENDIX C
CUT STUMP

MONITORING AND REPORTING FORM
YEAR _____

TREATMENT AREA grid unit ID & year	LAT/LONG AT OR NEAR CENTER	APPROX. BEGINNING PLANT NUMBERS			PERSON-HOURS WORKED			TOTAL HOURS
		Fr. Broom	Port. Broom	Acacia	Fr. Broom	Port. Broom	Acacia	
	N37° 4’ W122° 3’							
	N37° 4’ W122° 3’							
	N37° 4’ W122° 3’							
	N37° 4’ W122° 3’							
	N37° 4’ W122° 3’							
	N37° 4’ W122° 3’							
	N37° 4’ W122° 3’							
	N37° 4’ W122° 3’							
	N37° 4’ W122° 3’							
	N37° 4’ W122° 3’							
	N37° 4’ W122° 3’							

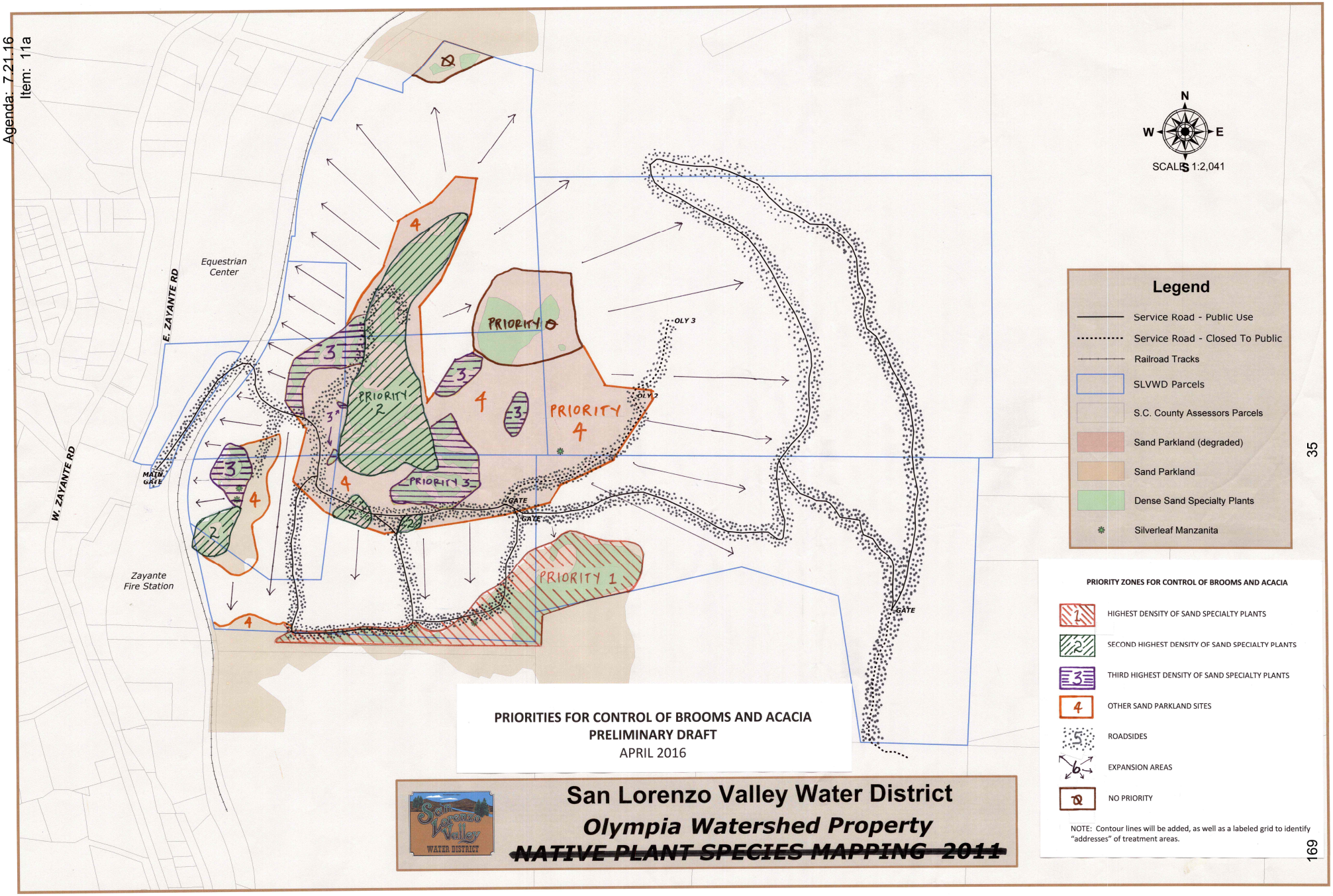
APPENDIX D
MONITORING AND REPORTING FORM

ILLUSTRATIONS FOR ESTIMATING PERCENTAGE OF COVER



Each fourth of any one square has the same amount of black.

APPENDIX E


N
W
E
S
SCALE 1:2,041
Equestrian Center
E. ZAYANTE RD
W. ZAYANTE RD
MAIN GATE
Zayante Fire Station
PRIORITY 0
PRIORITY 1
PRIORITY 2
PRIORITY 3
PRIORITY 4
OLY 2
OLY 3
GATE
GATE
GATE
Legend
Service Road - Public Use
Service Road - Closed To Public
Railroad Tracks
SLVWD Parcels
S.C. County Assessors Parcels
Sand Parkland (degraded)
Sand Parkland
Dense Sand Specialty Plants
Silverleaf Manzanita
PRIORITY ZONES FOR CONTROL OF BROOMS AND ACACIA
1 HIGHEST DENSITY OF SAND SPECIALTY PLANTS
2 SECOND HIGHEST DENSITY OF SAND SPECIALTY PLANTS
3 THIRD HIGHEST DENSITY OF SAND SPECIALTY PLANTS
4 OTHER SAND PARKLAND SITES
5 ROADSIDES
6 EXPANSION AREAS
0 NO PRIORITY
NOTE: Contour lines will be added, as well as a labeled grid to identify "addresses" of treatment areas.
PRIORITIES FOR CONTROL OF BROOMS AND ACACIA
PRELIMINARY DRAFT
APRIL 2016
San Lorenzo Valley Water District
Olympia Watershed Property
NATIVE PLANT SPECIES MAPPING 2011

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:
ALBAUGH, LLC
Ankeny, IA 50021

EMERGENCY TELEPHONE NUMBERS:
(800) 424-9300 (CHEMTREC, transportation and spills)

PRODUCT NAME : **TRICLOPYR 4E**
CHEMICAL NAME : Triclopyr butoxyethyl ester
PRODUCT USE : Herbicide
PRODUCT CODE : EPA Reg. No 42750-126

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

Light yellow clear liquid

HEALTH HAZARDS: Moderate eye irritant. Potential skin sensitizer from exposure to concentrate.

PHYSICAL HAZARDS: May release toxic fumes if burned.

ENVIRONMENTAL HAZARDS: Triclopyr is highly toxic to certain terrestrial plant and aquatic organisms in its ester form.

SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER
Triclopyr Butoxy Ethyl Ester	61.6	64700-56-7
Petroleum distillates*	> 25.0	64742-94-5
Naphthalene (*contained)	2 – 5	91-20-3

SECTION 4 - FIRST AID MEASURES

First Aid responders should use protective equipment in Section 8 if there is a potential for exposure to product.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Do not give liquid to the person.
IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED: Move person to fresh air, if person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: May cause chemical pneumonitis if aspirated. If lavage is performed, suggest endotracheal and/or esophagoscopic control.

Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5 - FIRE FIGHTING MEASURES

National Fire Protection Rating (NFPA)

HEALTH	2
FLAMMABILITY	2
REACTIVITY	0
4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

FLASHPOINT: 142°F (61°C)

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fires involve this material.

FIRE AND EXPLOSION HAZARD: May decompose in fire due to thermal decomposition, releasing toxic gases.

FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid possible hazardous fumes and decomposition products. Dike and collect water used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

Minimize use of water to prevent environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece and protective clothing.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILLS OR LEAKS: Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

SMALL SPILL: Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal.

LARGE SPILL: Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container. Minimize use of water to prevent environmental contamination

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

HANDLING: Use only in a well-ventilated area.

STORAGE: Store above 28°F or agitate before use. Store in original container with lid tightly closed. Keep away from food, feed and drinking water. Combustible liquid, store in a well ventilated, dry place away from heat and other sources of ignition.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm):

COMPONENT	OSHA PEL	ACIGH TLV
Triclopyr BEE ester	Not listed	Not listed
Naphthalene	10 ppm	10 ppm

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to minimize exposure to airborne contaminants. Local mechanical exhaust ventilation may be required. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:
EYE PROTECTION - Safety goggles, face shield or full face respirator if vapors cause eye discomfort.
CLOTHING - Long-sleeved shirt and long pants, Shoes plus socks.
GLOVES – Chemical resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC) or viton.
RESPIRATOR - When handling in enclosed areas use a respirator approved for pesticides.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:
Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light yellow clear liquid
Odor: Paint like odor
pH: 3.65 – 4.65
Melting Point: Not applicable
Boiling Point: No data
Flash Point: 59°C
Evaporation Rate: No data
Flammability: No data
Flammability Limits: No data
Vapor Pressure: 0.2 mPa (25°C) (Triclopyr)
Vapor Density: Not applicable
Density: 1.15 – 1.21 g/ml (9.60 – 10.10 lb/gl)*
Solubility: Emulsifies
Partition Coefficient: log P_{ow} = 0.42 (pH5), -0.45 (pH7), -0.96 (pH9) (Triclopyr)
Auto-Ignition Temperature: No data
Decomposition Temperature: No data
Viscosity: 14.49 cSt (20°C); 6.7 cSt (40°C)

*Listed density is an approximate value and does not necessarily represent that of a specific batch.

SECTION 10 - STABILITY AND REACTIVITY

PRODUCT REACTIVITY: None known

CHEMICAL STABILITY: Stable, however may decompose if heated.

HAZARDOUS REACTION/POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Avoid temperatures above (105°F, 40°C) and below 30°F (6°C).

INCOMPATIBLE MATERIALS: Strong acids and oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: May decompose to hydrogen chloride, oxides of nitrogen and phosgene when burning.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity values from a similar but not identical formulation.

ACUTE TOXICITY:

Oral LD_{50} (rat)	- >1,000 mg/Kg
Dermal LD_{50} (rat)	- >2,000 mg/Kg
Inhalation LC_{50} (rat)	- >4.0 mg/L
Eye Irritation (rabbit)	- Slight irritant
Skin Irritation (rabbit)	- Moderate irritant
Sensitization (guinea pig)	- Potential sensitizer from prolonged or repeated exposure.

CARCINOGEN STATUS:

OSHA	- Not listed
NTP	- Not listed
IARC	- Not listed

TERATOGENICITY: Evidence of reproductive and developmental toxicity only at maternally toxic doses

MUTAGENICITY: Little evidence of mutagenic effects during in vivo or in vitro studies.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

FATE: Triclopyr BEE ester rapidly hydrolyzes to the parent acid. Triclopyr acid is slightly persistent with a soil half life of 2 to 6 weeks depending on soil type and weather conditions. Triclopyr acid is water soluble and mobile in soil.

FISH TOXICITY: (BEE ester formulation)

96 hour LC_{50}, Rainbow trout –	1.3 ppm
96 hour LC_{50}, Bluegill -	1.5 ppm

AVIAN TOXICITY: (BEE ester formulation)
Dietary LC_{50}, Bobwhite quail – > 9,000 ppm
Dietary LC_{50}, Mallard duck – > 10,000 ppm

BEE TOXICITY: (triclopyr acid) – > 100 ug/bee

SECTION 13 - DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL: Pesticide, spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to applicable federal, state, or local procedures.

CONTAINER DISPOSAL: Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

Refer to the product label for additional and complete Container Handling instructions

SECTION 14 - TRANSPORT INFORMATION

SHIPPING DESCRIPTION:
(Ground transport)

Containers ≤ 119 gallons -	Not regulated by DOT
Containers > 119 gallons -	NA1993, Combustible Liquid, N.O.S., (contains petroleum distillates), PG III
DOT HAZARD CLASS:	Combustible Liquid (> 119 gallons)
IDENTIFICATION NUMBER:	NA1993
DOT PACKING GROUP:	PG III

SECTION 15 - REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY: Not listed

SARA TITLE III STATUS:
311/312 Hazard Categories – Immediate & Delayed Health Hazard, Fire Hazard
313 Toxic Chemicals – None known

CALIFORNIA PROP 65: Not listed

TSCA: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SECTION 16 - OTHER INFORMATION

HMIS HAZARD RATINGS	HEALTH	2
	FLAMMABILITY	2
	PHYSICAL HAZARD	0
	4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh's knowledge. Albaugh makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

REVISED DATE: November, 2014

REFERENCE: Revised for GHS compliance

MONSANTO COMPANY

Safety Data Sheet
Commercial Product

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Product identifier

Roundup PRO® Herbicide

1.1.1. Chemical name
Not applicable.
1.1.2. Synonyms
None.
1.1.3. EPA Reg. No.
524-475

1.2. Product use
Herbicide

1.3. Company
MONSANTO COMPANY, 800 N. Lindbergh Blvd., St. Louis, MO, 63167
Telephone: 800-332-3111, **Fax:** 314-694-5557
E-mail: safety.datasheet@monsanto.com

1.4. Emergency numbers
FOR CHEMICAL EMERGENCY, SPILL LEAK, FIRE, EXPOSURE, OR ACCIDENT Call CHEMTREC - Day or Night: 1-800-424-9300 toll free in the continental U.S., Puerto Rico, Canada, or Virgin Islands. For calls originating elsewhere: 703-527-3887 (collect calls accepted).
FOR MEDICAL EMERGENCY - Day or Night: +1 (314) 694-4000 (collect calls accepted).

2. HAZARDS IDENTIFICATION

2.1. Classification
OSHA Hazard Communication Standard, 29 CFR 1910.1200 (2012)
Acute toxicity, inhalation - Category 4
2.2. Label elements
2.2.1. Signal word
WARNING!
2.2.2. Hazard pictogram/pictograms

2.2.3. Hazard statement/statements
Harmful if inhaled.
2.2.4. Precautionary statement/statements
Avoid breathing mist, vapours or spray.
Use only outdoors or in a well-ventilated area.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.

2.3. Appearance and odour (colour/form/odour)
Clear-Amber /Liquid / Sweet

2.4. OSHA Status
This product is hazardous according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Refer to section 11 for toxicological and section 12 for environmental information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Active ingredient
Isopropylamine salt of N-(phosphonomethyl)glycine; {Isopropylamine salt of glyphosate}

Composition

COMPONENT	CAS No.	% by weight (approximate)
Isopropylamine salt of glyphosate	38641-94-0	41
Other ingredients		59

Trade secret composition.

4. FIRST AID MEASURES

Use personal protection recommended in section 8.

4.1. Description of first aid measures
4.1.1. Eye contact: If in eyes, hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
4.1.2. Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
4.1.3. Inhalation: If inhaled, move person to fresh air. If person is not breathing, call emergency number or ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
4.1.4. Ingestion: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison center or doctor. Do not give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed
4.2.1. Eye contact, short term: May cause temporary eye irritation.
4.2.2. Skin contact, short term: Not expected to produce significant adverse effects when recommended use instructions are followed.
4.2.3. Inhalation, short term: Not expected to produce significant adverse effects when recommended use instructions are followed.
4.2.4. Single ingestion: Not expected to produce significant adverse effects when recommended use instructions are followed.

4.3. Indication of any immediate medical attention and special treatment needed

4.3.1. Advice to doctors: This product is not an inhibitor of cholinesterase.
4.3.2. Antidote: Treatment with atropine and oximes is not indicated.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

5.1.1. Recommended: Water, foam, dry chemical, carbon dioxide (CO2)

5.2. Special hazards

5.2.1. Unusual fire and explosion hazards

Minimise use of water to prevent environmental contamination.
Environmental precautions: see section 6.

5.2.2. Hazardous products of combustion

Carbon monoxide (CO), phosphorus oxides (PxOy), nitrogen oxides (NOx)

5.3. Fire fighting equipment: Self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

5.4. Flash point

Does not flash.

6. ACCIDENTAL RELEASE MEASURES

6.1. Environmental precautions

SMALL QUANTITIES:
Low environmental hazard.
LARGE QUANTITIES:
Minimise spread.
Keep out of drains, sewers, ditches and water ways.

6.2. Methods for cleaning up

SMALL QUANTITIES:
Flush spill area with water.
LARGE QUANTITIES:
Absorb in earth, sand or absorbent material.
Dig up heavily contaminated soil.
Collect in containers for disposal.
Refer to section 7 for types of containers.
Flush residues with small quantities of water.
Minimise use of water to prevent environmental contamination.

Refer to section 13 for disposal of spilled material.
Use handling recommendations in Section 7 and personal protection recommendations in Section 8.

7. HANDLING AND STORAGE

Good industrial practice in housekeeping and personal hygiene should be followed.

7.1. Precautions for safe handling

Avoid contact with eyes. When using do not eat, drink or smoke. Wash hands thoroughly after handling or contact. Wash contaminated clothing before re-use. Thoroughly clean equipment after use. Do not contaminate drains, sewers and water ways when disposing of equipment rinse water. Refer to section 13 of the safety data sheet for disposal of rinse water.

7.2. Conditions for safe storage

Minimum storage temperature: -15 °C
Maximum storage temperature: 50 °C
Compatible materials for storage: stainless steel, fibreglass, plastic, glass lining
Incompatible materials for storage: galvanised steel, unlined mild steel, see section 10.
Keep out of reach of children.
Keep away from food, drink and animal feed.

Keep only in the original container.
Keep container tightly closed in a cool, well-ventilated place.
Partial crystallization may occur on prolonged storage below the minimum storage temperature.
If frozen, place in warm room and shake frequently to put back into solution.
Minimum shelf life: 5 years.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Airborne exposure limits

Components	Exposure Guidelines
Isopropylamine salt of glyphosate	No specific occupational exposure limit has been established.
Other ingredients	No specific occupational exposure limit has been established.

8.2. Engineering controls: Provide local exhaust ventilation.

8.3. Recommendations for personal protective equipment

8.3.1. Eye protection: If there is significant potential for contact: Wear chemical goggles.

8.3.2. Skin protection: No special requirement when used as recommended. If repeated or prolonged contact: Wear chemical resistant gloves. Applicators and other handlers must wear: Wear long sleeved shirt, long pants and shoes with socks.

8.3.3. Respiratory protection: No special requirement when used as recommended.

When recommended, consult manufacturer of personal protective equipment for the appropriate type of equipment for a given application.

9. PHYSICAL AND CHEMICAL PROPERTIES

These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Colour/colour range:	Clear - Amber
Odour:	Sweet
Form:	Liquid
Physical form changes (melting, boiling, etc.):	
Melting point:	Not applicable.
Boiling point:	No data.
Flash point:	Does not flash.
Explosive properties:	No explosive properties
Auto ignition temperature:	452 °C
Self-accelerating decomposition temperature (SADT):	No data.
Oxidizing properties:	No data.
Specific gravity:	1.169 @ 20 °C / 15.6 °C
Vapour pressure:	25 mmHg 24 °C
Vapour density:	Not applicable.
Evaporation rate:	No data.
Dynamic viscosity:	73.2 mPa·s
Kinematic viscosity:	62.47 cSt @ 20 °C
Density:	1.17 g/cm3 @ 20 °C
Solubility:	Water: Completely miscible.

pH:	4.4 - 5.0 @ 80 g/l
Partition coefficient:	log Pow: < -3.2 @ 25 °C (glyphosate)

10. STABILITY AND REACTIVITY

10.1. Reactivity
Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

10.2. Stability
Stable under normal conditions of handling and storage.

10.3. Possibility of hazardous reactions
Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

10.4. Incompatible materials
galvanised steel;unlined mild steel;see section 10.;
Compatible materials for storage: see section 7.2.

10.5. Hazardous decomposition
Thermal decomposition: Hazardous products of combustion: see section 5.

11. TOXICOLOGICAL INFORMATION

This section is intended for use by toxicologists and other health professionals.

Likely routes of exposure: Skin contact, eye contact

Potential health effects
Eye contact, short term: May cause temporary eye irritation.
Skin contact, short term: Not expected to produce significant adverse effects when recommended use instructions are followed.
Inhalation, short term: Not expected to produce significant adverse effects when recommended use instructions are followed.
Single ingestion: Not expected to produce significant adverse effects when recommended use instructions are followed.

Data obtained on product and components are summarized below.
Acute oral toxicity
Rat, LD50: 5,108 mg/kg body weight
Practically non-toxic.
Acute dermal toxicity
Rat, LD50 (limit test): > 5,000 mg/kg body weight
Practically non-toxic. No mortality.
Acute inhalation toxicity
Rat, LC50, 4 hours, aerosol: 2.9 mg/L
Other effects: weight loss, breathing difficulty
Practically non-toxic.
Skin irritation
Rabbit, 6 animals, OECD 404 test:
Days to heal: 3
Primary Irritation Index (PII): 0.5/8.0
Essentially non irritating.
Eye irritation

Rabbit, 6 animals, OECD 405 test:
Days to heal: 3
Slight irritation.

Skin sensitization

Guinea pig, 3-induction Buehler test:
Positive incidence: 0 %

N-(phosphonomethyl)glycine; { glyphosate acid}

Genotoxicity

Not genotoxic.

Carcinogenicity

Not carcinogenic in rats or mice.

Reproductive/Developmental Toxicity

Developmental effects in rats and rabbits only in the presence of significant maternal toxicity.
Reproductive effects in rats only in the presence of significant maternal toxicity.

12. ECOLOGICAL INFORMATION

This section is intended for use by ecotoxicologists and other environmental specialists.

Aquatic toxicity, fish

Rainbow trout (Oncorhynchus mykiss):
Acute toxicity, 96 hours, static, LC50: 5.4 mg/L
Moderately toxic.

Bluegill sunfish (Lepomis macrochirus):
Acute toxicity, 96 hours, static, LC50: 7.3 mg/L
Moderately toxic.

Aquatic toxicity, invertebrates

Water flea (Daphnia magna):
Acute toxicity, 48 hours2, static, EC50: 11 mg/L
Slightly toxic.

Avian toxicity

Mallard duck (Anas platyrhynchos):
Dietary toxicity, 5 days, LC50: > 5,620 mg/kg diet
Practically non-toxic.

Bobwhite quail (Colinus virginianus):
Dietary toxicity, 5 days, LC50: > 5,620 mg/kg diet
Practically non-toxic.

Arthropod toxicity

Honey bee (Apis mellifera):
Oral/contact, 48 hours, LD50: > 100 µg/bee
Practically non-toxic.

Soil organism toxicity, invertebrates

Earthworm (Eisenia foetida):
Acute toxicity, 14 days, LC50: > 1,250 mg/kg soil
Practically non-toxic.

Similar formulation

Aquatic toxicity, algae/aquatic plants

Green algae (Selenastrum capricornutum):
Acute toxicity, 72 hours, static, EbC50 (biomass): 12.4 mg/L
Slightly toxic.
Green algae (Selenastrum capricornutum):
Acute toxicity, 72 hours, static, NOEC: 6.3 mg/L

Similar formulation

Soil organism toxicity, microorganisms
Nitrogen and carbon transformation test:
30 L/ha, 28 days: Less than 25% effect on nitrogen or carbon transformation processes in soil.

N-(phosphonomethyl)glycine; { glyphosate acid}

Avian toxicity
Bobwhite quail (Colinus virginianus):
Dietary toxicity, 5 days, LC50: > 4,640 mg/kg diet
No more than slightly toxic.
Mallard duck (Anas platyrhynchos):
Dietary toxicity, 5 days, LC50: > 4,640 mg/kg diet
No more than slightly toxic.
Bobwhite quail (Colinus virginianus):
Acute oral toxicity, single dose, LD50: > 3,851 mg/kg body weight
Practically non-toxic.
Bioaccumulation
Bluegill sunfish (Lepomis macrochirus):
Whole fish: BCF: < 1
No significant bioaccumulation is expected.
Dissipation
Soil, field:
Half life: 2 - 174 days
Koc: 884 - 60,000 L/kg
Adsorbs strongly to soil.
Water, aerobic:
Half life: < 7 days

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

13.1.1. Product

Excess product may be disposed of by agricultural use according to label instructions. Keep out of drains, sewers, ditches and water ways. Recycle if appropriate facilities/equipment available. Burn in proper incinerator. Follow all local/regional/national/international regulations.

13.1.2. Container

See the individual container label for disposal information. Emptied containers retain vapour and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Empty packaging completely. Triple or pressure rinse empty containers. Do NOT contaminate water when disposing of rinse waters. Store for collection by approved waste disposal service. Ensure packaging cannot be reused. Do NOT re-use containers. Recycle if appropriate facilities/equipment available. Follow all local/regional/national/international regulations.

Use handling recommendations in Section 7 and personal protection recommendations in Section 8.

14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

14.1. US Dept. of Transportation (DOT) Hazardous Materials Regulations (49 CFR Parts 105-180)

Proper Shipping Name (Technical Name if required):	Not regulated for domestic ground transportation. ()

14.2. IMDG Code

Proper Shipping Name (Technical Name if required):	Not regulated for transport under IMO Regulations ()

14.3. IATA/ICAO

Proper Shipping Name (Technical Name if required):	Not regulated for transport under IATA/ICAO Regulations ()

15. REGULATORY INFORMATION

15.1. Environmental Protection Agency

15.1.1. TSCA Inventory

All components are on the US EPA's TSCA Inventory

15.1.2. SARA Title III Rules

Section 311/312 Hazard Categories: Immediate
Section 302 Extremely Hazardous Substances: Not applicable.
Section 313 Toxic Chemical(s): Not applicable.

15.1.3. CERCLA Reportable quantity

Not applicable.

15.1.4. Federal Insecticide, Fungicide, Rodenticide Act (FIFRA)

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION!
CAUSES EYE IRRITATION

Acute oral toxicity: FIFRA category IV.
Acute dermal toxicity: FIFRA category IV.
Acute inhalation toxicity: FIFRA category IV.
Skin irritation: FIFRA category IV.
Eye irritation: FIFRA category III.

16. OTHER INFORMATION

The information given here is not necessarily exhaustive but is representative of relevant, reliable data.
Follow all local/regional/national/international regulations.

Please consult supplier if further information is needed.
In this document the British spelling was applied.
|| Significant changes versus previous edition.

	Health	Flammability	Instability	Additional Markings
NFPA	1	1	1	

0 = Minimal hazard, 1 = Slight hazard, 2 = Moderate hazard, 3 = Severe hazard, 4 = Extreme hazard

Full denomination of most frequently used acronyms. BCF (Bioconcentration Factor), BOD (Biochemical Oxygen Demand), COD (Chemical Oxygen Demand), EC50 (50% effect concentration), ED50 (50% effect dose), I.M. (intramuscular), I.P. (intraperitoneal), I.V. (intravenous), Koc (Soil adsorption coefficient), LC50 (50% lethality concentration), LD50 (50% lethality dose), LDLo (Lower limit of lethal dosage), LEL (Lower Explosion Limit), LOAEC (Lowest Observed Adverse Effect Concentration), LOAEL (Lowest Observed Adverse Effect Level), LOEC (Lowest Observed Effect Concentration), LOEL (Lowest Observed Effect Level), MEL (Maximum Exposure limit), MTD (Maximum Tolerated Dose), NOAEC (No Observed Adverse Effect Concentration), NOAEL (No Observed Adverse Effect Level), NOEC (No Observed Effect Concentration), NOEL (No Observed Effect Level), OEL (Occupational Exposure Limit), PEL (Permissible Exposure Limit), PII (Primary Irritation Index), Pow (Partition coefficient n-octanol/water), S.C. (subcutaneous), STEL (Short-Term Exposure Limit), TLV-C (Threshold Limit Value-Ceiling), TLV-TWA (Threshold Limit Value - Time Weighted Average), UEL (Upper Explosion Limit)

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, MONSANTO Company or any of its subsidiaries makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for the purposes prior to use. In no event will MONSANTO Company or any of its subsidiaries be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR TO THE PRODUCT TO WHICH INFORMATION REFERS.

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M E M O

TO: Board of Directors

FROM: District Manager

SUBJECT: DISCUSSION AND POSSIBLE ACTION REGARDING APPOINTING FOUNDING MEMBERS TO THE LOMICO OVERSIGHT COMMITTEE

DATE: July 21, 2016

RECOMMENDATION:

The Board appoint five members to the Lompico Oversight Committee.

BACKGROUND:
The merger of Lompico County Water District and San Lorenzo Valley Water District was completed on June1, 2016. A Local Agency Formation Commission (LAFCO) condition of the merger was that SLVWD create a Lompico Oversight Committee (LAFCO Conditions attached).

On May 19, 2016 the District modified Section 14 - 'Committees' of the Board Procedure Manual to include a Lompico Oversight Committee (Section 14 attached).

The District began requesting applications on June 1, 2016 (application form attached).

As of July 13, 2016 the District has received applications from the following individuals (attached):

1. April Crittenden
2. John Grunow
3. Lydia Hammack
4. Peter Weyzen
5. Ruth Shaw
6. Lilian 'Alecia' Morgan
7. Mary Ann LoBalbo
8. Antoinette (Toni) Norton

Staff has requested that each applicant attend tonight's meeting to interact with the Board prior to any Board Action. The Board may appoint each applicant singularly by five affirmative motions, appoint five individuals by a single affirmative motion or any variation in-between.

STRATEGIC PLAN:
Element 5.2 Funding Infrastructure Replacement
Element 6.2 Increase Civic Understanding and Engagement

FISCAL IMPACT:
None

6. Be responsible for the orderly conduct of all Board of Directors meetings.

7. Act as spokesperson for the Board of Directors.

8. Coordinate and prepare the Board of Directors annual evaluation of the General Manager and Legal Counsel.

9. Other duties as authorized by the Board of Directors.

12. VICE-PRESIDENT

When the President resigns or is absent or disabled, the Vice President shall perform the President's duties. When the President disqualifies himself/herself from participating in an agenda item, the Vice-President shall perform the duties of the presiding officer.

13. MINUTES

Minutes of all regularly scheduled Board of Directors meetings will be audio recorded. Said audio record shall be subject to inspection in accordance with State Laws, including the California Public Records Act.

14. COMMITTEES

The Board shall organize committees that are advisory to the Board with regard to matters within their respective areas of responsibility.

The four District standing committees are as follows: Administrative, Budget & Finance, Environmental/Engineering/Planning and Lompico Oversight. Each standing committee shall have no power or authority to commit the District or to take any action on behalf of the Board of Directors. Standing Committees shall hold meetings at such times as deemed necessary by consensus of the committee members. Committees are encouraged to meet at least monthly.

Committee meetings shall be held in accordance with the provisions of the Ralph M. Brown Act. In order to promote attendance by Directors at Committee meetings without inadvertently creating a violation of the Ralph M. Brown Act, Directors that are not members of a committee may attend as observers, but shall not participate at the Committee's meeting.

Committee appointments will be reviewed by the full Board at the 2nd Board of Director's meeting in December of each Calendar Year, or as soon thereafter as practical. Applications to serve as a Public Member will be available at the District's Office or on-line at the District's website (www.slvwd.com). Public Member Applications will be reviewed by the full Board. Each committee member shall be appointed by a simple majority vote of the Board.

Administrative, Budget & Finance, Environmental/Engineering/Planning Committees may have no more than two Board Members and no more than one Public Member. During the appointment discussion each Director may present a public member to serve on each committee; Administrative, Budget & Finance, Environmental/Engineering/Planning Committees. If more than one public member is presented to serve on an individual committee, the full Board shall vote to determine which public member shall be seated on that committee for the year.

The Lompico Oversight Committee may have no more than five Public Members. Public members serving on the Lompico Oversight Committee shall have a residential mailing address within Assessment District 2016-1.

Members of the committees serve at the pleasure of the Board. Each committee shall designate their own chairperson. For the Administrative, Budget & Finance and Environmental/Engineering/Planning Committees the chairperson shall be a member of the Board. Each committee may elect a vice- chairperson. Members of committees, including the chairperson and vice-chairperson shall serve until their successors are appointed. The chairperson of a committee is its presiding officer and shall be responsible for communicating the recommendation of the committee to the Board. In the absence of the chairperson, the vice-chairperson shall perform the duties of the chairperson. The chairperson and vice-chairperson are not deprived of any of the rights and privileges of a committee member by reason of being the presiding officer.

A majority of the members of each committee shall constitute a quorum for the transaction of business. Only members of the committee are entitled to make, second or vote on any motion or other action of the committee. Each committee member shall be entitled to one vote on all matters considered by the committee. A simple majority vote of the members of the Committee shall designate approval of a motion.

During the first regular meeting after January 1st of each year, each Committee shall review the District's current Strategic Plan and identify Strategic Plan Elements pertaining to said Committee. The Committee's findings regarding such Strategic Plan review shall be reported back to the Board at the next available regular Board Meeting for discussion and to allow the Board to provide direction back to the committees regarding completion of identified Strategic Plan Elements.

During the first regular meeting after January 1st of each year, each Committee shall prepare a multi-month forward looking calendar of items to be discussed by said Committee. Said calendar shall be no less than a three month look-ahead. Each Committee chairperson shall maintain said look-ahead calendar and submit same to the Board on a monthly basis.

The committee Chairperson shall record summary minutes of each committee meeting. The minutes of each committee meeting and any recommendation of a committee shall include a summary of the information presented.

All committee member absences will be considered by the majority of the committee members to determine whether or not the absence is without cause. Sickness, jury duty, vacation and/or bereavement will be considered excused absences. When three meetings in a row or a total of six meetings in one calendar year are missed the remaining committee members will consider removal of the individual from the committee. The removal must be voted upon and approved by the majority of the committee members with the exception of the committee member in question.

Vacancies shall be reported to the full Board as soon as practically possible. Vacancies shall be filled by simple majority vote of the Board.

Committee Members shall comply with the obligations and responsibilities of office including the obligation to comply with the disclosure requirements of the Political Reform Act (Form

700). The reporting categories made applicable to the Directors by San Lorenzo Valley Water District's local conflict of code shall apply to the members of the committee members.

All committee communications must go through the designated committee chairperson.

A committee has jurisdiction to consider and make a recommendation to staff, other committees and to the Board regarding any item of business within the responsibility of the committee. Committee recommendations shall be communicated to the Board. A committee may consider other matters referred to it by the Board.

The Board may refer a recommendation back to any committee for reevaluation whenever the Board deems additional evaluation is required.

Each Standing Committee shall, as a minimum, be responsible for the following:

Administrative Committee

The Committee shall be responsible for matters of internal and external administrative matters including: communications, staffing and staff support; District's data gap grant programs; interagency relations; codes and policies, pending State and Federal legislation; and other administrative programs.

Budget and Finance Committee

The Committee shall be responsible for the review of District finances including: rates, fees, charges and other sources of revenue; budget and reserves; audit; investments; insurance; and other financial matters.

Environmental / Engineering / Planning Committee

The Committee shall be responsible to review matters of stewardship, design, construction, replacement, and repair of the District facilities and property, including: The Capital Improvement Program; Master Plans; Urban Water Management Plans; Water Conservation Programs; Classic Watershed Education Grants; Watershed Management; Resource Management; and other environmental / engineering / operational and planning related matters.

Lompico Oversight Committee

The Committee shall be responsible to review matters of stewardship, design, construction, replacement, and repair of the District facilities and property directly related to Assessment District 2016-1, the Lompico Service Area.

15. MEETING STIPENDS

Each Director may receive compensation as established by resolution of the Board of Directors. Pursuant to California Water Code section 30507, each Director may receive compensation in an amount not to exceed one hundred dollars ($100.00) per day for each

San Lorenzo Valley Water District

- accepting applications-

PUBLIC COMMITTEE MEMBERS
for the LOMPICO OVERSIGHT COMMITTEE

Due July 7, 2016

NOTICE IS HEREBY GIVEN THAT THE SAN LORENZO VALLEY WATER DISTRICT is seeking applications for interested members of the former Lompico County Water District community to participate as Public Members of the Lompico Oversight Committee. The Committee will be advisory for the Lompico transition to SLVWD. Five Lompico residents will be chosen to serve on the Committee. The term of a Public Member of a committee is one year.

Applicants must be customers of the former Lompico County Water District.

Any person interested in filling a position on the committee as a Public Member must complete an application. Applications can be sent to the District Secretary, 13060 Highway 9, Boulder Creek, CA 95006 or to hmorrison@slvwd.com.

Applications will be reviewed by the Board and Committee members will be announced at the July 7, 2016 Board of Directors meeting.

Lompico Oversight Committee Application Form

Thank you for your interest in participating in a Lompico Oversight Committee.

Members of the public play a vital role in shaping the District and your willingness to contribute time and effort is greatly appreciated.

Please send your completed application to the District Secretary, 13060 Hwy. 9, Boulder Creek, CA 95006 or to hmorrison@slvwd.com

Personal Details

Name:_____Mr. ☐ Mrs. ☐ Miss ☐ Ms. ☐

Postal Address: _____

Telephone: (Home) _____ (Mobile) _____

E-Mail: _____

The Committee

This committee will be made up of 5 individuals interested in assisting in the transition of Lompico County Water District in the merger with SLVWD. We ask that you be customers of the former Lompico water district. Your input with SLVWD will be advisory.

Why You Want to Participate

Lompico Steering Committee Application Form

Thank you for your interest in participating in a Lompico Oversight Committee.

Members of the public play a vital role in shaping the District and your willingness to contribute time and effort is greatly appreciated.

Please send your completed application to the District Secretary, 13060 Hwy. 9, Boulder Creek, CA 95006 or to hmorrison@slvwd.com

Personal Details

Name: April Crittenden Mr. ☐ Mrs. ☐ Miss ☐ Ms. ☒

Postal Address: 12245 Coleman Ave Felton, CA 95018

Telephone: (Home) 831-704-7646 (Mobile) 831-239-7889

E-Mail: aprilrenee111@yahoo.com

The Committee

This committee will be made up of 5 individuals interested in assisting in the transition of Lompico County Water District in the merger with SLVWD. We ask that you be customers of the former Lompico water district. Your input with SLVWD will be advisory.

Why You Want to Participate

I have been a Lompico resident and water user for seven years this year. I am passionate about access to clean water and improving our water system infrastructure. I worked the last nine years at California Certified Organic Farms (CCOF) as the Quality and Compliance Superviser and I am currenly the President of Envirocann an environmental certification agency. I have experience as a regulator and with managing people and systems. I would love to play a role in shaping the future of Lompico water quality, access and infrastructure as we merge with SLV Water. I am curious about what the expected time commitment, length of time(years? months?) and frequency of the meetings for this committee will be.

Lompico Steering Committee Application Form

Thank you for your interest in participating in a Lompico Oversight Committee.

Members of the public play a vital role in shaping the District and your willingness to contribute time and effort is greatly appreciated

Please send your completed application to the District Secretary, 13060 Hwy. 9, Boulder Creek, CA 95006 or to hmorrison@slvwd.com

Personal Details

Name: John H Grunow Mr. ☒ Mrs. ☐ Miss ☐ Ms. ☐

Postal Address: 12040 Madrone Ave, Felton 95018

Telephone: (Home) 831-335-3966 (Mobile) _____

E-Mail: jgrunow@yahoo.com

The Committee

This committee will be made up of 5 individuals interested in assisting in the transition of Lompico County Water District in the merger with SLVWD. We ask that you be customers of the former Lompico water district. Your input with SLVWD will be advisory.

Why You Want to Participate

I have owned property in Lompico for about 44 years. I was on the LCWD Board of Directors in the early 1980's, on Lompico Community Center Board in the late 1980's, and on Supervisor Fred Keeley's Citizen Advisory Committee in the early 1990's. I am aware of a lot of the infrastructure of LCWD and want to contribute my knowledge, experience and support for my community.

Lompico Oversight Committee Application Form

Thank you for your interest in participating in a Lompico Oversight Committee.

Members of the public play a vital role in shaping the District and your willingness to contribute time and effort is greatly appreciated.

Please send your completed application to the District Secretary, 13060 Hwy. 9, Boulder Creek, CA 95006 or to hmorrison@slvwd.com

Personal Details

Name: LYDIA HAMMACK Mr. ☐ Mrs. ☐ Miss ☐ Ms. ☒

Postal Address: 12561 COLEMAN AVE FELTON, CA 95018

Telephone: (Home) 831-335-5489 (Mobile) 775-741-0180

E-Mail: L.HAMMACK@ATT.NET

The Committee

This committee will be made up of 5 individuals interested in assisting in the transition of Lompico County Water District in the merger with SLVWD. We ask that you be customers of the former Lompico water district. Your input with SLVWD will be advisory.

Why You Want to Participate

I HAVE LIVED HERE OVER THE LAST 10 YEARS (2 YEARS - FULL TIME) ACCOUNT # 36
I HAVE ALWAYS VOLUNTEERED AND BEEN ACTIVE WHERE I LIVE.
(SEE WORK & VOLUNTEER HISTORY)
I BELIEVE I HAVE THE EXPERIENCE TO BE CONSIDERED FOR THIS COMMITTEE
(I AM NOW RETIRED AND AM AVAILABLE FOR DAYTIME MEETINGS AS WELL AS EVENINGS. Thank-you

Lydia Hammack

Lydia Hammack
12561 Coleman Ave Felton, CA 95018
Home Phone # 831-**335-5489** / Cell # 775-741-0180 / Email **Lhammack@att.net**

EMPLOYMENT HISTORY

July 2007 to July 2012 Bookkeeper for Highland Ranches Property Owners Association. Duties included: A/R; A/P; Payroll -including associated tax reporting & filing; Assured insurance coverage was current; Reconciliation and month-end reports for Board of Directors; Tracked address and lot owner changes; Assisted in property transfers via certification of lot information for title companies.

March 2006 to August 2012 Bookkeeper & Finance Manager for Sierra Association of Foster Families. Duties included: A/R; A/P; Payroll -including associated tax reporting & filing; Complied Audit materials, Reconciliation and month-end reports for Executive Director; Reviewed & tracked budgets for 12 grants.

July 2004 to January 2014 Bookkeeper for Virginia City Highlands Property Owners Association. Duties included: A/R; A/P; Payroll -including associated tax reporting & filing; Assured insurance coverage was current; Reconciliation and month-end reports for Board of Directors; Tracked address and lot owner changes; Assisted in property transfers via certification of lot information for title companies.

1994 to September 2012 Storey County Planning Commissioner - Highlands representative. Appointed by and made recommendations to the Storey County Commissioners.
During 2003 -Complied a database of well log information for the Virginia Highlands utilizing records from state well logs; cross-referencing with building permits & assessor parcel information; Plotted well & home locations on maps. Research included information on depths, GPM, static level and information of original plus deepened wells.

VOLUNTEER WORK EXPERIENCE

1996 to 2012 - Storey County Precinct 5 election board chair.

Served on the Highland Ranches Property Owners Association board of directors,
President 1998-2001. VP 1995-1998. Handled correspondence with homeowners, Attorneys and Title Companies; Designed forms for annual meetings, elections & dues notice mailings; Chaired meetings; Designed and maintained hrpoa.org website until retirement.

Served on the Virginia Range Wildlife Protection Association board of directors, 1988-2000.
While serving several terms as President of the board from 1992 thru 2000: Coordinated donations & fundraising activities; Lobbied Legislators & County to pass bills helpful to "wild horses"; Spoke to various groups about wildlife, horses & adoption; Managed the Storey County Horse Adoption Program; Participated in state & local meetings about range conditions and horse management; Chaired meetings; Designed & maintained vrwpa.org website until August 2001.

2015 Worked on the "vote YES" for the Lompico / SLV water merger.

Education: Major-Graphic Arts; Minor - Journalism
Bookkeeping training was from a forensic accountant who works at a Reno Nevada CPA firm.
References: Dave Thomas & Pam Loy 775-847-9604/wk 775-823-3777

Holly Morrison

From: Peter Weyzen <pweyzen@gmail.com>
Sent: Monday, June 06, 2016 2:44 PM
To: Holly Morrison
Subject: Lompico Oversight....

Hi-

Sorry for not using the actual form to submit an application.

Peter Weyzen
12300 Lompico Rd, Felton CA 95018
831-335-2679
pweyzen@gmail.com
(district resident for 11 years, age 52)

I am not sure I would have submitted this on my own, but someone else more active in the water issues suggested I'd make a good candidate.

I've not been active in the water district as it was. I never attended meetings or participated directly with the previous board. But, I do live right next door to the water district, and through frequent visits over the years I've always known what was going on. (maybe known too much).

I think that if you'd ask anyone (who knew me) they'd say I was a super moderate guy. I am good at seeing more than one side of an issue and comprehending the basis of the other side.

Lastly, if you want me -- I'd be happy to participate. Thought, honestly, I am definitely not begging for a position -- just letting you know I could and would participate in the process if you needed me to.

-peter

Lompico Oversight Committee Application Form

Thank you for your interest in participating in a Lompico Oversight Committee.

Members of the public play a vital role in shaping the District and your willingness to contribute time and effort is greatly appreciated.

Please send your completed application to the District Secretary, 13060 Hwy. 9, Boulder Creek, CA 95006 or to hmorrison@slvwd.com

Personal Details

Name: Ruth Shaw Mr. ☐ Mrs. ☐ Miss ☒ Ms. ☐

Postal Address: 12385 Coleman AV Felton, CA 95018

Telephone: (Home) 831 335-4142 (Mobile) 831 334-4459

E-Mail: rashaw2@icloud.com

The Committee

This committee will be made up of 5 individuals interested in assisting in the transition of Lompico County Water District in the merger with SLVWD. We ask that you be customers of the former Lompico water district. Your input with SLVWD will be advisory.

Why You Want to Participate

As a retired Medical Technologist I have time to devote to the Lompico oversight committee. I love living in Lompico and want a safe and reliable water system for now and the future. For the past several years I've worked for the passage of the merger. Campainging for pro-merger candidates and for measure N has allowed me to meet residents of Lompico that I might never have met. Lois Henry has encouraged me to apply for membership in the oversight committee. I hope I could contribute to SLVWD even a small amount as much as she has to the LCWD. Attending and participating in the LCWD information meetings has shown me many of the concerns and frustrations involved in merger process. I would like the opportunity to show my fellow Lompicans our money in action and how wisely it is being spent.

Lompico Oversight Committee Application Form

Thank you for your interest in participating in a Lompico Oversight Committee.

Members of the public play a vital role in shaping the District and your willingness to contribute time and effort is greatly appreciated.

Please send your completed application to the District Secretary, 13060 Hwy. 9, Boulder Creek, CA 95006 or to hmorrison@slvwd.com

Personal Details

Name: Lilian 'Alecia' Morgan Mr. ☐ Mrs. ☐ Miss ☐ Ms. ☒

Postal Address: P. O. Box 1118 (12174 Lake Blvd.) Felton (Lompico) 95018

Telephone: (Home) 335-3896 (Mobile) _____

E-Mail: no1alecia@cruzio.com

The Committee

This committee will be made up of 5 individuals interested in assisting in the transition of Lompico County Water District in the merger with SLVWD. We ask that you be customers of the former Lompico water district. Your input with SLVWD will be advisory.

Why You Want to Participate

I have lived in my home in Lompico for 43 years. I have watched the water company operations thru many changes.
After the original bond attempt failed, I suggested to Lois Henry that Prop. 218 rules might work better. They did and we are now members of the SLVWD.
I feel that we will have real and functional management from now forward. I will be glad when all the repairs and upgrades are completed, but in the meantime, I would like to be involved with the process as much as possible.
I feel that my knowledge of Lompico history would be helpful and that I would be an asset on the oversight committee.
I am very comfortable the the SLVWD personnel, who go out of their way to answer my questions, and have confidence in the Managemnt of SLVWD.
Thank you.
Lilian Alecia Morgan (Lompico)

Lilian Alecia Morgan
6/22/16

Lompico Oversight Committee Application Form

Thank you for your interest in participating in a Lompico Oversight Committee.

Members of the public play a vital role in shaping the District and your willingness to contribute time and effort is greatly appreciated.

Please send your completed application to the District Secretary, 13060 Hwy. 9, Boulder Creek, CA 95006 or to hmorrison@slvwd.com

Personal Details

Name: Mary Ann LoBalbo Mr. ☐ Mrs. ☐ Miss ☐ Ms. ☒

Postal Address: PO Box 501 Felton, CA 95018

Telephone: (Home) 831-335-1117 (Mobile) 831 566-3385

E-Mail: MaryAnn.LoBalbo@comcast.net

The Committee

This committee will be made up of 5 individuals interested in assisting in the transition of Lompico County Water District in the merger with SLVWD. We ask that you be customers of the former Lompico water district. Your input with SLVWD will be advisory.

Why You Want to Participate

I have been on a few boards with Lompico County Water District as a concerned customer who cares about the community. I took a large interest in our water over 10 years ago when I first moved to Lompico. I have attended many meetings over the years with plenty of notes to keep informed.

I currently work for the Department of Public Works for the County of Santa Cruz as the Accounts Payable Supervisor. I feel I have the knowledge to review and ask the right questions when needed. I also had run my own business in Ben Lomond for 10 years until I sold my share to my partner.

I would like to continue to support my community by becoming part of this team so that our money is spent wisely which I know it will. I could not spend the time before to be on the board of Lompico, but I now have the time to be that Team member!

Thank you for you time!

Lompico Oversight Committee Application Form

Personal Details

Name: Antoinette (Toni) Norton

Postal Address: 844 Trinkling Creek Dr, Felton CA 95018

Telephone: (Home) (Mobile) E-Mail: 831-335-7203 home, 408-832-6435 cell, lompicotoni@gmail.com

The Committee

This committee will be made up of 5 individuals interested in assisting in the transition of Lompico County Water District in the merger with SLVWD. We ask that you be customers of the former Lompico water district. Your input with SLVWD will be advisory.

Why You Want to Participate:

As a former member of the Lompico Water District Citizens Advisory committee I played an active role in keeping Lompico Citizens up-to-date with information regarding the status of the possible merger with SLVWD. I was also very active in the Pro-Merger committee, prepared flyers explaining the benefits of the merger and walked door-to-door encouraging Lompicans to vote yes for both the earlier bond and then the Assessment. I feel a responsibility to see this through and ensure that the funds provided by Lompico will be spent appropriately to benefit Lompico.

I'm also a co-founder of the Lompico/Zayante Women's Social Club, active in the community and can reach out and inform our community if the need arises.

I'm retired after a 33 year career with AT&T. My final position was as a Global Results Manager. I also spent many years as an Account Executive and am very comfortable acting as a bridge and advocate between a business organization and the people they serve.

Thank you for considering my application.

MEMO

To: Board of Directors

From: District Manager
Written by: Environmental Programs manager

DATE: July 21, 2016

SUBJECT: 2015-16 OLYMPIA WATERSHED PATROL SUMMARY REPORT

RECOMMENDATION

It is recommended that the Board of Directors review this memo and accept the Olympia Watershed Patrol Summary Report (Attachment 1) provided by Wojciechowski, Access Coordinator, Land Trust of Santa Cruz County.

BACKGROUND

On June 30, 2011 your Board approved Resolution 34 (10-11) which designates the extremely rare sand chaparral/sand parkland biotic communities on the Olympia Watershed property as “special protection area” and prohibits all recreational uses except limited hiking, dog-walking and horseback riding on designated service roads.

Following Board approval of Resolution 34 (10-11), District staff have implemented mandated actions:

1. Prohibit throughout the property all unauthorized motorized vehicle use, all bicycle use, poaching, alcohol use, firearms, smoking, use of fire and camping.
2. Restrict hiking, dog-walking, and equestrian use on the Olympia Watershed property to existing District service roads during daylight hours commencing 30 minutes after sunrise and ending 30 minutes before sunset.
3. Equestrian use is no longer restricted to members of Santa Cruz County Horsemen’s Association (SCCHA).
4. Require all dogs to be leashed; leashes shall not exceed ten feet in length.
5. Engage the services of an experienced land steward to patrol the Olympia Watershed property and discourage trespassers.
6. Fence and gate the western region of the property along the east side of the railroad tracks and both sides of the District service roads, as well as any other areas deemed necessary by the district to discourage trespass.
7. Post signs at appropriate intervals along fences, gates and other known entry points, prohibiting trespass and listing recreational use restrictions.
8. Assess on at least a six (6) month basis or more frequently if deemed necessary, the success of implementing the aforementioned recreational use restrictions; the District retains the option of prohibiting all recreational use, if deemed necessary, in the final implementation plan for the property.

In February 2012 the District contracted with the Land Trust of Santa Cruz County to patrol the Olympia Watershed property on foot, pursuant to Resolution 34 (10-11), Directive 8 and the Olympia Watershed Planning and Implementation Report, which incorporated the directives of the resolution.

Ginger Wojciechowski, the Land Trust's Steward Assistant has, as directed, completed and filed monthly reports noting each of her observations of legal and illegal uses on the property during his patrols. Her reports have also included photographs of notable observations such as vandalism and wildlife sightings.

Ms. Wojciechowski compiled a quantitative summary report of all her recorded observations of both legal and illegal use over the past 12 months, and to provide a narrative summarizing these observations. The Olympia Watershed Patrol Summary Report is attached. (Attachment 1).

It is recommended that the Board Review this memo and accept the Olympia Watershed Patrol Summary Report (Attachment 1) provided by Ginger Wojciechowski, Access Coordinator, Land Trust of Santa Cruz County.

FISCAL IMPACT
$17,530

STRATEGIC PLAN:
Strategic Element 2.0 - Watershed Stewardship
Strategic Element 7.0 - Strategic Partners

LAND TRUST OF SANTA CRUZ COUNTY

617 Water Street
Santa Cruz, CA 95060
831-429-8810
Fax 831-429-1160
info@landtrustsantacruz.org
www.landtrustsantacruz.org

Olympia Watershed Patrol

(Public Use Brief)

Since February 2012, the Land Trust of Santa Cruz County has been patrolling the Olympia Watershed 8-10 hours a week during random daylight hours. This report is intended to summarize the types of legal and illegal use trends that have been observed on the property.

General Use

The majority of recreational users on the property continues to be dog walkers and equestrian users, both are daily occurrences. Entrance to the property is at the main gate off of E. Zyante Rd. upon entering the equestrian gate users can access the north boundary loop from a subsequent equestrian gate. Use of the upper portion of the property continues to be minimal due to its extreme grades and difficulty to access after winter storms causing trail obstructions from fallen trees.

In general many of the people using the property are following the rules outlined on the kiosk. We believe the vandalism and trespassing onto sensitive areas of the property are being done by a select few and does not represent the use of the regular visitors to the property.

Illegal Use:

Dog's Off-Leash

The number of dogs observed off-leash has been significantly lower in in the past two years with an average of 1 incident per month as opposed to previous years (See figure 1). We have noticed that most people walking with dog's off-leash have a leash readily available and comply with the rules after a reminder.

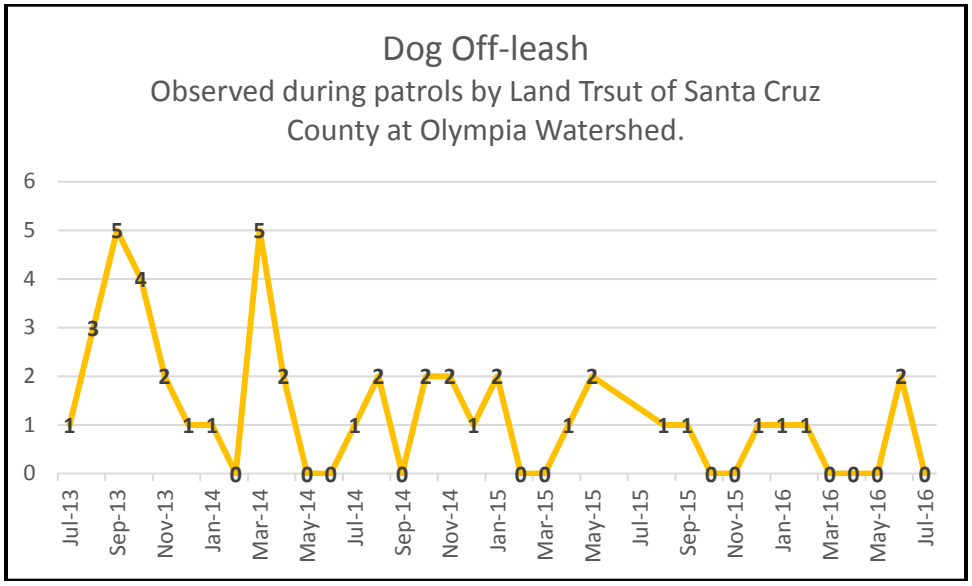

Figure 1: This chart shows a significant decrease of dog-off leash incidents over the last

three fiscal years of patrolling Olympia Watershed. Dates are shown as every other month though you can see how many incidents happened for the month not shown.

Dirt Bike/Bicycle Use

There was one incident this past year of a mountain bike speculated to be on the property. Tracks were discovered in September of 2015 throughout the upper equestrian area (see photo 1). This is an isolated incident and does not appear to be a frequently occurring attraction on the property. There was a similar isolated incident in November of 2015 that occurred throughout the property where a dirt bike had entered from the main entrance gate near E. Zayante Rd. The offender stayed on the walking trails and has not returned to the property since (see photo 2).

Recommendation

To continue patrol efforts to monitor the frequency of illegal trespass events. It seems to be a deterrent to have frequent users on the property who exemplify proper use of the trails.

Trespass/Vandalism

Most of the fencing around the property has remained intact and has kept people out of the most sensitive habitat on the Olympia Watershed. A common fencing issue occurs at the top south gate leading on to Morgan Preserve (see phot 3). The fence directly next to the gate is continually tampered with and usually appears loose allowing for easy access.

Suspicious Activity- Update from June 2015

As quoted from the Olympia Watershed Patrol Brief of June 2015:

“A second matter occurred when a suspicious vehicle kept returning to the parking lot of the Zayante Fire department. This vehicle belonged to a suspicious persons who was noted by LTSCC patrols, Zayante Fire Department staff, and SLVWD staff. The man was finally approached in May of 2015 by all three entities after leaving his dog outside of the vehicle unattended in the lot for hours. He has not been sighted on the property since. A vehicle license plate number was recorded and description of the character. The inner portions of Olympia were searched heavily for suspicions of an illegal grow operation or encampment. No evidence of this has been found to date.”

Upon further inspection an encampment was found on the property within the quarry area. It has since been eradicated and patrolmen of the Land Trust of Santa Cruz County are aware of the area and makes frequent checks for any reoccurring trespass issues.

Conclusion:

Wildlife sightings are frequent including but not limited to deer, coyote, turkey, and rattlesnakes (see photo 4). All users are informed by patrols to stay on the designated trails and to keep dogs on-leash to avoid unwanted encounters and preserve the tranquility and ecological richness of the habitat. Dirt bike and bicycle offences, once frequent, have severely decreased. Regulations fostered have maintained the overall goal of the San Lorenzo Valley Water Districts management plan. The plan objectives to integrate public recreation and wildlife and native plant protection while providing a reliable water resource to the community are enforced with the collaboration of Land Trust patrols and SLVWD’s signage, fencing, and property maintenance.

Photo Highlights July 2015- June 2016:

Photo 1

Photo 2

Photo 1: Mountain bike tracks discovered in the upper equestrian trails at Olympia Watershed. Tracks were noted on September 1, 2015.

Photo 2: Dirt bike tracks were discovered on November 23, 2015 at Olympia Watershed. Tracks went throughout the lower trail system. It appeared that the offender entered the property from the main entrance gate off E. Zayante Rd.

Photo 3

Photo 3: Fence next to upper south gate is frequently tampered with. Access is common between Morgan Preserve and Olympia Watershed.

Photo 4

Photo 4: A coyote is spotted on September 17, 2015 at 4:30PM at Olympia Watershed. This is located in the no trespass area along the train tracks going north. Coyotes are a frequent site. It is a reminder that dogs should be kept on leash so to not disturb wildlife within the area as well as keeping pets safe from predators.

M E M O

TO: Board of Directors

FROM: District Manager

SUBJECT: DISCUSSION AND POSSIBLE ACTION REGARDING AUTHORIZATION TO PURCHASE CAPITAL EQUIPMENT FOR THE BEAR CREEK WASTEWATER TREATMENT PLANT

DATE: July 21, 2016

RECOMMENDATION:

The Board authorize staff to purchase two air blowers and an alkalinity feed system for the Bear Creek Wastewater Treatment Plant at a not-to-exceed cost of $35,000.

BACKGROUND:

On April 11, 2016 the District received Notice of Violation Order No. 00-043 (attached) from the State Water Board regarding operation of Bear Creek Estates Wastewater Treatment Plant. The NOV was issues in response to a plant overflow that occurred during winter rains on March 6, 2016. The NOV also addresses a systemic issue that has been plaguing the treatment plant for years; failure to consistently achieve required nitrogen reduction.

Due to the short response time provided in the NOV (Response required by May 15, 2016), the District conducted an abbreviated Request for Qualifications (RFQ) process. RFQ's were requested from three firms; Black and Veatch, Dudek and Infrastructure Engineering Corporation (IEC). Staff has positive previous wastewater experience with each of these firms.

Dudek and IEC were able to respond with appropriate SOQs. Black and Veatch were interested but unable to respond due to time constraints. After review of the SOQs staff selected to contract with IEC on a time and material basis (contract attached).

After IEC completed their investigation the District, consultant and State Board representatives participated in a teleconference to discuss IEC's findings. The teleconference went well and IEC is currently preparing a final report.

IEC's findings can be summed up in two bullet-points:

- Overflow risk can be mitigated by replacing leaky collection system pipelines and improved staff training and response plans.

- Nitrogen reduction is being hindered due to improper oxygen management and insufficient alkalinity. Nitrogen entering the treatment plant in raw sewage is primarily ammonia. Aerobic (oxygen) bacteria convert ammonia to nitrate (nitrification). Anaerobic (no oxygen) bacteria convert the nitrate to nitrogen gas

(denitrification). Adequate alkalinity ensures a stable pH is maintained during the total process (no acid spikes).

Replacing leaking collection system pipelines is costly but required due to the pipeline's aging condition. IEC has identified one specific 200-foot stretch of pipeline for immediate replacement. Preliminary cost for replacement of this stretch of pipeline are approximately $100,000, including design and inspection. Staff will be preparing a replacement plan for Board review sometime prior to the Fall of 2016.

Training manuals and response plans are currently being updated with staff and consultant coordination.

Nitrogen reduction looks to be a potentially easy fix. There are three components to the proposed fix:

- Streamline the treatment process and make it more linear (reduce the looping back into previous tanks) to gain control of oxygen levels in the sewage. This can be accomplished by staff, at minimal cost through modifying the plumbing.

- Install proper blowers and aerators in the nitrification tanks. Purchasing new blowers is estimated to cost $15,000. Minimal increase in daily operating cost due to higher electricity use.

- Install a chemical feed system to increase alkalinity. Estimated capital cost $20,000. Estimated operating cost is ~$4.00 per day; soda ash and electricity.

At this time staff would like to move forward on improving the treatment processes, fixing the aeration equipment and installing an alkalinity chemical feed system. As mentioned earlier, staff will be proposing a pipeline replacement project later this fiscal year.

STRATEGIC PLAN:

Element 4.0 – Wastewater Management

FISCAL IMPACT:

Fiscal Year 2017

- Capital Projects – Bear Creek Estates WWTP - Budgeted $400,000
    - Proposed Cost Request - $35,000 for equipment purchase and installation.

Water Boards

Central Coast Regional Water Quality Control Board

April 11, 2016

Rick Rogers
San Lorenzo Valley Water District
13060 HWY 9
Boulder Creek, CA 95006
Sent via email to : rrogers@slvwd.com

Dear Mr. Rogers:

NOTICE OF VIOLATION: WASTE DISCHARGE REQUIREMENTS (WDR) ORDER NO. 00-043; BEAR CREEK ESTATES WASTEWATER FACILITY, BEAR CREEK RD, BOULDER CREEK, CA, 95006, WDID No. 3 440107001

Based on self-monitoring data submitted by Bear Creek Estates WWF (hereafter 'Discharger') from January 2012 through December 2015, Central Coast Water Board (hereafter 'Water Board') staff identified the following violations of WDR Order No. 00-043:

- Nitrogen, Total (as N) Percent Reduction limit is 50.0 %. Recorded date, reported values, and recorded CIWQS[1] Violation Sequence Nos. are as follow:

Recorded Date	Reported Nitrogen, Total (as N) % Reduction	CIWQS Violation No.
1/5/2012	20.0	927576
1/19/2012	27.0	927578
2/1/2012	38.0	927583
2/16/2012	6.8	927586
3/1/2012	30.0	927589
3/15/2012	22.0	927591
4/2/2012	35.0	935938
4/19/2012	40.0	935939
5/2/2012	22.0	935940
5/17/2012	41.0	935941
6/4/2012	38.0	935942
6/18/2012	27.0	935943
7/2/2012	2.4	939132
7/19/2012	39.7	939133
8/2/2012	26.4	939134
8/16/2012	41.9	939135
9/4/2012	35.9	939136
9/20/2012	26.9	939137
10/3/2012	38.1	943268
10/15/2012	43.1	943269
11/1/2012	17.2	943270
11/15/2012	27.5	943271
12/20/2012	29.8	943292
1/17/2013	49.2	948540

Recorded Date	Reported Nitrogen, Total (as N) % Reduction	CIWQS Violation No.
2/4/2013	40.0	948704
2/14/2013	45.0	948705
3/21/2013	27.1	948706
4/2/2013	44.6	954147
4/18/2013	35.2	954148
5/1/2013	32.8	954149
5/16/2013	40.0	954150
6/3/2013	28.6	954151
6/17/2013	35.3	954152
7/18/2013	47.7	958217
8/1/2013	46.3	958218
8/15/2013	36.9	958219
9/3/2013	10.6	958220
10/1/2013	25.5	958221
12/19/2013	13.0	969422
1/2/2014	23.0	969414
1/16/2014	13.0	969418
2/3/2014	14.0	969419
2/20/2014	6.0	969420
3/3/2014	27.0	969421
6/2/2014	38.2	974148
7/17/2014	44.6	979180
10/16/2014	46.4	986109
11/3/2014	30.8	986110
11/20/2014	30.6	986112
12/1/2014	43.5	986113
12/18/2014	36.8	986114
1/5/2015	25.9	992788
2/2/2015	21.7	992789
3/2/2015	35.2	992790
3/19/2015	33.3	992791
4/1/2015	39.7	994260
6/1/2015	45.3	994261
6/18/2015	41.0	994262
7/1/2015	46.0	1000498
8/3/2015	12.0	1000499
8/20/2015	41.0	1000500
9/1/2015	0.0	1000501
9/17/2015	0.0	1000502
10/01/2015	43.2	1004985
10/15/2015	24.7	1004986
11/02/2015	1.6	1004987
11/19/2015	0.0	1004988
12/01/2015	39.1	1004989
12/17/2015	0.0	1004990

- Flow Daily Average (mean) limit is 16,500 gallons per day (GPD) and reported value was 18,864 GPD on 12/31/2012. Recorded as CIWQS[1] Violation Sequence No. 943293.

- Wastewater treatment plant spill of 450 gallons of primary treated sewage on unpaved surface on 4/05/2012. Recorded as CIWQS[1] Violation Sequence No. 922544.

- Wastewater treatment plant spill of 3,150 gallons of primary treated sewage into San Lorenzo River on 3/06/2016. Recorded as CIWQS[1] Violation Sequence No. 1004695.

The violations associated with Total Nitrogen (as N) Percent Reduction have been ongoing since 2007. Prior violations of insufficient Total Nitrogen reduction and excess flows at the facility were communicated to the Discharger in a Notice of Violation (NOV) dated March 7, 2012. Following the March 2012 NOV, the following reported spill events and Discharger actions have occurred:

Date	Description
April 5, 2012	Primary treated sewage spill of 450 gallons onto unpaved surface.
July 10, 2012	Fall Creek Engineering (FCE) contracted to assess the Bear Creek wastewater treatment system and submitted a performance evaluation of the treatment plant. Report stated potential short-circuiting through Tank No. 2 and advised to modify the recirculation splitter valve by adding drop pipes to the splitter, which would enhance the denitrification process.
July 25, 2012	FCE submitted a treatment plant status update. They re-iterated potential short-circuiting through Tank No. 2 and advised modification of recirculation splitter valve.
October 4, 2012	FCE submitted a performance evaluation report. It stated that ammonia levels were still high and highly recommended that Bear Creek Estates perform the splitter valve modifications.
December 31, 2012	Bear Creek Estates reported excess flows beyond allowed 16, 500 GPD.
December 30, 2013	FCE submitted a letter describing the proposed aeration modifications at the Bear Creek Estates wastewater treatment system.
January 27, 2014	Email correspondence from FCE to Water Board staff stated the Bear Creek Estates was “on-track” to complete installing the modifications by end of January 2014.
April 25, 2014	The FCE letter contained within the first quarter self-monitoring report for Bear Creek Estates stated a regenerative blower was installed to force air into the clarifier, modified two splitters, and installed a drop pipe to induce mixing. They concluded by recommending installation of ball valves and drop pipes on the remaining two splitters.
July 27, 2014	FCE shared laboratory analysis of the Bear Creek Estates wastewater treatment system influent and effluent indicating 50% total nitrogen reduction during a March 2014 and May 2014 sampling event.
March 6, 2016	Primary treated sewage spill of 3,150 gallons into San Lorenzo Creek. Spill reported to the Office of Emergency Services 37 hours after the time of discovery and no samples were collected from the receiving water body.

The Discharger is required to provide an engineering report professionally certified by a California civil engineer no later than May 15, 2016, that addresses the following:

1. Wastewater treatment plant modifications to ensure the denitrification process will reduce total nitrogen by 50%.
2. Engineering controls to reduce inflow and infiltration during rain events.
3. Evidence of Bear Creek Estates wastewater treatment plant operators being properly trained in sanitary sewer and wastewater treatment plant spills.

The Discharger must take immediate corrective action to address these violations and prevent them from continuing to occur. The above violations of WDR Order No. 00-043 subject the Discharger to further enforcement action pursuant to the California Water Code, including monetary penalties for each day of each violation.

Nothing in this letter relieves you of liability for past violations of the WDR Order or Monitoring and Reporting Program, and the Water Board reserves the right to pursue enforcement action, including imposition of administrative civil liability, for all past violations or for any additional violations that occur before you provide complete reports.

Water Board records indicate a long-standing pattern of Discharger non-compliance and multiple informal enforcement actions in response. Water Board staff will consider the Discharger's history of violations in making any recommendation for further enforcement.

If you have any questions, please contact Cecile DeMartini at (805) 542-4782 or by email at cecile.demartini@waterboards.ca.gov or Chris Adair at (805) 549-3761.

Sincerely,

Michael J. Thomas
Assistant Executive Officer

cc:

Brian Lee, San Lorenzo Valley Water District (SLVWD), District Manager
blee@slvwd.com

James Furtado, SLVWD, Deputy Director of Operations
jfurtado@slvwd.com

Adrienne Carter, Fall Creek Engineering
acarter@fallcreekengineering.com

Peter Haase, Fall Creek Engineering
phase@fallcreekengineering.com

Todd Stanley
Tstanley@waterboards.ca.gov

[1] The California Integrated Water Quality System (CIWQS) is a statewide database of compliance data. Further information is available at http://www.waterboards.ca.gov/water_issues/programs/ciwqs/

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ECM# CW-209014

AGREEMENT FOR PROFESSIONAL SERVICES
by and between the
SAN LORENZO VALLEY WATER DISTRICT (District)
and
INFRASTRUCTURE ENGINEERING CORPORATION INCORPORATED (Consultant)

PREAMBLE

This agreement for the performance of professional services ("Agreement") is made and entered into on this **11th** day of **May, 2016** ("Effective Date"), by and between **Infrastructure Engineering Corporation,** with its principal place of business located at 39199 Paseo Padre Parkway Suite D Fremont, CA 94538 ("Consultant") and the San Lorenzo Valley Water District, a California County Water District, with its principal place of business located at 13060 Highway 9, Boulder Creek, CA 95006 ("District"). District and Consultant may be referred to individually as a "Party" or collectively as the "Parties" or the "Parties to this Agreement."

RECITALS

A. District desires to secure professional services to correct deficiencies in the Bear Creek Estates Wastewater Treatment Plant. Those deficiencies are more specifically outlined in the Regional Water Quality Control Board Notice of Violation dated April 11, 2016.

B. Consultant represents that it possesses the professional qualifications and expertise to provide such services and

C. The Parties have specified herein the terms and conditions under which such services will be provided and paid for.

The Parties agree as follows:

AGREEMENT PROVISIONS

1. SCOPE OF SERVICES

Except as specified in this Agreement, Consultant shall furnish all technical and professional services, including labor, material, equipment, transportation, supervision and expertise (collectively referred to as "Services") to satisfactorily complete the work required by District at its own risk and expense. Services to be provided to District are more fully described in Exhibit A, entitled "Scope of Services". All of the exhibits referenced in this Agreement are attached and incorporated by this reference.

2. TERM OF AGREEMENT

Consultant shall provide the services under the requirements of this Agreement commencing upon the date of execution of this Agreement by the parties. Consultant shall complete services within the time limits set forth in Scope of Services or as mutually determined in writing by Parties.

3. RESPONSIBILITY OF CONSULTANT

Consultant shall be responsible for the quality, technical accuracy, and coordination of services furnished by it under this Agreement as outlined in Exhibit A. Consultant will endeavor to provide services in a manner consistent with the level of care and skill ordinarily exercised by other professionals providing the same service in the same

locale. Consultant shall be solely responsible to District for the performance of Consultant, and any of his or her employees, agents, subcontractors, or suppliers, under these Agreement Documents.

4. RESPONSIBILITY OF DISTRICT

A. District has established a budget for professional services including all costs as outlined in Exhibits A and B. The District Manager, or designee, shall be District's authorized representative and will ensure all required budget, purchase orders, service orders and any other internal documentation necessary to comply with the terms of this Agreement are properly and timely prepared in order to enable Consultant to commence and continue services according to terms of the Agreement.

B. On behalf of District, the District Manager, or designee, shall be District's authorized representative in the interpretation and enforcement of all work performed in connection with this Agreement. The District Manager, or designee, shall render decisions in a timely manner pertaining to documents submitted by Consultant in order to avoid unreasonable delay in the orderly and sequential progress of Consultant's services. Consultant shall promptly comply with instructions from District Manager or designee. The District Manager will ensure all required budget, purchase orders, service orders and any other internal documentation necessary to comply with the terms of this agreement are properly and timely prepared in order to enable Consultant to continue services according to the terms of this Agreement.

5. PAYMENT OF COMPENSATION

A. In consideration for Consultant's performance of services, District shall pay Consultant for all services rendered by Consultant pursuant to Consultant's Standard Rate Schedule, the current version of which is outlined in Exhibit B, "Services Fee Schedule." Payments made by District under this Agreement shall be the amounts charged for Services provided and billed by Consultant, subject to verification by District, pursuant to the standard rates set forth in the "Services Fee Schedule" attached as Exhibit B. Consultant may begin services prior to the effective date of this agreement at its own risk, with the understanding that, upon District approval, District may choose to compensate consultant for services performed prior to authorization by District's Board of Directors, with the limits of the District Manager's authority.

B. Consultant shall bill District on a monthly basis for services provided by Consultant during the preceding month, subject to verification by District. Payment to Consultant for services will be made within thirty (30) days of date of Consultant invoice.

C. Compensation for the services hereunder shall be on a time and material basis unless changed in writing by District.

6. RIGHT TO TERMINATION

Both parties reserve the right to terminate this Agreement at any time, with or without cause, upon thirty (30) days written notice to the other party. As of the date of termination, Consultant shall immediately cease all services hereunder, except such as may be specifically approved by both Consultant and District's authorized

representative. Consultant shall be entitled to compensation for all services rendered prior to termination and for any services authorized by the authorized representative thereafter.

7. NO ASSIGNMENT OF AGREEMENT/SUCCESSORS IN INTEREST

This Agreement is a contract for professional services. District and Consultant bind themselves, their partners, successors, assigns, executors and administrators to all covenants of this Agreement. Except as otherwise set forth in this Agreement, no interest in this Agreement shall be assigned or transferred, either voluntarily or by operation of law, without the prior written approval of both parties.

8. NO AGENCY

Consultant shall not have authority, expressed or implied, to act on behalf of District as an agent, or to bind District to any obligations whatsoever, unless specifically authorized in writing by the District Manager or authorized representative.

9. NO THIRD PARTY BENEFICIARY

This Agreement shall not be construed to be an Agreement for the benefit of any third party or parties and no third party or parties shall have any claim or right of action under this Agreement for any cause whatsoever.

10. CONSULTANT IS AN INDEPENDENT CONSULTANT

It is agreed that in performing the work required under this Agreement, Consultant and any person employed by or contracted with Consultant to furnish labor and/or materials under this Agreement is neither an agent nor employee of District. Consultant has full rights to manage its employees subject to the requirements of the law.

11. CONFIDENTIALITY OF MATERIAL

All memoranda, specifications, plans, data, drawings, descriptions, documents, discussions or other information received by or for Consultant and all other written information submitted to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant and shall not, without the prior written consent of District, be used for any purposes other than the performance of the services nor be disclosed to an entity not connected with performance of the services. Nothing furnished to Consultant, which is otherwise known to Consultant or becomes generally known to the public or is of public record, shall be deemed confidential.

12. RIGHT OF DISTRICT TO INSPECT RECORDS OF CONSULTANT

District, through its authorized employees, representatives or agents shall have the right during the term of this Agreement and for three (3) years from the date of final payment for goods or services provided under this Agreement, to audit the books and records of Consultant for the purpose of verifying any and all charges made by Consultant in connection with Consultant's compensation under this Agreement, including termination of Consultant. Consultant agrees to maintain sufficient books and records in accordance with generally accepted accounting principles to establish the correctness of all charges submitted to District. District shall disallow any expenses not so recorded.

Consultant shall submit to District any and all reports concerning its performance under this Agreement that may be requested by District in writing. Consultant agrees to assist District in meeting District's reporting requirements to the State and other agencies with respect to Consultant's services hereunder.

13. CORRECTION OF SERVICES

Consultant will be given the opportunity and agrees to correct any incomplete, inaccurate or defective services at no further cost to District, when such defects are due to the negligence, errors or omissions of Consultant.

14. FORCE MAJEURE

The time for performance of services to be rendered pursuant to this Agreement may be extended because of any delays due to unforeseeable causes beyond the control and without the fault or negligence of Consultant, including, but not restricted to, acts of God or of any public enemy, acts of the government, fires, earthquakes, floods, epidemic, quarantine restrictions, riots, strikes, freight embargoes and unusually severe weather if Consultant shall, within ten (10) days of the commencement of such condition, notify the District Manager who shall thereupon ascertain the facts and extent of any necessary delay, and extend the time for performing services for period of enforced delay when and if the District Manager's determination shall be final and conclusive upon the parties to this Agreement.

15. FAIR EMPLOYMENT

Consultant shall not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, condition of physical handicap, religion, ethnic background, or marital status, in violation of state or federal law.

16. HOLD HARMLESS/INDEMNIFICATION

Consultant agrees, to the fullest extent permitted by law, to indemnify and hold District, its Board members, officers, and employees, harmless from any damage, liability or cost (including reasonable attorneys' fees and costs of defense) to the extent caused by Consultant's negligent acts, errors or omissions in the performance of professional services under this Agreement and those of his or her sub-consultants or anyone for whom Consultant is legally liable.

Consultant is not obligated to indemnify District in any manner whatsoever for District's own negligence.

17. INSURANCE REQUIREMENTS

A. Without limiting Contractor's indemnification of District, and prior to commencing any Services required under this Agreement, Consultant shall purchase and maintain in full force and effect, at its sole cost and expense, the following insurance policies with at least the indicated coverages, provisions and endorsements:

1. Commercial General Liability Policy (bodily injury and property damage): Policy limits are subject to review, but shall in no event be less than, the following:

   $1,000,000 Each Occurrence

$1,000,000 General Aggregate
$1,000,000 Products/Completed Operations Aggregate
$1,000,000 Personal Injury

2. Workers' Compensation Insurance Policy as required by statute and employer's liability with limits of at least one million dollars ($1,000,000) policy limit Bodily Injury by disease, one million dollars ($1,000,000) each accident/Bodily Injury and one million dollars ($1,000,000) each employee Bodily Injury by disease.

3. Comprehensive Business Automobile Liability Insurance Policy with policy limits at minimum limit of not less than one million dollars ($1,000,000) each accident using. Liability coverage shall apply to all owned, non-owned and hired autos.

4. Professional Liability or Errors and Omissions Insurance as appropriate shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of Consultant. Coverage shall be in an amount of not less than one million dollars ($1,000,000) per claim/aggregate.

B. EVIDENCE OF COVERAGE

Prior to commencement of any services under this Agreement, Consultant, shall, at its sole cost and expense, purchase and maintain not less than the minimum insurance coverage with endorsements and deductibles indicated in this Agreement. Consultant shall file with District all certificates for required insurance policies for District's approval as to adequacy of insurance protection.

18. AMENDMENTS

It is mutually understood and agreed that no alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the Parties and incorporated into this Agreement. Such changes, which are mutually agreed upon by District and Consultant, shall be incorporated in amendments to this Agreement.

19. WAIVER

No term or provision hereof shall be deemed waived and no default or breach excused, unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented to such breach. The consent by any party to, or waiver of, a breach or default by the other shall not constitute a consent to, waiver of, or excuse for, any other different or subsequent breach or default.

The failure of either party to insist upon or enforce strict conformance by the other party of any provision of this Agreement or to exercise any right under this Agreement shall not be construed as a waiver or relinquishment of such party's right unless made in writing and shall not constitute any subsequent waiver or relinquishment.

20. INTEGRATED DOCUMENT - TOTALITY OF AGREEMENT

This Agreement embodies the Agreement between District and Consultant and its terms and conditions. No other understanding, agreements, conversations or otherwise, with any officer, agent or employee of District prior to execution of this Agreement shall affect

or modify any of the terms or obligations contained in any documents comprising this Agreement. Any such verbal agreement shall be considered as unofficial information and in no way binding upon District.

Agreement Documents comprise the entire Agreement between District and Consultant concerning the work to be performed for this project. Agreement Documents are complementary; what is called for in one of the Agreement Documents is binding as if called for by all of them.

21. SEVERABILITY CLAUSE

In the event any one or more of the provisions contained herein shall, for any reason, be held invalid, illegal or unenforceable in any respect, it shall not affect the validity of the other provisions, which shall remain in full force and effect.

If any part of this agreement is for any reason held to be excessively broad as to time, duration, geographical scope, activity or subject, it will be construed, by limiting or reducing it, so as to be enforceable to the extent reasonably necessary for the protection of the parties.

22. NOTICES

All notices to the Parties shall, unless otherwise requested in writing, be sent to District addressed as follows:

Brian C. Lee
District Manager
San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, CA 95006

And to Consultant addressed as follows:

Robert S. Weber
President
Infrastructure Engineering Corporation
39199 Paseo Padre Parkway Suite D
Fremont, CA 94538

23. STATUTES AND LAW GOVERNING AGREEMENT

This Agreement shall be governed and construed in accordance with the statutes and laws of the State of California.

24. WAIVER OF CONSEQUENTIAL DAMAGES

District and Consultant mutually agree to waive all claims of consequential damages arising from disputes, claims, or other matters relating to this Agreement.

25. DISPUTE RESOLUTION

A. Unless otherwise mutually agreed to by the Parties, any controversies between Consultant and District regarding the construction or application of this Agreement,

and claims arising out of this agreement or its breach, shall be submitted to mediation within thirty (30) days of the written request of one Party after the service of that request on the other Party.

B. The Parties may agree on one mediator. If they cannot agree on one mediator, the Party demanding mediation shall request that the Superior Court, State of California, County of Santa Cruz appoint a mediator. The mediation meeting shall not exceed one day or eight (8) hours. The Parties may agree to extend the time allowed for mediation under this Agreement.

C. The costs of mediation shall be borne by the Parties equally.

D. Mediation under this section is a condition precedent to filing an action in any court. In the event any legal action or proceeding is commenced to interpret or enforce the terms of, or obligations arising out of this Agreement, or to recover damages for the breach thereof, the Party prevailing in any such action or proceeding shall be entitled to recover from the non-prevailing Party all reasonable attorneys' fees, costs and expenses incurred by the prevailing Party.

26. VENUE

In the event that suit shall be brought by either Party, the Parties agree that the venue shall be exclusively vested in the state courts of the State of California, County of Santa Cruz, or where otherwise appropriate, exclusively in the United States District Court, Northern District of California, San Jose.

27. SIGNATURES

The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of the respective legal entities of Consultant and District.

The Parties acknowledge and accept the terms and conditions of this Agreement as evidenced by the following signatures of their duly authorized representatives. It is the intent of the Parties that this Agreement shall become operative on the Effective Date.

SAN LORENZO VALLEY WATER DISTRICT,

Brian C. Lee
District Manager
San Lorenzo Valley Water District

Robert S. Weber, P.E.
President
Infrastructure Engineering Corporation

Approved as to form:

Marc G. Hynes,
District Counsel

San Lorenzo Valley Water District
Water and Wastewater Engineering Services

EXHIBIT A

SCOPE OF SERVICES

The Bear Creek wastewater system is operated by the San Lorenzo Valley Water District under the authority of District Ordinance No. 60 which authorizes and regulates the collection, treatment and discharge of liquid waste for Bear Creek Estates subdivision 3, 4 and 5. The wastewater is regulated under Waste Discharge Requirement Order No. 00-43 issued by the California Regional Water Quality Control Board, Central Coast Region (CCRWQCB). The Bear Creek wastewater treatment plant (WWTP) is located at 15900 Bear Creek Road, Boulder Creek, California.

Based on self-monitoring data submitted by the Bear Creek WWTP from January 2012 through December 2015, the CCRWQCB has noted violations of WDR No 00-43. These violation are identified in the attached letter from the CCRWQCB dated April 11, 2016 and form a part of this Scope of Services.

The goal of this scope is to identify the causes of the violations, recommend remedial actions in an engineering report, and implement the recommended design in coordination with the District.

The Consultant will provide engineering services for all project elements listed in this Scope of Services. This project will be executed in two phases as listed below. Phase 1 will commence upon execution of this agreement. A preliminary scope of Phase 2 and 3 is provided herein. The exact scope and fee of Phase 2 and 3 will be further detailed and negotiated by the District at the conclusion of Phase 1.

Phase 1 – Initial Study and Engineering Report

Task 1 – General Services
Task 2– Engineering Report

Phase 2 – Design

Task 3 – Preliminary (30%) Design Memorandum
Task 4 – Final Design ○

- Task 4.1 – 90% Design
- Task 4.2 – Final (100%) Design and Bid Documents

Phase 3 – Bidding and Construction Services

Task 5 – Bid Phase Services
Task 6 – Construction Services

Typical tasks that are required of the Consultant under these categories are detailed in the following sections. A preliminary listing of major milestones and deliverables has been provided in this Scope of Services and will be finalized during the kick-off meeting.

San Lorenzo Valley Water District
Water and Wastewater Engineering Services

PHASE 1 – INITIAL STUDY and ENGINEERING REPORT

TASK 1 – GENERAL SERVICES

Task 1.1 – Project Management

The Consultant will be responsible for detailed management of the project (including the Subconsultants) and will keep the District appraised of the status of the project progress. The Consultant will provide the key management personnel as described in their Statement of Qualifications for this project.

The Consultant will prepare and submit monthly invoices in accordance with Professional Services Agreement. The invoices will document the man-hours and billing rates for staff for and any direct costs. Monthly progress report and project schedule will be submitted with the project invoice as part of the monthly request for payment.

Task 1.3 – Meetings and Workshops

An initial project kick-off meeting will be held with the District staff to introduce principal members of District and Consultant's teams. The discussion topics will include: District responsibilities, Consultant's responsibilities, invoice procedures, site access, Consultant's Scope of Work, project schedule and deliverables. The Consultant will also establish contact with the District Project Team participating in this project.

For the Engineering Report, Consultant will present the findings of investigations and remedial alternatives/recommendation in a single workshop. If the District agrees, then the findings and recommendations will be formalized in a final engineering report.

For the 30% and 90% Design submittals, the Consultant will conduct a review meeting with District staff where the submittals are presented to the District for initial review and comment. Followed by a two (2) week review period. The District will compile and provide all comments in a single transmittal.

At the District's request, the Consultant will conduct monthly project meetings to review the project scope, schedule, budget and any issues which may affect completion of the project.

Task 1.4 – Deliverables and Major Milestone

Major milestones for Phase 1 are listed below. Milestones for Phase 2 and 3 will be provided once the District approves the scope and fee.

Phase 1:
Project Kick-off Meeting and Site Visit: May 18, 2016
Initial meeting with CCRWQCB to outline Corrective Action Plan: May 25, 2016
Workshop on Investigation, and Corrective Action Recommendation: June 8, 2016
Technical Memo No. 1 - WWTP Modifications to reduce Total Nitrogen (N): June 15, 2016
Technical Memo No. 2 - Engineering Controls to reduce Inflow and Infiltration: June 15, 2016
Technical Memo No. 3 – Operator Training: June 22, 2016
Engineering Report (Final): July 22, 2016

Phase 2: *To be Determined on conclusion of Phase 2 and 3.*

Task 1.5 – Quality Control

The Consultant will assign a Quality Assurance/Quality Control (QA/QC) Reviewer for implementation of the Scope of Work. All work submitted to the District shall be have been reviewed by the QA/QC reviewer prior to submitting to the District.

Task 1.6 – Central Coast Regional Water Quality Control Board Coordination

When requested by the District, the Consultant will assist the District in discussing/outlining the corrective measures to address the Notice of Violation of the Waste Discharge Requirement Order No 00-043 identified in the Board's letter dated April 11, 2016. This subtask includes attending meetings with the Board, providing meeting minutes, and providing project information and exhibits to the Board.

TASK 2 – Engineering Report

This Engineering Report will address the following:

1. Wastewater treatment modifications required to optimize the denitrification process to reduce total nitrogen by 50%
2. Engineering Controls to reduce inflow and infiltration during rain events
3. Evidence of Bear Creek Estates Wastewater Treatment Plant operators being properly trained in sanitary sewer and wastewater treatment plant spills.

Task 2.1 – WWTP Modifications to optimize the denitrification process to reduce total nitrogen (as N) by 50%

The purpose of this task is to evaluate the current wastewater treatment process at the Bear Creek Estates WWTP, identify the deficiencies that causes the WWTP to violate the Total Nitrogen Percent Reduction Limit Wastewaters identified in e CCRWQB Notice of Violation of Wastewater Discharge Require (WDR) Order No. 00-043 dated April 11, 2106 and recommend remedial action to prevent such violations in the future.

The deliverable for this subtask will be a Technical Memorandum, used to define the modifications for preliminary and final design. This memorandum will and include conceptual layouts and budgetary construction cost estimate.

Pertinent data will be collected through site visits, meetings, and records collection. Periodic meetings will be conducted as needed with the District, to gather pertinent data, understand District needs and requirements, collect input and coordinate performance of the work. The Consultant will also hold a workshop with the District to review the findings and recommendations of the memorandum. The District review period will be two (2) weeks for the report. The Consultant will address any District comments prior to finalizing the Engineering Report.

Task 2.2 – Engineering Controls to reduce inflow and infiltration (I&I) during rain event

The Bear Creek Estate Wastewater Facility has occasional recorded flows during rain events in excess of the permitted Average Daily Flow (mean) limit of 16,500 gallons per day (GPD). This has triggered a Notice of Violation of Wastewater Discharge Requirement (WDR) Order No 00-0043 as noted in CCRWQB's notice dated April 11, 2016.

The purpose of this task is to evaluate the exiting collection system and recommend corrective action and/or controls to minimize/prevent such violation in the future.

The Consultant will gather and review all available information and previous studies conducted. The deliverable for this subtask will be a Technical Memorandum, used to define the modifications for preliminary and final design. This section will and include conceptual layouts, if required, and cost of the work. The Consultant will recommend pipe installation if required, with suggested alignment and/or rehabilitation methods to be used. Rehabilitation and replacement of existing manholes/structures may be required along each project alignment.

Task 2.3 – Operator Training to handle sanitary sewer and wastewater treatment spills

The Bear Creek Estate Wastewater Facility experienced a primary treated sewage spill of 3,150 gallons into San Lorenzo Creek which triggered a Notice of Violation from the CCRWQCB. Per CCRWQCB's violation notice dated April 11, 2016, this spill was reported to the Office of Emergency Services approximately 37 hours after time of discovery of the spill. Further no samples were collected from the receiving water body to ensure that it had not been adversely affected or contaminated.

The purpose of this task is to develop a Training Program for plant operators aimed at handling spills and similar incidents. Such program will present clear and concise methods for identifying spills, procedure and protocols for reporting, sampling requirements, and penalties and enforcement actions arising from improper response or lack thereof.

The deliverable for this subtask will be a short Training Manual and a training workshop

PHASE 2 – DESIGN and CONSTRUCTION SERVICES

TASK 3 – PRELIMINARY (30%) DESIGN

Task 3.1 – Preliminary Design Report (PDR)

The PDR will document the preliminary design of the proposed modifications as outlined in the Engineering Report and approved by the District. The draft PDR will be prepared and submitted to the District for review and subsequently discussed in detail at a review workshop. The Consultant will respond to all District review comments in writing and incorporate all comments into the final memoranda as applicable. District comments on the Draft PDR will be finalized after the workshop.

TASK 4 – FINAL DESIGN

The Final Design will be documented in three (2) review phases (90% and Bid documents). The design packages will be submitted to the District for general review at the end of each phase. Sets signed and sealed by a California licensed engineer will be submitted for the formal planning and permit applications.

Task 4.1 – 90% Design Submittal

This submittal will include all finished, checked and complete plans and specifications. No new drawings and/or specification sections by the Consultant will be expected after this stage. All District comments on the previous submittal will have been resolved, rejected, addressed and/or incorporated in this submittal. The project is essentially finished and submitted as 100% complete. An updated construction cost estimate and construction schedule will be included with the deliverables.

Task 4.2– Bid Documents

Following receipt of all District and regulatory review comments on the 90% Design Submittals, the Consultant will prepare and submit the Final Bid Documents. The Final Bid Documents will include finished, checked and completed plans and specifications and will incorporate all District comments from previous submittals, workshops and constructability reviews as appropriate.
All plans and, detailed specifications and engineering calculations will be stamped and signed by a Registered Engineer in the State of California.
An updated construction cost estimate (AACE Class 1) and construction sequencing plan and schedule will be included with the deliverables.

TASK 5 – BID PHASE SERVICES

The Consultant will provide the following bid phase services:
• Participate in the pre-bid meeting.
• Prepare responses to bidder questions.
• Prepare project drawing set and project specification addenda to provide clarification for items identified prior to bid opening.
• Participate in the evaluation of the submitted bids, furnish consultation and advice to District staff and assist with all the related equipment, cost and other analyses as required to finalize the award decision.
• Prepare conformed drawings and specifications that incorporate the addenda.

TASK 6 – CONSTRUCTION PHASE SERVICES

The Consultant will provide the following construction phase services:
• Attendance at pre-construction and construction progress meetings
• Periodic field visits
• Submittal review
• Request for information review
• Change order review and contract document modifications
• Startup and commissioning support
• Preparation of record drawings

**********END*********

Water Boards

Central Coast Regional Water Quality Control Board

April 11, 2016

Rick Rogers
San Lorenzo Valley Water District
13060 HWY 9
Boulder Creek, CA 95006
Sent via email to : rrogers@slvwd.com

Dear Mr. Rogers:

NOTICE OF VIOLATION: WASTE DISCHARGE REQUIREMENTS (WDR) ORDER NO. 00-043; BEAR CREEK ESTATES WASTEWATER FACILITY, BEAR CREEK RD, BOULDER CREEK, CA, 95006, WDID No. 3 440107001

Based on self-monitoring data submitted by Bear Creek Estates WWF (hereafter 'Discharger') from January 2012 through December 2015, Central Coast Water Board (hereafter 'Water Board') staff identified the following violations of WDR Order No. 00-043:

- Nitrogen, Total (as N) Percent Reduction limit is 50.0 %. Recorded date, reported values, and recorded CIWQS[1] Violation Sequence Nos. are as follow:

Recorded Date	Reported Nitrogen, Total (as N) % Reduction	CIWQS Violation No.
1/5/2012	20.0	927576
1/19/2012	27.0	927578
2/1/2012	38.0	927583
2/16/2012	6.8	927586
3/1/2012	30.0	927589
3/15/2012	22.0	927591
4/2/2012	35.0	935938
4/19/2012	40.0	935939
5/2/2012	22.0	935940
5/17/2012	41.0	935941
6/4/2012	38.0	935942
6/18/2012	27.0	935943
7/2/2012	2.4	939132
7/19/2012	39.7	939133
8/2/2012	26.4	939134
8/16/2012	41.9	939135
9/4/2012	35.9	939136
9/20/2012	26.9	939137
10/3/2012	38.1	943268
10/15/2012	43.1	943269
11/1/2012	17.2	943270
11/15/2012	27.5	943271
12/20/2012	29.8	943292
1/17/2013	49.2	948540

Recorded Date	Reported Nitrogen, Total (as N) % Reduction	CIWQS Violation No.
2/4/2013	40.0	948704
2/14/2013	45.0	948705
3/21/2013	27.1	948706
4/2/2013	44.6	954147
4/18/2013	35.2	954148
5/1/2013	32.8	954149
5/16/2013	40.0	954150
6/3/2013	28.6	954151
6/17/2013	35.3	954152
7/18/2013	47.7	958217
8/1/2013	46.3	958218
8/15/2013	36.9	958219
9/3/2013	10.6	958220
10/1/2013	25.5	958221
12/19/2013	13.0	969422
1/2/2014	23.0	969414
1/16/2014	13.0	969418
2/3/2014	14.0	969419
2/20/2014	6.0	969420
3/3/2014	27.0	969421
6/2/2014	38.2	974148
7/17/2014	44.6	979180
10/16/2014	46.4	986109
11/3/2014	30.8	986110
11/20/2014	30.6	986112
12/1/2014	43.5	986113
12/18/2014	36.8	986114
1/5/2015	25.9	992788
2/2/2015	21.7	992789
3/2/2015	35.2	992790
3/19/2015	33.3	992791
4/1/2015	39.7	994260
6/1/2015	45.3	994261
6/18/2015	41.0	994262
7/1/2015	46.0	1000498
8/3/2015	12.0	1000499
8/20/2015	41.0	1000500
9/1/2015	0.0	1000501
9/17/2015	0.0	1000502
10/01/2015	43.2	1004985
10/15/2015	24.7	1004986
11/02/2015	1.6	1004987
11/19/2015	0.0	1004988
12/01/2015	39.1	1004989
12/17/2015	0.0	1004990

- Flow Daily Average (mean) limit is 16,500 gallons per day (GPD) and reported value was 18,864 GPD on 12/31/2012. Recorded as CIWQS[1] Violation Sequence No. 943293.

- Wastewater treatment plant spill of 450 gallons of primary treated sewage on unpaved surface on 4/05/2012. Recorded as CIWQS[1] Violation Sequence No. 922544.

- Wastewater treatment plant spill of 3,150 gallons of primary treated sewage into San Lorenzo River on 3/06/2016. Recorded as CIWQS[1] Violation Sequence No. 1004695.

The violations associated with Total Nitrogen (as N) Percent Reduction have been ongoing since 2007. Prior violations of insufficient Total Nitrogen reduction and excess flows at the facility were communicated to the Discharger in a Notice of Violation (NOV) dated March 7, 2012. Following the March 2012 NOV, the following reported spill events and Discharger actions have occurred:

Date	Description
April 5, 2012	Primary treated sewage spill of 450 gallons onto unpaved surface.
July 10, 2012	Fall Creek Engineering (FCE) contracted to assess the Bear Creek wastewater treatment system and submitted a performance evaluation of the treatment plant. Report stated potential short-circuiting through Tank No. 2 and advised to modify the recirculation splitter valve by adding drop pipes to the splitter, which would enhance the denitrification process.
July 25, 2012	FCE submitted a treatment plant status update. They re-iterated potential short-circuiting through Tank No. 2 and advised modification of recirculation splitter valve.
October 4, 2012	FCE submitted a performance evaluation report. It stated that ammonia levels were still high and highly recommended that Bear Creek Estates perform the splitter valve modifications.
December 31, 2012	Bear Creek Estates reported excess flows beyond allowed 16, 500 GPD.
December 30, 2013	FCE submitted a letter describing the proposed aeration modifications at the Bear Creek Estates wastewater treatment system.
January 27, 2014	Email correspondence from FCE to Water Board staff stated the Bear Creek Estates was “on-track” to complete installing the modifications by end of January 2014.
April 25, 2014	The FCE letter contained within the first quarter self-monitoring report for Bear Creek Estates stated a regenerative blower was installed to force air into the clarifier, modified two splitters, and installed a drop pipe to induce mixing. They concluded by recommending installation of ball valves and drop pipes on the remaining two splitters.
July 27, 2014	FCE shared laboratory analysis of the Bear Creek Estates wastewater treatment system influent and effluent indicating 50% total nitrogen reduction during a March 2014 and May 2014 sampling event.
March 6, 2016	Primary treated sewage spill of 3,150 gallons into San Lorenzo Creek. Spill reported to the Office of Emergency Services 37 hours after the time of discovery and no samples were collected from the receiving water body.

The Discharger is required to provide an engineering report professionally certified by a California civil engineer no later than May 15, 2016, that addresses the following:

1. Wastewater treatment plant modifications to ensure the denitrification process will reduce total nitrogen by 50%.
2. Engineering controls to reduce inflow and infiltration during rain events.
3. Evidence of Bear Creek Estates wastewater treatment plant operators being properly trained in sanitary sewer and wastewater treatment plant spills.

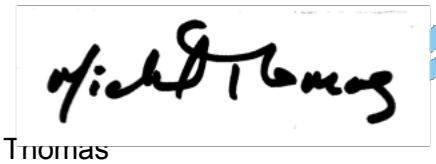
The Discharger must take immediate corrective action to address these violations and prevent them from continuing to occur. The above violations of WDR Order No. 00-043 subject the Discharger to further enforcement action pursuant to the California Water Code, including monetary penalties for each day of each violation.

Nothing in this letter relieves you of liability for past violations of the WDR Order or Monitoring and Reporting Program, and the Water Board reserves the right to pursue enforcement action, including imposition of administrative civil liability, for all past violations or for any additional violations that occur before you provide complete reports.

Water Board records indicate a long-standing pattern of Discharger non-compliance and multiple informal enforcement actions in response. Water Board staff will consider the Discharger's history of violations in making any recommendation for further enforcement.

If you have any questions, please contact Cecile DeMartini at (805) 542-4782 or by email at cecile.demartini@waterboards.ca.gov or Chris Adair at (805) 549-3761.

Sincerely,



Digitally signed by Michael Thomas
Date: 2016.04.11 12:28:05 -07'00'
Water Boards

Michael J. Thomas
Assistant Executive Officer

cc:

Brian Lee, San Lorenzo Valley Water District (SLVWD), District Manager
blee@slvwd.com

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[1] The California Integrated Water Quality System (CIWQS) is a statewide database of compliance data. Further information is available at http://www.waterboards.ca.gov/water_issues/programs/ciwqs/

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ECM# CW-209014

Sodium carbonate

From Wikipedia, the free encyclopedia

Sodium carbonate (also known as **washing soda**, **soda ash** and **soda crystals**), Na_2CO_3, is the water-soluble sodium salt of carbonic acid.

It most commonly occurs as a crystalline heptahydrate, which readily effloresces to form a white powder, the monohydrate. Pure sodium carbonate is a white, odorless powder that is hygroscopic (absorbs moisture from the air). It has a strongly alkaline taste, and forms a moderately basic solution in water. Sodium carbonate is well known domestically for its everyday use as a water softener. It can be extracted from the ashes of many plants growing in sodium-rich soils, such as vegetation from the Middle East, kelp from Scotland and seaweed from Spain. Because the ashes of these sodium-rich plants were noticeably different from ashes of timber (used to create potash), they became known as "soda ash".[12] It is synthetically produced in large quantities from salt (sodium chloride) and limestone by a method known as the Solvay process.

The manufacture of glass is one of the most important uses of sodium carbonate. Sodium carbonate acts as a flux for silica, lowering the melting point of the mixture to something achievable without special materials. This "soda glass" is mildly water-soluble, so some calcium carbonate is added to the melt mixture to make the glass produced insoluble. This type of glass is known as soda lime glass: "soda" for the sodium carbonate and "lime" for the calcium carbonate. Soda lime glass has been the most common form of glass for centuries.

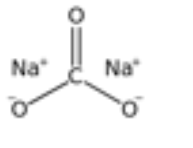
Sodium carbonate is also used as a relatively strong base in various settings. For example, it is used as a pH regulator to maintain stable alkaline conditions necessary for the action of the majority of photographic film developing agents. It acts as an alkali because when dissolved in water, it dissociates into the weak acid: carbonic acid and the strong alkali: sodium hydroxide. This gives sodium carbonate in solution the ability to attack metals such as aluminium with the release of hydrogen gas.[13]

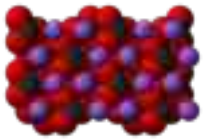
It is a common additive in swimming pools used to neutralize the corrosive effects of chlorine and raise the pH.

In cooking, it is sometimes used in place of sodium hydroxide for lyeing, especially with German pretzels and lye rolls. These dishes are treated with a solution of an alkaline substance to change the pH of the surface of the food and improve browning.

In taxidermy, sodium carbonate added to boiling water will remove flesh from the skull or bones of trophies to create the "European skull mount" or for educational display in biological

Sodium carbonate






Names	
IUPAC name Sodium carbonate	
Other names Soda ash, Washing soda, Soda crystals	
Identifiers	
CAS Number	497-19-8 (http://www.commonchemistry.org/ChemicalDetail.aspx?ref=497-19-8) (anhydrous) 5968-11-6 (http://www.commonchemistry.org/ChemicalDetail.aspx?ref=5968-11-6) (monohydrate) 6132-02-1 (http://www.commonchemistry.org/ChemicalDetail.aspx?ref=6132-02-1) (decahydrate)
ChEBI	CHEBI:29377 (https://www.ebi.ac.uk/chebi/searchId.do?chebiId=29377)
ChEMBL	ChEMBL186314 (https://www.ebi.ac.uk/chembldb/index.php/compound/inspect/ChEMBL186314)
ChemSpider	9916 (http://www.chemspider.com/Chemical-Structure.9916.html)
EC Number	207-838-8
Jmol 3D model	Interactive image (http://chemapps.stolaf.edu/jmol/jmol.php?model=%5BNa%2B%5D.%5BNa%2B%5D.%5BO-%5DC%28%5BO-

and historical studies.

In chemistry, it is often used as an electrolyte. Electrolytes are usually salt-based, and sodium carbonate acts as a very good conductor in the process of electrolysis. In addition, unlike chloride ions, which form chlorine gas, carbonate ions are not corrosive to the anodes. It is also used as a primary standard for acid-base titrations because it is solid and air-stable, making it easy to weigh accurately.

Contents

Domestic use

It is used as a water softener in laundering: it competes with the magnesium and calcium ions in hard water and prevents them from bonding with the detergent being used. Sodium carbonate can be used to remove grease, oil, and wine stains.

In dyeing with fiber-reactive dyes, sodium carbonate (often under a name such as soda ash fixative or soda ash activator) is used to ensure proper chemical bonding of the dye with cellulose (plant) fibers, typically before dyeing (for tie dyes), mixed with the dye (for dye painting), or after dyeing (for immersion dyeing).

Sodium carbonate test

The sodium carbonate test (not to be confused with sodium carbonate extract test) is used to distinguish between some common metal ions, which are precipitated as their respective carbonates. The test can distinguish between copper (Cu), iron (Fe), and calcium (Ca), zinc (Zn) or lead (Pb). Sodium carbonate solution is added to the salt of the metal. A blue precipitate

	%5D%29%3DO)
PubChem	10340 (https://pubchem.ncbi.nlm.nih.gov/compound/10340)
RTECS number	VZ4050000
UNII	45P3261C7T (http://fdasis.nlm.nih.gov/srs/srsdirect.jsp?regno=45P3261C7T)
InChI	
SMILES	
Properties	
Chemical formula	Na_2CO_3
Molar mass	105.9888 g/mol (anhydrous) 286.1416 g/mol (decahydrate)
Appearance	White solid, hygroscopic
Odor	Odorless
Density	2.54 g/cm^3 (25 °C, anhydrous) 1.92 g/cm^3 (856 °C) 2.25 g/cm^3 (monohydrate)[1] 1.51 g/cm^3 (heptahydrate) 1.46 g/cm^3 (decahydrate)[2]
Melting point	851 °C (1,564 °F; 1,124 K) decomposes (anhydrous) 100 °C (212 °F; 373 K) decomposes (monohydrate) 33.5 °C (92.3 °F; 306.6 K) decomposes (heptahydrate) 34 °C (93 °F; 307 K) (decahydrate)[2][6]
Solubility in water	Decahydrate: 7 g/100 mL (0 °C) 16.4 g/100 mL (15 °C) 34.07 g/100 mL (27.8 °C) Heptahydrate: 48.69 g/100 mL (34.8 °C) Monohydrate: 50.31 g/100 mL (29.9 °C) 48.1 g/100 mL (41.9 °C) 45.62 g/100 mL (60 °C) 43.6 g/100 mL (100 °C)[3]
Solubility	Soluble in aq. alkalis,[3] glycerol Slightly soluble in aq. alcohol Insoluble in CS_2, acetone, alkyl acetates, alcohol, benzonitrile, liquid ammonia[4]

indicates Cu^{2+} ion. A dirty green precipitate indicates Fe^{2+} ion. A yellow-brown precipitate indicates Fe^{3+} ion. A white precipitate indicates Ca^{2+}, Zn^{2+}, or Pb^{2+} ion. The compounds formed are, respectively, copper(II) carbonate, iron(II) carbonate, iron(III) oxide, calcium carbonate, zinc carbonate, and lead(II) carbonate. This test is used to precipitate the ion present as almost all carbonates are insoluble. While this test is useful for telling these cations apart, it fails if other ions are present, because most metal carbonates are insoluble and will precipitate. In addition, calcium, zinc, and lead ions all produce white precipitates with carbonate, making it difficult to distinguish between them. Instead of sodium carbonate, sodium hydroxide may be added, this gives nearly the same colours, except that lead and zinc hydroxides are soluble in excess alkali, and can hence be distinguished from calcium. For the complete sequence of tests used for qualitative cation analysis, see qualitative inorganic analysis.

Other applications

Sodium carbonate is a food additive (E500) used as an acidity regulator, anticaking agent, raising agent, and stabilizer. It is one of the components of *kansui* (かん水), a solution of alkaline salts used to give ramen noodles their characteristic flavor and texture. It is also used in the production of *snus* (Swedish-style snuff) to stabilize the pH of the final product.

Sodium carbonate is also used in the production of sherbet powder. The cooling and fizzing sensation results from the endothermic reaction between sodium carbonate and a weak acid, commonly citric acid, releasing carbon dioxide gas, which occurs when the sherbet is moistened by saliva.

In China, it is used to replace lye-water in the crust of traditional Cantonese moon cakes, and in many other Chinese steamed buns and noodles.

Sodium carbonate is used by the brick industry as a wetting agent to reduce the amount of water needed to extrude the clay.

In casting, it is referred to as "bonding agent" and is used to allow wet alginate to adhere to gelled alginate.

Sodium carbonate is used in toothpastes, where it acts as a foaming agent and an abrasive, and to temporarily increase mouth pH.

Sodium carbonate is used by the cotton industry to neutralize the sulfuric acid needed for acid delinting of fuzzy cottonseed.

Sodium carbonate, in a solution with common salt, may be used for cleaning silver. In a nonreactive container (glass, plastic, or ceramic), aluminium foil and the silver object are immersed in the hot salt solution. The elevated pH dissolves the aluminium

Solubility in glycerine	98.3 g/100 g (15.5 °C)[4]
Solubility in ethanediol	3.46 g/100 g (20 °C)[5]
Solubility in dimethylformamide	0.5 g/kg[5]
Basicity (pK_b)	3.67
Magnetic susceptibility (χ)	$-4.1 \cdot 10^{-5}$ cm^3/mol[2]
Refractive index (n_D)	1.485 (anhydrous) 1.420 (monohydrate)[6] 1.405 (decahydrate)
Viscosity	3.4 cP (887 °C)[5]
Structure	
Crystal structure	Monoclinic (γ-form, β-form, δ-form, anhydrous)[7] Orthorhombic (monohydrate, heptahydrate)[1][8]
Space group	C2/m, No. 12 (γ-form, anhydrous, 170 K) C2/m, No. 12 (β-form, anhydrous, 628 K) $P2_1/n$, No. 14 (δ-form, anhydrous, 110 K)[7] $Pca2_1$, No. 29 (monohydrate)[1] Pbca, No. 61 (heptahydrate)[8]
Point group	2/m (γ-form, β-form, δ-form, anhydrous)[7] mm2 (monohydrate)[1] 2/m 2/m 2/m (heptahydrate)[8]
Lattice constant	a = 8.920(7) Å, b = 5.245(5) Å, c = 6.050(5) Å (γ-form, anhydrous, 295 K)[7] α = 90°, β = 101.35(8)°, γ = 90°
Coordination geometry	Octahedral (Na^+, anhydrous)
Thermochemistry	
Specific heat capacity (C)	112.3 J/mol·K[2]
Std molar entropy (S°_{298})	135 J/mol·K[2]
Std enthalpy of formation ($\Delta_f H^\circ_{298}$)	−1130.7 kJ/mol[2][5]
Gibbs free energy ($\Delta_f G^\circ$)	−1044.4 kJ/mol[2]
Hazards	

230 25

oxide layer on the foil and enables an electrolytic cell to be established. Hydrogen ions produced by this reaction reduce the sulfide ions on the silver restoring silver metal. The sulfide can be released as small amounts of hydrogen sulfide. Rinsing and gently polishing the silver restores a highly polished condition.[14]

Sodium carbonate is used in some aquarium water pH buffers to maintain a desired pH and carbonate hardness (KH).

Because of its ability to absorb CO_2, sodium carbonate is being investigated as a carbon-capturing material for power plants and in other industries that produce greenhouse gases.[15]

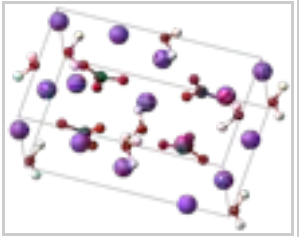
Physical properties

The integral enthalpy of solution of sodium carbonate is –28.1 kJ/mol for a 10% w/w aqueous solution.[16] The Mohs hardness of sodium carbonate monohydrate is 1.3.[6]

Occurrence

Sodium carbonate crystallizes from water to form three different hydrates:

- sodium carbonate decahydrate (natron), Na2CO3.10H2O.
- sodium carbonate heptahydrate (not known in mineral form), Na2CO3.7H2O.
- sodium carbonate monohydrate (thermonatrite), Na2CO3.H2O.



Structure of monohydrate at 346 K.

Sodium carbonate is soluble in water, and can occur naturally in arid regions, especially in mineral deposits (*evaporites*) formed when seasonal lakes evaporate. Deposits of the mineral natron have been mined from dry lake bottoms in Egypt since ancient times, when natron was used in the preparation of mummies and in the early manufacture of glass.

The anhydrous mineral form of sodium carbonate is quite rare and called natrite. Sodium carbonate also erupts from Ol Doinyo Lengai, Tanzania's unique volcano, and it is presumed to have erupted from other volcanoes in the past, but due to these minerals' instability at the earth's surface, are likely to be eroded. All three mineralogical forms of sodium carbonate, as well as trona, trisodium hydrogendicarbonate dihydrate, are also known from ultra-alkaline pegmatitic rocks, that occur for example in the Kola Peninsula in Russia.

Safety data sheet	MSDS (http://www.chem.tamu.edu/class/majors/msdsfiles/msdssodiumcarb.htm#Material)
GHS pictograms	[9]
GHS signal word	Warning
GHS hazard statements	H319[9]
GHS precautionary statements	P305+351+338[9]
EU classification (DSD)	**Xi**
R-phrases	R36
S-phrases	(S2), S22, S26
NFPA 704	[11]
Lethal dose or concentration (*LD*, *LC*):	
LD_{50} (median dose)	4090 mg/kg (rat, oral) [10]
Related compounds	
Other anions	Sodium bicarbonate
Other cations	Lithium carbonate Potassium carbonate Rubidium carbonate Caesium carbonate
Related compounds	Sodium sesquicarbonate Sodium percarbonate
Except where otherwise noted, data are given for materials in their standard state (at 25 °C [77 °F], 100 kPa).	
✗ verify (what is ?)	
Infobox references	

Production

Mining

Trona, trisodium hydrogendicarbonate dihydrate ($Na_3HCO_3CO_3{\cdot}2H_2O$), is mined in several areas of the US and provides nearly all the domestic consumption of sodium carbonate. Large natural deposits found in 1938, such as the

one near Green River, Wyoming, have made mining more economical than industrial production in North America. There are important reserves of trona in Turkey; two million tons of soda ash have been extracted from the reserves near Ankara. It is also mined from some alkaline lakes such as Lake Magadi in Kenya by dredging. Hot saline springs continuously replenish salt in the lake so that, provided the rate of dredging is no greater than the replenishment rate, the source is fully sustainable.

Barilla and kelp

Several "halophyte" (salt-tolerant) plant species and seaweed species can be processed to yield an impure form of sodium carbonate, and these sources predominated in Europe and elsewhere until the early 19th century. The land plants (typically glassworts or saltworts) or the seaweed (typically *Fucus* species) were harvested, dried, and burned. The ashes were then "lixiviated" (washed with water) to form an alkali solution. This solution was boiled dry to create the final product, which was termed "soda ash"; this very old name refers to the archetypal plant source for soda ash, which was the small annual shrub *Salsola soda* ("barilla plant").

The sodium carbonate concentration in soda ash varied very widely, from 2–3 percent for the seaweed-derived form ("kelp"), to 30 percent for the best barilla produced from saltwort plants in Spain. Plant and seaweed sources for soda ash, and also for the related alkali "potash", became increasingly inadequate by the end of the 18th century, and the search for commercially viable routes to synthesizing soda ash from salt and other chemicals intensified.[17]

Leblanc process

In 1791, the French chemist Nicolas Leblanc patented a process for producing sodium carbonate from salt, sulfuric acid, limestone, and coal. First, sea salt (sodium chloride) was boiled in sulfuric acid to yield sodium sulfate and hydrogen chloride gas, according to the chemical equation

$$2\ NaCl + H_2SO_4 \rightarrow Na_2SO_4 + 2\ HCl$$

Next, the sodium sulfate was blended with crushed limestone (calcium carbonate) and coal, and the mixture was burnt, producing calcium sulfide.

$$Na_2SO_4 + CaCO_3 + 2\ C \rightarrow Na_2CO_3 + 2\ CO_2 + CaS$$

The sodium carbonate was extracted from the ashes with water, and then collected by allowing the water to evaporate.

The hydrochloric acid produced by the Leblanc process was a major source of air pollution, and the calcium sulfide byproduct also presented waste disposal issues. However, it remained the major production method for sodium carbonate until the late 1880s.[17][18]

Solvay process

In 1861, the Belgian industrial chemist Ernest Solvay developed a method to convert sodium chloride to sodium carbonate using ammonia. The Solvay process centered around a large hollow tower. At the bottom, calcium carbonate (limestone) was heated to release carbon dioxide:

$$CaCO_3 \rightarrow CaO + CO_2$$

At the top, a concentrated solution of sodium chloride and ammonia entered the tower. As the carbon dioxide bubbled up through it, sodium bicarbonate precipitated:

$$NaCl + NH_3 + CO_2 + H_2O \rightarrow NaHCO_3 + NH_4Cl$$

The sodium bicarbonate was then converted to sodium carbonate by heating it, releasing water and carbon dioxide:

$$2\ NaHCO_3 \rightarrow Na_2CO_3 + H_2O + CO_2$$

Meanwhile, the ammonia was regenerated from the ammonium chloride byproduct by treating it with the lime (calcium hydroxide) left over from carbon dioxide generation:

$$CaO + H_2O \rightarrow Ca(OH)_2$$
$$Ca(OH)_2 + 2\ NH_4Cl \rightarrow CaCl_2 + 2\ NH_3 + 2\ H_2O$$

Because the Solvay process recycles its ammonia, it consumes only brine and limestone, and has calcium chloride as its only waste product. This made it substantially more economical than the Leblanc process, and it soon came to dominate world sodium carbonate production. By 1900, 90% of sodium carbonate was produced by the Solvay process, and the last Leblanc process plant closed in the early 1920s.The Solvay process results in soda ash (predominantly sodium carbonate (Na2CO3)) from brine (as a source of sodium chloride (NaCl)) and from limestone (as a source of calcium carbonate (CaCO3)).[6] The overall process is:

2 NaCl + CaCO3 → Na2CO3 + CaCl2

The actual implementation of this global, overall reaction is intricate.[8][9][10] A simplified description can be given using the four different, interacting chemical reactions illustrated in the figure. In the first step in the process, carbon dioxide (CO2) passes through a concentrated aqueous solution of sodium chloride (table salt, NaCl) and ammonia (NH3).

NaCl + CO2 + NH3 + H2O → NaHCO3 + NH4Cl (I)

In industrial practice, the reaction is carried out by passing concentrated brine through two towers. In the first, ammonia bubbles up through the brine (salt water) and is absorbed by it. In the second, carbon dioxide bubbles up through the ammoniated brine, and sodium bicarbonate (baking soda) precipitates out of the solution. Note that, in a basic solution, NaHCO3 is less water-soluble than sodium chloride. The ammonia (NH3) buffers the solution at a basic pH; without the ammonia, a hydrochloric acid byproduct would render the solution acidic, and arrest the precipitation.

The necessary ammonia "catalyst" for reaction (I) is reclaimed in a later step, and relatively little ammonia is consumed. The carbon dioxide required for reaction (I) is produced by heating ("calcination") of the limestone at 950 - 1100 °C. The calcium carbonate (CaCO3) in the limestone is partially converted to quicklime (calcium oxide (CaO)) and carbon dioxide:

CaCO3 → CO2 + CaO (II)

The sodium bicarbonate (NaHCO3) that precipitates out in reaction (I) is filtered out from the hot ammonium chloride (NH4Cl) solution, and the solution is then reacted with the quicklime (calcium oxide (CaO)) left over from heating the limestone in step (II).

2 NH4Cl + CaO → 2 NH3 + CaCl2 + H2O (III)

CaO makes a strong basic solution. The ammonia from reaction (III) is recycled back to the initial brine solution of reaction (I).

The sodium bicarbonate (NaHCO3) precipitate from reaction (I) is then converted to the final product, sodium carbonate (washing soda: Na2CO3), by calcination (160 - 230 C), producing water and carbon dioxide as byproducts:

2 NaHCO3 → Na2CO3 + H2O + CO2 (IV)

The carbon dioxide from step (IV) is recovered for re-use in step (I). When properly designed and operated, a Solvay plant can reclaim almost all its ammonia, and consumes only small amounts of additional ammonia to make up for losses. The only major inputs to the Solvay process are salt, limestone and thermal energy, and its only major byproduct is calcium chloride, which is sold as road salt.

Hou's process

This process was developed by Chinese chemist Hou Debang in the 1930s. The earlier steam reforming byproduct carbon dioxide was pumped through a saturated solution of sodium chloride and ammonia to produce sodium bicarbonate by these reactions:

$$NH_3 + CO_2 + H_2O \rightarrow NH_4HCO_3$$
$$NH_4HCO_3 + NaCl \rightarrow NH_4Cl + NaHCO_3$$

The sodium bicarbonate was collected as a precipitate due to its low solubility and then heated to yield pure sodium carbonate similar to last step of the Solvay process. More sodium chloride is added to the remaining solution of ammonium and sodium chlorides; also, more ammonia is pumped at 30-40 °C to this solution. The solution temperature is then lowered to below 10 °C. Solubility of ammonium chloride is higher than that of sodium chloride at 30 °C and lower at 10 °C. Due to this temperature-dependent solubility difference and the common-ion effect, ammonium chloride is precipitated in a sodium chloride solution.

The Chinese name of Hou's process, *lianhe zhijian fa* (联合制碱法), means "coupled manufacturing alkali method": Hou's process is coupled to the Haber process and offers better atom economy by eliminating the production of calcium chloride, since ammonia no longer needs to be regenerated. The byproduct ammonium chloride can be sold as a fertilizer.

See also

- Natron
- Residual sodium carbonate index
- Sodium bicarbonate

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External links

- American Natural Soda Ash Company (http://www.ansac.com)
- International Chemical Safety Card 1135 (http://www.inchem.org/documents/icsc/icsc/eics1135.htm)
- FMC Wyoming Corporation (http://www.fmcchemicals.com/Products/SodaAsh/tabid/1471/Default.aspx)
- Use of sodium carbonate in dyeing (http://www.pburch.net/dyeing/FAQ/sodaash.shtml)
- Sodium carbonate manufacturing (http://www.inclusive-science-engineering.com/sodium-carbonate-manufacturing-synthetic-processes-chlor-alkali-industry/) by synthetic processes
- Soda Ash light overview, manufacturing method and applications (http://www.sodaash.net/products/soda-ash-light-1/)

Wikimedia Commons has media related to ***Sodium carbonate***.

Carbonates

H_2CO_3																	He
Li_2CO_3, $LiHCO_3$	$BeCO_3$											B	C	$(NH_4)_2CO_3$, NH_4HCO_3	O	F	Ne
Na_2CO_3, $NaHCO_3$, $Na_3H(CO_3)_2$	$MgCO_3$, $Mg(HCO_3)_2$											$Al_2(CO_3)_3$	Si	P	S	Cl	Ar
K_2CO_3, $KHCO_3$	$CaCO_3$, $Ca(HCO_3)_2$	Sc	Ti	V	Cr	$MnCO_3$	$FeCO_3$	$CoCO_3$	$NiCO_3$	$CuCO_3$	$ZnCO_3$	Ga	Ge	As	Se	Br	Kr
Rb_2CO_3	$SrCO_3$	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag_2CO_3	$CdCO_3$	In	Sn	Sb	Te	I	Xe
Cs_2CO_3, $CsHCO_3$	$BaCO_3$		Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl_2CO_3	$PbCO_3$	$(BiO)_2CO_3$	Po	At	Rn
Fr	Ra		Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Uut	Fl	Uup	Lv	Uus	Uuo
		↓															
		$La_2(CO_3)_3$	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	
		Ac	Th	Pa	UO_2CO_3	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr	

Categories: Carbonates | Household chemicals | Photographic chemicals | Sodium compounds

M E M O

TO: Board of Directors

FROM: District Manager

SUBJECT: DISCUSSION AND POSSIBLE ACTION REGARDING AS-NEEDED ENGINEERING CONTACT WITH MWH

DATE: July 21, 2016

BACKGROUND:
The District has utilized Nick Johnson's expertize for decades in regards to management of our water resources. His knowledge and background regarding the San Lorenzo Valley is invaluable for the District on multiple active fronts; Urban Water Management Planning, Groundwater and conjunctive use, stream diversions, Sustainable Groundwater Management Act (SGMA).

Mr. Johnson has joined MWH (formerly Montgomery Watson). As a result, District staff is requesting an as-needed contract for the fiscal year 2017 with MWH so that we may continue utilizing Mr. Johnson's expertise.

Funding will be accomplished through Engineering Salaries & Benefits (1-300-5100, FY17 - $154,831), utilizing funds for the funded but vacant Engineering Manager position. The contract will be booked to Engineering Department Contracts and Professional Services account (1-300-5310), budgeted at $10,000 for Fiscal Year 2017.

STRATEGIC PLAN:
Element 1.0 – Water Management
Element 2.0 – Watershed Stewardship
Element 3.0 Capital Facilities
Element 5.0- Fiscal Planning

FISCAL IMPACT:

Fiscal Year 2017

- Account 1-300-5310 - Engineering Contracts/Professional Services - $51,954

MWH
BUILDING A BETTER WORLD

July 8, 2016

Mr. Brian Lee, District Manager
San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, CA 95006

RE: PROPOSAL AND COST ESTIMATE
AS-NEEDED CONSULTING SERVICES – 2016-2017
SAN LORENZO VALLEY WATER DISTRICT, SAN LORENZO, CALIFORNIA

Dear Mr. Lee:

This letter proposal responds to the San Lorenzo Valley Water District's (SLVWD) request for consulting services from Nick Johnson, PhD, CHg, MWH Americas, Inc. (MWH), Principal Hydrogeologist, to provide as needed support to San Lorenzo Valley Water District (District) for water resources-related consulting services during 2016 and 2017.

PROJECT OVERVIEW

The District initially requested the services of Dr. Johnson through MWH in 2014 to update its Drought Management Plan. Since then he has assisted the District by:

- Reviewing a draft Santa Margarita Basin Groundwater Model;
- Reviewing the status of groundwater remediation in the Camp Evers area;
- Preparing an addendum to the 2010 UWMP;
- Preparing a technical memorandum (TM) on the status and sustainable yield of District water sources;
- Preparing a TM on potential water supply projects;
- Preparing a TM on the potential to increase conjunctive using new intra-District interties;
- Preparing a TM to support the District Water Supply Reliability Certification Form;
- Making presentations to the District Board and its committees; and
- Helping represent the District's interests at meetings with other District consultants, and the staff of neighboring districts and county, state, and federal agencies.

2121 North California Boulevard
Suite 600
Walnut Creek, California 94596
United States
TEL +1 925 627 4500
FAX +1 925 627 4501
www.mwhglobal.com

SCOPE OF WORK

To address District needs, MWH proposes the tasks below.

Task 1: As-Needed Consulting Support. The

Dr. Johnson will be available to provide support to District, upon request. Project work may include (but is not limited to), preparation and attendance of meetings with the District Board of Directors, third-party review of water resources-related documents and data, evaluation and reporting related to specific issues that may be encountered over the term of this contract, and client communication.

Task 2. Project Management

Project management will consist of schedule and budget monitoring, and client coordination.

Assumptions

- Work will be conducted by Nick Johnson assuming up to 200 hours of effort for Task 1.
- Travel includes up to 1,000 miles for trips between MWH offices and District offices. at standard government rates.

CONTRACTING AND SCHEDULE

The estimated Time and Materials (T&M) not-to-exceed amount for completing this work is **$51,954.** A cost breakdown is provided in Attachment A. MWH will begin work immediately upon receipt of District's acceptance of the MWH Standard Hourly Rate Contract provided in Appendix B. The period of performance for this contract is July 1, 2016 through June 30, 2017.

CLOSING

MWH appreciates the opportunity to provide ongoing environmental services to the District. Please contact Nick Johnson at (925-627-4621) if you have questions or comments on this proposal.

Sincerely,
MWH

Nick Johnson, C.Hg.
Principal Hydrogeologist

Kevin Lapus, P.E., P.M.P.
California PM & Commercial Lead

cc: Gail Eaton, PG, PMP, Project Manager

Attachments:
Attachment A. Cost Breakdown
Attachment B. MWH Standard Terms & Conditions

ATTACHMENT A

Cost Breakdown

ATTACHMENT A
Cost Breakdown - As-Needed Consulting Services
San Lorenzo Valley Water District, Boulder Creek, California

MWH Labor Costs:

Labor Category	MWH Staff	Hourly Rate	Task 1	Task 2	TOTAL BUDGETED	
			As-Needed Consulting Services	Project Mgmt		
			(hours)	*(hours)*	*(hours)*	*(hours)*
Principal Professional	(Johnson)	$226	200		200	$ 45,200
Project Manager	(Eaton)	$190		20	20	$ 3,800
Project Controls	(Patil)	$110		12	12	$ 1,320
Accounting	(Webb)	$90		12	12	$ 1,080
		LABOR COST	**$ 45,200**	**$ 6,200**	**$**	**51,400**

Other Direct Costs (ODCs):

ODC Category	Unit Cost	Unit	Task 1		Task 2		TOTAL BUDGETED
			(qty)	*(cost)*	*(qty)*	*(cost)*	
Mileage	$0.56	mile	900	$ 504		$ -	$ 504
	$0			$ -		$ -	$ -
ODC Subtotal				$ 504		$ -	$ 504
ODC Mark-Up	10%			$ 50		$ -	$ 50
		ODC COST		**$ 554**		**$ -**	**$ 554**

TASK TOTALS	**$ 45,754**	**$ 6,200**	**$ 51,954**
		PROJECT TOTAL	***$ 51,954***

ATTACHMENT B

MWH Standard Hourly Rate Contract

MWH®

MWH CONTRACT No._____

CONSULTING SERVICES AGREEMENT [Hourly Rate]

This agreement ("Agreement"), with an effective date of _____, 20__, is by and between San Lorenzo Valley Water District ("CLIENT") and MWH Americas, Inc. ("CONSULTANT").

In consideration of the mutual covenants and promises contained herein, the parties agree as follows:

1 SCOPE OF SERVICES

1.1 The services to be performed by CONSULTANT for CLIENT under this Agreement ("Services") are set out in Attachment A (Scope of Services), incorporated herein by reference. The Services are to be performed in support of the project identified in Attachment A ("Project").

2 COMPENSATION

2.1 CLIENT shall pay to CONSULTANT, as compensation for the Services ("Compensation"), at the rates set forth in CONSULTANT's rate schedule ("Rate Schedule"), Attachment B, incorporated herein by reference.

2.2 Compensation shall include non-salary expenses and outside services attributable to the Project, consisting of:

2.2.1 Living and traveling expenses of employees when away from the home office on business connected with the Services at the rate of 1.1 times actual cost;

2.2.2 The cost of reproduction, printing and binding applicable to the Project;

2.2.3 A CAD rate in the amount of $16.53 per computer aided design/drafting hour to cover the hardware, software and related expenses of CAD; and

2.2.4 The cost of outside and subcontracted services at the rate of 1.1 times actual cost.

2.3 Charges for Services provided by CONSULTANT's approved water quality laboratory shall be in accordance with the published laboratory fee schedule in effect at the time the services are furnished.

2.4 CLIENT will pay CONSULTANT additional compensation for labor and expenses incurred by CONSULTANT in responding to or and assisting with any audit required by CLIENT, or any federal, state and local government agencies. The basis of payment will be the CONSULTANT's normal commercial rate for such services unless otherwise defined by an amendment to this Agreement.

3. INVOICING AND PAYMENT

3.1 CONSULTANT SHALL SUBMIT ITS STANDARD MONTHLY INVOICE DESCRIBING THE SERVICES PERFORMED AND EXPENSES INCURRED DURING THE PRECEDING MONTH. CLIENT SHALL MAKE PAYMENT OF ALL UNDISPUTED PORTIONS OF SUCH INVOICE AND PROVIDE WRITTEN JUSTIFICATION FOR THE WITHHOLDING OF ANY DISPUTED PORTIONS TO CONSULTANT WITHIN THIRTY (30) CALENDAR DAYS FROM THE DATE OF CONSULTANT'S MONTHLY INVOICE.

3.2 Payment of all Compensation due CONSULTANT pursuant to this Agreement shall be a condition precedent to CLIENT's use or reliance upon any of CONSULTANT's professional services or work products furnished under this Agreement.

3.3 In the event payment for the Services has not been made within 60 calendar days from the date of the invoice, CONSULTANT may, after giving 7 calendar days written notice and without penalty or liability of any nature, and without waiving any claim against CLIENT, suspend all or any part of the Services. In order to defray carrying charges resulting from delayed payments, simple interest at the rate of 1.5% per month (18% per annum), not to exceed the maximum rate allowed by law, shall be added to the unpaid balance of each invoice. The interest period shall commence 30 calendar days after the date of the invoice. Payments shall first be credited to interest and then to principal.

3.4 Electronic payment may be made to the following address:

BANK NAME: Wells Fargo Bank
BANK ADDRESS: 1000 Lakes Drive, Suite 250
West Covina, CA 91790
ACCOUNT #: 4945081503
ACCOUNT NAME: MWHA A/R Collection
ABA#: 121000248
SWIFT #: WFBIUS6S
NON US# SWIFT CODE: WFBIUS6WFFX
ACH COORDINATOR:
Jeff Cuevas 626-564-6737
cuevas@wellsfargo.com

Please Send Remittance Details To:
Accounts.receivable.correspondence@mwhglobal.com

3.5 Mail / Lock Box

MWH Americas, Inc.
PO Box 842728
Los Angeles, CA 90084-2728
Attn: Accounts Receivable

Remittance via Overnight Delivery:

Wells Fargo Lockbox – E2001-049
MWH Americas – Box 842728
3440 Flair Drive
El Monte, CA 91731

4 PERIOD OF PERFORMANCE

4.1 This Agreement shall have an effective date as set forth above and shall remain in effect until _____ unless terminated earlier pursuant to this Agreement.

5 CLIENT'S RESPONSIBILITIES

5.1 CLIENT shall designate a person to act as CLIENT's representative with respect to this Agreement. Such person will have complete authority to transmit instructions, receive information and interpret and define CLIENT's policies and decisions.

5.2 CLIENT shall furnish to CONSULTANT all applicable information and technical data in CLIENT's possession or control reasonably required for the proper performance of the Services. CLIENT shall also disclose to CONSULTANT hazards at the Project site ("Site") which pose a significant threat to human health or the environment. CONSULTANT shall be entitled to reasonably rely upon the information and data provided by CLIENT or obtained from generally accepted sources within the industry without independent verification except to the extent such verification is expressly included in the Services.

5.3 CLIENT shall examine all studies, reports, sketches, drawings, specifications, and other documents presented by CONSULTANT, seek legal advice, the advice of an insurance counselor, or other consultant(s), as CLIENT deems appropriate for such examination. If any document requires CLIENT to approve, comment, or to provide any decision or direction, such approval, comment, decision or direction shall be provided within a reasonable time within the context of the schedule for the Services ("Project Schedule").

5.4 CLIENT shall arrange for access to and make all provisions for CONSULTANT to enter upon public and private property as required for CONSULTANT to properly perform the Services.

5.5 CLIENT shall obtain, where applicable, the following:

5.5.1 All published advertisements for bids;

5.5.2 All permits and licenses that may be required of CLIENT by local, state, or federal authorities;

5.5.3 All necessary land, easements, and rights-of-way;

5.5.4 All items and services not specifically covered by the terms and conditions of this Agreement.

5.6 CLIENT shall pay for any costs associated with the above items.

5.7 If the Services involve a construction phase of the Project, CLIENT shall require all construction contractor covered by the CLIENT's contracts related to the Project, to defend, indemnify and hold CONSULTANT harmless to the same extent that the contractor is obligated to defend, indemnify and hold CLIENT harmless and also require the contractor to add CONSULTANT as an additional insured on the contractor's Commercial General Liability and Auto Liability insurance policies applicable to the Project. CLIENT shall also require the construction contractor to assume

sole and complete responsibility for Project site health and safety during the course of construction, including but not limited to the safety of all persons and property related to the Project.

6 CONSULTANT'S RESPONSIBILITIES

6.1 CONSULTANT shall designate a project manager for the performance of the Services.

6.2 CONSULTANT shall perform the Services as an independent contractor and not as CLIENT's agent or employee. CONSULTANT shall be solely responsible for the compensation, benefits, contributions and taxes, if any, of its employees and agents.

6.3 The standard of care applicable to CONSULTANT's Services will be the degree of skill and diligence normally employed by professional consultants performing the same or similar services at the time and location said Services are performed. CONSULTANT will re-perform any Services not meeting this standard without additional compensation.

6.4 CONSULTANT may, during the course of its Services, prepare opinions of the probable cost of construction. CLIENT acknowledges, however, that CONSULTANT has no control over costs of labor, materials, competitive bidding environments and procedures, unknown field conditions, financial and/or market conditions or other factors affecting the cost of the construction and the operation of the facilities, all of which are beyond CONSULTANT's control and are unavoidably in a state of change. CLIENT therefore acknowledges that CONSULTANT cannot and does not make any warranty, promise, or representation, either express or implied, that proposals, bids, opinions of probable construction costs, or cost of operation or maintenance will not vary substantially from its probable cost estimates.

6.5 When CONSULTANT provides on-site monitoring personnel during construction as part of its Services, the on-site monitoring personnel will notify CLIENT of any observed defects in the Work; will otherwise make reasonable efforts to guard CLIENT against defects and deficiencies in the work of the contractor(s) and will help to determine if the provisions of the contract documents are being fulfilled. Providing on-site monitoring personnel will not, however, cause CONSULTANT to be responsible for those duties and responsibilities which belong to the construction contractor, and which include, but are not limited to, full responsibility for the means, methods, techniques, sequences and progress of construction, and the health and safety precautions incidental thereto, and for performing the construction in accordance with the contract documents.

6.6 In addition to or in lieu of on-site personnel, CONSULTANT's off-site staff may periodically visit the Project site as part of its Services. Such periodic visits and any observations made by CONSULTANT during such periodic visits shall not make CONSULTANT responsible for, nor relieve the construction contractor of the sole responsibility for all construction means, methods, techniques, sequences and progress of construction, and the health and safety precautions incidental thereto, and for performing the construction in accordance with the contract documents.

7 CHANGE ORDERS

7.1 CLIENT or CONSULTANT may, from time to time, request modifications or changes in the Services. To the extent that the Services to be performed by CONSULTANT has been affected by the change, CONSULTANT's Compensation and Project Schedule shall be equitably adjusted. All changes shall be set forth in a written Change Order in the form of Attachment C, incorporated herein by reference, and executed by both parties.

8 FORCE MAJEURE

8.1 Neither party shall be responsible for a delay in its performance under this Agreement, other than a delay in payment for Services already performed, if such delay is caused by extraordinary weather conditions or other natural catastrophes war, terrorism, riots, strikes, lockouts or other industrial disturbances, acts of any governmental agencies or other events beyond the reasonable control of the claiming party. CONSULTANT shall be entitled to an equitable adjustment to the Compensation and the Project Schedule as a result of any such delay.

9 CONFIDENTIALITY

9.1 CONSULTANT shall treat as confidential and proprietary all information and data delivered to it by CLIENT. Confidential information shall not be disclosed to any third party, other than CONSULTANT's subcontractors or subconsultants, during or subsequent to the term of this Agreement. Nothing contained herein shall preclude CONSULTANT from disclosing information or data: (i) in the public domain without breach of this Agreement; (ii) developed independently by CONSULTANT; (iii) where disclosure or submission to any governmental authority is required by applicable statutes, ordinances, codes, regulations, consent decrees, orders, judgements, rules, and all other requirements of any and all governmental or judicial entities that have jurisdiction over the Services ("Law"), but only after written notice has been given to CLIENT.

10 RIGHTS IN DATA

10.1 All right, title and interest in and to the work products provided by CONSULTANT to CLIENT shall be the property of CLIENT ("Work Product"). Methodologies, process know-how and other instruments of service used to prepare the Work Product shall remain the property of CONSULTANT. Any modification or reuse of the Work Product without written verification or adaptation by CONSULTANT for the specific purpose intended will be at CLIENT's sole risk and without liability or legal exposure to CONSULTANT or to CONSULTANT'S subcontractors and subconsultants.

11 INSURANCE

11.1 CONSULTANT will furnish to CLIENT copies of insurance certificates evidencing that it maintains the following coverages while performing Services, subject to the terms and conditions of the policies:

TYPE	AMOUNT
Workers Compensation	Statutory
Employers' Liability	$1,000,000 policy limit
Commercial General Liability	$1,000,000
Automobile Liability	$1,000,000
Professional Liability	$1,000,000

11.2 CONSULTANT will furnish CLIENT with certificates of insurance verifying the above referenced coverages and stating that the insurance carrier will provide CLIENT with thirty days prior written notice of insurance cancellation or reduction below the above listed requirements. CONSULTANT shall list CLIENT as an additional insured on the Commercial General Liability and the Automobile Liability insurance.

11.3 Waiver of Subrogation is required for Workers Compensation.

12 INDEMNITY

12.1 CONSULTANT agrees to indemnify CLIENT, its officers, directors and employees, from loss or damage for bodily injury or property damage, ("Claims"), to the extent caused by the negligence of CONSULTANT in the performance of the Services. This obligation to indemnify CLIENT shall not impose any obligation on CONSULTANT that exceeds the Limitation of Liability provisions set forth below.

12.2 IN NO EVENT SHALL CONSULTANT BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING BUT NOT LIMITED TO LOST PROFITS OR INTERRUPTION OF BUSINESS) ARISING OUT OF OR RELATED TO THE SERVICES PROVIDED UNDER THIS AGREEMENT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

13 LIMITATION OF LIABILITY

13.1 IN RECOGNITION OF THE RELATIVE RISKS AND BENEFITS OF THE PROJECT TO BOTH THE CLIENT AND CONSULTANT, THE PARTIES AGREE, TO THE FULLEST EXTENT PERMITTED BY LAW, TO LIMIT THE AGGREGATE LIABILITY OF CONSULTANT, ITS PARENT, AFFILIATES AND SUBCONTRACTORS, AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS, TO $50,000 OR THE COMPENSATION FOR THE SERVICES, WHICHEVER IS GREATER. THIS LIMITATION OF LIABILITY SHALL APPLY TO ALL SUITS, CLAIMS, ACTIONS, LOSSES, COSTS (INCLUDING LEGAL FEES) AND DAMAGES OF ANY NATURE ARISING FROM OR RELATED TO THIS AGREEMENT AND WITHOUT REGARD TO THE LEGAL THEORY UNDER WHICH SUCH LIABILITY IS IMPOSED.

13.2 CONSULTANT MAY AGREE, AT CLIENT'S REQUEST, TO INCREASE THIS LIMITATION OF LIABILITY TO A GREATER SUM IN EXCHANGE FOR A NEGOTIATED INCREASE IN CONSULTANT'S FEE. ANY INCREASE IN THIS LIMITATION OF LIABILITY MUST BE IN WRITING AS A FORMAL AMENDMENT TO THIS AGREEMENT AND MUST BE SIGNED AND DATED BY AUTHORIZED REPRESENTATIVES OF EACH PARTY. ANY ADDITIONAL CHARGE FOR HIGHER LIABILITY IS CONSIDERATION FOR THE GREATER RISK ASSUMED BY CONSULTANT AND IS NOT A CHARGE FOR ADDITIONAL INSURANCE.

13.3 BY ENTERING INTO THIS AGREEMENT, THE PARTIES ACKNOWLEDGE THAT THIS LIMITATION OF LIABILITY CLAUSE HAS BEEN REVIEWED, UNDERSTOOD, IS A MATERIAL PART OF THIS AGREEMENT, AND EACH PARTY HAS HAD THE OPPORTUNITY TO SEEK LEGAL ADVICE REGARDING THIS PROVISION.

14 PREEXISTING CONDITIONS

14.1 CLIENT hereby understands and agrees that CONSULTANT has not created nor contributed to the creation or existence of any Hazardous Substances at or related to the Project site or in connection with or related to this Agreement. The compensation to be paid CONSULTANT for the Services is in no way commensurate with, and has not been calculated with reference to, the potential risk of injury or loss which may be caused by the exposure of persons or property to such Hazardous Substances. Therefore, to the fullest extent permitted by law, CLIENT agrees to defend, indemnify, and hold CONSULTANT, its officers, directors, employees, and consultants, harmless from and against any and all claims, damages, and expenses, whether direct, indirect, or consequential, including but not limited to attorney's fees and court costs, arising

out of, or resulting from the threatened or actual release of Hazardous Substances ("Release"), except to the extent that such Release is caused by the negligence of CONSULTANT. Nothing contained within this Agreement shall be construed or interpreted as requiring CONSULTANT to assume the status of a generator, arranger, transporter or as a storage, treatment or disposal facility as those terms appear within applicable Law.

15 SUSPENSION

15.1 CLIENT may, at any time and without cause, suspend the Services of CONSULTANT, or any portion thereof for a period of not more than 90 days by notice in writing to CONSULTANT. CONSULTANT shall resume the Services on receipt from CLIENT of a written notice of resumption of the Services. If such suspension causes an increase in CONSULTANT's cost or a delay in the performance of the Services, then an equitable adjustment shall be made to the Compensation and Project Schedule, as appropriate. In the event that the period of suspension exceeds 90 days, the contract time and compensation are subject to renegotiation.

16 TERMINATION

16.1 CLIENT may terminate all or part of this Agreement for CLIENT's convenience by providing 10 days written notice to CONSULTANT. In such event, CONSULTANT will be entitled to Compensation for the Services performed up to the effective date of termination plus compensation for reasonable termination expenses. CONSULTANT will not be entitled to compensation for profit on Services not performed.

17 DISPUTES RESOLUTION – ARBITRATION

17.1 Any dispute arising between the parties concerning this Agreement or the rights and duties of either party in relation thereto shall first be submitted to a panel consisting of at least one representative of each party who shall have the authority to enter into an agreement to resolve the dispute. The disputes panel shall be conducted in good faith, either physically or electronically, within two weeks of a request by either party. No written, verbal or electronic representation made by either party during the course of any panel proceeding or other settlement negotiations shall be deemed to be a party admission.

17.2 If the panel fails to convene within two weeks, or if the panel is unable to reach resolution of the dispute, then either party may submit the dispute for binding arbitration to be held in accordance with the Construction Industry Rules of the American Arbitration Association ("Association") in effect at the time that the demand for arbitration is filed with the Association. Either party may file in the manner provided by the Rules of the Association, a Demand for Arbitration at any time. The arbitrator or arbitrators appointed by the Association shall have the power to award to either party to the dispute such sums, costs, expenses, and attorney's fees as the arbitrator or arbitrators may deem proper.

18 NOTICE

18.1 Any notice or communication required or permitted by this Agreement shall be deemed sufficiently given if in writing and when delivered personally or 48 hours after deposit with the a receipted commercial courier service or the U.S. Postal Service as registered or certified mail, postage prepaid, and addressed as follows:

CLIENT

_____

_____

_____

Attn:_____

CONSULTANT

_____

_____

_____

Attn:_____

or to such other address as the party to whom notice is to be given has furnished to the other party(ies) in the manner provided above.

19 SURVIVAL OF CONTRACT TERMINATION

19.1 The Articles relating to Indemnification, Limitation of Liability, Preexisting Conditions, Data Rights, Confidentiality, Governing Law and Venue shall survive completion of the Services, payment in full of the Compensation and termination of this Agreement.

20 MISCELLANEOUS

20.1 Governing Law. The validity, construction and performance of this Agreement and all disputes between the parties arising out of this Agreement or as to any matters related to but not covered by this Agreement shall be governed by the laws, without regard to the laws as to choice or conflict of laws, of the State where the Project is located.

20.2 Assignment. Neither this Agreement nor any rights under this Agreement may be assigned by any party, other than to a party's affiliate, parent or subsidiary, without the prior written consent of the other party(ies).

20.3 Binding Effect. The provisions of this Agreement shall bind and inure to the benefit of the parties and their respective successors and permitted assigns.

20.4 Parties in Interest. Nothing in this Agreement, expressed or implied, is intended to confer on any person or entity other than the parties any right or remedy under or by reason of this Agreement.

20.5 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute a single agreement.

20.6 Amendment and Waiver. This Agreement may be amended, modified or supplemented only by a writing executed by each of the parties. Any party may in writing waive any provisions of this Agreement to the extent such provision is for the benefit of the waiving party. No action taken pursuant to this Agreement shall be deemed to constitute a waiver of any other party's compliance with provisions of this Agreement. No waiver by any party of a breach of any provision of this Agreement shall be construed as a waiver of any subsequent or different breach, and no forbearance by a party to seek a remedy for noncompliance or breach by another party shall be construed as a waiver of any right or remedy with respect to such noncompliance or breach.

20.7 Venue, Jurisdiction and Process. The parties agree that any arbitration proceeding arising out of this Agreement or for the interpretation, performance or breach of this Agreement, shall be instituted in the County where the Project is located, and each party irrevocably submits to the jurisdiction of such proceeding and waives any and all objections to jurisdiction or venue that it may have under the laws of that state or otherwise in such proceeding.

20.8 Severability. The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions, and this Agreement shall be construed in all respects as if any invalid or unenforceable provision were omitted.

20.9 Preparation of Agreement. All provisions of this Agreement have been subject to full and careful review by and negotiation between CONSULTANT and CLIENT. Each such party has availed itself of such legal advice and counsel as it, respectively, has deemed appropriate. The parties hereto agree that neither one of them shall be deemed to be the drafter or author of this Agreement, and in the event this Agreement is subject to interpretation or construction by a court of law or panel of arbitration, such court or panel shall not construe this Agreement or any portion hereof against either party as the drafter of this Agreement.

20.10 Entire Agreement. This Agreement embodies the entire agreement and understanding between the parties pertaining to the subject matter of this Agreement, and supersedes all prior agreements, understandings, negotiations, representations and discussions, whether verbal or written, of the parties, pertaining to that subject matter.

CLIENT	CONSULTANT
_____	_____
Signature	Signature
_____	_____
Name (Printed or Typed)	Name (Printed or Typed)
_____	_____
Date	Date

Attachment A

SCOPE OF SERVICES

1. PROJECT DESCRIPTION

The Services to be performed by CONSULTANT shall be as follows:
As-Needed Consulting Services as presented in CONSULTANT'S Proposal dated July 1, 2016.

2. PROJECT SCHEDULE

July 1, 2016 through June 30, 2017

Attachment B

RATE SCHEDULE

1. The rates provided below shall be in effect from July 1, 2016 to June 30, 2017.

2. Services provided by CONSULTANT personnel in various labor categories will be billed at the following negotiated hourly rates (inclusive of salary, overhead, and fee):

2016-2017 MWH FEE SCHEDULE

HOURLY PROJECT BILLING RATES

- Principal Professional . .. . $**226**
- Project Manager .. .. $**190**
- Supervising Professional .. $**185**
- Senior Professional $**159**
- Professional . $**135**
- Associate Professional . .. $**118**
- Project Controls $**110**
- Accounting $ **90**

For projects that extend beyond the calendar year specified above, the unit prices will be adjusted by 3% on July 1 of every subsequent year.

OTHER DIRECT PROJECT COSTS

Outside Vendors for Supplies, Materials, and Services	At Cost + 10% markup
Vehicle Mileage	Prevailing IRS Deduction Rate
Employee Expenses (meals, lodging, travel, project specific equipment, etc.)	At Cost + 10% markup

In the performance of these services, MWH Americas, Inc., may use personnel and other resources from affiliated MWH companies at the rates provided in this agreement.

Attachment C

CHANGE ORDER

Contract No. _____
Change Order No. _____
Effective Date _____

In accordance with Article 7 of the Consulting Services Agreement (Hourly Rate) dated _____, 20__ ("Agreement") between _____ ("CLIENT") and MWH AMERICAS, INC. ("CONSULTANT"), this Change Order modifies the Agreement as follows:

1. **Change in Services**:

_____
_____
_____
_____
_____

2. **Change in time of Performance** (attach schedule if appropriate):

_____

3. **Change in CONSULTANT's Compensation**:

_____

All other terms and conditions remain unchanged.

CLIENT	**CONSULTANT**
Signature	Signature
Name (Printed or Typed)	Name (Printed or Typed)
Date	Date

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 05/02/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	AON REED STENHOUSE INC. AON RISK SERVICES CENTRAL, INC. 900 - 10025 - 102A AVENUE EDMONTON, AB T5J 0Y2	CONTACT NAME: ANDREA OTTO PHONE (A/C, No, Ext): 1-952-807-0679 FAX (A/C, No): 1-312-381-6608 E-MAIL ADDRESS: ANDREA.OTTO@AON.COM	
		INSURER(S) AFFORDING COVERAGE	NAIC #
		INSURER A: ZURICH AMERICAN INSURANCE COMPANY	16535
INSURED	MWH GLOBAL INC; MWH AMERICAS INC; MWH CONSTRUCTORS INC; HAWKSLEY CONSULTING, INC.STANTEC CONSULTING SERVICES INC.; 380 INTERLOCKEN CRESCENT, STE 200, BROOMFIELD, CO 80021	INSURER B: SENTRY INSURANCE A MUTUAL COMPANY	24988
		INSURER C: ZURICH INSURANCE COMPANY	
		INSURER D: SENTRY INSURANCE A MUTUAL COMPANY	24988
		INSURER E:	
		INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 1640 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY** X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X CONTRACTUAL/CROSS LIABILITY X OWNERS & CONTRACTORS PROTECTIVE GEN'L AGGREGATE LIMIT APPLIES PER POLICY X PRO-JECT X LOC			GLO5415704 XCU COVER INCLUDED	05/01/16	05/01/17	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 2,000,000 $ 300,000 $ 10,000 $ 2,000,000 $ 4,000,000 $ 2,000,000
B	**AUTOMOBILE LIABILITY** X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS			90-17043-08	05/01/16	05/01/17	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000
C	X **UMBRELLA LIAB** X OCCUR X **EXCESS LIAB** CLAIMS-MADE DED X RETENTION $ 10,000			8831307 EXCESS GENERAL, AUTO AND EMPLOYERS LIABILITY (FOLLOW FORM)	05/01/16	05/01/17	EACH OCCURRENCE AGGREGATE	$ 5,000,000 $ 5,000,000
D	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		90-17043-06	05/01/16	05/01/17	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

BROOMFIELD, CO - MWH ET AL

CERTIFICATE HOLDER

TO WHOM IT MAY CONCERN

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Andrea R. Otto

M E M O

TO: Board of Directors

FROM: District Manager

SUBJECT: Administration/Engineering Departments Status Report

DATE: July 21, 2016

RECOMMENDATION:

It is recommended that the Board of Directors review and file the Administration/ Engineering Departments status report.

BACKGROUND:

MEETINGS OF NOTE

- June 22 the DM attended a Conjunctive Use Project Grant Opportunities Planning Session with County staff at the County Building

ENTERPRISE WIDE COST-OF-SERVICE STUDY

- ~~Management met with staffing consultant on March 24th.~~
- ~~Management conducted field survey with consultant on March 28th~~
- ~~Finance Committee conducted kick-off meeting with consultant on March 29th~~
- ~~Staff interviews were conducted April 6 and 11.~~
- ~~Follow-up interviews were conducted in April and May~~
- Senior staff have reviewed draft staffing study and provided feedback to consultant. Board-ready draft staffing study will be presented to Budget and Finance Committee on July 26.
- Staff is scheduled to meet with the consultant on July 18 to wrap up the capital component of the cost-of-service study. Board-ready cost-of-service study draft expected to be presented to Budget and Finance Committee on August 9 or August 23.

The intent of this study is to determine what the true cost of providing water and sewer service includes; watershed protection, water rights management, infrastructure, staffing and administration. These issues will be studied both from a geographical and seasonal standpoint.

PROBATION TANK REPLACEMENT PROJECT

The 100% Plan Review is currently in progress. The Project's Habitat Conservation Plan (HCP) was approved by the Board in late summer. ~~The State has conducted an initial review of the HCP. Staff met with the State on-site at Olympia. Staff and~~

~~consultant are coordinating modifications to the HCP with the hope of final State Approval in summer 2016.~~

Staff and consultant continue to work on final HCP requirements. We remain on track to obtain a permit in late Summer or Fall of 2016. Project is scheduled for bidding in late-2016 and construction is expected to be completed in early 2017. Construction is expected to take 6 months

SWIM TANKS REPLACEMENT PROJECT

Plans and Specifications are complete and a Mitigated Negative Declaration is in the works. Project has been deferred a minimum of six months while District applies for SRF funding.

FALL CREEK FISH LADDER

100% plans and specifications are under staff review.

Staff recently was informed by Federal Fish and Wildlife (FFW) that the Fall Creek Diversion and Fish Ladder do not qualify for streamlined permitting. This is a change of direction from past conversations over the last three years. Individual consultation will be required and the District will be submitting a request to the Army Corp of Civil Engineers. This new information will delay the project at least a year, if not longer.

INTERTIES 2, 3, 4

Primary project construction is finished. ~~Start-up was initiated in late March and District is testing the effectiveness of moving water between service areas using the Intertie 3/4 Station. A joint test was completed successfully with Scotts Valley WD.~~ Testing is complete and the interties are fully functional and operational.

On June 22 a vehicle crashed and knocked out power along Graham Hill Road, taking our Pasatiempo Well Field off-line. District staff reacted quickly and initiated water transfers from Scotts Valley Water District, utilizing Intertie 2 into the District's south zone as a precautionary measure. Intertie 2 was used for less than an hour.

County has rejected all paving on Graham Hill Road. ~~Paving, in particular the saw-cut grooving is unraveling. District is investigating to determine cause and how to correct. Staff has contracted with NCE to conduct forensic services.~~ District is in discussions with County and contractor to resolve the paving issues.

FELTON HEIGHTS WATER STORAGE TANK

Staff is working to obtain necessary easements on neighboring property. Design is expected for summer of 2016 with construction occurring in Spring 2017. Project has been deferred while District applies for SRF funding.

LOMPICO

~~The Lompico Assessment District ballot count took place May 4th, 2016. A majority of the returned ballots were 'yes', and the Assessment District is was formed Final paperwork for the merger has been completed. Staff has begun operating the Lompico facilities. Final merger is scheduled to be completed June 1st, with the LAFCO paperwork being filed with the County Recorder.~~

The merger was completed on June 1, 2016. Since that time staff has flushed the entire Lompico system. Currently the Lompico Service Area is being provided water through the booster station (former intertie) and all local water sources are off-line while the District conducts assessments of the local Lompico source water, particularly for Lead and Copper Rule compliance.

SLVWD bills have gone out for the Lompico Service Area. Minor billing issues are being dealt with professionally by District front office staff. During the transfer of accounting data between the two Districts approximately 100 Lompico customers did not receive credit for their last payment to Lompico County Water District. The issue has been resolved.

New meters have been ordered and delivered for installation in the Lompico Service Area. Staff has an aggressive schedule to complete replacement of all meters in the service area by the end of August.

A temporary SCADA system has been installed in the Lompico Service Area, saving approximately 6 labor-hours daily in travel time.

M E M O

TO: Board of Directors

FROM: District Manager

PREPARED BY: Environmental Programs Manager

SUBJECT: Environmental Status Report

DATE: July 21, 2016

RECOMMENDATION:

It is recommended that the Board of Directors review and file the Environmental Department status report.

BACKGROUND:

SWIM TANKS MITIGATED NEGATIVE DECLARATION
On May 19th your board approved the initial study for the swim tanks replacement project. On July 14th, the Notice of Intent to adopt the Mitigated Negative Declaration and the Initial Study was distributed to the distribution list provided in the consent section of the July 21st board agenda. The public comment period will be open from July 14 through August 12 for a period of 30 days as required by CEQA. At that time the District will prepare responses to the comments provided. The public hearing to adopt the Mitigated Negative Declaration has been scheduled for October 6, 2016 at your regularly scheduled board meeting. Following the adoption of the MND/IS, it will be submitted to the County Clerk for approval and permit to construct.

FALL CREEK FISH LADDER- BIOLOGICAL ASSESSMENT
Staff met with the Army Corps of Engineers and National Marine Fisheries Service to establish a timeline for the application of a Biological Opinion, which will address the Construction, Operation & Maintenance, and the water diversion associated with the Fall Creek Fish Ladder. Staff will prepare an Initial Study to be submitted in August, which will begin the permit process. We anticipate construction to begin construction in Summer 2017.

FALL CREEK FISH LADDER GRANT APPLICATION
As part of a collaborative effort led by San Lorenzo 2025, to enhance fish habitat in the San Lorenzo River Watershed, the District has participated in a multi-project grant to acquire funding to help with the construction of the Fish Ladder. Other projects to enhance fish habitat include:

1. Lagoon Drain to prevent breaching of the river mouth, and to reduce flooding.
2. Branciforte Creek Passage Projects
3. Zayante Large Wood Project

The Grant was submitted June 24, 2016. Staff will provide updates on the grant process as they come available.

OLYMPIA INVASIVE SPECIES MANAGEMENT PLAN
June 29, 2016 the EEP Committee met to discuss the details regarding the Final Draft of the Olympia Invasive Broom & Acacia Management Plan provided by Greening Associates. There was discussion regarding the use of herbicide as part of the plan. The EEP voted to bring the Final Report with no changes to the Board for consideration and possible action. Details are provided in the memo and the plan, which will be discussed as part of the July 21, 2016 regular Board meeting.

FELTON LIBRARY WEED MANAGEMENT
Staff met with Linda Skeff, who has offered her services to coordinate CCC crews to remove a hybrid blackberry from District property at the Kirby Treatment Plant. The weed removal is part of a joint effort with County Parks to improve riparian habitat along Bull Creek in preparation for an outdoor education site, adjacent to the Kirby Treatment Property, which is planned by the Friends of Felton Library. The Environmental, Engineering & Planning Committee discussed the effort at the June 29th meeting and decided to move forward with the plan to remove the blackberry, and heavily chip the area to prevent future growth. Initial work is expected to be conducted by CCC crews in August or September of 2016.

COUNTY ORDINANCE ON CANNABIS CULTIVATION
Staff been meeting with various individuals including but not limited to, Cal Fire, County Officials, Resource Conservation District of Santa Cruz County, Local Cannabis Cultivators, and residents to hear concerns and seek solutions for the potential impacts on water resources which could result from increased cannabis cultivation if the proposition to legalize cannabis in California passes on the November Ballot. Staff is preparing a set of recommendations for the County Ordinance to minimize environmental impacts.
Staff will be meeting with the County Water Advisory Commission to discuss environmental impacts that will result from the Draft County Ordinance on Cannabis Cultivation.

2015 URBAN WATER MANAGEMENT PLAN (UWMP)
Staff is working closely with Water Systems Consulting (WSC) to update the 2015 UWMP. Staff has transferred all requested data to WSC in order to prepare the document. Our primary contact at WSC recently took another job and we have transitioned to another staff member at WSC to handle our update. This may cause some delay in the process. On July 11, 2016 staff distributed notifications to all neighboring agencies with an official notice of preparation and intent to adopt the UWMP. It is expected a draft of the UWMP will be available for review in August 2016.

WATER CONSERVATION
Staff is working on public outreach to notify the customers that we are still in a Stage 2 Water Shortage Emergency. Water restrictions are still in effect. We have transitioned to a new water conservation message ‘‘Conserve to Preserve.’’ Signs have been posted on two of the Hwy 9 (Route 35) bus lines. Soon new highway signs will be posted. Our monthly e-newsletters will be available in the coming week, Staff produces multiple posts on Facebook every week focused on various district business.

Rebates are Back! -Staff revised the Water Conservation Rebate program to include credits for water efficient clothes washers, greywater systems and irrigation controllers. We are directing our customers to the State's rebates for lawn removal and toilet replacement.

Staff continues to coordinate with the Water Conservation Coalition for a collaborative regional public outreach campaign. The District continues to support Cabrillo College water conservation/landscape course work. Spring classes are scheduled to begin in March. http://www.cabrillo.edu/services/extension/green.html
Upcoming Water Conservation Coalition collaborative efforts include:
County Wide Water Conservation/Storm Water Video Contest
County Faire: September 14-18th

HYDROLOGICAL ASSESSMENT
Staff met with County officials and our hydrologist, Nick Johnson, to discuss possibilities for conjunctive use to balance our water needs to reduce overdraft on south system wells, while avoiding water right violations on Fall Creek. The county has indicated that they are planning to go ahead and put together an application for a planning grant that will address the questions that came up at our meeting and hopefully set the stage for operation of the interties for more conjunctive use.

KARST PROTECTION ZONE INVESTIGATION
Staff received a final report for the Karst Protection Zone Investigation and Mapping. The purpose of the study was to develop an inventory of karst related rock formations in western Santa Cruz County as part of an overall effort to protect and manage ground and surface water resources in Santa Cruz County. This effort is particularly of interest for our Felton System, which gets 100% of its water from the Karst geologic feature. The Water Advisory Commission is expected to submit a memo to the Board of Supervisors in September asking them to direct County Planning and Environmental Health Departments to codify an ordinance to protect karst formations.

PUBLIC OUTREACH/ DROUGHT OUTREACH

- E Newsletters are sent out to over 3000 customer email addresses at least monthly.
- The District Facebook page and website are updated regularly (3-5 times per week).
- Two Hwy 9 Busses have Conserve to Preserve Message on the "Queen" Side.
- Media Alerts have been published in local papers regarding:
  1. None

M E M O

TO: Board of Directors

FROM: District Manager

SUBJECT: FINANCE DEPARTMENT STATUS REPORT

DATE: July 8, 2016

RECOMMENDATION:

It is recommended that the Board of Directors review and file the Finance Department Status Report.

BACKGROUND:

LOMPICO
As with any data conversion, there are always a few hiccups. We were able to read and bill our new Lompico customers, there were however, payments that still needed to be posted to customer accounts so it did cause a spike in calls trying to confirm what the actual balance due was. We still have a significant delay in any mail being forwarded that was addressed to Lompico's office. I will continue to work with staff to help make the transition is as smooth as possible for everyone, but it does require a significant amount of my staff's time. But overall, the majority of customers have been great during this transition.

YEAR END
We are in the process of preparing for the year end close. There are a lot of accounts to reconcile. And with Lompico, we will have additional audit work that needs to be completed.

CASH TRANSACTIONS
As of 6/30/2016 we paid back the $1,005,000 loan owed to Scotts Valley Water District in full.

We have also taken advantage of the Fresh Start 15 to reduce our interest expense for the unfunded liability of our CalPERS expense. We will also pay the lump sum amount for FY1617, which will save approximately $7,000.

We are waiting for the Lompico revaluation for their CalPERS to determine the best course of action for making payments towards their unfunded liability.

CUSTOMER SERVICE DEPT SUMMARY

Monthly Stats:	**June**	**May**	**April**	**March**	**Feb**	**Jan**	**Dec**	**Nov**
Cut In/Outs	123	116	91	84	64	67	52	83
Final Bills	74	56	36	60	29	30	47	47
Tags	341	310	267	388	372	360	411	400
Turn-offs	53	53	52	81	73	67	76	68

Online / Going Green

As of 7/8/2016

Online Sign-ups	2,452	2,322	2,277	2,235	2,181	2,125	2,058	1,963
E-Bills	691	637	626	612	591	551	526	487
Auto Pay	1,718	1,658	1,636	1,611	1,596	1,552	1,511	1,458

MEMO

TO: District Manager

FROM: Director of Operations

SUBJECT: OPERATIONS DEPARTMENT PROJECT STATUS REPORT JUNE 2016

DATE: July 13, 2016

RECOMMENDATION:

It is recommended that the District Manager review and file the Operations Department Project Status Report for the month of June 2016.

BACKGROUND:

REGIONAL EMERGENCY INTERTIE 3/4 STARTUP

Regional Intertie 3/4 is in operation. Still outstanding is the Graham Hill Road paving that was rejected by the County. The District has received the independent review of the paving project and has submitted the document to the County of Santa Cruz Public Works Department for review.

DROUGHT CONTINGENCY PLANNING

Staff continues monitoring consumption/production throughout the system. With recent rainfall surface water sources have increased in the North System. The North system well field is now active due to the increased usage as a result of summer vacation season. The increase in surface water of 20.30% this year from June 2013 had let the well fields remain in standby until needed. Water production system wide is down 11.35% from June 2013.

LOMPICO WATER CONSOLIDATION PREPARATION

On June 01, 2016 Lompico Water merged with the District. During the reporting period staff continued with operations of the Water System and continued main line flushing on the East and West sides of the Canyon. During the reporting period staff installed the majority of the SCADA system that monitors tank levels with alarms and turns the Lompico Booster on/off. Before SCADA operations would take 6 staff hours per day water system. The installation of the temporary SCADA is anticipated to be completed by mid-July 2016. Once SCADA is online operational staff time will be greatly reduced.

MONAN WAY NEW SERVICE INSTALLATION

During the reporting period staff completed a new service installation on Monan

Way in Brookdale. The new service will supply water to an existing home with a failing well supply.

HYDRANT REPAIR HIGHWAY 9 BOULDER CREEK

During the reporting period a delivery truck/trailer hit a fire hydrant in downtown town Boulder Creek. The flow from the broken hydrant created a crowd with children running through the water. The hydrant has been repaired and costs associated with the repairs will be collected.

EMERGENCY WATER SERVICE TAN OAK DRIVE

During June a homeowner along Tan Oak Drive in Scotts Valley contacted the District for water service as there private well failed and they were out of water. Due to the emergency staff installed the service the next day as soon as all associated costs for service were paid.

INVENTORY COUNT

At the end of each fiscal year and inventory is taken for all plumbing part and associated materials. The day long counting is supervised by accounting staff.

Rick Rogers

SAN LORENZO VALLEY WATER DISTRICT
PRODUCTION COMPARRISON

Source	June-16	May-16	June-13	Difference This Year To 2013
North System				
Surface Water Sources				
Foreman Creek	13,998,160	23,305,124	16,483,000	
Peavine Creek + Hydro	4,453,960	5,399,660	2,974,000	
Clear Creek	8,017,128	5,918,530	0	
Sweetwater Creek	5,344,752	3,945,686	0	
Sub-Total (Streams)	**31,814,000**	**38,569,000**	**19,457,000**	63.51%
Wells (North)				
Olympia No. 2	624,000	-	8,416,000	
Olympia No. 3	5,000	-	13,697,000	
Quail Well No. 4-A	7,744,000	1,357,000	0	
Quail Well No. 5-A	2,151,800	23,900	798,700	
Sub Total North Wells	**10,524,800**	**1,380,900**	**22,911,700**	-54.06%
South System Wells				
Pasatiempo 5A	916,900	1,062,800	N/A	
Pasatiempo 6	8,070,000	1,264,000	10,420,000	
Pasatiempo 7	2,112,000	1,135,000	3,249,000	
Sub Total Pasatiempo Wells	**11,098,900**	**3,461,800**	**13,669,000**	-18.80%
North South All Sources Combined	**53,437,700**	**43,411,700**	**56,037,700**	-4.64%
Felton System - Surface Water				
Fall Creek	7,566,173	5,638,054	10,380,000	
Bennett Spring	1,589,878	1,649,243	5,898,000	
Bull 1 & 2	4,413,432	4,895,126	1,989,900	
Total Felton System Sources	**13,569,483**	**12,182,423**	**18,267,900**	-25.72%
Manana Woods System				
Well 1	-	-	1,280,959	
Paso Mana By Pass	997,259	715,287	468,296	
Total Manana Woods Sources	**997,259**	**715,287**	**1,749,255**	
Sub - Total Production				
North / Felton / Manana	68,004,442	56,309,410	76,054,855	-10.59%
Less South /Manana Inter-Tie	997,259	715,287	468,296	
Total Production	67,007,183	55,594,123	75,586,559	-11.35%
Surface	45,383,483		37,724,900	20.30%
Wells	21,623,700		37,861,659	-42.89%
Total Surface Water Percentage	67.73		49.91	35.70%
Total Wells Percentage	32.27		50.09	-35.58%

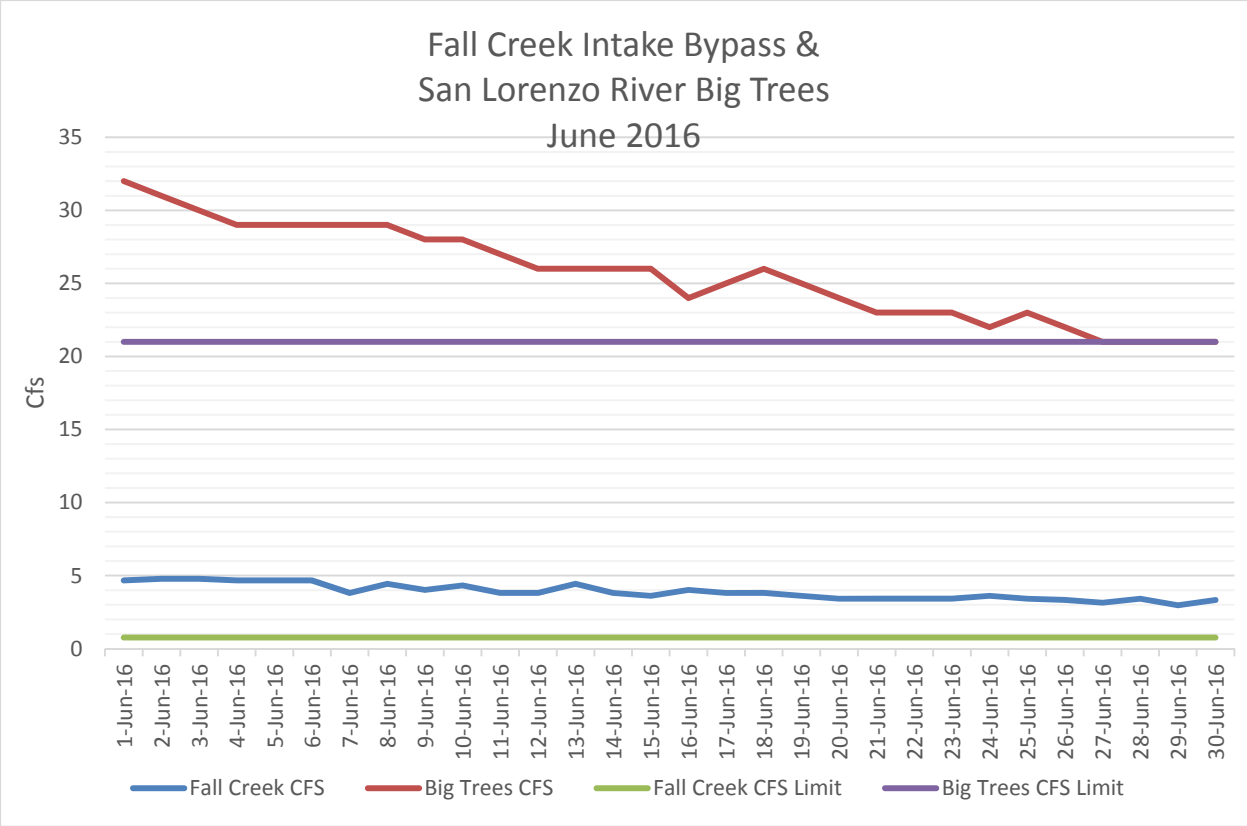
SAN LORENZO VALLEY WATER DISTRICT
PRODUCTION BY SYSTEM
+/- INTERTIES
JUNE 2016

North System All Sources	**53,437,700**
Interties IN +	**636,985**
Interties OUT -	**3,224,027**
TOTAL NORHT SYSTEM	**50,850,659**
Felton Water system All Sources	**13,569,483**
Interties IN +	**128,048**
Interties OUT -	**0**
TOTAL FELTON SYSTEM	**13,697,531**
Manana Woods System	**0**
Interties IN +	**997,259**
TOTAL MANANA WOODS	**997,259**

SAN LORENZO VALLEY WATER DISTRICT
INTERTIE USAGE
JUNE 2016

INTERTIE 2	
SLVWD to SVWD	**0**
SVWD to SLVWD	**0**
INTERTIE 3	
SLV SOUTH to SLV NORTH	**636,985**
SLV NORTH to SLV SOUTH	**59,394**
INTERTIE 4	
SLVWD to MHWD	**0**
MHWD to SLVWD	**0**
INTERTIE 6	
SLV NORTH to SLV FELTON	**128,048**
SLV FELTON to SLV NORTH	**-**
LOMPICO INTERTIE	
SLV NORTH to LOMPICO	**2,039,326**
MANANA WOODS INTERTIE	
SLVWD to MANANA WOODS	**997,259**

Fall Creek Intake June 2016



Normal Rainfall Fall Creek Intake Bypass Requirements

April 1 through October 31	1.0 cubic feet per second
November 1 through March 31	1.5 cubic feet per second

Dry Conditions Fall Creek Intake Bypass Requirements

April 1 through October 31	0.5 cubic feet per second
November 1 through March 31	0.75 cubic feet per second

Number of Days in month 0.75 cfs or below, ZERO days

San Lorenzo River USGS Big Trees Flow Requirements

September	11 cubic feet per second
October	26 cubic feet per second
November 1 through May 31	21 cubic feet per second
June – August	No Requirements

Fall Creek Intake June 2016

For the protection of fish and wildlife, during the period: (a) April 1 through October 31 bypass a minimum of 0.5 cfs; (b) November 1 through March 31 bypass a minimum of 1.5 cfs past the Fall Creek point of diversion. The natural streamflow shall be bypassed whenever it is less than 1.5 cfs; provided, however, that during a dry year, the bypass requirement shall be reduced from 1.5 to 0.75 cfs. A dry year is defined on a monthly basis of cumulative runoff beginning October 1 of each season in the San Lorenzo River at the USGS gage at Big Trees. These runoff figures are based on approximately 50 percent of normal runoff as the dividing level between normal and dry year runoff and are as, follows:

- November 1 for the month of October 500 af
- December 1 for October-November, inclusive 1,500 af
- January 1 for October-December, inclusive 5,000 af
- February 1 for October-January, inclusive 12,500 af
- March 1 for October-February, inclusive 26,500 af

Fall Creek Weir Measurement

Agenda: 7.21.16
Item: 13a1v

	Month:	June		Year:	2016	Big Trees > 26,500 Acre-ft Oct-Feb Normal Yr ☐				Big Trees <26,500 Acre-ft Oct-Feb Dry Yr: X		

Date	Time	Initials	Pump #	Fall Cr. GPM into Kirby plant	Weir Board Height	Weir Height Measurement	Fall Creek (Cubic Feet per Second)	Big Trees (Cubic Feet per Second	Rainfall (Felton gauge)	Met Fall Cr, Bypass Requirement: Normal Year Apil 1 - Oct 31 1.0 cfs *Dry Year* April 1- Oct 31 0.5 cfs Nov. 1 - March 31 0.75 cfs (yes/no)	Met Big Trees Requirement Nov-May 21cfs Sept 11 cfs Oct 26 cfs (yes/no)	Notes
1	11:05	jg	1	155	25.0	37.4	4.662	32	0	Yes	N/A	No Big Tree
2	14:40	db	1	155	25.0	37.5	4.776	31	0	Yes	N/A	requirements for
3	15:15	db	1	157	25.0	37.5	4.776	30	0	Yes	N/A	June - August
4	13:50	db	2	158	25.0	37.4	4.662	29	0	Yes	N/A	
5	12:40	ks	2	127	25.0	37.4	4.662	29	0	Yes	N/A	
6	11:05	ks	2	114	25.0	37.4	4.662	29	0	Yes	N/A	
7	10:11	ks	2	161	25.0	36.4	3.809	29	0	Yes	N/A	
8	10:16	KS	2	137	25.0	37.2	4.439	29	0	Yes	N/A	
9	9:10	jg	2	198	25.0	36.6	4.013	28	0	Yes	N/A	
10	14:20	jg	2	210	25.0	37.0	4.33	28	0	Yes	N/A	
11	12:30	db	2	227	25.0	36.4	3.809	27	0	Yes	N/A	
12	10:15	ks	2	211	25.0	36.4	3.809	26	0	Yes	N/A	
13	8:39	ks	2	161	25.0	37.2	4.439	26	0	Yes	N/A	
14	8:49	ks	2	179	25.0	36.4	3.809	26	0	Yes	N/A	
15	9:51	ks	2	152	25.0	36.2	3.612	26	0	Yes	N/A	
16	14:15	db	2	204	25.0	36.6	4.013	24	0	Yes	N/A	
17	13:05	db	2	186	25.0	36.4	3.809	25	0	Yes	N/A	
18	10:40	db	2	188	25.0	36.4	3.809	26	0	Yes	N/A	
19	10:23	ks	2	159	25.0	36.2	3.612	25	0	Yes	N/A	
20	7:55	ks	2	282	25.0	36.0	3.421	24	0	Yes	N/A	
21	10:00	ks	2	165	25.0	36.0	3.421	23	0	Yes	N/A	
22	8:16	ks	2	222	25.0	36.0	3.421	23	0	Yes	N/A	
23	12:50	jg	2	146	25.0	36.0	3.421	23	0	Yes	N/A	
24	14:15	db	2	175	25.0	36.2	3.612	22	0	Yes	N/A	
25	11:20	jg	2	188	25.0	36.0	3.421	23	0	Yes	N/A	
26	11:12	ks	2	194	25.0	35.8	3.327	22	0	Yes	N/A	
27	7:34	ks	2	217	25.0	35.6	3.147	21	0	Yes	N/A	
28	14:23	ks	2	182	25.0	36.0	3.421	21	0	Yes	N/A	
29	15:01	ks	2	197	25.0	35.4	2.970	21	0	Yes	N/A	
30	13:40	db	2	215	25.0	35.8	3.327	21	0	Yes	N/A	
31	:											

San Lorenzo Valley Water District
Loch Lomond Water Supply
June 2016

Loch Lomond Water Level

Week ending 07/13/2016
(in feet above mean sea level; lake spills at 577.25 feet)

Currently:	575.85
Percent of capacity:	97.1%

In 1958 SLVWD sold 2,500 acres of property in the vicinity of the Newell Creek Watershed to the City of Santa Cruz, with the agreement that SLVWD would be entitled to purchase 12 ½ percent of the annual safe yield from a future Newell Creek reservoir, up to a maximum of 500 AF/yr. Based on the 1958 agreement, SLVWD began receiving delivers of Loch Lomond water from the City in 1963. In 1965 the District constructed the Glen Arbor Water treatment plant for treating Loch Lomond water. Toward the end of the 1976-77 drought, the City stipulated that the District was not entitled to an allocation of 500 AF/yr, merely 12.5% of the safe yield. This decision based on a reduction to the estimated annual safe yield from the Newell Creek Reservoir, reduced the Districts contractual allocation. On June 7, 1977, the District filed a Complaint for Declaratory Relief, which requested the court to make a judicial determination of the respective parties' duties and rights. In June 1980 a court order fixed the estimated safe yield from Newell Creek Reservoir at reduced quantity, which resulted in a reduction to the Districts contractual allocation to 313 AF/yr.

Production Loch Lomond to SLVWD

Date	Total Used	Total Available
1976 July to June 1977	353 AF	
1977 July to June 2015	0	313 AF
2015 July to 02/2016	0	313 AF
03/2016	0	313 AF

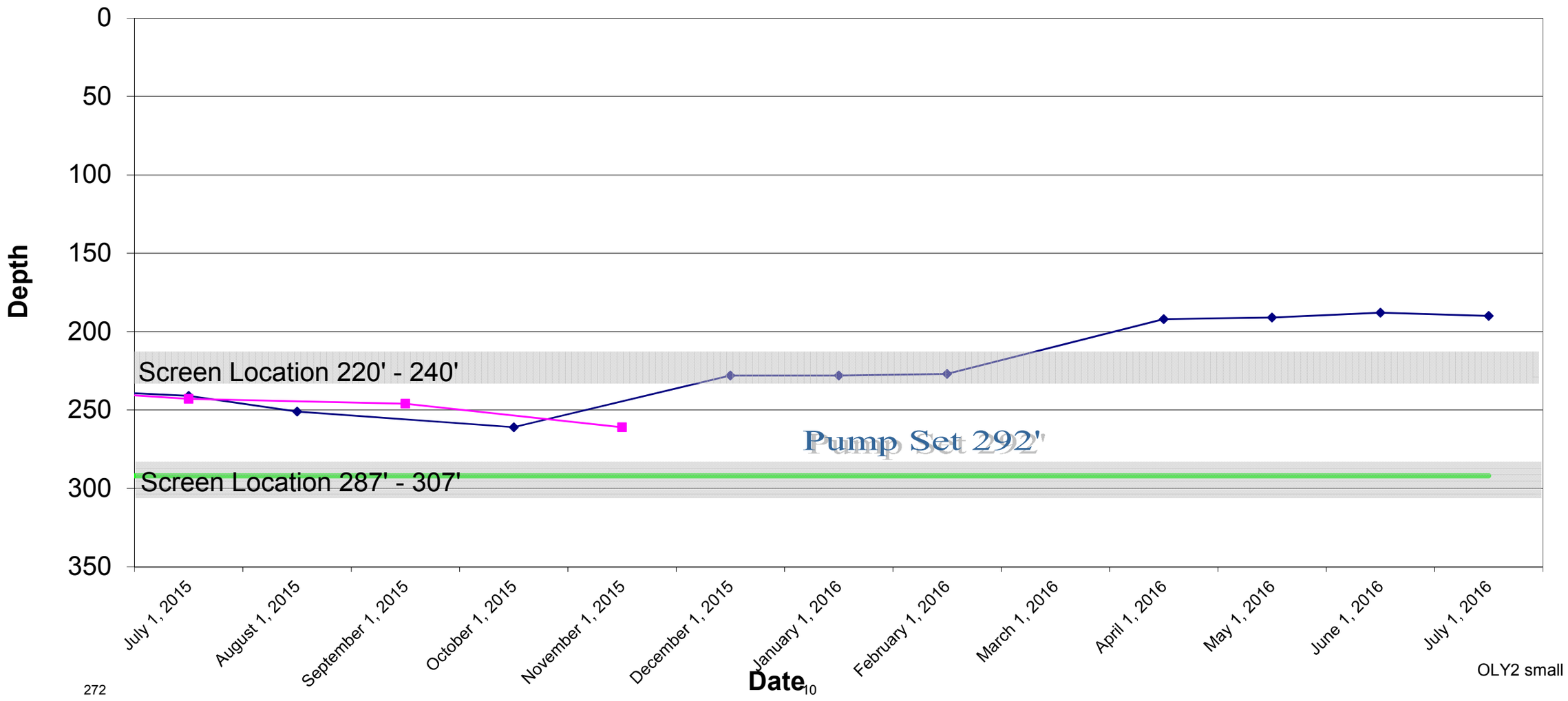
Last time District used Loch Lomond water was June 1977

SAN LORENZO VALLEY WATER DISTRICT

Well Drawdown Report

Olympia 2

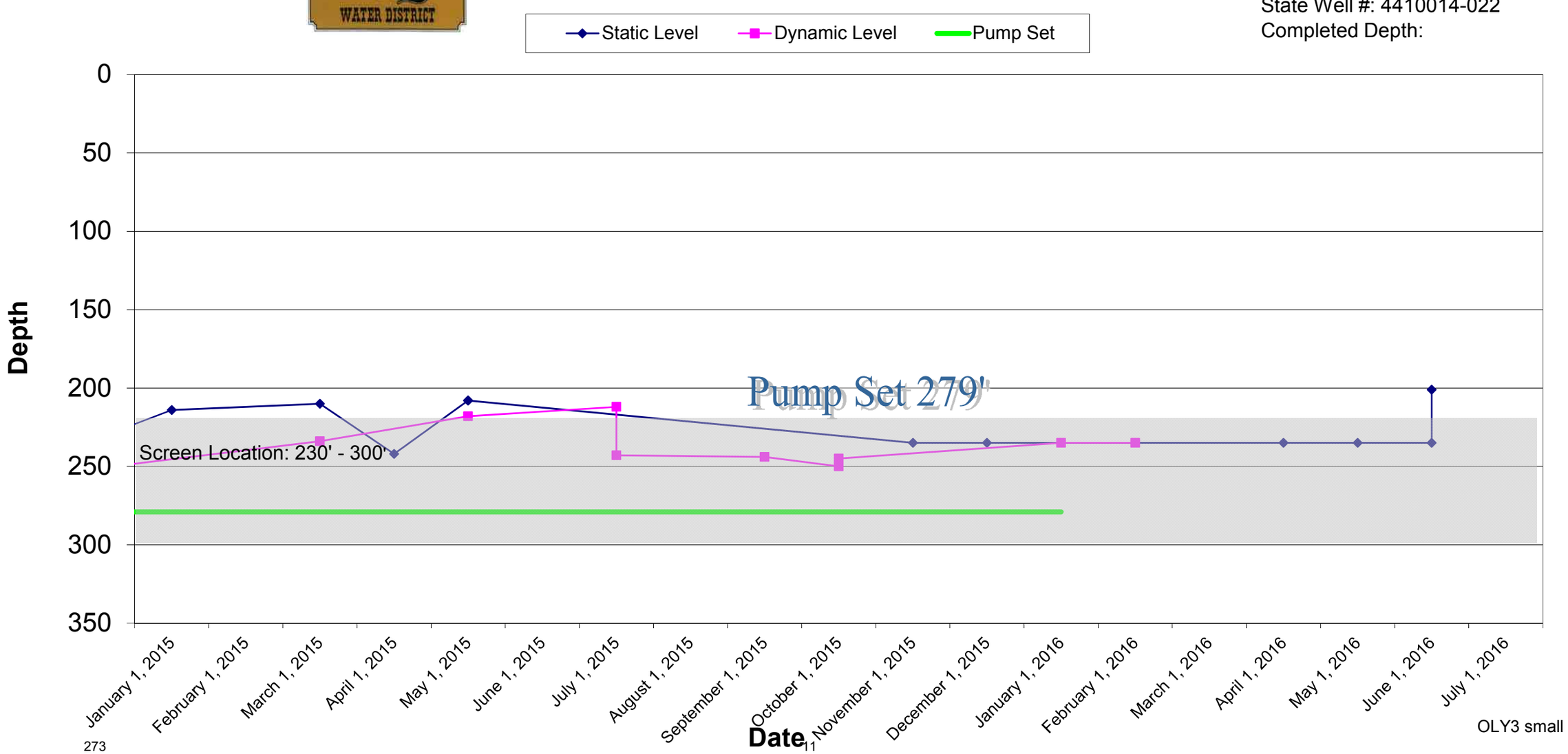
Location: 7701 E. Zayante Rd.
Elevation: 525'
Installed: April 28, 1980
State Well #:10S/O2W-11P01
New #: 4410014-010
Completed Depth: 300'



OLY2 small

SAN LORENZO VALLEY WATER DISTRICT
Well Drawdown Report
Olympia 3

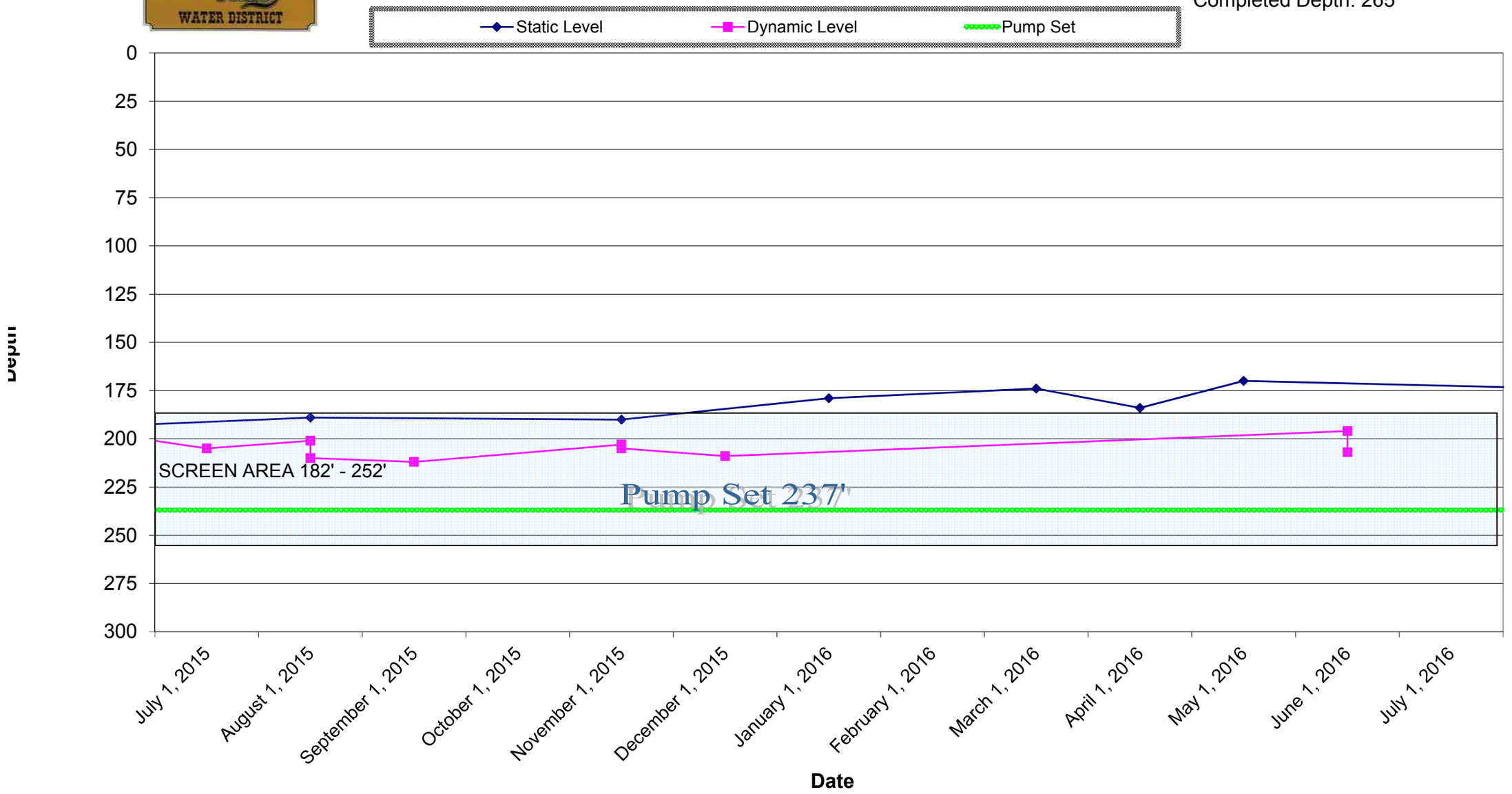
Location: 7701 E. Zayante Rd
Elevation: 538' Mean Sea Level
Installed: 8-15-90
State Well #: 4410014-022
Completed Depth:



OLY3 small

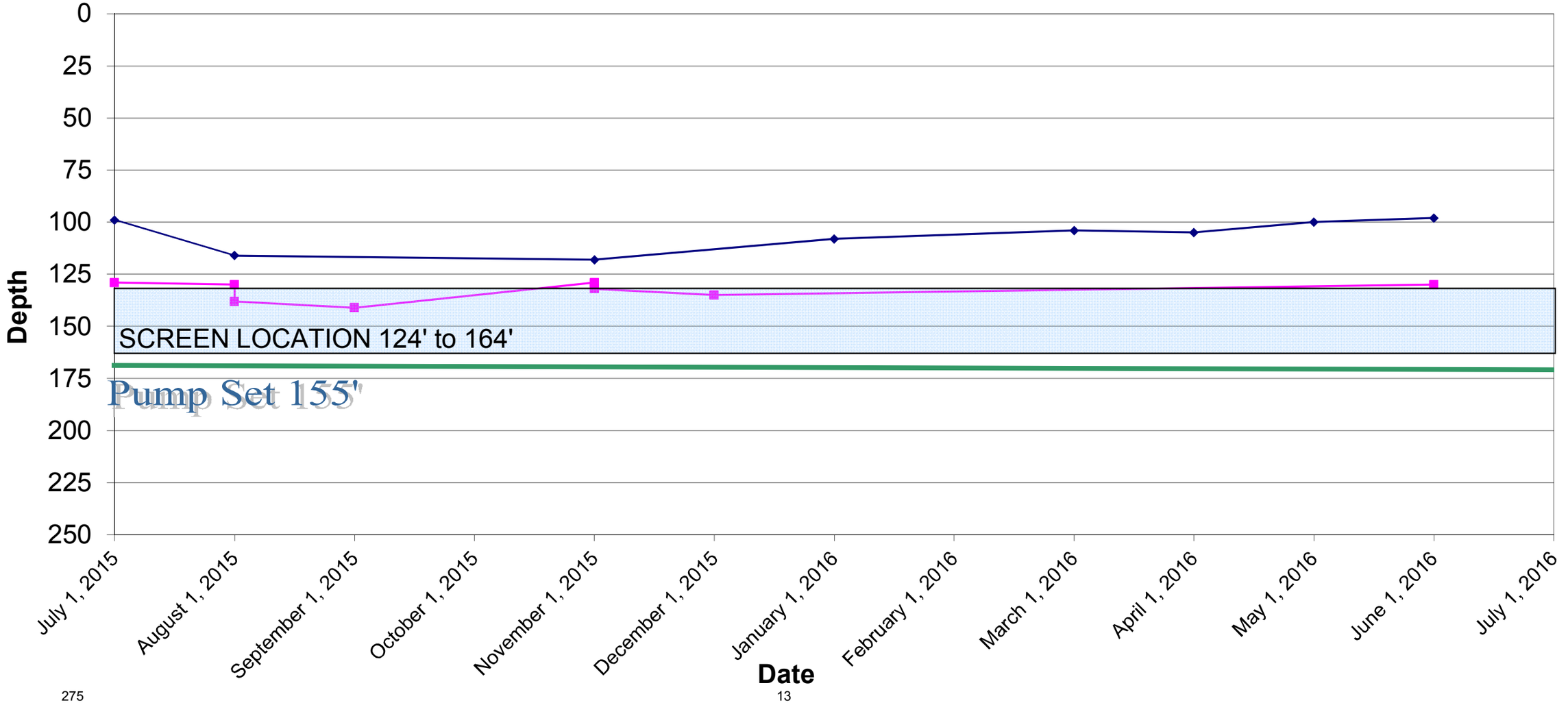
SAN LORENZO VALLEY WATER DISTRICT
Well Drawdown Report
Quail Well 4-A

Location: Cumora Ln. Ben Lomond
Elevation: 596.54 ft @ Pad
Installed: 6-07-2001
State Well #: 4410014-026
Completed Depth: 265



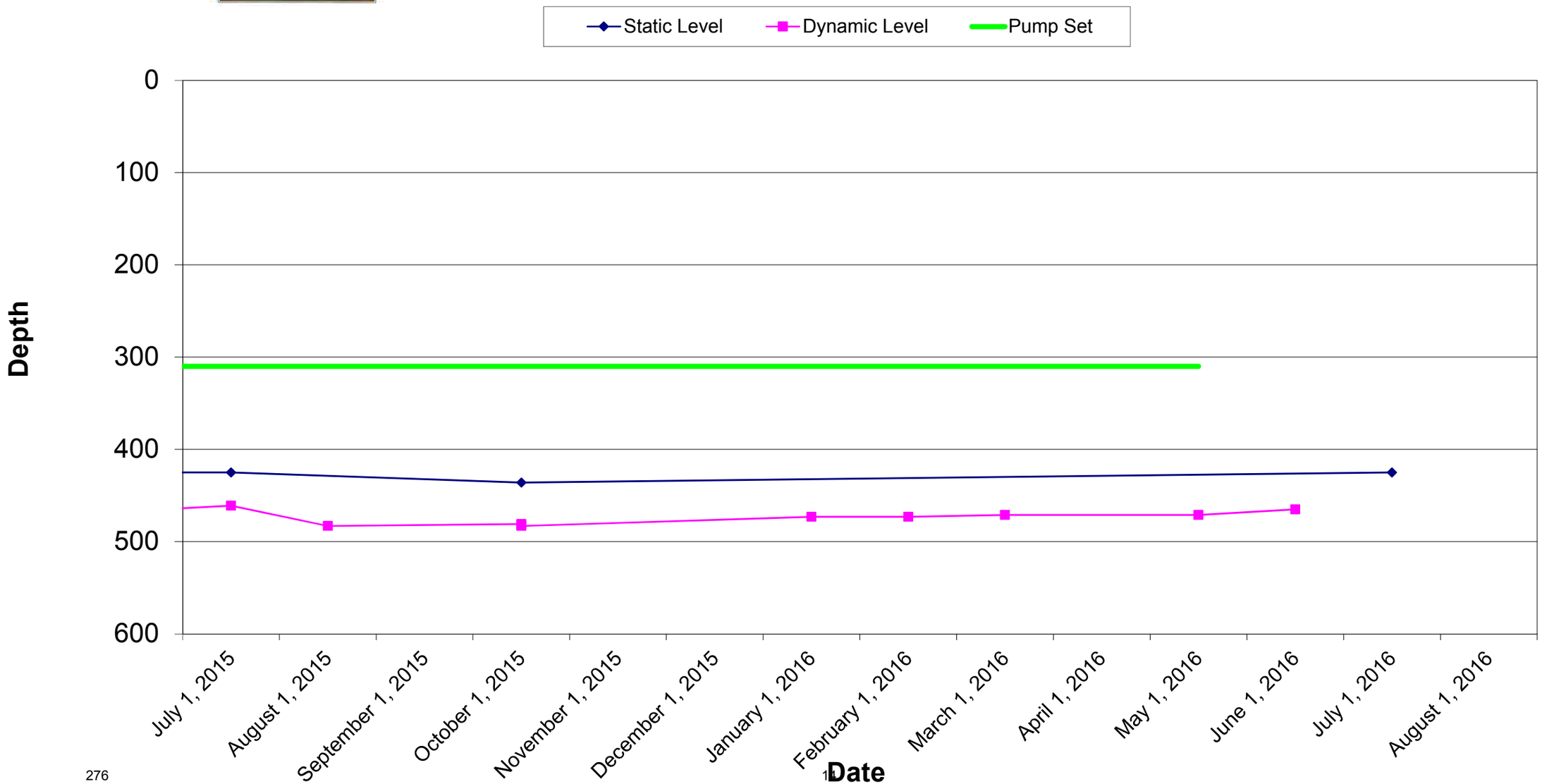
SAN LORENZO VALLEY WATER DISTRICT
Well Drawdown Report
Quail Well 5-A

Location: 1161 Quail Hollow Rd.
Ben Lomond
Elevation: 517.65 ft. @ Pad
Installed: March 2000
State Well #: 4410014-025
Completed Depth: 174'



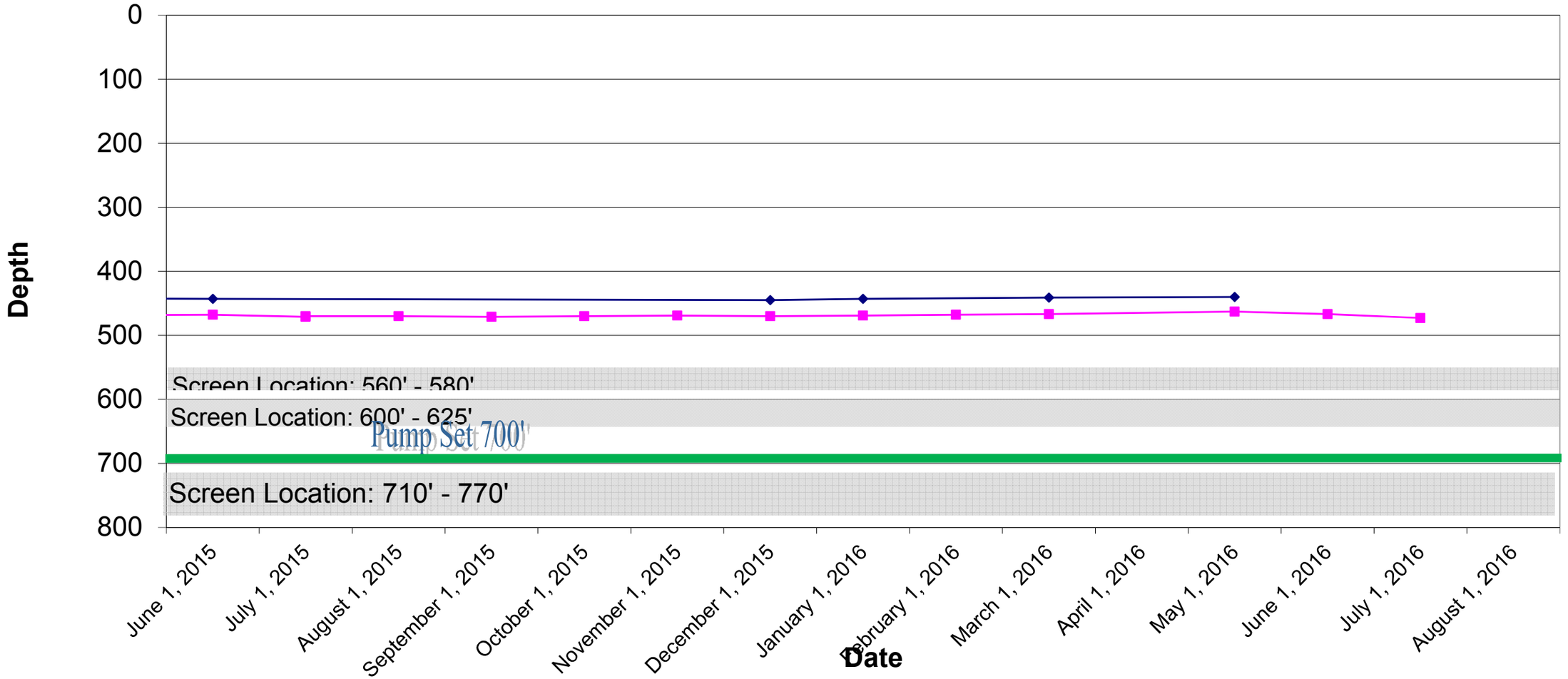
SAN LORENZO VALLEY WATER DISTRICT
Well Drawdown Report
Pasatiempo 5-A

Location: So. Of 3650 Graham Hill Rd
Elevation: 752'
Installed 1-1-14
State Well #:4410014-014
Completed Depth: 710'



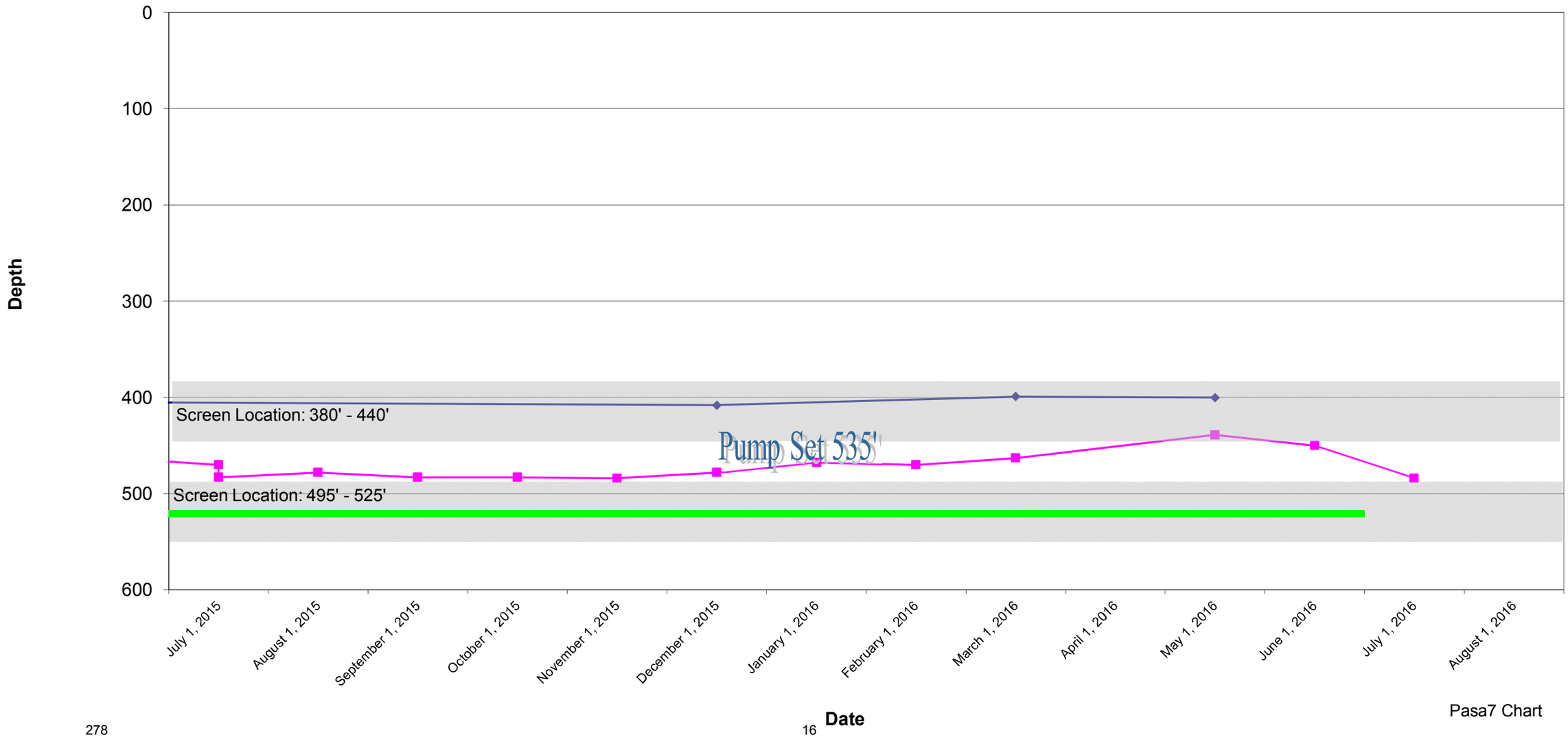
SAN LORENZO VALLEY WATER DISTRICT
Well Drawdown Report
Pasatiempo 6

Location: Behind 3650 Graham Hill Rd.
Elevation: 775'
Installed: 5-30-91
State Well #: 4410014-023



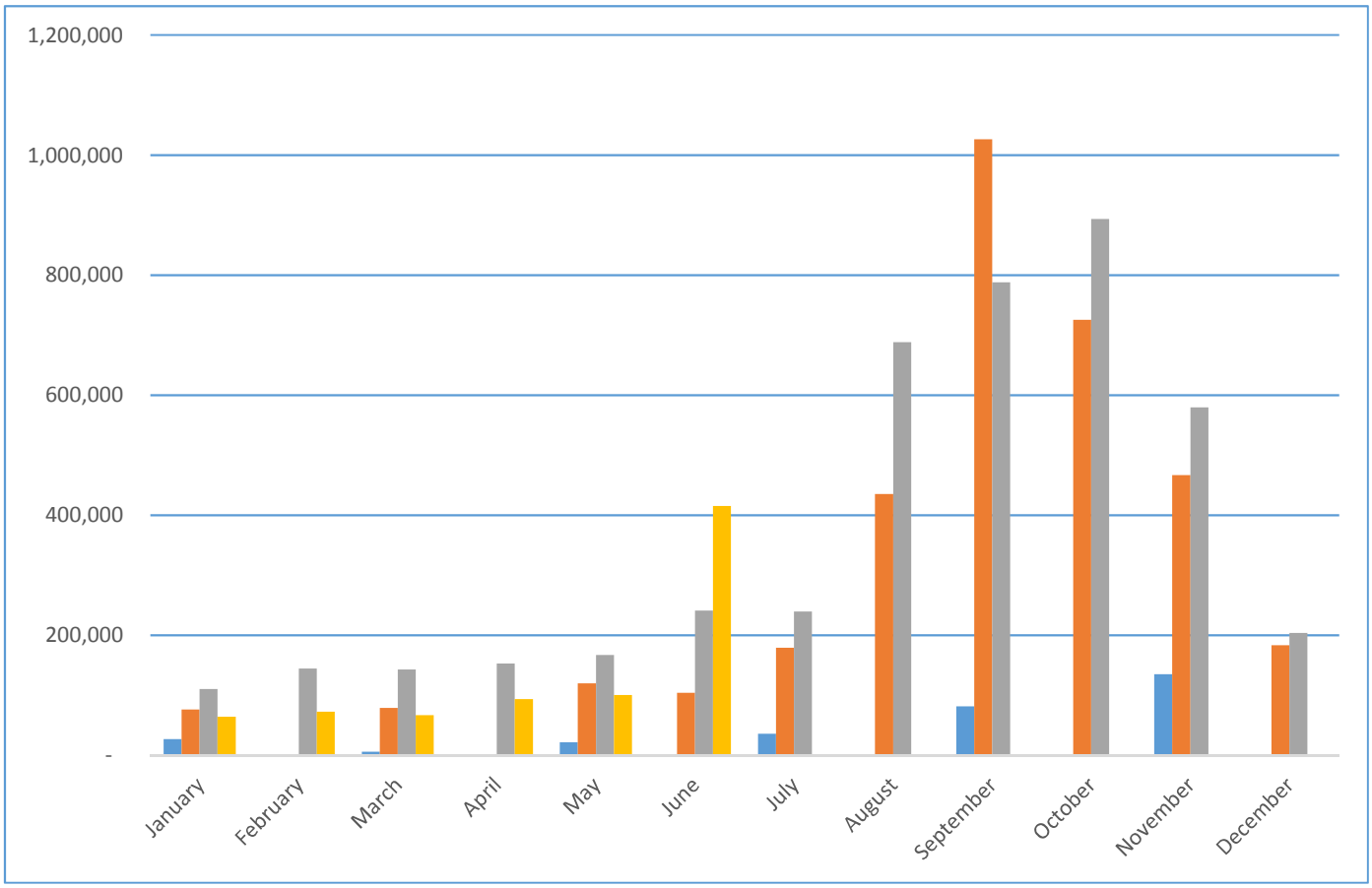
SAN LORENZO VALLEY WATER DISTRICT
Well Drawdown Report
Pasatiempo 7

Location: South of Probation Center
Elevation: 734' MSL
Installed: July 21,1990
State Well #: 4410014-024
Completed Depth: 540'



Pasa7 Chart

SAN LORENZO VALLEY WATER DISTRICT
BULK WATER SALES
GALLONS
June 2016



Month	2013	2014	2015	2016
January	26,928	76,296	109,965	63,850
February			144,364	72,556
March	5,984	78,540	142,868	66,572
April			152,592	93,500
May	21,692	119,680	166,804	100,232
June		103,972	240,983	415,140
July	35,904	178,772	239,360	
August		435,336	688,160	
September	81,352	1,026,256	787,644	
October		725,560	893,112	
November	134,640	466,752	579,700	
December		183,260	203,456	
Totals	306,500	3,394,424	4,349,008	811,850

SAN LORENZO VALLEY WATER DISTRICT
MONTHLY LEAK REPORT
June 2016

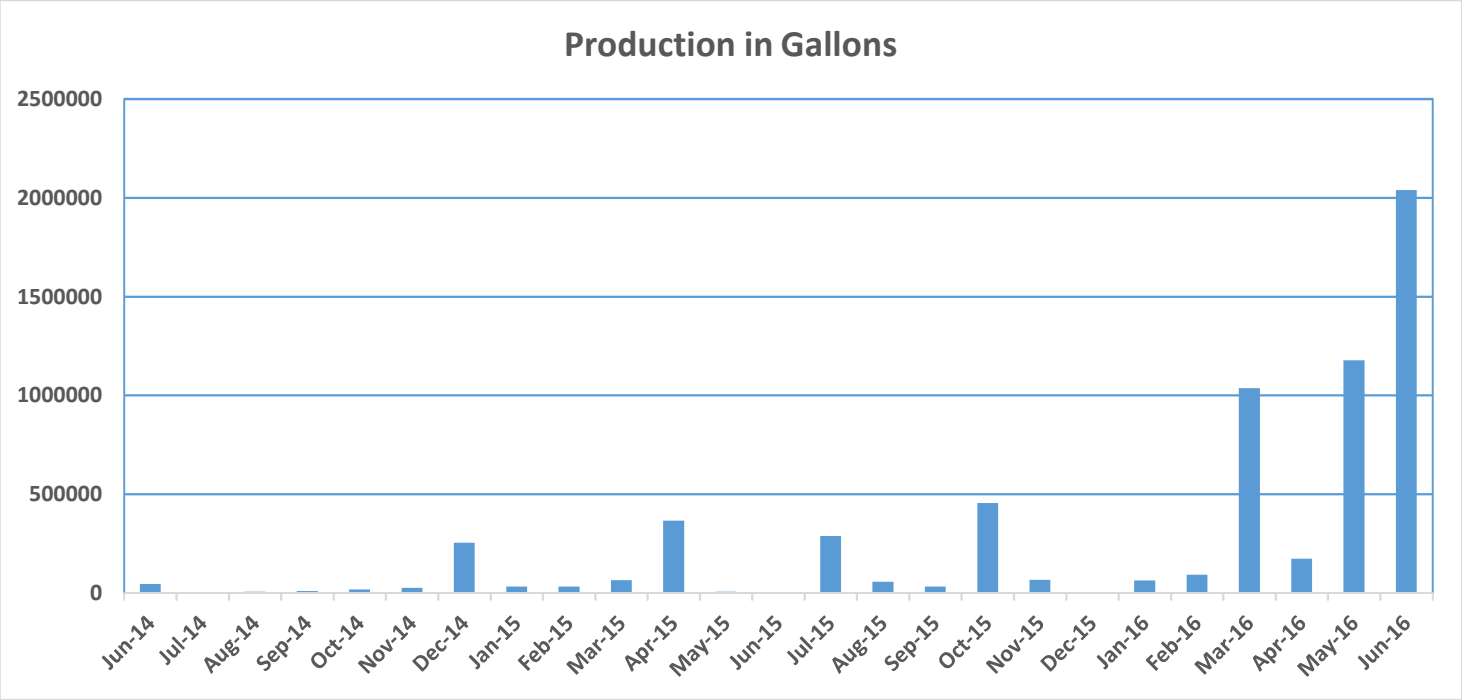
NORTH SYSTEM

Leak Type	Location	Town	Gallons Lost
400 MAIN LEAKING	110 Juanita Rd.	Boudler Creek	-
400 MAIN LEAKING	West Road & Middleton Road	Boulder Creek	720.00
400 MAIN LEAKING	12938 IRWIN WAY	Boulder Creek	-
400 MAIN LEAKING	320 Blue Ridge Dr.	Boulder Creek	720.00
400 MAIN LEAKING	Middelton/East Creek	Boulder Creek	1,500.00
400 MAIN LEAKING	375 St. Francis Dr.	Boulder Creek	720.00
400 MAIN LEAKING	331 River Dr.	Boulder Creek	7,200.00
400 MAIN LEAKING	515 Middleton Dr.	Boulder Creek	60.00
411 TANK OVERFLOWING	105 Upper Redwood Dr.	Boulder Creek	-
400 MAIN LEAKING	11785 LAKESHORE DR	Lompico	1,440.00
411 TANK OVERFLOWING	Oly. Watershed	Lompico	1,200.00
		SubTotal North	13,560
	FELTON SYSTEM		
400 MAIN LEAKING	Watershed off of Felton Empire Grade	Felton	4,800.00
		SubTotal Felton	4,800.00
	MANANA WOODS		
		SubTotal Manana	0
		Total All Systems	18,360

SAN LORENZO VALLEY WATER DISTRICT
Authorized Unmetered Water Use (GALLONS)
June 2016

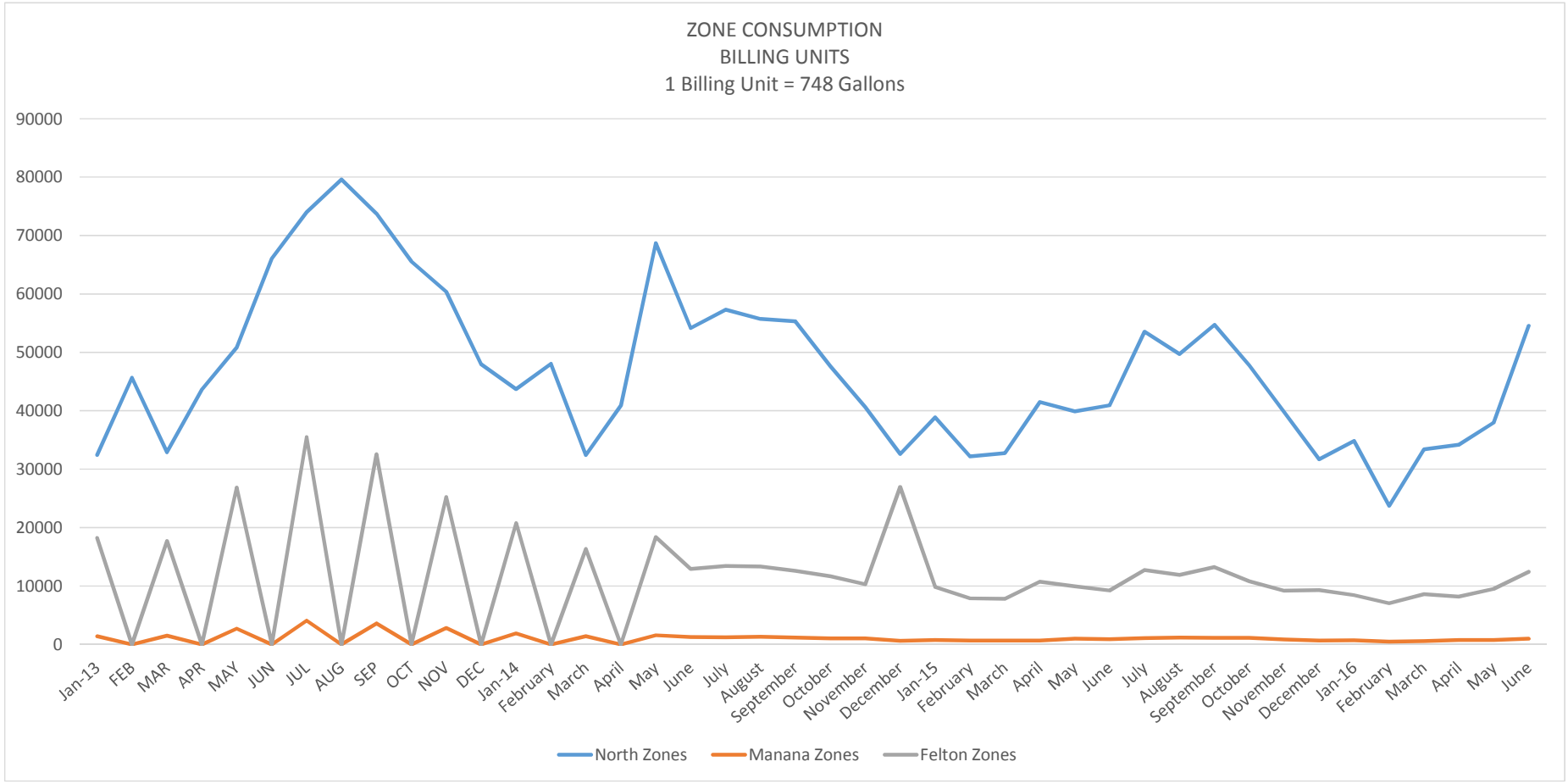
North System		Monthly Total
Mainline Flushing		-
Tank Leakage		90,720
Probation	1.0 gpm	43,200
Upper Swim	0.3 gpm	12,960
Blue Ridge	0.4 gpm	17,280
Echo	0.1 gpm	4,320
Highland	0.3 gpm	12,960
Process Water		92,880
Lyon cL2 Analyzer	0.02 gpm	864
Quail 5 cL2 Analyzer	0.11 gpm	4,752
Olympia cL2 Analyzer	1.32 gpm	57,024
Paso cL2 Analyzer	0.7 gpm	30,240
Firefighting		0
Tank Overflow		0
Waste Water		0
Sub Total North		183,600
Felton Water System		
Mainline Flushing		
Tank Leakage		4,320
El Solyo	0.1 gpm	4,320
Process Water		
Kirby WTP cL2 Analyzers	0.8 gpm	34,560
Firefighting		0
Tank Overflow		0
Waste Water		0
Sub Total Felton		38,880
Manana Woods Water System		
Mainline Flushing		-
Tank Leakage		
Process Water		
Firefighting		
Tank Overflow		
Waste Water		
Sub Total Manana Woods		0
Lompico Water System		
Kaski Tank	0.1 gpm	4,320
Lewis Tank	0.3 gpm	12,960
Sub Total Lompico		17,280
Total All Systems		239,760

SAN LORENZO VALLEY WATER DISTRICT
LOMPICO INTERTIE
June 2016



Month / Year	2014	2015	2016
January		32,164	62,641
February		32,912	91,503
March		65,076	1,036,730
April		365,540	172,572
May		3,740	1,177,674
June	44,800	3,740	2,039,326
July		288,728	
August	5,984	55,934	
September	9,724	32,252	
October	17,204	454,036	
November	26,180	66,572	
December	254,320	0	
Totals	358,212	1,400,694	4,580,445

SAN LORENZO VALLEY WATER DISTRICT
Consumption by Zone
June 2016



SAN LORENZO VALLEY WATER DISTRICT
CONSUMPTION BY ZONE

Zones	Jan-13	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	742	0	684	0	1053	0	1315	0	1267	2	1204
2	0	174	0	199	0	486	0	631	0	519	0	458
3	0	436	0	399	0	653	0	814	0	850	5	676
4	1	14856	0	13189	16	20742	5	25687	18	20923	8	15756
5	0	2782	0	2430	3	4121	1	4676	5	3612	0	2820
6	0	100	0	90	0	105	0	157	0	104	0	82
7	0	118	0	147	0	315	0	333	0	297	0	266
8	52	9308	19	9210	60	13143	52	15349	107	12132	123	9060
9	0	622	0	701	0	1182	0	1671	0	1289	0	907
10	0	231	0	66	0	122	0	278	0	188	0	152
11	0	1144	2	1180	9	1869	0	2131	0	2353	6	1613
12	0	18	0	20	0	48	0	47	0	42	0	39
13	0	694	0	668	14	1198	0	1420	2	1117	0	828
14	0	1024	0	981	0	1837	0	2144	0	1648	5	1251
15	0	13	0	33	0	58	0	74	0	54	0	37
16	12023	9045	12059	9786	16486	13371	25131	16108	27729	13526	20690	7555
17	0	592	0	569	0	736	0	891	2	707	10	674
18	8	1752	0	1457	0	2087	1	2386	0	2001	1	1907
19	2	608	0	538	1	815	5	869	1	842	0	796
20	1203	12	1359	9	2262	12	3325	44	2985	12	2900	11
21	5759	0	5447	3	8307	0	12741	7	12050	2	9618	0
22	12014	0	12416	0	20676	11	28212	29	26767	24	23624	0
23	1340	0	1567	0	2932	0	4511	30	4056	9	3360	0
24	26	1408	26	1284	55	2060	36	2521	40	2062	29	1902
North Totals	32428	45679	32895	43643	50821	66024	74020	79612	73762	65580	60381	47994
25	1053	0	1118	0	1773	0	3000	0	2760	0	2136	0
26	302	0	332	0	855	0	937	0	725	0	561	0
27	55	0	65	0	80	0	136	0	121	0	105	0
Manana Totals	1410	0	1515	0	2708	0	4073	0	3606	0	2802	0
28	675	0	632	0	970	0	1308	0	935	0	827	0
29	185	0	177	0	436	0	699	0	637	0	464	0
30	514	0	580	0	691	0	991	8	1000	0	765	0
31	13634	0	13424	0	20483	14	27588	10	25615	12	19096	0
32	239	0	258	0	321	0	307	0	293	0	324	0
33	2978	0	2663	1	3984	0	4604	-54	4080	58	3777	0
Felton Totals	18225	0	17734	1	26885	14	35497	-36	32560	70	25253	0

SAN LORENZO VALLEY WATER DISTRICT
CONSUMPTION BY ZONE

Zones	Jan-14	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
1	0	911	0	686	616	548	514	562	492	457	411	300
2	0	397	0	279	228	197	190	214	217	149	167	92
3	0	577	0	422	373	284	311	389	266	310	235	163
4	17	14471	5	12306	10732	9023	9868	9573	8845	8286	6338	5540
5	5	2647	-22	2116	1829	1600	1654	1652	1407	1291	1184	854
6	2	104	0	89	71	52	53	51	44	42	45	41
7	0	215	81	134	133	94	106	101	107	89	61	41
8	238	9707	0	8387	5879	5312	6271	5501	6341	5593	4051	3837
9	0	900	0	631	457	496	425	515	419	426	380	221
10	0	106	4	105	101	102	88	94	139	68	51	33
11	0	1533	0	1109	789	716	700	644	725	542	545	379
12	0	22	0	25	29	18	17	20	40	18	19	6
13	2	887	0	721	648	484	561	515	457	472	327	261
14	0	1258	0	902	756	702	761	704	653	691	466	354
15	0	33	11804	30	26	30	32	18	19	19	12	8
16	15851	9694	0	9163	18029	14392	14747	15650	14297	11712	10482	7978
17	0	578	0	490	306	263	302	273	309	260	222	325
18	7	1747	0	1481	1578	947	957	868	1034	799	823	533
19	1	762	0	544	417	317	351	320	363	301	321	194
20	1973	11	1334	15	1487	1060	1203	987	964	971	778	593
21	7125	25	5372	0	6284	4518	4780	4705	4212	3912	3450	3327
22	16003	11	12196	2	14711	10524	10920	10121	11515	9124	8293	6193
23	2451	0	1634	0	1960	1562	1315	1264	1472	1215	1045	730
24	33	1474	31	1286	1260	920	1172	990	969	894	927	604
North Totals	43708	48070	32439	40923	68699	54161	57298	55731	55306	47641	40633	32607
25	1435	0	1049	0	1172	1008	973	1025	909	830	777	514
26	404	0	300	0	348	250	245	286	237	210	206	133
27	49	0	40	0	47	21	23	22	22	19	31	12
Manana Totals	1888	0	1389	0	1567	1279	1241	1333	1168	1059	1014	659
28	730	0	541	0	602	412	375	466	345	355	326	229
29	311	0	182	0	317	248	286	257	248	247	173	138
30	640	0	457	0	526	355	414	319	300	333	246	183
31	15707	3	12246	1	13736	9945	10294	10341	9717	8968	7894	25290
32	289	0	345	0	426	260	266	243	276	229	241	155
33	3134	0	2584	0	2782	1690	1802	1700	1683	1555	1424	966
Felton Totals	20811	3	16355	1	18389	12910	13437	13326	12569	11687	10304	26961

SAN LORENZO VALLEY WATER DISTRICT
CONSUMPTION BY ZONE

Zones	Jan-15	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
1	326	311	347	322	397	375	402	458	415	425	343	258
2	83	81	121	183	170	164	189	223	237	221	196	94
3	189	185	203	220	208	237	326	253	291	274	229	166
4	6869	5450	5779	7138	6624	7035	9539	7914	8396	7595	5959	5021
5	1724	944	1032	1115	1169	1405	1512	1356	1652	1463	1085	976
6	60	44	51	49	52	51	52	62	63	60	48	36
7	71	59	64	78	67	68	100	89	114	82	70	66
8	4567	3788	3864	4590	4438	4849	6115	5352	6775	5380	4144	3964
9	302	255	287	340	274	293	386	353	466	363	301	151
10	54	41	40	59	55	75	85	68	70	79	45	32
11	649	464	401	538	468	528	709	571	667	654	514	426
12	13	10	12	15	12	15	17	17	17	23	12	6
13	437	270	298	391	350	390	508	383	507	407	399	249
14	516	415	428	589	514	538	689	595	846	617	439	368
15	8	8	15	20	17	18	27	14	44	23	14	12
16	8729	7826	8767	10388	10232	10971	13128	13307	14181	13525	10530	7906
17	282	217	214	258	226	281	268	258	314	234	228	265
18	827	673	674	810	705	717	911	776	962	755	737	586
19	284	246	256	312	264	261	317	280	373	278	295	212
20	742	597	605	823	761	732	1018	889	940	1013	789	590
21	3367	2493	2587	3317	3984	3259	5163	5226	4947	4679	4120	3026
22	7333	6458	5402	8115	7125	7006	9817	9032	9940	7359	7438	6031
23	720	761	716	1160	937	979	1331	1187	1561	1327	1079	711
24	736	584	592	684	867	715	935	1063	929	929	696	536
North Totals	38888	32180	32755	41514	39916	40962	53544	49726	54707	47765	39710	31688
25	576	524	506	667	774	701	857	920	877	884	667	528
26	154	132	141	165	202	177	219	220	201	225	164	137
27	25	17	21	18	14	15	20	22	36	23	15	9
Manana Totals	755	673	668	850	990	893	1096	1162	1114	1132	846	674
28	264	227	206	276	288	259	322	374	364	208	148	124
29	158	130	125	179	140	154	234	198	243	185	171	179
30	239	193	191	268	286	231	333	256	307	271	236	212
31	7477	6048	5906	8188	7683	7018	9736	9279	10208	8432	7030	7588
32	231	176	210	236	207	212	268	244	359	275	297	173
33	1446	1108	1175	1590	1346	1350	1877	1548	1772	1445	1324	1043
Felton Totals	9815	7882	7813	10737	9950	9224	12770	11899	13253	10816	9206	9319

SAN LORENZO VALLEY WATER DISTRICT
CONSUMPTION BY ZONE

Zones	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
1	329	288	296	430	319	449						
2	76	63	57	91	118	216						
3	437	276	151	149	169	271						
4	7122	5428	5909	5840	6444	9068						
5	1235	1018	1237	1029	1176	1748						
6	46	42	50	36	42	50						
7	65	55	57	64	126	201						
8	3970	4050	4342	3754	4465	6214						
9	227	195	227	226	253	300						
10	42	39	34	49	61	92						
11	527	410	418	446	567	625						
12	6	5	3	6	7	16						
13	311	242	298	302	315	460						
14	405	357	406	411	438	802						
15	14	14	18	17	15	22						
16	8487	1589	7985	9003	10501	13585						
17	284	392	220	225	303	268						
18	755	600	605	669	816	773						
19	267	219	203	217	277	311						
20	661	461	528	614	643	1047						
21	3036	2802	3447	4390	3478	6851						
22	4955	4230	5690	4978	6110	8786						
23	535	432	637	557	704	1393						
24	1063	524	571	697	632	1004						
North Totals	34854.68	23731	33389	34201	37977	54552	0	0	0	0	0	0
25	529	355	419	562	658	794						
26	160	106	132	154	117	168						
27	17	15	16	17	16	15						
Manana Totals	706	476	567	733	791	977	0	0	0	0	0	0
28	133	218	260	306	304	418						
29	350	101	118	118	133	196						
30	195	161	178	157	175	272						
31	6347	5394	6525	6305	7316	9692						
32	223	162	256	172	228	225						
33	1176	1026	1269	1136	1371	1634						
Felton Totals	8424	7062	8606	8194	9527	12438	0	0	0	0	0	0

SLV Monthly Water Quality Service Order Summary
June 2016

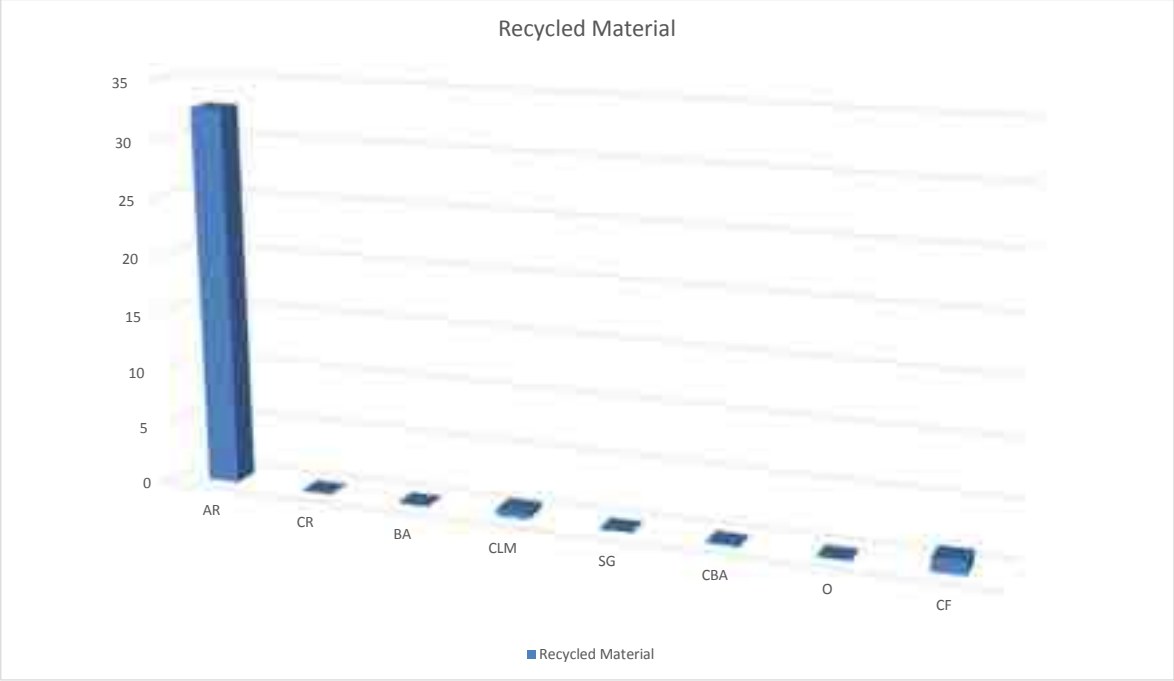
Water Quality Complaint List

Date Received	Type Of Complaint							Address	Conclusion	System
	Taste/ Odor	Color	Turbidity/ Particles	Worms/ Other Visible Organisms	Pressure (High/Low)	Illness (Waterborne)	Other (Specify)			
6/6/2016		X						417 Bahr Dr	A structure fire had occoured in the area on the day before the customer called, which most likely stirred up sediment in the water main. Upon field investigation, the water had cleared up. Free chlorine was 0.8 mg/L	SLV-North
6/13/2016	X							15025 Two Bar Rd	Upon field investagation, water quality results were normal and within range. Free chlorine was 1.0 mg/L. A vinyl hose giving off a strong odor was connected to faucet outside of where the taste was noticed. Customer disconnected hose.	SLV-North
6/27/2016		X						804 Trinkling Creek Dr.	Customers service line had been repaired prior to discolored water. Upon field investigation, colored water was observed at customers outside hose bib. The customer's service line was flushed until colored water no longer persisted. After flushing, free chlorine was 0.4 mg/L, while turbidity was 0.19 NTU.	Lompico

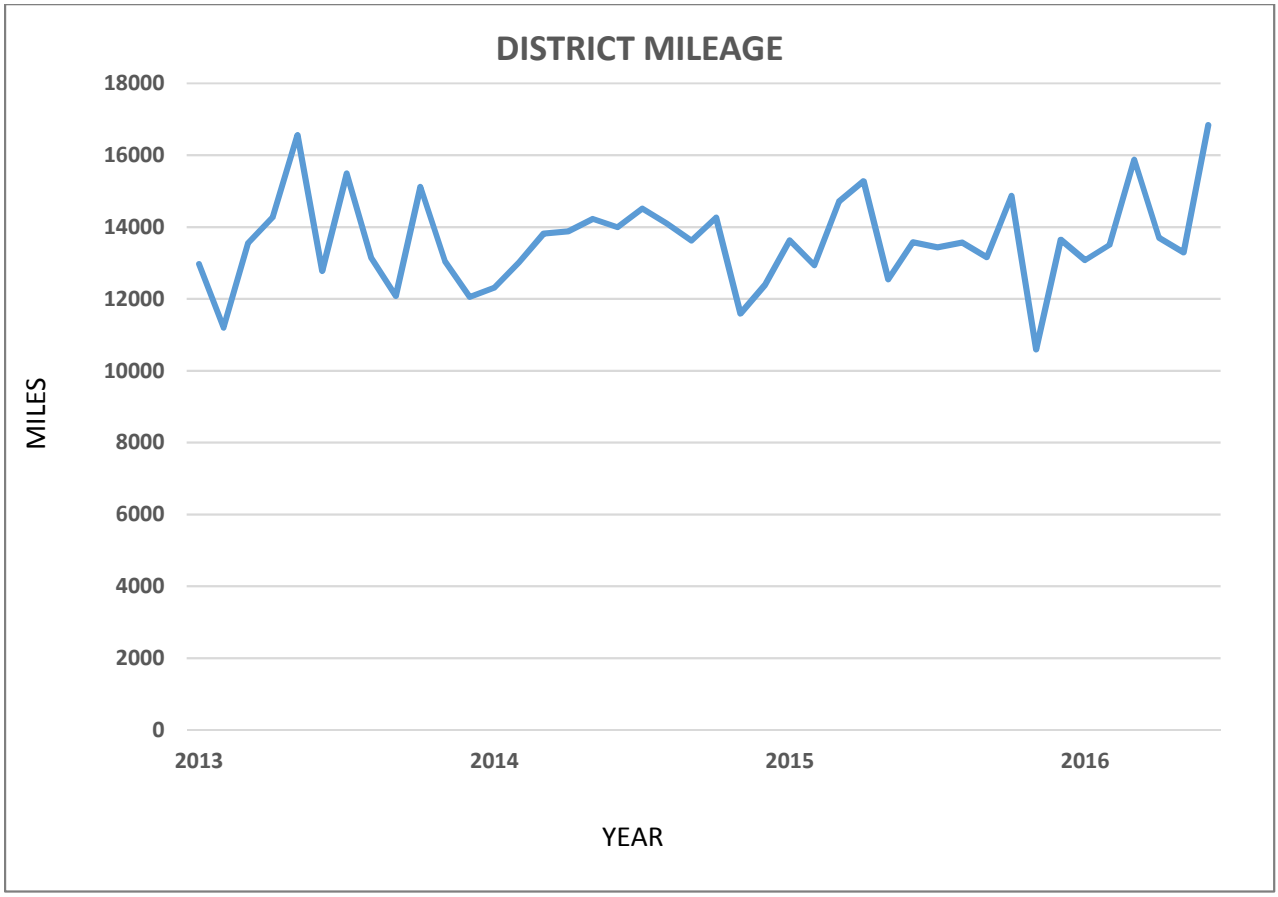
Soils Disposal Log
June 2016

DATE	REASON	DUMP	TYPE / AMOUNT cubic yards								TOTAL Cyds By Month
			AR	CR	BA	CLM	SG	CBA	O	CF	
6/2/2016	Main Repair	OLY	16							0.17	
6/10/2016	Main Repair	OLY	0.25			0.5					
6/24/2016	Main Repair	OLY								1	
6/28/2016	Main Repair	OLY	0.5			0.04					
6/29/2016	Main Repair	OLY	16			0.08					
		TOTALS	32.75	0	0	0.62	0	0	0	1.17	34.54
			AR	CR	BA	CLM	SG	CBA	O	CF	

AR Asphalt Recycle
CR Concrete Recycle
BA Baserock/Asphalt Mix
CLM Clay/loom/mud
SG sand Baserock Mix
CBA Clay/Sand/Base/Asphalt/mix
CF Clean Fill
O other

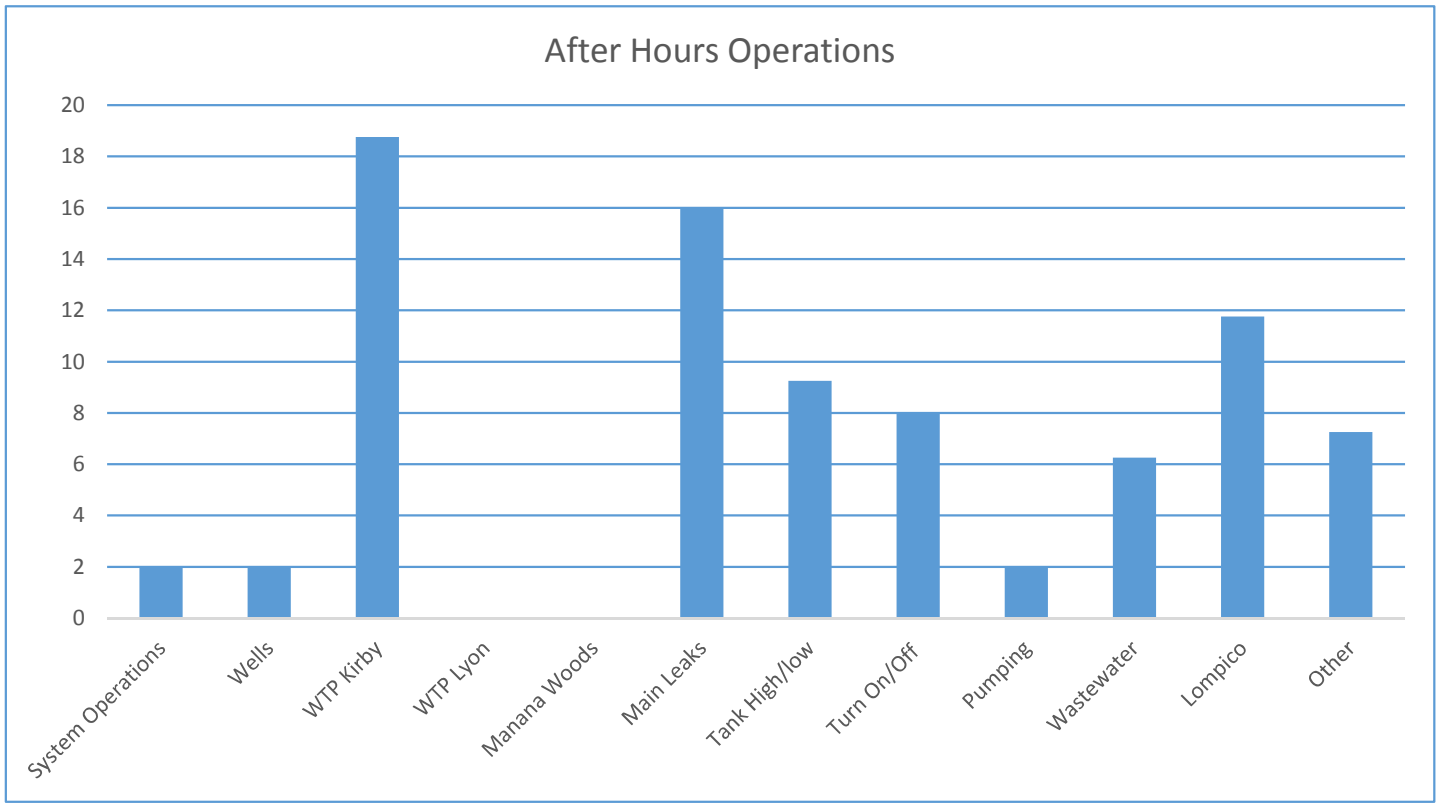


SAN LORENZO VALLEY WATER DISTRICT
VEHICLE MILEAGE
June 2016



Month	2013	2014	2015	2016
January	12,976	12,317	13,633	13,082
February	11,201	13,015	12,934	13,505
March	13,558	13,817	14,714	15,882
April	14,283	13,883	15,279	13,704
May	16,560	14,228	12,550	13,290
June	12,780	14,000	13,582	16,841
July	15,497	14,519	13,441	
August	13,136	14,096	13,569	
September	12,087	13,622	13,137	
October	15,120	14,261	14,868	
November	13,046	11,594	10,591	
December	12,060	12,394	13,648	
Totals	162,304	161,746	161,946	86,304

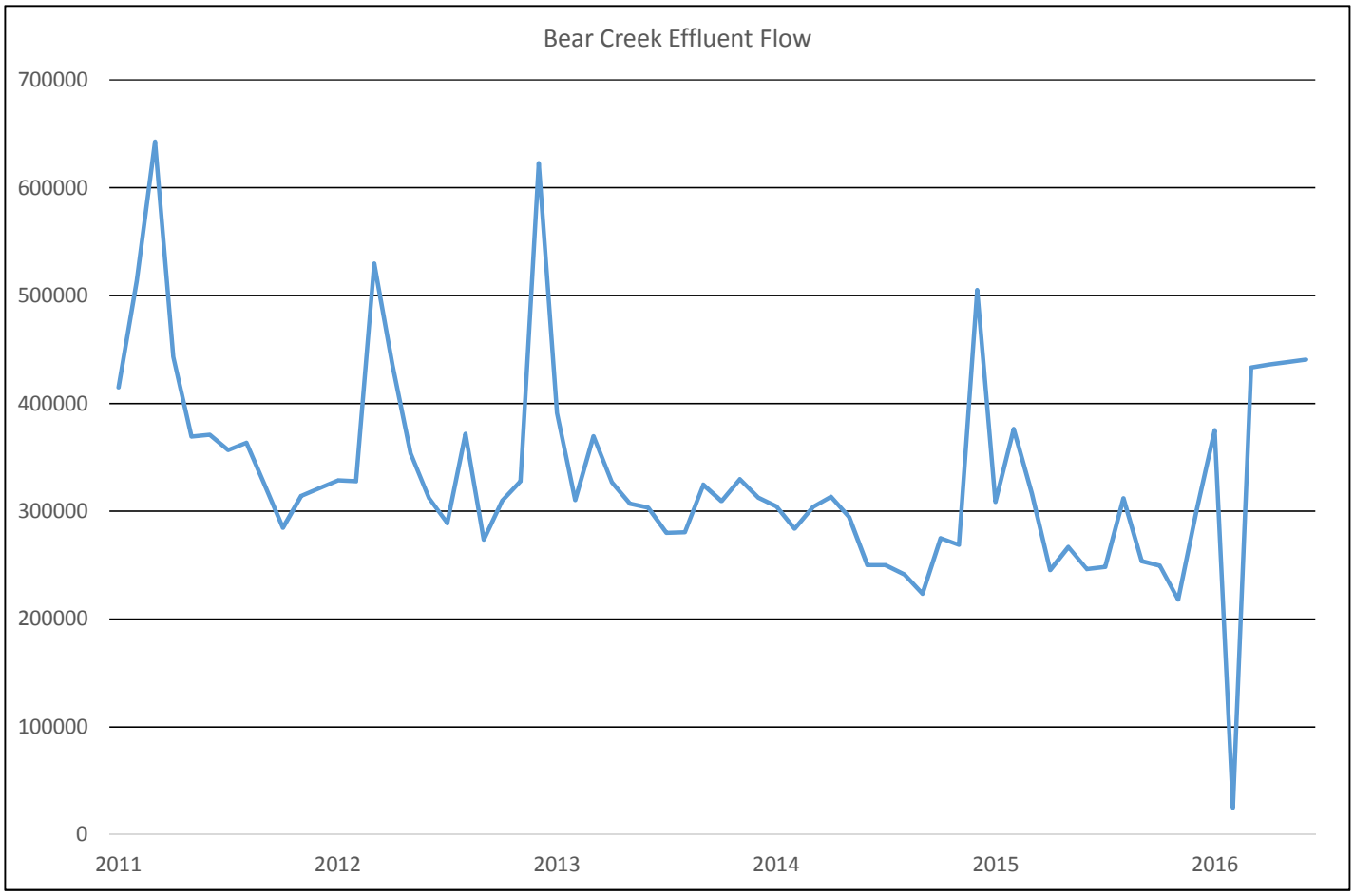
SAN LORENZO VALLEY WATER DISTRICT
OPERATIONS DEPARTMENT
June 2016



Description	Hours
System Operations	2
Wells	2
WTP Kirby	18.75
WTP Lyon	0
Manana Woods	0
Main Leaks	16
Tank High/low	9.25
Turn On/Off	8
Pumping	2
Wastewater	6.25
Lompico	11.75
Other	7.25
Total	83.25

	2015	2016
January	N/A	145
February	N/A	86.5
March	N/A	153.75
April	82.50	72
May	104.75	49.25
June	172.50	83.25
July	124.25	
August	111.75	
September	230.25	
October	128.25	
November	114.25	
December	186.25	
	1254.75	589.75

SAN LORENZO VALLEY WATER DISTRICT
BEAR CREEK ESTATES WASTEWATER
June 2016



Month/Year	2011	2012	2013	2014	2015	2016
January	414,900	328,500	391,200	304,700	308,500	375,200
February	513,700	327,600	310,100	283,800	376,100	Out for Repair
March	642,800	529,700	369,500	303,800	316,100	433,206
April	443,400	435,300	326,800	313,200	245,500	435,870
May	369,200	353,200	306,900	294,400	266,700	438,361
June	370,800	311,900	303,300	250,000	246,200	440,473
July	356,800	288,900	297,800	250,000	248,200	
August	363,400	371,800	280,400	241,500	311,900	
September	324,400	273,600	324,600	223,300	253,500	
October	284,700	309,400	304,900	274,900	249,300	
November	314,100	327,700	329,600	268,900	218,100	
December	321,500	622,500	312,900	505,100	300,200	
Totals	4,719,700	4,480,100	3,858,000	3,513,600	3,340,300	2,123,110

Should state limit small water agencies?

A new emergency water line was constructed in 2014 to connect Lompico residents with water from the San Lorenzo Valley in case of drought conditions affected the Lompico well. (Dan Coyro -- Santa Cruz Sentinel file)

By Paul Rogers, **progers@bayareanewsgroup.com**

POSTED: 06/19/16, 7:08 PM PDT

Lompico Water District president Lois Henry and vice president Shannar Abraham in 2014 were tasked with trying to guide the tiny district, which serves just under 500 people, through a very trying time. (Shmuel Thaler/Sentinel file)
California's drought has revealed that when it comes to water, not every community is equal.

Large urban areas, from the Bay Area to Los Angeles, asked residents to conserve, raised rates to buy water from other places and generally have gotten by without much inconvenience, other than brown lawns and shorter showers.

But communities served by smaller systems, from farm towns to forest hamlets — often lacking money, expertise and modern equipment — have struggled and, in some cases, nearly run out of water entirely.

Now, a bill by a Bay Area state lawmaker aims to slow the spread of little “mom and pop” water providers by making it very difficult to create new ones.

The problem, says state Sen. Bob Wieckowski, D-Fremont, is that California has 7,642 water systems. Some serve only campgrounds, prisons or schools. Of the ones in communities with full-time residents, 63 percent have 200 or fewer connections.

Many have no permanent employees. Some own only one well and have leaky, aging pipes and tanks. State records show they have far more health violations than large city water districts, involving everything from arsenic to bacteria levels in drinking water.

“We see a proliferation of these small districts, some with 100 homes, 200 homes, even 15 homes,” Wieckowski said. “Some of them are just putting in a well and saying, ‘this is a water district’ without the money or the technical expertise to operate it.”

CURRENT LAW

Under current law, in much of California anyone can create a private company or a new public agency to set up a water system with a vote from local officials, such as the county.

Wieckowski’s bill, Senate Bill 1263, would require applicants instead to identify other water agencies within three miles, then meet with those agencies, and write a report comparing how much it would cost residents to simply connect to the existing, larger water system rather than creating a new one. Every new system would need a permit from the State Water Resources Control Board in Sacramento.

“There’s no rhyme or reason now,” he said. “We need to be more efficient.”

The bill, which passed the Senate 21-14 last month, also requires a study of how a new system’s supply would hold up over 20 years, including in droughts.

But the debate, pitting environmentalists against business interests, is raising questions about whether bigger is better, and how much local control matters.

Opponents include the California Chamber of Commerce, California Building Industry Association and Association of California Water Agencies. They note that it’s often developers who need to create new water systems, particularly if they can’t work out agreements with existing ones.

“In its current form, the bill would set up an open-ended bureaucratic process that could make it more expensive to build new homes and developments,” said Valerie Nera, a lobbyist with the California Chamber of Commerce.

Supporters cite a 2015 state water board report that showed systems with under 200 connections accounted for 69 percent of all arsenic violations in the state, 94 percent of nitrate violations and 92 percent of bacteria violations.

“Some of these smaller agencies are not able to provide people with clean water,” said Kathryn Phillips, director of Sierra Club California. “We’ve seen a lot of that happening in the San Joaquin Valley, and we want to make sure that doesn’t happen again. This provides more oversight.”

But others say having larger agencies provide water gives locals less say over rates and rules.

“We’ve seen what happens with consolidation of smaller business into larger corporations. Sometimes you don’t have the same level of service, and you can fall through the cracks,” said Tyler Boswell, who works as an operator for seven small water systems in the mountains between Los Gatos and the Santa Cruz County line.

RUNNING OUT

In 2014, as the drought worsened, Boswell watched as Aldercroft Heights, a small community near Lexington Reservoir whose water system serves 350 people, was told by San Jose Water Co., which serves 1 million people, that it might run out of water. The reason: San Jose Water was going to stop releases of water from Lake Elsman, which empties into Los Gatos Creek, the main source of water for Aldercroft Heights.

The tiny community dug a well, put in strict conservation rates and got by when natural springs continued to feed the creek. Other small areas had an even rougher time.

Lompico, a community of 480 people east of Boulder Creek in the Santa Cruz Mountains, saw its wells drying up in 2014.

“It was pretty bad. We were running out of water,” said Merrie Schaller, a former member of the Lompico Water District board. “We have old redwood tanks. Everything leaks. We had to tell people, ‘Don’t use water unless you have to.’ Nobody could grow a garden.”

The district, founded generations ago when the area was a collection of summer vacation cabins, raised rates and got a grant from the state to build an emergency pipeline connecting it with the larger San Lorenzo Valley Water District. A vote to merge with that district failed by one vote, but then passed on a later vote, and took effect this month.

“A lot of it is emotional,” she said. “People here said it was cool to have our own water district. They thought nobody gets to tell us what to do. But the state tells us what to do. Everybody has to meet the public health standards, and it’s not cheap.”

Paul Rogers covers resources and environmental issues. Contact him at 408-920-5045. Follow him at Twitter.com/PaulRogersSJMN.

Lompico/SLV water merger is official

Press Banner

Backed by a water infrastructure bond approved by Lompico property owners, officials from the Lompico County Water District have filed documents to officially dissolve the district.

Lompico County Water District customers on May 4 voted overwhelmingly to spend $2.75 million on water system improvements, which allowed a proposed merger with the San Lorenzo Valley Water District to go forward.

Lois Henry, Lompico Water District board member, said, "Our long journey is finally complete, [and] we're very happy that Lompico's water supplies are no longer in doubt."

Lompico customers are invited to apply to serve on the five-member Lompico Oversight Committee.

Applications are due by July 7, and should be mailed to the District Secretary, 13060 Highway 9, Boulder Creek, Calif., 95006, or emailed to to hmorrison@slvwd.com. The application can be found at www.slvwd.com

NEWS IN BRIEF

SLV student projects get grants from water district to study watershed

The San Lorenzo Valley Water District is giving $16,500 to six projects this year to enhance the understanding of the San Lorenzo River watershed and improve the watershed's environmental health.

Nearly all of the funded programs involve enhancing local students' understanding and stewardship of the San Lorenzo River Watershed.

The projects include an interpretive sign at the Fall Creek fish ladder, a family science night at San Lorenzo Valley Elementary, the Watershed Warriors after-school program for middle schoolers created by the Coastal Watershed Council, water science Lessons for fourth graders at San Lorenzo Valley Elementary, Science Camp for Boulder Creek Elementary students, and renewal for a sixth year of an environmental monitoring Program for SLV honors biology students led by teacher Jane Orbuch.

SLV Water District praised for promoting 'transparency'

The San Lorenzo Valley Water District today announced it received the District Transparency Certificate of Excellence by the Special District Leadership Foundation (SDLF) of California in recognition of its outstanding efforts to promote transparency and good governance.

"This award is a testament to San Lorenzo Valley Water District's commitment to open government," said Brian C. Lee, District Manager.

"The entire district staff is to be commended for their contributions that empower the public with information and facilitate engagement and oversight."