BOARD OF DIRECTORS
SAN LORENZO VALLEY WATER DISTRICT
AGENDA
NOVEMBER 4, 2021

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 meeting of the Board of Directors of the San Lorenzo Valley Water District will be held on **Thursday, November 4, 2021, at 5:30 p.m.**, via videoconference and teleconference.

There will not be any physical location for this meeting. Pursuant to AB 361 and San Lorenzo Valley Water District Resolution No. 4 (21-22) this meeting will be conducted by video/teleconference. Any person in need of any reasonable modification or accommodation in order to participate in the meeting may contact the District Secretary's Office at (831) 430-4636 a minimum of 72 hours prior to the scheduled meeting. The meeting access information is as follows:

To join the meeting click the link below, or type it into your web browser.

Webinar/Public link:
https://us02web.zoom.us/j/85441658419

+1 669 900 6833
+1 346 248 7799
+1 253 215 8782
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+1 301 715 8592
+1 312 626 6799

Webinar ID: 854 4165 8419

Agenda documents are 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 Closed Session 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 Regarding Items in Closed Session:

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. PUBLIC EMPLOYEE ANNUAL PERFORMANCE EVALUATION
Government Code Section 54957
Title: District Manager

b. CONFERENCE WITH LEGAL COUNSEL–EXISTING LITIGATION
County of Santa Cruz v. San Lorenzo Valley Water District, Santa Cruz Superior Court Case No. 21CV00188 (re: Bear Creek Road)
Gov. Code section 54956.9(d)(1)

Closed Session Note:

The Brown Act prohibits the disclosure of confidential information acquired in a closed session by any person present and offers various remedies to address willful breaches of confidentiality. These include injunctive relief, disciplinary action against an employee, and referral of a member of the legislative body to the grand jury. It is incumbent upon all those attending lawful closed sessions to protect the confidentiality of those discussions. Only the legislative body acting as a body may agree to divulge confidential closed session information; regarding attorney/client privileged communications, the entire body is the holder of the privilege and only a majority vote of the entire body can authorize the waive of the privilege.

5. Convene to Open Session at 6:30 p.m.

6. Report of Actions Taken in Closed Session

7. Re-Convene Meeting/Roll Call

8. Additions and Deletions:

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).

9. Oral Communications:

This portion of the agenda is reserved for Oral Communications by the public on any subject that lies within the jurisdiction of the District and is not on the agenda. Any person may address the Board of Directors at this time. Normally, presentations must not exceed three (3) minutes in length, and individuals may only speak once. Please state your name and town/city of residence for the record at the beginning of your statement. Please understand that the Brown Act limits what the Board can do regarding issues not on the agenda. No action or discussion may occur on issues outside of those already listed on today's agenda. Any Director may request that a matter raised during Oral Communication be placed on a future agenda.

10. President's Report

No action will be taken and discussion may be limited at the Chairperson's discretion.

11. Old Business:

Members of the public will be given the opportunity to address each agenda item prior to Board action. Normally, presentations must not exceed three (3) minutes in length, and individuals may only speak once. Please state your name and town/city of residence for the record at the beginning of your statement.

a. WATER MASTER PLAN REPORT
Discussion and possible action by the Board regarding the Water Master Plan and the Public Meeting required by the State Department of Water Resources to grant funding of the report.

b. REMOTE MEETING AUTHORIZATION UNDER AB 361
Discussion and possible action to ratify Resolution No. 04 (21-22) proclaiming an ongoing state of local emergency and authorizing remote meetings for another 30 days during the COVID-19 pandemic.

12. New Business:

Members of the public will be given the opportunity to address each agenda item prior to Board action. Normally, presentations must not exceed three (3) minutes in length, and individuals may only speak once. Please state your name and town/city of residence for the record at the beginning of your statement.

a. POSSIBLE CONSOLIDATION WITH BIG BASIN WATER COMPANY
Discussion and possible action by the Board regarding exploring possible consolidation of the District with with Big Basin Water Company.

b. PACIFIC GAS & ELECTRIC MITIGATION AGREEMENT
Discussion and possible action by the Board to authorize execution of the PG&E Mitigation Agreement in the Olympia Watershed.

c. DRAFT CONJUNCTIVE USE PLAN
Discussion and possible action by the Board regarding environmental review of the draft Conjunctive Use Plan.

d. MULTIPLE VARIANCE RENEWALS FOR 2021/2022
Discussion and possible action by the Board regarding 2021/22 Multiple Variance Renewals.

e. DIRECTOR OF FINANCE AND BUSINESS SERVICES RECRUITMENT
Discussion and possible action by the Board regarding the hiring of a recruiting firm to search for a Director of Finance and Business Services.

13. Consent Agenda:

The Consent Agenda contains items which are considered to be routine in nature and will be deemed adopted by unanimous consent if no Director states an objection. Any item on the consent agenda will be moved to the regular agenda upon request from an individual Director or a member of the public.

a. BOARD OF DIRECTORS MEETING MINUTES 10.21.21

14. District Reports:

No action will be taken and discussion may be limited at the Chairperson's discretion. The District encourages that questions be submitted in writing (bod@slvwd.com) on items listed in the District Reports. Questions submitted, if any, will be posted in the next available District Reports, along with a reply.

- COMMITTEE REPORTS
  - Future Committee Agenda Items
  - Committee Meeting Notes/Minutes
    - Engineering 10.19.21
    - Budget & Finance 10.20.21
    - LADOC 10.20.21

15. Written Communication: None

16. Adjournment

Certification of Posting

I hereby certify that on October 29, 2021, 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 October 29, 2021.

_____

Holly Hossack, District Secretary

MEMO

To: Board of Directors

From: District Engineer

Subject: Recommended Acceptance of Master Plan

Date November 4, 2021

Executive Summary:

Akel Engineering has developed a Master Plan and Capital Improvement Plan for the San Lorenzo Valley Water District. District Staff recommend that the Board of Directors review this memo and by a motion of the Board ***accept the Master Plan and Capital Improvement Plan as presented and direct the District Manager to implement the recommendations therein.***

Master Plan:

The District contracted with Akel Engineering in 2019 to develop a Master Plan of the District's existing infrastructure. Existing facilities are described and quantified in the Plan, which also provides a summary of the condition of each installation. The Plan evaluates risks to each facility and provides recommendations to mitigate such risks.

The Master Plan also includes a dynamic model of the District's system. This model allows District Staff to evaluate and optimize proposed changes to the system. To date, the model has been used to create a schedule of all fire hydrants within the District, with quantification of available flow and pressure at each; Staff have also used the model to determine the most advantageous pipeline replacement and pressure zone changes for the new Lyon 12-inch pipeline between the Lyon Water Treatment Plant and Boulder Creek.

Capital Improvement Plan:

The Capital Improvement Plan (CIP) identifies and prioritizes system deficiencies. The CIP provides recommendations regarding repairs to existing facilities; identifies zones with insufficient storage and provides recommendations for future tank construction; and quantifies fire protection pressure and flow deficiencies, with recommendations to address such deficiencies. The CIP breaks identified deficiencies down into prioritized groups; further prioritization will be by District Staff on an annual or bi-annual basis.

Presentation:

The Master Plan and the CIP will be presented to the Board by Akel Engineering at the November 4, 2021 Board of Directors meeting. The presentation will be available in the form of a PowerPoint file as a supplemental attachment on Monday, November 1, 2021.

Public presentation of the Master Plan and CIP will take place at a Special Meeting of the Board of Directors, tentatively scheduled for November 10, 2021.

Recommendation:
District Staff recommend that the Board of Directors review and accept the Master Plan and CIP as developed by Akel Engineering. Further, Staff recommend that the Board of Directors direct that the recommendations outlined in the CIP be implemented.

NOSSAMAN LLP | Memorandum

TO: Board of Directors,
San Lorenzo Valley Water District

FROM: Gina R. Nicholls, District Counsel

DATE: November 4, 2021

RE: Continuation of Remote Meeting Authorization Under AB 361 and San Lorenzo Valley Water District Resolution No. 4 (21-22)
502665-0001

SUMMARY:

Statewide legislation Assembly Bill (AB) 361 amended the Brown Act and thereby changed the manner in which local agencies such as the District may continue to conduct remote meetings during a declared state of emergency such as COVID-19, through January 1, 2024. On October 7, 2021, the Board of Directors of the District adopted Resolution No. 4 (21-22), which proclaims an ongoing state of local emergency and authorizes the District to hold remote meetings during the COVID-19 pandemic.

RECOMMENDATION:

By motion of the Board of Directors, ratify and re-adopt the attached Resolution No. 4 (21-22) so that it continues in effect for another thirty (30) days from today's date.

For administrative convenience, motions ratifying and re-adopting the Resolution will be documented in the Board meeting minutes. The District will not generate a new resolution each time this occurs, and the Resolution will continue to have the same number, Resolution No. 4 (21-22).

BACKGROUND:

In order for the District to continue conducting remote meetings (i.e., by Zoom, GoTo Meeting, or other video/teleconference platform) of the Board and Committees in compliance with the Brown Act, the Board must make appropriate findings consistent with AB 361. The specific findings required by AB 361 are as follows:

a) A proclaimed state of emergency is in effect;

b) State or local officials have imposed or recommended measures to promote social distancing; and

c) As a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

The attached resolution contains the necessary findings. If re-adopted, the resolution would apply to all Board and Committee meetings of the District for another 30 days. The Board must reconsider and re-adopt the resolution every 30 days for it to continue in effect.

If the resolution is not re-adopted, then once it expires, District meetings subject to the Brown Act would need to comply with standard teleconference requirements as they existed "pre-pandemic". "Pre-pandemic" requirements for remote meetings include: (1) a quorum of the Board or Committee must be physically present at designated meeting location(s) within the agency's jurisdiction; and (2) in order for any Board or Committee member to participate in the meeting from a remote location:

a) each remote location shall be identified in the posted meeting agenda;

b) a copy of the meeting agenda must be posted for the requisite time period (usually 72 hours in advance) at each remote location; and

c) each remote location shall be accessible to the public.

ATTACHMENTS:

Attachment A – Resolution No. 4 (21-22)

ATTACHMENT A

San Lorenzo Valley Water District Resolution No. 4 (21-22)

[See Following Pages]

SAN LORENZO VALLEY WATER DISTRICT
RESOLUTION NO. 4 (21-22)

SUBJECT: A RESOLUTION OF THE SAN LORENZO VALLEY WATER DISTRICT PROCLAIMING AN ONGOING STATE OF LOCAL EMERGENCY AND AUTHORIZING REMOTE MEETINGS DURING THE COVID-19 PANDEMIC

WHEREAS, the San Lorenzo Valley Water District ("District") is committed to preserving public access and participation in meetings of the Board of Directors ("Board"), including meetings held during a proclaimed state of emergency; and

WHEREAS, all meetings of the District's legislative bodies including the Board and the District's standing committees are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend and participate; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the District's boundaries, caused by natural, technological, or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, such conditions now exist in the District, specifically, on March 4, 2020, the Governor declared a statewide emergency based on the COVID-19 pandemic, and the Governor's declaration of a state of emergency continues in effect; and

WHEREAS, state and local officials such as the California Department of Public Health, Cal/OSHA and Santa Cruz County Public Health continue to recommend social distancing measures; in particular, County Public Health recommends the use of face coverings indoors and moving activities and meetings outdoors to the greatest extent possible; and

WHEREAS, the Board of Directors does hereby find that the COVID-19 pandemic continues to imperil the health and safety of individuals, especially where individuals from multiple households gather indoors under circumstances and risks of exposure to COVID-19 cannot adequately be controlled through adherence to Cal/OSHA regulations and public health guidance, and accordingly the District desires to continue its proclamation of a local emergency and ratify the proclamation of state of emergency by the Governor of the State of California; and

WHEREAS, as a consequence of the local emergency, the Board of Directors does hereby find that the legislative bodies of the District shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the San Lorenzo Valley Water District, as follows:

1. The Board hereby proclaims that a local emergency continues to exist throughout the District, and Board and Committee meetings are likely to involve gathering individuals from multiple households indoors under circumstances where risks of exposure to COVID-19 cannot adequately be controlled through adherence to Cal/OSHA regulations and public health guidance; and

2. The Board hereby ratifies the Governor's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.

3. The District Manager, District staff, and all legislative bodies of the District (including the Board and all standing Committees) are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, conducting open and public remote meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

4. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) 30 days from adoption of this Resolution, or such time the Board of Directors ratifies or re-adopts this Resolution (or a subsequent resolution) in accordance with Government Code section 54953(e)(3) to extend the time during which the

legislative bodies of the District may continue to conduct remote meetings without compliance with paragraph (3) of subdivision (b) of section 54953.

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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 October 2021, by the following vote of the members thereof:

AYES: G. Mahood, L. Henry, J. Ackemann, B. Fultz, M. Smolley
NOES:
ABSENT:
ABSTAIN:

Holly B. Hossack

Holly B. Hossack,
District Secretary

M E M O R A N D U M

TO: Board of Directors

FROM: District Manager

SUBJECT: Big Basin Possible Consolidation

DATE: November 4, 2021

SUMMARY:

On October 26, 2021, owners of the Big Basin Water Company requested in writing that the San Lorenzo Valley Water District explore possible consolidation with the Company. The District has been providing emergency assistance on a limited basis to the Company and its water customers since the CZU Wildfire seriously damaged the Company's water system. Most recently, on October 20, 2021, the District dispatched a repair crew to facilitate repairs in the Big Basin water system after a mainline break caused a system outage.

The District prides itself on providing reliable, safe and high quality water to its customers at an equitable price, and its history of extending service to neighbors and consolidating with smaller systems. The District appreciates the interest expressed by Big Basin in a possible water system consolidation, and the willingness of the County to take responsibility for the Company's wastewater system, which the District is not in a position to operate.

RECOMMENDATION:

Review this memorandum and its attachments and, by motion, direct the District Manager to proceed with exploring possible water system consolidation with Big Basin Water Company, including authorization to incur legal and grant-writing expenses within the amount of the District Manager's purchasing authority.

For clarification, this proposed motion would not authorize additional expenses for consulting work such as engineering studies or reports that would be needed for a water system consolidation. It is anticipated that the District and the Big Basin Water Company will enter into written agreements along the following lines before additional District expenses are authorized:

1. The Company should enter into an emergency operating agreement with the District that governs the parties' relationship while exploring consolidation and any requests for emergency assistance by the Company.
2. The Company should agree to cover costs incurred by the District, less the amount of grant funding obtained by the District to help cover such costs, with a view toward minimizing costs absorbed by the District during the consolidation process and any costs imposed on Big Basin residents, including any assessments or water surcharges imposed as part of a consolidation.
3. The Company should agree to include the District in any negotiations involving the proposed sale of Company assets, and to cooperate in good faith with the District to ensure that any such sale includes appropriate protections for the integrity of the water system, including without limitation easements (including easements in the Company's watershed) to protect water quality, water rights, and access to water facilities.

BACKGROUND:

Attached for reference is a copy of the October 26 letter form owners of the Big Basin Water Company to the District Manager requesting that the District explore possible consolidation with the Company. (Attachment A.) In addition to the request from owners of the Company, the District understands that there is community support for consolidation with the District, based on the results of a community survey. (See Attachment B.)

The Company has been under a compliance order from the State Water Resources Control Board (SWRCB) since April 9, 2021. (See Attachment C.) The SWRCB has issued citations for failure to comply with its compliance orders. The latest citation no. 02_05_21C_030 was issued on October 28, 2021. (Attachment D.) The citations impose financial administrative penalties that may be suspended if certain conditions are met.

Any petitions responding to the citation must be received by the SWRCB within 30 days. If the Boards directs the District to proceed with exploring possible water system consolidation with the Company, the District may wish to request party status in connection with the SWRCB proceedings, for the purpose of representing the District's interests and providing information to SWRCB about the status of possible consolidation.

ATTACHMENTS:

Attachment A – Letter from Big Basin Water Co. dated 10/26/2021
Attachment B – Community survey results
Attachment C – Letter from Assemblymember M. Stone, Senator J. Laird, and County Supervisor B. McPherson to J. Moore re: SWRCB Compliance Order 02_05_21R_001_441001
Attachment D – SWRCB Citation 02_05_21C_030

Attachment A

Letter from Big Basin Water Company

[See Following Page]

Big Basin Water Company Inc

P.O. Box 197

Boulder Creek, CA 95006

831-818-4477

October 26,2021

Rick,

We would like to make a request for SLVWD to explore consolation with Big Basin Water Co. INC.

We will need sometime to gather the other documents you need. We lost all those papers in the fire. I will have to write each agency to get everything you need. I will start on that tomorrow.

Thomas and Shirley Moore

Big Basin Water Co.

Attachment B

Community Survey Results

[See Following Pages]

From: Patrick LaBruzzo <pslabruzzo@gmail.com>
Sent: Tuesday, October 26, 2021 9:29 AM
To: Rick Rogers
Subject: BBWC Survey Results
Attachments: Big Basin Water_Tally of responses to survey_PL05232021.pdf; Tally of responses to survey_PL05232021.pdf

Hi Rick,

Thank you for bringing this to the board. I was a bit surprised with the amount of responses I received on the survey, and how many people wanted to see the Big Basin Water system sold to SLVWD. A copy of the survey responses is attached.

The line items in red were from the original survey, however many of the responders wrote in responses or selected multiple preferences. I added the black line items to capture all of the nuances in the responses. A very small minority of only 2.7%, wanted no change. The customers with a preference for SLVWD was 43%, and there was an overwhelming majority preference for taking the system public.

I have also attached a copy of the write in responses.

Regards,
Patrick LaBruzzo

QUESTION: *(For Big Basin Water Company customers only) The owners of Big Basin Water Company are intersted in selling the water system. As a customer, please mark your preference of purchasers.*

	Big Basin Water Company		Forest Springs/ Bracken Brae	
	Count	%	Count	%
Don't Sell	4	2.7%		
No Preference	14	9.4%	2	15.4%
Needs More Information	15	10.1%		
Mutual Water Company	**20**	**13.4%**	**3**	**23.1%**
Private Water Company	**8**	**5.4%**		
Large Water Agency	7	4.7%		
San Lorenzo Valley Water District	**64**	**43.0%**	**8**	**61.5%**
Public Water Agency	4	2.7%		
Any Local Water Agency	6	4.0%		
New Water District	**5**	**3.4%**		
County Service Area	**2**	**1.3%**		
TOTAL	**149**	**100.0%**	**13**	**100.0%**

QUESTION: *On a scale from 5 (very important) to 1 (not important), please rate the importance of the following items to you, as a water customer, as it pertains to your water system*

Service	Average
Water quality	4.84
Water supply and production	4.73
Water storage for fire fighting	4.61
Protection of the watershed	4.52
Resiliency to natural disasters	4.49
Resiliency to power outages	4.44
Customer service	4.19

Back-up sources, water pressure
Ranked different acquisitions, and fix all the defferred maintenance!
water pressure, do what you think is best you know what's know what's best, (filled out best for her)
can't make a selection, I would like whatever improvements are needed to consistently provdie safe and reliable water for our home and yard. I know this will cost money. I am willing to pay more for safe and reliable wateer.
I don't have enough information to make this decision
We need to not run out of water - the water company needs to improve the overall company. It is way behind other companies
responsiveness and customer services
No SLVWD, Been happy with BBW, they're great folks and good nieghbors
keep it local
don't know about acquisition
updated webpage, and updates, thanks!
Someone who could properly run it; quality and reliability
Just want to say thank you again, damian you're a hero for your effort!
Hoping pricing would be reduced or stay the same
I would like the moore family to get state and federal infrasctrue grants, this was a state disaster
Just someoen we can can really on, better communication !!!, Water is vital to our lives!!! For consumption and fire fighting help!
on line Payment processing service
ranked others, keeping up with the infastructure
I don't know, I will mourn the sloos of a small private company, overwhelmed, understaffed, and water purvision important to our system, doesn't support conglomerate running system, none, supports public ownership
Individual water meters to every house
New mutual company is shit-silly and has to be the worst idea ever in ready to water
Local owernship, don't want the company or water sold to other counties
Wish you would sell BBW! You are amazing folks and amazing folks folks and appreciate what you have done for us, no improvements needed,
Additional storage and stand-by Power Source
Improved water pressure, additional storage, hillton and hilltop court area, disconnect those who have no meter and charge all users
I don't know about purchase, we can't water our grass or flower gardens, becasuse they isn't enough water need, need sufficient water, only 3 people run BBW, Just get us a water company with water.
sjwc first, SLVWD second, this needs to happen to happen asap. If we have another fire we could be toast.
Back-up generator!
We would like water to be consistent incostatn availabel, too many shut-offs and power outages
any company with a competent track record, no NW!!
knowledge
If there any viable options above, would like details, need more information, since hasn't been a buyer so far, my gut answer is SLVWD
More workers repair a leak or brake so water,
we have lived here for 38 years, the system is antiquatied hasn't been updated, generator 1971 hasn't been updated, can't connect it, son is injuried, can't keep up with repairs
Rebuild water system after fire
No Private! Pretty scared for disasters, afraid of climate changes, and aftraid of, proper watershed management, long comments,
want more information
thank you for conducting , BBW not have not been helping, primary water suplly issue I experience is the chronic waterline breaks that cause water outages, wasted water and road damages, waterlines for hill house replaced and , need a plan for water supply is important for my rebuild, SLVWD is my preference
1. Rebuild the infrasture! Its running at a fraction! 2. proactivety, status updates on Big basin website, reactive to disasters, direct infomration, text push notifications, 3. transparency with customers, schedule fore reparing, remors of nothing on website, only rumouurs, working with insurance, insurance dispute, need time table
We are sorry for thinking about seeling, I know 2020 was a difficult year, hope you change your time, if not hope you don't hope you the best

Adequate fire protection when enduring power outages, and unreliable generator it would be helpful not to depend on gravity, flow as current conditions with BBW (unreliable generaotr)
Continue private ownership with BBWC under new management, under new management full tanks with water
Better the fire hydrants and water that is drinkable, so that we stop buying botteld water for drinking. BBW tastes horrible! It had been bad for several years, especially after fires.
We would like to water our lawns and plans, any company that can help out company would be appreciated, need water for our pool too!
reliable water sourece and quality, reasonable rates, no response
The last few years before the fire less reliable, BBW needs to invest but refused, knew before fire, needed generator, need to make profits, and tried to sell, and costed some of us our homes and possessions
Big Basin Water Infrastructure is in dis-repair had used personal bottled water, found dead birds when used BBW, SLVWD and gave us bottled water for months after the fires
more isolation valves, more less people affected, BBW is the best water in the valley, thanks the moores
Don't sell, let Damian take over, improvements, tests and regular updates,
Ability to pay bills online/ autopay
Water quality is excellence, see resiliency, modernization, text allerts, notes for power outages, autopay
Our needs are pretty basic, needs consistent reliable supply of water
Which ever water company will keep the wonder BBW, for sure SLVWD water is the worst
Here at house new golf course, very pleased, qualit is good, customer service is good, care about watershed, water for fire fighting is top priority
choses are hard to prioritize, best customer service, we care about these priorities, we care about these factors, we want to see fire availability for fire protection, thank you for the survey
Before I can answer the above I have many questions, SLV is filled in with lawsuits and problems, brack/CC, do we want FS and Brack, how much expensive for brack,
Sufficient supply, repaired, maintenance infrastructure, regular communications as needed, not a via social if needed, back-up power and related shortages
Clean drinking water. We have to buy water to drink
Tank on rosita drive put back into service, we have already paid to have it done, maybe twice
protected also
We need reliable water system fire protective system, not above grade how ok for a community water system, need pump station fire resistant, public water system needs to be publicly protected also, why th water system not protected also
Reliable clean water for daily living is important
Consistant Water and good quality water for continuity of service, santa cruz county sanitary sewer taking over the BBWC sewage system
feel confident we'll have running water, SLVWD, co-op thing, better communication than moore's can provide
Big Basin water had 3 wells a lot of water, only one working well know, hopefully somebody does something about adequate water supply and prudence, afraid we may lose water source.
Protection of Water system and storage
need more information, better communication and transparency from company, trusts that appropriate repairs are needed when need, pro company managing company, when damange to pipe repair not a project 6 months later, and have enough later
Ability to have water supply and hydrants to fight wildfires even when power is out, big problem during fire.
Who is less than important than actually value/cost being without poer and water at the same time is a big problem,
System to provide good safety testing water taste, weird taste righ now, more resistant to natural disaster
not a customer
Mine is great! We were prepared, Cal fire water not, if jim sells I will be sorry to see it us, new to us!
Not sure about new water district, reliable pump requirement, new reservoir for storage, filtration for system, have some redundency
We'd be happy to keep our system the same, we don't to merge with SLV, I love the service, wish we could contact BBW, want to pay on-time would like more reliable billing,
Want it to be safe, local, efficient, capable of serving system, not depending on water for fire fighting for wildfire, for deep fire, drones and fire, needs more information
whichever would be best for the moores, new company can take over it would be bnice, important for the moores get a good payment package
More information, More water pressure and fire hydrant for fire protection
needs more information, fire hydrants, copper lines, repairs in a timely manner
needs more information, pressure like hillhouse Rd, and backflow valves for all
We're a retired couple on a fixed income but worth paying more for more reliable it for the system, better for them and better supply in the future, thanks for the survey!

Forest springs buy from BBWC, having SLVWD serving FS will be better system, system uprades are needed
wQ testing, lead testing, benzene and testing of other things needed
makes sense to go with existing system not a new private with more problemes and todays costs and water
Whatever is need to keep system running during fires, and help suppress fires
more reliable water supply, especially during power outages
just fix leaks to prevent any further outages
New christy boxes and lids, with gofer proof
I want to be a part of municipal water system that con provide reliable water system, fire failed to provide water, we lost our house, no way to communicate with customers, this can't continue!
Minimum industry standards, please!
drinkable and more fire hydrants, more information
Ample water 24/7 better pricing, better customer service, more reliability, more affordable rates/service SLVWD
Quality water, poor customer service, we use bottle water for own uses
Meters and reliable delivery system
We'd like more reliable infrasctructure for when power and water go out, we have a fire hydrant in our system, flooding from hydrant worries, and afraid water goes out
More wells and storage, consistent delivery,
I don't have enough information, would prefer local company with good financial support, and online billing is a must
better communication
also CSA or MW, ensure water available at all times, suffer from water scarcity, water is a problem for people with rebuilds, desperately need generator, we can't fix problems with each day
We'd like a larger water tank
needs more information, more water pressure, we have a tank to get into our system
Improved Water supply, and customer transparency
bbw has done a great job over the years
Back-up fire water pressure very important
Water availability during natural disasters, fire prevented us having water for over a month, better storage
more information. Better customer service for problems fas repairs, uninturrupted supply for fire,
Rate reduction (better tiers)
wants public
emergency power source for PG&E, better pipe repair for pipes to current standards
want big
Make sure that back-up generators work for power losses
Water district first, last SLVWD no SJWC/P!!!! Moore's served well, they've been outstanding, we would like to see the system, SLVWD has been a huge issue and we are in dire straights, a take over by SLVWD won't solve the problem and casue any additional issues, we need all hands on deck, temporary, the fire was a federal state disaster should be states should be available
Big boulder creek customer for 3.5 years e ach bill has a surcharge of 60 years has been bull shit for we had to pay for

Better communication for customers, better transparency

Attachment C

Letter from Assemblymember M. Stone, Senator J. Laird, and County Supervisor B. McPherson to J. Moore re: SWRCB Compliance Order 02_05_21R_001_441001

[See Following Pages]

County of Santa Cruz

BOARD OF SUPERVISORS

701 OCEAN STREET, SUITE 500, SANTA CRUZ, CA 95060-4069
(831) 454-2200 • FAX: (831) 454-3262 TDD/TTY - Call 711

MANU KOENIG	ZACH FRIEND	RYAN COONERTY	GREG CAPUT	BRUCE MCPHERSON
FIRST DISTRICT	SECOND DISTRICT	THIRD DISTRICT	FOURTH DISTRICT	FIFTH DISTRICT

April 19, 2021

Jim Moore
Big Basin Water District
P.O. Box 197
Boulder Creek, CA 95003

Re: STATE WATER RESOURCES CONTROL BOARD COMPLIANCE ORDER NO. 02_05_21R_001_441001

Dear Mr. Moore:

On behalf of the nearly 1,700 mutual constituents who reside within our respective districts and inside the service area of the Big Basin Water District (BBWD), we are writing you out of grave concern regarding the immediate threat to public health and well-being represented by the current condition of BBWD's water system.

As outlined in the Compliance Order issued to BBWD on April 9 by the State Water Resources Control Board (Board), BBWD, also known as Big Basin Water Company, faces a host of legally enforceable deadlines between now and September 2021 to meet state regulations, which will require the establishment of a temporary water supply, development of a permanent secondary source of supply, and the resolution of outstanding deficiencies stemming from a sanitary service report conducted by the Board in 2018.

We fully understand the devastating impacts the CZU Lightning Complex Fire of August 2020 had on the BBWD water system, as detailed in the Board's Compliance Order, including the loss of the Jamison Surface Water Treatment Plant that left BBWD with only a single well as its supply source, which fails to meet state requirements for source capacity. We believe it will be extremely difficult for BBWD to meet the Compliance Order deadlines to develop a water contingency plan for a temporary water supply (May 10, 2021) and then submit a permit application for an additional source (September 10, 2021).

Even before the CZU fire, we understood BBWD to be in a state of disrepair, including, as noted in the Compliance Order, the lack of a power outage response plan (overdue since March 2, 2020), the need for which became evident when BBWD was unable to provide water to customers for two days during a PG&E Public Safety Power Shutoff event in October 2019.

In summary, the Compliance Order notes Big Basin Water Company "*has a documented history of failing to administer preventative maintenance, emergency preparedness, and customer complaint programs. This lack of preparation and inadequate customer communication has contributed to Big Basin WC failing to reliably supply its customers with potable water during emergency events, including the 2019 PG&E Power Safety Shutoffs and the August 2020 CZU Lightning Complex Fire. These deficiencies constitute an ongoing threat of failure to provide a reliable and adequate supply of pure, wholesome, healthful, and potable water as required by CHSC, Section 116555 (a)(3).*"

It is our understanding, stemming from conversations you have had with Supervisor Bruce McPherson and other community members dating back more than six months, that you believed an offer to buy your company was imminent. However, no such purchase has come to fruition, and without the ability for you to rectify the above-mentioned deficiencies by the state's deadlines, we are deeply concerned about BBWD's ability within the next several months to adequately provide water to meet the needs of existing customers.

Additionally, as property owners whose homes were destroyed by the fire prepare to rebuild their homes, we are concerned BBWD will not be equipped to provide reliable and safe water – therefore risking the ability of fire victims to gain the needed approvals to rebuild. Furthermore, we are concerned about the amount of water that would need to be available for fire suppression activities.

Considering all of this, as the county and state elected officials representing your company and its customers, we implore BBWD to immediately and earnestly engage in discussions with San Lorenzo Valley Water District (District) regarding terms of a possible merger. We believe an annexation of the BBWD service area by the District offers a viable way to ensure that BBWD customers receive adequate and reliable service in the immediate and long-term future.

We understand that on several occasions recently you have been urged by District Director Rick Rogers to begin such talks but that you have not agreed to do so. With legally enforceable deadlines associated with the Compliance Order, as well as fire rebuilding and summer demand on the immediate horizon, we

sincerely believe the time is now to explore such a merger. We stand ready and willing, as does the Local Agency Formation Commission staff, to help you better understand and follow the process involved in pursuing a merger.

We thank you for your many years of service to your customers and hope that you will see this letter as a respectful offer of assistance, as it is sincerely intended.

Sincerely,

Assemblymember Mark Stone
California Assembly, 29th District

Supervisor Bruce McPherson
Santa Cruz County, 5th District

Senator John Laird
California Senate, 17th District

cc: Senator John Laird
Assemblymember Mark Stone
Santa Cruz County Administrative Officer Carlos Palacios
California State Water Resources Control Board
Santa Cruz County Local Agency Formation Commission

Attachment D

SWRCB Citation 02_05_21C_030

[See Following Pages]

CALIFORNIA Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

October 28, 2021

System No. 4410001

Jim Moore, Manager
Big Basin Water Company
PO Box 197
Boulder Creek, CA 95006
bbwater197@yahoo.com

CITATION NO. 02_05_21C_030
FAILURE TO COMPLY WITH COMPLIANCE ORDER NO. 02_05_21R_001 AND CITATION NO. 02_05_21C_021

Enclosed is Citation No. 02_05_21C_030 (hereinafter "Citation"), issued to the Big Basin Water Company (hereinafter "Big Basin WC") public water system. Please note that there are legally enforceable deadlines associated with this Citation.

*This Citation imposes an administrative penalty in the amount of **$21,000.00**; however, that penalty may be suspended and will only become fully due if Big Basin WC fails to comply with any of the directives set forth in the Citation by the deadlines indicated*.

If Big Basin WC continues operating as an out of compliance water system and does not respond to the State Water Board's enforcement actions, the State Water Board is prepared to invoke its authority under the California Health and Safety Code, Section §116665, specifically, "Whenever the department determines that any public water system is unable or unwilling to adequately serve its users, has been actually or effectively abandoned by its owners, or is unresponsive to the rules or orders of the department, the department may petition the superior court for the county within which the system has its principal office or place of business for the appointment of a receiver to assume possession of its property and to operate its system upon such terms and conditions as the court shall prescribe. The court may require, as a condition to the appointment of the receiver, that a sufficient bond be given by the receiver and be conditioned upon compliance with the orders of the court and the department, and the

protection of all property rights involved. The court may provide, as a condition of its order, that the receiver appointed pursuant to the order shall not be held personally liable for any good faith, reasonable effort to assume possession of, and to operate, the system in compliance with the order."

Big Basin WC will be billed at the State Water Resources Control Board's (hereinafter "State Water Board") hourly rate for the time spent on issuing this Citation. California Health and Safety Code (hereinafter "CHSC") Section 116577 provides that a public water system must reimburse the State Water Board for actual costs incurred by the State Water Board for specified enforcement actions, including preparing, issuing and monitoring compliance with a citation. At this time, the State Water Board has spent approximately five hours on enforcement activities associated with this violation.

Big Basin WC will receive a bill sent from the State Water Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on Big Basin WC for the current fiscal year.

Any person who is aggrieved by a citation, order or decision issued under authority delegated to an officer or employee of the State Water Board under Article 8 (commencing with CHSC, Section 116625) or Article 9 (commencing with CHSC, Section 116650), of the Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4), may file a petition with the State Water Board for reconsideration of the citation, order or decision.

Petitions must be received by the State Water Board within 30 days of the issuance of the citation, order or decision by the officer or employee of the State Water Board. If the 30th day falls on a Saturday, Sunday, or state holiday, the petition is due the following business day by 5:00 p.m.

Information regarding filing petitions may be found at:

http://www.waterboards.ca.gov/drinking_water/programs/petitions/index.shtml

If you have any questions regarding this matter, please contact the Division of Drinking Water at dwpdist05@waterboards.ca.gov or (831) 655-6939.

Sincerely,

Jonathan Weininger, PE
District Engineer, Monterey District
Division of Drinking Water

Enclosures

Certified Mail No. 7018 3090 0001 0464 6878

cc: Santa Cruz County Environmental Health Services
Marilyn Underwood, Marilyn.Underwood@santacruzcounty.us
Nathan Salazar, Nathan.Salazar@santacruzcounty.us
Sierra Ryan, Sierra.Ryan@santacruzcounty.us

California Public Utilities Commission (CPUC) Water Division
Moises Chavez, moises.chavez@cpuc.ca.gov
Wilson Tsai, wilson.tsai@cpuc.ca.gov

Santa Cruz County Board of Supervisors,
BoardOfSupervisors@santacruzcounty.us

Citation No. 02_05_21C_030

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

Name of Public Water System: Big Basin Water Company

Water System No: 4410001

Attention: Jim Moore, Manager
PO Box 197
Boulder Creek, CA 95006

Issued: October 28, 2021

CITATION FOR NONCOMPLIANCE

FAILURE TO COMPLY WITH COMPLIANCE ORDER NO. 02_05_21R_001 AND CITATION NO. 02_05_21C_021

The California Health and Safety Code (hereinafter "CHSC"), Section 116650 authorizes the State Water Resources Control Board (hereinafter "State Water Board"), to issue a citation to a public water system when the State Water Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA"), (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit, or order issued or adopted thereunder.

The State Water Board, acting by and through its Division of Drinking Water (hereinafter "Division"), and the Deputy Director for the Division, hereby issues Citation No. 02_05_21C_030 (hereinafter "Citation"), pursuant to Section 116650 of the CHSC to the Big Basin Water Company (hereinafter "Big Basin WC"), for violation of Compliance Order No. 02_05_21R_001 and Citation No. 02_05_21C_021.

STATEMENT OF FACTS

Big Basin WC is classified as a community water system and serves a population of 1,120 through 482 connections (information from the 2020 Electronic Annual Report to the Division of Drinking Water (EAR)). The population and service connections listed in the 2020 EAR reflect reduced numbers following the August 2020 CZU Lightning Complex Fire, which destroyed or damaged a portion of Big Basin WC's customer connections. Big Basin WC operates under Domestic Water Supply Permit No. 02-05-44-94P-001, issued by the State Water Board on February 11, 1994.

On April 9, 2021, the State Water Board issued Compliance Order No. 02_05_21R_001 (Appendix 1) for noncompliance with California Code of Regulations (CCR), Title 22, Section 64554(a)(2), CHSC Section 116555 (a)(3), and failure to comply with the 2018 Sanitary Survey Deficiency List. To date, Big Basin WC has not complied with portions of Directives 1, 2, 3, 4, and 7 from Compliance Order No. 02_05_21R_001, as more fully described below.

1. Directive 1: By June 10, 2021, [extended to **July 16, 2021,** by letter dated June 24, 2021] submit to the State Water Board for review and approval a compliance action plan prepared by a licensed California professional engineer. The compliance action plan must include the following elements:
    a. A proposal to comply with the source capacity requirements of CCR, Title 22, Section 64554 (a)(2), including a schedule for completion of each

project phase. As a minimum, the schedule must include the following project phases: environmental review, design, construction, permitting, inspection, and startup. The plan must include an anticipated date when Big Basin WC will achieve compliance with CCR, Title 22, Section 64554(a). The completion date must be no later than March 10, 2022, unless otherwise approved by the State Water Board.

b. A schedule for removal and replacement of all fire-damaged infrastructure, including, but not limited to, service laterals, mains, transmission lines, storage tanks, etc.

c. An analysis of Big Basin WC's financial capacity to complete the projects listed in the compliance action plan.

[The Division has not received the compliance action plan.]

2. Directive 2 - by **May 10, 2021**, submit to the State Water Board a water contingency plan that describes how Big Basin WC will secure a temporary water supply in the event of an outage or failure of Well 4. In addition to any other options for temporary supply, Big Basin WC must present a feasibility analysis for obtaining an emergency or permanent interconnection to a neighboring public water system, sized to reliably provide water to all Big Basin WC customers.

[*The Division received a water contingency plan from Big Basin WC on June 10, 2021, which included a proposal to install a temporary surface water treatment plant at the existing site for the old surface water treatment plant that was destroyed by the CZU Lightening Complex Fire. The Division responded with a letter dated May 26, 2021, requesting additional information on the treatment plant, timeline on the duration of the temporary surface water treatment plant installation, and a permit amendment application. The permit amendment*

application, and supporting documentation was submitted on June 28, 2021. The Division requested an update on treatment plant installation via emails dated August 25, 2021 and September 16, 2021; to date, the Division has not received an update from Big Basin WC.

Big Basin WC's engineering consultant provided the Division with an update letter, dated June 10, 2021, which provided a feasibility analysis of a potential interconnection between Big Basin WC and the San Lorenzo Valley Water District. The letter concluded the interconnection was not feasible; however, in follow-up communication, the engineering consultant was continuing to research the feasibility. The Division recommends Big Basin WC continue to communicate with neighboring water systems and evaluate the feasibility of installing an interconnection.]

3. Directive 3 - by June 10, 2021, [extended to **August 10, 2021,** by letter dated June 24, 2021] submit to the State Water Board for approval a schedule for completing the corrective actions identified in Big Basin WC's March 3, 2019, response to the 2018 sanitary survey letter (Appendix 1). The plan must include a schedule and project list to correct existing storage tank, booster station, and distribution system deficiencies. Unless specified below, the plan may exclude any deficiencies related to fire-damaged infrastructure, such as the Jamison SWTP and raw surface water sources. The State Water Board will consider each project completed after adequate documentation and photos have been sent and approved by the State Water Board. State Water Board confirmation may include site visits. As a minimum, the schedule must include the following projects mentioned in the 2018 sanitary survey and March 3, 2019, Big Basin WC response letter:

a. Letter Section 3.3.3 - remove the cross connection between the Jamison Reservoir and the distribution system
b. Letter Section 3.6 - remove the Robin Hood Tank #2 (Horizontal Tank) from service
c. Letter Section 3.7 - Galleon Heights Booster Station and Storage Tank improvements
d. Letter Section 3.8.1 – Galleon Heights Tank improvements.
e. Letter Section 3.8.2 – Tradewinds pressure system improvements.
f. Letter Section 3.10 – Rancho Dia Tank replacement.
    i. The State Water Board understands this tank was destroyed in the CZU Lightning Complex Fire, but Big Basin WC must provide details on tank replacement at this site or provide a hydraulic model that demonstrates adequate water system operations without this tank
g. 3.11 – Oberst Tank replacement
h. 3.12 – Bloom Grade Tank improvements
i. 3.13 and 3.14 – Create a main replacement program that includes adding distribution system isolation valves.

The completion date for the projects listed above must be no later than **February 28, 2023**.

[The Division only received proof of completion of Directive 3 (a). The Division has not received a schedule for addressing the remaining corrective actions listed in Directive 3 (items b through i).]

4. Directive 4 - by July 10, 2021, [extended to **July 16, 2021,** by letter dated June 24, 2021], submit to the State Water Board for review and approval a Water

System Operations and Maintenance Plan (O&M plan) pursuant to CCR, Title 22, Section 64600. The O&M plan must include the following elements:

a. A plan and procedures for responding to water supply emergencies, which also includes a power outage response plan that describes how Big Basin WC will supply water during a power outage. As a minimum, the power outage response plan must include the following items:
    i. Preparation protocol for an anticipated, planned power shutoff including filling storage tanks, site visits, water conservation notification, etc.
    ii. Identification of critical sites requiring backup power to supply all pressure zones with a system pressure no less than 20 psi during a power outage.
    iii. Documentation demonstrating ownership and/or rental contracts to obtain backup power at Well 4 and other identified critical sites before a planned power outage and at the onset of an unplanned power outage.
    iv. The process for transporting and installing portable backup power during a power outage at the locations identified as critical for sustained operation in all pressure zones but do not have on-site back power generators.
    v. Contact information for neighboring water systems, the State Water Board, Santa Cruz County Environmental Health, emergency response networks, and other contacts needed during a power outage.
    vi. The procedure for initiating and distributing public notification in accordance with California Code of Regulations, Title 22, Sections 64663 and 64665 and with State Water Board review and approval.

b. An operations and maintenance schedule for Well 4 and the chlorination system;
c. A schedule and procedure for flushing dead end mains, and procedures for disposal of the flushed water including dechlorination;
d. A schedule for routine inspection of tanks, and procedures for cleaning tanks;
e. A schedule and procedures for inspecting, repairing, and replacing water mains;
f. A plan and procedures for responding to consumer complaints;
g. A schedule and procedures for routine exercising of water main valves;
h. A schedule and program for maintenance and calibration of source flow meters and other online instruments used to determine the quality or quantity of water;
i. The qualifications and training of operating personnel;

[The Division has not received the operations and maintenance plan.]

5. Directive 7 - by **April 10, 2021,** and every 10th of the month thereafter, submit a monthly progress report to the State Water Board showing actions taken during the previous calendar month to comply with the corrective action plans required by Directives 1 and 3, using the form provided as Appendix 2 hereto. For each milestone addressed in the monthly progress report, describe the progress made during the past month, specify if the milestone was completed and if not completed, provide a reason and an estimated date of completion.

[The Division received document submittals from Big Basin WC's engineering consultant, but the Division has not received monthly progress reports from Big Basin WC by the 10th day of the following month.]

On August 19, 2021, the State Water Board issued Citation No. 02_05_21C_021 (Appendix 2) for failure to comply with the CHSC, Section 116555 (a)(3) and CCR, Title 22, Section 64602 after not providing a reliable supply of potable water to the Galleon Heights pressure zone. Big Basin WC has not complied with the following directive from Citation No. 02_05_21C_021:

1. Directive 1 - by **September 16, 2021**, submit to the State Water Board a corrective action plan that includes a schedule for replacing the pumps and appurtenances at the Galleon Heights booster station and installing reliability features, such as alarms and backup power capabilities, with a final completion date no later than November 30, 2021. The plan must ensure that the Galleon Heights pressure zone distribution system pressure can be reliably maintained without outages.

   [The Division has not received the Galleon Heights booster station corrective action plan.]

DETERMINATION

The State Water Board has determined that Big Basin WC has failed to comply with Directives 1, 2, 3, 4, and 7 of Compliance Order No. 02_05_21R_001, issued on April 9, 2021, and Directive 1 of Citation No. 02_05_21C_021, dated August 19, 2021.

PENALTY PURSUANT TO HEALTH AND SAFETY CODE SECTION 116650

The State Water Board hereby assesses upon Big Basin WC an administrative penalty in the amount of **$21,000.** However, should the State Water Board receive proof of completion of each of the following Directives 1, 2, 3, 4, 5, 6, and 7 by **January 31, 2022**, and should the State Water Board deem such proof adequate as to the

completion of each directive, the State Water Board will permanently stay and will not seek collection of up to **$21,000** of the **$21,000** penalty. In such case, the State Water Board will promptly inform Big Basin WC by letter of the final penalty amount. Big Basin WC is directed to pay this penalty in accordance with the requirements set forth in Directive 8 of this Citation.

DIRECTIVES

Big Basin WC is hereby directed to take the following actions:

1. By **December 31, 2021**, provide proof to the State Water Board that Big Basin WC has an additional temporary or permanent approved water supply source capable of supplying the distribution system in the event of a Well 4 outage.

2. By **December 31, 2021**, submit to the State Water Board a corrective action plan that includes a schedule for replacing the pumps and appurtenances at the Galleon Heights booster station and installing reliability features, such as alarms and backup power capabilities, with a final completion date no later than **January 31, 2022**. The plan must ensure that the Galleon Heights pressure zone distribution system pressure can be reliably maintained without outages.

3. By **December 31, 2021**, submit a permit amendment application package to the State Water Board requesting to add at least one additional permanent water source. The application must include documentation demonstrating compliance with the California Environmental Quality Act (CEQA), water rights, water quality, and all other documentation requested by the State Water Board. Please contact the State Water Board for a full list of requirements.

4. By **January 31, 2022**, submit to the State Water Board for review and approval a compliance action plan prepared by a licensed California professional engineer. The compliance action plan must include the following elements:
    a. A proposal to comply with the source capacity requirements of CCR, Title 22, Section 64554 (a)(2), including a schedule for completion of each project phase. As a minimum, the schedule must include the following project phases: environmental review, design, construction, permitting, inspection, and startup. The plan must include an anticipated date when Big Basin WC will achieve compliance with CCR, Title 22, Section 64554(a). The completion date must be no later than March 10, 2022, unless otherwise approved by the State Water Board.
    b. A schedule for removal and replacement of all fire-damaged infrastructure, including, but not limited to, service laterals, mains, transmission lines, storage tanks, etc.
    c. An analysis of Big Basin WC's financial capacity to complete the projects listed in the compliance action plan.

5. By **December 31, 2021**, submit to the State Water Board for approval a schedule for completing the remaining corrective actions identified in Big Basin WC's March 3, 2019, response to the 2018 sanitary survey letter (Appendix 1). The plan must include a schedule and project list to correct existing storage tank, booster station, and distribution system deficiencies. Unless specified below, the plan may exclude any deficiencies related to fire-damaged infrastructure, such as the Jamison SWTP and raw surface water sources. The State Water Board will consider each project completed after adequate documentation and photos have been sent and approved by the State Water Board. State Water Board confirmation may include site visits. As a minimum, the schedule must include

the following projects mentioned in the 2018 sanitary survey and March 3, 2019, Big Basin WC response letter:

a. Letter Section 3.6 - remove the Robin Hood Tank #2 (Horizontal Tank) from service
b. Letter Section 3.7 - Galleon Heights Storage Tank improvements
c. Letter Section 3.8.1 – Galleon Heights Tank improvements.
d. Letter Section 3.8.2 – Tradewinds pressure system improvements.
e. Letter Section 3.10 – Rancho Dia Tank replacement.
    i. The State Water Board understands this tank was destroyed in the CZU Lightning Complex Fire, but Big Basin WC must provide details on tank replacement at this site or provide a hydraulic model that demonstrates adequate water system operations without this tank
f. 3.11 – Oberst Tank replacement
g. 3.12 – Bloom Grade Tank improvements
h. 3.13 and 3.14 – Create a main replacement program that includes adding distribution system isolation valves.

The completion date for the projects listed above must be no later than **February 28, 2023**.

6. By **December 31, 2021**, submit to the State Water Board for review and approval a Water System Operations and Maintenance Plan (O&M plan) pursuant to CCR, Title 22, Section 64600. The O&M plan must include the following elements:
    a. A plan and procedures for responding to water supply emergencies, which also includes a power outage response plan that describes how Big Basin WC will supply water during a power outage. As a minimum, the power outage response plan must include the following items:

i. Preparation protocol for an anticipated, planned power shutoff including filling storage tanks, site visits, water conservation notification, etc.

ii. Identification of critical sites requiring backup power to supply all pressure zones with a system pressure no less than 20 psi during a power outage.

iii. Documentation demonstrating ownership and/or rental contracts to obtain backup power at Well 4 and other identified critical sites before a planned power outage and at the onset of an unplanned power outage.

iv. The process for transporting and installing portable backup power during a power outage at the locations identified as critical for sustained operation in all pressure zones but do not have on-site back power generators.

v. Contact information for neighboring water systems, the State Water Board, Santa Cruz County Environmental Health, emergency response networks, and other contacts needed during a power outage.

vi. The procedure for initiating and distributing public notification in accordance with California Code of Regulations, Title 22, Sections 64663 and 64665 and with State Water Board review and approval.

b. An operations and maintenance schedule for Well 4 and the chlorination system;

c. A schedule and procedure for flushing dead end mains, and procedures for disposal of the flushed water including dechlorination;

d. A schedule for routine inspection of tanks, and procedures for cleaning tanks;

e. A schedule and procedures for inspecting, repairing, and replacing water mains;
f. A plan and procedures for responding to consumer complaints;
g. A schedule and procedures for routine exercising of water main valves;
h. A schedule and program for maintenance and calibration of source flow meters and other online instruments used to determine the quality or quantity of water;
i. The qualifications and training of operating personnel;

7. By **November 10, 2021,** and every 10th of the month thereafter, submit a monthly progress report to the State Water Board showing actions taken during the previous calendar month to comply with the corrective action plans required by Directives 1 and 3, using the form provided as Appendix 2 hereto. For each milestone addressed in the monthly progress report, describe the progress made during the past month, specify if the milestone was completed and if not completed, provide a reason and an estimated date of completion.

8. Submit to the State Water Board by **February 10, 2022**, a check for the administrative penalty of **$21,000** imposed by this Citation and a copy of the form, which is attached as Appendix 1, hereto entitled "Notice of Administrative Penalty." The Citation number must be written on the check. The check must be made payable to the **State Water Resources Control Board** and submitted to:

SWRCB Accounting Office
ATTN: Drinking Water Program Fees
P.O. Box 1888
Sacramento, CA 95812-1888

All submittals required by this Citation, unless otherwise specified in the directives above, must be electronically submitted to the State Water Board at the following address. The subject line for all electronic submittals corresponding to this Citation must include the following information: Water System name and number, citation number and title of the document being submitted.

Jonathan Weininger, Monterey District Engineer
Dwpdist05@waterboards.ca.gov

The State Water Board reserves the right to make modifications to this Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance. Nothing in this Citation relieves Big Basin WC of its obligation to meet the requirements of the California SDWA (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit or order issued or adopted thereunder.

PARTIES BOUND

This Citation shall apply to and be binding upon Big Basin WC, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The directives of this Citation are severable, and Big Basin WC shall comply with each and every provision thereof notwithstanding the effectiveness of any provision.

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the State Water Board to: issue a citation or order with assessment of administrative penalties to a public water system for violation or

continued violation of the requirements of the California SDWA or any regulation, permit, standard, citation, or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the State Water Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an order of the State Water Board, and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the State Water Board. The State Water Board does not waive any further enforcement action by issuance of this Citation.

_____ October 28, 2021
Stefan Cajina, P.E., Chief Date
North Coastal Section
State Water Resources Control Board
Division of Drinking Water

Appendices (3):

1. Copy of Compliance Order No. 02_05_21R_001
2. Copy of Citation No. 02_05_21C_021
3. Notice of Administrative Penalty Form

Certified Mail No. 7018 3090 0001 0464 6878

APPENDIX 1 - COPY OF COMPLIANCE ORDER NO. 02_05_21R_001

CALIFORNIA Water Boards

GAVIN NEWSOM GOVERNOR
JARED BLUMENFELD SECRETARY FOR ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

April 9, 2021

System No. 4410001

Jim Moore, Manager
Big Basin Water Company
PO Box 197
Boulder Creek, CA 95006
bbwater197@yahoo.com

COMPLIANCE ORDER NO. 02_05_21R_001_4410001
FAILURE TO PROVIDE AN ADEQUATE SUPPLY OF PURE, WHOLESOME, HEALTHFUL, AND POTABLE WATER, &
NONCOMPLIANCE WITH SOURCE CAPACITY REQUIREMENTS, &
NONCOMPLIANCE WITH THE 2018 SANITARY SURVEY REPORT DEFICIENCY LIST

Enclosed is Compliance Order No. 02_05_21R_001 (hereinafter "Order"), issued to the Big Basin Water Company (hereinafter "Big Basin WC") public water system. Please note that there are legally enforceable deadlines associated with this Order.

Big Basin WC will be billed at the State Water Resources Control Board's (hereinafter "State Water Board") hourly rate for the time spent on issuing this Order. California Health and Safety Code (hereinafter "CHSC") Section 116577 provides that a public water system must reimburse the State Water Board for actual costs incurred by the State Water Board for specified enforcement actions, including preparing, issuing and monitoring compliance with an order. At this time, the State Water Board has spent approximately five hours on enforcement activities associated with this violation.

Big Basin WC will receive a bill sent from the State Water Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on Big Basin WC for the current fiscal year.

Any person who is aggrieved by a citation, order or decision issued under authority delegated to an officer or employee of the State Water Board under Article 8

(commencing with CHSC, Section 116625) or Article 9 (commencing with CHSC, Section 116650), of the Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4), may file a petition with the State Water Board for reconsideration of the citation, order or decision.

Petitions must be received by the State Water Board within 30 days of the issuance of the citation, order or decision by the officer or employee of the State Water Board. If the 30th day falls on a Saturday, Sunday, or state holiday, the petition is due the following business day by 5:00 p.m.

Information regarding filing petitions may be found at:

http://www.waterboards.ca.gov/drinking_water/programs/petitions/index.shtml

If you have any questions regarding this matter, please contact the Division of Drinking Water at dwpdist05@waterboards.ca.gov or (831) 655-6939.

Sincerely,

Stefan Cajina
Digitally signed by Stefan Cajina
Date: 2021.04.09 12:53:32 -07'00'
Water Boards

Stefan Cajina, P.E., Chief
North Coastal Section
Division of Drinking Water
State Water Resources Control Board

Enclosures

Certified Mail No. 7016 2070 0000 1417 3236

cc: Santa Cruz County Environmental Health Services
Marilyn Underwood, Marilyn.Underwood@santacruzcounty.us
Nathan Salazar, Nathan.Salazar@santacruzcounty.us
Sierra Ryan, Sierra.Ryan@santacruzcounty.us

California Public Utilities Commission (CPUC) Water Division
Moises Chavez, moises.chavez@cpuc.ca.gov
Will Dundon, Will.Dundon@cpuc.ca.gov
Stephen St. Marie, Stephen.St.Marie@cpuc.ca.gov

Compliance Order No. 02_05_21R_001

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

Name of Public Water System: Big Basin Water Company

Water System No: 4410001

Attention: Jim Moore, Manager
PO Box 197
Boulder Creek, CA 95006

Issued: April 9, 2021

COMPLIANCE ORDER FOR NONCOMPLIANCE
SOURCE CAPACITY REQUIREMENTS
CALIFORNIA CODE OF REGULATIONS
TITLE 22, SECTION 64554(a)(2)
AND CALIFORNIA HEALTH AND SAFETY CODE SECTION 116555 (a)(3)

The California Health and Safety Code (hereinafter "CHSC"), Section 116655 authorizes the State Water Resources Control Board (hereinafter "State Water Board"), to issue a Compliance Order to a public water system when the State Water Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA"), (CHSC, Division 104, Part 12,

Chapter 4, commencing with Section 116270), or any regulation, standard, permit, or order issued or adopted thereunder.

The State Water Board, acting by and through its Division of Drinking Water (hereinafter "Division"), and the Deputy Director for the Division, hereby issues Compliance Order No. 02_05_21R_001 (hereinafter "Order"), pursuant to Section 116655 of the CHSC to the Big Basin Water Company (hereinafter "Big Basin WC"), for violation of CHSC, Section 116555 and CCR, Title 22, Section 64554(a)(2).

STATEMENT OF FACTS

Big Basin WC is classified as a community water system and serves a population of 1,694 through 605 connections (information from the 2019 Electronic Annual Report to the Division of Drinking Water (EAR)). Following the August 2020 CZU Lightning Complex Fire, a portion of Big Basin Water Company customer connections were destroyed or damaged, so the current population and customer connection count is lower than reported in the 2019 EAR. Big Basin WC operates under Domestic Water Supply Permit No. 02-05-44-94P-001, issued by the State Water Board on February 11, 1994.

Prior to the August 2020 CZU Lightning Complex Fire, Big Basin Water Company's water sources included treated surface water and groundwater. Sources included groundwater from Well 4 and surface water from Corvin Creek, Jamison Springs, and Horizontal Well No. 5, which supplied the Jamison Surface Water Treatment Plant (Jamison SWTP). Jamison SWTP was a 150 gallons per minute (gpm) capacity treatment plant with two parallel 75 gpm-rated Trident Microfloc upflow contact clarification/filtration units that included coagulation using aluminum sulfate and disinfection with liquid sodium hypochlorite. The State Water Board's 2018 sanitary survey report identified Big Basin WC's noncompliance with source capacity regulations

and included a deadline of December 31, 2019 for Big Basin WC to send a report identifying progress made on increasing source capacity. In a March 3, 2019 letter responding to the sanitary survey report, Big Basin WC proposed the following plan to address its source capacity deficiency:

> *"Proposed Corrective Action: BBWC will contract with a professional engineering consultant to conduct well tests of its groundwater sources and review its surface water capacity to determine necessary steps to increase its source capacity is in accordance with current regulations.*
>
> *Proposed Year for Corrective Action to be Complete: 2020.*
>
> *Total Estimated Cost: $25,000."*

The State Water Board has not received this source capacity evaluation from Big Basin WC.

The August 2020 CZU Lightning Complex Fires destroyed the Jamison SWTP and several other water system facilities. Following the loss of the Jamison SWTP, Big Basin WC currently has only one potable water source, Well 4, and cannot meet source capacity requirements.

Pursuant to CCR, Title 22, Section 64554(a), as a public water system serving less than 1,000 service connections, Big Basin WC is required to have sufficient source capacity to meet the system's 10-year maximum day demand, which is determined pursuant to CCR, Title 22, Section 64454(b). The past 10 years of production data, as reported in Electronic Annual Reports to the State Water Board, are listed in the following table:

Past 10 Years of Production Data (2010-2019) in Million Gallons (MG)			
Year	**Max Day**	**Max Month**	**Year Total**
2019	*0.35*	7.32	67.0
2018	*0.26*	5.39	52.44
2017	*0.37*	7.62	64.51
2016	*0.51*	10.6	78.43
2015	*0.34*	7.09	68.38
2014	*0.48*	9.35	74.18
2013	Big Basin WC did not send a 2013 EAR.		
2012	***0.62***	12.71	98.92
2011	*0.59*	12.21	83.38
2010	*0.43*	8.91	56.71

Note: italicized values indicate a calculated value using Section 64554 guidelines.

Additionally, Big Basin WC is required to meet its 10-year maximum day demand with storage capacity, unless it can demonstrate that it has additional source capacity or an intertie with a nearby system.

The 72-hour pumping test for Well 4, conducted in 1980, demonstrated a maximum capacity of 288 gpm. CCR, Title 22, Section 64554 (g) specifies hard rock well source capacity as 25 percent of the maximum capacity; therefore, the capacity of Well 4 is 72 gpm (288 gpm * 0.25 = 72 gpm) or 0.104 million gallons per day (MGD).

With a 10-year maximum day demand of 0.62 MGD (2012) and an available source capacity of 0.104 MGD, Big Basin Water Company cannot meet the 10-year maximum day demand.

Big Basin WC does not have a second water source or a permanent interconnection to a nearby water system to ensure potable water supply in the event Well 4 fails or is out of service for maintenance, repairs, power outage, or other reasonably foreseeable events. Therefore, Big Basin WC cannot demonstrate the ability to provide a reliable and adequate supply of pure, wholesome, healthful, and potable water as required by CHSC, Section 116555 (a)(3).

Prior to the August 2020 CZU Lightning Complex fires, the State Water Board documented sanitary hazards and operational deficiencies found at Big Basin WC in the 2016 sanitary survey report (dated December 21, 2016), the 2018 sanitary survey report (dated January 10, 2019), and the 2020 surface water treatment plant evaluation (dated February 25, 2020).

During the 2019 Public Safety Power Shutoff (PSPS) program administered by Pacific Gas and Electric (PG&E) in Northern California, electricity was shut off in targeted geographic areas when heightened fire risk weather conditions were forecast. During two PSPS events in October 2019, with advance notice from PG&E that power shutoffs were imminent, Big Basin WC was not prepared and ultimately experienced a water outage on October 28 and 29, 2019, which prompted Big Basin WC to issue a precautionary boil water notice in conjunction with the State Water Board. In a letter dated February 3, 2020, the State Water Board requested a power outage response plan from Big Basin WC, with a deadline to submit the plan by February 28, 2020. The deadline was later extended to March 2, 2020 in the 2020 surface water treatment plant evaluation letter (dated February 25, 2020). The State Water Board has not received a power outage response plan from Big Basin WC.

Big Basin WC has a documented history of failing to administer preventative maintenance, emergency preparedness, and customer complaint programs. This lack of

preparation and inadequate customer communication has contributed to Big Basin WC failing to reliably supply its customers with potable water during emergency events, including the 2019 PG&E Power Safety Shutoffs and the August 2020 CZU Lightning Complex Fire. These deficiencies constitute an ongoing threat of failure to provide a reliable and adequate supply of pure, wholesome, healthful, and potable water as required by CHSC, Section 116555 (a)(3).

DETERMINATION

The State Water Board has determined that Big Basin WC cannot provide an adequate and reliable supply of water pursuant to CHSC, Section 116555 (a)(3) and has failed to comply with source capacity requirements pursuant to CCR, Title 22, Sections 64554(a)(2).

DIRECTIVES

Big Basin WC is hereby directed to take the following actions:

1. By **June 10, 2021**, submit to the State Water Board for review and approval a compliance action plan prepared by a licensed California professional engineer. The compliance action plan must include the following elements:
    a. A proposal to comply with the source capacity requirements of CCR, Title 22, Section 64554 (a)(2), including a schedule for completion of each project phase. As a minimum, the schedule must include the following project phases: environmental review, design, construction, permitting, inspection, and startup. The plan must include an anticipated date when Big Basin WC will achieve compliance with CCR, Title 22, Section 64554(a). The completion date must be no later than **March 10, 2022**, unless otherwise approved by the State Water Board.

b. A schedule for removal and replacement of all fire-damaged infrastructure, including, but not limited to, service laterals, mains, transmission lines, storage tanks, etc.
c. An analysis of Big Basin WC's financial capacity to complete the projects listed in the compliance action plan.

2. On or before **May 10, 2021**, submit to the State Water Board a water contingency plan that describes how Big Basin WC will secure a temporary water supply in the event of an outage or failure of Well 4. In addition to any other options for temporary supply, Big Basin WC must present a feasibility analysis for obtaining an emergency or permanent interconnection to a neighboring public water system, sized to reliably provide water to all Big Basin WC customers.

3. On or before **June 10, 2021**, submit to the State Water Board for approval a schedule for completing the corrective actions identified in Big Basin WC's March 3, 2019 response to the 2018 sanitary survey letter (Appendix 1). The plan must include a schedule and project list to correct existing storage tank, booster station, and distribution system deficiencies. Unless specified below, the plan may exclude any deficiencies related to fire-damaged infrastructure, such as the Jamison SWTP and raw surface water sources. The State Water Board will consider each project completed after adequate documentation and photos have been sent and approved by the State Water Board. State Water Board confirmation may include site visits. As a minimum, the schedule must include the following projects mentioned in the 2018 sanitary survey and March 3, 2019 Big Basin WC response letter:
    a. Letter Section 3.3.3 - remove the cross connection between the Jamison Reservoir and the distribution system

b. Letter Section 3.6 - remove the Robin Hood Tank #2 (Horizontal Tank) from service
c. Letter Section 3.7 - Galleon Heights Booster Station and Storage Tank improvements
d. Letter Section 3.8.1 – Galleon Heights Tank improvements.
e. Letter Section 3.8.2 – Tradewinds pressure system improvements.
f. Letter Section 3.10 – Rancho Dia Tank replacement.
    i. The State Water Board understands this tank was destroyed in the CZU Lightning Complex Fire, but Big Basin WC must provide details on tank replacement at this site or provide a hydraulic model that demonstrates adequate water system operations without this tank
g. 3.11 – Oberst Tank replacement
h. 3.12 – Bloom Grade Tank improvements
i. 3.13 and 3.14 – Create a main replacement program that includes adding distribution system isolation valves.

The completion date for the projects listed above must be no later than **February 28, 2023,** except item (a), removing the cross connection between the Jamison Reservoir and the distribution system, must be completed and verified no later than **June 10, 2021.**

4. On or before **July 10, 2021**, submit to the State Water Board for review and approval a Water System Operations and Maintenance Plan (O&M plan) pursuant to CCR, Title 22, Section 64600. The O&M plan must include the following elements:
    a. A plan and procedures for responding to water supply emergencies, which also includes a power outage response plan that describes how Big Basin

WC will supply water during a power outage. As a minimum, the power outage response plan must include the following items:

i. Preparation protocol for an anticipated, planned power shutoff including filling storage tanks, site visits, water conservation notification, etc.

ii. Identification of critical sites requiring backup power to supply all pressure zones with a system pressure no less than 20 psi during a power outage.

iii. Documentation demonstrating ownership and/or rental contracts to obtain backup power at Well 4 and other identified critical sites before a planned power outage and at the onset of an unplanned power outage.

iv. The process for transporting and installing portable backup power during a power outage at the locations identified as critical for sustained operation in all pressure zones but do not have on-site back power generators.

v. Contact information for neighboring water systems, the State Water Board, Santa Cruz County Environmental Health, emergency response networks, and other contacts needed during a power outage.

vi. The procedure for initiating and distributing public notification in accordance with California Code of Regulations, Title 22, Sections 64663 and 64665 and with State Water Board review and approval.

b. An operations and maintenance schedule for Well 4 and the chlorination system;

c. A schedule and procedure for flushing dead end mains, and procedures for disposal of the flushed water including dechlorination;

d. A schedule for routine inspection of tanks, and procedures for cleaning tanks;
e. A schedule and procedures for inspecting, repairing, and replacing water mains;
f. A plan and procedures for responding to consumer complaints;
g. A schedule and procedures for routine exercising of water main valves;
h. A schedule and program for maintenance and calibration of source flow meters and other online instruments used to determine the quality or quantity of water;
i. The qualifications and training of operating personnel;

5. On or before **September 10, 2021**, submit a permit amendment application package to the State Water Board requesting to add at least one additional permanent water source. The application must include documentation demonstrating compliance with the California Environmental Quality Act (CEQA), water rights, water quality, and all other documentation requested by the State Water Board. Please contact the State Water Board for a full list of requirements.

6. Perform the actions outlined in the State Water Board approved Corrective Action Plans required by Directives 1 and 3, and every element of said plan, according to the time schedule set forth therein.

7. On or before **April 10, 2021** and every 10th of the month thereafter, submit a monthly progress report to the State Water Board showing actions taken during the previous calendar month to comply with the corrective action plans required by Directives 1 and 3, using the form provided as Appendix 2 hereto. For each milestone addressed in the monthly progress report, describe the progress made

during the past month, specify if the milestone was completed and if not completed, provide a reason and an estimated date of completion.

8. By **April 27, 2021**, complete and return to the State Water Board the "Notification of Receipt" form attached to this Order as Appendix 3 Completion of this form confirms that Big Basin WC has received this Order and understands that it contains legally enforceable directives(s) with due dates.

All submittals required by this Order, unless otherwise specified in the directives above, must be electronically submitted to the State Water Board at the following address. The subject line for all electronic submittals corresponding to this Order must include the following information: Water System name and number, compliance order number and title of the document being submitted.

Jonathan Weininger, District Engineer
Dwpdist05@waterboards.ca.gov

The State Water Board reserves the right to make modifications to this Order as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Order and shall be effective upon issuance.

Nothing in this Order relieves the Big Basin Water Company of its obligation to meet the requirements of the California SDWA (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit or order issued or adopted thereunder.

PARTIES BOUND

This Order shall apply to and be binding upon Big Basin WC, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The directives of this Order are severable, and Big Basin WC shall comply with each and every provision thereof notwithstanding the effectiveness of any provision.

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the State Water Board to: issue a citation or order with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any regulation, permit, standard, citation, or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the State Water Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an order of the State Water Board, and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the State Water Board. The State Water Board does not waive any further enforcement action by issuance of this Order.

Stefan Cajina
Digitally signed by Stefan Cajina
Date: 2021.04.09 12:52:55 -07'00'
Water Boards

Stefan Cajina, P.E., Chief
North Coastal Section
Division of Drinking Water
State Water Resources Control Board

April 9, 2021
Date

Appendices (3):

1. Copy of “Response to 2018 Sanitary Survey of Big Basin Water Company” letter, dated March 3, 2019.
2. Progress Report Template
3. Notification of Receipt Form

Certified Mail No. 7016 2070 0000 1417 3236

APPENDIX 1: Copy of "Response to 2018 Sanitary Survey of Big Basin Water Company" letter, dated March 3, 2019.

Big Basin Water Co. & Sanitation
16575 Jamison Creek Rd., Boulder Creek, CA 95006
(831) 338 - 2933

March 3, 2019

Jan R. Sweigert, P.E.
District Engineer, Monterey District Office
Northern California Field Operations Branch
Division of Drinking Water

RE: Response to 2018 Sanitary Survey of Big Basin Water Company (No. 4410001)

Dear Ms. Sweigert,

On January 10, 2019, Big Basin Water Company received your 2018 Sanitary Survey report of the water treatment plant and distribution system. This letter and the enclosed documents provide a written response to the various deficiencies identified in the Sanitary Survey, as well as a list of the deficiencies and a plan to correct them. However, this plan and timeline for improvements is dependent on receiving the necessary funding as an outcome of the current Big Basin Water Company rate case filing with the California Public Utilities Commission.

If you have any questions, please contact Jim Moore at (831) 338 – 2933 or by email at bbwater197@yahoo.com.

Sincerely,

Jim Moore
Chief Operator/Owner
Big Basin Water Company

Enclosed:

1 – 2018 Sanitary Survey Response Memorandum
2 – Map of Existing System Layout and Proposed Corrective Actions
3 – Budgetary Cost Estimate of Improvements

Big Basin Water Co. & Sanitation
16575 Jamison Creek Rd., Boulder Creek, CA 95006
(831) 338 - 2933

Email cc:

Santa Cruz County Environment Health Services

CPUC Water Division
Rami Khalon, CPUC Director – Water Division
Bruce Deberry, CPUC Water Division
Adam Thaler, CPUC Water Division

CPUC Public Advocates Office
Pat Ma, CPUC PAO Program & Project Supervisor

2018 Sanitary Survey Response Memorandum

1. Introduction

This memorandum summarizes deficiencies and recommendations identified by the State Water Resource Control Board Division of Drinking Water (DDW) with proposed corrective actions to be taken by Big Basin Water Company (BBWC), including the timing of any improvements, construction costs to complete, and long-term strategies. The corrective actions presented below are grouped together based on the primary station where deficiencies were identified. An ordered list of the deficiencies as identified in the sanitary survey is available in the table at the end of this document.

2. Cost Estimating

Construction and maintenance costs presented herein are based on the following assumptions:

- All new construction will meet current application standards and codes
- Costs presented are based on general contractor, manufacturers, and/or professional engineering estimates
- Unless otherwise specified, retirement costs are not included with the cost estimate
- All construction is assumed to be design-build by the general contractor
- Costs included standard industry markups including Company Labor & Overhead (10%), Permits and Municipal Fees (3%), Construction Contingencies (15%)
- All costs are Present Valve (PV) for 2019
- Total estimated costs for identified corrective actions include costs for short-term and long-term solutions

3. Proposed CAPEX Corrective Actions

3.1. Well 4 Station

Identified Deficiency: Well 4 does not have a 50-foot sanitary seal and continually exerts a chlorine demand on system water that reduces the system chlorine residual. BBWC has been required to install chlorination at Well 4 since the 1994 permit from DDW but has not yet done so. BBWC must provide a plan for wellhead disinfection to DDW no later than March 10, 2019 and provide wellhead disinfection no later than May 20, 2019.

Proposed Corrective Action: In the short term, BBWC has installed a free chlorine injection system to improve the free chlorine residual in the distribution system. The electrical configuration of the chemical pump ensures that the pump only injects chlorine into the tank inlet piping when the groundwater well is operating (see Figure 1).

Figure 1. Temporary Disinfectant Injection Configuration at Well # 4

In the long term, a County permitted chemical storage and injection system will be installed. The system will include a 12.5% sodium hypochlorite solution. The solution will be stored with double containment consisting of a 55-gallon drum inside of a lockable polyethylene housing rated for the outdoors. This PE housing unit will be seated and anchored into a concrete foundation and will be located adjacent to the existing bolted steel tank. A peristaltic pump will inject free chlorine into the well discharge piping through a retractable injection assembly and using chemical piping and tubing to ensure double containment. The chemical pump will be activated whenever the groundwater well pump is running. Grab sampling from the tank outlet piping will confirm disinfectant levels entering the distribution system are adequate. Additional work will be performed to ensure that there is drainage away from the tank base.

Proposed Year for Corrective Action to be Complete: 2020

Total Estimated Cost: $253,900

3.2. Corvin Creek Station

Identified Deficiency: The existing Corvin Creek sedimentation tank is in poor physical condition and shows signs of corrosion. Additionally, the reservoir is located on an unstable foundation. The reservoir could potentially tip over if a landslide or a strong seismic event occurred.

Proposed Corrective Action: The Corvin Creek sedimentation tank was originally constructed as a settling tank for the spring diversion but has since become obsolete. Currently, all raw water sources are conveyed to a more recently constructed 5,000 gallon polyethylene settling tank at Jamison station. Therefore, the Corvin Creek tank is no longer necessary for system operations and retirement of this asset is recommended. Existing piping and associated appurtenances at the existing tank site location will be modified to bypass the Corvin Creek tank using 6-inch PVC or HDPE piping.

Proposed Year for Corrective Action to be Complete: 2021

Total Estimated Cost: $15,800

3.3. Jamison Station

3.3.1. Intake 1 Sedimentation Tank

Identified Deficiency: The intake includes a 2,000 gallon steel sedimentation tank in poor condition with signs of corrosion. BBWC needs to replace the tank and provide a stable foundation.

Proposed Corrective Action: The existing sedimentation tank has become obsolete since the construction of a 5,000 gallon polyethylene settling tank at Jamison station. Therefore, the Intake 1 sedimentation tank is no longer necessary for system operations and retirement of this asset is recommended. Existing piping and associated appurtenances at the existing tank site location will be modified to bypass the sedimentation tank using 6-inch PVC or HDPE piping.

Proposed Year for Corrective Action to be Complete: 2021

Total Estimated Cost: $15,800

3.3.2. Intake Transmission Lines & Screen

Identified Deficiency: The previous steel transmission lines for both intake 1 and 2 are broken and flexible pipes have been installed temporarily. BBWC must install a permanent transmission line using NSF 61 materials. In addition, the screen on Intake 2 was not properly secured.

Proposed Corrective Action: Replace the existing intake piping with 6-inch PVC or HDPE pipe from each intake (approximately 700-ft of piping to be installed) with all air-valves, valving, blowoffs, and all necessary appurtenances to service the line. Install a new secured screen on Intake 2.

Proposed Year for Corrective Action to be Complete: 2021

Total Estimated Cost: $95,500

3.3.3. Reservoir Cross Connection with Distribution System

Identified Deficiency: The Jamison surface water reservoir must be physically disconnected from the distribution system. Due to the nature of the cross connection (separated only by a closed isolation valve), BBWC must develop a well researched plan that reduces the risk of potable water contamination with raw surface water.

Proposed Corrective Action: The existing piping between Jamison Reservoir and the distribution system will be cut, capped, and separated with concrete to create a physical separation between these two sources of water, thereby eliminating all risk of cross connection at this location.

Proposed Year for Corrective Action to be Complete: 2019

Total Estimated Cost: $22,200

3.4. Hill House Station

Identified Deficiencies: Plants have grown around the site and need to be cut back around the tank perimeter. The tank is located adjacent to a home with its own well and tank. BBWC must ensure there are no cross connections and if the home is a customer of BBWC, the home owner has an approved reduce pressure assembly at their meter. The polyethylene tank does not have a foundation. As the budget allows, a more permanent foundation with seismic restraints should be installed. The tank site is not fenced. DDW recommends the site be fenced.

Proposed Corrective Action: BBWC has verified no cross connection exists and vegetation surrounding the tank has been cleared (see Figure 3). To secure the tank, BBWC will install a seismic restraint assembly consisting of four-way cables, cable clamps or clips, and anchor bolts. Anchor bolt length and depth to be determined by a soil or foundation engineer, similar to the example shown in Figure 2. BBWC will also install approximately 170 ft of fence surrounding the tank site with a 12-ft swing gate, as well as about 400 sf of base rock or gravel roadway to provide safer access to the site.

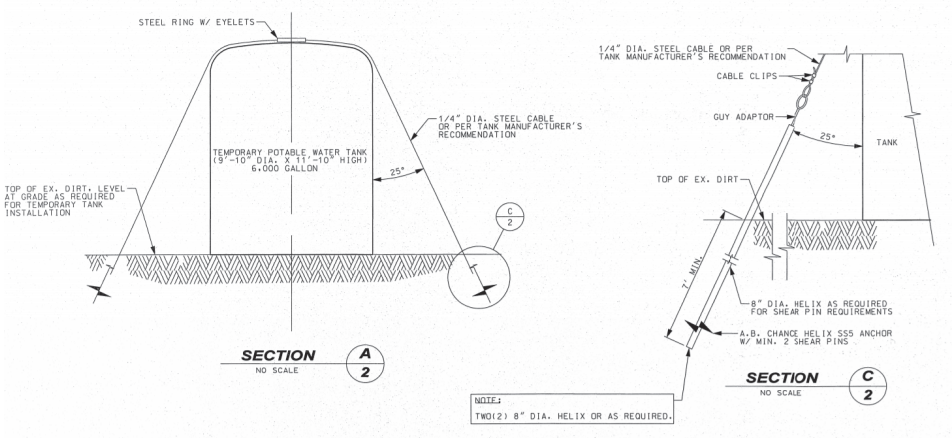

Figure 2. Example of Seismic Restraints

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Figure 3. Vegetation cleared surrounding Hill House Tank

Proposed Year for Corrective Actions to be Complete: 2022

Total Estimated Cost: $34,200

3.5. Water Treatment Plant

Identified Deficiency: DDW noted the following issues at the water treatment plant:

- The filter unit nearest the entrance door has a break in the clarification media screen, which has allowed the buoyant clarification media to enter the filter cell. The loss of clarification media will affect treatment plant performance. The screen must be replaced with a new screen, and the lost clarification media must be replaced.

- BBWC is required to purchase and install a chlorine residual analyzer due to past violations of grab sampling requirements. The Division requested an approved chlorine residual analyzer to be installed by April 30, 2018, but BBWC has not purchased and installed an analyzer to date. A new continuous chlorine residual analyzer using an approved EPA method using must be installed.

- The treatment plant building is a wood building in poor overall condition. The plant was overrun with rodents, so the BBWC keeps cats in the treatment plant building. BBWC must repair building deficiencies including eliminating potential entrance points for domestic animals and rodents. BBWC should begin planning to replace the treatment plant building to address the rodent problem.

- Parts of the existing turbidimeter were replaced with parts from another turbidimeter. Due to the overall condition and age of the turbidimeter, BBWC must budget to replace the turbidimeter with a new EPA method certified turbidimeter no later than November 10, 2019. A manufacturer representative must evaluate the current turbidimeter for accuracy. BBWC must continue to perform calibrations according to the manufacturer's recommendations.

- Until a manufacturer representative has evaluated the turbidimeter, BBWC must have its laboratory analyze filtered water turbidity samples at least once every two weeks and report the result to the Division along with the turbidimeter turbidity reading.

- DDW recommends BBWC install an additional turbidimeter so there are turbidimeters on each filter unit. A backup turbidimeter should also be available, as required by Section 64659(a)(2), which states that standby replacement equipment should be available to assure continuous operation and control of unit processes for coagulation, filtration and disinfection.

- DDW recommends BBWC install a new turbidimeter on each individual filter effluent (IFE) line.

Proposed Corrective Action: To address DDW's comments in the short term, BBWC intends to do the following work identified below. However, given the state of the existing WTP and that much of the infrastructure is now over 26 years old, it is clear that the existing plant is in need of a complete long-term evaluation. For this reason, BBWC is budgeting for a Water Treatment Plant Facilities Plan to be completed by a professional engineering consultant in 2020 (see Section 4.3).

- Repair filter screens as necessary and replace clarification media in both units
- Replace the Programmable Logic Controls (PLC) on both units. The existing PLCs are backed on cassette tapes, no longer supported by the manufacturer or any suppliers.
- Install a HACH CLT10sc Total Chlorine Analyzer with SC200 Controller on the treated water line sample tap to allow for continuous monitoring. The HACH chlorine analyzer is compliant with EPA Method 334.0 for reporting chlorine residual measurements. The analyzer allows for real-time control of disinfection processes by providing continuous readings and self-diagnostics to alert users when the process has changed or the instrument needs servicing.
- Clean the building and repair all holes and seal openings near windows, vents, and doors in the building to limit entrance points for animals. Install rodent bait stations around the exterior perimeter for the building and replace all the rotten or damaged wood siding.
- Replace the existing turbidimeter with two HACH TU5300 online laser turbidimeters; one on the effluent end of each filter unit. Purchase a third turbidimeter as backup to increase system reliability. Turbidimeters have real-time capabilities and are compliant with EPA Method 180.1. A list of turbidimeter alarms or shutdown set points will be provided to DDW.

Proposed Year for Corrective Action to be Complete: 2020

Total Estimated Cost: $236,300

3.5.1. WTP Chemical Storage Tanks and Storage Building

Identified Deficiency: Chemical Storage Tanks have large holes in their lids and are corroded. Furthermore, the secondary containment is partially full of ponding liquid, which poses an unknown risk. BBWC needs to install new alum and chlorine storage tanks and store the tanks separately. Chlorine and Alum are of different chemical storage groups and as a safety precaution should not be stored together. One of the chemical storage tanks in the chemical storage building is double contained, but both chemical storage tanks are stored together in the same containment facility and next to each other. The chemicals should be further separated and not stored in the same double containment box. The Chemical Storage Tanks (chlorine and alum) have a treated water line (for dilution) plumbed directly into storage tank. A proper air gap must be provided between the treated water fill line and the chemical tanks.

Proposed Corrective Action: BBWC will replace the existing chemical storage building with a new County permitted chemical storage facility that includes a wooden roof structure and concrete foundation. Two lockable polyethylene modular spill pallet with chemical containment and rated for outdoor storage will be housed and anchored to the concrete pad. 55 gallon drums of sodium hypochlorite and aluminum sulfate will be stored separately in each of the modular spill pallets. BBWC will prepare and submit a Hazardous Materials Business Plan to the County. In the long-term, the Water Treatment Plant Facilities Plan will consider including a permanent indoor chemical storage facility as part of a new building consideration.

Proposed Year for Corrective Action to be Complete: 2020

Total Estimated Cost: $149,000

3.5.2. WTP Backup Generator & Site Security

Identified Deficiency: BBWC does not have any backup power for the water treatment plant and this is the main source of supply into the system. In addition, the treatment plant is not secured by any fencing or gate.

Proposed Corrective Action: Install a 20-ft wide double swing gate and 950-ft of 6-ft high chain link fencing around all Jamison Station facilities as one enclosed area, which includes the sedimentation tank, chemical storage building, reservoir, WTP building, and storage tank. Install a 20-ft wide barrier gate at the entrance of the road leading to Jamison Station from Jamison Creek Road.

A backup generator will be considered in the Water Treatment Facilities Plan proposed as part of a long-term improvement plan to ensure the treatment plant can continue to operate and serve customers even in the event of a power outage.

The site security measures and backup generator will be addressed in 2022 following completion of the Water Treatment Plant Facilities Plan. At this time, only fencing costs are included below.

Proposed Year for Corrective Action to be Complete: 2022

Total Estimated Cost: $119,300

3.6. Robin Hood (Tank #2) Station

Identified Deficiency: The Robin Hood bolted steel tank provides a storage capacity of 10,000 gallons and primarily serves as an equalization storage reservoir. The horizontal tank is supplied by gravity from the 40,000 gallon Robin Hood Tank laying at an approximate elevation of 1,300 feet. In its current state, the tank is in poor physical condition and does not meet existing drinking water standards. Fallen tree branches obstruct access to the reservoir. Moreover, the exterior of the reservoir shows signs of advanced corrosion. Additionally, the tank lays on an unstable wooden foundation without any strong supports.

Proposed Corrective Action: As a temporary solution, BBWC will install a 2-inch bypass pressure reducing valve, set an adequate setpoint to serve customers in the Kings Highway Zone, and bypass the existing the horizontal Robin Hood tank. Additional piping will also be installed as

needed in order to bypass Robin Hood Tank #2. As a long-term solution, BBWC plans to construct a complete 6-inch regulating station at the reservoir site. The new regulating station will supply the existing Kings Highway zone service area. Once the construction of the regulating station is completed, the existing Robin Hood horizontal tank will be properly retired. The new regulating station will incorporate a Singer 6-inch S106-PR-C-SM dual-rolling diaphragm. If the primary chamber within the diaphragm fails, the secondary chamber will take over and regulate the downstream pressure at a desired pre-determined setpoint. The 6-inch valve can sustain a maximum flow rate of 1,800 gpm exceeding both fire flow requirements and maximum day demands in the zone.

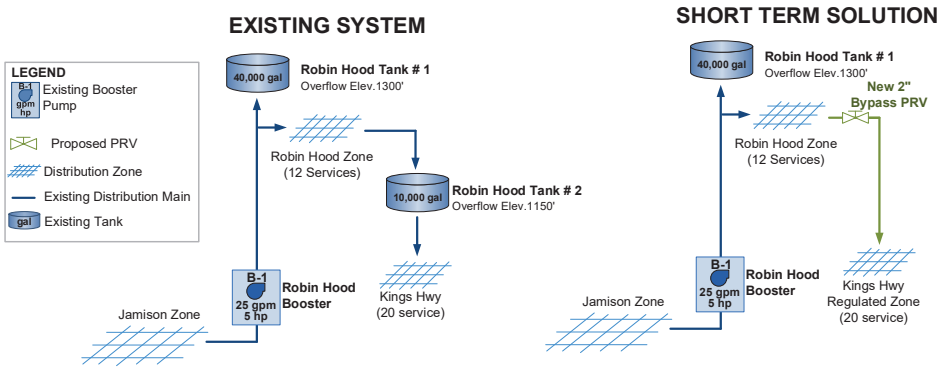

Figure 4. Proposed Corrective Action for Robin Hood Horizontal Tank (Tank # 2) – Short Term

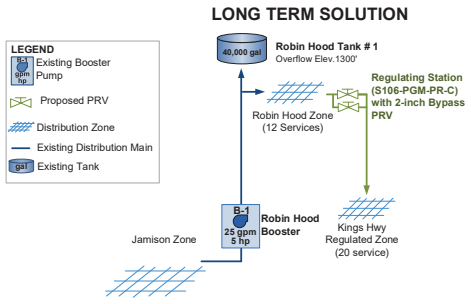

Figure 5. Proposed Corrective Action for Robin Hood Horizontal Tank (Tank # 2) – Long Term

Proposed Year for Corrective Action to be Complete: 2019 (2-inch bypass), 2023 (6-inch regulating station)

Total Estimated Cost: $130,800

3.7. Galleon Heights Booster Station and Storage Site

Identified Deficiencies: Several holes were observed on the wooden side panels of the pump house. Rodent droppings were present on above-grade piping and on the pump bodies. Rodent droppings can create unsanitary conditions and potentially contaminate the source of water supply water. Additionally, the Galleon pump station is severely oversized in comparison to the demands of the service area the pumps supply water to. Consequently, the surplus capacity of the booster pumps limit system operations flexibility, as the clearwell must remain close to its maximum level for the pumps to operate safely. Moreover, the pumps are in poor physical condition and exhibit signs of physical deterioration due to corrosion.

Proposed Corrective Actions: The existing wooden building has exceeded its useful life and will be replaced with a new wooden structure. The inside of the building will be cleaned and the piping will be sandblasted and recoated.

Existing booster pumps and motors will be replaced with two 100-gpm vertical in-line pumps to provide more reliable supply to the tank and replace the oversized equipment currently there. Electrical and logic controls will be installed to allow BBWC to operate pumps based on the water level in the Galleon tank and prevent overflow events. Scope of work would also include a new backup generator receptacle to allow for continued pumping operations to the Galleon reservoir in the occurrence of a power outage.

Proposed Year for Corrective Action to be Complete: 2021

Total Estimated Cost: $125,200

3.8. Tradewinds (Galleon Heights Tank Site) Station

3.8.1. Galleon Heights Reservoir Improvements

Identified Deficiencies: The Tank Vent Screen located at the center of the roof reservoir is corroded. Depending on the size of the opening in the vent induced by corrosion, debris, living organisms and other non-desirable pathogens can make their way into the water supply. The roof access hatch does not include a seal. The sealing gasket has primary goals to prevent debris, pathogens and organisms to contaminate the water supply. The overflow terminates approximately two inches from the ground and does not ensure minimum standard clearance compliance. Screen at the bottom of the overflow pipe is not effective in its current configuration.

Proposed Corrective Actions: The installation of a new gasket seal around the existing hatch has already been completed as well as a #24 Mesh stainless steel screen to retrofit the existing vent screen (see Figures 6 and 7). As a temporary solution, to ensure the overflow pipe complies with existing air-gap requirements, BBWC has cut the overflow pipe and installed a new screen at the bottom of the overflow pipe (see Figure 8). As a long-term solution, BBWC will install a Tideflex Dechlorinating Overflow Security Assembly (DOSA). The DOSA will dechlorinate any overflow water to comply with the Statewide General NPDES Permit for Drinking Water Systems Discharges and prevent debris and insects from entering the tank. A new storm drain and piping will be also be installed to allow overflow water to drain away from the tank.

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Commented [WJ2]: Jim – please delete note and insert a picture here of the new hatch gasket.

Figure 6. Sealed Shoe-Box Hatch

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Commented [WJ3]: Jim – please delete note and insert picture here of the new vent screen.

Figure 7. New #24 Mesh Vent Screen

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Commented [WJ4]: Jim – please delete note and insert picture here of the cut and screened overflow pipe.

Figure 8. Existing Overflow Pipe Cut and Screened

Included with this work will be the installation of a water level transducer, spread spectrum radio, and electrical work to enable the Galleon booster station to operate based on the water level inside the tank.

Proposed Year for Corrective Action to be Complete: 2021

Total Estimated Cost: $61,400

3.8.2. Tradewinds Pressure System Improvements

Identified Deficiencies: The Tradewinds pressure system consists of three booster pumps, two bladder tanks, and a backup generator. Both pressure tanks were constructed in 1975 and have since become waterlogged due to ruptured bladders, and DDW identified these as needing to be removed or replaced. DDW also identified the existing piping in the pressure system as being aged and corroded, and in need of an overall improvement plan to address. The backup generator

has been out of service and needs to be fixed since this pressure system is the sole source of water for the customers in this pressure zone.

Proposed Corrective Actions: BBWC will replace both ruptured bladders inside the pressure tank with new Amtrol WX-456C bladder tanks. Existing piping and valving will be sandblasted and recoated. The existing generator has already been repaired and is now fully operational (see Figure 9). The existing roof and wood siding will also be replaced to protect the pumping equipment and ensure rodents do not enter the building.

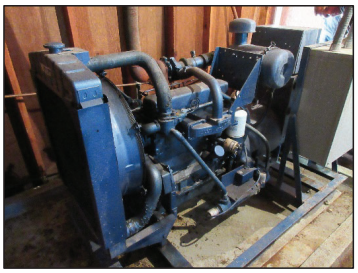

Figure 9. Generator repaired and operational

Proposed Year for Corrective Action to be Complete: 2021

Total Estimated Cost: $136,400

3.9. China Grade (Camino Verde) Station

Identified Deficiency: The tank site is not secured and DDW recommends a perimeter fence be installed. BBWC must ensure that there are no connections to the previously used redwood tank and install a roof lock.

Proposed Corrective Action: Install 145 feet of 6-ft high chain link fencing surrounding the tank site with one 12-ft entry gate. Construct approximately 1,000 sf of base rock or gravel roadway for safe access to the site. BBWC has installed a roof lock (see Figure 10).

Figure 10: Roof lock on China Grade Tank.

Proposed Year for Corrective Action to be Complete: 2022

Total Estimated Cost: $24,200

3.10. Rancho Dia (Santa Rosita) Station

Identified Deficiency: The redwood tank is a significant hazard due to the leaks, redwood condition, debris observed inside the tank, and many openings and breaks in the perimeter vent screen. According to Division records, the tank was constructed in 1958 and is past its useful life. Tank rehabilitation/replacement must be done in accordance with NSF 61, Waterworks Standards, and AWWA standards.

Proposed Corrective Action: To address the deficiency immediately, BBWC will disconnect the existing Rancho Dia Tank and install a 10,000 gallon polyethylene tank. This action will eliminate all hazards associated with the existing tank and ensure sufficient storage capacity is available to meet fire flow in the surrounding area. Once the existing redwood tank is removed from the site, the 10,000 gal polyethylene tank will be relocated and anchored to the existing tank foundation. In addition, a base rock or gravel roadway will be constructed for safer access to the site.

In the long-term, BBWC will evaluate retiring the Rancho Dia tank site all together. The Rancho Dia tank base elevation is lower than other storage facilities in Jamison zone, causing little to no turnover in the Rancho Dia tank and water age concerns. Installing a future regulator from the Hill House tank will satisfy customer demands, meet fire flow requirements, and eliminate the water age and hazards associated with the existing Rancho Dia tank site.

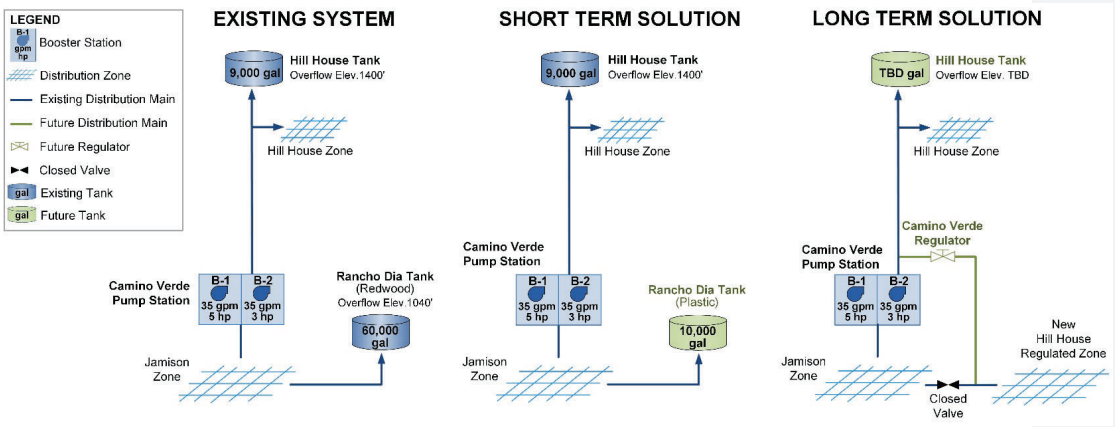

Figure 11: Rancho Dia and Hill House Short & Long-Term Solutions

Proposed Year for Corrective Action to be Complete: 2019

Total Estimated Cost: $74,300

3.11. Oberst Station

Identified Deficiency: The Oberst tank is an aged small steel tank. The interior and exterior coatings are severely corroded. Large rust nodules were observed attached to the interior tank wall. The corrosion presents a sanitary and structural risk. BBWC must provide a plan and schedule for replacement of this tank no later than May 10, 2019. The replacement plan must include NSF 61, AWWA, and Waterworks Standards compliance and a plan to construct a tank foundation and provide proper seismic supports.

Proposed Corrective Action: BBWC will replace the Oberst tank with a 10,000 gallon polyethylene tank anchored to the existing foundation. BBWC will also install a fence surrounding the tank site with a 12-ft swing gate.

Figure 12: Oberst Station existing foundation

Proposed Year for Corrective Action to be Complete: 2019

Total Estimated Cost: $64,600

3.12. Bloom Grade Station

Identified Deficiency: The tank site is not secured and DDW recommends a fence be constructed. Clarify Bloom Grade tank ownership, verify no cross connections exists, and install a tank drain and sample tap.

Proposed Corrective Action: Installation of about 170 ft of 6-ft high chain link fence surrounding the tank site with a 12-ft swing gate plus approximately 8,000 sf of base rock or gravel road to safely access the site. BBWC confirmed that no cross connection exists (see Figure 13). BBWC will install a tank drain and sample tap with other site improvements. BBWC is currently working with homeowners for easements and rights to access the tank.

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Commented [WJ5]: Jim – please delete note and insert picture here showing no cross connection.

Figure 13: No cross connection exists with Bloom Grade tank

Proposed Year for Corrective Action to be Complete: 2021

Total Estimated Cost: $71,800

3.13. Isolation Valves

Identified Deficiency: According to BBWC, there are some stretches of mainline without an isolation valve for miles. DDW recommends BBWC review all records and install isolation valves in accordance with CCR Title 22 Waterworks Standards.

Proposed Corrective Action: BBWC has reviewed its as-builts and will bring the mainline into compliance with the Waterworks Standards. Bringing the mainline into compliance will require the installation of 14 new line valves, spaced no farther than 1,320 feet apart along water mains. The installation of five new line valves will ensure that the requirement pertaining to tee and crossing connections is met. A summary of the number of valves and cost is presented in Table 1.

Table 1. Summary of Distribution Valve Requirements

Size (inch)	No. Valves	Installation (Cost per Valve)	Total Cost
2	2	$6,000	$12,000
4	8	$8,000	$64,00
6	4	$11,000	$44,000
8	3	$16,000	$48,000
10	1	$19,000	$19,000
12	2	$22,000	$44,000
Total	**20**	**-**	**$231,000**

Proposed Year for Corrective Action to be Complete: Five year program: 2020 – 2024

Total Estimated Cost: $231,000

3.14. Distribution Mainlines

Identified Deficiency: Lack of main replacement plan to replace leaky, aged, undersized (less than 4-inches), and above ground mainlines as part of a capital improvement plan. DDW recommends BBWC to develop a long-term main replacement program.

Proposed Corrective Action: Replace pipelines at a 1.5% rate, or approximately 1,360 ft of pipe per year. An age and failure rate analysis was performed considering the approximate current ages of pipelines in the distribution system and survival curves for existing pipe types. It was assumed that all steel pipelines were installed in the 1940's, all AC pipelines were installed in the 1960's, and all PVC pipelines were installed in the 1990's, and that the oldest pipes with the lowest survival rate are replaced first. The model calculates the average failure rate of all pipelines given their age and the pipe type's survival curve. It assumes that each year a certain percentage

of pipes are replaced, thus reducing the average age and average risk of pipelines across the system. The analysis showed that a replacement rate of 1.5% would ensure that the average age of pipelines in the system does not grow over time, but decreases from about 50 years today to 43 years in 2069 (see Figure 14). Additionally, replacing at a 1.5% rate will prevent the pipeline failure rate from escalating to an unmanageable level. Instead, risk of pipeline failure will steadily decrease over time (see Figure 15).

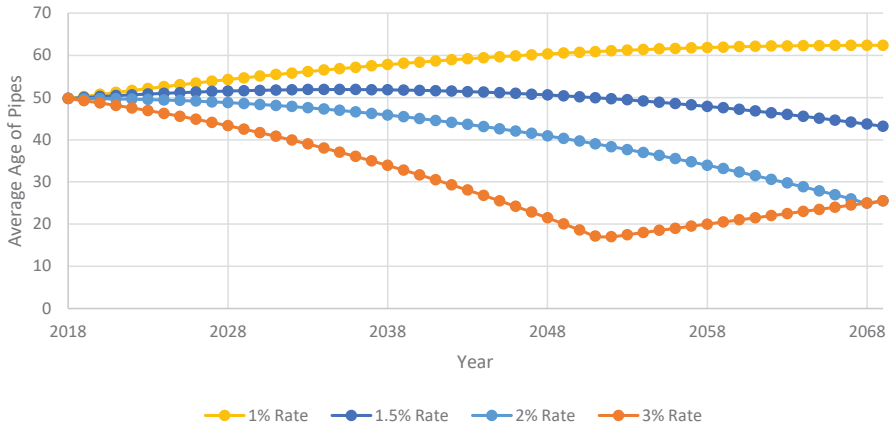


Figure 14: Average age of pipelines under 1-3% replacement programs

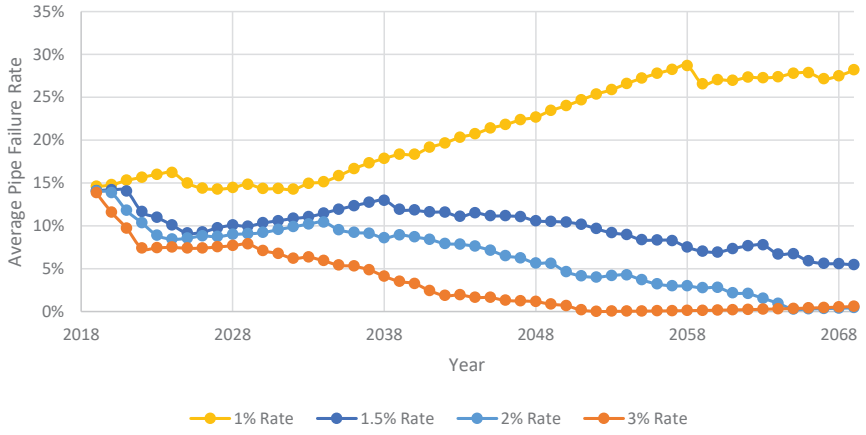


Figure 15: Average failure rate of pipelines under 1-3% replacement programs

Proposed Year for Corrective Action to be Complete: Starting in 2022 and ongoing

Total Estimated Cost: $270,000 / year

3.15. Retire Inactive Wells

Identified Deficiency: BBWC has two inactive well sources listed in DDW's database, Galleon Well 1 and Well 2. DDW recommends BBWC schedule to destroy these inactive groundwater sources.

Proposed Corrective Action: BBWC will work with a certified well driller to retire Well 1 and will clear the site of old pumping equipment and appurtenances, disinfect the well column, fill the void in with fill and sealing material, remove at least five feet below the surface and seal the top, and restore the site back to its original conditions.

According to BBWC's groundwater well consultant, Well 2 has the potential to be restored to provide approximately 35 gpm into the system. BBWC intends to evaluate the costs and benefits of restoring and receiving this well as part of the surface water capacity evaluation study (see Section 4.8).

Proposed Year for Corrective Action to be Complete: 2023

Total Estimated Cost: $26,200

4. Proposed Administrative Corrective Actions

4.1. Jamison Reservoir as a Surface Water Source

Identified Deficiency: BBWC is not permitted to use the Jamison Reservoir, a 3 MG artificial reservoir primarily fed by overflow from surface water sources, as a water source. The reservoir is not permitted raw surface water source and cannot be used as a surface water source.

Proposed Corrective Action: BBWC has stopped using Jamison Reservoir as a surface water source. BBWC will evaluate the need for this source water and apply for the source to be permitted if the use of this source water is deemed necessary to meet system demands.

Proposed Year for Corrective Action to be Complete: Now

Total Estimated Cost: N/A

4.2. Quarterly Tank Inspection

Identified Deficiency: Based on the condition of the storage tanks, BBWC is not adequately inspecting storage tanks. BBWC must begin to inspect all tanks at least quarterly and inspect Rancho Dia tank monthly. BBWC must provide a summary of tank inspections quarterly using the form provided by DDW.

Proposed Corrective Action: BBWC will perform tank inspections, at minimum, on a quarterly basis. BBWC will document the tank inspections by completing the forms provided by DDW in the

2018 *Sanitary Survey Report*. The Rancho Dia (Rosita) tank is scheduled to be replaced as soon as possible with a new 10,000 gallon polyethylene tank.

Proposed Year for Corrective Action to be Complete: Now & ongoing

Total Estimated Cost: N/A

4.3. WTP Facilities Plan

Identified Deficiency: The filtration units are in poor overall condition and must be evaluated by a WesTech® representative or consulting engineer with experience in surface water treatment to determine necessary upgrades.

Proposed Corrective Action: BBWC acknowledges the existing surface water treatment facility has exceeded the extent of its useful life and is in need of significant investment. While BBWC has approached WesTech® vendor to replace the media and improve the Programmable Logic Control (PLC), these systems are more than 26 years old and are in need of a long-term evaluation. For example, the PLC is currently backed up on cassette tapes, a format which is no longer supported by the manufacturer or any representative distributor. Even with the immediate improvements proposed in Section 3.3.1, BBWC intends to contract with a professional engineering consultant with experience in surface water treatment to prepare a master facilities plan for the Jamison Station.

Proposed Year for Corrective Action to be Complete: 2020

Total Estimated Cost: $50,000

4.4. Surface Water Treatment Plant Operations Plan

Identified Deficiency: In accordance with CCR, Title 22, Section 64661, BBWC shall update its surface water treatment plant operations plan.

Proposed Corrective Action: BBWC will consult with a professional engineering consultant to review and revise BBWC Operations Plan after the immediate improvements and new equipment has been installed at the surface water treatment. The new Operations Plan will address all tasks listed in the 2018 *Sanitary Survey*, as well as the following:

- Chlorine residual grab sampling and reporting requirements
- Settled water turbidity grab sampling and reporting requirements
- pH monitoring standard approach using EPA approved methodology
- pH and temperature daily monitoring from water leaving the treated water contact time
- Clarifier and filter loading rates calculation and reporting requirements

This will be completed after WesTech® completes the retrofit and improvements to the existing Microfloc treatment plant.

Proposed Year for Corrective Action to be Complete: 2021

Total Estimated Cost: $25,000

4.5. Distribution System Chlorine Residual

Identified Deficiency: As a surface water system, a detectable residual of 0.2 mg/L must be measured in at least 95 percent of the distribution samples.

Proposed Corrective Action: BBWC has increased the chlorine dosage to ensure a minimum 0.2 mg/L free chlorine residual throughout the distribution system. In addition, BBWC will implement all the disinfection system improvement projects listed above.

Proposed Year for Corrective Action to be Complete: Ongoing

Total Estimated Cost: N/A

4.6. Cross Connection Control Program

Identified Deficiency: BBWC must provide a copy of its current cross connection control operating rules. BBWC must conduct a system wide cross connection control survey, and identify all backflow prevention assemblies in the system and provide a list to DDW.

Proposed Corrective Action: BBWC will consult with a backflow prevention specialist to assist in the preparation of a Cross Connection Control Program, which will include standardize rules, equipment, and testing requirements. This program with then be presented to the California Public Utilities Commission for review and approval. Once the program is approved, the consultant will complete a system wide survey and inventory all backflow prevention assemblies in the system.

Proposed Year for Corrective Action to be Complete: 2019

Total Estimated Cost: $25,000

4.7. Watershed Sanitary Survey

Identified Deficiency: BBWC must conduct a watershed sanitary survey in accordance with CCR, Title 22, Section 64665

Proposed Corrective Action: BBWC will contract with a professional environmental consultant to prepare an updated Watershed Sanitary Survey in compliance with CCR Title 22 64665. The survey and report will include a physical and hydrogeological description of the watershed, a summary of source water quality monitoring data, a description of activities and sources of contamination, description of any significant changes that have occurred since the last survey which could affect the quality of the source water, a description of watershed control and management practices, an evaluation of the system's ability to meet requirements, and recommendations for any corrective actions.

Proposed Year for Corrective Action to be Complete: 2021

Total Estimated Cost: $25,000

4.8. Source Capacity

Identified Deficiency: BBWC is unable to meet source capacity requirements according to the method outlines in CCR, Title 22, Section 64554.

Proposed Corrective Action: BBWC will contract with a professional engineering consultant to conduct well tests of its groundwater sources and review its surface water capacity to determine necessary steps to increase its source capacity is in accordance with current regulations.

Proposed Year for Corrective Action to be Complete: 2020

Total Estimated Cost: $25,000

4.9. Records

Identified Deficiency: BBWC must begin storing records for all preventative maintenance programs including system flushing, valve exercising, and full tank inspections.

Proposed Corrective Action: BBWC has begun a more diligent record keeping program. BBWC maintains a log of all preventative maintenance items performed on the water system including the date, location and nature of the action performed. Additionally, BBWC will start developing their own forms and checklists when performing tests and water samplings based on best practices recommended by industry standards and public entities. All records will be organized, stored in a separated file cabinet, and easily accessible when necessary.

Proposed Year for Corrective Action to be Complete: Now

Total Estimated Cost: N/A

4.10. Operator Staffing

Identified Deficiency: DDW recommends BBWC add additional certified operators to ensure coverage at the treatment plant and to complete preventative maintenance. DDW also recommends BBWC add an additional T3 treatment operator to ensure a certified chief operator is available at all times.

Proposed Corrective Action: The distribution system is classified as a D3 water system, but the treatment plant is classified by DDW as a T2 treatment facility. It is unclear why DDW is recommending an additional T3 treatment operator. BBWC will evaluate contracting for at least one more full time and certified D3, T2 operator to ensure that at least one chief operator is available at all times for the distribution system and treatment plant. BBWC will also look into the financial feasibility of hiring additional staff and contracting out overhead staff duties.

Proposed Year for Corrective Action to be Complete: 2019

Total Estimated Cost: N/A

4.11. Emergency Response Plan

Identified Deficiency: DDW recommends BBWC create an updated Emergency Response Plan.

Proposed Corrective Action: BBWC will contract with a professional engineering consultant to prepare an emergency response plan in compliance with current regulatory standards.

Proposed Year for Corrective Action to be Complete: 2022

Total Estimated Cost: $20,000

Summary of Corrective Actions

Order of Hazard:
A. Critical Health Hazard
B. Serious Health Hazard
C. Potential Health Hazard
D. System or Operational Defect Resulting in Poor Waterworks Practice

Deficiency Identified	Order of Hazard	Date to Address Deficiency	Proposed Corrective Action			
			Description	Schedule	Cost	Memo Section Reference
SOURCES						
Well 4 Chlorination	A	Plan by 3/10/19 Completed by 5/20/19	Temporary chlorination system already installed; long term injection system to be completed by end of 2020	2020	$253,900	3.1
Corvin Creek Intake Sedimentation Tank	C	July 10, 2020	Bypass and retire sedimentation tank	2022	$15,800	3.2
Jamison Intake 1 Sedimentation Tank	C	July 10, 2020	Bypass and retire sedimentation tank	2021	$15,800	3.3.1
Jamison Intake 2 Screen	C	March 10, 2019	Install a secure screen	2021	$95,500	3.3.2
Jamison Intake 2 Transmission Line	C	March 10, 2019	Install 700-ft of 6-inch PVC or HPDE raw water main	2021		
Jamison Intake 1 Transmission Line	C	March 10, 2019				
Jamison Reservoir as a Surface Water Source	N/A	Now	BBWC to cease using Jamison Reservoir as a source of raw water	Now	-	4.1
Jamison Reservoir Cross Connection	A	March 10, 2019	Cut & Cap pipes to eliminate cross connection	2019	$22,200	3.3.3
BOOSTER STATIONS						
Galleon Heights Booster Station Housing	C	Sept 10, 2019	Replace wooden building	2021	$125,200	3.7
Galleon Heights Booster Pump Plan	D	Sept 10, 2019	Pumps will be replaced with more appropriately sized pumps			
Tradewinds Booster Station Waterlogged Pressure Tanks	C	Dec 31, 2019	Replace the bladder in the existing tanks and return to service	2021	$136,400	3.8.2
Tradewinds booster Station Piping and Valving Corrosion	D	Dec 31, 2019	Clean existing piping and recoat			
Tradewinds Booster Station Generator	C	March 10, 2019	Generator has been repaired and is back in service			
STORAGE						
Galleon Tank Vent Screen	C	March 10, 2019	# 24 Mesh vent screen already installed	2021	$61,400	3.8.1
Galleon Tank Roof Access Hatch	D	March 10, 2019	Hatch gasket already installed			
Galleon Tank Overflow	D	March 10, 2019	Include a DOSA assembly with storm drain and drain away from tank			
Robin Hood Bolted Steel Tank Roof Hatch Seal	D	March 10, 2019	Retire the existing Horizontal Robin Hood tank and replace with a 6-inch regulator and 2-inch bypass regulator	2019/2023	$130,800	3.6
Robin Hood Bolted Steel Tank Vent Screen	D	March 10, 2019				
Robin Hood Bolted Steel Tank Drain	C	During Next Rehab				
Robin Hood Bolted Steel Tank Removal/Replacement	A	March 20, 2019				
Hill House Tank Site	N/A	May 10, 2019	Vegetation cleared	Completed	-	3.4
Hill House Tank Cross Connection Verification	D	April 10, 2019	Verified that no cross connection exists	Completed	-	3.4
China Grade Tank Connection Verification	D	Written verification by April 10, 2019	Verified that no cross connection exists	Completed	-	3.9

Deficiency Identified	Order of Hazard	Date to Address Deficiency	Proposed Corrective Action			
			Description	Schedule	Cost	Memo Section Reference
China Grade Tank Roof Lid Lock	D	March 10, 2019	Roof lid lock installed	Completed	-	3.9
Rancho Dia Tank Rehabilitation/Replacement Plan	A	Rehabilitation/ Replacement Plan by May 10, 2019	Replace Rancho Dia Tank with 10,000 gallon polyethylene tank with seismic anchorage	2019	$74,300	3.10
Rancho Dia Tank Interim Operation Requirements	N/A	Immediately				
Rancho Dia Tank Vent Screen	A	February 10, 2019				
Rancho Dia Tank Site	D	May 10, 2019				
Rancho Dia Tank Leaks	C	March 10, 2019				
Rancho Dia Tank Cleaning	B	June 10, 2019				
Oberst Tank Replacement Plan	A	May 10, 2019	Replace Oberst Tank with 10,000 gallon polyethylene tank with seismic anchorage	2019	$64,600	3.11
Oberst Tank Roof Vent Screen	D	January 30, 2019				
Bloom Grade Tank Ownership Status and Fence Removal	B	Written verification of ownership status by April 10, 2019	BBWC working with property owner to verify	2019	-	3.12
Bloom Grade Tank Cross Connection Verification	C	Written verification by April 10, 2019	Confirmed no cross connection present	Completed	-	3.12
Bloom Grade Tank Drain	C	September 10, 2019	Sample tap and drain to be installed with other site improvements	2021	$23,500	3.12
Bloom Grade Tank Sample Tap	D	May 10, 2019				3.12
Storage Tank Inspections	C	Now	BBWC will increase its tank inspection efforts to meet DDW requirements	Ongoing	-	4.2
SURFACE WATER TREATMENT						
Jamison WTP Filter Unit Evaluation and Rehabilitation/Replacement	A	Plan by 4/10/19 Completed by 2/10/20	BBWC will consult with a professional engineering firm to prepare a Water Treatment Facilities Plan and provide long-term recommendations	2020	$50,000	4.3
Updated Surface Water Treatment Plant Operations Plan	B	6/10/19	BBWC will consult with a professional engineering consultant to updated SOPs and Operations Plan after improvements to existing Microfloc treatment plant are completed by WesTech® (see Section 4.3)	2021	$25,000	4.4
Settled Water Turbidity	N/A	Now				
pH Monitoring	C	4/10/19				
Daily pH and Temperature Monitoring	C	Immediately				
Chlorine Residual Grab Sampling and Reporting	N/A	Now				
Clarifier and Filter Loading Rates	N/A	Feb 2019				
Jamison WTP Filter Unit Clarification Media Screen	A	3/10/19	Repair filters, replace PLCs, install EPA approved total chlorine analyzer, clean building and repair holes, replace existing turbidimeter	2020	$236,300	3.5
Online Chlorine Residual Analyzer	A	3/10/19				
Jamison WTP Building	B	9/10/19				
Jamison WTP Cleaning	A	2/10/19 & Continuously				
Jamison WTP Turbidimeter	B	11/10/19				
Distribution System Chlorine Residual	A	Immediately	Increased system chlorine residual	Completed	-	4.5

Deficiency Identified	Order of Hazard	Date to Address Deficiency	Proposed Corrective Action			
			Description	Schedule	Cost	Memo Section Reference
Filter Effluent Line Cross Connection Evaluation	D	7/10/19	BBWC confirmed that no cross connection exists (JIM TO CONFIRM)	Completed	-	-
Backwash Tank Cross Connection(s)	C	4/10/19	BBWC confirmed that no cross connection exists (JIM TO CONFIRM)	Completed	-	-
October 9, 2018 Chlorine Residual	N/A	2/15/19	Completed and mailed to DDW on XX/XX/XX	Completed	-	-
Jamison WTP Cats	B	2/20/19	BBWC to develop a comprehensive long-term Vector Control Plan		See Section 3.5	
Jamison WTP Chemical Storage Tank Water Line	C	5/10/19	BBWC to install new chemical storage platform and containment	2020	$149,000	3.5.1
Jamison WTP Chemical Storage Tanks and Storage	B	5/10/19				
Cross Connection Control Operating Rules	A	6/10/19	BBWC to prepare new Rules and Standards for Cross Connection in the service area for approval by CPUC; after which BBWC will complete a system wide survey and inventory backflow equipment	2019	$25,000	4.6
Cross Connection Control Survey	A	10/10/19				
Backflow Prevention Assembly Inventory	A	6/10/19				
OTHER						
2017 Consumer Confidence Report Certification	C	2/15/2019	BBWC provided to DDW on XX/XX/XX	2019	-	-
Watershed Sanitary Survey	C	12/31/2019	BBWC to engage professional engineering consultant to prepare	2021	$25,000	4.7
Source Capacity	B	12/31/2019	BBWC to engage professional engineering consultant to prepare	2020	$25,000	4.8
Records	D	Now	BBWC working to improve recordkeeping procedures	Ongoing	-	4.9
Overdue 2018 Source Monitoring	C	1/31/2019	BBWC provided to DDW on XX/XX/XX	2019	-	-
LIST OF RECOMMENDATIONS						
Photos	-	-	BBWC to prepare and provide to DDW by end of 2019	2019	-	-
Robin Hood Tank Foundation	-	-	BBWC to engage to professional engineer to evaluate as budget allows	2023	$10,000	-
Hill House Tank Foundation	-	-	Install seismic restraint system	2022	$34,200	3.4
Hill House Tank Fence	-	-	Install ~170 ft of fence, a 12-ft swing gate, and ~400 sf gravel road			
China Grade Tank Fence	-	-	Install ~145 ft of fence, a 12-ft swing gate, and ~1,000 sf gravel road	2022	$24,200	3.9
Bloom Grade Tank Fence	-	-	Install ~170 ft of fence, a 12-ft swing gate, and ~8,000 sf gravel road	2021	$48,300	3.12
Jamison WTP IFE Turbidimeter	-	-	Install a turbidimeter on the effluent end of each filter unit		See Section 3.5	
Jamison WTP Backup Turbidimeter	-	-	Purchase one backup turbidimeter		See Section 3.5	
Jamison WTP Generator	-	-	BBWC to evaluate as part of long term facilities plan		See Section 3.5.2	
Jamison WTP Site Security	-	-	Install 950 ft of fence, a 20-ft double swing gate, and a 20-ft barrier gate	2022	$119,300	3.5.2
Inactive Sources	-	-	BBWC to retire Well # 1 and evaluate Well # 2 for restoration	2023	$26,200	3.15
Isolation Valves	-	-	Install 20 line valves	2020 - 2024	$231,000	3.13
Operator Staffing	-	-	BBWC evaluating hiring/contracting additional staff	2020	-	4.10
Emergency Response Plan	-	-	BBWC to engage professional consultant to prepare	2022	$20,000	4.11
Distribution Main Replacement Plan	-	-	BBWC replacing mains as part of a long term asset management program	Ongoing	TBD	3.14
Cross Connection Specialist	-	-	Will contract with a cross connection specialist		See Section 4.6	

Commented [WJ6]: If this is complete, make a note stating that it is complete and what work was performed

Commented [WJ7]: If this is complete, make a note stating that it is complete and what work was performed

Commented [WJ8]: Add date

Commented [WJ9]: Add date

Commented [WJ10]: Add date

Corrective Action Projected Costs and Schedule of Improvements

The following table is a summary of the costs and schedule for the proposed corrective actions.

Project	2019	2020	2021	2022	2023	2024	TOTAL
Well 4 Chlorination		$253,900					**$253,900**
Corvin Creek Intake Sedimentation Tank			$15,800				**$15,800**
Jamison Intake 1 Sedimentation Tank			$15,800				**$15,800**
Jamison Intake 2 Screen			$95,500				**$95,500**
Jamison Intake 2 Transmission Line							
Jamison Intake 1 Transmission Line							
Jamison Reservoir Cross Connection	$22,200						**$22,200**
Galleon Heights Booster Station Housing			$125,200				**$125,200**
Galleon Heights Booster Pump Plan							
Tradewinds Booster Station Waterlogged Pressure Tanks			$136,400				**$136,400**
Tradewinds Booster Station Piping and Valving Corrosion							
Tradewinds Booster Station Generator							
Galleon Tank Power and Level Transducer			$61,400				**$61,400**
Galleon Tank Overflow							
Robin Hood Bolted Steel Tank Roof Hatch Seal	$19,500				$111,300		**$130,800**
Robin Hood Bolted Steel Tank Vent Screen							
Robin Hood Bolted Steel Tank Drain							
Robin Hood Bolted Steel Tank Removal/Replacement							
Rancho Dia Tank Rehabilitation/Replacement Plan	$74,300						**$74,300**
Rancho Dia Tank Interim Operation Requirements							
Rancho Dia Tank Vent Screen							
Rancho Dia Tank Site							
Rancho Dia Tank Leaks							
Rancho Dia Tank Cleaning							
Oberst Tank Replacement Plan	$64,600						**$64,600**
Oberst Tank Roof Vent Screen							
Bloom Grade Tank Drain and Sample Tap			$23,500				**$23,500**

Project	2019	2020	2021	2022	2023	2024	TOTAL
Jamison WTP Filter Unit Evaluation and Rehabilitation/Replacement		$50,000					**$50,000**
Updated Surface Water Treatment Plant Operations Plan			$25,000				**$25,000**
Jamison WTP Building Repairs, Filter Unit Repairs, Chlorine Analyzer, Turbidimeters		$236,300					**$236,300**
Jamison WTP Chemical Storage Tanks and Storage		$149,000					**$149,000**
Cross Connection Control Operating Rules	$25,000						**$25,000**
Cross Connection Control Survey							
Backflow Prevention Assembly Inventory							
Watershed Sanitary Survey			$25,000				**$25,000**
Source Capacity		$25,000					**$25,000**
Robin Hood Tank Foundation					$10,000		**$10,000**
Hill House Tank Foundation				$34,200			**$34,200**
Hill House Tank Fence							
China Grade Tank Fence				$24,200			**$24,200**
Bloom Grade Tank Fence			$48,300				**$48,300**
Jamison Station Fence				$119,300			**$119,300**
Inactive Sources					$26,200		**$26,200**
Isolation Valves		$46,200	$46,200	$46,200	$46,200	$46,200	**$231,000**
Distribution Main Replacement Plan				$270,000	$270,000	$270,000	**$810,000**
Emergency Response Plan				$20,000			**$20,000**
Estimated Capital Expenditures (Present Value)	**$ 205,600**	**$760,400**	**$ 618,100**	**$ 513,900**	**$463,700**	**$316,200**	**$2,877,900**

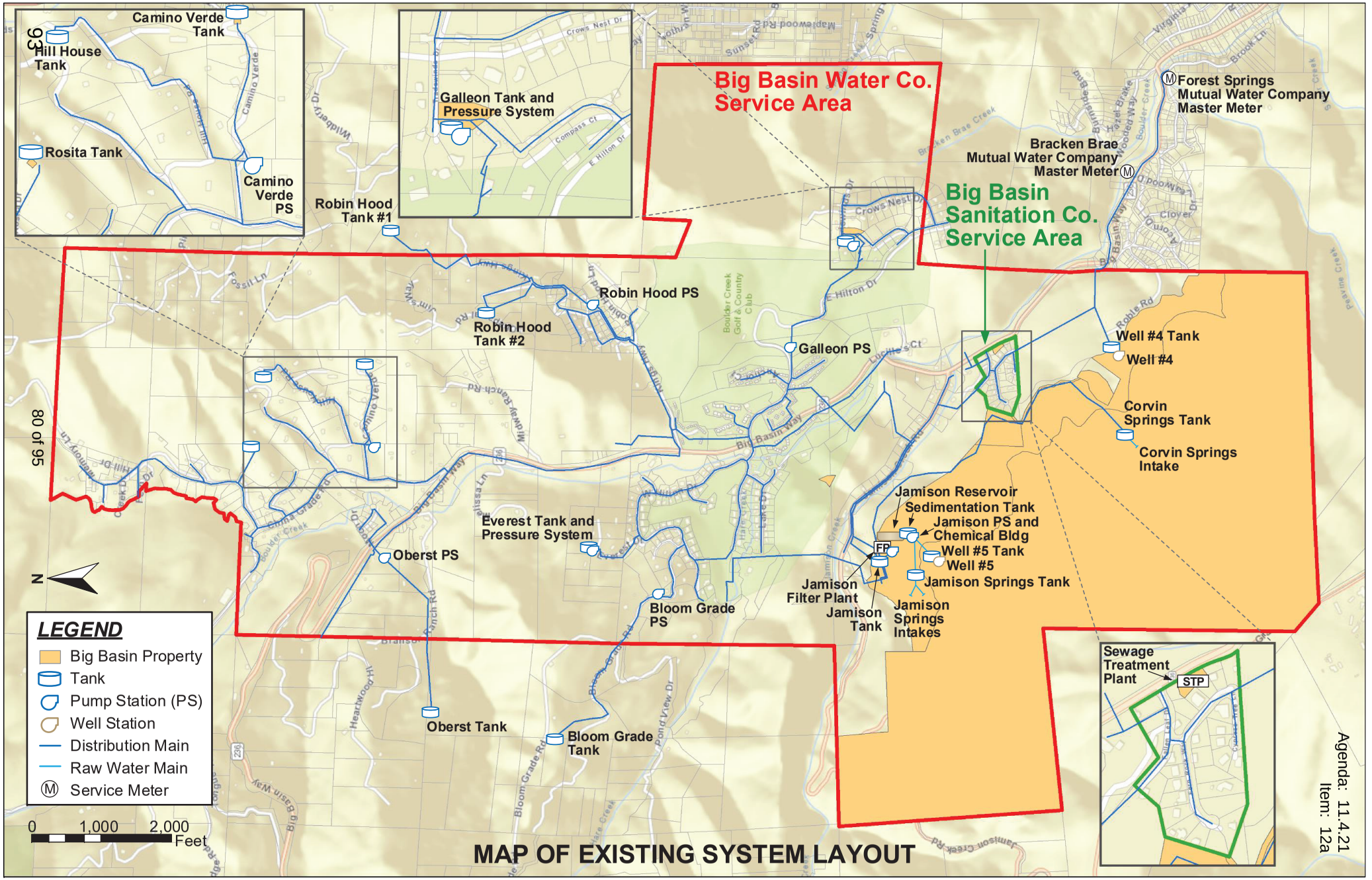
Items for Jim to address are highlighted in the DDW response document.

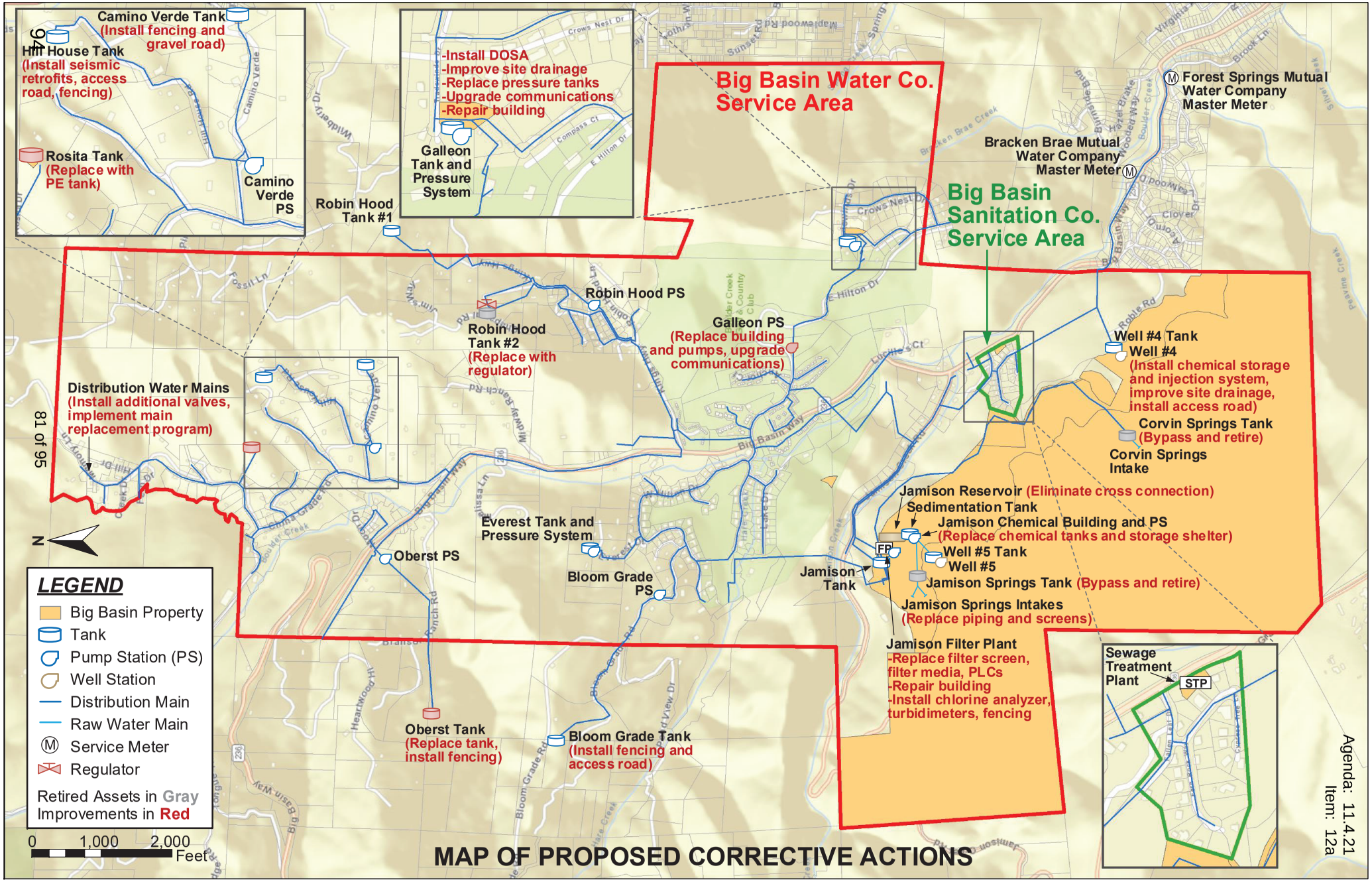
Photos for Jim to insert into the document:

- Section 3.4, Figure 3 – Photo showing vegetation cleared around Hill House Tank
- Section 3.8.1, Figure 6 – Photo showing hatch gasket seal on Galleon Heights Tank
- Section 3.8.1, Figure 7 – Photo showing #24 mesh vent screen on Galleon Heights Tank
- Section 3.8.1, Figure 8 – Photo showing greater clearance between pipe and ground (cut and screened overflow pipe)
- Section 3.12, Figure 13 – Photo showing that there is no cross connection between Bloom Grade Tank and neighbor's tank

In Table on Page 24, for Jim to confirm and provide evidence to DDW:

- Confirm and provide evidence that there is no cross connection between the filtered water line and backwash line
- Confirm and provide evidence that there is no cross connection between backwash water storage tank and Jamison Reservoir
- Confirm that the October 9, 2018 Chlorine Residual report was sent to DDW and update table in response document
- Confirm that the 2017 Consumer Confidence Report Certification was sent to DDW
- Confirm that the overdue 2018 Source Monitoring report was sent to DDW


Big Basin Water Co.
Service Area
Big Basin
Sanitation Co.
Service Area
Camino Verde
Tank
Hill House
Tank
Rosita Tank
Camino
Verde
PS
Galleon Tank and
Pressure System
Robin Hood
Tank #1
Robin Hood PS
Robin Hood
Tank #2
Galleon PS
Forest Springs
Mutual Water Company
Master Meter
Bracken Brae
Mutual Water Company
Master Meter
Well #4 Tank
Well #4
Corvin
Springs Tank
Corvin Springs
Intake
Jamison Reservoir
Sedimentation Tank
Jamison PS and
Chemical Bldg
Well #5 Tank
Well #5
Jamison Springs Tank
Jamison
Filter Plant
Jamison
Tank
Jamison
Springs
Intakes
FP
Everest Tank and
Pressure System
Oberst PS
Bloom Grade
PS
Oberst Tank
Bloom Grade
Tank
Sewage
Treatment
Plant
STP
93
80 of 95
N
LEGEND
Big Basin Property
Tank
Pump Station (PS)
Well Station
Distribution Main
Raw Water Main
Service Meter
0 1,000 2,000
Feet
MAP OF EXISTING SYSTEM LAYOUT
Agenda: 11.4.21
Item: 12a



MAP OF PROPOSED CORRECTIVE ACTIONS

Agenda: 11.4.21
Item: 12a

APPENDIX 2: MONTHLY PROGRESS REPORT

Water System: **Big Basin Water Company**	Water System No: **4410001**
Compliance Order No.	Violation:
Calendar Quarter:	Date:

This form should be prepared and signed by Big Basin Water Company personnel with appropriate authority to implement the directives of the Compliance Order and the Corrective Action Plan. Please attach additional sheets as necessary. The quarterly progress report must be submitted by the 10th day of each subsequent quarter, to the Division of Drinking Water, Monterey District Office to the following email address: dwpdist05@waterboards.ca.gov titled appropriately.

Summary of Compliance Plan:

Tasks completed in the reporting quarter:

Tasks remaining to complete:

Anticipated compliance date:

Printed Name **Signature**

Title **Date**

APPENDIX 3 - Notification of Receipt

Compliance Order Number: 02_05_21R_001
Name of Water System: Big Basin Water Company
System Number: 4410001

Certification

I certify that I am an authorized representative of the Big Basin Water Company and that Compliance Order No. 02_05_21R_001 was received on _____.
Further I certify that the Order has been reviewed by the appropriate management staff of the Big Basin Water Company and it is clearly understood that Compliance Order No. 02_05_21R_001 contains legally enforceable directives with specific due dates.

_____ _____
Signature of Water System Representative Date

**THIS FORM MUST BE COMPLETED AND RETURNED TO THE STATE WATER BOARD,
DIVISION OF DRINKING WATER, NO LATER THAN April 27, 2021**

Disclosure: Be advised that the California Health and Safety Code, Sections 116725 and 116730 state that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the Safe Drinking Water Act may be liable for, respectively, a civil penalty not to exceed five thousand dollars ($5,000) for each separate violation or, for continuing violations, for each day that violation continues, or be punished by a fine of not more than $25,000 for each day of violation, or by imprisonment in the county jail not to exceed one year, or by both the fine and imprisonment.

APPENDIX 2 - COPY OF CITATION NO. 02_05_21C_021

CALIFORNIA Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

August 19, 2021

System No. 4410001

Jim Moore, Manager
Big Basin Water Company
PO Box 197
Boulder Creek, CA 95006
bbwater197@yahoo.com

CITATION NO. 02_05_21C_021
FAILURE TO PROVIDE A RELIABLE SUPPLY OF POTABLE WATER

Enclosed is Citation No. 02_05_21C_020 (hereinafter "Citation"), issued to the Big Basin Water Company (hereinafter "Big Basin WC") public water system. Please note that there are legally enforceable deadlines associated with this Citation.

Big Basin WC will be billed at the State Water Resources Control Board's (hereinafter "State Water Board") hourly rate for the time spent on issuing this Citation. California Health and Safety Code (hereinafter "CHSC") Section 116577 provides that a public water system must reimburse the State Water Board for actual costs incurred by the State Water Board for specified enforcement actions, including preparing, issuing and monitoring compliance with a citation. At this time, the State Water Board has spent approximately three hours on enforcement activities associated with this violation.

Big Basin WC will receive a bill sent from the State Water Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on Big Basin WC for the current fiscal year.

Any person who is aggrieved by a citation, order or decision issued under authority delegated to an officer or employee of the State Water Board under Article 8 (commencing with CHSC, Section 116625) or Article 9 (commencing with CHSC, Section 116650), of the Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter

4), may file a petition with the State Water Board for reconsideration of the citation, order or decision.

Petitions must be received by the State Water Board within 30 days of the issuance of the citation, order or decision by the officer or employee of the State Water Board. If the 30th day falls on a Saturday, Sunday, or state holiday, the petition is due the following business day by 5:00 p.m.

Information regarding filing petitions may be found at:

http://www.waterboards.ca.gov/drinking_water/programs/petitions/index.shtml

If you have any questions regarding this matter, please contact the Division of Drinking Water at dwpdist05@waterboards.ca.gov or (831) 655-6939.

Sincerely,

Jonathan Weininger

Digitally signed by Jonathan Weininger
Date: 2021.08.18 10:12:09 -07'00'

Water Boards

Jonathan Weininger, PE
District Engineer, Monterey District
Division of Drinking Water

Enclosures

Certified Mail No. 7018 3090 0001 0464 6731

cc: Santa Cruz County Environmental Health Services
Marilyn Underwood, Marilyn.Underwood@santacruzcounty.us
Nathan Salazar, Nathan.Salazar@santacruzcounty.us
Sierra Ryan, Sierra.Ryan@santacruzcounty.us

California Public Utilities Commission (CPUC) Water Division
Moises Chavez, moises.chavez@cpuc.ca.gov
Wilson Tsai, wilson.tsai@cpuc.ca.gov

Citation No. 02_05_21C_021

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

Name of Public Water System: Big Basin Water Company

Water System No: 4410001

Attention: Jim Moore, Manager
PO Box 197
Boulder Creek, CA 95006

Issued: August 19, 2021

CITATION FOR NONCOMPLIANCE

CALIFORNIA HEALTH AND SAFETY CODE, SECTION 116555 (a)(3), AND CCR, TITLE 22, SECTION 64602

FAILURE TO PROVIDE A RELIABLE SUPPLY OF POTABLE WATER

The California Health and Safety Code (hereinafter "CHSC"), Section 116650 authorizes the State Water Resources Control Board (hereinafter "State Water Board"), to issue a citation to a public water system when the State Water Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA"), (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit, or order issued or adopted thereunder.

The State Water Board, acting by and through its Division of Drinking Water (hereinafter "Division"), and the Deputy Director for the Division, hereby issues Citation No. 02_05_21C_021 (hereinafter "Citation"), pursuant to Section 116650 of the CHSC to the Big Basin Water Company (hereinafter "Big Basin WC"), for violation of CHSC, Section 116555 and CCR, Title 22, Section 64602.

STATEMENT OF FACTS

Big Basin WC is classified as a community water system and serves a population of 1,120 through 482 connections (information from the 2020 Electronic Annual Report to the Division of Drinking Water (EAR)). The population and service connections listed in the 2020 EAR reflect reduced numbers following the August 2020 CZU Lightning Complex Fire, which destroyed or damaged a portion of Big Basin WC's customer connections. Big Basin WC operates under Domestic Water Supply Permit No. 02-05-44-94P-001, issued by the State Water Board on February 11, 1994.

CHSC, Section 116555 (a)(3) requires any person who owns a public water system to ensure that the system provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.

CCR, Title 22, Section 64602 states that each distribution system must be operated in a manner to assure that a minimum operating pressure in the water main at the user service line connection throughout the distribution system is not less than 20 pounds per square inch at all times.

On Sunday, June 27, 2021, three Big Basin WC customers notified the State Water Board of a water outage impacting the Galleon Heights pressure zone. Based on conversations with Big Basin WC customers, the water outage lasted up to seven hours, and service was restored by 8 PM. Each customer mentioned they tried to reach Big Basin WC to

report the outage, but they were not provided a response. By email dated June 27, 2021, and by phone on June 28, 2021, the State Water Board instructed Big Basin WC to issue a precautionary boil water notice to the Galleon Heights pressure zone.

On June 28, 2021, Big Basin WC issued a Boil Water Notice to the Galleon Heights customers following the water outage. Big Basin WC later stated the reason for the pressure loss was a faulty 100-amp breaker that caused the Galleon Heights booster station, which serves the Galleon Heights pressure zone, to shut down. Big Basin WC did not report the water outage to the State Water Board until the State Water Board initiated contact with Big Basin WC.

DETERMINATION

The State Water Board has determined that Big Basin WC has failed to comply CHSC, Section 116555 (a)(3) and CCR, Title 22, Section 64602 by not providing a reliable supply of potable water to the Galleon Heights pressure zones.

PENALTY PURSUANT TO HEALTH AND SAFETY CODE SECTION 116650

The State Water Board hereby assesses upon Big Basin WC an administrative penalty in the amount of **$1,000**. Big Basin WC is directed to pay this penalty in accordance with the requirements set forth in Directive 2 of this Citation.

DIRECTIVES

Big Basin WC is hereby directed to take the following actions:

1. By **September 16, 2021**, submit to the State Water Board a corrective action plan that includes a schedule for replacing the pumps and appurtenances at the Galleon Heights booster station and installing reliability features, such as alarms and backup power capabilities, with a final completion date no later than

November 30, 2021. The plan must ensure that the Galleon Heights pressure zone distribution system pressure can be reliably maintained without outages.

2. Submit to the State Water Board by **September 16, 2021,** a check for the administrative penalty of **$1,000** imposed by this Citation and a copy of the form, which is attached as Appendix 1, hereto entitled "Notice of Administrative Penalty." The Citation number must be written on the check. The check must be made payable to the **State Water Resources Control Board** and submitted to:

SWRCB Accounting Office
ATTN: Drinking Water Program Fees
P.O. Box 1888
Sacramento, CA 95812-1888

All submittals required by this Citation, unless otherwise specified in the directives above, must be electronically submitted to the State Water Board at the following address. The subject line for all electronic submittals corresponding to this Citation must include the following information: Water System name and number, citation number and title of the document being submitted.

Jonathan Weininger, District Engineer
Dwpdist05@waterboards.ca.gov

The State Water Board reserves the right to make modifications to this Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance. Nothing in this Citation relieves Big Basin WC of its obligation to meet the requirements of the California SDWA (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit or order issued or adopted thereunder.

PARTIES BOUND

This Citation shall apply to and be binding upon Big Basin WC, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The directives of this Citation are severable, and Big Basin WC shall comply with each and every provision thereof notwithstanding the effectiveness of any provision.

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the State Water Board to: issue a citation or order with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any regulation, permit, standard, citation, or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the State Water Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an order of the State Water Board, and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the State Water Board. The State Water Board does not waive any further enforcement action by issuance of this Citation.

Stefan Cajina
Digitally signed by Stefan Cajina
Date: 2021.08.18 09:05:50 -07'00'
Water Boards

August 19, 2021
Date

Stefan Cajina, P.E., Chief
North Coastal Section
Division of Drinking Water
State Water Resources Control Board

Appendices (1):

1. Notice of Administrative Penalty Form

Certified Mail No. 7018 3090 0001 0464 6731

APPENDIX 1 - NOTICE OF ADMINISTRATIVE PENALTY FORM

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

Notice of Administrative Penalty

System Name: Big Basin Water Company

System Number: 4410001

Background

On August 18, 2021, the Division of Drinking Water issued Citation 02_05_21C_021 to the Big Basin Water Company. The Citation carried a civil penalty in the amount of **$1,000**.

Method of Payment

A check for the total amount of the civil penalty and a copy of this form must be submitted to the State Water Board by **September 10, 2021**. The Citation number must be written on the check, the check made payable to the **State Water Resources Control Board**, and submitted to:

SWRCB Accounting Office
ATTN: Drinking Water Program Fees
P.O. Box 1888
Sacramento, CA 95812-1888

Attach check below:

APPENDIX 3 - NOTICE OF ADMINISTRATIVE PENALTY

APPENDIX 3 - NOTICE OF ADMINISTRATIVE PENALTY FORM

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

Notice of Administrative Penalty

System Name: Big Basin Water Company

System Number: 4410001

Background

On October 28, 2021, the Division of Drinking Water issued Citation 02_05_21C_030 to the Big Basin Water Company. The Citation carried a civil penalty in the amount of **$21,000**.

Method of Payment

A check for the total amount of the civil penalty and a copy of this form must be submitted to the State Water Board by **February 10, 2022**. The Citation number must be written on the check, the check made payable to the **State Water Resources Control Board**, and submitted to:

SWRCB Accounting Office
ATTN: Drinking Water Program Fees
P.O. Box 1888
Sacramento, CA 95812-1888

Attach check below:

MEMO

TO: Board of Directors

FROM: District Manager

PREPARED BY: Environmental Programs Manager

SUBJECT: PACIFIC GAS AND ELECTRIC COMPANY (PG&E) RIPARIAN MITIGATION PROJECT AGREEMENT

DATE: November 4, 2021

Recommendation

It is recommended that the Board of Directors review the potential PG&E riparian mitigation project description, and, by motion, authorize the District Manager to enter into the attached agreement with PG&E on behalf of the District.

Background

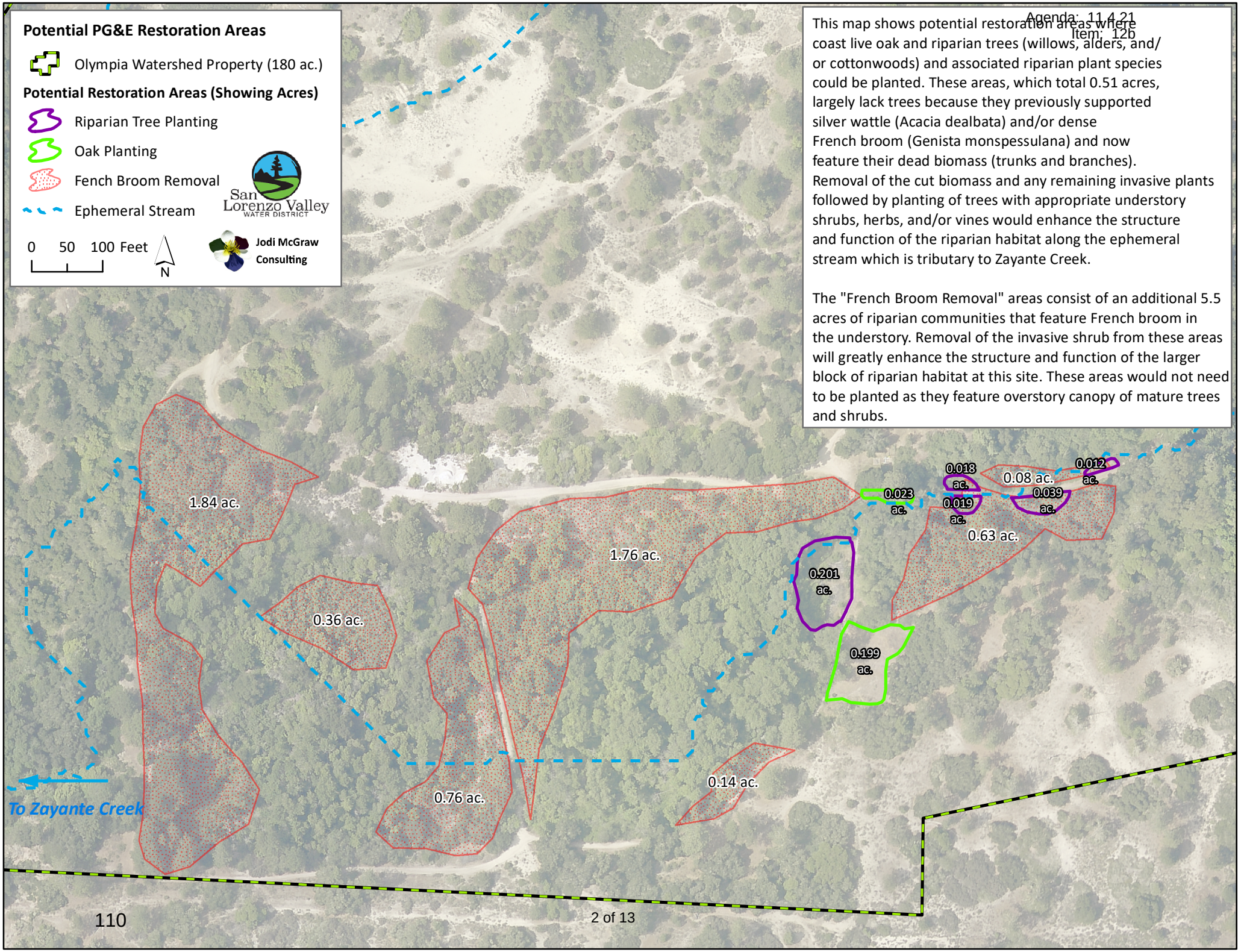
In 2020 the District was approached by PG&E to inquire about available riparian habitat to complete a mitigation project through planting of native riparian trees. PG&E contracted with Ecologist Jodi McGraw to create a conceptual restoration plan for the approval by the State Water Resource Control Board. A 1.15-acre area of riparian and oak woodland habitat located along an ephemeral tributary to Zayante Creek was identified on the District's Olympia Watershed property.

The restoration plan entails removing invasive plants throughout the 1.15-acre area, and then planting riparian trees and understory plants within the 0.29-acre area and coast live oak within an estimated 0.22-acre area. Installing plants within these 0.51-acre areas that lack established tree canopy will accelerate establishment of native plant community structure and species composition and suppress re-establishment of invasive plants. The remaining 0.64 acres, which feature an existing native plant canopy, will be passively revegetated following removal of the invasive plants.

Not only will the District's riparian habitat be improved by PG&E's proposed mitigation, but in addition PG&E would agree to conduct invasive removal in other parts of the property, specifically French Broom (*Genista monspessulana*) which is prolific throughout. Estimations on costs of invasive removal for approximately 5.5 acres was determined by Jodi McGraw Consulting, for ~$101,000. The total costs for invasive removal throughout the Olympia watershed includes 5-years of maintenance. This is an excellent opportunity for restoration at no cost to the District and developing a productive collaboration with PG&E.

Exhibit A: Map
Exhibit B: Agreement

FISCAL IMPACT:
None


Potential PG&E Restoration Areas
Olympia Watershed Property (180 ac.)
Potential Restoration Areas (Showing Acres)
Riparian Tree Planting
Oak Planting
Fench Broom Removal
Ephemeral Stream
San Lorenzo Valley Water District
0 50 100 Feet
N
Jodi McGraw Consulting
This map shows potential restoration areas where coast live oak and riparian trees (willows, alders, and/or cottonwoods) and associated riparian plant species could be planted. These areas, which total 0.51 acres, largely lack trees because they previously supported silver wattle (Acacia dealbata) and/or dense French broom (Genista monspessulana) and now feature their dead biomass (trunks and branches). Removal of the cut biomass and any remaining invasive plants followed by planting of trees with appropriate understory shrubs, herbs, and/or vines would enhance the structure and function of the riparian habitat along the ephemeral stream which is tributary to Zayante Creek.
The "French Broom Removal" areas consist of an additional 5.5 acres of riparian communities that feature French broom in the understory. Removal of the invasive shrub from these areas will greatly enhance the structure and function of the larger block of riparian habitat at this site. These areas would not need to be planted as they feature overstory canopy of mature trees and shrubs.
1.84 ac.
0.36 ac.
1.76 ac.
0.76 ac.
0.14 ac.
0.023 ac.
0.018 ac.
0.019 ac.
0.08 ac.
0.039 ac.
0.012 ac.
0.63 ac.
0.201 ac.
0.199 ac.
To Zayante Creek

LICENSE AGREEMENT FOR ACCESS AND ENVIRONMENTAL MITIGATION BETWEEN SAN LORENZO VALLEY WATER DISTRICT AND PACIFIC GAS & ELECTRIC COMPANY

This License Agreement for Access and Environmental Mitigation ("**Agreement**"), is made and entered into on this __ day of _____ 2021 ("**Effective Date**"), by and between the San Lorenzo Valley Water District, a public agency of the State of California, with its principal place of business located at 13060 Highway 9, Boulder Creek, CA 95006 ("**Licensor**") and Pacific Gas and Electric Company, a California corporation and regulated public utility, with its principal place of business located at 77 Beale Street, San Francisco, CA 94105 ("**Licensee**"). Licensor and Licensee may be referred to herein individually as a "Party" and collectively as the "Parties."

RECITALS

A. WHEREAS, Licensor is the owner of certain real property located in the County of Santa Cruz, California, near 7710 East Zayante Road, Felton, and consisting of approximately one hundred and eighty (180) acres of undeveloped land and related property commonly referred to as the "Olympia Watershed Property" or the "Olympia Wellfield," as more particularly shown on Exhibit A attached hereto and incorporated herein by this reference (the "**Property**"). The Property is known to support endangered species protected by the Endangered Species Act, including the Mount Hermon June Beetle, the Zayante band-winged grasshopper, and the Ben Lomond spineflower.

B. WHEREAS, Licensee wishes to secure mitigation to compensate for the loss of vegetation associated with riparian corridors and oak woodland habitat as a result of gas transmission line maintenance within the County of Santa Cruz. Licensee is obtaining permits for this gas transmission line maintenance, consisting of a Section 401 Water Quality Certification and a Lake and Streambed Alteration Agreement (collectively, the "**Permits**"). The Permits will require compensatory mitigation, for which Licensee desires to restore riparian habitat within the Restoration Area (defined below) on the Property.

C. WHEREAS, as conditions of allowing access and use of the Restoration Area on the Property for compensatory mitigation, Licensor desires that Licensee shall hold harmless and indemnify Licensor; that Licensee shall provide additional removal of invasive plants beyond the scope required by the Permits; and that Licensor shall have an opportunity to review plans and reports regarding work to be conducted on the Property.

AGREEMENT

NOW THEREFORE, in consideration of the above Recitals and the mutual promises, covenants, terms and conditions contained herein, and for other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, Licensor and Licensee agree as follows:

1. Definitions. The following terms shall have the meanings set forth below:

(a) "**License Area**" refers collectively to the Restoration Area (defined below) and the Removal Areas (defined below).

(b) "**Performance Period**" refers to the duration of Licensee's Project (defined below), which will commence upon the Effective Date and last a minimum of five (5) years from the last day of plant installation. Plant installation is tentatively planned for fall/winter 2021 or spring 2022.

(c) "**Removal Areas**" refers to areas located within the Property consisting of a total of approximately five (5) acres that have been identified by Licensor for invasive plant removal, as outlined on the map attached hereto as Exhibit A.

(d) "**Restoration Area**" refers to an area located within the Property and consisting of approximately 1.15 acres of degraded riparian and oak woodland habitat, as outlined on the map attached hereto as Exhibit A.

2. Grant of License. Licensor hereby grants to Licensee, and Licensee hereby accepts from Licensor, for the benefit of Licensee and Licensee's employees, officers, and agents (collectively, the "**Licensee Parties**"), a license to use the License Area in its "as is" and "with all faults" condition, for the purposes of Licensee's Project (defined below) and the Additional Scope (defined below), subject to the terms, conditions and restrictions set forth in this Agreement (the "**License**").

(a) Licensee shall, at its sole cost and expense, comply with all applicable rules, laws and regulations of any governmental or quasi-governmental authority applicable to the use of the License Area by Licensee and shall comply with all reasonable rules and regulations (the "**Rules and Regulations**") that Licensor may, at any time or from time to time, establish regarding the License Area, provided that (i) the foregoing shall not require Licensee to make any alterations or improvements to the License Area and (ii) any such Rules and Regulations do not materially increase Licensee's obligations or decrease its rights under this License.

(b) Licensee shall not make or perform or permit the making or performing of any alterations, installations, additions or other physical changes to the License Area, beyond those outlined in this Agreement, without the prior written consent of Licensor, which consent shall be in Licensor's sole discretion.

3. Term. The term of this Agreement and the License shall commence upon the Effective Date and continue throughout the Performance Period, a minimum of five (5) years from the Effective Date, unless terminated early by mutual written agreement of the Parties. This Agreement and the License shall expire and terminate automatically upon either (a) five (5) years after the Effective Date or (b) completion of Licensee's Project (defined below), whichever event occurs last.

4. Work. Licensee shall furnish all necessary funds, materials, labor, equipment and supplies for the performance of the "**Work**," which shall consist of Licensee's Project (defined below) and the Additional Scope (defined below).

(a) "**Licensee's Project**" consists of removing invasive plants, installing native trees and shrubs, and conducting maintenance and monitoring within the Restoration Area to satisfy requirements of the Permits. Licensee's Project shall be conducted in conformance with a site-specific Restoration and Monitoring Plan ("**RMP**") to be approved by the Central Coast Regional Water Quality Control Board ("**RWQCB**") and California Department of Fish and Wildlife ("**CDFW**"). Exhibit B attached hereto and incorporated herein by this reference, is a draft of the RMP that has been provided to Licensor for review. Licensee shall provide a copy of the approved RMP to Licensor within ten (10) days of its approval by RWQCB and CDFW. Licensee shall be solely responsible for obtaining and complying with all required permits (including without limitation the Permits) and for complying with all applicable laws and regulations in connection with Licensee's Project.

(b) The "**Additional Scope**" consists of invasive plant removal within the Removal Areas and ongoing maintenance to manage invasive plants therein, as more specifically described in Exhibit C attached hereto and incorporated herein by this reference. Licensee's agreement herein to perform the Additional Scope is a material inducement to Licensor in granting this License.

5. Consultants. Licensee shall retain consultants as independent contractors ("**Consultants**") to perform the Work. Licensee shall be solely responsible for contracting with such Consultants, for ongoing contract administration and oversight of the Work, and for payment of Consultants.

(a) Licensee intends to retain Jodi McGraw Consulting as its Consultants; however, nothing in this Agreement requires Licensee to retain or continue working with a particular firm or consultant.

(b) Licensee's contractors (including Consultants) are required by law to be licensed and regulated by the State Contractors' License Board, which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within 4 years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractor's State License Board, and P.O. Box 26000, Sacramento, California 95826.

(c) Licensee shall require Consultants to comply with all applicable rules, laws and regulations of any governmental or quasi-governmental authority in connection with the performance of Work under this Agreement.

(d) Licensee shall require Consultants to coordinate with the Licensor's designated staff member(s) to avoid any interference with the use of the Property.

(e) Licensee shall require its Consultants to procure and maintain at a minimum, the insurance specified in Section 8 below.

(f) Licensee shall prohibit Consultants from storing any items in, on, or about the License Area and from disposing of any flammable, explosive, hazardous, toxic, contaminating, polluting matter, waste, or substance or related injurious materials in, under, about, or on any part of the License Area and the Property.

(g) Licensee shall provide copies of its contracts with Consultants and any amendments thereto to Licensor within ten (10) days of their execution or other approval by Licensee.

6. Access.

(a) Consultants shall have the right reasonably to access the License Area for purposes of conducting the Work; provided, however, that Consultants shall coordinate with the Licensor's designated staff member(s) to avoid any interference with the use of the Property.

(b) Licensee Parties other than Consultants shall have the right reasonably to access the License Area, upon advance written notice to Licensor and accompanied by Licensor's designated staff member(s), for purposes of monitoring, overseeing and/or verifying the performance of the Work.

(c) Each person entering upon the Property under this Agreement does so at their own risk and peril. The Property is in natural condition and, as with any unimproved land, certain risks exist. Slippery conditions may exist during and after storms. The Property and the lands adjacent thereto are known to contain wildlife which can be hazardous to humans if encountered, including rattlesnakes, ticks (and associated Lyme disease), rats and mice (and associated diseases such as plague, tularemia, relapsing fever or hantavirus), bats, coyotes, and other mammals (each capable of attacking or of carrying rabies or other diseases). In addition to wildlife, there are plants which can also be hazardous to human health if encountered directly, including poison oak and plants with sharp spines. Licensor shall have no duty to inspect the Property and no duty to warn any person of any latent or patent defect, condition or risk that might be incurred in the exercise of the rights granted herein.

(d) Licensor shall have the right to deny access to the Property to any of the Licensee Parties in Licensor's reasonable discretion.

(e) Licensor retains the right to use and to grant to others the nonexclusive right to use the Property for any and all lawful purposes; provided, however, that Licensor shall not use, or grant other parties the right to use, the License Area in any way that materially and unreasonably interferes with restoration success criteria as outlined in Exhibit B.

7. Insurance.

(a) All Licensee Parties (including Consultants) that enter the Property shall procure and maintain at a minimum, the following insurance with insurance carriers satisfactory to Licensor: (i) comprehensive general liability insurance including coverage for operations, contractual and contractor's protective liability and completed operations on an "occurrence" basis with no less than a $1,000,000 combined single limit for bodily injury and

property damage; (ii) comprehensive automobile liability insurance covering owned, non-owned and hired vehicles used in the performance of the Work with limits no less than $1,000,000 as to any one occurrence for bodily injury and property damage; and (iii) worker's compensation insurance with statutory limits and employer's liability insurance with limits no less than $1,000,000 per accident for bodily injury or disease.

(b) The policies identified above shall name Licensor as an additional insured, and shall require the insurer to endeavor to provide thirty (30) days' prior written notice to Licensor prior to any cancellation of such policy or coverage.

(c) A certificate evidencing the insurance required herein shall be furnished to Licensor at the time of commencement of the term.

8. Reports. Licensee shall provide the following reports to Licensor:

(a) Annual status reports documenting the progress of the Work, including photographs, within thirty (30) days of the anniversary of the Effective Date each year.

(b) Copies of any and all reports, tests and other written documents regarding the Work, within ten (10) days after receipt by Licensee.

(c) A final report upon termination of this Agreement.

9. Licensee's Assumption of Liability and Indemnity.

(a) Licensor is not responsible for the acts or omissions of Licensee or any of its respective agents, employees, contractors (including Consultants) or invitees, or any other third-party licensee or their respective agents, employees, contractors or invitees in or about the License Area, and Licensor shall have no liability for the acts or omissions of such parties in the use of the License Area.

(b) Licensee shall defend, indemnify and hold harmless Licensor and its respective employees, agents, directors, officers, representatives, attorneys, successors and assigns (collectively, the "**Indemnified Parties**") from and against any and all costs, expenses (including, without limitation, reasonable attorneys' fees), liabilities, damages, losses, fines, judgments, claims, actions, lawsuits or demands incurred by or asserted against any one or more of the Indemnified Parties by reason of the use of the License Area by the Licensee Parties (including Consultants); any breach of Licensee's obligations under this Agreement; or injury to, or death of, any person or damage to any property caused by the acts, omissions, negligence or misconduct of Licensee Parties (including Consultants) or their respective employees, agents or invitees. Licensee's obligations in this paragraph shall extend to include any and all hazardous material spills or other form of hazardous material contamination to the License Area by Licensee or any party entering the License Area with Licensee's permission.

(c) Licensee's indemnity obligations shall survive expiration or termination of this Agreement and shall not be limited by any insurance carried or required to be carried by Licensee or Licensee's Consultants hereunder.

10. Destruction or Damage. If the License Area or the access thereto shall be partially damaged or destroyed by wildfire or another cause, Licensor shall have the right to terminate this License upon five (5) days prior written notice to Licensee.

11. Notices. Any notice, consent, demand, or other communication required or permitted to be given under this Agreement shall be in writing and sent via email with a copy by U.S. mail or by express overnight courier with tracking, addressed as follows (or such other address as a Party may designate by giving written notice to the other Party):

To Licensor:

Rick Rogers
District Manager
San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, CA 95006
Email: rrogers@slvwd.com

To Licensee:

Matthew Brown
Principal Land Consultant,
Environmental Resources and Mitigation
Pacific Gas and Electric Company
3580 East California Ave. Bld. B
Fresno, CA 93725
Email: MVB5@pge.com

12. No Lease. This Agreement does not and shall not be deemed to constitute a lease or a conveyance of the License Area (or any portion thereof) by Licensor to Licensee or to confer upon Licensee any right, title, estate or interest in or to the License Area or to provide any exclusive right to use and occupy the License Area.

13. Assignment. Licensee shall not assign or otherwise convey any of its rights, obligations or interests under this Agreement without the prior written consent of Licensor.

14. Miscellaneous.

(a) No modification, waiver or amendment of this Agreement or any provision herein shall be valid unless the same is in writing, and signed by the Party against which the enforcement of such modification, waiver or amendment is sought. This Agreement contains the entire agreement between the Parties hereto relating to the transactions contemplated hereby, and all prior or contemporaneous agreements, understandings, representations and statements, oral or written, are merged herein.

(b) This Agreement shall not make or be deemed to make any Party to this Agreement an agent for or the partner of any other Party.

(c) The failure of either Party to insist in any one or more instances upon the strict performance or observance of any one or more of the obligations of the other party, or to exercise any election herein contained, shall not be construed as a waiver or relinquishment for the future of performance of such obligations or of the right to exercise such election, but the same shall continue and remain in full force and effect with respect to any subsequent breach, act or omission.

(d) The unenforceability, invalidity, or illegality of any provision of this Agreement shall not render the other provisions unenforceable, invalid or illegal.

(e) This Agreement shall be construed and interpreted in accordance with the laws of the State of California, without giving effect to conflict-of-law rules and principles of said State.

(f) The terms and provisions of this Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective legal representatives, and permitted successors, transferees and assigns.

(g) Section headings are included solely for convenience, are not to be considered part of this Agreement and are not intended to modify, explain or to be a full or accurate description of the content thereof.

(h) Neither this Agreement nor any memorandum thereof may be recorded or filed in the Official Records of the County of Santa Cruz, California.

(i) In the event of any litigation arising under this Agreement, the prevailing party shall be entitled to recover from the non-prevailing party its reasonable attorneys' costs, fees and expenses.

(j) This Agreement may be executed in counterparts, including electronic counterparts, with the same effect as if both Parties hereto had executed the same document. Such counterparts shall be construed together and shall constitute a single agreement.

(k) 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 Licensor and Licensee.

[Remainder of Page Intentionally Blank; Signature Page(s) Follow]

IN WITNESS WHEREOF, this License Agreement for Access and Environmental Mitigation has been duly executed by the parties hereto as of the day and year first above written.

LICENSOR:

SAN LORENZO VALLEY WATER DISTRICT

_____

Richard M. Rogers
District Manager
San Lorenzo Valley Water District

APPROVED AS TO FORM:

_____

Gina Nicholls
District Counsel
Nossaman LLP

LICENSEE:

PACIFIC GAS AND ELECTRICIC COMPANY

_____

John Wilcox
Manager, Environmental Resources and Mitigation

EXHBIT A

PLAN OF THE PROPERTY AND LICENSE AREA
(Including Locations of Restoration Area and Removal Areas)

[Insert; See Following Page]

EXHBIT B

SITE-SPECIFIC RESTORATION AND MONITORING PLAN

[Insert; See Following Pages]

EXHBIT C

ADDITIONAL SCOPE
(Invasive Plant Removal Scope and Cost Estimate)

[Insert; See Following Pages]

MEMO
Revised

TO: Board of Directors

FROM: District Manager

PREPARED BY: Environmental Programs Manager
SUBJECT: Conjunctive Use Plan IS-MND & Environmental Permitting Consultant Contract Amendment

DATE: November 4, 2021

RECOMMENDATION:
It is recommended that the Board of Directors review this memorandum and authorize the District Manager to enter into an amended professional services agreement with Rincon Consultants, Inc for the Conjunctive Use Plan Environmental Impact Report (EIR).

BACKGROUND

The San Lorenzo River Watershed Conjunctive Use Plan (CUP) has been developed jointly by the San Lorenzo Valley Water District (SLVWD or District) and the County of Santa Cruz (County) to identify opportunities for improving the reliability of the District's surface and groundwater supplies through conjunctively managing these supplies while also increasing stream baseflows for fish in the San Lorenzo River watershed. The CUP was developed under a State of California grant administered by the County (grant completed in June 2021). As part of the grant's deliverables two studies: (1) the Water Availability Assessment (WAA) and (2) the Fisheries Resource Considerations, the CUP, and CEQA analysis were completed. The CEQA Initial Study – Mitigated Negative Declaration (IS-MND) was released for public review from July 28 through August 31, 2021. Significant public concerns were raised during the public review period (see comment letters attached as Exhibit A). Therefore, District staff and legal counsel recommend a more thorough CEQA analysis, through an Environmental Impact Report (EIR).

In addition to preparing an EIR that will help the District respond to public comments received on the IS-MND, the District will consider revisions to the CUP to better suit its operational needs. Immediate next steps include evaluating concerns raised by the California Department of Fish & Wildlife, National Marine Fisheries Service, the City of Santa Cruz and others during the public review period for the CUP IS-MND. Once direction is determined and concerns are properly addressed the District will proceed with submitting water right petitions through the SWRCB. Staff's goal is to file all associated water rights petitions with SWRCB in 2022.

District staff recommends continuing the CEQA analysis work with Rincon Environmental Consulting, the firm originally brought onto the project to complete the IS-

MND, because the firm's familiarity with the project. Rincon's updated scope of work (exhibit B) is attached.

Exhibit A – IS-MND Comment Letters
Exhibit B – Rincon Environmental Amended Scope

Additional supporting documents can be found the District's website:

Conjunctive Use Plan –
https://www.slvwd.com/sites/g/files/vyhlif1176/f/uploads/slvwd_conjunctive_use_plan.pdf

IS-MND -
https://www.slvwd.com/environmental/pages/conjunctive-use-planning-documents

WAA –
https://www.slvwd.com/sites/g/files/vyhlif1176/f/uploads/water_availability_assessment_v3_with_tables_figures_0.pdf

Fisheries Resource Considerations –
https://www.slvwd.com/sites/g/files/vyhlif1176/f/uploads/slvwd_conjunctive_use_-_fisheries_revised_final.pdf

FISCAL IMPACT:
Cost: ~$145,000

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

August 30, 2021

Ms. Carly Blanchard
Environmental Planner
San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, CA 95006
cblanchard@slvwd.com

Subject: Conjunctive Use Plan for the San Lorenzo River Watershed, Initial Study/Mitigated Negative Declaration, SCH No. 2021070572, City of Felton, Santa Cruz County

Dear Ms. Blanchard:

The California Department of Fish and Wildlife (CDFW) has reviewed the Conjunctive Use Plan for the San Lorenzo River Watershed (Project) Initial Study/Mitigated Negative Declaration (IS/MND) prepared by San Lorenzo Valley Water District (SLVWD). CDFW is submitting comments on the IS-MND regarding potentially significant impacts to biological resources associated with the Project.

CDFW ROLE

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources (e.g., biological resources). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

PROJECT DESCRIPTION

This Project is centered in SLVWD's service area in Santa Cruz County, California. SLVWD provides drinking water to unincorporated communities in Santa Cruz County including: Brookdale; Ben Lomond; Boulder Creek; Lompico; Felton; and areas surrounding Scotts Valley. SLVWD supplies water via surface water diversions from tributaries to the San Lorenzo River, and from wells that draw water from the Santa Margarita Groundwater Basin (SMGB).

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Currently, SLVWD has three service areas: the North, Felton and Southern systems, which are independent of one another and draw water from distinct sources. The Northern System includes Brookdale, Ben Lomond, Boulder Creek, and Lompico. Water is supplied via surface diversions on Peavine, Foreman, Sweetwater, and Clear Creeks, and from groundwater drawn from the Quail Hollow and Olympia wellfields. The Felton Area is supplied solely from surface water diversions on Fall Creek, Bennett Spring, and Bull Creek. The Southern System relies on groundwater from the Pasatiempo wellfield.

The Project initially stemmed from SLVWD efforts to study and identify projects that would boost water supply reliability. For this effort, SLVWD contracted Exponent Environmental & Earth Sciences (Exponent). In 2019, Exponent released *Water Availability Assessment for San Lorenzo River Watershed Conjunctive Use Plan*, which is Appendix A in the IS/MND. This document identified 22 potential projects that could increase water supply reliability by reducing reliance on distinct water sources for the North, Felton and South System, and that in some cases conjunctively use water diverted from surface sources to recharge groundwater aquifers in the SMGB via direct injection, or indirectly affect groundwater by preferentially using water supplied from surface sources to meet customer demands as opposed to groundwater. The SMGB is overdrafted and the State's 2014 Sustainable Groundwater Management Act (SGMA) identifies it as a medium priority basin. This listing necessitated the formation of the Santa Margarita Groundwater Agency (SMGA) of which SLVWD and other local water suppliers are members. The SMGA is required to prepare a Groundwater Sustainability Plan for the SMGB by 2022.

The IS/MND advances four potential projects from Exponent's 2019 study potentially toward implementation to improve SLVWD water supply reliability. They are: modification of existing water right and associated bypass flow requirement for SLVWD's diversions on Fall Creek and Bennett Spring; importing excess water from stream diversions in the North System to supplement supplies in the Southern System; use of earmarked supply in City of Santa Cruz's Loch Lomond Reservoir to supplement supply in Southern System; and a conjunctive use scenario where excess water supplied from stream diversions in the North and Felton Systems is injected in the Olympia groundwater wellfield as an aquifer storage and recovery (ASR) project. The IS/MND states the first three projects could be implemented after adoption of this IS/MND, while the ASR project would require additional CEQA documentation.

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA Permit must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA

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documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA section 21001(c), 21083, and CEQA Guidelines section 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code, section 2080.

Lake and Streambed Alteration Program

The Project has the potential to impact resources including mainstems, tributaries and floodplains associated with the San Lorenzo River Watershed including: Peavine Creek; Foreman Creek; Boulder Creek; Clear Creek; Sweetwater Creek, Fall Creek; Bennett Spring; Bull Creek; Newell Creek; Bean Creek; Zayante Creek; and the mainstem of the San Lorenzo River. Notification is required, pursuant to CDFW's LSA Program (Fish and Game Code, section 1600 et. seq.) for any Project-related activities that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. CDFW considers work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW, as a Responsible Agency under CEQA, will consider the CEQA document for the project. CDFW may not execute the final LSA Agreement until it has complied with CEQA (Public Resources Code section 21000 et seq.) as the responsible agency.

ENVIRONMENTAL SETTING AND LOCATION

The Project is located in the water system and service area of the SLVWD, and the greater San Lorenzo River watershed inclusive of the middle, and lower mainstems, Loch Lomond, Newell Creek, Bean Creek, Zayante Creek, and the SMGB.

The San Lorenzo River watershed covers 138 square miles, with 25 miles of mainstem habitat. The watershed is bounded by Castle Rock Peak and Ben Lomond Mountains and contains significant tracts of Coastal Redwood (*Sequoia sempervirens*) forest and Sandhills, which are characterized by Zayante sand soils and a collection of endemic and uniquely adapted plants and wildlife. Elevations in the watershed range from 3,214 feet to sea level. The surrounding climate is Mediterranean, and annual rain can vary throughout the watershed from 15 to over 100 inches of rain. SLVWD diverts surface waters from sources that encompass 7.1 square miles of the watershed.

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Threatened, endangered, and other special-status species that are known to occur, or have the potential to occur in the Project area, include, but are not limited to:

Common Name	**Scientific Name**	**Status**
California giant salamander	*Dicamptodon ensatus*	SSC
California red-legged frog	*Rana draytonii*	FT, SSC
Foothill yellow-legged frog – Southwest/South Coast Clade	*Rana boylii*	SE, SSC
Santa Cruz black salamander	*Aneides niger*	SSC
Santa Cruz long-toed salamander	*Ambystoma macrodactylum croceum*	FE, SE, SFP
Black swift	*Cypseloides niger*	SSC
Burrowing owl	*Athene cunicularia*	SSC
Marbled murrelet	*Brachyramphus marmoratus*	FT, SE
Tricolored blackbird	*Agelaius tricolor*	ST, SSC
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC
White tailed kite	*Elanus leucurus*	SFP
Coho salmon – Central California coast ESU	*Oncorhynchus kisutch*	FE, SE
Steelhead – Central California coast DPS	*Oncorhynchus mykiss irideus*	FT
Tidewater goby	*Eucyclogobius newberryi*	FE
Ohlone tiger beetle	*Cicindela Ohlone*	FE
Smith’s blue butterfly	*Euphilotes enoptes smith*	FE
Zayante band-winged grasshopper	*Trimerotropis infantilis*	FE
American badger	*Taxidea taxus*	SSC
Pallid bat	*Antrozous pallidus*	SSC
San Francisco dusky-footed woodrat	*Neotoma fuscipes annectens*	SSC
Townsend’s big-eared bat	*Corynorhinus townsendii*	SSC

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Western pond turtle	*Emys marmorata*	SSC
Notes: FE = Federally Endangered; FT = Federally Threatened; SE = State Endangered; ST = State Threatened; SFP = State Fully Protected; SSC = State Species of Special Concern; ESU = Evolutionarily Significant Unit; DPS = Distinct Population Segment		

CDFW recommends that prior to project implementation surveys be conducted for special-status species noted in this comment letter with potential to occur, following recommended survey protocols if available. Survey and monitoring protocols and guidelines are available at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist SLVWD in adequately identifying and/or mitigating the project's significant, or potentially significant, direct and indirect impacts on biological resources.

Comment 1: San Lorenzo River at Big Trees Low-Flow Requirements Modification Scenario

Issue: The IS/MND proposes modifying the existing Fall Creek Diversion water right and specifically eliminating an existing stipulation in the bypass flow requirements. This is described in the IS/MND on page 5. The existing water right requires SLVWD to bypass 1.5 cubic foot per second (cfs) of streamflow November through March and 1 cfs April through October in wet years, and 0.75 cfs November through March and 0.5 cfs April through October in dry years below the diversion. It also requires SLVWD cease all diversions at Fall Creek if the San Lorenzo River U.S. Geological Survey (USGS) gauge at Big Trees (SLRBT) goes below 10 cfs in September, 25 cfs in October, or 20 cfs in November. This latter obligation to cease all diversions in the Fall depending on the flows at the SLRBT gauge is the portion of the bypass flows SLVWD wishes to alter. This would reduce restrictions and allow SLVWD to divert more water to meet Felton System customer demands. However, the existing SLRBT streamflow bypass obligations are intended to be protective of juvenile Central California Coast steelhead trout (*Oncorhynchus mykiss*) rearing in the mainstem San Lorenzo River during critical low flow periods.

In *Fisheries Resource Considerations for the San Lorenzo River Watershed Conjunctive Use Plan* (Appendix B), the history of the origin of this bypass flow stipulation is discussed. There is a discussion of variation in the required bypass quantities at

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SLRBT, and lack of justification for these monthly adjustments relative to anadromous salmonid life histories. Regardless of justification for month-to-month variation, CDFW acknowledges the City of Santa Cruz is seeking approval for a Habitat Conservation Plan (HCP) to protect steelhead trout and Central California Coast Coho Salmon (*Oncorhynchus kisutch*) that will obligate the City to bypass a minimum of 10 cfs in September, 25 cfs in October and 20 cfs all other months of the year at their Felton Diversion, which is just upstream of SLRBT (City of Santa Cruz 2021).Selection of 20 cfs for the Felton diversion bypass was not directly informed by physical habitat modeling but was selected due to analysis supporting that it would protect migration ability of smolt sized and smaller steelhead. Elsewhere, the City of Santa Cruz did use Instream Flow Incremental Methodology (Bovee 1998) to inform the selection of bypass flow criteria they are seeking to implement.

CDFW asserts that operating the Fall Creek diversion in accordance with existing bypass stipulations at SLRBT does afford protections to juvenile steelhead in the mainstem San Lorenzo River. Eliminating this existing bypass stipulation will allow reductions of instream flow below those established in the City of Santa Cruz HCP. Those flows are necessary to conserve the ecosystem upon which listed species (rearing juvenile steelhead in the San Lorenzo River) depend, ultimately contributing to their recovery. Increased diversions, (particularly in dry years at Fall Creek) has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; substantially reduce the number or restrict the range of an endangered, rare or threatened species; and reduce the overall population number of steelhead juveniles this section of river could support. CDFW has worked with the City of Santa Cruz and NOAA Fisheries for many years to develop an integrated water resources management strategy that is protective of special status anadromous salmonid species while also providing for long-term water supply reliability. This strategy includes the development of a Habitat Conservation Plan negotiated with CDFW and NOAA Fisheries designed to enhance instream flow for coho salmon and steelhead in the San Lorenzo River watershed.

This Project not only seems to be in direct conflict with the goals of the City of Santa Cruz HCP but there is no detailed evaluation included in the IS/MND regarding the potential impacts these increased diversions will have on the existing instream flow or how they might impact habitat conditions for salmonids.

Recommendations: CDFW recommends SLVWD does not alter the existing SLRBT bypass flow requirement in order to protect San Lorenzo River flows during dry periods and droughts for rearing juvenile steelhead trout. The study by Exponent in Appendix A identifies other potential projects to provide alternative supplies to Felton System to provide relief when SLVWD is unable to divert at Fall Creek due to low flows and needs to comply with bypass flows. Some of these projects will be more beneficial to salmon

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and steelhead than elimination of a significant portion of the Fall Creek Diversion bypass flow stipulations. If SLVWD were to pursue the alteration the existing SLRBT bypass flow requirement, an in-depth analysis of the potential downstream impacts associated with this change would need to be presented and discussions and coordination with CDFW and NOAA Fisheries should occur. Altering existing bypass flows per the project description presents a risk for 'take' of CESA listed species which would necessitate a CESA Permit.

Comment 2: Other Public Agencies Whose Approval is Required

Issue: Page 16, Table 1 of the IS/MND, indicates approvals and permits for the Project will be needed from State Water Resources Control Board (SWRCB), Central Coast Regional Water Quality Control Board (CCRWQCB), County of Santa Cruz, and California Department of Transportation. This table should also cite that SLVWD surface water diversions are subject to Fish and Game Code section 1602. CDFE recommends SLVWD obtain LSA Agreements for all its surface water diversions from CDFW prior to diverting streamflow. CDFW has concerns with the current SLVWD diversion practices, particularly summer and fall diversions during low flows are already negatively impacting Coho salmon and steelhead trout. Areas of greatest concern are Boulder Creek, mainstem San Lorenzo River, Fall Creek and Clear Creek. This Project may increase diversions at all stream diversions SLVWD operates.

Evidence of Significant Impacts:

Reduction in wetted habitat: Diversion of water, particularly during summer low flow and/or drought conditions, reduces aquatic habitat quantity and quality or suitability (e.g., pool volumes, wetted channel, stream depths, water quality) for fish and other aquatic species (Gasith and Resh 1999, Marchetti and Moyle 2001; Lake 2003; taken from Deitch, et al. 2009). Reduction in aquatic conditions can have direct, indirect, and/or lethal effects on fish and aquatic life. Fish that are not able to respond to shifting habitat conditions as summer base flows recede can become trapped in isolated pools where: a) organisms become concentrated, b) water quality can become lethal, c) risk of predation increases, and d) competition increases for limited food resources. When fish are stressed by any one process, they are less able to deal with other stressors (Wedemayer et al. 1980).

Reduction in water quality: Reduced flow volume has a strong positive correlation with increased water temperature (Arismendi et al, 2012). Increased water temperatures reduce growth rates in fish and increase their susceptibility to disease, while warmer water also holds less dissolved oxygen, which can reduce survival in juvenile salmonids (Moyle 2002). Both water temperature and dissolved oxygen are critically important for salmonid survival and habitat quality (Moore and Townsend 1998). Though isolated pools can provide critical refuge habitat, extended intermittency can drive high mortality

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as dissolved oxygen levels decline to lethal levels (Woelfle-Erskine et al. 2017, Wigington et al. 2006).

Barrier to Movement: Reduced instream flow interrupts invertebrate drift, disrupts channel dynamics, increases deposition of fine sediments, inhibits recruitment of spawning gravels, and promotes encroachment of riparian and non–endemic vegetation into spawning and rearing areas (CDFW 2002). Juvenile salmonids react to reduction in stream connectivity from changing conditions by re-distributing themselves within the stream network in order to find more suitable rearing habitat (Hwan and Carlson 2015). Shirvell (1994) found that juvenile coho salmon moved upstream in response to decreasing stream flows to find suitable micro-habitat. Once established, salmonids exhibit high site fidelity (Sogard et al. 2009). This movement between habitats can be restricted when flow over riffles becomes too shallow (Hwan and Carlson 2015, Bradford and Heinonen 2008).

Recommendations: CDFW recommends SLVWD apply for and obtain LSA Agreements for operations of all SLVWD's surface water diversions. CDFW recommends SLVWD initiate discussions with CDFW and NOAA Fisheries regarding diversion compliance, and methodology to develop protective bypass flows considerate of the City of Santa Cruz's HCP, for anadromous salmonids for all points of diversion within a river, lake or stream.

Comment 3: Biological Resources pgs. 35-40

Issue: CDFW is concerned operational practices associated with these Projects will result in increased diversion of streamflow at all SLVWD diversions. Reduced stream flows particularly during critical low flow periods and dry years, are harmful to aquatic and riparian ecosystems, Coho salmon, and steelhead trout populations other aquatic life such as amphibians and benthic macroinvertebrates.

The IS/MND concludes significant effects with mitigation included for impacts to habitat of special-status fish, and less-than-significant impacts to interference with movement and migration of native fish. These assertions are almost entirely supported by analysis contained in Appendix A (*Water Availability Assessment for San Lorenzo River Watershed Conjunctive Use Plan)* and Appendix B (*Fisheries Resource Considerations for the San Lorenzo River Watershed Conjunctive Use Plan).*

The *Water Availability Assessment for San Lorenzo River Watershed Conjunctive Use Plan* (Appendix A) contains the following statement with respect to the limitations of the study:

> "The results of this study are suitable for a planning-level evaluation of conjunctive use alternatives. The synthesized monthly records of water supply and use have limited precision and should not be used to evaluate compliance

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> with specific regulatory, water-right, or habitat requirements. The alternatives are evaluated under optimal, hypothetical conditions without full regard for infrastructure and operational limitations, and as such likely overestimate potential yields. The actual yield of existing and future infrastructure will depend on numerous factors beyond the scope of this analysis.
>
> The approach used to evaluate and compare conjunctive use alternatives does not consider the effects of stream diversions or groundwater pumping other than by San Lorenzo Valley Water District (SLVWD). Beyond the simplified approach used for this study, evaluating the effects of groundwater pumping on streamflow requires use of a calibrated numerical groundwater flow model, which was outside the scope of this study. The conjunctive use alternatives are evaluated and compared on the basis of the 1970-2017 climatic period without considering potential climate change.
>
> The report provides additional details about the methods, results, and limitations of this study."

The *Fisheries Resource Considerations for the San Lorenzo River Watershed Conjunctive Use Plan* (Appendix B) contains the following statement with respect to the limitations of the analysis:

> "Similar to the approach used in the WAA [Water Availability Analysis], the results of this analysis of fisheries resource considerations for the *San Lorenzo River Watershed Conjunctive Use Plan* are suitable for a planning-level evaluation of conjunctive use alternatives. Due to the limited precision of the synthesized monthly records of water supply (Exponent 2019), the results should not be used to evaluate compliance with specific regulatory, water-right, or habitat requirements. Instead, this comparative analysis is intended to identify the relative fisheries benefits of individual conjunctive use scenarios and to narrow down the selection of potential projects to move forward in the planning process."

These statements acknowledging the limitations of the analysis are concerning. They raise serious doubts regarding the ability of these two studies to adequately support findings that the Project has less-than-significant impacts. This limited analysis does not demonstrate a good faith effort to determine whether there is substantial evidence that the Project would result in any significant environmental effect. The *Biological Technical Memorandum for the San Lorenzo Valley Water District Conjunctive Use Plan* (Rincon Consultants, Inc. 2020; Appendix E) states: "It is assumed that any changes to the operation of diversions on Bennett Spring/Bennett Creek and Bull Creek under this scenario would be negligible and would have no discernable effect on salmonid habitat in these tributaries or downstream reaches of the San Lorenzo River." (Page 4)

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However, there is no additional explanation or analysis presented to support this assumption other than a reference to the *Fisheries Resource Considerations* document which has already been established to be unsuitable for evaluating compliance with specific regulatory, water-right, or habitat requirements. Based on current Project analysis, CDFW believes there may be potentially significant negative impacts to Coho salmon, steelhead trout and other aquatic life due to operation practices at SLVWD diversions in association with these Projects. DW Alley and Associates long-term sampling has established a negative correlation between May to September average streamflow and juvenile steelhead trout average densities in the San Lorenzo River (DW Alley and Associates 2020). DW Alley also qualitatively has observed declining habitat in San Lorenzo River with decreasing baseflow. It is logical to assume that diversion would negatively impact fish and results in take and direct impacts to fish, particularly in a system like Boulder Creek where up to 20% of mainstem baseflow may be diverted by upstream SLVWD diversion and these impacts are likely to extend to the San Lorenzo River mainstem as well.

Recommendation: See CDFW's recommendation for Comment 2, which directly applies here. Documentation providing a detailed description of the amount and timing of the additional diversions as well as a comprehensive assessment of the instream flow needs of protected resources downstream of all the diversions would be needed to support SLVWD's finding that this Project would have a less-than-significant impact.

CONCLUSION

While the Project does identify some potential benefits to improvement of stream base flow in areas by reducing some groundwater pumping (which may improve habitat for these species) overall, the alteration of instream flows included in the Project have the potential to significantly impact downstream resources negatively by decreasing flow during critical life cycle periods for salmonids. The IS/MND fails to adequately assess or address potential downstream impacts from the reduction in the amount of water in the system. CDFW recommends SLVWD conduct a comprehensive assessment of biological resources downstream of the diversions, collect the necessary data to determine whether flow reductions would significantly impact these downstream resources, and perform the detailed analysis needed to demonstrate if there is a less-than-significant impact. If impacts are potentially significant, additional mitigation measures including minimum flow releases should be identified.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA section 21001(c), 21083, and CEQA Guidelines section 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC).

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FILING FEES

CDFW considers this Project to have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, section 711.4; Pub. Resources Code, section 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

If you have any questions regarding this letter or for further coordination with CDFW, please contact Ms. Jessie Maxfield, Water Rights Coordinator, at (707) 210-2807 or Jessica.Maxfield@wildlife.ca.gov; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Stacy Sherman
692D021D81CA4F7...

Stacy Sherman
Acting Regional Manager
Bay Delta Region

ec: State Clearinghouse No. 2021070572
Sean Cochran, CDFW Region 3 – Sean.Cochran@wildlife.ca.gov
William Stevens, NOAA Fisheries, William.Stevens@noaa.gov

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REMY | MOOSE | MANLEY LLP

James G. Moose
jmoose@rmmenvirolaw.com

August 30, 2021

Sent by Electronic Mail

Carly Blanchard, Environmental Planner
San Lorenzo Valley Water District
13060 CA-9
Boulder Creek, California 95006.
Email: cblanchard@slvwd.com

Re: Comments of City of Santa Cruz on Draft Initial Study & Mitigated Negative Declaration (IS/MND) for proposed Conjunctive Use Plan for the San Lorenzo River Watershed

Dear Ms. Blanchard,

On behalf of the City of Santa Cruz (City), I thank you for the opportunity to submit the following comments on the Draft Initial Study & Mitigated Negative Declaration (IS/MND) for the proposed Conjunctive Use Plan for the San Lorenzo River Watershed (the Project). As a long-time partner of the San Lorenzo Valley Water District (District or SLVWD), the City values its friendly and constructive relationship with its sister agency, and looks forward to maintaining the good will and collaborative spirit that have characterized past and ongoing cooperative efforts between the two public agencies. Not surprisingly, however, the City is very interested in the Project, as it will directly affect the City's operations of its own water system and the bodies of water from which the City directly or indirectly draws the majority of its water supplies. These water bodies include the San Lorenzo River, Loch Lomond Reservoir, Newell Creek, Fall Creek, Peavine Creek, Foreman Creek, Clear Creek, and Sweetwater Creek. To be frank, the City is also very concerned that the Project could frustrate the City's ongoing efforts to protect the fisheries in those water bodies, and that the Project could have its own adverse effects on those fisheries. The City therefore feels that it has no choice but to submit this letter on the IS/MND. Please accept the letter in the constructive spirit in which it is offered.

In the recent past, the City has taken actions to protect the sensitive fish species in the aforementioned water bodies and others, and is in the process of proposing and pursuing additional future protective actions. Since 2007, for example, the City has been subject to agreements with the California Department of Fish and Wildlife (CDFW) by which the City has maintained "interim bypass flows" protective of Central California Coast steelhead (steelhead) (O. mykiss) and Central California coast coho (coho) (O. kisutch) at the City's Tait Diversion on the San Lorenzo River and on the so-called North Coast Streams.[1] These bypass flows leave more water in-stream than is required by the City's existing water rights. In addition, in January 2021, the City approved its Operations and Maintenance Habitat Conservation Plan (OMHCP), which protects, among other species, the tidewater goby (Eucyclogobius newberryi) and the Pacific lamprey (Lampetra tridentata).

As the District is aware, the City is actively pursuing its Water Rights Project, for which the City published a Draft Environmental Impact Report (EIR) in June 2021. Among the elements of the Water Rights Project are stream bypass requirements for fish habitat (referred to in the Draft EIR as "Agreed Flows"). In addition to being proposed to be part of the City's upcoming Anadromous Salmonid Habitat Conservation Plan (ASHCP), the Agreed Flows would be incorporated, by action of the Santa Cruz City Council, into both the City's pre-1914 rights on the North Coast streams and its post-1914 permits and licenses on the San Lorenzo River and Newell Creek. The Agreed Flows and the ASHCP are intended to protect steelhead and coho, but will also benefit the tidewater goby and Pacific lamprey.

In light of these past and ongoing efforts, which are intended not only to benefit the above-referenced species but also to increase the reliability of the City's water supply, the City is understandably very vigilant in considering the merits of any actions that other public agencies might take that could adversely affect those same species. City staff and technical consultants have therefore very carefully reviewed the IS/MND and its supporting appendices for their completeness and accuracy from a technical and scientific standpoint. At the City's direction, I have also reviewed the document for its legal adequacy in light of the work done by these consultants and members of City staff.

[1] These "North Coast Streams" are Laguna Creek, Reggiardo Creek, Liddell Spring, and Majors Creek.

As will be explained in detail below, the City has reluctantly concluded that, in light of insufficiencies and gaps in the analysis found in the IS/MND and its supporting studies, the District cannot make the findings that are legally necessary in order to lawfully adopt a Mitigated Negative Declaration under the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) (CEQA) and the CEQA Guidelines (Cal Code Regs., tit. 14, § 15000 et seq.). More specifically, the District cannot find that there is no substantial evidence that the Project may have a significant effect on the environment. The District must instead prepare a full Environmental Impact Report (EIR) for the Project in order to comply with the law. Although the time and expense required to prepare an EIR will surely delay the District's approval of the Project, the City firmly believes that the efforts taken to prepare a defensible EIR will redound to the benefit of all concerned. An EIR will lead to a better Project that will complement, rather than undermine, the City's dual efforts to protect special status fish species and maintain a reliable water supply. The City understands that the District has the same dual goals.

The City bases its conclusion about the legal indefensibility of the IS/MND primarily on the fact that, as explained below and in supporting expert technical documents enclosed with this letter, substantial evidence supports a fair argument that the Project may have significant environmental effects. The existence of such substantial evidence triggers the need for an EIR under CEQA. The two technical experts offering this substantial evidence are the City's Watershed Compliance Manager Chris Berry and fisheries biologist Jeffery Hagar of Hagar Environmental Science. Their expert conclusions regarding the inadequacies of the IS/MND and the District's supporting technical documents are laid out in full in Exhibits A and B to this letter. These exhibits also include their resumes, which set forth the professional qualifications and experience that demonstrate their expertise with respect to the technical subjects they address.[2]

[2] Mr. Berry's submission (Exhibit A hereto) includes numerous references to technical and planning documents relevant to the Project. He also provides internet links to each such document. Mr. Hagar's submission (Exhibit B hereto) also provides an internet link. By providing these internet links to the District, the City has made all of the referenced documents part of the District's formal administrative record for the Project. As explained in case law, the District is required to print out copies of these reference documents and to include them within the Project files so that they are available in the event of CEQA litigation over the Project. (*Consolidated Irrigation Dist. v. Superior Court* (2012) 205 Cal.App.4th 697, 724-725).) The same is true of the internet link provided in footnote 6 of the body of this letter.

As Mr. Berry and Mr. Hagar explain, many of the problems with the Project result from its lack of definition and details in terms of how the District will actually divert water from various water bodies. This absence of specificity increases the potential universe of significant environmental effects. The most fundamental problem with the IS/MND, however, is the lack of depth of its environmental impact analysis, which by its inadequacy also enlarges the universe of potentially significant environmental impacts.

The District's analysis of impacts on fisheries relies on outdated information and is largely premised on two planning-level documents that deal in monthly time-steps rather than daily time steps: the Water Availability Assessment (WAA) (Exponent 2019); and what this letter calls the "Fisheries Effects Study" (formally entitled, *Fisheries Resource Considerations for the San Lorenzo River Watershed Conjunctive Use Plan (Revised Final)*) (Podlech 2019). The monthly time-steps used in these two documents make them insufficient for analyzing impacts on fisheries. As Mr. Berry and Mr. Hagar explain, the District should have contacted the City about using the City's operations model (Confluence), which employs *daily* time steps and is capable of analyzing effects of reservoir operations on spill frequency and associated flows. The District could have also sought from the City the substantial amounts of data the City possesses regarding the operation of Loch Lomond Reservoir and regarding downstream flows, water temperature, and aquatic resources. This data includes a daily hydrologic record encompassing over 70 years of flow data for Newell Creek as well as habitat modelling that links changes in flow to habitat quality for steelhead, coho salmon, and other species. If the District had asked the City for this information and assistance, the City would have gladly assisted its sister agency. Through this letter, the City offers its assistance to the District as the District embarks on an EIR for the Project.

The combination of the vaguely defined nature of the Project and the inadequate impact analysis makes it is very unlikely that the District, using the current IS/MND, will be able to receive the approvals the Project will need from the State Water Resources Control Board (SWRCB), the National Marine Fisheries Service (NMFS), and CDFW. For the District to have any hope of obtaining regulatory approvals from these resource agencies, the Project will have to be supported by rigorous environmental analysis in the form of an EIR supported by Confluence modeling, and will have to be refined to avoid potential adverse effects on fisheries. Moreover,

the City will be unable to support the Project if it is not reimagined in a form that complements the City's dual efforts to protect fisheries and to maintain a reliable water supply for its citizens and other dependent customers.

In short, until more rigorous technical work is completed and the Project is fleshed out to include more detailed flow regimes and specific fish protection features, the Project will remain too ill-defined and too poorly understood to succeed or to comply with CEQA's legal requirements. An EIR is the logical mechanism both for (i) doing the analyses needed to identify environmental problems and (ii) refining the Project to include built-in solutions for those problems. The preparation of an EIR will also give District staff a chance to collaborate with the City staff and its expert consultants in order to learn from the City's own ongoing efforts to reduce the environmental effects of the City's water system. Such collaboration should help the District to design the Project in a form that can be similarly constructive without undermining the City's past, ongoing, and future efforts to protect aquatic resources while providing a reliable water supply.

This letter will begin by laying out applicable legal principles governing when agencies subject to CEQA may rely on MNDs and when, instead, they are required to prepare EIRs (as is the case here). The letter will then summarize the conclusions reached by City Watershed Compliance Manager Chris Berry and fisheries biologist Jeffrey Hagar of Hagar, and will offer additional legal observations regarding what the City considers to be shortcomings of the IS/MND.

DISCUSSION

A. The "Fair Argument" standard for EIR preparation

Where a lead agency is considering a proposed project that is neither exempt from CEQA nor subejct to the rules governing supplemental environmental review (see CEQA Guidelines, §§ 15162 – 15164), the lead agency may rely on a negative declaration only where "[t]here is *no* substantial evidence, in light of the whole record before the lead agency, that the project *may* have a significant effect on the environment." (Pub. Resources Code, § 21080, subd. (c)(1), italics added; see also *id*. § 21082.2, subd. (a).) Where a negative declaration is not possible, a *mitigated* negative declaration (MND) is sometimes an option, but only where mitigation measures integrated into the project will "avoid the effects or mitigate the effects to a point

where *clearly* no significant effect on the environment would occur" and still "there is no substantial evidence, in light of the whole record before the lead agency, that the project, as revised, may have a significant effect on the environment." (Pub. Resources Code, § 21080*,* subd. (c)(2), italics added.)

The flip side of these legal standards is that an EIR is *required* "[i]f there is substantial evidence, in light of the whole record before the lead agency, that the project *may* have a significant effect on the environment." (*Id.,* subd. (d), italics added; see also *id*. § 21082.2, subd. (d).) As used in this context, "the word 'may' connotes a reasonable possibility." (*Oro Fino Gold Mining Corp. v. County of El Dorado* (1990) 225 Cal.App.3d 872, 881.) Stated another way, an EIR is required whenever substantial evidence in the record supports a "*fair argument*" that significant impacts *may* occur. Even if other substantial evidence supports the opposite conclusion, the agency nevertheless must prepare an EIR. (CEQA Guidelines, § 15064, subd. (f)(1); *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75 (*No Oil I*); *Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 1000–1003 (*Friends of "B" Street*); see also *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 319 (*CBE v. SCAQMD*); and *Save the Plastic Bag Coalition v. City of Manhattan Beach* (2011) 52 Cal.4th 155, 171-172.)

"In the CEQA context, substantial evidence 'means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached.'" (*Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714, 730, quoting CEQA Guidelines, § 15384, subd. (a).) Sometimes non-expert lay evidence is enough to trigger an EIR, though for some very technical issues some level of expertise is needed. (*Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928 (*Pocket Protectors*); *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 173.)

The "fair argument" standard creates a "low threshold" for requiring preparation of an EIR. (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 310 (*Sundstrom*) [quoting *No Oil I, supra,* 13 Cal.3d at p. 75]; *Citizens Action to Serve All Students v. Thornley* (1990) 222 Cal.App.3d 748, 754; *Citizens for Responsible & Open Government v. City of Grand Terrace* (2008) 160 Cal.App.4th 1323, 1331; *Georgetown Preservation Society v. County of El Dorado*

(2018) 30 Cal.App.5th 358, 370; and *Save the Agoura Cornell Knoll v. City of Agoura Hills* (2020) 46 Cal.App.5th 665, 676.) The fair argument standard is founded upon the principle that, because adopting a negative declaration has a "terminal effect on the environmental review process" (*Citizens of Lake Murray Area Assn. v. City Council* (1982) 129 Cal.App.3d 436, 440), an EIR is necessary to "substitute some degree of factual certainty for tentative opinion and speculation" and to resolve "uncertainty created by conflicting assertions" (*No Oil I, supra*, 13 Cal. 3d at p. 85).

As one court put it, "[t]hese legal standards reflect a preference for requiring an EIR to be prepared." (*Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 332.) EIRs should be prepared in "doubtful case[s]," so that agencies do not make decisions "without the relevant data or a detailed study of it." (*No Oil I, supra*, 13 Cal. 3d at p. 84.) "It is the function of an EIR, not a negative declaration, to resolve conflicting claims, based on substantial evidence, as to the environmental effects of a project." (*Pocket Protectors*, *supra*, 124 Cal.App.4th at p. 935.)

As the California Supreme Court explained long ago, a project need not have an "momentous effect of semi-permanent duration" to require an EIR. (*No Oil I*, *supra*, 13 Cal.3d at p. 87.) Rather, an agency must prepare an EIR "whenever it perceives some substantial evidence that [a] project may have a significant effect environmentally." (*Id*. at p. 85.) An EIR is required even if substantial evidence in the record supports a conclusion that significant impacts will not occur, if a "fair argument" supports the opposite conclusion. (*Id*. at p. 75.)

The "fair argument" test requires the preparation of an EIR whenever "there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, *regardless of whether the overall effect of the project is adverse or beneficial* …." (CEQA Guidelines, § 15063, subd. (b)(1), italics added; see also *Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal.App.4th 1170, 1197 ["[a]ny potential significant environmental effect triggers the EIR requirement …, even if the plan revisions together provide a 'net' or overall positive for the environment"].)

Where experts have presented conflicting evidence on the extent of the environmental effects of a project, the lead agency must conclude that the effects may be significant and prepare an EIR. (*Pocket Protectors*, *supra*, 124 Cal.App.4th at p. 935; and *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1317-18; CEQA Guidelines, § 15064, subd. (g).) When a

lead agency has received substantial evidence supporting a fair argument that a project's impacts may be significant, the agency faces a legal duty to prepare an EIR, even if the agency is more persuaded by contrary substantial evidence. (*Friends of "B" Street*, *supra*, 106 Cal.App.3d at p. 1002; and *Pocket Protectors*, *supra*, 124 Cal.App.4th at p. 935.) Thus, where such substantial evidence is presented, "evidence to the contrary is not sufficient to support a decision to dispense with preparation of an EIR and adopt a negative declaration, because it could be 'fairly argued' that the project might have a significant environmental impact." (*Sundstrom*, *supra*, 202 Cal.App.3d at p. 310.)

Importantly here, "[w]hile a fair argument of environmental impact must be based on substantial evidence, mechanical application of this rule would defeat the purpose of CEQA where the local agency has failed to undertake an adequate initial study. The agency should not be allowed to hide behind its own failure to gather relevant data." (*Id*. at p. 311.) "CEQA places the burden of environmental investigation on government rather than the public. If the local agency has failed to study an area of possible environmental impact, a fair argument may be based on the limited facts in the record. *Deficiencies in the record may actually enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences*." (*Ibid*., italics added)

Related to these last principles is the general legal rule under CEQA that agencies may not refuse to use the best reasonably available technical tools for addressing the impacts of their proposed projects. (See, e.g., CEQA Guidelines, § 15144 ["an agency must use its best efforts to find out and disclose all that it reasonably can"]; *Banning Ranch Conservancy v. City of Newport Beach* (2017) 2 Cal.5th 918, 938-939; *Citizens To Preserve the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 432; *Berkeley Keep Jets Over the Bay Committee v. Board of Port Com'rs* (2001) 91 Cal.App.4th 1344, 1364-1367; and *Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 17 Cal.App.5th 413, 439-440.)

Here, as explained below, the District's reliance on the WAA and Fisheries Effects Study, with their monthly time-steps, has greatly "enlarge[d] the scope of fair argument by lending a logical plausibility to a wider range of inferences." The District should have used the Confluence model, which, by using daily time-steps, allows for a far more refined analysis capable of addressing potential adverse effects on particular fish species and their life stages

across a variety of hydrological conditions (e.g., very dry years, average years, very wet years, etc.).

B. The IS/MND presents the Project in a confusing fashion; fails to include sufficient details of physical Project components and expected operations to allow for meaningful analysis; contains erroneous assumptions; omits analysis of key issues; and fails to address a sufficiently large geographic area.

As mentioned above, both Mr. Berry and Mr. Hagar reviewed at length both the IS/MND and the technical supporting materials on which it based its conclusions about impacts to biological resources. Each expert found a number of problems, which are set forth at length below, sometimes with extended quotations from their letters. In summary, Mr. Berry and Mr. Hagar found that the District's analysis of biological resource impacts, as set forth in the WAA and the Fisheries Effects Study, and thus in the IS/MND, is unsupportable for a number of reasons that compound upon each other to make the District's conclusions that impacts are less than significant wholly unsupportable. The Project – in both physical and operational terms – is too vaguely defined to allow for meaningful impact analysis. It lacks specific components and limitations that could limits its potential adverse environmental effects. In addition, the analysis includes erroneous assumptions that lead to erroneous conclusions. It fails to address key issues, and is focused on too small a geographic area.

1. The Project Description is confusing.

As an initial point, however, the City notes that the IS/MND presents the Project itself in a confusing fashion, making it difficult for readers to understand exactly what is being proposed. The District's terminology contributes to the problem. On page 5, the IS/MND states that the Project includes "four conjunctive use *scenarios*," only three of which are analyzed in the document (with the fourth to be studied separately in the future). The four "scenarios" are (i) the San Lorenzo River at Big Trees (SLRBT) Low-Flow Requirements Modification Scenario, (ii) the North System Diversions Scenario, (iii) the Loch Lomond Scenario, and (iv) the Aquifer Storage and Recovery (ASR) Scenario. The SLRBT Low-Flow Requirements Modification Scenario and the North System Diversions Scenario would be implemented in the short-term (within the next five years), while the Loch Lomond Scenario would be implemented in the long-

term (greater than five years). The ASR Scenario is the one that is not addressed in the IS/MND. It would have its own future CEQA review document.

The use of the term "scenario" in the Project Description is confusing and can be easily misunderstood. Based on the common use of the word "scenario,"[3] many readers are likely to interpret the term as the equivalent of "alternatives." In other words, readers may think that the District is mulling over which one of several options to choose but is not intending to go forward with all of them. After a close reading of the IS/MND, though, City readers concluded that, apparently, such an interpretation is not what the District intends. Rather, the Project seems to consist of three components, the first three of the "scenarios" listed above.

2. There are a number of problems with the Loch Lomond Scenario.

The scenarios are also insufficiently defined, lacking the details needed for an adequate environmental impact assessment. For example, the Loch Lomond Scenario lacks sufficient detail regarding facilities improvements to allow for the evaluation of environmental effects. The analysis in the IS/MND is also based on a potentially antiquated 11-year-old Loch Lomond Reservoir Source Development Study (SPH, 2010) that the City understands will be updated in the next fiscal year. This fact, by itself, makes the analysis problematic. As is evident from the proposal to upgrade the District's Kirby Treatment Plant under the Loch Lomond Scenario, water treatment capabilities at that facility are currently insufficient to treat "raw" water from Loch Lomond. Yet there has also been little specific coordination between the City and the District on the details of the District's connection to the City's Newell Creek (Loch Lomond) water line. This lack of coordination is another omission that can be cured if the District chooses to work closely with the City on an EIR that will include a refined and improved Project Description.

The analysis of the Loch Lomond Scenario also erroneously assumes, as Mr. Hagar explains, the availability of "free" water not needed for fishery habitat:

> The *Loch Lomond Scenario* element of the Project would divert currently unused water from the reservoir for use in the SLVWD system. The Fisheries Effects Study (Podlech 2019) cites pending implementation of the City of Santa Cruz Anadromous Species Habitat Conservation Plan (ASHCP) and erroneously

[3] An online dictionary (Dictionary.com) defined the term to mean "an imagined or projected sequence of events, especially *any of several detailed plans or possibilities*." (Italics added.)

> concludes that this allotment of water represents environmentally "free" water "for which potentially adverse effects will have already been avoided" (Podlech 2019, page 4-6) by implementation of the ASHCP. In fact, the ASHCP effects analysis treats the SLVWD allocation as remaining in storage and diversion of this amount under the SLVWD Project will influence streamflow below Newell Creek Dam and potentially affect the frequency of spill and resulting aquatic habitat conditions in Newell Creek. These potential environmental effects were not considered in the Initial Study determination that the Project has no significant effect on aquatic resources.
>
> (Exhibit B, p. 5.)

Relatedly, the WAA and the IS/MND do not address the potential impacts of the District's proposed withdrawals of stored water from Loch Lomond Reservoir under its unexercised storage reservation of 313.4 acre feet of water per year (AFY). The impact analysis should have discussed how the District's proposal to use its allocation of stored water in Loch Lomond Reservoir (on an unspecified schedule) could affect the City's right to divert water to storage and to redivert water from storage because the District's withdrawals could affect the City's ability to operate the reservoir under varying hydrologic conditions.

The District's new withdrawals from storage would be a change in the historic baseline use of water stored in Loch Lomond Reservoir. These new withdrawals could impact the recreational uses of the reservoir and could interfere with the City's rediversions from storage for its own consumptive purposes to meet existing and planned demands in the City's service area under water right License 9847. Because this supply is a municipal supply, the District could potentially use it year-round, yet the IS/MND does not specify when and at what diversion rate it would withdraw water from storage or whether there are limitations on the District's withdrawals that might limit the timing and conditions under which this new source of supply could be used.

3. The overall lack of detail in the Project Description makes adequate environmental analysis impossible.

In addition to these specific problems relating to the Loch Lomond Scenario, Mr. Hagar explains more generally how the lack of detail in the Project Description, and particularly the absence of details regarding the timing and amounts of proposed new diversions, has the effect of creating the potential for adverse effects on special status aquatic species:

The IS/MND states that the main purpose of the Project is to optimize the conjunctive use of surface and groundwater sources to improve aquatic habitat and water supply reliability within the San Lorenzo River watershed. While this concept has potentially beneficial effects to aquatic biological resources such as coho salmon and steelhead, *the Project is insufficiently defined to evaluate environmental effects of the Project*. The IS/MND and its supporting documents do not provide definition of the amounts and timing of additional diversions that would occur under the Project and do not provide an assessment of instream flow needs of protected resources existing downstream of the diversions (Exponent 2019, Podlech 2019, Podlech 2021, SLVWD 2021). *Without such definition, the effect of proposed diversions on streamflows is only hypothetical and any conclusions regarding biological effects are unsupported. Based on the current vaguely defined Project, potentially significant biological effects are certainly possible*. No mitigation options are presented that may avoid such effects.

The Project proposes to divert additional surface flows during the winter and spring and/or provide in-lieu groundwater recharge to improve surface flows during the summer. The winter and spring encompass critical portions of salmon and steelhead life-cycles including rearing of juveniles; migration of adults, smolts, and juveniles; and spawning. The project proponents do not appear to consider that the highly variable hydrology of the San Lorenzo River watershed can result in low flow periods in the winter and spring when diversion of flow can significantly affect aquatic resources. There has been no presentation of information related to the Project that indicates flow needs for instream resources (e.g., coho and steelhead) and how diversions would be accomplished to protect those flows. *Without analysis of the timing and magnitude of flows protective of instream resources and an associated Project Description that details the timing and magnitude of diversions that can be accomplished while protecting those instream habitat values, there can be no reliable determination of whether the Project may or will have significant environmental effects*. Diversions from the North System and Loch Lomond influence flows from the points of diversion downstream to the ocean and must be analyzed cumulatively for their potential effects in the source streams which are tributary to the San Lorenzo River as well as the mainstem San Lorenzo River and San Lorenzo River Lagoon.

***

[*T]he Project lacks enough definition to adequately determine effects on steelhead, coho salmon, or tidewater goby*. The timing and amounts of new diversions are not defined with sufficient detail to predict the timing and amounts of change in streamflow in the source streams or the San Lorenzo River, to which they are tributary. Further, there is insufficient information provided to determine the relationship between streamflow and habitat quality for potentially affected lifestages of steelhead and coho salmon in affected stream reaches, including the San Lorenzo River.

(Exhibit B, pp. 1-2, 5-6, italics added.)

4. The geographic scope of the analysis is too limited.

Furthermore, as Mr. Berry notes, "the analysis has a limited geographic scope that may not fully capture all the effects of the Project downstream." (Exhibit A, p. 3.) Indeed, the District has limited the Project's scope to its own service area in spite of the fact that the San Lorenzo River watershed is a relatively small stream system that is jointly operated by the District, the City, and other agencies and users. The interconnectedness of these water systems required the District, in describing the environmental setting for the Project, to describe how the District, the City, and other water users on the system currently operate within the legal requirements imposed by their water rights. The District was also required, in addressing the impacts of the Project, to analyze how proposed changes to the District's water rights, and the implementation of those changes, would impact the water supplies available to the City and other water users, and how any such effects on the reliability of those supplies might foreseeably lead to indirect environmental effects. The District was also required to address how effects on the availability of water supplies of sufficient quantity and quality below the Felton Diversion to satisfy the needs of special status fish in the lower San Lorenzo River and estuary.

C. The environmental baseline used in the IS/MND does not accurately reflect "existing conditions" in the aquatic environment at the time the document was prepared.

On pages 14 and 15, the IS/MND correctly states that the environmental baseline for impact analysis is normally "the physical environmental conditions in the vicinity of the project . . . at the time environmental analysis commenced." (See also *Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1277-1280 [applying this principle to a negative declaration]; and *CBE v. SCAQMD*, *supra*, 48 Cal.4th at 320-321 [same].) Although the text goes on to state that the analysis in the initial study was commenced in January 2021, the District explains that it has instead chosen to use an earlier date as the baseline date. The District mentions that the WAA and Fisheries Effects Study were prepared in 2019, and then argues that a baseline that reflects the aftermath of the 2020 CZU Lightning Complex Fires in Santa Cruz County would be

misleading in that "it would not account for the replacement of the infrastructure damaged in the … fires." Thus, the District is using a "pre-fire baseline," though it is unclear whether this translates into 2019 or 2020. Since much of the analysis relies on the WAA and Fisheries Effects Study, it appears that, at least for the impacts of greatest interest to the City (e.g., biological resources), the District has used a 2019 baseline. The WAA is dated January 2019 (more than two and a half years ago), while the Fisheries Effects Study is dated November 2019 (nearly two years ago).

The City finds the use of a 2019 baseline for the IS/MND to be flawed for the analysis of effects on biological resources. As to those topics, a 2021 baseline would *not* have been misleading, but rather would have been more accurate and appropriate than the 2019 baseline. For one thing, in January 2021, the City approved its OMHCP, as mentioned earlier. This plan is directly relevant to the inquiry, on page 40 of the IS/MND, as to whether the Project would "conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan." The current analysis does not mention the OMHCP. It should have been assumed as part of the baseline.

The baseline should also expressly account for the "interim bypass flows" that have been in place in the San Lorenzo River at the Tait Diversion pursuant to agreements reached between the City and CDFW going back to 2007, as mentioned earlier. As the City's June 2021 Draft EIR for its Water Rights Project explains, "[t]hrough interim bypass agreements with CDFW, the City has already begun implementing improved bypass flows not required by its existing water rights at diversion facilities on the North Coast streams and at the Tait Diversion on the San Lorenzo River, further constraining the City's limited water supply, particularly in dry years." (Draft EIR for Water Rights Project, p. 3-25.; see also id. p. 3-17, fn. 15 ["[t]he interim bypass flow requirements are those flow requirements agreed to by CDFW and the City as part of an April 2018 agreement between CDFW and the City. The City and CDFW have had numerous such agreements since 2007 during development of the ASHCP."])

The District has cited no legal authority for its use of a *past* baseline. Although the California Supreme Court has held that agencies may use a *future* baseline without an existing conditions baseline where including an existing conditions baseline would be misleading or

without informational value (*Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 445, 451–452), no court has ever authorized a *past* baseline unmoored in some way to existing conditions. In *CBE v. SCAQMD*, *supra*, 48 Cal.4th at 327-328, the Supreme Court explained that agencies had some flexibility in how to define existing conditions, and particularly where environmental conditions tended to fluctuate over time; but the goal must always be to identify, in some way, "existing conditions." The same qualification appears in CEQA Guidelines section 15125, subdivision (a)(1), which sets for the rules governing the formulation of baselines in EIRs.) Here, however, the District has said, outright, that "reliance on an existing conditions baseline would be misleading to both decisionmakers and the public[.]" (IS/MND, p. 15.) The District, then, is not characterizing its 2019 baseline for biological resources as in some way reflecting fluctuating existing conditions.

Another issue related to the environmental baseline is a lack of clarity as to whether the District is or is not currently operating within the bypass flows dictated by its water rights. As Mr. Berry explains,

> We … understand that, at the time of the issuance of the IS/MND, the SLVWD Felton System was not operating within compliance of SLVWD's water rights bypass flow standards. It is unclear whether the Project includes analysis of compliant or non-compliant Felton System operations, as the IS/MND states on page 39 that the Felton System will "continue to be operated in compliance with water rights" but the WAA repeatedly discusses Felton System non-compliant operations and states that the analysis may underrepresent the magnitude of non-compliant operations. Without additional operational details and clarification of seemingly contradictory statements provided above, it is difficult to understand how the Project will affect the City of Santa Cruz water operations and overall downstream beneficial uses of water.
>
> (Exhibit A, p. 2.)

When the District prepares an EIR for the Project, this compliance issue should be clarified. In addition, the updated baseline should reflect existing conditions as of the date on which the District issues its Notice of Preparation (NOP). (See CEQA Guidelines, § 15125, subd. (a).) Such existing conditions should definitely account for the OMHCP and, possibly, the interim bypass flows reflecting ongoing agreements between the City and CDFW. If, however, the City's Water Rights Project and/or the ASCHP have been approved by the date of the NOP,

the baseline should reflect the previously mentioned "Agreed Flows" or a variation thereof as reflected in the Final approved ASHCP.

D. The Water Availability Analysis and Fisheries Effects Study on which the IS/MND relies are insufficiently detailed to support accurate and meaningful environmental impact analysis; and they ignore the issue of climate change.

As discussed in the introductory portion of this letter and in Sections B.2 and B.3 of the Discussion, many of the problems with the Project and the IS/MND result from the general level of impact analysis found therein. A closely related additional problem is that the impact analysis relies heavily on both the WAA and the Fisheries Effects Study, both of which are planning level studies that lack the level of detail needed to sustain an adequate CEQA analysis.

By their very nature, the WAA and Fisheries Effects Study are insufficient for analyzing environmental impacts on fish species and their life stages in the San Lorenzo watershed because, as explained earlier, the documents are planning level studies that use a monthly time-step methodology that cannot possibly capture environmental nuances occurring on a weekly or daily basis. Yet, absent analysis that is sufficiently refined to detect weekly or even daily changes in flows and other environmental conditions, it is impossible to detect short-term changes that might be harmful to fish species or their life stages under various hydrological conditions. Both Mr. Berry and Mr. Hagar discuss this problem.

Mr. Berry states that "[m]onthly average values can obscure sometimes significant effects related to the typical daily hydrologic variations that may occur on a shorter time scale which may have substantial effects on downstream fisheries." (Exhibit A, p. 5.) Going into more detail, he explains that

> This reliance on planning level studies presents a fundamental challenge to evaluating biological effects of the Project with a level of rigor that will ensure protection of downstream special-status species and other beneficial uses of water. The Fisheries Analysis provides limited information related to planning-level studies and does not fully explore Project effects in drought or seasonally low-flow conditions. Nor does it provide specific flow and available fisheries habitat relationship information using appropriate downstream flow goals. Furthermore, the analysis has a limited geographic scope that may not fully capture all the effects of the Project downstream. At a minimum, *evaluation of the Project's effects on the flows below Big Trees … on downstream mainstem San Lorenzo River steelhead rearing and related impacts downstream should be explored more fully*.

(Exhibit A, p. 3, italics added.)

Mr. Hagar explains in more detail why analysis based on monthly time-steps can completely miss significant effects occurring within a more confined time frame, and notes that the City has a model, Confluence, that the District could use to analyze Project impacts using a *daily* time-step:

> The Fisheries Effects Study (Podlech 2019) concludes that effects are unlikely since the percent of simulated monthly flow remaining downstream of North system diversions under this Scenario is only slightly less (≤1 percent) than under the existing base case scenario. This is a gross misrepresentation of potential effects on steelhead and coho due to averaging of monthly average values and averaging over the system as a whole. Alterations of flow could be substantial during specific conditions such as periods between storms or during drier years or seasons. In fact, the Water Availability Assessment indicates that there are a number of years when Project-related monthly average flow reductions in Clear and Sweetwater Creeks exceed 10% of baseline (Exponent 2019). *Steelhead and coho life histories can be significantly affected by events that occur on a timescale of just a few days but have the potential to affect an entire year class*. *While analysis based on monthly averages or averages of monthly average values may be suitable for water supply planning, such averaging will completely miss important events influencing biological parameters. Even winter diversions could be significant if concentrated in a single source and/or during sensitive periods.* The Project Description is so vague that none of these possibilities can be excluded.
>
> ***
>
> The City of Santa Cruz has produced substantial amounts of data and analyses addressing the operation of Loch Lomond and effects on downstream flows, water temperature, and aquatic resources as part of its ASHCP. The data includes a daily hydrologic record encompassing over 70 years of flow data for Newell Creek and habitat modelling that links changes in flow to habitat quality for steelhead and coho salmon. The City's operations model (Confluence) is capable of analyzing effects of reservoir operations on spill frequency and associated flows. This information could have been made available to SLVWD for analysis of environmental effects of the Loch Lomond Scenario element of the Project.
>
> ***
>
> *Conclusions reached in the Biological Resources section of the Initial Study (SLVWD 2021) regarding significance of effects on these species are factually incorrect or purely conjectural as they are not supported by appropriate data or analyses*. *The documentation has not excluded the possibility of significant effects*

> *on special status aquatic species*, as explained above. To avoid such effects, the Project must be revised to include specific attributes intended and designed to avoid effects on special status species. Such design refinements will only be possible, however, after additional analysis performed on a daily time-step basis. Such work should occur in coordination with the City of Santa Cruz, whose water operations affect the same water bodies affected by the Project.
>
> (Exhibit B, pp. 4, 5, 6, italics added.)

Mr. Berry also identifies a number of other shortcomings in the IS/MND and its supporting technical analyses, in addition to the reliance on a monthly time-step; and he, too, notes that the City has extensive information that could assist the District as it undertakes, in the future, a far more thorough impact analysis:

> Further undermining the WAA's utility for evaluating effects is the fact that it omits many years of data from the City Newell Creek and United States Geological Survey (USGS) San Lorenzo River at Santa Cruz stream gages. It is also unclear how the IS/MND and supporting materials evaluated the Loch Lomond scenario hydrologic and biotic effects, given the lack of reference to or inclusion of City of Santa Cruz modeling. Nor is it clear if the WAA and related Fisheries Analysis includes an evaluation of Loch Lomond spill dynamics relative to SLVWD exercising its right to its allocation of water there. Additionally, many of the graphs provided in the WAA have a scale that precludes seeing the full presentation of the data.
>
> Finally, *climate change is one of the greatest threats to special-status fish species in the San Lorenzo River* – whether it regards hydrologic changes or increased water temperatures. Given the predictions for future "weather whiplash" associated with climate change and associated hydrologic regime shifts, *analysis of climate change scenarios relative to the potential future operations and downstream hydrologic and biotic effects would make the Project analysis significantly more robust*.[4]
>
> Therefore, the ability to evaluate effects of the Project is fairly limited by the lack of comprehensive data regarding downstream hydrologic and biotic effects resulting from the project implementation. At a minimum, comparison of water supply scenarios that includes reference to all applicable current bypass flow requirements and recommendations downstream should occur (be they from the City of Santa Cruz Habitat Conservation Planning processes, the 1979 San

[4] In its recent Draft EIR for its Water Rights Project, the City stated that "[p]rojected future droughts are likely to be a serious challenge to the region's already stressed water supplies" and that "the 73-year period of record is characterized by rainfall patterns well above long-term averages and therefore the worst droughts reflected in the past 73 years likely understate future conditions." (Draft EIR, pp. 7-3, 7-4.)

> Lorenzo River Watershed Plan or the 2004 San Lorenzo River Salmonid Enhancement Plan) and does so on a daily time-step would significantly enable more thorough effects evaluations. The City of Santa Cruz has extensive water supply (Confluence), hydrologic and fisheries habitat effects modeling (including climate change – adjusted hydrologic data) on a daily time step that may help with refining this analysis, should that be initiated (Dudek 2021a).

(Exhibit A, pp. 5-6, italics added; footnote omitted.)

As emphasized in the introductory portion of this letter, the City lists out all of these flaws in the District's methods with the constructive intention of seeking to help the District to identify the steps it must take in order to prepare an EIR that includes rigorous analysis that the District and the City, working together, can use to refine the Project in order to avoid any significant environmental effects on aquatic species. As co-stewards of the San Lorenzo River and its tributaries, the two agencies should be able to work together towards the formulation of creative solutions to common problems.

E. The IS/MND and supporting studies make unsupported assumptions, and contain informational omissions, that understate potential environmental impacts.

In addition to proposing a Project that is defined too vaguely and relying on planning tools that were inadequate for defensible impact analysis, the District has also made analytical assumptions that lead to erroneous or unsupportable impact conclusions. Mr. Berry explains, for example, how the Fisheries Effects Study, on which the IS/MND relies, draws erroneous conclusions about impact significance based solely on *relative* changes in diversion percentages:

> The Fisheries Analysis also draws conclusions about relative effects being insignificant based on diversion volume percentage of recommended bypass flows. This is insufficient for a variety of reasons, including the fact that *fish migration is, by nature, relatively absolute in nature and a relatively small reduction in flow can interfere with migration*. If sufficient flows for migration are not available, then migration generally cannot occur. Reduction in the number of fish passage days – particularly coho migration in a drought year when the number of migration days may already be limited – could be a potentially very serious concern. *Even if the Felton or North System water diversions are only a small percentage of the winter bypass requirements below Big Trees in Felton, that may be a relatively high percentage of the required bypass flow in Santa Cruz and may occur at a time when conditions are especially challenging for special-status fish species there* – thereby presenting potentially significant effects

> to downstream biota including not only coho and steelhead, but also tidewater goby, in the lower San Lorenzo River. For example, *even a relatively small diversion of 0.5 cfs*[5] *in Fall Creek during these periods can have relatively significant effects on available steelhead rearing habitat availability in the San Lorenzo River* and subsequent impacts on the City of Santa Cruz's ability to divert water there. There is no analysis of the Project relative to current bypass flow requirements downstream of Big Trees other than the historic requirements at the City's Felton Diversion and no detailed evaluation of the biotic effects in drought periods or under climate change scenarios provided in the current SLVWD proposal – in spite of the fact that the analysis states in several locations that there may be relatively substantial reductions in flow in the San Lorenzo River during dry periods with existing operations and proposed operations may – in some cases – exacerbate that condition.
>
> (Exhibit A, p. 4, italics added.)

Mr. Berry also explains the significance of the District's failure to consider how increased groundwater pumping under the Project might adversely affect aquatic species indirectly by reducing cold water inflows into surface streams from the karst formations in which the groundwater to be pumped is located:

> The analysis could be strengthened even further were it to broaden the evaluation of Project instream temperature effects further downstream where temperatures may be more limiting to cold water fisheries. By virtue of their origins in karst-dominated watersheds, many of the SLVWD water source streams are relatively more important to San Lorenzo River watershed fisheries recovery than other streams in the watershed. Karst streams tend to remain cold during hot weather and have more reliable flow during dry periods and drought. While the Fisheries Analysis does present good information on this topic, it would (again) be strengthened if it were provided in the context of overall watershed conditions – particularly considering potential future climate change–related effects on the San Lorenzo River mainstem temperatures and their potential to further limit cold water fisheries.

Mr. Hagar notes that the Fisheries Effect Analysis, and thus the IS/MND, did not look at the potential impacts of new diversions at all relevant times of the year, and failed to consider potential impacts on particular water bodies of concern:

> The Fisheries Effects Study (Podlech 2019) only considered the effect of flow changes in September and October, when effects of the Fall Creek Diversion have been concentrated. However, *steelhead and coho life histories can be significantly influenced by discrete, extreme events that can occur on the order of*

[5] The acronym "cfs" stands for cubic feet per second.

> *a day to a few days* and the frequency of an event does not always indicate the potential severity. In order to effectively evaluate the environmental effects of the Project, an analysis needs to cover the entirety of potential events at a fine enough time scale (daily) to observe the effects. ***
>
> The Fisheries Effects Study also did not consider effects of the Fall Creek Diversion on temperature in the mainstem San Lorenzo River to which it is tributary. Even relatively small changes in water temperature can have significant effects on sensitive species by decreasing resistance to disease, altering growth rates, and influencing survival. Fall Creek is one of the most shaded and coolest tributaries in the San Lorenzo River watershed (Podlech 2019) and potentially has a cooling effect on the San Lorenzo River below its confluence. The Initial Study makes no mention of this fact and fails to provide any supporting evaluation of why reducing Fall Creek flow into the San Lorenzo River under this scenario would not create a potentially adverse temperature-related effect on habitat for steelhead and coho salmon. Contrary to this potential, and without supporting analysis, the Initial Study finds that effects to steelhead or coho are not expected.
>
> In addition to flow reductions in Fall Creek and the San Lorenzo River under the SLRBT Low-Flow Requirements Modification Scenario, the other elements of the Project (North System Diversions Scenario and Loch Lomond Scenario) involve diversions of flow that do not occur under existing conditions. The Fisheries Effects Study (Podlech 2019) describes each of these elements individually from the perspective of conditions in the tributary streams themselves but does not evaluate the cumulative effect of all these diversions on habitat and temperature conditions in the mainstem San Lorenzo River, which could be significant.
>
> (Exhibit B, p. 3.)

One special status fish species of concern – the tidewater goby – was not addressed at all in the District's impact analysis. As Mr. Hagar explains,

> The Initial Study (SLVWD 2021) lists Special Status Species but fails to include the Federally Endangered tidewater goby (Eucyclogobius newberryi). Tidewater goby is an estuary dependent species known to inhabit the San Lorenzo River lagoon. Project-related alteration of flows, including increased diversion of flow in the winter and spring in the North System, removal of limits on Fall Creek diversions that support low flows in the San Lorenzo River, and diversions from Loch Lomond, effect downstream flows and ultimately are reflected in inflow levels to the lagoon. *Tidewater goby habitat in the lagoon is potentially altered with change in inflows*. Inflow is known to influence the frequency with which the lagoon opens and closes (breaching), either naturally or as assisted by City Public Works crews. Breaching of the lagoon has led to stranding of tidewater gobies and their burrows in the past. *Freshwater inflows also influence water quality conditions in the lagoon*, including nutrient levels, temperature, salinity, and

> dissolved oxygen levels, all of which have an influence on the quality of habitat for tidewater goby. *The Project may have a substantial adverse effect on this special status species that are not identified due to the failure of the Initial Study to consider them*.
>
> (Exhibit B, p. 5 [italics added].)

A more robust impact analysis in an EIR, supported by Confluence, could cure all of the analytical flaws and omissions described above.

F. The SLRBT Low-Flow Requirements Scenario could result in significant environmental effects.

With the exception of problems with the description and analysis of the Loch Lomond Scenario discussed above in Section B.2 of this letter, the omissions and inadequacies of the IS/MND and supporting materials, as laid out in detail in the other Sections above, generally apply to the Project as a whole. Mr. Hagar has also identified particular problems with the SLRBT Low-Flow Requirements Modification Scenario. As he explains,

> The *SLRBT Low-Flow Requirements Modification Scenario* element of the Project would maintain existing bypass flow requirements in Fall Creek but would remove a requirement that limits Fall Creek diversions to protect minimum low flows in the San Lorenzo River. Fall Creek is tributary to the San Lorenzo River upstream of the City of Santa Cruz Felton Diversion. This element would potentially reduce flows in the San Lorenzo River primarily during the fall (September-November) but also to some extent during December through May (See Podlech 2019, Table 4-1, page 4-2). The San Lorenzo River downstream of Fall Creek supports all life stages of steelhead and migration of coho. Existing information indicates a consistent increase in habitat value for rearing steelhead in the San Lorenzo River between 10 cfs and 25 cfs (City of Santa Cruz 2021). Optimum flow for steelhead spawning in the San Lorenzo River is around 70-90 cfs and declines at lower levels of flow. Both steelhead and coho need a flow of 40 cfs or more to migrate through the lower San Lorenzo River. Flow reductions related to the Project have the potential to adversely affect habitat for steelhead and coho salmon and interfere with movement of these species by reducing flows below threshold levels for migration or causing declines in habitat value with reduced flows. Contrary to this potential, and without supporting analysis, the Initial Study finds that effects to steelhead or coho are not expected. The Fisheries Effects Study (Podlech 2019) finds that flows would be altered by the Project a significant amount of the time but it provides no evaluation of the degree to which flows are changed and no evaluation of the potential of these changes to adversely alter habitat conditions for steelhead and coho. Without such an analysis, there is

> no basis for the IS finding of no expected effect (SLVWD 2021). Indeed, *potentially significant adverse effects remain possible*.
>
> (Exhibit B, p. 2.)

When the District prepares a full EIR for the Project, with assistance as necessary from the City, these shortcomings in the current analysis can be rectified.

G. The Project is inconsistent with applicable and pending habitat conservation plans and other plans and policies intended to protect biological resources and to avoid or minimize effects on such resources.

One of the questions posed in the checklist portion of the IS/MND is whether the Project would "conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan[.]" (IS/MND, p. 40.) In response to this question, the District finds "no impact." (*Ibid*.) For reasons set forth below, the discussion supporting this conclusion, as well as the conclusion itself, is unsupportable.

The only plan or policy mentioned at all in the discussion is the City's proposed ASHCP, mentioned earlier. Although the text first states that "the HCP was not reviewed for this evaluation," the text goes on to state, in a conclusory fashion, that the Project "is consistent with the anticipated goals and objectives of the draft HCP." The reason given is that the Project "would not result in significant impacts to steelhead or coho salmon, and would have an overall benefit to these species." (*Ibid*.) The many reasons why this last conclusion is unsupported are discussed at length above throughout this letter.

The discussion of the Project's potential conflicts with an "adopted Habitat Conservation Plan" should have considered the City's OMHCP, which was adopted in January 2021. As Mr. Berry explains,

> The current proposal may be in conflict with several existing plans and policies. The approved City of Santa Cruz OMHCP specifically calls for future instream flow requirements of 40 cfs during much of the winter downstream at the Big Trees USGS gage and a minimum of 8 cfs at the Santa Cruz USGS gage. Analysis of the Project scenarios specific to these standards would better illuminate the full scope of potential downstream Project biotic effects – including those relative to tidewater goby and Pacific lamprey.

(Exhibit A, p. 7.)

When the District prepares an EIR for the Project, the document should address the Project's potential conflicts with the OMHCP and whether any inconsistencies translate into adverse effects on the tidewater goby and Pacific lamprey. If, by the time the Draft EIR is ready for release, the ASHCP is in effect, the Draft EIR should also address any inconsistencies with that HCP as well.

Mr. Berry also explained that the IS/MND failed to address the Project's potential or apparent inconsistencies with a number of other pertinent regulatory plans and policies, and that, as a result, the IS/MND may have – again – understated the Project's environmental impacts:

> The Federal Central California Coastal Coho Recovery Plan Action Step 4.1.1.6 (National Marine Fisheries Services, 2012) also calls on page 7 for protection of karst-derived instream flows that are especially important during the dry season and in drought conditions. The IS/MND correctly references the importance of these karst-derived flows – particularly with regard to the Felton System and its influence on the San Lorenzo River during drought periods, but the IS/MND provides no reference to the Recovery Plan or any subsequent analysis of the Project's effects on karst-derived flow relative to downstream mainstem San Lorenzo flow or water temperatures.
>
> Policy 5.6.1 of the Conservation and Open Space Element of the County of Santa Cruz General Plan regarding minimum instream flows seems relevant to the Project (County of Santa Cruz Planning Department, 1994). For example, the WAA states in numerous locations that the Project will result in less than 70% of unimpaired flows downstream of SLVWD diversions in many cases. In addition, the Fisheries Analysis states on page 3-7 that during drought years Fall Creek flows may be reduced by up to 50 percent. It is not clear if these flow reductions would be exacerbated by the Project and its focus on reducing the Big Trees flow requirements tied to the Felton System water rights. It is understandable that there is tension between protection of most limiting flow requirements (i.e., dry season and drought) and water supply reliability. However, the lack of reference to this policy, diversion volumes related to the North System and SLRBT low flow scenarios in excess of the General Plan policy standards, and the absence of specific instream flow/habitat effects analyses of the Project for all relevant special-status fish species life-cycle stages downstream all appear to be in conflict with this policy.
>
> ***
>
> The Project is generally consistent with overall goals on page 3-2 and 3-3 of the July 2021 draft Santa Margarita Groundwater Sustainability Plan (GSP) (Balance

> Hydrologics, Miller Maxfield, Inc., Montgomery and Associates, WSC, Inc. and California State University – Sacramento, 2021), but the Project does not completely align with the overall goals of the draft GSP, in that there is no obvious commitment to improve flows for all life stages of special-status fish species downstream. The impacts of this strategy may (admittedly) be minor in some cases and the general focus on groundwater recharge and improving associate fish rearing flows is in complete alignment with GSP goals. However, there may be occasions when biotic effects could be substantial – though, again, the analysis provided does not make that clear. Further, it is not clear how the Project specifically contributes toward meeting GSP sustainability goals, as those goals are not explicitly referenced. Nor are Project elements analyzed specifically in context to them.
>
> (Exhibit A, pp. 7-8.)

When the District prepares an EIR for the Project, the new analysis should squarely address how the Project can be made to conform with the OMHCP, the ASHCP, the Federal Central California Coastal Coho Recovery Plan, Policy 5.6.1 of the Conservation and Open Space Element of the County of Santa Cruz General Plan, and the Santa Margarita GSP.

H. The discussion of cumulative impacts is deficient for failing to account for flows proposed under the City's Water Rights Project.

The IS/MND deals with the key topic of cumulative impacts on pages 114 through 117. Although the text identifies some future projects that might contribute to cumulative impacts of various kinds, the District omits the City's Water Rights Project from its list. (*Id*. at pp. 114-115.) On the crucial subject of potential cumulative impacts relating to aquatic biological resources, the very brief text states that "the proposed conjunctive use scenarios would have a beneficial impact related to fish habitat within the San Lorenzo River. The Loch Lomond Scenario, and any other projects in the region, would also be required to comply with federal, State, regional, and local regulations and laws put in place to minimize impacts to biological resources. Therefore, cumulative impacts would be less than significant." (*Id*. at p. 116.)

This discussion of cumulative impacts fails to meet legal standards. As noted earlier, the City released its Draft EIR for its Water Rights Project in June 2021, after having issued an NOP with a lengthy Initial Study in October 2018. The City's publication of the Draft EIR preceded by several weeks the District's late release in late July 2021 of the Notice of Intent to Adopt a Mitigated Negative Declaration for the Project. As explained below, this chronology clearly

made the Water Rights Project is a "probable future project" that the District should have considered in its analysis of cumulative impacts.

As a matter of law, a lead agency is required to prepare an EIR when a proposed project "has possible environmental effects that are individually limited but *cumulatively considerable*." CEQA Guidelines, § 15065, subd. (a)(3), italics added; see also *id*, § 15064, subd. (h).) In this context, '[c]umulatively considerable' means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of *probable future projects*." (*Id*., §§ 15065, subd. (a)(3), 15064, subd. (h), italics added.). Although, in an MND, a lead agency's focus should be on whether a proposed project will cause a "cumulatively considerable" impact, this question necessarily requires a consideration of how the project's effects interact with or exacerbate those expected from probable future projects. (*Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 119-120 ["the need for an EIR turns on the impacts of both the project under review and the relevant past, present and future projects"].)

It is clear, moreover, from case law going back to the 1980s that any proposed project "under environmental review" is considered to be a probable future project. (*San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 74.) There is no doubt that a proposed project, such as the Water Rights Project, for which a draft EIR has been released is "under environmental review." (*Ibid*., fn. 13.)

The IS/MND therefore should have included discussion of the Water Rights Project in the analysis of cumulative impacts. The omission renders the discussion inadequate. As discussed earlier, the Water Rights Project, as described in its Draft EIR, includes "stream bypass requirements for fish habitat (referred to … as Agreed Flows)." (Draft EIR, p. 3-19.) In addition to being proposed to be part of the City's upcoming ASHCP, "[t]he Agreed Flows would be incorporated into both pre-1914 rights on the North Coast streams and post-1914 permits and licenses on the San Lorenzo River and Newell Creek. This would improve instream habitat and flow conditions for these fish species in the San Lorenzo River compared to historic operations." (*Id*. at p. 3-25.) In preparing its analysis of cumulative impacts, the District should have accounted for the fact that these proposed flow changes are now reasonably foreseeable. The

assumption that such flows will be instituted would have complicated the question of whether the Project's effects are cumulatively considerable.

Mr. Berry is also critical of the District's analysis of cumulative impacts, and had the following to say on the subject:

> Cumulative effects – More thorough analysis of the Project in the context of downstream flow needs would not only help identify potential biotic and hydrologic effects, but also help contextualize the project regarding other existing and probable future projects including, but not necessarily limited to, the City of Santa Cruz Water Rights Project, the Draft Santa Margarita Groundwater Sustainability Plan, the City of Santa Cruz Operations and Maintenance Habitat Conservation Plan, the Administrative Draft Anadromous Salmonid Habitat Conservation Plan, the City of Santa Cruz Graham Hill Water Treatment Plant Facilities Improvement Project, the City of Santa Cruz Newell Creek Pipeline Rehabilitation Plan, and other, ongoing water diversions by the multitude of private diverters in the watershed.
>
> There is the potential that the SLVWD Project may have interaction with these other activities in terms of effects downstream, and the IS/MND would be strengthened by some analysis of this interaction. For example, as stated throughout the Fisheries Analysis, the cumulative effect of SLVWD diversions on downstream flows, while generally not problematic, may be significant if occurring during drier periods when considered in the context of other activities also occurring in the watershed. Typically, those are times when conditions in the San Lorenzo River are already limiting for special-status fish species. Admittedly, the cumulative effects of the SLVWD project may also be beneficial in some cases. An example of this would be any improvement that the Project makes regarding groundwater recharge-related baseflows that occur in concert with the City of Santa Cruz improvements to bypass flows downstream. However, analysis of the Project with broader consideration of the effects of other activities in the San Lorenzo River watershed has not been provided in the IS/MND, so a greater understanding of the cumulative effects of the Project is not possible with the analysis provided.
>
> (Exhibit A, pp. 8-9.)

In summary, the District's discussion of cumulative impacts on aquatic biological resources was cursory and failed to account for important probable future projects. These omissions can be cured in an EIR that uses the Confluence model and voluminous extant historical data on the San Lorenzo River watershed.

I. The IS/MND fails to address a reasonably foreseeable consequence of the Project: forcing the City to seek supplemental water supplies.

CEQA requires lead agencies to consider not only the direct environmental effects of their projects, but also any "[i]ndirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems." (CEQA Guidelines, § 15384.) Here, Mr. Berry expressed his concern that the IS/MND failed even to consider whether any indirect effects might result from reasonably foreseeable actions the City might need to take if the Project should result in reduced water supplies available to the City:

> Should the Project result in reduced instream flows that fall below the City's instream flow goals at Big Trees or Santa Cruz, the City may be forced to re-evaluate its water supply planning and utilize additional alternative water supplies not considered in its Water Supply Advisory Committee and related water supply planning processes to meet system demand (City of Santa Cruz Water Supply Advisory Committee, 2015). These sources may include Loch Lomond Reservoir, existing or new wells, North Coast sources, new diversions of Bay Street Spring, reinitiated diversions on Branciforte Creek, or other, as of yet unidentified, sources. Not only does this need to identify new sources present operational challenges to the City, it expands the realm of potential biological effects associated with the Project outside of the study area included in the IS/MND. For example, reduction of the Felton System bypass flow requirements at Big Trees could result in fewer City of Santa Cruz Felton Diversion pumping days or reduced ability to divert at the City's Tait Street Diversion – as the City has strict regulatory requirements related to those facilities vis-a-vis downstream instream flows. While there are undoubtedly benefits to rearing flows that benefit the City associated with the general focus on conjunctive use in this Project, the overall effects on City water operations are not well analyzed in this regard.

(Exhibit A, p. 8.)

As these observations demonstrate, the Project could benefit the District at the City's expense, forcing the City to consider means of augmenting its water supplies that involve environmental impacts not considered or addressed in the IS/MND. In the EIR to be prepared by the District, the District could use Confluence and other tools to explore options for Project refinement that will allow the Project to proceed without harming the City's water supply. Such

an outcome would also increase the odds that the District could succeed in obtaining all of the required regulatory approvals from the SWRCB, NFMS, and CDFW.

J. The IS/MND does not disclose or analyze possible limitations imposed on existing water system operations by terms in the District's water rights or the possible impacts of those terms on the District's ability to implement the Project.

The City's comments earlier in this letter peripherally address the lack of any disclosure or real discussion in the IS/MND of any terms limiting the District's exercise of its water rights and the potential limitations on the District's ability to obtain approval of its proposed water right changes because of Project impacts on aquatic and other resources in the San Lorenzo River watershed. But the City also believes that the IS/MND is defective because the District does not address these issues directly or explain how likely it is that the SWRCB will approve the District's water right change petitions or what impact a denial of those petitions would have on the Project. The District's water right Permit 20123 (A24652) illustrates the need for this discussion and analysis. Permit 20123 provides for diversions from Bull Creek, Bull Spring, Bennett Creek, and Fall Creek and contains three relevant terms, Terms 18, 19, and 20.[6] Permit 20123 imposes a maximum diversion rate and maximum limitations on diversions under this right and the District's other, more senior post-1914 appropriative rights to divert from Bull Creek, Bull Spring, Bennett Creek, and Fall Creek of 1.7 cfs and 1,059 acre-feet of total diversions per annum.

Permit terms 12 and 13 respectively relate to the existing bypass flow requirements at the District's Fall Creek diversion and limitations on diversions at the Felton Diversion Weir when flows in the San Lorenzo River fall below specified amounts below this point. Notably, the annual water right reports filed by the District indicate that it has not reached the maximum amount of annual diversions already permitted, which might indicate that system demands are below the District's existing permitted diversion rates or that its diversions are limited by the

[6] Permit 20123 may be accessed on the SWRCB's water right records database, eWRIMS, at: https://ciwqs.waterboards.ca.gov/ciwqs/ewrims/DocumentRetriever.jsp?appNum=A024652&wrType=Appropriative

variable hydrology in the San Lorenzo River watershed. But the IS/MND's analysis is too coarse to clearly indicate whether one or both conditions apply.

Terms 18, 19, and 20 are of interest because they potentially impose additional limitations on the District's ability to exercise its water rights and indicate that the Project's proposed changes to those rights might increase impacts from any changes in the District's water rights that would increase diversions and move water among its three service areas. Term 18 provides that the District may not establish new water service connections unless they have been properly permitted and comply with the Central Coast Regional Water Quality Control Plan. Term 19 requires the District to develop a water conservation plan or actions in consultation with the SWRCB's Division of Water Rights, and to implement "all cost-effective measures" in any approved conservation program according to the implementation schedule in that plan. Term 20 limits the District's total diversions of water under all of its post-1914 water rights to a daily maximum of 1.87 cfs until it can demonstrate to the Division of Water Rights that the District "can provide a dependable supply of water to its users during the months of July through November."

While the District admittedly does not know if the District has complied with some or all of these permit terms or if they remain applicable to the District or are relevant to the Project, the problem is that the lack of disclosure makes it impossible to know their relevance. The IS/MND simply does not mention these terms or analyze the applicability of any requirements in the Central Coast Regional Water Quality Control Plan or any other applicable regulatory document. To the extent one or more of these permit terms are relevant, the failure to identify or analyze them for any Project impacts constitutes yet another defect in the IS/MND. Also, if one or more of these permit terms are relevant and the Project is at least in part intended to relieve the District from complying with the applicable terms, there should have been a discussion or analysis both (i) of the likelihood the District will obtain the SWRCB's approval of the necessary water right changes that would enable the District to implement the Project and (ii) of what the impact on the Project would be if the water right change petitions are denied.

CONCLUSION

As this letter has surely made clear, the City believes that the District has erred by attempting to pursue a project as complicated as its proposed Conjunctive Use Plan for the San Lorenzo River Watershed with only an MND, which, almost by definition, lacks the kind of scientific and technical rigor associated with EIRs. Like the City's Water Rights Project, the District's Project is a complicated undertaking that will affect sensitive resources that are already under considerable stress, and will occur in a context in which climate change is increasing the challenges facing all water providers. Although the tone of this letter is firm insofar as it reflects the City's steely determination to identify for the official record the flaws in the IS/MND, the City is sincere in stating that it is willing to work with the District, as its long-time partner and fellow environmental steward, in trying to find a path forward for the Project. As Mr. Hagar stated, and as noted above, "the Project must be revised to include specific attributes intended and designed to avoid effects on special status species. Such design refinements will only be possible, however, after additional analysis performed on a daily time-step basis. Such work should occur in coordination with the City of Santa Cruz, whose water operations affect the same water bodies affected by the Project."

City staff is willing to make the time to share its own data and technical resources in order to try to help the District to succeed. The City recognizes that the District, like the City, has a legal obligation to provide a reliable water supply to its customers. These days, this job is ever more challenging. Collaboration amongst similarly situated public agencies is one way to maximize the chances of success.

Very truly yours,

James G. Moose

Cc: Santa Cruz City Council
San Lorenzo Valley Water District Board of Directors
Rick Rogers
Rosemary Menard
Anthony Condotti
Chris Berry
Heidi Luckenbach
Sarah Easley-Perez
Ryan Bezerra

EXHIBIT A

City of Santa Cruz Water Department – 212 Locust St. Santa Cruz, CA 95060 – (831) 420-5200

August 25, 2021

Mr. James Moose
c/o Remy, Moose and Manley, LLP
555 Capitol Mall, Suite 800
Sacramento, CA 95814
Via email to: JMoose@rmmenvirolaw.com

RE: Comments on San Lorenzo Valley Water District Initial Study/Mitigated Negative Declaration for the Conjunctive Use Plan for the San Lorenzo River Watershed

Dear Mr. Moose,

I'm corresponding with you regarding the Initial Study/Mitigated Negative Declaration (IS/MND) prepared by the San Lorenzo Valley Water District (SLVWD) Initial Study/Mitigated Negative Declaration for the proposed Conjunctive Use Plan for the San Lorenzo River Watershed (the Project). I am doing so in order to give you my professional opinion regarding the adequacy of the impact analysis and the Project's potential to have significant effects on the environment.

I am qualified to do so, in that I have over 35 years of experience working in fisheries and watershed management. This experience includes academic training in aquatic biology, as well as environmental management and environmental regulatory compliance. My professional background also includes significant experience working with the State and Federal Endangered Species Acts and California Fish and Game Code, groundwater sustainability planning, karst protection policy making, and water rights and related matters, including steelhead and coho recovery conservation planning (see resume attached).

That said, the Project is highly complex, and additional public process and environmental review would facilitate not only stakeholder engagement, but also enable the overall rigor of said review. While the Project conceptually has potential merit, the IS/MND suffers from the following shortcomings: a) it presents incomplete and confusing information; b) it has only been analyzed at a very high level without sufficient data to inform analysis of effects; c) it has elements that may be in conflict with existing plans and policies; and d) the overall Project focus on diverting water in excess of SLVWD system demand rather than in excess of downstream environmental needs may result in potentially significant effects that have not been well – evaluated or evaluated at all. The following are some specific points regarding IS/MND issues that warrant additional analysis in this regard.

Project Description Detail:

The Project Description is somewhat confusing and lacking of detail to the extent that effects cannot be well understood. In the Project Description, the use of the word "scenario" is confusing and may be construed as "alternatives". Understanding that the scenarios are elements of one Project, the Loch Lomond project element lacks sufficient detail regarding facilities improvements to evaluate effects. The analysis is based on a potentially-antiquated 11-year-old Loch Lomond Reservoir Source Development Study (SPH, 2010) that we understand will be updated in the next fiscal year. As is evident from the proposal to upgrade the Kirby Treatment Plant under the Loch Lomond Scenario, the water treatment capabilities at that facility are currently insufficient to treat "raw" water from Loch Lomond. There has also been little specific coordination, however, between the City and SLVWD on the details of SLVWD's connection to the City's Newell Creek (Loch Lomond) water line and details of conveyance/facility improvements and subsequent operations are insufficiently identified. Furthermore, the Water Availability Assessment (WAA) provided as an appendix states on page 6-16 that Loch Lomond water will be required on a "continuous basis" but is not clear on other operational details. The *Fisheries Resource Considerations for the San Lorenzo River Watershed Conjunctive Use Plan* (Revised Final) (Fisheries Analysis) supporting the IS/MND also states on page 4-6 that:

> "SLVWD staff selected Scenario 2b, the import of its Loch Lomond water allotment to the South system as a substitute for pumping the Pasatiempo wells. However, as conceived and simulated in the WAA, Scenario 2b incorporates Scenario 2a, the import of an average of 4 afy of Loch Lomond water to the North system[1] and an average of 50 afy to the Felton system to help meet unmet demand in those systems. SLVWD staff have indicated that the District currently does not plan to import Loch Lomond water to the North and Felton Systems."

Therefore, it is not clear that the Scenario 2b details were consistent across the IS/MND and supporting appendices or how that may have affected evaluation of its effects.

We also understand that, at the time of the issuance of the IS/MND, the SLVWD Felton System[2] was not operating within compliance of SLVWD's water rights bypass flow standards. It is unclear whether the Project includes analysis of compliant or non-compliant Felton System operations, as the IS/MND states on page 39 that the Felton System will "continue to be operated in compliance with water rights" but the WAA repeatedly discusses Felton System non-compliant operations and states that the analysis may underrepresent the magnitude of non-compliant operations. Without additional operational details and clarification of seemingly contradictory statements provided above, it is difficult to understand how the Project will affect the City of Santa Cruz water operations and overall downstream beneficial uses of water.

Data Deficiencies:
The Project elements focused on reducing San Lorenzo Valley Water District (SLVWD) Felton System operations bypass flow requirements and increasing diversions from the North System of the SLVWD system (SLRBT Low-Flow Requirements Modification Scenario[3] and North System Diversions Scenario) may also have significant effects on the environment both immediately downstream of these operations as well as further downstream to, and including, the San Lorenzo River estuary. Complicating the ability to evaluate the

[1] The North System includes SLVWD's diversions from creeks north of Ben Lomond, California on tributaries to the San Lorenzo River.
[2] The Felton System includes SLVWD's diversions from creeks and springs in Felton, California, as described in the IS/MND.
[3] The SLRBT Low-Flow Requirements Modification Scenario includes reducing the bypass flow requirements associated with SLVWD's Felton water rights that are tied to the USGS Big Trees stream gage located downstream on the San Lorenzo River.

Project, the planning-level evaluation used as a basis for determining the absence of potentially significant environmental effects is not detailed enough to actually understand what the potential effects are. Both the WAA and Fisheries Analysis do not explicitly reference other existing, (in some cases) more detailed hydrologic and instream flow habitat studies or provide sufficient new information detailed enough to evaluate effects on beneficial uses of water downstream to the San Lorenzo River estuary – particularly with regard to special-status fish species including coho salmon, steelhead trout and tidewater goby. In fact, both documents explicitly state that they are intended as planning level studies and should not be used to evaluate such effects.

The WAA states on page 1-6 as well in other locations:

> "…However, these records are insufficient for estimating the remaining portion of streamflow available to support habitat or the potential for additional diversions...."

It further states on page 6-4:

> "Values of simulated monthly flow (e.g., expressed in units of afm, cfs, or gpm; tabulated in Appendix A) have limited precision and should not be used to evaluate compliance with specific regulatory, water-right, or habitat requirements."

The Fisheries Analysis states on page 1-5:

> "Similar to the approach used in the WAA, the results of this analysis of fisheries resource considerations for the San Lorenzo River Watershed Conjunctive Use Plan are suitable for a planning-level evaluation of conjunctive use alternatives. Due to the limited precision of the synthesized monthly records of water supply (Exponent 2019), the results should not be used to evaluate compliance with specific regulatory, water-right, or habitat requirements. Instead, this comparative analysis is intended to identify the relative fisheries benefits of individual conjunctive use scenarios and to narrow down the selection of potential projects to move forward in the planning process. As such, the synthetic streamflow estimates developed for the WAA were not used to evaluate potential existing effects of SLVWD's surface water diversions on salmonid habitat conditions, but rather as a comparative tool for differentiating the relative potential benefits of the different conjunctive use scenarios..."

The Fisheries Analysis further states on page 3-2 that more detailed instream flow studies would be required to fully-evaluate the effects future expanded diversions, but notes that the current Project does not include expanded diversions. This is confusing in that the Project already includes expanded diversions. Further, the statement further reinforces the idea that more detailed instream flow studies would be helpful in evaluating the effects of the existing Project. This reliance on planning level studies presents a fundamental challenge to evaluating biological effects of the Project with a level of rigor that will ensure protection of downstream special-status species and other beneficial uses of water. The Fisheries Analysis provides limited information related to planning-level studies and does not fully explore Project effects in drought or seasonally low-flow conditions. Nor does it provide specific flow and available fisheries habitat relationship information using appropriate downstream flow goals. Furthermore, the analysis has a limited geographic scope that may not fully capture all the effects of the Project downstream. At a minimum, evaluation of the Project's effects on

the flows below Big Trees[4] – be they coho migration in drought years in the San Lorenzo River Gorge and in the lower river south of Highway 1 -- effects on downstream mainstem San Lorenzo River steelhead rearing and related impacts downstream should be explored more fully.

The Fisheries Analysis also draws conclusions about relative effects being insignificant based on diversion volume percentage of recommended bypass flows. This is insufficient for a variety of reasons, including the fact that fish migration is, by nature, relatively absolute in nature and a relatively small reduction in flow can interfere with migration. If sufficient flows for migration are not available, then migration generally cannot occur. Reduction in the number of fish passage days – particularly coho migration in a drought year when the number of migration days may already be limited – could be a potentially very serious concern. Even if the Felton or North System water diversions are only a small percentage of the winter bypass requirements below Big Trees in Felton, that may be a relatively high percentage of the required bypass flow in Santa Cruz and may occur at a time when conditions are especially challenging for special-status fish species there – thereby presenting potentially significant effects to downstream biota including not only coho and steelhead, but also tidewater goby, in the lower San Lorenzo River. For example, even a relatively small diversion of 0.5 cfs in Fall Creek during these periods can have relatively significant effects on available steelhead rearing habitat availability in the San Lorenzo River and subsequent impacts on the City of Santa Cruz's ability to divert water there. There is no analysis of the Project relative to current bypass flow requirements downstream of Big Trees[5] other than the historic requirements at the City's Felton Diversion and no detailed evaluation of the biotic effects in drought periods or under climate change scenarios provided in the current SLVWD proposal – in spite of the fact that the analysis states in several locations that there may be relatively substantial reductions in flow in the San Lorenzo River during dry periods with existing operations and proposed operations may – in some cases – exacerbate that condition.

In fact, the 2004 San Lorenzo River Salmonid Enhancement Plan (Alley, D., Dvorsky, J., Ricker, J., Schroeder, K., Smith, J., 2004) states on page 54 that:

> "Flow extractions from Fall Creek, the Boulder Creek sub-watershed and Clear Creek appeared to significantly impact the growth rate of YOY's [young of the year] and the overall density of smolt sized juveniles produced in the middle River, particularly in drier years"

The 1979 San Lorenzo River Watershed Plan (Ricker and Butler, 1979) also shows significant reductions in available salmonid rearing and spawning habitat at levels above the current SLVWD Felton System Big Trees bypass requirements. According to the IS/MND Fisheries Analysis page 4-1, the SLRBT Low-Flow

[4] Big Trees is located in Felton, California just downstream of the City of Santa Cruz Felton Diversion on the San Lorenzo River. The USGS stream gage there is the regulatory compliance gage for the City and SLVWD's Felton operations.

[5] The Fisheries Analysis asserts that the bypass flows required at SLRBT do not have clear biological benefits. However, these flows were developed with best available science at the time (1970s) and were presumably focused on protecting passage over the City of Santa Cruz's Felton Diversion and nominal protection of anadromous salmonid habitat downstream of Big Trees (Montgomery Consulting Engineers, 1970, Montgomery Consulting Engineers, 1973). Therefore, the historic bypass flows at Big Trees were protective of obvious fisheries habitat limiting factors at the time. That said, the current maximum bypass obligation at SLRBT of 40 cfs is considered to be more protective of anadromous salmonid habitat needs (including all life cycle needs) downstream of the Felton Diversion and should be the standard to which all upstream diversions are held. Similarly, the City has a minimum bypass flow requirement of 8 cfs below the Tait St. Diversion on the San Lorenzo River in Santa Cruz that can be severely limiting to its operations during dry periods and drought and which should be applied to other water diversions upstream. See Administrative Draft Anadromous Salmonid Habitat Conservation Plan (ASHCP) (Ebbin, Moser and Skaggs, LLC, et al., 2021) pages 231, 235, etc.

Requirements Modification Scenario includes a proposal to reduce bypass requirements that already prohibit diversions in October in 31 out of 48 years (65 percent) of the record analyzed. This analysis is relative to an antiquated, lower instream flow standard at Big Trees that has recently been increased through the completed City of Santa Cruz Operations and Maintenance Habitat Conservation Planning (OMHCP) (Ebbin, Moser and Skaggs, LLC, et al., 2021) process[6]. Therefore, potential effects of the project may be significantly greater than the baseline if it were to be evaluated in the context of current bypass flow requirements downstream. For example, the 1979 San Lorenzo River Watershed Plan states on page 26 in this case that the difference between 20 cfs and 40 cfs in available spawning habitat downstream of Felton is substantial (110 sq feet/1,000 ft at 20 cfs vs. 3,300 sq feet/1,000 ft at 40 cfs). This information informed the City's updated bypass flows for the Felton Diversion and should be considered in any evaluation of the SLVWD project effects.

Similarly, the foundation of the analyses provided for the North System Diversions scenario is to take water in excess of system demand, rather than to divert water in excess of downstream habitat needs. This perspective is fundamentally flawed in its lack of attention to effects on downstream beneficial uses, including (but not limited to) provision of habitat for special-status fish species.

The Fisheries Analysis states on page 3-10:

> "During drought baseflow conditions, surface water diversions likely reduce streamflows sufficiently to exacerbate already stressful juvenile salmonid rearing conditions, particularly in Boulder Creek."

This statement regards existing SLVWD diversions. It is our understanding that future additional diversions would come primarily from Clear and Sweetwater Creeks and that the diversions would occur in high flow months. However, we often have dry periods during these months that can be limiting to fisheries downstream. Without additional operational detail and assurances that additional North System diversions would not be occurring during times when downstream flows are already suboptimal for special-status fish species, and without additional hydrologic and biotic information which would support such an analysis, it is unclear what the specific effects are on downstream beneficial uses of water.

The analysis could be strengthened even further were it to broaden the evaluation of Project instream temperature effects further downstream where temperatures may be more limiting to cold water fisheries. By virtue of their origins in karst-dominated watersheds, many of the SLVWD water source streams are relatively more important to San Lorenzo River watershed fisheries recovery than other streams in the watershed. Karst streams tend to remain cold during hot weather and have more reliable flow during dry periods and drought. While the Fisheries Analysis does present good information on this topic, it would (again) be strengthened if it were provided in the context of overall watershed conditions – particularly considering potential future climate change–related effects on the San Lorenzo River mainstem temperatures and their potential to further limit cold water fisheries.

The analysis would be also more informative were it to be based on a daily time-step, and not a monthly time-step, as was the case with the WAA upon which much of the current analysis is based. Monthly average values can obscure sometimes significant effects related to the typical daily hydrologic variations that may occur on a shorter time scale which may have substantial effects on downstream fisheries. Further

[6] The OMHCP adopted the minimum bypass flows from the "Agreed Flows" developed in the ASHCP and also incorporated in the Santa Cruz Water Rights Project. See discussion on OMHCP pages 54, 123, etc.

undermining the WAA's utility for evaluating effects is the fact that it omits many years of data from the City Newell Creek and United States Geological Survey (USGS) San Lorenzo River at Santa Cruz stream gages. It is also unclear how the IS/MND and supporting materials evaluated the Loch Lomond scenario hydrologic and biotic effects, given the lack of reference to or inclusion of City of Santa Cruz modeling. Nor is it clear if the WAA and related Fisheries Analysis includes an evaluation of Loch Lomond spill dynamics relative to SLVWD exercising its right to its allocation of water there. Additionally, many of the graphs provided in the WAA have a scale that precludes seeing the full presentation of the data.

Finally, climate change is one of the greatest threats to special-status fish species in the San Lorenzo River – whether it regards hydrologic changes or increased water temperatures. Given the predictions for future "weather whiplash" associated with climate change and associated hydrologic regime shifts, analysis of climate change scenarios relative to the potential future operations and downstream hydrologic and biotic effects would make the Project analysis significantly more robust.

Therefore, the ability to evaluate effects of the Project is fairly limited by the lack of comprehensive data regarding downstream hydrologic and biotic effects resulting from the project implementation. At a minimum, comparison of water supply scenarios that includes reference to all applicable current bypass flow requirements and recommendations downstream should occur (be they from the City of Santa Cruz Habitat Conservation Planning processes, the 1979 San Lorenzo River Watershed Plan or the 2004 San Lorenzo River Salmonid Enhancement Plan) and does so on a daily time-step would significantly enable more thorough effects evaluations. The City of Santa Cruz has extensive water supply (Confluence), hydrologic and fisheries habitat effects modeling (including climate change – adjusted hydrologic data) on a daily time step that may help with refining this analysis, should that be initiated (Dudek 2021a)[7].

Other regulatory requirements:
Given the lack of focus on relevant downstream instream flow standards or reference to detailed instream flow studies and potential conflicts with downstream water rights holders such as the City, it is unlikely that the current proposal will be authorized by the California State Water Resources Control Board (SWRCB) as currently defined. Furthermore, it may be that the SWRCB would require a full Environmental Impact Report in order to approve proposed water rights changes associated with the project. The SWRCB may also require that SLVWD file Underground Storage Supplements for groundwater recharge elements of this Project, as well as petitions for its appropriative water rights that require changes in Purpose or Place of Use.

Approval of the Project, as currently defined, by the California Department of Fish and Wildlife and the National Marine Fisheries Services (NMFS), either through their own permit processes or through their roles in SWRCB processes, is also in question given the lack of detailed information and potential effects on downstream biota. It is our understanding that the majority of SLVWD operations have not gone through either Fish and Game Code Section 1602 or 2081 or Federal Endangered Species Act (ESA) Section 10(a)(1)(B) permitting. However, we are aware that the NMFS has communicated to SLVWD that its Fall Creek operations generally have minimal effects on steelhead and coho within the immediate vicinity of the Fall Creek Diversion as historically operated, but that reinitiation of consultation should occur if conditions change from those that were considered during the original consultation on the Fall Creek Diversion. Unfortunately, the CZU fire response challenged SLVWD to the extent that the Fall Creek operations have changed and diversions have increased – thereby potentially necessitating reinitiation of ESA consultation on

[7] These models include a long period of record of daily hydrologic, available fisheries habitat and City of Santa Cruz water supply operational data that interact with each other to project future available flow for meeting City of Santa Cruz system demand and corresponding effects on fisheries.

this facility and further obfuscating analysis of effects of the Felton System baseline relative to future proposed operations. Long - term Section 10 ESA consultation has not occurred regarding SLVWD operations, nor has it occurred in the context of effects downstream in all affected stream reaches. NMFS states on page 2 of its May 2021 Biological Opinion (National Marine Fisheries, 2021) regarding the Fall Creek Diversion:

> "…the effects of the SLVWD's other water supply options within the San Lorenzo River basin on salmonids and their habitats have not been analyzed under the ESA or MSA…."

DFW also stated in a recent email to the City (Maxfield, 2021) that, while permitting associated with fish ladder rehabilitation at the Fall Creek Diversion has occurred, permitting regarding ongoing operations of the Fall Creek (and other SLVWD diversions) has not occurred. These permits may entail bypass flow requirements that are not currently reflected in the IS/MND analysis. To that point, the 1979 San Lorenzo River Watershed Plan shows significant reductions in available salmonid rearing and spawning habitat at levels above the current bypass requirements for Fall Creek. Furthermore, the SLRBT Low-Flow Requirements Modification Scenario includes a proposal to reduce bypass requirements that would already prohibit diversions in October in 31 out of 48 years (65 percent) of the record analyzed due to the diversions' violation of downstream bypass flow obligations included in the associated water rights. This analysis is relative to an antiquated, lower instream flow standard at Big Trees that has recently been changed through the City of Santa Cruz Habitat Conservation Planning process and incorporated in the approved OMHCP and Santa Cruz Water Right Project petitions to the SWRCB. Therefore, potential effects of the proposal may be significantly greater than the baseline.

Again, without acknowledging and building into the proposal rigorous instream flow bypass requirements (some of which have already been developed specific to SLVWD operations, others proposed in the 1979 San Lorenzo River Watershed Plan and others related to City of Santa Cruz operations), it is likely the Project will be protested at the SWRCB; and Felton System - related petitions may not be approved.

Conflict with Existing Plans and Policies:
The current proposal may be in conflict with several existing plans and policies. The approved City of Santa Cruz OMHCP specifically calls for future instream flow requirements of 40 cfs during much of the winter downstream at the Big Trees USGS gage and a minimum of 8 cfs at the Santa Cruz USGS gage. Analysis of the Project scenarios specific to these standards would better illuminate the full scope of potential downstream Project biotic effects – including those relative to tidewater goby and Pacific lamprey.

The Federal Central California Coastal Coho Recovery Plan Action Step 4.1.1.6 (National Marine Fisheries Services, 2012) also calls on page 7 for protection of karst-derived instream flows that are especially important during the dry season and in drought conditions. The IS/MND correctly references the importance of these karst-derived flows – particularly with regard to the Felton System and its influence on the San Lorenzo River during drought periods, but the IS/MND provides no reference to the Recovery Plan or any subsequent analysis of the Project's effects on karst-derived flow relative to downstream mainstem San Lorenzo flow or water temperatures.

Policy 5.6.1 of the Conservation and Open Space Element of the County of Santa Cruz General Plan regarding minimum instream flows seems relevant to the Project (County of Santa Cruz Planning Department, 1994). For example, the WAA states in numerous locations that the Project will result in less than 70% of unimpaired flows downstream of SLVWD diversions in many cases. In addition, the Fisheries Analysis states on page 3-7 that during drought years Fall Creek flows may be reduced by up to 50 percent. It is not clear if these flow reductions would be exacerbated by the Project and its focus on reducing the Big Trees flow requirements

tied to the Felton System water rights. It is understandable that there is tension between protection of most limiting flow requirements (i.e., dry season and drought) and water supply reliability. However, the lack of reference to this policy, diversion volumes related to the North System and SLRBT low flow scenarios in excess of the General Plan policy standards, and the absence of specific instream flow/habitat effects analyses of the Project for all relevant special-status fish species life-cycle stages downstream all appear to be in conflict with this policy.

Should the Project result in reduced instream flows that fall below the City's instream flow goals at Big Trees or Santa Cruz, the City may be forced to re-evaluate its water supply planning and utilize additional alternative water supplies not considered in its Water Supply Advisory Committee and related water supply planning processes to meet system demand (City of Santa Cruz Water Supply Advisory Committee, 2015). These sources may include Loch Lomond Reservoir, existing or new wells, North Coast sources, new diversions of Bay Street Spring, reinitiated diversions on Branciforte Creek, or other, as of yet unidentified, sources. Not only does this need to identify new sources present operational challenges to the City, it expands the realm of potential biological effects associated with the Project outside of the study area included in the IS/MND. For example, reduction of the Felton System bypass flow requirements at Big Trees could result in fewer City of Santa Cruz Felton Diversion pumping days or reduced ability to divert at the City's Tait Street Diversion – as the City has strict regulatory requirements related to those facilities vis-a-vis downstream instream flows. While there are undoubtedly benefits to rearing flows that benefit the City associated with the general focus on conjunctive use in this Project, the overall effects on City water operations are not well analyzed in this regard.

The Project is generally consistent with overall goals on page 3-2 and 3-3 of the July 2021 draft Santa Margarita Groundwater Sustainability Plan (GSP) (Balance Hydrologics, Miller Maxfield, Inc., Montgomery and Associates, WSC, Inc. and California State University – Sacramento, 2021), but the Project does not completely align with the overall goals of the draft GSP, in that there is no obvious commitment to improve flows for all life stages of special-status fish species downstream. The impacts of this strategy may (admittedly) be minor in some cases and the general focus on groundwater recharge and improving associate fish rearing flows is in complete alignment with GSP goals. However, there may be occasions when biotic effects could be substantial – though, again, the analysis provided does not make that clear. Further, it is not clear how the Project specifically contributes toward meeting GSP sustainability goals, as those goals are not explicitly referenced. Nor are Project elements analyzed specifically in context to them.

Other Concerns:
Recreation - The IS/MND would be more robust were it to also include an analysis of recreation effects of the Project – both downstream of the SLVWD diversions and also in Loch Lomond. Some of this analysis has already been completed for the City of Santa Cruz Water Rights Project Draft Environmental Impact Report (Dudek, 2021b).

Cumulative effects – More thorough analysis of the Project in the context of downstream flow needs would not only help identify potential biotic and hydrologic effects, but also help contextualize the project regarding other existing and probable future projects including, but not necessarily limited to, the City of Santa Cruz Water Rights Project, the Draft Santa Margarita Groundwater Sustainability Plan, the City of Santa Cruz Operations and Maintenance Habitat Conservation Plan, the Administrative Draft Anadromous Salmonid Habitat Conservation Plan, the City of Santa Cruz Graham Hill Water Treatment Plant Facilities Improvement Project, the City of Santa Cruz Newell Creek Pipeline Rehabilitation Plan, and other, ongoing water diversions by the multitude of private diverters in the watershed.

There is the potential that the SLVWD Project may have interaction with these other activities in terms of effects downstream, and the IS/MND would be strengthened by some analysis of this interaction. For example, as stated throughout the Fisheries Analysis, the cumulative effect of SLVWD diversions on downstream flows, while generally not problematic, may be significant if occurring during drier periods when considered in the context of other activities also occurring in the watershed. Typically, those are times when conditions in the San Lorenzo River are already limiting for special-status fish species. Admittedly, the cumulative effects of the SLVWD project may also be beneficial in some cases. An example of this would be any improvement that the Project makes regarding groundwater recharge-related baseflows that occur in concert with the City of Santa Cruz improvements to bypass flows downstream. However, analysis of the Project with broader consideration of the effects of other activities in the San Lorenzo River watershed has not been provided in the IS/MND, so a greater understanding of the cumulative effects of the Project is not possible with the analysis provided.

The City of Santa Cruz appreciates the opportunity to participate in the review of the IS/MND and offers these comments in the spirit of strengthening our future collective regional water resources and fisheries conservation efforts. SLVWD staff should not hesitate to follow up with me if there are questions or concerns about the points I've raised.

Sincerely,

8/25/2021

X 

Chris Berry
Watershed Compliance Manager
Signed by: Chris Berry

cc: Rosemary Menard, Heidi Luckenbach

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CHRISTOPHER BERRY
123 Jewell Street
Santa Cruz, California
95060
(831) 251 6875 cberryh2o@gmail.com

EDUCATION:

- University of California, Santa Barbara. *B.A. Biological Sciences, 1992*
- University of San Francisco. *M.S. Environmental Management, 1997*

TRAINING:

- TECHNICAL – *Hydrology, Icthyology, Aquatic Biology, Environmental Engineering, Fish X-ing, California red-legged frog and western pond turtle conservation, U.S. Environmental Protection Agency - Watershed Academy, Wetland Restoration, Riparian Habitat Conservation, Karst Groundwater Hydrogeology, Salmonid Restoration Federation Conferences, etc.*
- LEADERSHIP – *Public Utilities and Waterworks Management, The Public Agency Training Center Leadership Certificate Managing Performance Through Evaluation, Environmental Values in the Water Industry, Conflict Resolution, True Colors, Federal Emergency Management Agency - National Incident Management System – IS 700, Leadership Santa Cruz, etc.*
- LEGAL – *California Water Law, California Environmental Quality Act, California Fish and Game Code, Federal Endangered Species and Clean Water Act, etc.*

PROFESSIONAL:

- City of Santa Cruz, CA. Water Department – *Watershed Compliance Manager, 2012-present*
- City of Santa Cruz, CA. Water Department – *Water Resources Manager, 2001-2012*
- City of Santa Cruz, CA. Water Department – *Watershed Specialist, 1999-2001*
- City of Santa Cruz, CA. Water Department – *Watershed Program Coordinator, 1997-1999*
- City of Santa Cruz, CA. Water Department – *Water Quality Laboratory Assistant, 1994-2000*
- Land Trust of Santa Cruz County, CA. – *Environmental Science Intern, 1993-1994*
- Geo/Resource Consultants, Inc. – *Environmental Science Intern, 1993*
- Ventura County, CA. Resource Conservation District – *Water Conservation Intern, 1992-1993*
- Woods Hole Marine Biological Laboratory – *Marine Biological Laboratory Intern, 1986*

PROJECTS:

- City of Santa Cruz, CA. - *Estuary management*
- City of Santa Cruz, CA. - *Water rights management*
- Save the Frogs – *Invasive species policy development*
- Save the Frogs – *Wetland restoration regulatory compliance*
- City of Santa Cruz, CA. - *Groundwater Sustainability Planning*
- Land Trust of Santa Cruz County, CA. - *Sediment transport studies*
- City of Santa Cruz, CA. - *Hydrologic and sediment transport studies*
- County of Santa Cruz, CA. - *Karst Protection Zone policy development*
- Woods Hole Marine Biological Laboratory - *Shellfish population analyses*
- City of Santa Cruz, CA. - *Endangered Species Act permitting and compliance*
- City of Santa Cruz, CA. - *Fisheries population and habitat database development*
- County of Santa Cruz, CA. - *Integrated Regional Water Management Plan workgroup*
- Geo Resources, Inc. - *Groundwater contamination assessment and related NEPA work*
- City of Santa Cruz, CA. - *Drinking water sanitary surveys and source water assessments*
- City of Santa Cruz, CA. - *Environmental compliance, regulatory liaison and construction monitoring*
- City of Santa Cruz, CA. - *Anadromous salmonid, Pacific pond turtle, tidewater goby, California red-legged frog and other biotic surveys*

GRANTS:

- American Rivers - *Mountain Charlie Instream Restoration Project #1*
- US EPA - *San Lorenzo Valley High School Watershed Management Internship Program*
- State of California Department of Fish and Wildlife - *San Lorenzo Valley High School Watershed Management Internship Program*
- State of California Wildlife Conservation Board - *Addressing Limiting Factors in the San Lorenzo River Lagoon: A "Bottom Up" Approach to Enhancing Stream Flow*
- County of Santa Cruz, CA. Fish and Wildlife Commission – *State of the San Lorenzo Science Symposium*

VOLUNTEER:

- Save the Frogs Advisory Committee former member
- Coastal Watershed Council Board of Directors former member and chair
- County of Santa Cruz, CA. Fish and Wildlife Commission current member and chair
- County of Santa Cruz, CA. Environmental Health Appeals Commission current member and chair
- County of Santa Cruz, CA. Water Advisory Commission current member and vice-chair, former chair
- County of Santa Cruz, CA. Inter-Commission Coordination Working Group founder and current member

PUBLIC PRESENTATIONS:

- *Logging, Leather, Lime and "Lost Boys": Reducing Limiting Factors for Anadromous Salmonids in the San Lorenzo River Lagoon, Santa Cruz County.* 2020 (tentatively rescheduled to 2022). Salmonid Restoration Federation Annual Conference. Santa Cruz, California.
- *20 Years of Habitat Conservation Planning for the City of Santa Cruz Water Department.* 2018. Presented at the County of Santa Cruz Fish and Wildlife Advisory Commission. Santa Cruz, CA.
- *From Coho Salmon to the Zayante Band-Winged Grasshopper-Twenty Years of Lessons from the City of Santa Cruz Habitat Conservation Planning Process*. 2018. Presented at the Northern California Conservation Planning Partners Annual Conference. Vacaville, CA.
- *A "10,000 foot", 10 minute Overview of the San Lorenzo Watershed.* 2017. Presented at the State of the San Lorenzo River Science Symposium. Santa Cruz, California.
- *Water Resources of the San Lorenzo River Lagoon.* 2016. Presented at the State of the San Lorenzo River Science Symposium. Santa Cruz, California.
- *State of the San Lorenzo River Science Symposium - Facilitator.* 2015. Santa Cruz, California.
- *Moving Toward Balance – The City of Santa Cruz Anadromous Salmonid HCP.* 2014. Presented at the Salmonid Restoration Federation Annual Conference. Santa Barbara, California.
- *Watershed – The Movie Discussion panel member.* 2014. Santa Cruz, California.
- *Karst Protection Zone Planning.* 2014. Presented to the Rural Bonny Doon Association. Bonny Doon, California.
- *Resource Management for Steelhead and Coho Salmon Conservation in Santa Cruz County.* 2009. Presented at the Salmonid Restoration Federation Annual Conference. Santa Cruz, California.
- *City of Santa Cruz Drinking Water Source Protection and Timber Harvest.* 2004. Presented to the Central Coast Regional Water Quality Control Board. Santa Cruz, California.
- *People, Fish and the River – Can Competing Needs Co-Exist?* 2003. Presented at the Valley Women's Club Watershed Festival. Felton, California.

MEMBERSHIPS/AFFILIATIONS:

- The Wildlife Society
- American Fisheries Society
- California Native Plant Society
- North American Lake Management Society
- Fire Safe Council of Santa Cruz County Board of Directors
- Santa Margarita Groundwater Agency – Surface Water Working Group
- San Lorenzo Valley High School Watershed Academy Advisory Panel

- Gavilan College Water Resources Management Program Advisory Panel
- Santa Cruz Mid-County Groundwater Agency - Surface Water Working Group
- Comparative Lagoon Ecological Assessment Project (CLEAP) Advisory Panel
- NOAA – Monterey Bay National Marine Sanctuary/BWET Grants Review Panel
- Coastal Regional Prioritization Group - California Forest Management Task Force
- Summit-Martin Fires State Emergency Assessment Team (SEAT) Advisory Panel
- Santa Cruz County Regional Conservation Investment Strategy Technical Advisory Team
- California Rapid Assessment Method for Wetlands (CRAM) Central Coast Regional Team
- Santa Cruz County, CA Integrated Regional Water Management (IRWM) Program Working Group
- California State University at Monterey Bay Professional Science Master's Program Advisory Panel
- California Department of Fish and Wildlife – Bullfrog and Non-native Turtle Policy Working Group

LICENSES/PERMITS/CERTIFICATIONS:

- California Department of Motor Vehicles: Class C Driver's License
- California Department of Boating and Waterways: Boater Education Certification
- California Department of Public Health: T1 Drinking Water Treatment Plant Operator
- United States Fish and Wildlife Service Approved Biologist for California red-legged frog and tidewater goby

PUBLICATIONS:

- *Giants of the Forest: Dicamptodon.* Save the Frogs Magazine. December, 2015. Los Angeles, California.
- *Water Quality Impacts of Extreme Weather-Related Events: Case Studies – CS 046.* Prepared for the Water Research Foundation. Denver, Colorado. 2014.
- *Resource Management for Steelhead and Coho Salmon Conservation in Santa Cruz County – Field Tour Abstract.* Prepared for the Salmonid Restoration Federation. Redway, California. 2009.
- *Sanitary Survey of San Lorenzo and North Coast Watersheds – 2001 Update.* Prepared for the City of Santa Cruz Water Department. Santa Cruz, California. 2001.
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ONLINE:

https://www.linkedin.com/in/cberryh2o
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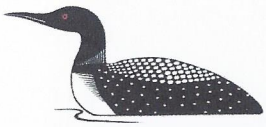
EXHIBIT B



Hagar Environmental Science

August 24, 2021

James G. Moose
Remy Moose Manley LLP
555 Capitol Mall, Suite 800
Sacramento, CA 95814

Re: Comments on Draft Initial Study & Mitigated Negative Declaration (IS/MND) for proposed Conjunctive Use Plan for the San Lorenzo River Watershed - Attorney Client Privilege

Dear Mr. Moose,

In response to your request, I have completed a review of the San Lorenzo Valley Water District's Initial Study - Mitigated Negative Declaration (IS/MND) for the proposed Conjunctive Use Plan for the San Lorenzo River Watershed (the Project) and related documents. This letter transmits my professional expert opinion[1] regarding the adequacy of the impact analysis and whether the Project may have a significant effect on the environment. My review is focused on potential effects on steelhead and coho salmon.

The IS/MND states that the main purpose of the Project is to optimize the conjunctive use of surface and groundwater sources to improve aquatic habitat and water supply reliability within the San Lorenzo River watershed. While this concept has potentially beneficial effects to aquatic biological resources such as coho salmon and steelhead, the Project is insufficiently defined to evaluate environmental effects of the Project. The IS/MND and its supporting documents do not provide definition of the amounts and timing of additional diversions that would occur under the Project and do not provide an assessment of instream flow needs of protected resources existing downstream of the diversions (Exponent 2019, Podlech 2019, Podlech 2021, SLVWD 2021). Without such definition, the effect of proposed diversions on streamflows is only hypothetical and any conclusions regarding biological effects are unsupported. Based on the current vaguely defined Project, potentially significant biological effects are certainly possible. No mitigation options are presented that may avoid such effects.

[1] A copy of my resume, which sets forth my educational background and the career work that makes me an expert on fisheries issues in the water bodies within Santa Cruz County, is attached to this letter.

6523 Claremont Ave • Richmond, CA 94805 • Phone: 510.333.9410 • E-mail: jmhagar@sbcglobal.net

The Project proposes to divert additional surface flows during the winter and spring and/or provide in-lieu groundwater recharge to improve surface flows during the summer. The winter and spring encompass critical portions of salmon and steelhead life-cycles including rearing of juveniles; migration of adults, smolts, and juveniles; and spawning. The project proponents do not appear to consider that the highly variable hydrology of the San Lorenzo River watershed can result in low flow periods in the winter and spring when diversion of flow can significantly affect aquatic resources. There has been no presentation of information related to the Project that indicates flow needs for instream resources (e.g., coho and steelhead) and how diversions would be accomplished to protect those flows. Without analysis of the timing and magnitude of flows protective of instream resources and an associated Project Description that details the timing and magnitude of diversions that can be accomplished while protecting those instream habitat values, there can be no reliable determination of whether the Project may or will have significant environmental effects. Diversions from the North System and Loch Lomond influence flows from the points of diversion downstream to the ocean and must be analyzed cumulatively for their potential effects in the source streams which are tributary to the San Lorenzo River as well as the mainstem San Lorenzo River and San Lorenzo River Lagoon.

The *SLRBT Low-Flow Requirements Modification Scenario* element of the Project would maintain existing bypass flow requirements in Fall Creek but would remove a requirement that limits Fall Creek diversions to protect minimum low flows in the San Lorenzo River. Fall Creek is tributary to the San Lorenzo River upstream of the City of Santa Cruz Felton Diversion. This element would potentially reduce flows in the San Lorenzo River primarily during the fall (September-November) but also to some extent during December through May (See Podlech 2019, Table 4-1, page 4-2). The San Lorenzo River downstream of Fall Creek supports all life stages of steelhead and migration of coho. Existing information indicates a consistent increase in habitat value for rearing steelhead in the San Lorenzo River between 10 cfs and 25 cfs (City of Santa Cruz 2021). Optimum flow for steelhead spawning in the San Lorenzo River is around 70-90 cfs and declines at lower levels of flow. Both steelhead and coho need a flow of 40 cfs or more to migrate through the lower San Lorenzo River. Flow reductions related to the Project have the potential to adversely affect habitat for steelhead and coho salmon and interfere with movement of these species by reducing flows below threshold levels for migration or causing declines in habitat value with reduced flows. Contrary to this potential, and without supporting analysis, the Initial Study finds that effects to steelhead or coho are not expected. The Fisheries Effects Study (Podlech 2019) finds that flows would be altered by the Project a significant amount of the time but it provides no evaluation of the degree to which flows are changed and no evaluation of the potential of these changes to adversely alter habitat conditions for steelhead and coho. Without such an analysis, there is no basis for the IS finding of no expected effect (SLVWD 2021). Indeed, potentially significant adverse effects remain possible.

The Fisheries Effects Study (Podlech 2019) only considered the effect of flow changes in September and October, when effects of the Fall Creek Diversion have been concentrated. However, steelhead and coho life histories can be significantly influenced by discrete, extreme events that can occur on the order of a day to a few days and the frequency of an event does not always indicate the potential severity. In order to effectively evaluate the environmental effects of the Project, an analysis needs to cover the entirety of potential events at a fine enough time scale (daily) to observe the effects. An example of this type of effects analysis is one I completed using a long-term daily hydrologic record (over 70 years), models linking streamflow with salmonid habitat value, analysis of temperature effects, and effects of projected climate change. This analysis was completed using output from a detailed operations model defining proposed project operations in sufficient detail to predict daily streamflow values below each of the City diversions. Documentation of this approach can be found in the City of Santa Cruz Draft Water Rights EIR (Appendix C and Appendix D) available online at (https://www.cityofsantacruz.com/Home/Components/BusinessDirectory/BusinessDirectory/126/2089).

The Fisheries Effects Study also did not consider effects of the Fall Creek Diversion on temperature in the mainstem San Lorenzo River to which it is tributary. Even relatively small changes in water temperature can have significant effects on sensitive species by decreasing resistance to disease, altering growth rates, and influencing survival. Fall Creek is one of the most shaded and coolest tributaries in the San Lorenzo River watershed (Podlech 2019) and potentially has a cooling effect on the San Lorenzo River below its confluence. The Initial Study makes no mention of this fact and fails to provide any supporting evaluation of why reducing Fall Creek flow into the San Lorenzo River under this scenario would not create a potentially adverse temperature-related effect on habitat for steelhead and coho salmon. Contrary to this potential, and without supporting analysis, the Initial Study finds that effects to steelhead or coho are not expected.

In addition to flow reductions in Fall Creek and the San Lorenzo River under the *SLRBT Low-Flow Requirements Modification Scenario*, the other elements of the Project (*North System Diversions Scenario* and *Loch Lomond Scenario*) involve diversions of flow that do not occur under existing conditions. The Fisheries Effects Study (Podlech 2019) describes each of these elements individually from the perspective of conditions in the tributary streams themselves but does not evaluate the cumulative effect of all these diversions on habitat and temperature conditions in the mainstem San Lorenzo River, which could be significant.

Under the *North System Diversions Scenario*, SLVWD would export unused potential diversions from the North System to the South System as a substitute for pumping groundwater from the Pasatiempo groundwater wells. The surface water components of SLVWD's North System consist of diversions located on the eastern slope of Ben Lomond Mountain from Boulder Creek to Brookdale, with multiple diversion boxes that feed into a gravity pipeline (Five-Mile Pipeline) and ultimately to the Lyon Treatment

Plant in Boulder Creek. SLVWD's North System includes surface water diversions on Peavine Creek and Foreman Creek (tributaries to Boulder Creek), Clear Creek (tributary to the mainstem San Lorenzo River), and Sweetwater Creek (tributary to Clear Creek). All of these streams ultimately feed the San Lorenzo River. The Project Description assumes that existing streamflow that exceeds current demand can be diverted. However, there is no assessment of instream flows needed to protect aquatic resources in any of these streams, including those that support steelhead and coho. Without such an assessment it is not possible to determine the environmental effects of the Project. The Fisheries Effects Study (Podlech 2019) concludes that effects are unlikely since the percent of simulated monthly flow remaining downstream of North system diversions under this Scenario is only slightly less (≤1 percent) than under the existing base case scenario. This is a gross misrepresentation of potential effects on steelhead and coho due to averaging of monthly average values and averaging over the system as a whole. Alterations of flow could be substantial during specific conditions such as periods between storms or during drier years or seasons. In fact, the Water Availability Assessment indicates that there are a number of years when Project-related monthly average flow reductions in Clear and Sweetwater Creeks exceed 10% of baseline (Exponent 2019). Steelhead and coho life histories can be significantly affected by events that occur on a timescale of just a few days but have the potential to affect an entire year class. While analysis based on monthly averages or averages of monthly average values may be suitable for water supply planning, such averaging will completely miss important events influencing biological parameters. Even winter diversions could be significant if concentrated in a single source and/or during sensitive periods. The Project Description is so vague that none of these possibilities can be excluded.

The Fisheries Effects Study (Podlech 2019) reviews existing temperature data in different parts of the North System but does not address the potential effects of the *North System Diversion Scenario* on water temperatures in salmonid supporting streams including Boulder Creek or Clear Creek and their influence on water temperature in the San Lorenzo River, to which they are tributary. Existing temperature conditions in these streams are favorable for both steelhead and coho. Temperature can influence growth rates, expression of disease, egg development rates, hatching rates, and survival of both species. Without definition of the timing and magnitude of increased diversions expected to occur under the Project, it is not possible to determine the degree to which the Project may affect temperature conditions for steelhead and coho and to make findings regarding the degree to which adverse effects to habitat for these species may occur. There is no analysis to support findings of no significant effect in the Initial Study. Potentially adverse effects of the Project are weighed (without quantification) against potentially beneficial effects of streamflow enhancement from groundwater recharge. However, the effects of any streamflow enhancement are also unquantified and largely hypothetical, since the supporting analyses have provided no assessment of the relationship between streamflow and habitat value for steelhead and coho. It is purely conjectural under this

approach to determine that the benefits of hypothetical streamflow enhancement exceed the adverse effects of increased diversions.

The *Loch Lomond Scenario* element of the Project would divert currently unused water from the reservoir for use in the SLVWD system. The Fisheries Effects Study (Podlech 2019) cites pending implementation of the City of Santa Cruz Anadromous Species Habitat Conservation Plan (ASHCP) and erroneously concludes that this allotment of water represents environmentally "free" water "for which potentially adverse effects will have already been avoided" (Podlech 2019, page 4-6) by implementation of the ASHCP. In fact, the ASHCP effects analysis treats the SLVWD allocation as remaining in storage and diversion of this amount under the SLVWD Project will influence streamflow below Newell Creek Dam and potentially affect the frequency of spill and resulting aquatic habitat conditions in Newell Creek. These potential environmental effects were not considered in the Initial Study determination that the Project has no significant effect on aquatic resources.

The City of Santa Cruz has produced substantial amounts of data and analyses addressing the operation of Loch Lomond and effects on downstream flows, water temperature, and aquatic resources as part of its ASHCP. The data includes a daily hydrologic record encompassing over 70 years of flow data for Newell Creek and habitat modelling that links changes in flow to habitat quality for steelhead and coho salmon. The City's operations model (Confluence) is capable of analyzing effects of reservoir operations on spill frequency and associated flows. This information could have been made available to SLVWD for analysis of environmental effects of the *Loch Lomond Scenario* element of the Project.

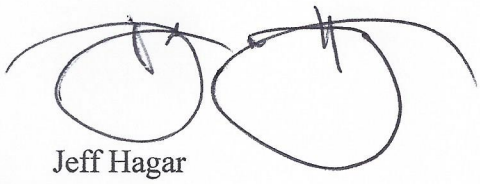
The Initial Study (SLVWD 2021) lists Special Status Species but fails to include the Federally Endangered tidewater goby (*Eucyclogobius newberryi*). Tidewater goby is an estuary dependent species known to inhabit the San Lorenzo River lagoon. Project-related alteration of flows, including increased diversion of flow in the winter and spring in the North System, removal of limits on Fall Creek diversions that support low flows in the San Lorenzo River, and diversions from Loch Lomond, effect downstream flows and ultimately are reflected in inflow levels to the lagoon. Tidewater goby habitat in the lagoon is potentially altered with change in inflows. Inflow is known to influence the frequency with which the lagoon opens and closes (breaching), either naturally or as assisted by City Public Works crews. Breaching of the lagoon has led to stranding of tidewater gobies and their burrows in the past. Freshwater inflows also influence water quality conditions in the lagoon, including nutrient levels, temperature, salinity, and dissolved oxygen levels, all of which have an influence on the quality of habitat for tidewater goby. The Project may have a substantial adverse effect on this special status species that are not identified due to the failure of the Initial Study to consider them.

In summary, the Project lacks enough definition to adequately determine effects on steelhead, coho salmon, or tidewater goby. The timing and amounts of new diversions

are not defined with sufficient detail to predict the timing and amounts of change in streamflow in the source streams or the San Lorenzo River, to which they are tributary. Further, there is insufficient information provided to determine the relationship between streamflow and habitat quality for potentially affected lifestages of steelhead and coho salmon in affected stream reaches, including the San Lorenzo River. Conclusions reached in the Biological Resources section of the Initial Study (SLVWD 2021) regarding significance of effects on these species are factually incorrect or purely conjectural as they are not supported by appropriate data or analyses. The documentation has not excluded the possibility of significant effects on special status aquatic species, as explained above. To avoid such effects, the Project must be revised to include specific attributes intended and designed to avoid effects on special status species. Such design refinements will only be possible, however, after additional analysis performed on a daily time-step basis. Such work should occur in coordination with the City of Santa Cruz, whose water operations affect the same water bodies affected by the Project.

Thank you for the opportunity to review the IS/MND. It is my hope that all parties find these comments constructive and helpful.

Sincerely,



Jeff Hagar
Principal

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Jeff Hagar

Principal, Hagar Environmental Science

Jeff Hagar has worked since 1985 as a fisheries consultant in California. He provides expertise on projects involving significant or complex fisheries issues, generally working with multi-disciplinary teams involving environmental planning, engineering, hydrology, geomorphology, and/or legal components. Services include biological surveys such as population abundance and habitat characterization, flow/habitat relationships, endangered species act compliance including Habitat Conservation Plan development, fish passage evaluation, special studies in fisheries, development of resource management and restoration plans, and permitting of habitat restoration and passage improvement projects. Mr. Hagar has been involved in projects throughout California including the Central Coast, Sierra, Eastern Sierra, Central Valley, Sacramento-San Joaquin Delta, and San Francisco Bay with particularly extensive experience in coastal streams of Central and South-Central California including the Santa Ynez River, Salinas River, San Lorenzo River, and Russian River, as well as numerous smaller streams. Much of his current work involves issues relating to management of threatened and endangered species, particularly coastal steelhead and coho salmon. Mr. Hagar has played a major role in development of the City of Santa Cruz Anadromous Species Habitat Management Plan. Mr. Hagar has worked closely with representatives of California Department of Fish and Game, National Marine Fisheries Service, and US Fish & Wildlife Service on compliance with the Endangered Species Act within these streams.

PROFESSIONAL HISTORY

1994 - present	Principal/Senior Biologist Hagar Environmental Science
1991 - 1993	Senior Fisheries Biologist BioSystems Analysis, Inc., Tiburon, California
1989 - 1991	Fisheries Biologist East Bay Municipal Utility District, Oakland, California
1985 - 1989	Aquatic Ecologist/Fisheries Biologist BioSystems Analysis, Inc., Sausalito, California

EDUCATION

M.S. Zoology, 1984
University of Wisconsin, Madison, Center for Limnology

M.S. Water Resources Management, 1984
University of Wisconsin, Madison, Institute for Environmental Studies

B.S. Biological Aspects of Conservation, 1979
University of Wisconsin, Madison

PERMITS AND CERTIFICATIONS

California Department of Fish & Game Scientific Collecting Permit

National Marine Fisheries Service Section 10 Permit for Scientific Research, including Endangered Species Act take authorization for Central California Coast Steelhead, South-Central California Coast Steelhead, Central California Coast Coho Salmon

US Fish and Wildlife Service 10(a)(1)(A) Federal Fish and Wildlife Permit including take of tidewater goby (*Eucyclogobius newberryi*)

REPRESENTATIVE PROJECT EXPERIENCE

City of Santa Cruz Habitat Conservation Plan, 2005-present, for City of Santa Cruz Water Department. HES is providing technical support to assist the City, NOAA Fisheries, and California Department of Fish and Game in development of the City's HCP. HES is integrating existing information with ongoing field surveys implemented by us to develop conservation strategies that maximize anticipated benefits to fishery resources while maintaining the City's ability to operate within water supply constraints. Field surveys include steelhead population abundance surveys in the San Lorenzo River and Laguna Creek lagoons; habitat assessment using the California Salmonid Stream Habitat Restoration Manual methods; instream flow assessment for spawning and rearing steelhead and coho salmon using the PHABSIM component of the Instream Flow Incremental Methodolgy (IFIM); and evaluation of migration passage obstacles using the Thompson methodology and approaches developed by Powers and Orsborn. HES is developing a conservation strategy for anadromous salmonids and evaluating effects of alternative flow improvement strategies.

Salinas Valley Water Project Fishery Evaluations, 1994 – 2013. The Monterey County Water Resources Agency has developed the Salinas Valley Water Project to stop seawater intrusion, manage nitrate contamination in the ground water, provide adequate water supplies to meet current and future (year 2030) needs, and hydrologically balance the ground water basin in the Salinas Valley. As part of this process, Hagar Environmental Science completed fishery studies and environmental documentation for fishery resources of the Salinas River Basin. HES conducted studies in the Salinas River and its tributaries to determine the presence, distribution, and relative abundance of steelhead spawning populations and evaluated habitat conditions for suitability for steelhead spawning, rearing and migration. Tasks completed by HES have also included monitoring of stream temperature and its relationship to stream flow; evaluation of water quality conditions in the Salinas River Lagoon and project effects on its potential to support rearing steelhead; stream flow requirements for steelhead migration; and potential effects of a surface diversion alternative on steelhead migration, steelhead rearing, and other fish populations. HES worked closely with project planners and engineers to ensure that project alternatives would achieve project objectives without harming remnant steelhead runs within the Salinas River

Basin. HES was also involved in consultation with the National Marine Fisheries Service on steelhead and provided technical information on steelhead and steelhead habitat for the Biological Assessment for the project. Current work involves monitoring of steelhead populations and water quality in the Salinas River Lagoon as required in the NOAA Biological Opinion for the project.

Sonoma Creek Steelhead Smolt Trapping, 2012-2013, for Center for Ecosystem Management and Restoration (CEMAR). The monitoring program was developed to confirm the presence of out-migrating smolts in the Sonoma Creek system and to establish baseline conditions. Of particular importance is the identification of life-history strategies potentially used by steelhead in the Sonoma Creek watershed and the identification of size and age distribution and life-history stage (parr vs. smolt), and relative abundance of migrating steelhead. HES was responsible for refining the study design in collaboration with co-investigators which included CEMAR, Sonoma Ecology Center, and Southern Sonoma Resource Conservation District. Fish sampling equipment and handling protocols were developed in coordination with other programs operating in the Bay Area (Napa County Resource Conservation District, The San Francisco Water Department, and the Santa Clara Valley Water District) to promote regional consistency in study design. HES obtained permitting for the study through the National Marine Fisheries Service and California Department of Fish and Wildlife. HES was also responsible for developing the team of co-investigators and training the team to process the traps; development of study protocols and data handling procedures; design and installation of sampling equipment; coordinating with collaborators and volunteers; and implementation and supervision of the trapping, data collection, and reporting.

Calaveras Dam Replacement Project, 2005-2008, for San Francisco Public Utilities Commission. HES was the fisheries lead as part of the project team for environmental impact assessment and permitting. Key tasks included the integration of extensive background information to address project compliance with environmental regulations, implementation of field surveys to resolve information gaps, and coordination with ongoing fisheries investigations conducted by the client and its consultants. Fisheries surveys included habitat assessment for over 16 miles of streams using modified Level IV effort as described in The California Salmonid

Stream Habitat Restoration Manual and an instream flow assessment for steelhead and native rainbow trout spawning using the PHABSIM component of the Instream Flow Incremental Methodolgy (IFIM).

Carmel and Salinas River Flood Control, Steelhead Monitoring Plan, January 2001-present. Flood Control activities conducted by Monterey County entail artificial breaching of the Carmel River mouth when river flows raise the lagoon elevation to a predetermined level. Artificial breaching anticipates the natural opening of the lagoon that is imminent. There has been concern that artificial breaching has the potential to impact the lagoon ecology, and particularly steelhead, since it may cause the lagoon to open somewhat earlier and at a lower elevation than would otherwise occur. Hagar Environmental Science developed a monitoring program to evaluate the effect of this activity on lagoon ecology and determine how future flood management should be undertaken to minimize adverse impacts to steelhead trout, a threatened species. HES has conducted pre- and post-breach steelhead population and water quality assessment during the winter of 2001-2002 in the Carmel River Lagoon, in 2002-2003 for both the Carmel and Salinas lagoons, and since 2002 in the Salinas River Lagoon according to this program.

Aptos Creek Watershed Assessment and Enhancement Plan, 2001-2003, for Coastal Watershed Council and California Coastal Conservancy. In this assessment for the Coastal Watershed Council, HES teamed with specialists in hydrology, geomorphology and vegetation to complete a thorough evaluation of habitat conditions and limiting factors for steelhead and coho salmon. HES completed a habitat assessment for over 16 miles of stream in the Aptos Creek watershed. HES used the habitat assessment data together with existing information and information developed by other team members on hydrology, geomorphology, and riparian over-story to complete a limiting factors analysis and worked with the team to develop a list of high priority restoration projects. The practicality of addressing key limiting factors was weighed against the relative benefits to be expected.

Steelhead Habitat Assessment for the San Pedro Creek Watershed, 2001-2002. HES conducted an assessment of the San Pedro Creek Watershed for the San Pedro Creek Watershed Coalition. The assessment included a review of existing information, habitat survey for the mainstem and major tributaries, assessment of factors most likely to limit steelhead, and recommendations for habitat protection and enhancement in the watershed.

Wilder Ranch State Park Habitat Assessment and Aquatic Vertebrate Survey, 2001-2002. Under contract to California State Parks, HES conducted a survey of streams within Wilder Ranch State Park as part of a statewide biological resources monitoring program being developed by State Parks. Surveys involved stream reach classification, habitat assessment using the California Salmonid Stream Habitat assessment methodology, and development of abundance and distribution information for aquatic reptiles, amphibians, and fish using both visual observation and electrofishing. The objective of the Wilder Ranch surveys was to provide a baseline inventory of habitat conditions and aquatic vertebrate populations in Park streams and to develop a long term aquatic monitoring program. The monitoring program will be developed to provide Park Managers with information to identify changes in the areal extent and quality of aquatic habitat and changes in the presence or abundance of key aquatic taxa.

Fish Habitat and Fish Population Assessment for San Lorenzo Creek, Alameda County, 1999 – 2002. The Alameda County Public Works Agency has initiated a pilot watershed study for San Lorenzo Creek. As a part of this work Hagar Environmental Science is conducted a fisheries habitat and fish population assessment. The objectives of fisheries investigations were

to develop a comprehensive understanding of the existing condition of fish populations and their habitat in the San Lorenzo Creek watershed; identify major factors that limit the native fish populations; develop aquatic resource objectives and quantifiable indicators that can be used to monitor the health of fish populations over time; identify and prioritize potential sites to enhance, protect and restore habitat for native fish communities; and understand how sediment and flow affect fish habitat. HES trained County staff in habitat assessment methods, provided oversight and supervision for the habitat assessment, developed and implemented a fish sampling program, provided guidance on implementation of a stream temperature monitoring network, and coauthored the final report.

Stream Reach and Aquatic Habitat Inventory in the Guadalupe River, Coyote and Stevens Creeks, Santa Clara County, 1999. The Santa Clara Valley Water District (SCVWD) has been engaged in a multi-party dispute resolution process identified as the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE). The FAHCE has conducted various investigations to identify factors limiting the production of chinook salmon and steelhead inhabiting streams in the SCVWD service area. Hagar Environmental Science teamed with ENTRIX, Inc. to complete the stream reach and aquatic habitat inventory. HES worked with the FAHCE committee and project team to develop project specific field protocols and provided field training in these protocols for survey crews. HES also provided field oversight and survey calibration and verification as part of the project quality assurance and quality control program.

Aquatic Resource Inventory of Oakland Streams, 1998. Hagar Environmental Science conducted aquatic habitat and fishery surveys in 11 streams in the City of Oakland to identify sensitive resources and factors potentially influencing aquatic resource conditions. Stream reaches were surveyed to evaluate instream and watershed conditions. Aquatic habitat conditions were described including habitat features, substrate, cover, suitability for rearing and migration of fish, presence of aquatic invertebrates, bank conditions, riparian vegetation and surrounding land-use. Fish abundance and distribution was assessed by electrofishing. The presence of sensitive resources and factors potentially influencing aquatic life were described as a first step in determining impacts of stormwater on beneficial uses of local creeks.

Coastal Lagoon Ecological Assessment Project, 2004, for Santa Cruz County Resource Conservation District. HES is teamed with Swanson Hydrology and Geomorphology in a collaborative project with NOAA Fisheries, USGS, The City of Santa Cruz, Santa Cruz County, and the California Coastal Conservancy in a pilot study to assess ecological processes in several lagoons associated with coastal streams in central California. HES is conducting fisheries assessments including development of sampling protocols and description of fish community profiles, species presence and relative abundance. We are also using PIT tag technology to assess growth rates and movement of steelhead using lagoons for rearing. This information will be used together with hydrologic, water quality, plankton, and aquatic invertebrate monitoring data to assess potential limiting factors for steelhead and tidewater goby in these lagoons and as a basis for developing management actions to enhance lagoon habitat.

Branciforte Creek Flood Control Channel Maintenance. 2003-present, for City of Santa Cruz. The City of Santa Cruz maintains the U.S. Army Corps of Engineers Branciforte Creek Flood Control Channel Project. Maintenance requires periodic removal of sediment and associated wetland vegetation from the channel to maintain flood conveyance capacity. Recent collections of tidewater goby in the San Lorenzo River lagoon have raised questions concerning the possibility for tidewater goby to be present in the Branciforte Creek FCC project area. Permitting for the project requires NOAA Fisheries to quantify the amount of take of Central California Coast steelhead that may be present in the flood control channel. HES was contracted

to develop steelhead population estimates and monitor temperature conditions in the FCC. Recent collections of tidewater goby in the San Lorenzo River lagoon have raised questions concerning the possibility for tidewater goby to be present in the Branciforte Creek FCC project area. HES recently completed reconnaissance level surveys to determine whether tidewater goby are likely to be present in the FCC.

Mountain Charlie Gulch Steelhead Monitoring Program, 2003-2005 for the City of Santa Cruz Water Department. The City of Santa Cruz Water Department manages lands adjacent to Mountain Charlie Gulch. In the summer of 2002, the Water Department implemented a steelhead passage improvement project in portions of the Creek on City property. In order to assess the effectiveness of passage improvement projects and to develop better information on the status and limiting factors for steelhead/rainbow trout populations in Mountain Charlie Gulch, the City contracted with HES to develop and implement a steelhead monitoring project for portions of Mountain Charlie Gulch on City property. The purpose of the monitoring program is to: describe habitat conditions in the stream and evaluate potential for supporting steelhead; estimate the abundance of steelhead/rainbow trout of different age classes in the study reach and compare abundance upstream and downstream of the passage improvement project; compare visual methods and electrofishing population assessment for accuracy and cost; and, provide recommendation for a standard monitoring protocol that can be repeated by the City in the future to monitor changes in habitat conditions and steelhead populations.

Gateway Pedestrian Bridge, 2004, for John Gilchrist and Associates (CALTRANS Project). A pedestrian bridge crossing the San Lorenzo River in the vicinity of Gateway Mall is proposed. This reach of the San Lorenzo River is known to support threatened Central California Coastal ESU steelhead/rainbow trout (*Oncorhynchus mykiss*). Recently, endangered tidewater goby (*Eucyclogobius newberryi*) have been collected downstream in the San Lorenzo River lagoon. HES conducted surveys in the vicinity of the proposed bridge to assess the potential for presence of *O. mykiss* and *E. newberryi* and prepared a report documenting findings.

Boulder Creek Seasonal Dam Fish Passage Improvement, 2004-present, for Boulder Creek Recreation and Park District. The Boulder Creek Seasonal Dam, located on the San Lorenzo River in Boulder Creek (Santa Cruz County), was typically installed during the summer months to create a recreational swimming area for the community. Historically, the Boulder Creek Recreation and Park District (District) obtained a Streambed Alteration Permit issued by the California Department of Fish and Game (CDFG) to install and operate the seasonal dam. The most recent permit expired in June 2003. To obtain a new permit the District is required to evaluate fish passage at the project site and potentially improve the dam to provide bi-directional year round passage of juvenile and adult steelhead. HES is working with Fall Creek Engineering, Inc. and John Gilchrist & Associates to assist the District in improving seasonal fish passage at the dam and to obtain the state and federal permits that will be required to operate the dam. As part of this work HES has evaluated habitat conditions within the impoundment area to determine the effect of the impoundment on rearing habitat for juvenile steelhead, and evaluated the existing apron in the center of the dam for passage by adult and juvenile steelhead.

Tucker Road Ford Passage Improvement Project. 2005- . for Santa Cruz County RCD. HES participated in a multidisciplinary team of consultants lead by Fall Creek Engineering to analyze fish passage and prepare plans to restore steelhead passage at an at-grade road crossing of the West Branch Soquel Creek. HES conducted a habitat condition and passage analysis at the crossing to document existing passage conditions and anticipate post-project improvements. HES used an analytical computer program

(FishXing, version 2.1, Six Rivers Watershed Interaction Team, November 1999) to evaluate elements of the crossing.

LLNL Arroyo Mocho Passage Improvement Project. 2002-2003. for University of California, Lawrence Livermore National Laboratory. HES participated in a multidisciplinary team of consultants lead by Fall Creek Engineering to analyze fish passage and prepare plans to restore steelhead passage at an at-grade road crossing of the Arroyo Mocho near Livermore. HES conducted a passage analysis at the crossing to document existing passage conditions and anticipate post-project improvements. HES also developed mitigation and monitoring guidelines for fish passage. HES used an analytical computer program (FishXing, version 2.1, Six Rivers Watershed Interaction Team, November 1999) to evaluate elements of the crossing.

Biological Assessment and Fish Relocation for the Lower Codornices Creek Restoration Project, 2004- . Lower Codornices Creek is a small urbanized watershed tributary to San Francisco Bay in the cities of Berkeley and Albany. HES prepared a Biological Assessment to address project elements for the protection and enhancement of a steelhead/rainbow trout population in the creek. The BA was used by NOAA Fisheries to support issuance of a Biological Opinion allowing project implementation. As part of this work, HES re-located steelhead/rainbow trout from the project area to temporary holding locations in other parts of the stream. HES took samples from a few of these fish and has arranged to have them analyzed at UC-Davis for age, growth rates, and life-history/ancestral origin (sea-run steelhead or non-migratory rainbow trout).

Alameda Creek Steelhead Restoration, 1999 – 2004. Working with the Alameda Creek Fisheries Restoration Workgroup, Hagar Environmental Science teamed with AMS to complete an assessment of the feasibility of restoring a steelhead trout population in the Alameda Creek watershed. The Workgroup includes members representing County flood control and water districts, resource agencies, municipalities, and citizens groups. The assessment documented historical use of the watershed by steelhead, evaluated current habitat conditions and fish populations, and considered existing beneficial uses of the watershed for water supply, flood control, and recreation and potential conflicts between these uses and restoration of steelhead. The assessment provided a set of findings and recommended nine essential actions necessary for steelhead to complete their life cycle in the watershed, five additional restoration actions to increase the likelihood of successful restoration, and seven follow-on technical investigations to reduce technical uncertainties. The assessment met with approval from all members of the Workgroup and the Workgroup is proceeding with implementation of the recommendations. The primary recommendations involve passage improvement at several sites, modification of recreational fisheries management, and evaluation of alternative water delivery scenarios to enhance migration conditions for steelhead while meeting water supply and quality needs.

Hosler Fish Relocation, 2000. Hagar Environmental Science completed fish relocation for steelhead/rainbow trout in Soquel Creek (Santa Cruz County) as part of a streambank stabilization project for a private property owner.

Wilder Ranch State Park Fish Relocation, 2000. Hagar Environmental Science completed fish relocation for steelhead/rainbow trout in Wilder Creek (Santa Cruz County) as part of a dam removal and streambank stabilization project in Wilder Ranch State Park sponsored by California State Parks.

Mill Creek Fish Relocation, 2000. Hagar Environmental Science completed fish relocation for steelhead/rainbow trout in Mill Creek (Pilarcitos watershed, San Mateo County) as part of a dam removal and streambank stabilization project in Burleigh Murray Ranch State Park sponsored by California State Parks. Tissue samples were collected from steelhead/rainbow trout for genetic analyses by the National Marine Fisheries Service.

Arroyo Leon Fish Passage Enhancement Project, 2000-2004. HES participated on a multi-disciplinary team managed by the San Mateo County Resource Conservation District and Pilarcitos Creek Advisory Committee to evaluate fish passage and steelhead rearing issues at two seasonal dams on Arroyo Leon. The team developed preliminary engineering designs and specifications for improvements at these dams; identified potential environmental impacts and permitting conditions associated with the project alternatives; and incorporated mitigation measures and protective provisions developed in consultation with the National Marine Fisheries Service and California Department of Fish and Game. HES conducted site surveys and evaluated design alternatives for their potential effects on steelhead populations in Arroyo Leon.

Salinas River Flood Maintenance Program, 2000. Hagar Environmental Science provided review and assisted with establishment of guidelines for implementation of 2000 River Maintenance Program involving removal of vegetation and sandbars from the Salinas River channel. HES also provided technical assistance to landowners by completing channel marking and mapping and preparation of permit application packages submitted to National Marine Fisheries Service.

Potrero Road Tide Gate Configuration and Performance Study, 2000. As part of the Performance Study conducted by Schaaf & Wheeler Consulting Civil Engineers for MCWRA, HES evaluated fish passage issues at the Potrero Road tide gates, Old Salinas River channel and Salinas River Lagoon. HES provided relevant background information on steelhead migration and recommended measures to enhance existing conditions.

Old Salinas River Channel Dredging, 2001. Hagar Environmental Science was called in to relocate all fish, particularly steelhead/rainbow trout, from the Old Salinas River Channel prior to dredging and subsequent deepening of the channel. The dredging is part of on-going maintenance work conducted by the Monterey County Water Resources Agency, Salinas, California

Apanolio Creek Fish Passage, 2000-2002. As part of a restoration project team, Hagar Environmental Science evaluated conditions in Apanolio Creek for steelhead/rainbow trout including an assessment of instream habitat conditions and presence of structural barriers to steelhead migration at two small diversion dams and a culvert. The restoration project is sponsored by the San Mateo County Resource Conservation District. HES worked with the restoration project engineering contractor to assess biological conditions and develop, screen, and select alternative restoration plans for each passage barrier.

Santa Clara Valley Water District Stream Maintenance Program EIR and Section 7 Consultation, 2000-2002. The Stream Maintenance Program is designed to meet the District's flood protection and water supply mandates. The District is pursuing multi-year environmental permitting to conduct these activities. Hagar Environmental Science developed background information and impact analyses on steelhead and chinook salmon in Santa Clara Valley streams as part of this work. HES also developed a mitigation program and best management practices for the bank protection and repair component of the stream maintenance program. HES was also involved with coordination and consultation on steelhead and chinook salmon with National

Marine Fisheries Service as part of Section 7 Endangered Species Act (ESA) compliance on the multi-year permit for stream maintenance activities.

Long-Term Contingency Water Supply Plan for the Monterey Peninsula, 1999 –2000. The California Public Utilities Commission developed a long-term water supply contingency plan (Plan B) as an alternative to a proposed dam on the Carmel River. As part of the Plan B consultant team, Hagar Environmental Science evaluated the Carmel River steelhead resource and effects of current project operations on Carmel River aquatic resources and worked with the team to develop specific objectives and criteria for evaluating alternative water supply components, identify and analyze potential water supply components, and develop a strategy for meeting water supply needs as an alternative to the proposed dam.

Guadalupe River Fish Ladder and Fish Screen at the Alamitos Drop Structure, 1998. for Santa Clara Valley Water District. HES completed permit acquisition including U.S. Army Corps of Engineers 404 Nationwide Permit pre-construction notification, California Department of Fish and Game streambed alteration agreement, and Regional Water Quality Control Board water quality certification.

Guadalupe River Fish Barrier Removal Project. 1998. for Santa Clara Valley Water District. HES completed permit acquisition including U.S. Army Corps of Engineers 404 Nationwide Permit pre-construction notification, California Department of Fish and Game streambed alteration agreement, and Regional Water Quality Control Board water quality certification, and CEQA categorical exemption.

Hillsdale Bridge Removal Project, 1999-2000. Completed permit acquisition including U.S. Army Corps of Engineers 404 Nationwide Permit pre-construction notification, California Department of Fish and Game streambed alteration agreement, and Regional Water Quality Control Board water quality certification, and CEQA Initial Study/Negative Declaration.

Synthesis and Analysis of Information Collected on the Fishery Resources and Habitat Conditions of the Lower Santa Ynez River, 1996-1998. Hagar Environmental Science worked with Hanson Environmental, Inc. to compile and synthesize hydrology, water quality, habitat, and fishery resource data collected over a four year period in the Santa Ynez River and Santa Ynez River lagoon. The purpose of this work was to summarize a wide range of available data, determine what conclusions could be supported by the information available, and make recommendations for the direction of ongoing studies conducted by the Santa Ynez River Technical Advisory Committee. Hydrologic conditions including precipitation, reservoir storage and elevation, spill, controlled releases, river flows, tributary flows, and breaching of the Santa Ynez River lagoon were described and summarized. Water temperature and dissolved oxygen data were evaluated to characterize seasonal trends and patterns, inter-annual variations, longitudinal gradients, diel fluctuations, analysis of potentially stressful water temperatures, evaluation of potential cold water refuges. The relationship of water quality variables to river flows was also evaluated. Habitat characteristics including depth, substrate, areal extent of habitat type units, riparian vegetation, instream vegetation, substrate, passage barriers, and other habitat features in the mainstem Santa Ynez River and its tributaries were summarized. Fishery resources were characterized in terms of species presence, longitudinal distribution, seasonal distribution and abundance, upstream and downstream migration, and rainbow trout/steelhead stock of origin. Water quality, habitat, and flow conditions were evaluated to determine observable effects on fishery resource condition, identify potentially limiting factors, and recommend appropriate modifications to the long-term study plan.

South Delta Barrier Project, 1995. HES worked with a team of biologists to evaluate monitoring methods for the California Department of Water Resources (CDWR) South Delta Barrier Project. Monitoring data collected by CDWR and CDFG were analyzed to evaluate the relationship between placement of barriers in South Delta channels and direct loss of fish at the Central Valley Project and State Water Project Delta export pumping facilities. Experimental design and study methods were critically reviewed and evaluated. Several years of monitoring data were evaluated to determine potential impact of temporary barriers on fish salvage at the export pumps. Statistical analyses were performed using fish salvage and pumping data during periods with and without barriers in Middle River and Old River. Fish species of particular interest were winter-run chinook salmon, delta smelt, longfin smelt, striped bass, Sacramento splittail, and fall run chinook salmon. Problems with the study plan were identified and recommendations for study modifications were presented.

Sausal Creek Steelhead/Rainbow Trout Studies. 1995-1998. With Hanson Environmental for Kendall-Jackson Winery, Ltd. Conducted field investigation to determine flow requirements, summer habitat conditions, and population inventories for steelhead in this Russian River tributary. Assisted in preparation of testimony for water rights proceeding.

Status of Steelhead Populations in California, 1996. Hagar Environmental Science contributed to a special report for the Association of California Water Agencies (ACWA) describing the status of steelhead populations in California in regards to the Endangered Species Act. The report was submitted on behalf of ACWA to the National Marine Fisheries Service to provide information for their determination as to whether to list steelhead as threatened or endangered under the federal Endangered Species Act.

Sacramento River Basin Chinook Salmon Productivity Model 1985-1988. For the National Marine Fisheries Service Jeff Hagar analyzed population and life history data for chinook salmon and developed input data and assumptions for Sacramento River Basin Chinook Salmon Productivity Model. This project included evaluation of ocean harvest and natural mortality rates; factors influencing upstream migration including passage at dams; factors influencing spawning, hatching and emergence success; factors influencing rearing and migration success. Mr. Hagar worked with a modeler to develop model structure and incorporate existing measured population parameters and relevant environmental variables and developed conceptual relationships between environmental variables and chinook salmon productivity.

Lower Mokelumne River Project FERC Proceeding, 1994. Provided technical support to EBMUD in its proceeding to resolve FERC proposed license modifications to operations of the Mokelumne River Project. Completed critical review of FERC FEIS and comparative analysis of FERC and EBMUD alternatives using analytical tools developed under the direction of Jeff Hagar. Participated in technical meetings with FERC staff at Oak Ridge National Lab to resolve technical issues related to management of river flows and resulting habitat conditions for chinook salmon and steelhead populations in the Lower Mokelumne River

Lower Mokelumne River Management Plan, 1990 - 1994. As a consultant, Jeff Hagar served as project manager for the development of the Lower Mokelumne River Management Plan for EBMUD Updated Water Supply Management Program. He supervised preparation of technical documents including EIS/EIR sections and technical appendices. He contributed to studies evaluating chinook salmon and steelhead in the Mokelumne River, including estimation of spawning escapements, run-timing, factors influencing run size, timing and enumeration of smolt emigration, factors influencing rearing success and smolt emigration, and mortality factors. Mr. Hagar worked with a team of hydrologists, biologists, and engineers to develop and evaluate management strategies for chinook salmon and steelhead in the Lower Mokelumne River,

California using an integrated application of an instream temperature model and reservoir model to a reservoir/tailwater system. Mr. Hagar served as a member of the Mokelumne River Technical Advisory Committee to establish a long term management plan for the Mokelumne River and provided technical information and analysis to negotiations between EBMUD and California Department of Fish and Game to determine management of flows in the Mokelumne River.

Entrainment of Fish at Eastern Sierra Hydroelectric Facilities, 1988. As part of FERC license review, Jeff Hagar developed and implemented special studies and conducted analyses to document the magnitude and significance of entrainment of trout at representative hydroelectric facilities in the Eastern Sierra Nevada.

Rincon Consultants, Inc.

2511 Garden Road, Suite C-250
Monterey, California 93940

831 333 0310

info@rinconconsultants.com
www.rinconconsultants.com

October 29, 2021
Project Number 20-09468

Carly Blanchard, Environmental Planner
San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, California 95006
Via email: cblanchard@slvwd.com

Subject: **Revised Amendment Request No. 1 for the San Lorenzo Valley Water District Conjunctive Use Plan for the San Lorenzo River Watershed Environmental Review**

Dear Ms. Blanchard:

The purpose of this letter is to request a scope and budget amendment to the December 8, 2020, contract scope of work for the San Lorenzo Valley Water District (SLVWD) Conjunctive Use Plan for the San Lorenzo River Watershed environmental review. This amendment is intended to address additional efforts needed to prepare a Focused EIR for the project in response to public comment letters submitted on the Draft IS-MND.

Additional Scope of Work

Rincon will prepare a Focused EIR for the Conjunctive Use Plan. The Focused EIR will, to the extent practicable, rely on existing environmental documentation and technical studies prepared for the plan. Our scope of work for preparation of the Focused EIR will include the following tasks.

Task 1: EIR Kickoff and Notice of Preparation

Task 1.1: EIR Kickoff Meeting

Rincon will prepare for and participate in a kickoff meeting with District staff, which is assumed to occur via video conference call. This meeting will allow an opportunity to thoroughly discuss potential changes to the project description, scope of environmental evaluation, and approach to addressing community concerns regarding the project that have surfaced to date.

Task 1.2: Initial Study Revisions

This task includes revisions to the existing Initial Study, for attachment to the Notice of Preparation (NOP) to be prepared under Task 1.3. The *Biological Resources* and *Hydrology and Water Quality* sections will be condensed and will refer to the Focused EIR for detailed analysis. Other sections will be bolstered, where appropriate, to address concerns raised during the public comment period for the IS-MND. This scope of work does not include additional field work or updating modeling for air quality, greenhouse gas, noise, or transportation. Rincon assumes up to two rounds of review of the revised Initial Study.

Task 1.3: Notice of Preparation

Rincon will prepare a draft NOP of a Draft EIR for District staff to review. The NOP alerts responsible agencies and the public about the upcoming CEQA document, so they can contribute their input on the scope of the study. The NOP will consist of a one- to two-page notice with a brief project description, a map of the plan area, and instructions for submitting comments. The NOP will also include a statement of project objectives and a general description of anticipated project alternatives and alternative screening criteria, to be developed in consultation with District staff. The Initial Study prepared under Task 1.2 will be attached and circulated with the NOP. Rincon assumes one round of review for the NOP. Rincon also assumes the District will file the NOP and alert applicable responsible agencies and the public.

Task 1.4: Public Scoping Meeting

Rincon staff will prepare for and conduct a public scoping meeting for the project, either virtually or in person, depending on local COVID-19 restrictions in place at the time. Rincon will prepare PowerPoint slides and present at the meeting. It is assumed the District will handle noticing requirements and secure a venue, if held in person. Following the meeting, Rincon will prepare either a list or memorandum summarizing concerns and comments received at the scoping meeting.

Task 2: Project Description

The Project Description will provide a detailed summary of the proposed project including text, tables, and graphics to facilitate a thorough understanding of the proposed CUP scenarios. Based on comments received on the Draft IS-MND and preliminary discussions with District staff, we assume the CUP scenarios may be modified from the description in the IS-MND and/or that other District operational changes (e.g., transfers to Scotts Valley and/or water rights changes) may be incorporated into the project. However, the project will not include any scenarios requiring major physical changes, such as aquifer storage and recovery. This task includes time to coordinate with the District on defining these details, including email correspondence and up to three one-hour meetings, as well as time to address up to two rounds of comments from District staff. For the purposes of this scope of work, we assume that the project description will be stable once accepted by District staff, prior to initiation of the environmental analysis. We also reserve the right to revisit the scope of work presented herein, if the changes to the project description necessitate additional or modified analysis.

Task 3: Modeling Consultation and Peer Review

Rincon understands that Mike Podlech, the District's independent fisheries consultant, will conduct a salmonid model and prepare a technical memorandum to support the Focused EIR ("salmonid tech memo"). It is anticipated that this memorandum will include responses to comments provided on the Draft IS-MND relating to potentially significant impacts to fish and aquatic resources. Mike Podlech' s work effort will be conducted under separate contract with the District.

Under this task, Stillwater Sciences will provide input on the modeling approach, model development, and interpretation of the modeling results, and complete a formal peer review of the model results and memorandum, including the responses to comments. This includes the following subtasks.

Task 3.1: Coordination and Input on Modeling Approach

Stillwater will provide coordination and input to help guide the approach and development of a quantitative model to evaluate salmonid impacts. Stillwater will meet with the State Water Resources Control Board (Water Board) to gain an understanding of the Water Board's requirements and informational needs for the model as it pertains to the Water Board's future actions relating to the Conjunctive Use Plan. Stillwater's support may include input on model framework, assumptions, input data requirements and sources, and desired outcomes. Stillwater will provide input to the model's developer, Mike Podlech, that addresses the model's consistency with the requirements and informational needs of the Water Board as understood by Stillwater.

Assumptions:

- Stillwater staff, including one or more senior fisheries biologists and/or quantitative ecologists familiar with quantitative salmonid modeling, will provide up to 24 hours of review and input on the modeling approach and model development.
- The model developed by Mike Podlech and reviewed by Stillwater is a salmonid model and does not include non-salmonid species.
- A Stillwater senior fisheries biologist will participate in up to five 2-hour meetings with Mike Podlech, SLVWD, and/or the Water Board to discuss input regarding modeling approach, model development, and the Water Board's requirements and informational needs for the model.
- Meetings and coordination will occur via email, phone, or video conference.
- The scope and estimated cost for this task assumes Stillwater can gain adequate understanding of the Water Board's requirements and informational needs for the model as it pertains to the Water Board's future actions relating to the Conjunctive Use Plan and provide appropriate input on the modeling approach and development within the level of effort (staff hours) specified above. If additional effort is required, an amendment to this scope and cost estimate will be needed.

Task 3.2: Review Preliminary Results/Analysis

Stillwater will review the preliminary model results and provide input regarding interpretation of the results, including sensitivity of the results to model inputs, parameters, and assumptions.

Assumptions:

- Review will occur approximately half-way through the modeling effort, or as otherwise agreed with Mike Podlech and SLVWD.
- Stillwater staff, including one or more senior fisheries biologists and/or quantitative ecologists, will provide up to 18 hours of technical review and input on preliminary model results and model sensitivity.
- Input will be provided via email, phone, or video conference.

Task 3.3: Formal Peer Review

Stillwater will review the model results and memorandum and provide a technical memorandum summarizing the review. The memo will address model performance and results, including discussion of its potential utility for EIR impact analysis and related decision-making by the CEQA lead agency and

other relevant trustee and responsible agencies (e.g., SLVWD, the Water Board, and the California Department of Fish and Wildlife).

Recommendations for improvement of the model, if any, will be described. The peer review will also consider the responses to comments on the Draft IS-MND relating to potentially significant impacts to fish and aquatic resources.

Assumptions:

- Stillwater will provide a draft memorandum for internal team review (i.e., Mike Podlech, Rincon, and/or SLVWD), and will address comments on the draft memo to produce a final memo.
- Comments on the draft memo will be provided electronically in MS Word "track changes" and consolidated into a single set of comments prior to submittal to Stillwater.
- The draft and final memos will be provided to Rincon electronically in MS Word, in Stillwater's standard Technical Memorandum format.
- This task includes up to 90 hours of effort by Stillwater staff, including one or more senior fisheries biologists and/or quantitative ecologists.
- Currently there is considerable uncertainty regarding the decision-making process and criteria that will be used by the CEQA lead agency and other relevant trustee and responsible agencies and how each agency will use the salmonid model to support their decision-making. The scope and estimated cost for this task assumes the applicable agency decision-making processes and criteria will be made clear to Stillwater prior to initiation of this task and that the scope and level of effort (staff hours) specified above will be sufficient to complete the task accordingly. If, upon clarification of the applicable decision-making processes and criteria, it becomes apparent that additional effort is required, an amendment to this scope and cost estimate will be needed.
- The scope and estimated cost for this task assumes the model will be used for purposes of an EIR and not for federal approval or permitting (i.e., no federal nexus). It is therefore assumed that no federal agencies will review or use the model for decision-making.
- The level of effort and estimated cost for this task does not include modeling or other quantitative analysis by Stillwater.

Task 3.4: Review of Revisions

Stillwater will review relevant portions of the model, model documentation, and model results to evaluate and verify revisions made in response to Stillwater's peer review conducted under Task 3.3. Stillwater will also review Mike Podlech's responses to reviewer comments on the model, model documentation, and model results. Stillwater will coordinate directly with Mike Podlech to provide comments or corrections, as needed.

Assumptions:

- Coordination between Stillwater and Mike Podlech will be via email, phone, or video conference. No documents or other written deliverables will be provided.
- This task includes up to 14 hours of review and coordination by Stillwater staff, including one or more senior fisheries biologists and/or quantitative ecologists.

Task 4: Administrative Draft Focused EIR

The Administrative Draft Focused EIR will include the following key sections.

Executive Summary

The Focused EIR will contain a summary of the proposed Conjunctive Use Plan and associated environmental consequences. This information will be presented in tabular format to simplify review by decision-makers and the public. This section will identify each potential environmental impact, the level of significance of each impact, mitigation measures required and the residual impacts after mitigation. The summary will also note areas of known controversy and an assessment of the alternatives reviewed and their associated impacts. The summary will also include identification of the environmentally superior alternative and the rationale for its selection as such.

Introduction and Environmental Setting

The Introduction will describe the purpose and legal authority of the study, the project objectives, and will provide a discussion of lead, responsible and trustee agencies, if any. The Environmental Setting will provide a general description of the geographic character of the project vicinity at the time of NOP distribution. The setting will be based on existing data sources, including the City's General Plan, LCP, and ordinances, existing and applicable Habitat Conservation Plans, and other relevant environmental documents prepared during recent years, supplemented with information from existing technical studies. Per comments received on the Draft IS-MND, the geographic scope of the study may be broadened, and the larger area will be described in the setting accordingly.

Environmental Impact Analysis

The main body of the Focused EIR will consist of the assessment of potential environmental impacts of the proposed CUP. Based upon the analysis in the Draft IS-MND, the EIR will focus on two technical issue areas: *Biological Resources* and *Hydrology and* Water Quality. If, during the analysis, it is determined that any additional resource areas warrant consideration in a full technical chapter, a scope amendment will be required. Our approach to these two issue areas is described below.

Biological Resources

The Biological Resources section of the Draft IS-MND was based on the Biological Technical Memorandum for the San Lorenzo Valley Water District Conjunctive Use Plan prepared by Rincon Consultants, Inc. (2020) and the Fisheries Resource Considerations for the San Lorenzo River Watershed Conjunctive Use Plan prepared by Mike Podlech, Fisheries Biologist (2019). For the EIR, Rincon will request an updated search of the California Natural Diversity Database (CNDDB) and perform a field reconnaissance, and update the Biological Technical Memorandum as needed to account for existing conditions at the time the NOP for the Draft EIR is issued. The EIR will utilize this updated report as well as the salmonid tech memo to be prepared by Mike Podlech and peer reviewed by Stillwater, to prepare an EIR section that analyzes impacts to biological resources. The section will include a more robust setting and regulatory setting section and will assess all CEQA Appendix G threshold questions related to biological resources. If the geographic scope for the analysis is expended, this scope of work assumes that there would be no physical impacts to this larger area, such that it can be described in the setting and qualitatively discussed utilizing existing information. Rincon further assumes that the salmonid tech memo will sufficiently address comments provided on the Draft IS-MND, including to downstream fisheries, and that

this information will be summarized in the EIR. This scope of work does not include protocol surveys or a formal jurisdictional delineation.

Hydrology and Water Quality

This section of the EIR will utilize information in the Draft IS-MND, the *Water Availability Assessment for San Lorenzo River Watershed Conjunctive Use Plan* (Exponent 2019), the salmonid tech memo, input from the District's legal counsel regarding water rights changes, and other information from the District and neighboring water agencies. The analysis will describe how implementation of CUP would modify both surface water and groundwater levels within the geographic analysis area, including the potential to decrease downstream flows. The analysis will consider the potential to decrease groundwater supplies, interfere with groundwater recharge, or substantially alter drainage patterns. However, detailed consideration of water rights is not anticipated to be included.

Cumulative Analysis

The Focused EIR will include a cumulative analysis that considers additional cumulative projects, as noted in comment letters received on the Draft IS-MND. This includes: the City of Santa Cruz Water Rights Project, the draft Santa Margarita Groundwater Sustainability Plan, the City of Santa Cruz Operations and Maintenance Habitat Conservation Plan, the Administrative Draft Anadromous Salmonid Habitat Conservation Plan, the City of Santa Cruz Graham Hill Water Treatment Plant Facilities Improvement Project, the City of Santa Cruz Newell Creek Pipeline Rehabilitation Plan, and other ongoing water diversions by the multitude of private diverters in the watershed. It is anticipated that this section will consider all CEQA issue areas.

Alternatives

The Alternatives section will be prepared in accordance with the requirements of the CEQA Guidelines Section 15126.6. The purpose of this section will be to promote informed decision-making and to evaluate a reasonable range of project alternatives, with an emphasis on alternatives capable of reducing significant impacts identified in the environmental analysis. This section will identify the "environmentally superior alternative." If the No Project Alternative is determined to be environmentally superior, the EIR will identify the environmentally superior alternative among the remaining scenarios. Rincon assumes two alternatives will be presented to reduce potential impacts to biological resources and/or hydrology, selected in consultation with District staff and legal counsel.

Other CEQA-Required Sections

Also included in the Focused EIR will be other sections required by CEQA, such as table of contents, references, persons contacted, list of preparers, Appendix F energy analysis, summary of potential growth-inducing, and significant irreversible effects.

Task 5: Draft Focused EIR

After receiving consolidated comments from the District and legal counsel, Rincon will prepare a "Screencheck" Draft EIR showing revisions in track changes. Upon receiving clearance from the District on the Screencheck Draft EIR, Rincon will accept revisions and provide a clean digital (pdf) version of the Draft EIR suitable for posting on the District's website. Rincon will prepare all required notices for the Focused EIR, including the Notice of Completion, and will deliver the NOC to the County Clerk and State

Clearinghouse via the CEQAsubmit website. We assume the District will produce any required hard copies, distribute the Draft EIR to the mailing list, and post a notice in the local newspaper.

Task 6: Final Focused EIR

The final stages of the Focused EIR process involve responding to comments, preparing the Administrative Final Focused EIR and Final Focused EIR, and holding public hearings and final editorial tasks. At this point, the CUP and Final Focused EIR will be brought together for final public and decision-maker scrutiny to render official decisions regarding the proposed project. Through this process, final changes and policy decisions concerning the project are made. Our work effort regarding this task is delineated below.

Task 6.1: Response to Comments/Administrative Final Focused EIR

Rincon staff, in coordination with District staff, its consultant, and legal counsel, will respond to public and agency review comments on the Draft EIR in accordance with CEQA Guidelines Section 15088. This scope of work assumes that one lengthy (over 20 pages) and substantive letter will be submitted, and that up to five additional short (under two pages) and non-substantive letters will be submitted, which can be adequately responded to in a maximum of 80 professional staff hours. The actual level of effort required to respond will depend on the length, detail, and sophistication of the comments, in addition to the number of letters received. We reserve the right to reevaluate the effort level and request a scope amendment upon close of the public comment period.

The Final EIR will consist of the body of the Draft EIR, as revised based on comments received, and an additional section including all comments and responses. We assume one round of review by District staff and legal counsel on the Response to Comments and Administrative Final Focused EIR.

Task 6.2: Mitigation Monitoring and Reporting Program (MMRP)

Concurrent with delivery of the Final Focused EIR, and in accordance with Public Resources Code Section 21081.6, Rincon will prepare an MMRP, consistent with CEQA Guidelines requirements. The MMRP will include a table that lists each mitigation measure, the agency responsible for each measure, when monitoring must occur, the frequency of monitoring, and criteria to determine compliance with the condition. For some issues that may depend on the details of future development design, mitigation measures will identify specific performance standards to be achieved, typical approaches to meeting the applicable criteria, and the point in time when documentation must be provided to and approved by the District. Where necessary, the MMRP will include post-construction monitoring to confirm the effectiveness of the proposed measures. The MMRP will include mitigation measures identified in the Focused EIR and its accompanying Initial Study. We assume one round of review of District staff comments on the MMRP.

Task 6.3: Final Focused EIR and Notice of Determination

Rincon will respond to one round of District staff and legal counsel comments on the Administrative Final Focused EIR. Rincon will deliver a digital PDF copy of the Final Focused EIR to the District. Upon certification of the Final EIR and assuming project approval, Rincon will prepare a Notice of Determination (NOD) and will file the NOD with the County Clerk's office and State Clearinghouse. We assume the District will be responsible for payment of the County Clerk and CDFW filing fees.

Task 7: CEQA Findings

Rincon will prepare the CEQA findings for the project in accordance with CEQA Guidelines §15091. The findings will include information related to whether those significant impacts identified in the EIR will be reduced to below a level of significance by mitigation measures identified in the document. If a significant and unavoidable impact is identified in the EIR, it is anticipated that the District will prepare the Statement of Overriding Considerations in consultation with legal counsel. Rincon will provide an administrative draft of the CEQA findings for District and legal review and comment, and then incorporate comments into a final document.

Task 8: Administrative Record

Rincon will maintain the Administrative Record for this project. Rincon will develop a work plan at the outset that instructs internal staff on the way in which the Administrative Record will be developed and maintained. As sources are referenced in each section of the report, they will be logged in an index containing a hyper-linked cross-reference to the individual source files, copies of which are maintained on company servers. These include, for example, guidance documents, websites, correspondence, and technical memoranda. The citations and source files will be audited during our technical review to ensure the record is complete and comprehensive. Upon completion, the index and the source files will be supplied on a thumb drive.

Task 9: Project Management and Coordination

Task 9.1: Project Management

Rincon's Project Manager and her support staff will be responsible for general day-to-day management tasks, including team management, client coordination and communication, and monthly invoicing.

Task 9.2: Meetings and Public Hearings

During EIR preparation, key Rincon staff will attend up to two virtual meetings with staff (two hours in length each). These meetings would be scheduled at the discretion of the District but are anticipated to occur upon receipt of District/legal comments on the Administrative Draft Focused EIR and upon receipt of public comments on the Draft Focused EIR. This is in addition to the kickoff meeting and the three one-hour meetings assumed during preparation of the project description. Rincon's Project Manager and/or Principal-in-Charge will also attend and present the conclusions of the Focused EIR at one virtual District Board meeting.

Assumptions

Rincon assumes the following:

- One round of consolidated comments will be provided on each deliverable
- The Focused EIR will contain two technical chapters (*Biological Resources* and *Hydrology and Water Quality)*; any additional technical chapters will require an amendment
- No project disturbance will occur within a stream channel and no permits from CDFW or RWQCB will be required
- The Focused EIR will rely on AB 52 consultation already completed by the District for the IS-MND

- In addition to the no project alternative, two alternatives will be presented to reduce potential impacts to biological resources and/or hydrology
- One lengthy (over 20 pages) and substantive letter will be submitted, and that up to five additional short (under two pages) and non-substantive letters
- The District will be responsible for payment of the County Clerk and CDFW filing fees
- Rincon will not provide hard copies of any deliverables

Estimated Timeline

Rincon has an excellent reputation for adhering to schedules and meeting milestones. Based on our project understanding and the analysis required Rincon proposes to adhere to a schedule that allows for completion of the environmental review process in approximately nine to 12 months depending on the time required to prepare and peer review the salmonid tech memo, timing of our receipt of a complete and stable project description, District review times, and number and complexity of public comments.

1. Kickoff. Rincon will schedule a kickoff meeting within one week of notice to proceed.
2. Project Description. Rincon will coordinate with the District and prepare a draft Project Description within four weeks of the kickoff meeting (concurrent with IS and NOP).
3. IS-NOP. Rincon will submit the revised IS and NOP within four weeks of District acceptance of the Project Description.
4. Administrative Draft Focused EIR. Rincon will submit the Administrative Draft EIR within six weeks of end of the 30-day public scoping period, or three weeks after receipt of the salmonid tech memo (revised per peer review comments), whichever is later.
5. Draft Focused EIR. The Screencheck Draft Focused EIR will be completed within three weeks of receipt of comments on the Administrative Draft Focused EIR. The Draft Focused EIR will be prepared within two weeks of receipt of comments on the Screencheck Draft Focused EIR.
6. Final Focused EIR. The Administrative Draft Final EIR/Responses to Comments will be completed within three to six weeks after receipt of all written comments received during the review period, depending on the number and complexity of public comments received. We will submit the Final EIR/Responses to Comments and MMRP within two weeks of receipt of comments on the draft responses.

Meetings and public hearings will be scheduled as needed during the process.

Cost

The scope of work outlined herein will be completed on a time and materials basis, in accordance with our 2021 fee schedule, not to exceed **$145,449**. This would increase the total budget for our services from $77,530 to **$222,979**. A breakdown of cost by task is provided at the end of this proposal. Costs have been allocated to tasks based upon Rincon's proposed approach. Rincon may re-allocate costs among tasks and/or direct costs as circumstances warrant so long as the adjustments maintain the total price within its authorized amount.

The terms of this amendment request are fully negotiable to meet the needs of SLVWD. Please do not hesitate to contact us if you have questions about this proposal or need additional information.

Sincerely,
Rincon Consultants, Inc.

Megan Jones, MPP
Principal/Project Manager

Phone: 831-920-5424
Email: mjones@rinconconsultants.com

Contact for Clarification

Jennifer Haddow, PhD
Principal Environmental Scientist

Phone: 831-440-3899 x44
Email: jhaddow@rinconconsultants.com

Authorized to contractually obligate and negotiate on behalf of Rincon Consultants, Inc.

Conjunctive Use Plan
Focused EIR Cost Estimate

	Rate	Hours	Labor Budget	Direct Expenses	Total Budget
Task 1: EIR Kickoff and Notice of Preparation		75.50	13,449.00	141.00	13,590.00
Task 1.1: EIR Kickoff Meeting		10.00	2,114.00	0.00	2,114.00
Principal II	270.00	2.00	540.00		
Principal I	250.00	2.00	500.00		
Senior Planner I	179.00	6.00	1,074.00		
Task 1.2: Initial Study Revisions		32.00	5,240.00	0.00	5,240.00
Principal II	270.00	2.00	540.00		
Principal I	250.00	4.00	1,000.00		
Senior Planner I	179.00	6.00	1,074.00		
GIS/CADD Specialist II	135.00	2.00	270.00		
Planner II	135.00	16.00	2,160.00		
Production Specialist I	98.00	2.00	196.00		
Task 1.3: Notice of Preparation		18.00	3,106.00	0.00	3,106.00
Principal II	270.00	2.00	540.00		
Principal I	250.00	2.00	500.00		
Senior Planner I	179.00	4.00	716.00		
GIS/CADD Specialist II	135.00	2.00	270.00		
Planner II	135.00	8.00	1,080.00		
Task 1.4: Public Scoping Meeting		15.50	2,989.00	141.00	3,130.00
Principal II	270.00	0.50	135.00		
Principal I	250.00	6.00	1,500.00		
Senior Planner I	179.00	4.00	716.00		
Planner II	135.00	4.00	540.00		
Production Specialist I	98.00	1.00	98.00		
Travel - Mileage				56.00	
Vehicle Day Rate				85.00	
Task 2: Project Description		46.00	8,171.00	0.00	8,171.00
Principal II	270.00	5.00	1,350.00		
Principal I	250.00	8.00	2,000.00		
Senior Planner I	179.00	10.00	1,790.00		
GIS/CADD Specialist II	135.00	5.00	675.00		
Planner II	135.00	16.00	2,160.00		
Production Specialist I	98.00	2.00	196.00		
Task 3: Modeling Consultation and Peer Review		17.00	3,455.00	35,535.00	38,990.00
Task 3.1: Coordination and Input on Modeling Approach		3.00	569.00	7,475.00	8,044.00
Senior Biologist II	195.00	2.00	390.00		
Senior Planner I	179.00	1.00	179.00		
Biology Subconsultant				7,475.00	
Task 3.2: Review Preliminary Results/Analysis		0.00	0.00	4,025.00	4,025.00
Senior Biologist II	195.00	0.00	0.00		

Senior Planner I	179.00	0.00	0.00		
Biology Subconsultant				4,025.00	
Task 3.3: Formal Peer Review		14.00	2,886.00	19,550.00	22,436.00
Principal I	250.00	4.00	1,000.00		
Senior Biologist II	195.00	6.00	1,170.00		
Senior Planner I	179.00	4.00	716.00		
Biology Subconsultant				19,550.00	
Task 3.4: Review of Revisions		0.00	0.00	4,485.00	4,485.00
Senior Biologist II	195.00	0.00	0.00		
Senior Planner I	179.00	0.00	0.00		
Biology Subconsultant				4,485.00	
Task 4: Administrative Draft Focused EIR		191.50	33,208.00	755.00	33,963.00
Executive Summary		6.50	1,104.00	0.00	1,104.00
Principal II	270.00	0.50	135.00		
Principal I	250.00	1.00	250.00		
Senior Planner I	179.00	1.00	179.00		
Planner II	135.00	4.00	540.00		
Introduction and Environmental Setting		14.50	2,191.00	0.00	2,191.00
Principal II	270.00	0.50	135.00		
Principal I	250.00	1.00	250.00		
Senior Planner I	179.00	2.00	358.00		
GIS/CADD Specialist II	135.00	2.00	270.00		
Planner II	135.00	8.00	1,080.00		
Production Specialist I	98.00	1.00	98.00		
Biological Resources		62.00	11,510.00	755.00	12,265.00
Principal II	270.00	7.00	1,890.00		
Principal I	250.00	3.00	750.00		
Senior Biologist II	195.00	9.00	1,755.00		
Senior Biologist I	179.00	10.00	1,790.00		
Biologist IV	164.00	30.00	4,920.00		
GIS/CADD Specialist II	135.00	3.00	405.00		
Record Search				690.00	
Travel - Mileage				65.00	
Vehicle Day Rate				0.00	
Hydrology and Water Quality		29.00	5,250.00	0.00	5,250.00
Principal II	270.00	2.00	540.00		
Principal I	250.00	3.00	750.00		
Senior Planner II	195.00	12.00	2,340.00		
GIS/CADD Specialist II	135.00	2.00	270.00		
Planner II	135.00	10.00	1,350.00		
Cumulative Analysis		20.00	3,532.00	0.00	3,532.00
Principal II	270.00	1.00	270.00		
Principal I	250.00	3.00	750.00		
Senior Planner I	179.00	8.00	1,432.00		
Planner II	135.00	8.00	1,080.00		
Alternatives		36.00	6,474.00	0.00	6,474.00
Principal II	270.00	2.00	540.00		

Principal I	250.00	4.00	1,000.00		
Senior Biologist II	195.00	4.00	780.00		
Senior Planner I	179.00	12.00	2,148.00		
Biologist IV	164.00	4.00	656.00		
Planner II	135.00	10.00	1,350.00		
Other CEQA-Required Sections		23.50	3,147.00	0.00	3,147.00
Principal II	270.00	0.50	135.00		
Principal I	250.00	1.00	250.00		
Senior Planner I	179.00	2.00	358.00		
Planner II	135.00	12.00	1,620.00		
Production Specialist I	98.00	8.00	784.00		
Task 5: Draft Focused EIR		58.00	9,533.00	0.00	9,533.00
Principal II	270.00	4.00	1,080.00		
Principal I	250.00	4.00	1,000.00		
Senior Biologist II	195.00	2.00	390.00		
Senior Biologist I	179.00	3.00	537.00		
Senior Planner I	179.00	12.00	2,148.00		
Biologist IV	164.00	5.00	820.00		
GIS/CADD Specialist II	135.00	6.00	810.00		
Planner II	135.00	16.00	2,160.00		
Production Specialist I	98.00	6.00	588.00		
Task 6: Final Focused EIR		92.50	16,449.00	0.00	16,449.00
Task 6.1: Response to Comments/Administrative Final Focused EIR		84.00	15,164.00	0.00	15,164.00
Principal II	270.00	10.00	2,700.00		
Principal I	250.00	10.00	2,500.00		
Senior Biologist II	195.00	6.00	1,170.00		
Senior Biologist I	179.00	4.00	716.00		
Senior Planner I	179.00	16.00	2,864.00		
Biologist IV	164.00	8.00	1,312.00		
GIS/CADD Specialist II	135.00	2.00	270.00		
Planner II	135.00	24.00	3,240.00		
Production Specialist I	98.00	4.00	392.00		
Task 6.2: MMRP		8.50	1,285.00	0.00	1,285.00
Principal II	270.00	0.50	135.00		
Principal I	250.00	1.00	250.00		
Planner IV	164.00	1.00	164.00		
Planner II	135.00	4.00	540.00		
Production Specialist I	98.00	2.00	196.00		
Task 7: CEQA Findings		23.00	3,646.00	0.00	3,646.00
Principal II	270.00	1.00	270.00		
Principal I	250.00	2.00	500.00		
Senior Planner I	179.00	4.00	716.00		
Planner II	135.00	16.00	2,160.00		
Task 8: Administrative Record		17.50	2,559.00	0.00	2,559.00

Principal II	270.00	0.50	135.00		
Principal I	250.00	1.00	250.00		
Senior Planner I	179.00	2.00	358.00		
Planner II	135.00	12.00	1,620.00		
Production Specialist I	98.00	2.00	196.00		
Task 9: Project Management and Coordination		88.00	18,548.00	0.00	18,548.00
Task 9.1: Project Management		64.00	13,178.00	0.00	13,178.00
Principal II	270.00	8.00	2,160.00		
Principal I	250.00	14.00	3,500.00		
Senior Planner I	179.00	42.00	7,518.00		
Task 9.2: Meetings and Public Hearings		24.00	5,370.00	0.00	5,370.00
Principal II	270.00	4.00	1,080.00		
Principal I	250.00	10.00	2,500.00		
Senior Planner I	179.00	10.00	1,790.00		
Project Total		**609**	**$109,018**	**$36,431**	**$145,449**

Direct Expenses Summary	**Amount**
Record Search	$690
Travel - Mileage	$121
Vehicle Day Rate	$85
Stillwater Sciences	$35,535
Direct Expenses Subtotal	$36,431

DEPARTMENT OF TRANSPORTATION
CALTRANS DISTRICT 5
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3329
TTY 711
www.dot.ca.gov/dist05/

Making Conservation a California Way of Life.

August 26, 2021

SCr/9/6.904
SCH#2021070572

Carly Blanchard
Environmental Planner
San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, CA 95006

Dear Ms. Blanchard:

COMMENTS FOR THE MITIGATED NEGATIVE DECLARATION (MND) FOR THE CONJUNCTIVE USE PLAN FOR THE SAN LORENZO RIVER WATERSHED – SANTA CRUZ COUNTY, CA

The California Department of Transportation (Caltrans) appreciates the opportunity to review the MND for the Conjunctive Use Plan for the San Lorenzo River Watershed which includes installation of a pipeline segment under State Route 9. Caltrans offers the following comments in response to the MND:

1. All work in, on, under, over, or affecting State highway right of way is subject to a Caltrans encroachment permit. For more information regarding the encroachment permit process, please visit our Encroachment Permit Website at: https://dot.ca.gov/caltrans-near-me/district-5/district-5-programs/d5-encroachment-permits.

2. Depending on the complexity of the project improvements requiring an encroachment permit, Caltrans Oversight may be the more appropriate avenue for project review and approval by Caltrans. The District Permit Engineer has been granted authority by Caltrans to make this decision. Please consult with the District Permit Engineer to determine the most appropriate Caltrans project permitting system.

3. All future work will need to conform to the Caltrans Encroachment Permits Manual, Chapter 600. Additional utility installation requirements, which may apply, are found in Chapter 17 of the Project Development Procedures Manual. Deviations to Caltrans Encroachment Permit Policies may require an exception. This requirement and process will be outlined by the District Permit Engineer in the pre-submittal conference.

4. All non-operational or vacated pipes shall be removed under ordinary circumstances. However, exceptions can be made regarding abandoned in-place pipes within the State right off way. The District Permit Engineer can grant waivers to this requirement based on an engineering or environmental evaluation. Plans shall conform to the Caltrans Plans Preparation Manual and Encroachment Permit Construction Plan Set outline. Verification will be needed to ensure the abandoned pipeline will not incur future expenses on any highway project.

5. The applicant will need to show all existing facilities and utilities in plan and profile where the scope of work is located.

6. General Basis of Horizontal and Vertical Control - Caltrans datums shall be used and observed for the construction of the proposed improvements. All plans shall be in US feet and follow the datums as follows: • Vertical Basis: NAVD 88 • Horizontal: NAD83 Zone 3 Santa Cruz County, Zone 4 Monterey and San Benito County, and Zone 5 San Luis Obispo and Santa Barbara County. At least two recorded, Caltrans Monuments must be referenced in the surveying basis.

7. All future documents will be subject to additional evaluation and approval at the time of their review. As part of future evaluation, issues involving or impacting the State right-of-way may require additional mitigation due to pertinent issues such as cultural resources, environmental justice, water quality, hydrology, etc.

Thank you for the opportunity to review and comment on the proposed project. If you have any questions, or need further clarification on items discussed above, please contact me at (805) 835-6543 or christopher.bjornstad@dot.ca.gov.

Sincerely,

Christopher Bjornstad

Chris Bjornstad
Associate Transportation Planner
District 5 Development Review

Rincon Consultants, Inc.

2511 Garden Road, Suite C-250
Monterey, California 93940

831 333 0310

info@rinconconsultants.com
www.rinconconsultants.com

October 29, 2021
Project Number 20-09468

Carly Blanchard, Environmental Planner
San Lorenzo Valley Water District
13060 Highway 9
Boulder Creek, California 95006
Via email: cblanchard@slvwd.com

Subject: **Revised Amendment Request No. 1 for the San Lorenzo Valley Water District Conjunctive Use Plan for the San Lorenzo River Watershed Environmental Review**

Dear Ms. Blanchard:

The purpose of this letter is to request a scope and budget amendment to the December 8, 2020, contract scope of work for the San Lorenzo Valley Water District (SLVWD) Conjunctive Use Plan for the San Lorenzo River Watershed environmental review. This amendment is intended to address additional efforts needed to prepare a Focused EIR for the project in response to public comment letters submitted on the Draft IS-MND.

Additional Scope of Work

Rincon will prepare a Focused EIR for the Conjunctive Use Plan. The Focused EIR will, to the extent practicable, rely on existing environmental documentation and technical studies prepared for the plan. Our scope of work for preparation of the Focused EIR will include the following tasks.

Task 1: EIR Kickoff and Notice of Preparation

Task 1.1: EIR Kickoff Meeting

Rincon will prepare for and participate in a kickoff meeting with District staff, which is assumed to occur via video conference call. This meeting will allow an opportunity to thoroughly discuss potential changes to the project description, scope of environmental evaluation, and approach to addressing community concerns regarding the project that have surfaced to date.

Task 1.2: Initial Study Revisions

This task includes revisions to the existing Initial Study, for attachment to the Notice of Preparation (NOP) to be prepared under Task 1.3. The *Biological Resources* and *Hydrology and Water Quality* sections will be condensed and will refer to the Focused EIR for detailed analysis. Other sections will be bolstered, where appropriate, to address concerns raised during the public comment period for the IS-MND. This scope of work does not include additional field work or updating modeling for air quality, greenhouse gas, noise, or transportation. Rincon assumes up to two rounds of review of the revised Initial Study.

Task 1.3: Notice of Preparation

Rincon will prepare a draft NOP of a Draft EIR for District staff to review. The NOP alerts responsible agencies and the public about the upcoming CEQA document, so they can contribute their input on the scope of the study. The NOP will consist of a one- to two-page notice with a brief project description, a map of the plan area, and instructions for submitting comments. The NOP will also include a statement of project objectives and a general description of anticipated project alternatives and alternative screening criteria, to be developed in consultation with District staff. The Initial Study prepared under Task 1.2 will be attached and circulated with the NOP. Rincon assumes one round of review for the NOP. Rincon also assumes the District will file the NOP and alert applicable responsible agencies and the public.

Task 1.4: Public Scoping Meeting

Rincon staff will prepare for and conduct a public scoping meeting for the project, either virtually or in person, depending on local COVID-19 restrictions in place at the time. Rincon will prepare PowerPoint slides and present at the meeting. It is assumed the District will handle noticing requirements and secure a venue, if held in person. Following the meeting, Rincon will prepare either a list or memorandum summarizing concerns and comments received at the scoping meeting.

Task 2: Project Description

The Project Description will provide a detailed summary of the proposed project including text, tables, and graphics to facilitate a thorough understanding of the proposed CUP scenarios. Based on comments received on the Draft IS-MND and preliminary discussions with District staff, we assume the CUP scenarios may be modified from the description in the IS-MND and/or that other District operational changes (e.g., transfers to Scotts Valley and/or water rights changes) may be incorporated into the project. However, the project will not include any scenarios requiring major physical changes, such as aquifer storage and recovery. This task includes time to coordinate with the District on defining these details, including email correspondence and up to three one-hour meetings, as well as time to address up to two rounds of comments from District staff. For the purposes of this scope of work, we assume that the project description will be stable once accepted by District staff, prior to initiation of the environmental analysis. We also reserve the right to revisit the scope of work presented herein, if the changes to the project description necessitate additional or modified analysis.

Task 3: Modeling Consultation and Peer Review

Rincon understands that Mike Podlech, the District's independent fisheries consultant, will conduct a salmonid model and prepare a technical memorandum to support the Focused EIR ("salmonid tech memo"). It is anticipated that this memorandum will include responses to comments provided on the Draft IS-MND relating to potentially significant impacts to fish and aquatic resources. Mike Podlech' s work effort will be conducted under separate contract with the District.

Under this task, Stillwater Sciences will provide input on the modeling approach, model development, and interpretation of the modeling results, and complete a formal peer review of the model results and memorandum, including the responses to comments. This includes the following subtasks.

Task 3.1: Coordination and Input on Modeling Approach

Stillwater will provide coordination and input to help guide the approach and development of a quantitative model to evaluate salmonid impacts. Stillwater will meet with the State Water Resources Control Board (Water Board) to gain an understanding of the Water Board's requirements and informational needs for the model as it pertains to the Water Board's future actions relating to the Conjunctive Use Plan. Stillwater's support may include input on model framework, assumptions, input data requirements and sources, and desired outcomes. Stillwater will provide input to the model's developer, Mike Podlech, that addresses the model's consistency with the requirements and informational needs of the Water Board as understood by Stillwater.

Assumptions:

- Stillwater staff, including one or more senior fisheries biologists and/or quantitative ecologists familiar with quantitative salmonid modeling, will provide up to 24 hours of review and input on the modeling approach and model development.
- The model developed by Mike Podlech and reviewed by Stillwater is a salmonid model and does not include non-salmonid species.
- A Stillwater senior fisheries biologist will participate in up to five 2-hour meetings with Mike Podlech, SLVWD, and/or the Water Board to discuss input regarding modeling approach, model development, and the Water Board's requirements and informational needs for the model.
- Meetings and coordination will occur via email, phone, or video conference.
- The scope and estimated cost for this task assumes Stillwater can gain adequate understanding of the Water Board's requirements and informational needs for the model as it pertains to the Water Board's future actions relating to the Conjunctive Use Plan and provide appropriate input on the modeling approach and development within the level of effort (staff hours) specified above. If additional effort is required, an amendment to this scope and cost estimate will be needed.

Task 3.2: Review Preliminary Results/Analysis

Stillwater will review the preliminary model results and provide input regarding interpretation of the results, including sensitivity of the results to model inputs, parameters, and assumptions.

Assumptions:

- Review will occur approximately half-way through the modeling effort, or as otherwise agreed with Mike Podlech and SLVWD.
- Stillwater staff, including one or more senior fisheries biologists and/or quantitative ecologists, will provide up to 18 hours of technical review and input on preliminary model results and model sensitivity.
- Input will be provided via email, phone, or video conference.

Task 3.3: Formal Peer Review

Stillwater will review the model results and memorandum and provide a technical memorandum summarizing the review. The memo will address model performance and results, including discussion of its potential utility for EIR impact analysis and related decision-making by the CEQA lead agency and

other relevant trustee and responsible agencies (e.g., SLVWD, the Water Board, and the California Department of Fish and Wildlife).

Recommendations for improvement of the model, if any, will be described. The peer review will also consider the responses to comments on the Draft IS-MND relating to potentially significant impacts to fish and aquatic resources.

Assumptions:

- Stillwater will provide a draft memorandum for internal team review (i.e., Mike Podlech, Rincon, and/or SLVWD), and will address comments on the draft memo to produce a final memo.
- Comments on the draft memo will be provided electronically in MS Word "track changes" and consolidated into a single set of comments prior to submittal to Stillwater.
- The draft and final memos will be provided to Rincon electronically in MS Word, in Stillwater's standard Technical Memorandum format.
- This task includes up to 90 hours of effort by Stillwater staff, including one or more senior fisheries biologists and/or quantitative ecologists.
- Currently there is considerable uncertainty regarding the decision-making process and criteria that will be used by the CEQA lead agency and other relevant trustee and responsible agencies and how each agency will use the salmonid model to support their decision-making. The scope and estimated cost for this task assumes the applicable agency decision-making processes and criteria will be made clear to Stillwater prior to initiation of this task and that the scope and level of effort (staff hours) specified above will be sufficient to complete the task accordingly. If, upon clarification of the applicable decision-making processes and criteria, it becomes apparent that additional effort is required, an amendment to this scope and cost estimate will be needed.
- The scope and estimated cost for this task assumes the model will be used for purposes of an EIR and not for federal approval or permitting (i.e., no federal nexus). It is therefore assumed that no federal agencies will review or use the model for decision-making.
- The level of effort and estimated cost for this task does not include modeling or other quantitative analysis by Stillwater.

Task 3.4: Review of Revisions

Stillwater will review relevant portions of the model, model documentation, and model results to evaluate and verify revisions made in response to Stillwater's peer review conducted under Task 3.3. Stillwater will also review Mike Podlech's responses to reviewer comments on the model, model documentation, and model results. Stillwater will coordinate directly with Mike Podlech to provide comments or corrections, as needed.

Assumptions:

- Coordination between Stillwater and Mike Podlech will be via email, phone, or video conference. No documents or other written deliverables will be provided.
- This task includes up to 14 hours of review and coordination by Stillwater staff, including one or more senior fisheries biologists and/or quantitative ecologists.

Task 4: Administrative Draft Focused EIR

The Administrative Draft Focused EIR will include the following key sections.

Executive Summary

The Focused EIR will contain a summary of the proposed Conjunctive Use Plan and associated environmental consequences. This information will be presented in tabular format to simplify review by decision-makers and the public. This section will identify each potential environmental impact, the level of significance of each impact, mitigation measures required and the residual impacts after mitigation. The summary will also note areas of known controversy and an assessment of the alternatives reviewed and their associated impacts. The summary will also include identification of the environmentally superior alternative and the rationale for its selection as such.

Introduction and Environmental Setting

The Introduction will describe the purpose and legal authority of the study, the project objectives, and will provide a discussion of lead, responsible and trustee agencies, if any. The Environmental Setting will provide a general description of the geographic character of the project vicinity at the time of NOP distribution. The setting will be based on existing data sources, including the City's General Plan, LCP, and ordinances, existing and applicable Habitat Conservation Plans, and other relevant environmental documents prepared during recent years, supplemented with information from existing technical studies. Per comments received on the Draft IS-MND, the geographic scope of the study may be broadened, and the larger area will be described in the setting accordingly.

Environmental Impact Analysis

The main body of the Focused EIR will consist of the assessment of potential environmental impacts of the proposed CUP. Based upon the analysis in the Draft IS-MND, the EIR will focus on two technical issue areas: *Biological Resources* and *Hydrology and* Water Quality. If, during the analysis, it is determined that any additional resource areas warrant consideration in a full technical chapter, a scope amendment will be required. Our approach to these two issue areas is described below.

Biological Resources

The Biological Resources section of the Draft IS-MND was based on the Biological Technical Memorandum for the San Lorenzo Valley Water District Conjunctive Use Plan prepared by Rincon Consultants, Inc. (2020) and the Fisheries Resource Considerations for the San Lorenzo River Watershed Conjunctive Use Plan prepared by Mike Podlech, Fisheries Biologist (2019). For the EIR, Rincon will request an updated search of the California Natural Diversity Database (CNDDB) and perform a field reconnaissance, and update the Biological Technical Memorandum as needed to account for existing conditions at the time the NOP for the Draft EIR is issued. The EIR will utilize this updated report as well as the salmonid tech memo to be prepared by Mike Podlech and peer reviewed by Stillwater, to prepare an EIR section that analyzes impacts to biological resources. The section will include a more robust setting and regulatory setting section and will assess all CEQA Appendix G threshold questions related to biological resources. If the geographic scope for the analysis is expended, this scope of work assumes that there would be no physical impacts to this larger area, such that it can be described in the setting and qualitatively discussed utilizing existing information. Rincon further assumes that the salmonid tech memo will sufficiently address comments provided on the Draft IS-MND, including to downstream fisheries, and that

this information will be summarized in the EIR. This scope of work does not include protocol surveys or a formal jurisdictional delineation.

Hydrology and Water Quality

This section of the EIR will utilize information in the Draft IS-MND, the *Water Availability Assessment for San Lorenzo River Watershed Conjunctive Use Plan* (Exponent 2019), the salmonid tech memo, input from the District's legal counsel regarding water rights changes, and other information from the District and neighboring water agencies. The analysis will describe how implementation of CUP would modify both surface water and groundwater levels within the geographic analysis area, including the potential to decrease downstream flows. The analysis will consider the potential to decrease groundwater supplies, interfere with groundwater recharge, or substantially alter drainage patterns. However, detailed consideration of water rights is not anticipated to be included.

Cumulative Analysis

The Focused EIR will include a cumulative analysis that considers additional cumulative projects, as noted in comment letters received on the Draft IS-MND. This includes: the City of Santa Cruz Water Rights Project, the draft Santa Margarita Groundwater Sustainability Plan, the City of Santa Cruz Operations and Maintenance Habitat Conservation Plan, the Administrative Draft Anadromous Salmonid Habitat Conservation Plan, the City of Santa Cruz Graham Hill Water Treatment Plant Facilities Improvement Project, the City of Santa Cruz Newell Creek Pipeline Rehabilitation Plan, and other ongoing water diversions by the multitude of private diverters in the watershed. It is anticipated that this section will consider all CEQA issue areas.

Alternatives

The Alternatives section will be prepared in accordance with the requirements of the CEQA Guidelines Section 15126.6. The purpose of this section will be to promote informed decision-making and to evaluate a reasonable range of project alternatives, with an emphasis on alternatives capable of reducing significant impacts identified in the environmental analysis. This section will identify the "environmentally superior alternative." If the No Project Alternative is determined to be environmentally superior, the EIR will identify the environmentally superior alternative among the remaining scenarios. Rincon assumes two alternatives will be presented to reduce potential impacts to biological resources and/or hydrology, selected in consultation with District staff and legal counsel.

Other CEQA-Required Sections

Also included in the Focused EIR will be other sections required by CEQA, such as table of contents, references, persons contacted, list of preparers, Appendix F energy analysis, summary of potential growth-inducing, and significant irreversible effects.

Task 5: Draft Focused EIR

After receiving consolidated comments from the District and legal counsel, Rincon will prepare a "Screencheck" Draft EIR showing revisions in track changes. Upon receiving clearance from the District on the Screencheck Draft EIR, Rincon will accept revisions and provide a clean digital (pdf) version of the Draft EIR suitable for posting on the District's website. Rincon will prepare all required notices for the Focused EIR, including the Notice of Completion, and will deliver the NOC to the County Clerk and State

Clearinghouse via the CEQAsubmit website. We assume the District will produce any required hard copies, distribute the Draft EIR to the mailing list, and post a notice in the local newspaper.

Task 6: Final Focused EIR

The final stages of the Focused EIR process involve responding to comments, preparing the Administrative Final Focused EIR and Final Focused EIR, and holding public hearings and final editorial tasks. At this point, the CUP and Final Focused EIR will be brought together for final public and decision-maker scrutiny to render official decisions regarding the proposed project. Through this process, final changes and policy decisions concerning the project are made. Our work effort regarding this task is delineated below.

Task 6.1: Response to Comments/Administrative Final Focused EIR

Rincon staff, in coordination with District staff, its consultant, and legal counsel, will respond to public and agency review comments on the Draft EIR in accordance with CEQA Guidelines Section 15088. This scope of work assumes that one lengthy (over 20 pages) and substantive letter will be submitted, and that up to five additional short (under two pages) and non-substantive letters will be submitted, which can be adequately responded to in a maximum of 80 professional staff hours. The actual level of effort required to respond will depend on the length, detail, and sophistication of the comments, in addition to the number of letters received. We reserve the right to reevaluate the effort level and request a scope amendment upon close of the public comment period.

The Final EIR will consist of the body of the Draft EIR, as revised based on comments received, and an additional section including all comments and responses. We assume one round of review by District staff and legal counsel on the Response to Comments and Administrative Final Focused EIR.

Task 6.2: Mitigation Monitoring and Reporting Program (MMRP)

Concurrent with delivery of the Final Focused EIR, and in accordance with Public Resources Code Section 21081.6, Rincon will prepare an MMRP, consistent with CEQA Guidelines requirements. The MMRP will include a table that lists each mitigation measure, the agency responsible for each measure, when monitoring must occur, the frequency of monitoring, and criteria to determine compliance with the condition. For some issues that may depend on the details of future development design, mitigation measures will identify specific performance standards to be achieved, typical approaches to meeting the applicable criteria, and the point in time when documentation must be provided to and approved by the District. Where necessary, the MMRP will include post-construction monitoring to confirm the effectiveness of the proposed measures. The MMRP will include mitigation measures identified in the Focused EIR and its accompanying Initial Study. We assume one round of review of District staff comments on the MMRP.

Task 6.3: Final Focused EIR and Notice of Determination

Rincon will respond to one round of District staff and legal counsel comments on the Administrative Final Focused EIR. Rincon will deliver a digital PDF copy of the Final Focused EIR to the District. Upon certification of the Final EIR and assuming project approval, Rincon will prepare a Notice of Determination (NOD) and will file the NOD with the County Clerk's office and State Clearinghouse. We assume the District will be responsible for payment of the County Clerk and CDFW filing fees.

Task 7: CEQA Findings

Rincon will prepare the CEQA findings for the project in accordance with CEQA Guidelines §15091. The findings will include information related to whether those significant impacts identified in the EIR will be reduced to below a level of significance by mitigation measures identified in the document. If a significant and unavoidable impact is identified in the EIR, it is anticipated that the District will prepare the Statement of Overriding Considerations in consultation with legal counsel. Rincon will provide an administrative draft of the CEQA findings for District and legal review and comment, and then incorporate comments into a final document.

Task 8: Administrative Record

Rincon will maintain the Administrative Record for this project. Rincon will develop a work plan at the outset that instructs internal staff on the way in which the Administrative Record will be developed and maintained. As sources are referenced in each section of the report, they will be logged in an index containing a hyper-linked cross-reference to the individual source files, copies of which are maintained on company servers. These include, for example, guidance documents, websites, correspondence, and technical memoranda. The citations and source files will be audited during our technical review to ensure the record is complete and comprehensive. Upon completion, the index and the source files will be supplied on a thumb drive.

Task 9: Project Management and Coordination

Task 9.1: Project Management

Rincon's Project Manager and her support staff will be responsible for general day-to-day management tasks, including team management, client coordination and communication, and monthly invoicing.

Task 9.2: Meetings and Public Hearings

During EIR preparation, key Rincon staff will attend up to two virtual meetings with staff (two hours in length each). These meetings would be scheduled at the discretion of the District but are anticipated to occur upon receipt of District/legal comments on the Administrative Draft Focused EIR and upon receipt of public comments on the Draft Focused EIR. This is in addition to the kickoff meeting and the three one-hour meetings assumed during preparation of the project description. Rincon's Project Manager and/or Principal-in-Charge will also attend and present the conclusions of the Focused EIR at one virtual District Board meeting.

Assumptions

Rincon assumes the following:

- One round of consolidated comments will be provided on each deliverable
- The Focused EIR will contain two technical chapters (*Biological Resources* and *Hydrology and Water Quality)*; any additional technical chapters will require an amendment
- No project disturbance will occur within a stream channel and no permits from CDFW or RWQCB will be required
- The Focused EIR will rely on AB 52 consultation already completed by the District for the IS-MND

- In addition to the no project alternative, two alternatives will be presented to reduce potential impacts to biological resources and/or hydrology
- One lengthy (over 20 pages) and substantive letter will be submitted, and that up to five additional short (under two pages) and non-substantive letters
- The District will be responsible for payment of the County Clerk and CDFW filing fees
- Rincon will not provide hard copies of any deliverables

Estimated Timeline

Rincon has an excellent reputation for adhering to schedules and meeting milestones. Based on our project understanding and the analysis required Rincon proposes to adhere to a schedule that allows for completion of the environmental review process in approximately nine to 12 months depending on the time required to prepare and peer review the salmonid tech memo, timing of our receipt of a complete and stable project description, District review times, and number and complexity of public comments.

1. Kickoff. Rincon will schedule a kickoff meeting within one week of notice to proceed.
2. Project Description. Rincon will coordinate with the District and prepare a draft Project Description within four weeks of the kickoff meeting (concurrent with IS and NOP).
3. IS-NOP. Rincon will submit the revised IS and NOP within four weeks of District acceptance of the Project Description.
4. Administrative Draft Focused EIR. Rincon will submit the Administrative Draft EIR within six weeks of end of the 30-day public scoping period, or three weeks after receipt of the salmonid tech memo (revised per peer review comments), whichever is later.
5. Draft Focused EIR. The Screencheck Draft Focused EIR will be completed within three weeks of receipt of comments on the Administrative Draft Focused EIR. The Draft Focused EIR will be prepared within two weeks of receipt of comments on the Screencheck Draft Focused EIR.
6. Final Focused EIR. The Administrative Draft Final EIR/Responses to Comments will be completed within three to six weeks after receipt of all written comments received during the review period, depending on the number and complexity of public comments received. We will submit the Final EIR/Responses to Comments and MMRP within two weeks of receipt of comments on the draft responses.

Meetings and public hearings will be scheduled as needed during the process.

Cost

The scope of work outlined herein will be completed on a time and materials basis, in accordance with our 2021 fee schedule, not to exceed **$145,449**. This would increase the total budget for our services from $77,530 to **$222,979**. A breakdown of cost by task is provided at the end of this proposal. Costs have been allocated to tasks based upon Rincon's proposed approach. Rincon may re-allocate costs among tasks and/or direct costs as circumstances warrant so long as the adjustments maintain the total price within its authorized amount.

The terms of this amendment request are fully negotiable to meet the needs of SLVWD. Please do not hesitate to contact us if you have questions about this proposal or need additional information.

Sincerely,
Rincon Consultants, Inc.

Megan Jones, MPP
Principal/Project Manager

Phone: 831-920-5424
Email: mjones@rinconconsultants.com

Contact for Clarification

Jennifer Haddow, PhD
Principal Environmental Scientist

Phone: 831-440-3899 x44
Email: jhaddow@rinconconsultants.com

Authorized to contractually obligate and negotiate on behalf of Rincon Consultants, Inc.

Conjunctive Use Plan
Focused EIR Cost Estimate

	Rate	Hours	Labor Budget	Direct Expenses	Total Budget
Task 1: EIR Kickoff and Notice of Preparation		75.50	13,449.00	141.00	13,590.00
Task 1.1: EIR Kickoff Meeting		10.00	2,114.00	0.00	2,114.00
Principal II	270.00	2.00	540.00		
Principal I	250.00	2.00	500.00		
Senior Planner I	179.00	6.00	1,074.00		
Task 1.2: Initial Study Revisions		32.00	5,240.00	0.00	5,240.00
Principal II	270.00	2.00	540.00		
Principal I	250.00	4.00	1,000.00		
Senior Planner I	179.00	6.00	1,074.00		
GIS/CADD Specialist II	135.00	2.00	270.00		
Planner II	135.00	16.00	2,160.00		
Production Specialist I	98.00	2.00	196.00		
Task 1.3: Notice of Preparation		18.00	3,106.00	0.00	3,106.00
Principal II	270.00	2.00	540.00		
Principal I	250.00	2.00	500.00		
Senior Planner I	179.00	4.00	716.00		
GIS/CADD Specialist II	135.00	2.00	270.00		
Planner II	135.00	8.00	1,080.00		
Task 1.4: Public Scoping Meeting		15.50	2,989.00	141.00	3,130.00
Principal II	270.00	0.50	135.00		
Principal I	250.00	6.00	1,500.00		
Senior Planner I	179.00	4.00	716.00		
Planner II	135.00	4.00	540.00		
Production Specialist I	98.00	1.00	98.00		
Travel - Mileage				56.00	
Vehicle Day Rate				85.00	
Task 2: Project Description		46.00	8,171.00	0.00	8,171.00
Principal II	270.00	5.00	1,350.00		
Principal I	250.00	8.00	2,000.00		
Senior Planner I	179.00	10.00	1,790.00		
GIS/CADD Specialist II	135.00	5.00	675.00		
Planner II	135.00	16.00	2,160.00		
Production Specialist I	98.00	2.00	196.00		
Task 3: Modeling Consultation and Peer Review		17.00	3,455.00	35,535.00	38,990.00
Task 3.1: Coordination and Input on Modeling Approach		3.00	569.00	7,475.00	8,044.00
Senior Biologist II	195.00	2.00	390.00		
Senior Planner I	179.00	1.00	179.00		
Biology Subconsultant				7,475.00	
Task 3.2: Review Preliminary Results/Analysis		0.00	0.00	4,025.00	4,025.00
Senior Biologist II	195.00	0.00	0.00		

Senior Planner I	179.00	0.00	0.00		
Biology Subconsultant				4,025.00	
Task 3.3: Formal Peer Review		14.00	2,886.00	19,550.00	22,436.00
Principal I	250.00	4.00	1,000.00		
Senior Biologist II	195.00	6.00	1,170.00		
Senior Planner I	179.00	4.00	716.00		
Biology Subconsultant				19,550.00	
Task 3.4: Review of Revisions		0.00	0.00	4,485.00	4,485.00
Senior Biologist II	195.00	0.00	0.00		
Senior Planner I	179.00	0.00	0.00		
Biology Subconsultant				4,485.00	
Task 4: Administrative Draft Focused EIR		191.50	33,208.00	755.00	33,963.00
Executive Summary		6.50	1,104.00	0.00	1,104.00
Principal II	270.00	0.50	135.00		
Principal I	250.00	1.00	250.00		
Senior Planner I	179.00	1.00	179.00		
Planner II	135.00	4.00	540.00		
Introduction and Environmental Setting		14.50	2,191.00	0.00	2,191.00
Principal II	270.00	0.50	135.00		
Principal I	250.00	1.00	250.00		
Senior Planner I	179.00	2.00	358.00		
GIS/CADD Specialist II	135.00	2.00	270.00		
Planner II	135.00	8.00	1,080.00		
Production Specialist I	98.00	1.00	98.00		
Biological Resources		62.00	11,510.00	755.00	12,265.00
Principal II	270.00	7.00	1,890.00		
Principal I	250.00	3.00	750.00		
Senior Biologist II	195.00	9.00	1,755.00		
Senior Biologist I	179.00	10.00	1,790.00		
Biologist IV	164.00	30.00	4,920.00		
GIS/CADD Specialist II	135.00	3.00	405.00		
Record Search				690.00	
Travel - Mileage				65.00	
Vehicle Day Rate				0.00	
Hydrology and Water Quality		29.00	5,250.00	0.00	5,250.00
Principal II	270.00	2.00	540.00		
Principal I	250.00	3.00	750.00		
Senior Planner II	195.00	12.00	2,340.00		
GIS/CADD Specialist II	135.00	2.00	270.00		
Planner II	135.00	10.00	1,350.00		
Cumulative Analysis		20.00	3,532.00	0.00	3,532.00
Principal II	270.00	1.00	270.00		
Principal I	250.00	3.00	750.00		
Senior Planner I	179.00	8.00	1,432.00		
Planner II	135.00	8.00	1,080.00		
Alternatives		36.00	6,474.00	0.00	6,474.00
Principal II	270.00	2.00	540.00		

Principal I	250.00	4.00	1,000.00		
Senior Biologist II	195.00	4.00	780.00		
Senior Planner I	179.00	12.00	2,148.00		
Biologist IV	164.00	4.00	656.00		
Planner II	135.00	10.00	1,350.00		
Other CEQA-Required Sections		23.50	3,147.00	0.00	3,147.00
Principal II	270.00	0.50	135.00		
Principal I	250.00	1.00	250.00		
Senior Planner I	179.00	2.00	358.00		
Planner II	135.00	12.00	1,620.00		
Production Specialist I	98.00	8.00	784.00		
Task 5: Draft Focused EIR		58.00	9,533.00	0.00	9,533.00
Principal II	270.00	4.00	1,080.00		
Principal I	250.00	4.00	1,000.00		
Senior Biologist II	195.00	2.00	390.00		
Senior Biologist I	179.00	3.00	537.00		
Senior Planner I	179.00	12.00	2,148.00		
Biologist IV	164.00	5.00	820.00		
GIS/CADD Specialist II	135.00	6.00	810.00		
Planner II	135.00	16.00	2,160.00		
Production Specialist I	98.00	6.00	588.00		
Task 6: Final Focused EIR		92.50	16,449.00	0.00	16,449.00
Task 6.1: Response to Comments/Administrative Final Focused EIR		84.00	15,164.00	0.00	15,164.00
Principal II	270.00	10.00	2,700.00		
Principal I	250.00	10.00	2,500.00		
Senior Biologist II	195.00	6.00	1,170.00		
Senior Biologist I	179.00	4.00	716.00		
Senior Planner I	179.00	16.00	2,864.00		
Biologist IV	164.00	8.00	1,312.00		
GIS/CADD Specialist II	135.00	2.00	270.00		
Planner II	135.00	24.00	3,240.00		
Production Specialist I	98.00	4.00	392.00		
Task 6.2: MMRP		8.50	1,285.00	0.00	1,285.00
Principal II	270.00	0.50	135.00		
Principal I	250.00	1.00	250.00		
Planner IV	164.00	1.00	164.00		
Planner II	135.00	4.00	540.00		
Production Specialist I	98.00	2.00	196.00		
Task 7: CEQA Findings		23.00	3,646.00	0.00	3,646.00
Principal II	270.00	1.00	270.00		
Principal I	250.00	2.00	500.00		
Senior Planner I	179.00	4.00	716.00		
Planner II	135.00	16.00	2,160.00		
Task 8: Administrative Record		17.50	2,559.00	0.00	2,559.00

Principal II	270.00	0.50	135.00		
Principal I	250.00	1.00	250.00		
Senior Planner I	179.00	2.00	358.00		
Planner II	135.00	12.00	1,620.00		
Production Specialist I	98.00	2.00	196.00		
Task 9: Project Management and Coordination		88.00	18,548.00	0.00	18,548.00
Task 9.1: Project Management		64.00	13,178.00	0.00	13,178.00
Principal II	270.00	8.00	2,160.00		
Principal I	250.00	14.00	3,500.00		
Senior Planner I	179.00	42.00	7,518.00		
Task 9.2: Meetings and Public Hearings		24.00	5,370.00	0.00	5,370.00
Principal II	270.00	4.00	1,080.00		
Principal I	250.00	10.00	2,500.00		
Senior Planner I	179.00	10.00	1,790.00		
Project Total		**609**	**$109,018**	**$36,431**	**$145,449**

Direct Expenses Summary	**Amount**
Record Search	$690
Travel - Mileage	$121
Vehicle Day Rate	$85
Stillwater Sciences	$35,535
Direct Expenses Subtotal	$36,431

M E M O

TO: Board of Directors

FROM: District Manager

PREPARED BY: Finance Department

SUBJECT: MULTIPLE USER VARIANCE RENEWALS FOR 2021/2022

DATE: November 4, 2021

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:

006196-001	006933-000	016441-000
006282-000	006934-000	016700-000
006337-000	006979-000	016727-000
006432-000	007194-000	014614-000
006497-000	007223-000	013174-000
006498-000	007704-000	006179-000
006512-000	008357-000	
006560-000	009988-000	
006643-000	010935-000	
006659-000	012426-000	
006823-000	013523-000	
006901-000	015705-000	

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 5/8" monthly basic fee as a single-family dwelling, while those who are multiple users are charged 1" monthly basic service fee. This will also affect the Fire Recovery Surcharge as that is based on billing meter size.

One (1) account was 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.

FISCAL IMPACT:

~$8,300

SAN LORENZO VALLEY WATER DISTRICT

RESOLUTION NO. XX (21-22)

SUBJECT: **MULTIPLE USER VARIANCE RENEWALS FOR 2021/2022**

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 5/8" meter monthly basic fee as a single family dwelling, while those who are multiple users are charged a 1" meter 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 4th day of November, 2021 by the following vote of the members thereof:

AYES:
NOES:
ABSTAIN:
ABSENT:

Holly Hossack, District Secretary
San Lorenzo Valley Water District

MEMO

TO: Board of Directors

FROM: District Manager

SUBJECT: Recruitment of Director of Finance and Business Services Position

DATE: November 4, 2021

Recommendation:

It is recommended the Board of Directors review this memo and by a motion of the Board ***authorize the District Manager to procure the services of an Executive Search Firm to fill the position of Director of Finance and Business Services not to exceed $35,000.***

Background:

On July 23, 2021, the District started the recruitment process for the Director of Finance and Business Services position. This position is an executive management classification responsible for complex functions related to the fiscal and business components of the District.

Several attempts have been made to recruit qualified applicants for this position. The District has continually posted job offerings as follows:

SLVWD Web site	KSCO Radio 1080 am
Social Media Campaign	Santa Cruz Mountains Stewardship Network
Brown & Caldwell Water Jobs	Water District Jobs
Jobs Available	Indeed
LinkedIn	Press Banner

The District has received a small number of applications that did not meet the job requirements. Not getting applicants is not unique to the District. Job openings have reached the highest levels on record while hiring levels have stalled.

Currently, to fill the vacancy we have an Acting Director of Finance and Business Services. This position is doing fantastic however the workload with FEMA and capital projects has overloaded staff. With the workload not easing up any time soon, staff recommends the District utilize an Executive Search Firm to fill the position.

The estimated cost for Executive Recruiter is estimated at $30 to $35K, and the process is estimated to take approximately 16 weeks to complete.

BOARD OF DIRECTORS
SAN LORENZO VALLEY WATER DISTRICT
MINUTES
OCTOBER 21, 2021

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.

Thursday, October 21, 2021, at 5:30 p.m., via videoconference and teleconference.

1. **Convene Meeting/Roll Call**

   Board Members Present:
   Gail Mahood, President
   Lois Henry, Vice President
   Jayme Ackemann, Director
   Bob Fultz, Director
   Mark Smolley, Director

   Staff Present:
   Rick Rogers, District Manager
   Gina Nicholls, District Counsel
   Holly Hossack, District Secretary

2. **Additions and Deletions to Closed Session Agenda**: None

3. **Oral Communications Regarding Items in Closed Session**: None

4. **Adjournment to Closed Session:** 5:32 p.m.

5. **Convene to Open Session at 6:30 p.m.**

6. **Report of Actions Taken in Closed Session:** None

7. **Re-Convene Meeting/Roll Call**

   Board Members Present:
   Gail Mahood, President
   Lois Henry, Vice President
   Jayme Ackemann, Director
   Bob Fultz, Director
   Mark Smolley, Director

Staff Present:
Rick Rogers, District Manager
Gina Nicholls, District Counsel
Holly Hossack, District Secretary
Kendra Reed, Acting Director of Finance & Business Services
Carly Blanchard, Environmental Programs Manager
James Furtado, Director of Operations
Josh Wolff, Engineering Manager

8. **Additions and Deletions**: None

9. **Oral Communications**: None

10. **Directors Reports**

B. Fultz reported that the Admin Committee decided not to fill the vacancy on the committee left by M. Bounds resignation and to wait for the 2022 committee recruitment.

11. **Old Business**:

a. BOARDROOM LOCATION FOR HYBRID MEETINGS
R. Rogers introduced this item and read from his memo to the Board.

Discussion by the Board and staff regarding; the comparison of possible locations, the Admin Committee recommendation of the Johnson Bldg., parking, renaming of the building, concerns about the long term, and equipment.

B. Fultz made a motion to direct the District Manager to move forward with preparing the Johnson Building for hybrid in-person meetings of the Board.

J. Ackemann seconded the motion.

ROLL CALL VOTE: MOTION PASSED
AYES: G. Mahood, L. Henry, J. Ackemann, B. Fultz, M. Smolley
NOES: None
ABSTAIN: None

12. **New Business**:

a. CSDA 2021 BYLAW VOTE
R. Rogers introduced this item and read from the memo. G. Nicholls added her input.

Discussion by the Board and staff regarding the acceptance of members and removal of members using opaque criteria.

G. Mahood made a motion to direct the District Secretary to enter a vote of yes to the updates, additions, and improvements in the 2021 CSDA bylaws.

L. Henry seconded.

ROLL CALL VOTE: MOTION PASSED
AYES: G. Mahood, L. Henry, J. Ackemann
NOES: B. Fultz, M. Smolley
ABSTAIN: None

b. QUAIL HOLLOW PIPELINE CONSTRUCTION – AWARD OF CONTRACT

J. Wolff introduced this item.

Discussion by the Board and staff regarding Engineering Committee recommendation to move forward with GraniteRock for this project, transite pipe handling, road resurfacing by the County, 120 day lead time on material because of the supply chain problems, notifying residents that are not currently customers, and budget.

M. Smolley made a motion to award the construction contract for the Quail Hollow Construction Project to the GraniteRock Company based on its bid in the amount of $2,387,000 and authorize the District Manager to execute such contract on behalf of the District.

B. Fultz seconded.

ROLL CALL VOTE: MOTION PASSED
AYES: G. Mahood, L. Henry, J. Ackemann, B. Fultz, M. Smolley
NOES: None
ABSTAIN: None

c. QUAIL HOLLOW PIPELINE CONSTRUCTION MANAGEMENT – AWARD OF CONTRACT

J. Wolff introduced this item.

Discussion by the Board and staff regarding; Engineering Committee's recommendation to move forward with MME Civil + Structural Engineering for this project, multiple bids, Project Manager position, and explanation of full time oversight of the construction project.

L. Henry made a motion to authorize the District Manager to negotiate and execute a contract on behalf of the District with MME Civil + Structural Engineering for construction management activities at Quail Hollow Pipeline replacement in an amount not to exceed $163,554.

M. Smolley seconded.

ROLL CALL VOTE: MOTION PASSED
AYES: G. Mahood, L. Henry, J. Ackemann, B. Fultz, M. Smolley
NOES: None
ABSTAIN: None

13. **Consent Agenda**: Approved

14. **District Reports**:

DEPARTMENT STATUS REPORTS

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

- Environmental
- Engineering
- Finance
- Legal
- Operations

Discussion by the Board and staff regarding status reports regarding Big Basin Water, Bear Creek Road, Huckleberry Mainline break, and reduction in water use.

C. Dzendzel questioned per person per day target for individuals' water use.

Discussion by the Board and staff regarding leak detection, and Badger meter monitoring.

C. Dzendzel questioned the information on Badger meters.

Discussion by the Board and staff regarding PG&E mitigation on the Olympia Watershed, conjuctive use, and past due accounts.

COMMITTEE REPORTS

- Future Committee Agenda Items
- Committee Meeting Notes/Minutes
  - SMGWA Meeting Recap 9.23.21
  - Environmental 10.6.21
  - Administration 10.12.21

15. **Written Communication**: None

16. **Adjournment:** 7:39 p.m.

MINUTES OF ENGINEERING COMMITTEE MEETING

Covering Design, Construction, Capital Improvement, Master Plan and other Engineering, Operational and Planning Related Matters

Tuesday, October 19, 2021, 2:00 pm, via video/teleconference.

MINUTES

1. **Convene Meeting/Roll Call**

Committee Members Present:
Mark Smolley
Lois Henry arrived at 2:06 p.m.
Ken Lande
Mike Murphy
David Ladd arrived at 2:06 p.m.

Staff Present:
Rick Rogers, District Manager
James Furtado, Director of Operations
Josh Wolff, Engineering Manager
Joel Scianna, Assistant Engineer
Holly Hossack. District Secretary

2. **Oral Communications**: None

3. **Old Business**:

A. ENGINEERING PROJECTS SUMMARY & CALENDAR
J. Wolff updated the projects and asked for questions.

Discussion by Committee and staff regarding; 5 Mile Constructability completion (draft expected by November Eng Comm), Brookdale Tank Recoating RFP development, recap of the Huckleberry Island main break, rerouting, easement, & importance to the District, upgrade of Lyon Pipeline, and Foreman Electrical RFP size of conduit.

4. **New Business**:

B. LEAK DETECTION REPORT
J. Furtado introduced this item to the Committee.

Discussion by the Committee and staff regarding; cost of leaks, leak repair, and frequency of leak detection.

M. Smolley suggested that staff bring this to the Board at either the November or December BoD meeting with the recommendation that leak detection be performed every 2 years.

C. QUAIL HOLLOW PIPELINE PROJECT CONSTRUCTION BID REVIEW
J. Wolff introduced this item.

Discussion by the Committee and staff regarding the low bid, history with this and other bidders, delay for materials, time table for work, and asbestos training (sub-contractor).

M. Smolley recommended that the Board proceed with Graniterock as the selected contractor for the Quail Hollow Pipeline Construction Project

ROLL CALL VOTE: Recommendation Passed
AYES: M. Smolley, L. Henry, K. Lande, M. Murphy
NOES: None
ABSTAIN: D. Ladd

D. QUAIL HOLLOW PIPELINE PROJECT CONSTRUCTION MANAGEMENT BID REVIEW
J. Wolff introduced this item.

Discussion by the Committee and staff regarding 120-day construction delay due to unavailability of materials, and the construction schedule.

M. Smolley recommended that the Board accept MME as the Construction Management of the Quail Hollow Pipeline.

ROLL CALL VOTE: Recommendation Passed
AYES: M. Smolley, L. Henry, K. Lande, M. Murphy
NOES: None
ABSTAIN: D. Ladd

E. WATER MASTER PLAN REVIEW
J. Wolff updated the Water Master Plan for the Committee.

5. Adjournment: 3:18 p.m.

MINUTES OF BUDGET & FINANCE COMMITTEE MEETING

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.

Wednesday, October 20, 2021, 2:00 pm, via video/tele conference.

MINUTES

1. **Convene Meeting/Roll Call**

   Committee Members Present:
   Lois Henry
   Gail Mahood
   Jeff Hill
   Stephanie Winegarden - absent

   Staff Present:
   Kendra Reed, Acting Director of Finance and Business Services
   Rick Rogers, District Manager
   Holly Hossack, District Secretary

2. **Oral Communications**: None

3. **New Business**:
   A. FIRE RECOVERY SURCHARGE TRACKING
   K. Reed introduced and explained this item.

   Discussion by the B & F Committee and staff regarding spread sheet readability, making this a quarterly report, clarity of the report, and posting to the website.

   K. Reed will change this information to a quarterly rather than monthly report and email it the committee. L. Henry would like to see the Rate Assistance Program on the next agenda.

4. **Unfinished Business**: None

5. **Adjournment**: 2:29 P.M.

MINUTES OF SPECIAL LOMPICO ASSESSMENT DISTRICT OVERSIGHT COMMITTEE MEETING

Responsible for review of matters of revenue and expenses directly
Related to Assessment District 2016-1 projects.
To serve as liaison between the Lompico Assessment District
Customers and the District.

Monday, October 20, 2021 at 5:30 pm, via video/teleconference.

MINUTES

1. **Convene Meeting/Roll Call**

Committee Members Present:
Toni Norton
Norm Hagen
Maryann LoBalbo
Jaime Newton arrived 5:58 p.m.

Staff Present
Rick Rogers, District Manager
Gina Nicholls, District Counsel
Holly Hossack, District Secretary

2. **Oral Communications:** None

3. **Old Business**: None

T. Norton said that she would like to rearrange the order of the agenda items. She requested information from R. Rogers on the Lompico Tanks water levels. R. Rogers said that the tank levels are normal.

4. **New Business**:

A. LOMPICO ASSESSMENT DISTRICT PROJECT UPDATE
R. Rogers reported on the Lompico Assessment District Project to date.

Discussion by the Committee and staff regarding the end of the Assessment District (K. Reed will find out for sure and email the Committee), the Quail Hollow Pipeline Project, Surplus Property in Lompico, and quick response to call for a hydrant. L. Henry thanked R. Rogers for his work in Lompico.

B. BI-ANNUAL LADOC FINANCIAL REPORT
K. Reed gave the Bi-annual LADOC Financial Report.

Discussion by the Committee and staff regarding the loan payment, Assessment District expenses, and how to show the sale of surplus property in Lompico.

C. 2021 ANNUAL REPORT

Discussion by the Committee regarding when the audit will be ready, phots for the 2021 Annual Report, December 1, 2021 Annual Report Workshop, and how much longer to prepare an Assessment District Annual Report (until the Assessment District has run its course).

5. Adjournment: 6:32 p.m.