

## NOTICE AND AGENDA OF REGULAR MEETING

GROUNDWATER SUSTAINABILITY AGENCY  
FOR THE **EASTERN MANAGEMENT AREA**  
IN THE SANTA YNEZ RIVER GROUNDWATER BASIN  
AT

**06:30 P.M.**, THURSDAY, FEBRUARY 24, 2022

### Remote participation available via ZOOM

You do NOT need to create a ZOOM account or login with email for meeting participation.

**ZOOM.us - "Join a Meeting"**

**Meeting: 889 5159 1394 Meeting Passcode: 520378**

**DIRECT LINK:** <https://us02web.zoom.us/j/88951591394?pwd=aXRLam5vVHYrZkrZUEE1WXRNYjE4UT09>

**DIAL-IN NUMBER: 1-669-900-9128**

**PHONE MEETING ID: 889 5159 1394 Meeting Passcode: 520378**

*If your device does not have a microphone or speakers, you can call in for audio with the phone number and Meeting ID listed above to listen and participate while viewing the live presentation online.*

In the interest of clear reception and efficient administration of the meeting, all persons participating remotely are respectfully requested to mute their line after logging or dialing-in and at all times unless speaking.

**Video and Teleconference Meeting During Coronavirus (COVID-19) Pandemic:** As a result of the COVID-19 pandemic, this meeting will be available via video and teleconference as recommended by Santa Barbara County Public Health, authorized by State Assembly Bill 361, and Resolution EMA-2021-001 (passed on 10/21/2021, reaffirmed 1/6/2022).

**Important Notice Regarding Public Participation in Video/Teleconference Meeting:** Those who wish to provide public comment on an Agenda Item, or who otherwise are making a presentation to the GSA Committee, may participate in the meeting using the remote access referenced above. **Those wishing to submit written comments, please submit any and all comments and materials to the GSA via electronic mail at [bbuelow@syrwcd.com](mailto:bbuelow@syrwcd.com).** All submittals of written comments must be received by the GSA no later than **Wednesday, February 23, 2022**, and should indicate **"February 24, 2022 GSA Meeting"** in the subject line. To the extent practicable, public comments and materials received in advance pursuant to this timeframe will be read into the public record during the meeting. Public comments and materials will become part of the post-meeting materials available to the public and posted on the SGMA website.

**AGENDA ON NEXT PAGE**

GROUNDWATER SUSTAINABILITY AGENCY  
FOR THE **EASTERN MANAGEMENT AREA**  
IN THE SANTA YNEZ RIVER GROUNDWATER BASIN

THURSDAY, FEBRUARY 24, 2022, 6:30 P.M.

**AGENDA OF REGULAR MEETING**

- I. Call to Order and Roll Call
- II. Consider findings under Government Code section 54953(e)(3) to authorize continuing teleconference meetings under Resolution EMA-2021-001
- III. Additions or Deletions to the Agenda
- IV. Public Comment (Any member of the public may address the Committee relating to any non-agenda matter within the Committee’s jurisdiction. The total time for all public participation shall not exceed fifteen minutes and the time allotted for each individual shall not exceed five minutes. No action will be taken by the Committee at this meeting on any public item.) *Staff recommends any potential new agenda items based on issues raised be held for discussion under Agenda Item “EMA GSA Committee requests and comments” for items to be included on the next Agenda.*
- V. Review and consider approval of meeting minutes of November 18, 2021, December 9, 2021, and January 6, 2022.
- VI. Review and consider approval of Financial Statements and Warrant List
- VII. Review and consider approval of calendar of Regular GSA meetings for 2022 and location of Regular and Special Meetings
- VIII. Consider approval of printing costs for public copies of the EMA GSP
- IX. Receive and discuss January 5, 2022, letter from Los Olivos CSD
- X. Receive update from EMA CAG Meeting of February 4, 2022
- XI. Receive presentation from GSI on the First Annual Report for the EMA
- XII. Update and discussion on future governance, JPA, future projects, and funding for EMA expenses
- XIII. Review possible change of GSA Financial Institution
- XIV. Consider “Special” EMA GSA Meeting Thursday, March 24, 2022, at 6:30 P.M.
- XV. Next “Regular” EMA GSA Meeting Thursday, May 26, 2022, at 6:30 P.M.
- XVI. EMA GSA Committee requests and comments
- XVII. Adjournment

[This agenda was posted 72 hours prior to the scheduled meeting at 3669 Sagunto Street, Suite 101, Santa Ynez, California, and <https://www.santaynezwater.org> in accordance with Government Code Section 54954. In compliance with the Americans with Disabilities Act, if you need special assistance to review agenda materials or participate in this meeting, please contact the Santa Ynez River Water Conservation District at (805) 693-1156. Notification 48 hours prior to the meeting will enable the GSA to make reasonable arrangements to ensure accessibility to this meeting.]

**HEALTH OFFICER ORDER NO. 2022-10.1  
COUNTY OF SANTA BARBARA**

**FOR THE CONTROL OF COVID-19  
FACE COVERINGS  
WITHIN SANTA BARBARA COUNTY**

**Health Officer Order No. 2022-10 is rescinded by this  
Health Officer Order No. 2022-10.1**

**Effective Date: February 16, 2022, 12:00 am PT**

Nothing in this Health Officer Order supersedes State Executive Orders or State Health Officer Orders or guidance provided by the California Department of Public Health available at: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Guidance.aspx#>

WHEREAS, on February 7, 2022, the California Department of Public Health updated their Guidance for the Use of Face Masks to take effect on February 16, 2022, requiring unvaccinated persons to wear masks in all indoor public settings, requiring universal masking in only specified settings, and recommending continued indoor masking when the risk may be high (<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/guidance-for-face-coverings.aspx>). Thus, the County of Santa Barbara Health Officer finds Health Officer Order 2022-10 ordering face coverings within Santa Barbara County is no longer necessary for the control of COVID-19 in the County of Santa Barbara.

**ACCORDINGLY, UNDER THE AUTHORITY OF CALIFORNIA HEALTH AND SAFETY CODE SECTIONS 101040, 101085, AND 120175, TITLE 17 CALIFORNIA CODE OF REGULATIONS SECTION 2501, THE HEALTH OFFICER OF THE COUNTY OF SANTA BARBARA ORDERS:**

1. Order 2022-10 is rescinded effective February 15, 2022 at 11:59 pm (PT). This Order applies in the incorporated and unincorporated areas of Santa Barbara County ("County").

This Order is issued in accordance with, and incorporates by reference: the March 4, 2020 Proclamation of a State Emergency issued by Governor Gavin Newsom; the March 12, 2020 Declaration of Local Health Emergency and Proclamation of Emergency based on an imminent and proximate threat to public health from the introduction of novel COVID-19 in the County; the March 17, 2020 Resolution of the Board of Supervisors ratifying the County Declaration of Local Health Emergency and Proclamation of Emergency regarding COVID-19; the March 13, 2020 Presidential Declaration of a National Emergency due to the national impacts of COVID-19; the March 22, 2020, Presidential Declaration of a Major Disaster in California beginning on January 20, 2020 under Federal Emergency Management Agency (FEMA) Incident DR-4482-CA; CDPH / Cal-OSHA Interim Guidance for Ventilation, Filtration, and Air Quality in Indoor Environments issued February 26, 2021; the State Public Health Order issued June 11, 2021; Governor Gavin Newsom's Executive Order N-07-21 of June 11, 2021; Governor Gavin Newsom's Executive Order N-08-21 of June 11, 2021; the State Public Health Order issued July 26, 2021; the October 15, 2021 guidance issued by the Centers for Disease Control and Prevention titled Interim Public Health

Recommendations for Fully Vaccinated People; the January 12, 2022 California Department of Public Health Guidance for K-12 Schools in California, 2021-22 School Year; the January 13, 2022 guidance issued by the Centers for Disease Control and Prevention titled Guidance for COVID-19 Prevention in K-12 Schools; the January 21, 2022 guidance issued by the Centers for Disease Control and Prevention titled Your Guide to Masks; and the February 7, 2022 California Department of Public Health Guidance for the Use of Face Coverings.

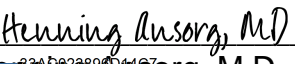
This Order is made in accordance with all applicable State and Federal laws, including but not limited to: Health and Safety Code sections 101040 and 120175; Health and Safety Code sections 101030 et seq., 120100 et seq.; and Title 17 of the California Code of Regulations section 2501.

If any provision of this Order or the application thereof to any person or circumstance is held to be invalid by a court of competent jurisdiction, the remainder of the Order, including the application of such part or provision to other persons or circumstances, shall not be affected and shall continue in full force and effect. To this end, the provisions of this Order are severable.

The violation of any provision of this Order constitutes a threat to public health. Pursuant to Government Code sections 26602 and 41601 and Health and Safety Code sections 101029 and 120295, the Health Officer requests that the Sheriff and all chiefs of police in the County ensure compliance with and enforce this Order. Per Health and Safety Code section 101029, "the sheriff of each county, or city and county, may enforce within the county, or the city and county, all orders of the local health officer issued for the purpose of preventing the spread of any contagious, infectious, or communicable disease. Every peace officer of every political subdivision of the county, or city and county, may enforce within the area subject to his or her jurisdiction all orders of the local health officer issued for the purpose of preventing the spread of any contagious, infectious, or communicable disease. This section is not a limitation on the authority of peace officers or public officers to enforce orders of the local health officer. When deciding whether to request this assistance in enforcement of its orders, the local health officer may consider whether it would be necessary to advise the enforcement agency of any measures that should be taken to prevent infection of the enforcement officers."

Copies of this Order shall promptly be: (1) made available at the County Public Health Department; (2) posted on the County Public Health Department's website (publichealthsb.org); and (3) provided to any member of the public requesting a copy of this Order.

IT IS SO ORDERED:

DocuSigned by:  
  
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324106288901167  
Henning Ansorg, M.D.  
Health Officer  
Santa Barbara County Public Health Department

## Groundwater Sustainability Agency for the Eastern Management Area in the Santa Ynez River Valley Groundwater Basin

### RESOLUTION EMA-2021-001

#### RESOLUTION INITIALLY AUTHORIZING REMOTE TELECONFERENCE MEETINGS UNDER AB 361

WHEREAS, meetings of the governing Committee (“Committee”) of the **Groundwater Sustainability Agency for the Eastern Management Area in the Santa Ynez River Valley Groundwater Basin** (EMA GSA) 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, participate, and watch the EMA GSA conduct its business;

WHEREAS, Government Code section 54953(e), added by Assembly Bill 361 (2021) (“AB361”), provides for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to certain conditions and requirements; and

WHEREAS, the EMA GSA wishes to invoke the provisions of AB361 to authorize teleconference meetings subject to the provisions of Government Code section 54953(e);

NOW, THEREFORE, BE IT RESOLVED that:

Section 1. Findings. The Committee hereby finds as follows:

- (a) As provided by Government Code section 54953(e)(1), a proclaimed state of emergency exists under the California Emergency Services Act, as declared by the Governor on March 4, 2020.
- (b) As provided by Government Code section 54953(e)(1), the County of Santa Barbara Health Department has imposed or recommended measures to promote social distancing, specifically Santa Barbara County Health Order No. 2021-10.5 (see also Santa Barbara County Public Health Department Health Officials AB 361 Social Distance Recommendation issued September 28, 2021).

Section 2. Procedures for Teleconference Meetings. The EMA GSA shall hold meetings to allow for teleconference participation pursuant to the requirements of Government Code section 54953(e).

Section 3. Effective Date. This resolution shall take effect immediately upon its adoption.

Section 4. Renewal. Pursuant to Government Code section 54953(e)(3), the EMA GSA may consider findings regarding the state of emergency every 30 days.

PASSED AND ADOPTED by the governing Committee of the EMA GSA on October 21, 2021 by the following roll call vote:

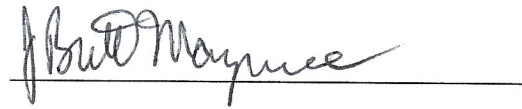
AYES: Meighan Dietenhofer (Acting Alternate), Mark Infanti, Brad Joos, Brett Marymee

NOES: None

ABSENT: None

ABSTAINED: None

ATTEST:

A handwritten signature in blue ink, appearing to read "Brett Marymee", written over a horizontal line.

Brett Marymee, Chairman

A handwritten signature in blue ink, appearing to read "William J. Buelow", written over a horizontal line.

William J. Buelow, Secretary

# **DRAFT REGULAR MEETING MINUTES**

## **Groundwater Sustainability Agency for the Eastern Management Area in the Santa Ynez River Groundwater Basin November 18, 2021**

A regular meeting of the Groundwater Sustainability Agency (GSA) for the Eastern Management Area (EMA) in the Santa Ynez River Valley Groundwater Basin was held on Thursday, November 18, 2021, at 6:30 p.m. at Santa Ynez Community Services District, Conference Room at 1070 Faraday Street, Santa Ynez, California. As a result of the COVID-19 pandemic, participation in this meeting was also available via teleconference as recommended by Santa Barbara County Public Health, authorized by State Assembly Bill 361, and Resolution EMA-2021-001 (passed on 10/21/2021).

EMA GSA Committee Members Present (in person): Joan Hartmann, Mark Infanti, Brett Marymee, and Meighan Dietenhofer (Alternate),

EMA GSA Committee Members Present (remote participation): Brad Joos and Cynthia Allen (Alternate)

Member Agency Staff Present (in person): Bill Buelow, Amber Thompson, and Matt Young

Member Agency Staff Present (remote participation): Paeter Garcia and Kevin Walsh

Others Present (in person): Jeff Barry (GSI Water Solutions), Gay Infanti, Tim Nicely (GSI Water Solutions), and Bruce Wales.

Others Present (remote participation): Steve Anderson (Best Best & Krieger), Doug Circle, Mary Heyden, CJ Jackson, Brett Stroud (Young Wooldridge), Matt van der Linden, and two additional members of the public whose names were not registered.

### **I. Call to Order and Roll Call**

GSA Committee Chair, Brett Marymee called the meeting to order at 6:30 p.m. and asked Mr. Buelow to call roll. Four GSA Committee Members were present providing a quorum plus two GSA Alternate Committee Members.

### **II. Consider findings under Government Code section 54953(e)(3) to authorize continuing teleconference meetings under Resolution EMA-2021-001**

Mr. Buelow explained that the reasonings for Resolution EMA-2021-001, passed on October 21, 2021, and State Assembly Bill 361 which authorized teleconference public meetings were still in effect.

GSA Committee Member Joan Hartmann made a MOTION to authorize continuing teleconference meetings under Resolution EMA-2021-001. GSA Committee Member Mark Infanti seconded the motion and it passed unanimously by roll call vote.

**III. Additions or Deletions, if any, to the Agenda**

No additions or deletions were made.

**IV. Public Comment**

There was no public comment.

**V. Review and Consider Approval of Minutes**

The minutes of the GSA Committee meetings on October 28, 2021 were presented for GSA Committee approval.

GSA Committee Member Joan Hartmann made a MOTION to approve the minutes of October 28, 2021 as presented. GSA Committee Member Mark Infanti seconded the motion and it passed unanimously by roll call vote.

**VI. Receive EMA GSA financial update and approve EMA Warrant Lists**

The GSA Committee reviewed the financial reports of FY 2021-22 Periods 1 through 3 (through September 30, 2021) and the Warrant Lists for July, August, and September 2021 for GSA Committee review. There were no comments.

GSA Committee Member Mark Infanti made a MOTION to approve the financial reports and the Warrant List for July, August, and September 2021 Warrant Lists (Nos. 1034-1038) totaling \$56,832.54, as presented. GSA Committee Member Joan Hartmann seconded the motion and it passed unanimously by roll call vote.

**VII. Review and consider approval of Resolution EMA-2021-002 authorizing the EMA GSA Chairperson to sign the Santa Ynez River Valley Groundwater Basin Coordination Agreement**

The GSA Committee reviewed the Santa Ynez Valley Groundwater Basin Coordination Agreement and Resolution EMA-2021-002 authorizing the EMA GSA Chairperson to sign the Santa Ynez River Valley Groundwater Basin Coordination Agreement. Mr. Buelow explained the requirement of a Coordination Agreement by DWR for Basins submitting multiple GSPs. There was no discussion.

GSA Committee Member Mark Infanti made a MOTION to approve RESOLUTION EMA-2021-002, AUTHORIZING THE EMA CHAIRPERSON TO SIGN THE SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN COORDINATION AGREEMENT. GSA Committee Member Joan Hartmann seconded the motion and it passed unanimously by roll call vote.



## **VIII. Update and discussion on Draft EMA GSP and Future Governance Options**

Mr. Buelow and Mr. Jeff Barry, GSI Water Solutions, provided an update on the completion of the final EMA GSP. Discussion followed.

There was no update on future governance options. GSA Committee Chair Brett Marymee requested a timeline of future governance options action items like what was provided by consultants for the preparation of the GSP. Discussion followed. Mr. Doug Circle, on behalf of the Santa Ynez Water Group, requested future governance consideration of adding agricultural stakeholder representation to the GSA.

## **IX. Review and discuss Scope of Work and Costs for GSI to prepare EMA Annual Report and Change Order for GSP Preparation Task**

The GSA Committee reviewed the Scope of Work and costs for GSI to prepare the EMA Annual Report. Mr. Buelow explained that the first Annual Report required by CA Department of Water Resources (DWR) will need to include data from 2018 through September 2021. Member agency staff recommended GSI prepare the EMA Annual Report. Discussion followed.

Discussion continued regarding a need for a Cost Share Agreement between the EMA GSA member agencies for at least part, if not all, of the cost of first Annual Report and possible future funding of EMA GSA projects, including the need for a rate study and costs involved with a Prop 218 or Prop 26 process.

GSA Committee Member Brett Marymee made a MOTION to request the SYRWCD add a new task order to its existing contract with GSI for completion of the first EMA Annual Report and authorize GSI to the prepare the first EMA Annual Report according to the Scope of Work with costs Not to Exceed \$61,000. GSA Committee Member Joan Hartmann seconded the motion and it passed unanimously by roll call vote.

Mr. Paeter Garcia noted that a formal agreement for Cost Share arrangement between the EMA member agencies needs to be finalized at the staff level. GSA Committee Chair Brett Marymee requested staff work together to prepare a cost share agreement and bring a cost share agreement for the EMA to the next meeting of the EMA GSA Committee.

The GSA Committee reviewed the Change Order for GSP Preparation Task from GSI. Mr. Buelow explained the existing funds received from the DWR Prop 1 Grant and deposited into the EMA checking account should cover the additional costs for the change order. Discussion followed.

GSA Committee Member Mark Infanti made a MOTION to authorize SYRWCD to modify the contract with GSI, as presented in the GSI Change Order for GSP Preparation Task, with an additional \$52,000 in costs for a revised Not to Exceed of \$179,000. GSA Committee Member Joan Hartmann seconded the motion and it passed unanimously by roll call vote.

**X. Next “Special” EMA GSA Meeting to consider GSP adoption Thursday, January 6, 2022 at 6:30 P.M.**

Mr. Buelow suggested the EMA GSA Committee schedule a Special Meeting, including a Public Hearing to consider adoption of the EMA Groundwater Sustainability Plan (GSP), for Thursday, January 6, 2022 at 6:30 pm. Discussion followed. The GSA Committee unanimously agreed to scheduling this EMA GSA Special Meeting, including a Public Hearing, to consider adoption of the EMA GSP and approved of scheduling a hybrid style meeting or by remote participation only, if needed, due to the continuing health concerns presented by the COVID-19 pandemic, with in-person location being the Santa Ynez CSD Conference Room.

**XI. Consideration of additional “Special EMA GSA Meeting” December 9 or 16, 2021 at 6:30 P.M.**

The EMA GSA Committee considered the need for an additional EMA GSA Special Meeting in December 2021. Discussion followed. The GSA Committee unanimously agreed to schedule a Special Meeting for the EMA GSA Committee on December 9, 2021 at 6:30 pm to allow for a review and discussion of public comments received on the EMA GSP and responses from consultants. The Committee approved of scheduling a hybrid style meeting or by remote participation only, if needed, due to the continuing health concerns presented by the COVID-19 pandemic, with in-person location being the Santa Ynez CSD Conference Room. The EMA GSA Committee Members requested a log of EMA GSP public comments and responses to comments. Mr. Barry offered to provide to the EMA GSA Committee Members a final EMA GSP comment log prior to the December 9, 2021 Special Meeting of the EMA GSA Committee. He offered to provide a clean version of the final EMA GSP to be considered for adoption on January 6, 2022, as well as a red-line version of the EMA GSP showing changes that were made from the Public Draft version, on or about December 16, 2021.

**XII. EMA GSA Committee requests and comments**

EMA GSA Committee Chair Brett Marymee asked for a SGMA Newsletter be produced for December 2021 announcing GSP adoption planned for January 2022.

**XIII. Adjournment**

There being no further business, GSA Committee Member Brett Marymee adjourned the meeting at 8:35 pm.

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Brett Marymee, Chairman

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William J. Buelow, Secretary

# **DRAFT SPECIAL MEETING MINUTES**

## **Groundwater Sustainability Agency for the Eastern Management Area in the Santa Ynez River Groundwater Basin December 09, 2021**

A special meeting of the Groundwater Sustainability Agency (GSA) for the Eastern Management Area (EMA) in the Santa Ynez River Valley Groundwater Basin was held on Thursday, December 09, 2021, at 6:30 p.m. at Santa Ynez Community Services District, Conference Room at 1070 Faraday Street, Santa Ynez, California. As a result of the COVID-19 pandemic, participation in this meeting was also available via teleconference as recommended by Santa Barbara County Public Health, authorized by State Assembly Bill 361, and Resolution EMA-2021-001 (passed on 10/21/2021 and reaffirmed on 11/18/2021).

EMA GSA Committee Members Present (in person): Joan Hartmann, Mark Infanti, and Meighan Diethofer (Alternate),

EMA GSA Committee Members Present (remote participation): Brad Joos, Brett Marymee, and Cynthia Allen (Alternate)

Member Agency Staff Present (in person): Bill Buelow and Matt Young

Member Agency Staff Present (remote participation): Paeter Garcia, Amber Thompson, and Kevin Walsh

Others Present (in person): Jeff Barry (GSI Water Solutions) and Gay Infanti

Others Present (remote participation): Steve Anderson, Mike Burchardi, Russell Chamberlin, Doug Circle, Tim Gorham, Mary Heyden, Tim Nicely (GSI Water Solutions), Anita Regmi (DWR), and one additional member of the public whose name was not registered.

### **I. Call to Order and Roll Call**

EMA GSA Committee Chair Brett Marymee called the meeting to order at 6:30 p.m. and asked Mr. Buelow to call roll. Four EMA GSA Committee Members were present providing a quorum plus two EMA GSA Alternate Committee Members.

### **II. Consider findings under Government Code section 54953(e)(3) to authorize continuing teleconference meetings under Resolution EMA-2021-001**

EMA GSA Committee Member Mark Infanti made a MOTION to authorize continuing teleconference meetings under Resolution EMA-2021-001. EMA GSA Committee Member Joan Hartmann seconded the motion and it passed unanimously by roll call vote.

### **III. Additions or Deletions, if any, to the Agenda**

No additions or deletions were made.

### **IV. Public Comment**

There was no public comment.

### **V. Workshop on EMA GSP Responses to Comment**

Mr. Buelow and Mr. Matt Young explained the intent of the workshop was to review responses to the public comments received on the EMA GSP, as requested by the EMA GSA Committee, and to review whether any further changes to the final GSP are needed based on responses to the comments.

EMA GSA Committee Member Mark Infanti said he reviewed the log of public comments and responses from consultants in detail. He thanked the consultants for an excellent job responding to public comments and expressed he was happy with the responses and proposed changes to the EMA GSP referenced in the public comment log.

EMA GSA Committee Member Joan Hartmann said she reviewed the log of public comments and responses from consultants in detail with Mr. Matt Young (Santa Barbara County Water Agency) and she felt the responses and changes made looked comprehensive and defensible.

EMA GSA Committee Member Brad Joos said he reviewed the log of public comments and responses from consultants in detail with Mr. Paeter Garcia (ID No. 1) and was pleased with the responses in the public comment log and reported they had not received any responses from their constituents.

EMA GSA Committee Member Brett Marymee said he reviewed the log of public comments and responses from consultants in detail with Mr. Bill Buelow (SYRWCD) and was pleased with the responses in the public comment log. He expressed he felt the responses were thoughtful, no comments were dismissed, and the comment log documents transparency and due diligence in the process of creating the EMA GSP.

EMA GSA Committee Chair Brett Marymee asked the CAG members in attendance for their response. Ms. Gay Infanti, Ms. Mary Heyden, Ms. Elizabeth Farnum and Mr. Tim Gorham unanimously agreed the consultant responses to comments received were extensive, complete, and appreciated the efforts.

EMA GSA Committee Chair Brett Marymee request the comment log be included as a deliverable as part of the GSP. Mr. Jeff Barry confirmed the comment log is planned to be included as an Appendix to the final GSP. EMA GSA Committee Member Joan Hartmann made a CONCEPTUAL MOTION indicating support and approval of responses to comments received and asked staff to follow through with making the comment log an

appendix to the final GSP. EMA GSA Committee Member Mark Infanti seconded the conceptual motion and the EMA GSA Committee unanimously approved by roll call vote.

**VI. Receive update and discuss Scope of Work and Costs for GSI to prepare EMA Annual Report**

Mr. Buelow reported that the GSA's November 18, 2021 request to add a new Task Order to the SYRWCD's existing contract with GSI, based on the Scope of Work dated October 2021, was taken to the Santa Ynez River Water Conservation District (SYRWCD) Board of Directors at their meeting of December 1, 2021. Mr. Buelow reported that the SYRWCD Board of Directors conditionally approved the EMA GSA Committee's request provided there is a Cost Share Agreement in place between three of the EMA GSA Member Agencies, (SYRWCD, City of Solvang and ID No. 1).

Mr. Buelow explained the efforts by Staff to develop a cost share. However, no cost share is in place at this time. The Notice to Proceed (NTP) is on hold pending a completed cost share agreement. Mr. Buelow reported that commitments were received from the SYRWCD and the City of Solvang, and staff continue to work with ID No. 1 to resolve their questions and concerns. Mr. Paeter Garcia explained that some of ID No. 1's concerns were addressed and stated that he expected there would be a draft cost share agreement for consideration no later than next week. Mr. Young explained that the County of Santa Barbara would not participate in the cost share agreement as it had already contributed approximately \$1.2 million to the GSP efforts in the EMA. There was discussion regarding the path forward. Mr. Barry, GSI, and others expressed urgency and need to quickly receive a Notice to Proceed within the next few days. Mr. Barry advised that further delays could result in a reduction of review time and would put a burden on consultant and agency staff to complete the report on time, as consultants are already one month behind according to their originally proposed schedule. Further discussion followed.

**VII. Next "Special" EMA GSA Meeting to consider GSP adoption Thursday, January 6, 2022 at 6:30 P.M.**

The EMA GSA Committee considered scheduling a Special Meeting, including a Public Hearing to consider adoption of the EMA Groundwater Sustainability Plan (GSP), for Thursday, January 6, 2022 at 6:30 pm. Discussion followed. The EMA GSA Committee unanimously agreed to scheduling this EMA GSA Special Meeting, including a Public Hearing to consider adoption of the EMA GSP, and approved of scheduling a hybrid style meeting with in-person at Santa Ynez CSD, Conference Room or by remote participation only, if needed, due to the continuing health concerns presented by the COVID-19 pandemic.

**VIII. Next Regular EMA GSA Meeting, Thursday, February 24, 2022**

Mr. Buelow announced that the next Regular Meeting of the EMA GSA Committee will be February 24, 2022.

**IX. EMA GSA Committee requests and comments**

EMA GSA Committee Member Brett Marymee commented that he received the SYRVGB SGMA Newsletter No. 6 with his personal water bill from ID No. 1 announcing the January Public Hearings scheduled for GSP Adoption. Mr. Buelow confirmed that Newsletter No. 6 was created by SYRWCD staff on behalf of the three GSAs, mailed out by member agencies and e-blasted to all Interested Parties through the Communication and Engagement portal.

EMA GSA Committee Member Joan Hartman asked if there will be a press release about the GSP adoption after the expected adoption during the January 6, 2022 meeting.

**X. Adjournment**

There being no further business, GSA Committee Member Brett Marymee adjourned the meeting at 7:37 pm.

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Brett Marymee, Chairman

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William J. Buelow, Secretary

# **DRAFT MEETING MINUTES**

## **Groundwater Sustainability Agency for the Eastern Management Area in the Santa Ynez River Groundwater Basin January 6, 2022**

A special meeting of the Groundwater Sustainability Agency (GSA) for the Eastern Management Area (EMA) in the Santa Ynez River Groundwater Basin was held on Thursday, January 6, 2022, at 6:30 p.m. As a result of the COVID-19 emergency, this meeting occurred solely via video and teleconference in accordance with the latest Santa Barbara County Health Officer Order, as authorized by State Assembly Bill 361, and Resolution EMA-2021-001 (passed on 10/21/2021, reaffirmed 12/9/2021).

EMA GSA Committee Members Present: Joan Hartmann, Brad Joos, Mark Infanti, and Brett Marymee

EMA GSA Alternate Committee Members Present: Cynthia Allen and Meighan Diethofer

Member Agency Staff Present: Jose Acosta, Xenia Bradford, Bill Buelow, Paeter Garcia, Amber Thompson, Kevin Walsh, and Matt Young

Others Present: Jeff Barry (GSI Water Solutions), Gay Infanti, Steve Anderson, Mike Burchardi, Doug Circle, Bob Drew, Tim Gorham, Brian Macy, Tim Nicely (GSI Water Solutions), Bob Perrault (LOCSO), Anita Regmi (DWR), Margot Smit, Brett Stroud, and one additional member of the public whose name was not registered.

### **I. Call to Order and Roll Call**

EMA GSA Committee Chair Brett Marymee called the meeting to order at 6:31 p.m. and asked Mr. Buelow to call roll. Four EMA GSA Committee Members were present providing a quorum plus two EMA GSA Alternate Committee Members.

### **II. Consider findings under Government Code section 54953(e)(3) to authorize continuing teleconference meetings under Resolution EMA-2021-001**

Mr. Buelow explained that the reasonings for State Assembly Bill 361 and adoption of Resolution EMA-2021-001, passed on October 21, 2021 and reaffirmed on December 9, 2021, which authorized teleconference public meetings were still in effect. Discussion followed.

EMA GSA Committee Member Brad Joos made a MOTION to authorize continuing teleconference meetings under Resolution EMA-2021-001. EMA GSA Committee Member Joan Hartmann seconded the motion. There was no discussion and the motion passed unanimously by roll call vote.

### **III. Additions or Deletions to the Agenda**

No additions or deletions were made.

### **IV. Public Comment**

Mr. Buelow presented a public comment letter addressed to Santa Ynez Eastern Management Area GSA Committee, received from Mr. Robert Perrault, General Manger, Los Olivos Community Services District, dated January 5, 2022. Mr. Perrault had requested to speak but was having technical difficulty with participating remotely and was unable to provide his verbal comment. Mr. Buelow summarized the content of the received letter and the committee Chair and members of the committee agreed to have the received correspondence added to the agenda for the next meeting.

### **V. Public Hearing on the Groundwater Sustainability Plan for the Eastern Management Area of the Santa Ynez River Valley Groundwater Basin (EMA GSP)**

EMA GSA Committee Chair Brett Marymee opened the public hearing at 6:45 p.m. Mr. Buelow announced the public hearing was properly noticed, gave a brief history of the EMA GSP preparation and public review process and the upcoming GSP two-year review at DWR and the DWR hosted public comment period.

Comments of thanks and congratulations were received. Ms. Anita Regmi, DWR, advised that the GSP review process at DWR is not an interactive process. She anticipated a full two-years will be needed for DWR to review due to the submission of multiple GSPs in the Basin. Discussion followed.

No public comments were received.

GSA Committee Member Mark Infanti made a MOTION to close the Public Hearing at 6:57 p.m. GSA Committee Member Brett Marymee seconded the motion. There was no discussion and the motion passed unanimously by roll call vote.

### **VI. Consider Resolution Number EMA-2022-001 adopting the Groundwater Sustainability Plan for the Eastern Management Area of the Santa Ynez River Valley Groundwater Basin**

Mr. Buelow presented verifications from the member agencies granting GSA Committee Members authority to vote for adopting the EMA GSP on behalf of their respective agency. Mr. Buelow read Resolution EMA-2022-001. He noted a couple typographical errors to be corrected. There was no discussion.

GSA Committee Member Brad Joos made a MOTION to adopt RESOLUTION EMA-2022-001, ADOPTING GROUNDWATER SUSTAINABILITY PLAN FOR THE EASTERN MANAGEMENT AREA OF THE SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN as amended for corrections of typographical errors. GSA



Committee Member Mark Infanti seconded the motion. There was no discussion and the motion passed unanimously by roll call vote.

## **VII. Update and discussion on EMA GSP and Future Governance Options**

Mr. Jeff Barry and Mr. Tim Nicely, GSI Water Solutions, provided an update on efforts to upload the GSP components to the DWR SGMA portal. They thanked Stetson Engineers for the coordinating efforts to create three coordinated GSPs for the Basin. Mr. Buelow reported that DWR had informed him that the Santa Ynez River Valley Groundwater Basin is the only medium priority groundwater basin in the State of California submitting multiple GSPs for the one basin.

There was no update and no discussion regarding future governance options. EMA GSA Committee Member Brad Joos recommended the Citizens Advisory Group (CAG) be engaged for input on future governance options. EMA GSA Committee Members agreed and requested member agency staff meet to discuss future governance options and engage with the CAG on the topic.

## **VIII. Update on EMA Annual Report and Annual Report Cost Share**

Mr. Buelow reported that a Notice to Proceed was issued to GSI on January 9, 2022. Mr. Buelow then reported that the issues and concerns regarding cost were resolved and he expected to receive nominal contributions from the three contributing agencies towards the annual report project. Mr. Barry will prepare and submit a revised schedule. Discussion followed.

EMA GSA Committee Member Joan Hartmann requested options for public participation and CAG involvement in reviewing the First Annual Report. Member agency staff will review the revised schedule provided by GSI to determine if public and CAG review time can be added beyond the presentations planned during the EMA GSA public meetings scheduled for February and March 2022.

Mr. Kevin Walsh recalled that the CAG members are volunteers who represent a broad-spectrum of the communities subject to SGMA and that all three GSA Committees accepted all CAG recommendations provided during the GSP preparation process.

Mr. Barry emphasized the need for additional existing wells located in the EMA be identified and added to the EMA Monitoring Network as is an implementation aspect to address in the First Annual Report. He requested staff seek assistance from CAG members.

## **IX. Next Regular EMA GSA Meeting, Thursday, February 24, 2022 at 6:30 p.m.**

Mr. Buelow announced the next regular EMA GSA meeting will be Thursday, February 24, 2022 at 6:30 p.m., either in person at the Santa Ynez Community Services District Conference Room or via Zoom. The details will be determined closer to the meeting date based on continuing health concerns presented by the COVID-19 pandemic.

**X. EMA GSA Committee requests and comments**

EMA GSA Committee Chair Brett Marymee requested adding to the next agenda the need for more volunteer wells in the EMA Monitoring Network.

EMA GSA Committee Member Brad Joos requested member agency staff get together to pursue additional upcoming grants. EMA GSA Committee Member Joan Hartmann agreed and requested member agency staff prepare work plans and prepare as much as possible ahead of time to be ready for when the grant application process opens and to be a successful grant applicant.

EMA GSA Chair Brett Marymee asked how staff will convey the news of the GSP adoption. Discussion followed. EMA GSA Committee Member Joan Hartmann requested member agency staff issue a press release announcing the adoption of the GSP.

Mr. Buelow summarized various items to be added to the next agenda.

**XI. Adjournment**

EMA GSA Committee Chair Brett Marymee adjourned the meeting at 7:44 p.m.

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Brett Marymee, Chairman

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William J. Buelow, Secretary

SYRWCD EMA  
BALANCE SHEET  
DECEMBER 31, 2021

Assets

Current Assets

Mechanics Bank #5843	\$113,120.48	
Other Current Assets	1,000.00	
	-----	
TOTAL Current Assets		114,120.48
		-----
TOTAL Assets		\$114,120.48
		=====

Liabilities AND Equity

TOTAL Liabilities		-----
		.00

Net Position

RETAINED EARNINGS - PRIOR	211,037.93	
Retained Earnings-Current Year	(96,917.45)	
	-----	
TOTAL Net Position		114,120.48
		-----
TOTAL Liabilities AND Equity		\$114,120.48
		=====

SYRWCD EMA  
INCOME STATEMENT  
FOR THE 6 PERIODS ENDED DECEMBER 31, 2021

	QUARTER TO DATE		YEAR TO DATE	
	ACTUAL	PERCENT	ACTUAL	PERCENT
TOTAL Revenue	\$.00	.0 %	.00	.0
Gross Profit	.00	.0	.00	.0
Expenses:				
Operating Expenses				
Outside Staff Support	300.00	.0	300.00	.0
Public Relations	429.92	.0	611.71	.0
TOTAL Operating Expenses	729.92	.0	911.71	.0
Consultants				
GSP - GSP Doc	33,626.85	.0	88,520.10	.0
Basin Coordination	5,698.14	.0	7,455.64	.0
TOTAL Consultants	39,324.99	.0	95,975.74	.0
Non Operating Expenses				
Misc Expense	30.00	.0	30.00	.0
TOTAL Non Operating Expenses	30.00	.0	30.00	.0
TOTAL Expenses	40,084.91	.0	96,917.45	.0
Net Income from Operations	(40,084.91)	.0	(96,917.45)	.0
Earnings before Income Tax	(40,084.91)	.0	(96,917.45)	.0
Net Income (Loss)	\$(40,084.91)	.0 %	(96,917.45)	.0

**GROUNDWATER SUSTAINABILITY AGENCY FOR THE  
EASTERN MANAGEMENT AREA (EMA)  
IN THE SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN**

**OCTOBER 2021 WARRANT LIST FOR COMMITTEE APPROVAL**

<u>NUMBER</u>	<u>DATE</u>	<u>PAYEE</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
1039	10/15/21	GSI Water Solutions	September 2021 GSP Preparation Services	\$ 18,424.00
1040	10/15/21	Inklings	Public Draft EMA GSP printed (Public access to review GSP at Solvang Library)	\$ 173.92
1041	10/15/21	Santa Barbara News Press	Public Draft GSP advertisement (9/26/21: 1 of 2 run dates) (1/3 of total paid per GSA)	\$ 50.00
1042	10/15/21	Santa Maria Times	Public Draft GSP advertisement (9/28/21 SYV News and 9/29/21 Lompoc Record) (1/3 of total paid per GSA)	\$ 156.00
1043	10/15/21	Valley Bookkeeping	2021 3rd Quarter Bookkeeping (July, August, September 2021)	\$ 150.00
<b>MONTH TOTAL</b>				<b>\$ 18,953.92</b>

**NOVEMBER 2021 WARRANT LIST FOR COMMITTEE APPROVAL**

<u>NUMBER</u>	<u>DATE</u>	<u>PAYEE</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
1044	11/15/21	Santa Ynez CSD	Conference Room Rental (11/18/2021 EMA GSA Meeting)	\$ 30.00
1045	11/15/21	Santa Barbara News Press	Public Draft GSP advertisement (10/3/21: 2 of 2 run dates) (1/3 of total paid per GSA)	\$ 50.00
1046	11/15/21	Stetson Engineers	August & September 2021 Engineering Service (Basin Coordination)	\$ 3,564.75
1047	11/15/21	GSI Water Solutions	October 2021 GSP Preparation Services	\$ 15,202.85
<b>MONTH TOTAL</b>				<b>\$ 18,847.60</b>

**DECEMBER 2021 WARRANT LIST FOR COMMITTEE APPROVAL**

<u>NUMBER</u>	<u>DATE</u>	<u>PAYEE</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
1048	12/14/21	Stetson Engineers	October 2021 Engineering Service (Basin Coordination)	\$ 2,133.39
1049	12/14/21	Valley Bookkeeping	2021 4th Quarter Bookkeeping (October, November, December 2021)	\$ 150.00
<b>MONTH TOTAL</b>				<b>\$ 2,283.39</b>

**TOTAL THIS QUARTER: \$ 40,084.91**

**Santa Ynez River Valley Groundwater Basin**  
**2022 Regular GSA Meetings**

**WMA GSA Committee**

(Wednesday, 10:00 am; if in person, at Lompoc Water Treatment Plant)

February 23, 2022	Regular Meeting	
May 25, 2022	Regular Meeting	
August 24, 2022	Regular Meeting	
<b>November 16, 2022</b>	Regular Meeting	meeting to be held one week early due to Thanksgiving Holiday

**CMA GSA Committee**

(Mondays, 10:00 am; if in person, at Buellton City Council Chambers)

February 28, 2022	Regular Meeting	
May 23, 2022	Regular Meeting	
August 22, 2022	Regular Meeting	
<b>November 14, 2022</b>	Regular Meeting	meeting to be held one week early due to Thanksgiving Holiday

**EMA GSA Committee**

(Thursday, 6:30 pm; if in person, at Solvang City Council Chambers)

February 22, 2022	Regular Meeting	
May 26, 2022	Regular Meeting	
August 25, 2022	Regular Meeting	
<b>November 17, 2022</b>	Regular Meeting	meeting to be held one week early due to Thanksgiving Holiday

Lisa Palmer, President  
Tom Fayram, Vice President  
Mike Arme, Director  
Brian O'Neill, Director  
Brad Ross, Director



January 5, 2022

Santa Ynez Eastern Management Area GSA Committee  
C/o Bill Buelow  
PO Box 719  
Santa Ynez, CA 93460

via email:bbuelow@syrwcd.com

Subject: Public Hearing on the Groundwater Sustainability Plan

Dear Committee Members:

On behalf of the Los Olivos Community Services District, thank you for your efforts in completing this Groundwater Sustainability Plan (GSP). The health and sustainability of the Santa Ynez Basin Eastern Management Area (EMA) is important to every community member who relies on the basin as a safe water resource.

It is important to note that the GSP recognizes degraded water quality as an indicator of basin sustainability. In 1974, Santa Barbara County Environmental Health Services (EHS) designated the community of Los Olivos as a Special Problems Area due to nitrate levels that exist in the shallow aquifer underlying Los Olivos. Since the Special Problems Area designation by the County more than four decades ago, no additional monitoring of the basin has been done in the Los Olivos area to further track groundwater nitrate levels.

In 2018, Los Olivos voters authorized the formation of the Los Olivos Community Services District. The District's purpose is to fund and develop a septic to sewer conversion project that will resolve the nitrate and other contaminant concentrations problem. A component of this project is the development of a groundwater monitoring program. The development of a groundwater monitoring program is necessary to measure the condition of water quality and to assist the District in developing a wastewater collection and reclamation project that will improve the water quality in the underlying aquifers.

In 2021, the District worked with GSI Water Solutions and developed a proposed Groundwater Monitoring Program for the Los Olivos CSD area (attached). The Monitoring Plan recognizes the same data gaps for Los Olivos as noted in the draft GSP. There are currently only two wells in the Los Olivos area with the capability of monitoring both water levels and water quality. Both existing wells are within the Paso Robles Formation. The Monitoring Plan identifies the need to install a monitoring network consisting of 12 additional wells to be constructed in two phases. The location of the wells will monitor basin conditions both underlying Los Olivos and upgradient of the community, also within the EMA. The implementation of the Monitoring Plan is expected to enable the following:

- Determine the impact of existing Onsite Water Treatment Systems (OWTS) on groundwater quality;

**Los Olivos Community Services District, P.O. Box 345, Los Olivos, CA 93441, (805) 946-0431**

[losolivoscscd@gmail.com](mailto:losolivoscscd@gmail.com), [www.losolivoscscd.com](http://www.losolivoscscd.com)

- Quantify the impact of upgradient sources of contaminants outside of the District;
- Model soil characteristics such as infiltration rates, permeability, and other geological and hydrological parameters;
- Establish a baseline and monitor groundwater quality trends that will show the impact of community wastewater reclamation.

Given the breadth of monitoring programs needed, the projected monitoring program cost is infeasible for the District to undertake on its own. Based on the GSI proposal, each phase is estimated to cost approximately \$300,000 to implement and conduct the monitoring necessary to yield the desired result, as noted above.

Therefore, the District requests that the Groundwater Sustainability Agency and the District develop a partnership to fund and implement this very important and long overdue monitoring network. This partnership would cooperatively support the requirements of the Groundwater Sustainability Plan by strategically coordinating local needs with their overall Monitoring Program to include monitoring wells in and around the District in support of the EMA's monitoring program.

We appreciate the opportunity to comment on the GSP and look forward to developing the partnership necessary to achieve our mutual goals for the region's water quality and sustainability.

Sincerely,

*Robert Perrault*

Robert Perrault  
General Manager

cc:

State Assembly Member Steve Bennett, District 37  
State Senator S. Monique Limon, District 19  
Supervisor Joan Hartmann, Santa Barbara County 3<sup>rd</sup> District Supervisor  
Michael Prater, Local Agency Formation Commission  
James Bishop, Central Coast Regional Water Quality Control Board  
Lars Seifert, Santa Barbara County Environmental Health Services

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## TECHNICAL MEMORANDUM

### Los Olivos Groundwater Monitoring Plan

**To:** Doug Pike, Los Olivos Community Services District  
**From:** Andy Lapostol, Brian Franz and Tim Thompson, GSI Water Solutions, Inc.  
**Date:** April 27, 2021

#### Executive Summary

This technical memorandum presents the Groundwater Monitoring and Reporting Plan (GWMP) for Los Olivos, California and constitutes an initial element supporting development of the Los Olivos Community Services District's (LOCS) Wastewater Reclamation Program Project. The purpose of this GWMP is to establish the methodology for (a) defining the baseline groundwater quality in the Los Olivos area and (b) monitoring future changes in water quality as septic to sewer conversion plans are implemented.

Los Olivos overlies two principal aquifers: Tributary Alluvium (also referred to as the shallow aquifer), which extends to a maximum depth of roughly 75 feet below ground surface, and the underlying Paso Robles Formation (also referred to as the deep aquifer). Nearly all wells with a record of water level data in the Los Olivos area are perforated at least partially in the Paso Robles Formation. No known wells are constructed exclusively within the Tributary Alluvium and therefore the groundwater conditions in this shallow aquifer are not well understood. Groundwater in the Tributary Alluvium varies seasonally and exists within discontinuous, perched layers.

Past studies suggest that the shallow aquifer underlying Los Olivos contains elevated concentrations of nitrate which are assumed to be a result of discharges from numerous septic systems in Los Olivos and potentially exacerbated by undefined upgradient sources. The depth and extent of nitrate contamination in both the Tributary Alluvium and the Paso Robles Formation are not currently well defined, but it is believed that nitrates in the shallow alluvial aquifer may be contributing to elevated nitrate concentrations in the deep aquifer. The Paso Robles Formation represents the primary water source for water supply wells in the area.

A monitoring network of up to twelve new monitoring wells located within the vicinity of Los Olivos is proposed to characterize groundwater quality and better define groundwater conditions in both the Tributary Alluvium and Paso Robles Formation aquifers. The proposed monitoring wells will be installed in two phases, with the initial six wells to be located immediately upgradient, within, and downgradient of Los Olivos. Results from water quality sampling at these wells will establish baseline groundwater quality conditions. The locations of the wells installed during the second phase (up to six wells) will be selected based upon areas where water quality data gaps can be addressed. Data collected during water quality sampling will include 5 parameters measured in the field, and 12 parameters measured in a state-certified environmental laboratory. Sampling and reporting is planned to be conducted quarterly for the first two years, and then annually thereafter.

## Introduction & Purpose

This technical memorandum presents the Groundwater Monitoring and Reporting Plan (GWMP) for Los Olivos, California and constitutes an initial element supporting development of the Los Olivos Community Services District's (LOCS) Wastewater Reclamation Program Project. The purpose of this GWMP is to establish the methodology for (a) defining the baseline groundwater quality in the community of Los Olivos and (b) monitoring future changes in water quality as septic to sewer conversion plans are implemented. This plan provides the following elements:

- Establishment of a monitoring network
- Sampling protocols, program, and schedule to collect baseline and future water quality data
- Reporting guidelines and frequency

Included in this GWMP is a hydrogeological conceptual model (HCM) that is specific to the urbanized area of Los Olivos. The HCM provides information on the hydrogeological setting and associated groundwater conditions that support the development of this GWMP. The HCM defines the depth, extent, and hydrogeologic characteristics of the principal aquifers and aquitards which will assist in the establishment of well construction criteria needed for the future monitoring well network. The HCM also describes the history of water quality conditions within and upgradient of Los Olivos. These data help with the establishment of the appropriate list of constituents to be sampled as part of the monitoring program, which will allow for determination of water quality trends as these data are collected into the future. Furthermore, the data gaps identified in the HCM provide a guide for future data collection efforts that will be essential for the development of LOCS's Wastewater Reclamation Program Project. The HCM component of this memo includes the following technical components:

- Geologic conditions specific to the Los Olivos area
- Depths and hydrogeologic characteristics of aquifers and aquitards
- Recent and historical water level data
- Horizontal and vertical flow gradients
- Historical water quality trends
- Identification of data gaps

## 1. Site Setting and History

Los Olivos is an unincorporated community of Santa Barbara County, located in the Eastern Management Area (EMA) of the Santa Ynez River Valley Groundwater Basin (Basin), as illustrated on Figure 1. The town is located at the intersection of Highway 154 and Alamo Pintado Creek, one of the major tributaries in the EMA that flows from the Los Padres National Forest in the north to the Santa Ynez River in the south. Los Olivos has a footprint of approximately 280 acres and includes approximately 340 residential and commercial parcels, all of which utilize onsite wastewater treatment systems (OWTS; i.e., septic systems).

In 1975, the Santa Barbara County Public Health Department (County Health) conducted a door-to-door sanitary survey of residences and businesses in Los Olivos to assess the status of septic system conditions. The study revealed that about 60% of the properties were served by drywells that generally extend into permeable alluvial deposits. Local water wells and monitoring wells in town indicated that seasonal perched groundwater levels range from 5 to 15 feet below ground surface, suggesting that many of the drywells discharge septic tank effluent into perched groundwater zones.

In 1977, County Health and the Central Coast Regional Water Quality Control Board (RWQCB) collected water samples from a series of wells located in and around Los Olivos. The samples were analyzed for typical water quality constituents, including nitrates. The results of these analyses appeared to show that the high density of septic systems in Los Olivos was contributing to a local increase in groundwater-nitrate concentrations, with some wells approaching or equaling the drinking water maximum contaminant levels (MCLs). In 1980, County Environmental Health Services again tested the same wells that were tested in 1977. However, because neither the depth to water in the sampled wells nor well construction information was reported, it is uncertain which of these results are specifically associated with the shallow groundwater of the area. The results and limitations of these investigations are discussed further in Section 3.1.1.

As a result of the apparent water quality challenges in the area Los Olivos was identified by County Health as a Special Problems Area (SPA). The SPA designation requires an additional review for proposed development projects to mitigate potential threats to public health. Additionally, the RWQCB has imposed wastewater flow restrictions on each parcel, thereby limiting the owner's use of the property (AECOM 2013). Los Olivos represents the first of ten SPAs in Santa Barbara County to develop a management plan addressing onsite wastewater issues.

LOCSO was formed in 2018 to provide a funding mechanism for the development, permitting, construction, and operation of facilities necessary to collect, treat, and dispose of sewage, wastewater, recycled water, and stormwater. LOCSO's Wastewater Reclamation Program Project represents an effort to develop an economically acceptable and technically feasible solution to the negative impacts caused by the high OWS density in the community. Implementing a local groundwater monitoring plan is a key component of the initial phase of this project.

## 2. Hydrogeologic Conceptual Model

To establish a sufficient technical understanding of the local groundwater conditions, it is valuable to develop a clear hydrogeologic conceptual model (HCM) of the Los Olivos area. This HCM was developed using published hydrogeologic reports and publicly accessible online databases. Data were augmented with relevant resources from ongoing work currently being conducted to develop the Draft Groundwater Sustainability Plan for the Eastern Management Area (EMA) of the Santa Ynez Groundwater Basin (Basin).

### 2.1 Geology

Los Olivos is underlain by an unconsolidated to weakly consolidated Tertiary-aged marine sandstone deposit referred to as the Careaga Sand and non-marine Pliocene and Pleistocene aged sand, gravel, silt, and clay deposits that comprise the overlying Paso Robles Formation. These water-bearing formations extend to depths of over 1,500 feet in the area. Paso Robles Formation is exposed at the surface in the hills of the Santa Ynez Uplands that surround the town. To the southeast, Paso Robles Formation is overlain by Quaternary aged Older Alluvium. The urbanized area of Los Olivos, which is in a topographical low formed by Alamo Pintado Creek, Tributary Alluvium blankets the Paso Robles Formation in the form of channel deposits and extends from ground surface to a depth of approximately 75 feet.

The southeast to northwest trending Los Alamos Fault and Casmalia Fault Zone intersect the Los Olivos area. These faults do not exhibit vertical offset of adjacent materials and are not believed to be barriers to groundwater flow, but instead are likely semi-permeable because of the interbedded (layered) nature of the underlying Paso Robles Formation (Rick Hoffman & Associates, 1996). The surficial geology and major fault systems surrounding the Los Olivos area are illustrated on Figure 2.

### 2.2 Depths and Characteristics of Aquifers and Aquitards

Aquifers are commonly named based upon the presence of water-bearing sand and gravel deposits grouped together into similar zones. Aquifers can be vertically or horizontally separated by fine-grained layers

(“aquitards”) that can impede movement of groundwater between aquifers. Two Principal Aquifers have been identified in the Los Olivos Area: Paso Robles Formation and Tributary Alluvium. The Paso Robles Formation and Older Alluvium have similar characteristics and so have been combined into a single Principal Aquifer. The Careaga Sand is also present in the Basin, but it lies beneath the Paso Robles Formation, which is estimated to be upwards of 1,000 feet thick in the vicinity of Los Olivos and is therefore too deep to be considered a Principal Aquifer for Los Olivos.

### 2.2.1 Paso Robles Formation

The Paso Robles Formation makes up the majority of groundwater storage within the overall EMA. In Los Olivos, deeper well logs indicate that Paso Robles Formation extends to depths exceeding 1,300 feet below ground surface.

The Paso Robles Formation is a predominantly non-marine unit made of relatively thin, often discontinuous sand and gravel layers interbedded with thicker layers of silt and clay. These layers are often described on drillers logs as “shale gravel.” The formation was deposited in alluvial fan, flood plain, and lacustrine depositional environments. The formation is unconsolidated and poorly sorted. The sand and gravel beds within the unit have a high percentage of Monterey shale gravel fragments and generally have lower permeability compared to the shallow, unconsolidated alluvial sand and gravel beds. The formation is typically sufficiently thick and permeable such that properly designed and maintained water wells can produce up to several hundreds of gallons per minute.

The Paso Robles Formation is considered a single aquifer, although the formation is known to vary with depth. The upper part consists of generally coarser-grained materials typical of alluvial fan deposits, whereas the lower part of the complexly folded formation is finer-grained. The coarser-grained portions of the Paso Robles Formation yield groundwater to wells at higher flow rates than the underlying portions.

Based on aquifer tests for 20 wells completed in the Paso Robles Formation throughout the EMA, the hydraulic conductivity of the aquifer varies between 1 and 100 feet per day, with an average of approximately 18 feet per day (GSI, 2021).

### 2.2.2 Tributary Alluvium

The Tributary Alluvium consists of alluvial deposits within the Alamo Pintado Creek that flows from north to south from the Santa Ynez Uplands towards the Santa Ynez River. The stream channel incises Paso Robles Formation in the Uplands areas (north of highway 154) and Quaternary Alluvium in the vicinity of Los Olivos. Tributary Alluvium is made up of thin, discontinuous lenses of silt, sand, and gravel and extends to a depth of up to approximately 75 feet below ground surface (bgs).

Tributary Alluvium is not a reliable aquifer because of its shallow depth as well as its tendency to become dewatered during drought periods (Rick Hoffman & Associates, 1996). Several wells located in the tributary valley are completed in both the Tributary Alluvium and the underlying Paso Robles Formation, which are hydraulically connected. These wells appear to benefit from higher hydraulic conductivity of the shallow alluvium and the contribution of greater storage capacity and saturated thickness of the Paso Robles Formation.

There is a lack of published aquifer properties or aquifer tests in the Tributary Alluvium, not only within the Los Olivos Area but within the entire EMA. However, considering the generally coarse and permeable nature of the sediments, the Tributary Alluvium is assumed to have hydraulic properties similar to that of alluvial sediments elsewhere in the Basin. Based on criteria presented in the EMA Groundwater Sustainability Plan (GSI, 2021) the Tributary Alluvium is estimated to have an average hydraulic conductivity of approximately 200 feet per day.

### 2.2.3 Aquitards

Fine-grained sedimentary layers are common within the Paso Robles Formation and constitute localized confining layers. However, these zones are generally not laterally continuous and consequently do not represent barriers to regional groundwater flow.

Similar lithologic patterns of alternating fine and coarse-grained beds occur in the Tributary Alluvium. Lenses of fine-grained sediment are presumed to be the cause of localized, perched groundwater beds that have been observed in the Los Olivos area. A review of well logs in the vicinity indicates that these lenses are not continuous over the lateral extent of the area. Most well logs indicate a 5- to 15-foot-thick layer of fine sediments encountered within the upper 40 feet of drilling, but the depths and thicknesses vary significantly across the area, meaning that there is no single aquitard within the Tributary Alluvium that inhibits surface recharge and causes perched groundwater.

## 2.3 Recent and Historical Water Level Data

The most comprehensive source of water level data in the Los Olivos area is the National Water Information System (NWIS) database, which contains retrievable data through the United States Geological Survey (USGS) Water Resources website. The NWIS dataset includes data from the California Statewide Groundwater Elevation Monitoring (CASGEM) system in addition to data collected by the County of Santa Barbara. Well and water level data were compiled for all reported wells within the vicinity of Los Olivos. Well locations for all the NWIS wells contained in the database are shown on Figure 3.

There are limited water level data available for the Los Olivos area. Los Olivos constitutes a small portion of the overall groundwater basin, therefore very few actively monitored wells are located in the area. The majority of known wells in the area only have a single recorded water level, likely taken at the time of construction, which is typically between 1940 and 1960. The following sections describe available water level data in each of the Principal Aquifers in more detail.

### 2.3.1 Paso Robles Formation

Figure 4 illustrates hydrographs for two wells completed in the Paso Robles Formation: 7N/31W-22A03 and 7N/31W-23P01. These wells are the only two wells near Los Olivos with a record of water level data. These hydrographs present the water level elevation for the period of record relative to ground surface, in addition to periods of climatic variations, which were based on precipitation data representative of conditions in the EMA.

The Paso Robles Formation well hydrographs illustrate long-term stability of water levels over time. Water levels typically do not show drastic differences from the 1950s to present. However, water levels in the Paso Robles Formation show a strong correlation with climatic conditions. Some wells show water elevation decreases of more than 100 feet during prolonged drought cycles, but most wells appear to fully recover within a few years following the drought period.. Changes in water level are likely related to groundwater pumping as well. The Paso Robles aquifer is the most productive and most widely pumped aquifer in the EMA; increased pumping demand during dry weather cycles likely contributes to declining water levels during drought periods.

Seasonal fluctuations in water levels in the Paso Robles Formation appear to be relatively small (less than 30 feet). This observation is based on water level records predating 1980, when the USGS began monitoring water levels annually in the spring, instead of bi-annually in the spring and fall.

Though there are limited data available to calculate lateral hydraulic gradients in the Paso Robles Formation, groundwater flow direction in the aquifer is generally south-southwest with lateral gradients between 0.02 to 0.03 feet per foot throughout the Santa Ynez Uplands (GSI, 2021). Gradients are likely affected by pumping depressions associated with nearby municipal supply wells.

### 2.3.2 Tributary Alluvium

There are no wells completed in the Tributary Alluvium within the vicinity of Los Olivos that have a record of water level data. However, wells in other parts of Basin that are completed in the shallow alluvium of various tributaries show that water levels vary relative to their completed depth. Because shallow alluvial wells do not benefit from completion in both the overlying alluvium and Paso Robles Formation, they tend to rapidly de-water during drought periods. However, the same wells often benefit from rapid water level recovery in response to any substantial seasonal rainfall and to fully recharge during even a single wet year. Alluvial groundwater elevations are typically higher in the spring than in the fall, and generally fluctuate by ~30 feet annually.

Although there is a paucity of groundwater elevation data available to calculate lateral hydraulic gradients in the Tributary Alluvium surrounding Los Olivos, it is understood that the groundwater flow direction generally follows the tributary valley gradient from north to south, following the alignment of the Alamo Pintado Creek. Based on limited data in other portions of the Basin, it is assumed that the hydraulic gradient is approximately 0.002 feet per foot, roughly mimicking the topographic profile of the creeks.

### 2.3.3 Vertical Flow Gradients

Characteristics of vertical flow of groundwater within the Principal Aquifers underlying Los Olivos are not known but would be valuable to understand the nature of the connection between shallow and deeper aquifers. The installation of monitoring wells that are discretely completed in either the alluvium or the Paso Robles Formation would provide information to better understand this relationship.

## 2.4 Pumping History and Status

Many small, domestic wells exist within Los Olivos. Documentation of well construction or pumping history is not available for these wells. The majority of the water demands for the Los Olivos community is served by wells operated by SYRWCD ID-1, using wells that pump from the Paso Robles Formation. Typical annual water demand for Los Olivos is approximately 350 to 400 acre-feet per year (AFY) (SBC EHS, 2010).

## 3. Historical Water Quality

Groundwater quality samples have been collected and analyzed within the Los Olivos area for various studies and programs over many years. A broad survey of groundwater quality was conducted by USGS as part of its Groundwater Ambient Monitoring and Assessment (GAMA) Program. This report summarizes a compilation of historical groundwater quality data from both the USGS-operated NWIS database and the State Water Resources Control Board's (SWRCB) GeoTracker GAMA database. Some water quality data were also obtained from various published reports.

For this report, data were collected and reviewed for over 40 wells located both upgradient and within the urbanized area of Los Olivos. Sampling dates for the data ranges from 1958 to 2018, although only 30% of the data were collected within the last 10 years. Locations of these water quality sampling points are shown on Figure 5.

One of the major limitations for the water quality data analyzed for this study is that well construction details (i.e., depths of well completion, and specific aquifers contributing to the well) are not known for most of the wells. Thus, for most of samples collected, it is unknown which aquifer is represented. To understand the differences in water quality at various vertical horizons in the Principal Aquifers, water quality sampling will need to be conducted in wells with known construction details.

### 3.1 Constituents of Interest

Elevated nitrate concentrations in the shallow aquifer are the reason for the designation of the Los Olivos as a Special Problems Area, and are therefore the primary constituent of interest for this study and for the

associated LOCSW Wastewater Reclamation Program Project. Historical concentrations of total dissolved solids (TDS), chloride, and sulfate were also assessed and are discussed in the following sections. While not directly related to septic systems, these constituents are general indicators of groundwater quality and also will be monitored (in addition to other constituents as identified in Section 6) as part of the sampling program for the Groundwater Monitoring Plan.

Water quality is typically evaluated with regard to drinking water standards (Maximum Contaminant Limit [MCL] or Secondary MCL [SMCL]) or basin water quality objectives (WQO). Drinking water standards are established by federal and state agencies by setting concentration thresholds for specific chemicals using MCLs and SMCLs. MCLs are regulatory thresholds and SMCLs are guidelines established for nonhazardous aesthetic considerations such as taste, odor, and color. WQOs are set by the Regional Water Quality Control Board (RWQCB) in published Basin Plans to protect beneficial uses of groundwater on a basin-by-basin basis.

Table 1 shows the MCLs and WQOs for the constituents discussed in this report.

**Table 1. Water Quality Standards for Select Constituents**

Constituent	MCL (mg/L)	SMCL <sup>1</sup> (mg/L)	WQO (mg/L)
Nitrate <sup>2</sup>	10	-	1
Total Dissolved Solids	-	1,000	600
Chloride	-	500	50
Sulfate	-	500	10

**Notes**

1 Upper SMCL (SWRCB, 2018)

2 Nitrate reported as nitrogen.

MCL: maximum contaminant level

SMCL: secondary maximum contaminant level

WQO: water quality objective

mg/L: milligrams per liter

-: no value established

**3.1.1 Nitrate (as Nitrogen)**

Elevated concentrations of nitrate in groundwater can be associated with agricultural activities, septic system discharges, confined animal facilities, landscape fertilizers, and wastewater treatment facility discharges. Nitrate is soluble in water and can easily pass through soil to the groundwater table. Nitrate can persist in groundwater for decades and accumulate to increased concentrations as more nitrogen is discharged onto the land surface or into water.

Data compiled from the USGS NWIS and SWRCB GAMA databases show that 46 nitrate samples were collected from 15 wells in the Los Olivos area, between 1958 and 2017. Concentrations of nitrate (reported by the lab as the concentration of nitrate as nitrogen, for which the MCL is 10 mg/L) ranged from 0.8 to 12 mg/L, with a mean of 3.3 mg/L. Only one sample, collected in 1980, reported a nitrate concentration above the MCL of 10 mg/L. Most wells in the dataset only have a single reported nitrate sample. The few wells with a period of record did not have discernible trends in nitrate concentrations. Of the 46 reported samples, 6 were collected from wells of known depth. All 6 of these wells are deeper than 130 feet and are therefore assumed to be completed in the Paso Robles Formation. The results from these wells were similar to those of the rest of the data set.

Wells upgradient (north) of Los Olivos were also evaluated. Upgradient wells showed similar concentrations to the wells in Los Olivos; most wells with a period of record showed nitrate concentrations ranging from 1 to 3 mg/L with no discernible trends.

The USGS NWIS and SWRCB GAMA databases do not include the nitrate samples collected by the Santa Barbara County Health Department in 1997 and 1980 (see Section 1). These samples were reported by the lab as the concentration of the nitrate molecule (NO<sub>3</sub>), for which the MCL is 45 mg/L. The 1977 and 1980 concentrations ranged from 0.4 mg/L to 44 mg/L. The average nitrate concentration in the 10 wells during 1977 was 20.4 mg/L, and in the same wells during 1980 was 24.3 mg/L. These data suggest an upward trend in nitrate concentrations; however, there is uncertainty in the results because well completion depths are unknown for all 10 of the sampled wells. Additional uncertainty is also present because supporting documentation of these two sampling events is not provided (i.e., chain of custody, water levels, or information regarding sampling methods) to verify the legitimacy of the results.

### 3.1.2 Total Dissolved Solids

Data compiled from the USGS NWIS and SWRCB GAMA databases show that 43 TDS<sup>1</sup> samples were collected from 15 wells in the Los Olivos area, between 1958 and 2014. Concentrations of TDS ranged from 352 to 806 mg/L, with a mean of 656 mg/L. No samples exceeded the SMCL of 1,000 mg/L (upper limit). Most wells in the dataset only have a single reported TDS sample. The few wells with a period of record showed that TDS concentrations are relatively stable over time. Of the 43 reported samples, 6 were collected from wells of known depth. All 6 of these wells are deeper than 130 feet and are therefore representative of the Paso Robles Formation. The results from these wells were similar to those of the rest of the data set.

Wells upgradient of Los Olivos were also evaluated. Upgradient wells showed slightly lower concentrations compared to the wells in Los Olivos; most wells with a period of record showed stable TDS concentrations over time, ranging from roughly 400 to 600 mg/L.

### 3.1.3 Chloride

Data compiled from the USGS NWIS and SWRCB GAMA databases show that 43 chloride<sup>2</sup> samples were collected from 15 wells in the Los Olivos area, between 1958 and 2014. The concentrations of chloride ranged from 24 to 59 mg/L, with a mean of 33 mg/L. All reported concentrations for chloride are well below the SMCLs. Most wells in the dataset only have a single reported chloride sample. The few wells with a period of record showed that chloride concentrations are relatively stable over time. Of the 43 reported samples, 6 were collected from wells of known depth. All 6 of these wells are deeper than 130 feet and are

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<sup>1</sup> Total dissolved solids (TDS) is a water quality parameter defined as the concentration of minerals, salts or metals dissolved in a given volume of water. Elevated TDS concentrations in groundwater are commonly associated with rocks of marine origin that are present in the Basin. The SMCL for TDS has been established for color, odor, and taste, rather than human health effects. The SMCL includes a recommended standard of 500 mg/L, an upper limit of 1,000 mg/L and a short-term limit of 1,500 mg/L (SWRCB, 2018).

<sup>2</sup> Elevated chloride concentrations in groundwater may be associated with rocks of marine origin that are present in the Basin. The SMCL for chloride has been established for color, odor, and taste, rather than human health effects. The SMCL includes a recommended standard of 250 mg/L, an upper limit of 500 mg/L and a short-term limit of 600 mg/L (SWRCB, 2018).



therefore assumed to be completed in the Paso Robles Formation. The results from these wells were similar to those of the rest of the data set.

Wells upgradient of Los Olivos were also evaluated. Upgradient wells showed slightly similar concentrations compared to the wells in Los Olivos; most wells with a period of record showed stable chloride concentrations over time, ranging from roughly 20 to 60 mg/L.

### 3.1.4 Sulfate

Data compiled from the USGS NWIS and SWRCB GAMA databases show that 43 sulfate<sup>3</sup> samples were collected from 15 wells in the Los Olivos area, between 1958 and 2014. The concentrations of sulfate ranged from 13 to 230 mg/L, with a mean of 173 mg/L. All reported concentrations for sulfate are below the SMCLs. Most wells in the dataset only have a single reported sulfate sample. The few wells with a period of record showed that sulfate concentrations are relatively stable over time. Of the 43 reported samples, 6 were collected from wells of known depth. All 6 of these wells are deeper than 130 feet and are therefore assumed to be completed in the Paso Robles Formation. The results from these wells were similar to those of the rest of the data set.

Wells upgradient of Los Olivos were also evaluated. Upgradient wells showed slightly similar concentrations compared to the wells in Los Olivos; most wells with a period of record showed relatively stable sulfate concentrations over time, ranging from roughly 20 to 200 mg/L.

## 3.2 Potential Point Source Contaminants

Potential point sources of groundwater contamination, or potentially contaminating activities (PCAs) were identified using the SWRCB GeoTracker data management system<sup>4</sup>. There are not any active PCAs within or upgradient of Los Olivos. There are two historical leaking underground storage tank (LUST) sites within Los Olivos, but both sites have been remediated and designated as “closed” cases by the SWRCB for over 10 years. These sites are not considered to pose a threat to groundwater quality in the Los Olivos area.

## 4. Data Gaps

### 4.1 Groundwater Elevation Data

Central to the understanding of groundwater conditions in Los Olivos are reliable, frequent, and well-distributed water elevation data for each of the Principal Aquifers. There are only two wells within the vicinity of Los Olivos that have a record of water level data, and both wells are completed in the Paso Robles Formation. One of these wells, known by its State Well ID 7N/31W-23P01, was recently destroyed. The remaining well (7N/31W-22A03) is located north of town and is monitored by the County of Santa Barbara once every spring. It would be worthwhile for LOCSO to contact and seek permission from local well owners to determine if any other nearby wells could be added to the monitoring network.

### 4.2 Well Construction Data

An accurate understanding of the completion of each well is central to its usefulness in representing groundwater levels and groundwater quality results for each Principal Aquifer. However, based on efforts to obtain this type of information has not resulted in any data for wells in the Los Olivos area.

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<sup>3</sup> The SMCL for sulfate has been established for color, odor, and taste, rather than human health effects. The SMCL includes a recommended standard of 250 mg/L, an upper limit of 500 mg/L and a short-term limit of 600 mg/L (SWRCB, 2018).

<sup>4</sup> Geotracker data management system is available at <https://geotracker.waterboards.ca.gov/>. Accessed February, 2021

It is likely that many of the domestic wells within Los Olivos are completed in both the Tributary Alluvium and the Paso Robles Formation. If historical data are to be used to characterize baseline water elevation and water quality conditions, confirming the construction details of existing wells with data will be necessary.

## 5. Monitoring Network

To define baseline groundwater quality conditions and to monitor changes over time as LOCSD’s Wastewater Reclamation Program is implemented, a network of new monitoring wells will need to be constructed. Ideally, the monitoring network would include wells within Los Olivos in addition to wells upgradient, which would allow for the detection of any offsite groundwater contamination that may be migrating into the LOCSD area.

It is recommended that up to twelve new monitoring wells be installed to establish a sufficient monitoring network. As the immediate installation of twelve new wells is likely not economically feasible, a phased approach to the development of the monitoring network is recommended, as illustrated on Figure 6. Table 2 indicates the basis for the location of each planned well.

**Table 2. Planned Monitoring Wells**

Planned Well Number	Phase	Rationale
1	Phase 1	Upgradient; characterizes drainage west of Alamo Pintado Creek
2	Phase 1	Upgradient; characterizes Alamo Pintado Creek
3	Phase 1	Upgradient; characterizes eastern tributary of Alamo Pintado Creek
4	Phase 1	Upgradient; characterizes drainage east of Alamo Pintado Creek
5	Phase 1	In the center of town, near the proposed WWTP Site
6	Phase 1	Downgradient; near southern extent of Special Problems Area
7 - 12	Phase 2	Will be constructed on as-needed basis, based on data gaps

Phase 1 represents the six most important well locations, which are intended to capture groundwater quality characteristics immediately upgradient of Los Olivos, in the center of town, and downgradient towards the southern extent of the Special Problems Area. Potential locations for the Phase 2 monitoring wells are identified on Figure 6, although the final number and locations of these wells will be determined based upon an assessment of data gaps from the water quality results from the initial 6 monitoring wells as well as from other available data.

During the interim period between the beginning of baseline monitoring and the completion of the overall monitoring network, requesting the use of existing wells within the community for data collection would be of substantial benefit. If an existing well is in reasonably good condition and the total depth and screen interval are known, it may be used for water level and/or water quality sampling in lieu of a new monitoring well. LOCSD would need to coordinate with private well owners and obtain permissions for use.

### 5.1 Monitoring Well Design and Construction

Most monitoring wells are recommended to be constructed to allow for sampling from the Tributary Alluvium. Data from these wells will be representative of the shallow groundwater zones, will document water quality conditions associated with the most recent land use practices, and will also tend to respond most quickly to changes in management activities. Some wells should also be constructed in deeper portions of the aquifer to assess water quality differences in the deeper zones. Up to three of the proposed monitoring wells are recommended to be installed as nested monitoring wells to allow for discrete sampling of both shallow and deeper aquifers as well as determination of vertical hydraulic gradients. Calculating the vertical hydraulic

gradient is important for understanding the extent that shallow groundwater may migrate into deeper zones. The locations for the three recommended nested monitoring wells are shown on Figure 6 by the black, dashed outline on the green site circle.

Since most monitoring wells are expected to be relatively shallow, it is likely that the boreholes will be drilled using a hollow stem auger drill rig. Wells will be constructed with 2 or 4-inch PVC casing and a slotted screen interval, the depth of which will be determined during well construction by reviewing the borehole cuttings. Following drilling, borehole lithology will be logged and well construction (i.e., installing the casing and gravel pack) will be supervised by a qualified geologist. Following construction, the monitoring wells will be developed by the driller using bailing methods. A water quality sample will then be collected and analyzed at a State Certified laboratory.

Each completed well will be documented by a well construction report that provides the drilling methods employed, the final construction details, borehole lithology recorded from drill cuttings, and observations of static water level.

The locations and elevations of each completed monitoring well will be established by a licensed surveyor. Horizontal coordinates for the well will be measured to the nearest 1.0 foot. Elevations will be measured to the nearest 0.01 foot. Elevation measurements will be made at the top of the well casing and the top of the concrete pad. The measurements point on the casing will be clearly and permanently marked for future water level measurements. All elevations will be referenced to the North American Vertical Datum of 1988 (NAVD 88). All horizontal coordinates will be referenced to the North American Datum of 1983 (NAD 83).

## 6. Sampling Protocols

Following installation of the monitoring well network, a sampling program should be initiated to collect baseline water quality data. It is recommended that sampling be conducted quarterly.

Sampling will consist of both field measurements and laboratory analyses which are detailed in the following sections.

### 6.1 Groundwater Levels

Groundwater level measurements will be collected during each sampling event from all wells in the monitoring network. Measurements will be taken using a water level sounder with a precision of 0.01 foot and will be recorded to the nearest 0.01 foot. All measurements will be taken at a permanently marked point at the top of each well casing. Prior to use at each location, the sounding equipment will be properly decontaminated.

Groundwater levels, in addition to electrical conductivity and temperature, may also be collected at more frequent intervals by installing dedicated sensors in the monitoring wells. These sensors are commonly procured with the capability to automatically collect and store water level, electrical conductivity and temperature measurements at pre-determined intervals (such as hourly, daily, etc.) These data will be useful in monitoring the shallow aquifer, where water level and water quality are likely to change frequently.

## 6.2 Groundwater Quality

Water quality samples will be collected during each sampling event from all the wells in the monitoring network and analyzed for the constituents as specified in Table 3. Sampling will be conducted with a portable submersible sampling pump. Each well will be purged<sup>5</sup> before sampling to ensure that representative samples are collected. All samples will be collected and preserved according to the U.S. Environmental Protection Agency sample collection, handling, and preservation procedures appropriate for each analytical method. Chain-of-custody will be maintained and documented from the time of sample collection through completion of chemical analysis, which will be performed by a State certified environmental laboratory.

**Table 3. Sampling Parameters**

Field Parameters	Laboratory Analyses	
Constituent	Constituent	Method
pH	Nitrate as N	EPA 300
Temperature	Total Dissolved Solids	EPA 160.1
Electrical Conductivity	Total Suspended Solids	EPA 150.1
Oxidation Reduction Potential (ORP)	Chloride	EPA 300
Dissolved Oxygen (DO)	Sulfate	EPA 300
	Total Organic Carbon	SM 5310C
	Carbonate	EPA 310.1
	Bicarbonate	EPA 310.1
	Metals <sup>1</sup>	EPA 200.7/200.8
	Hexavalent Chromium	EPA 218.6
	Chlorine Residual	EPA 330.4
	Turbidity	EPA 180.1

**Note:**

<sup>1</sup> Includes: Al, As, Cr, Se, Fe, Mn, Mg, B, Silica, Ca, Na, K

## 7. Well Abandonment Program

It is likely that a large percentage of private wells within Los Olivos are no longer in use. Furthermore, it is probable that most of the unused wells have not been properly abandoned. Before any kind of treated wastewater disposal (by injection or other means) occurs as part of LOCSD’s Wastewater Reclamation Program Project, LOCSD must ensure that all inactive wells, particularly those in the shallow aquifer, are properly abandoned in accordance with public health and safety codes. Inactive or dilapidated wells can act as conduits for pollutants to enter groundwater and can also leak or cause surface flooding when groundwater levels rise. It is assumed that well abandonment will occur at the property owner’s expense.

<sup>5</sup> The physical parameters (pH, specific conductance, DO, ORP and temperature) of the purge water will be measured and recorded along with the date and time of measurement. Measurements will be recorded on a well purging and sampling form. Purging will continue until physical parameters are stable or three casing volumes have been purged. Stabilization shall be defined as an agreement between the last two sets of readings within plus or minus 0.1 pH units, plus or minus 1 degree Celsius, and plus or minus 10 percent of the reading for specific conductance. If these parameters have not stabilized during the removal of three well volumes, then a maximum of five well volumes will be removed. Purging and sampling will be documented on an associated form.

## 8. Reporting

Quarterly groundwater monitoring reports will be prepared and submitted to County Health and the RWQCB for the first 2 years, after which the report will be prepared annually.

The reports will provide hydrographs showing groundwater data collected including both water level and water quality measurements and comparisons relative to baseline groundwater conditions as well as observation of trends over time. The documents will also verify all monitoring methods, describe progress of the monitoring network construction, and provide updated recommendations for modifications to the groundwater monitoring program.

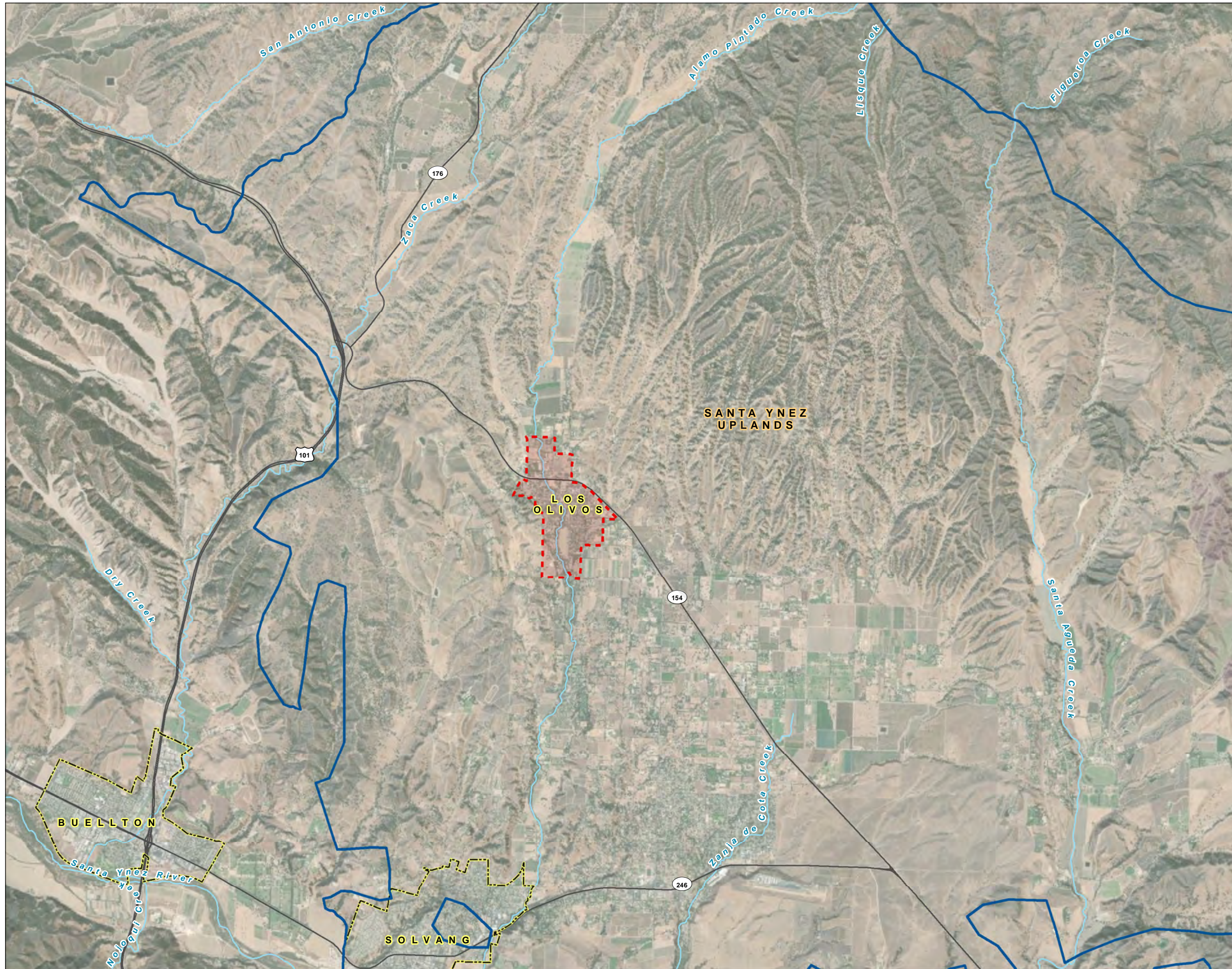
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[https://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/documents/ddw\\_secondary\\_standards.pdf](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/ddw_secondary_standards.pdf)

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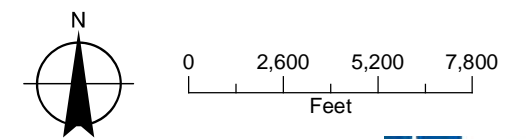
## Figures



**FIGURE 1**  
**Regional Setting**  
 Los Olivos Groundwater Monitoring Plan

**LEGEND**

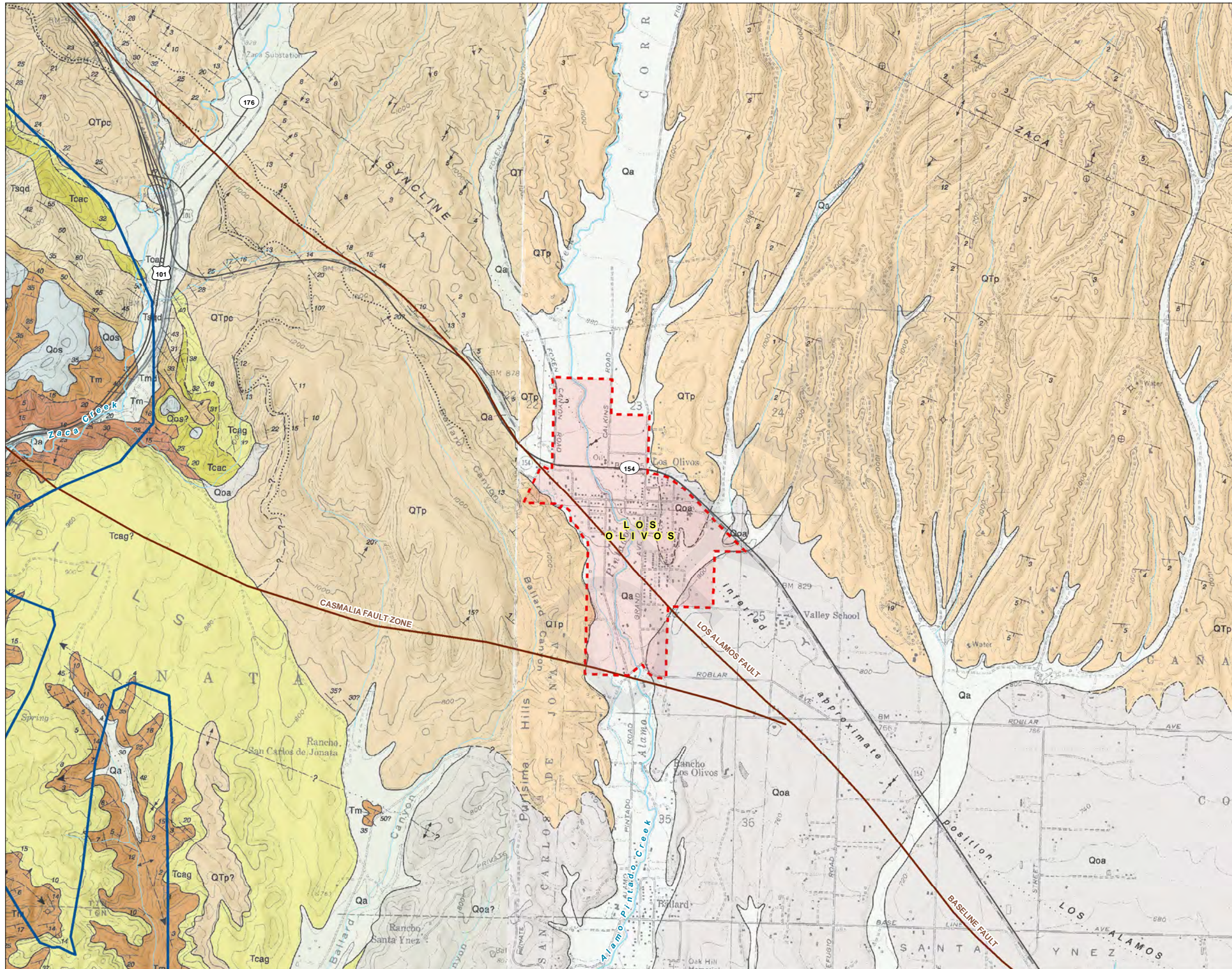
-  Los Olivos Special Problem Area
-  Eastern Management Area Basin Boundary
-  City Boundary
-  Major Road
-  Watercourse



Date: March 16, 2021  
 Data Sources: BLM, ESRI, DWR, USGS,  
 Aerial Photo 2019

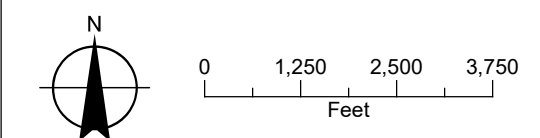


**FIGURE 2**  
**Surficial Geology**  
 Los Olivos Groundwater Monitoring Plan



**LEGEND**

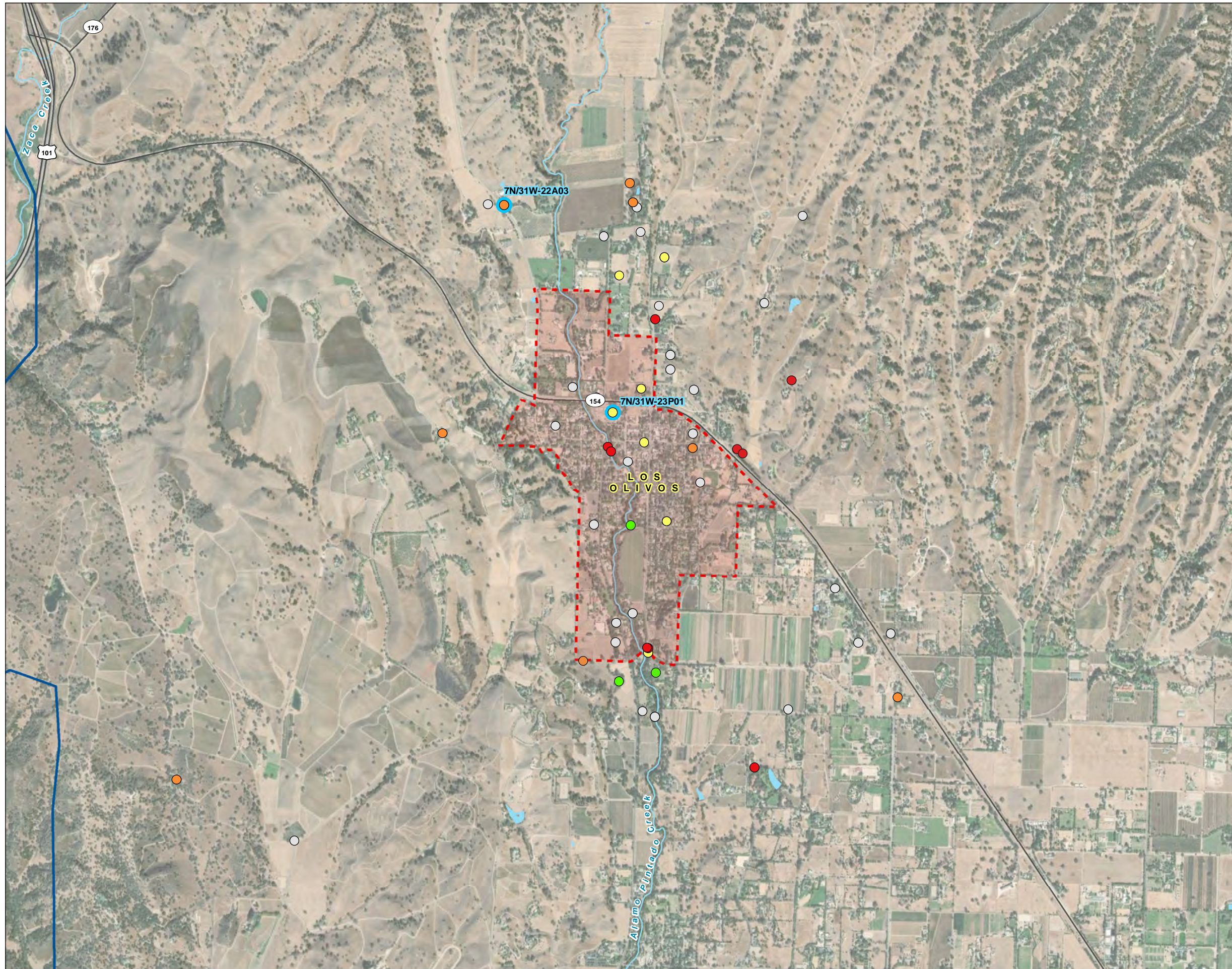
- Los Olivos Special Problem Area
- Eastern Management Area Basin Boundary
- Geology**
- Qa – Tributary Alluvium
- Qoa – Older Alluvium
- QTp – Paso Robles Formation
- Tcag – Careaga Sand
- Tm - Monterey Formation (Bedrock)
- Fault
- All Other Features**
- Major Road
- Watercourse



Date: April 20, 2021  
 Data Sources: ESRI, DWR, USGS

Document Path: Y:\0876\_Los\_Olivos\_CSD\Source\_Figures\001\_GW\_Quality\_Mgmt\_Svcs\Figure2\_Surficial\_Geology.mxd, alapostol





**FIGURE 3**  
**NWIS Water Level Database**  
 Los Olivos Groundwater Monitoring Plan

**LEGEND**

**NWIS Well**

Color Indicates Known Well Depth (ft bgs)

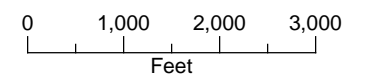
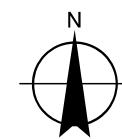
- 0 - 50
- 51 - 100
- 101 - 200
- 201 - 500
- 501 - 1320
- Unknown Completion
- Well with Hydrograph (See Figure 4)

**All Other Features**

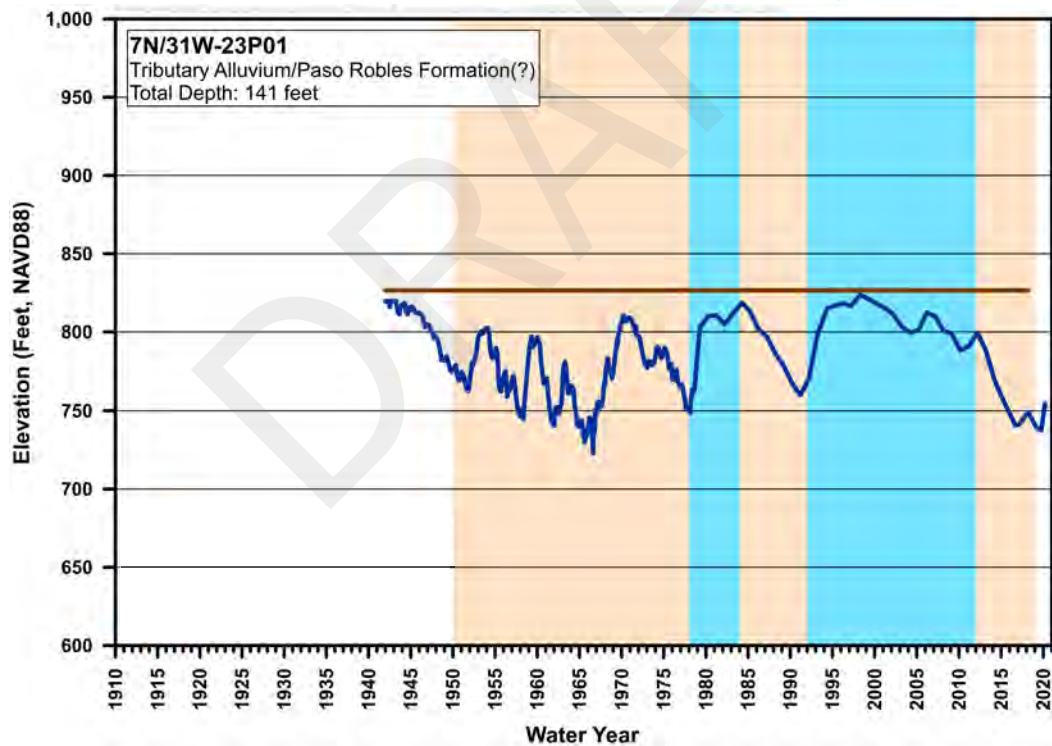
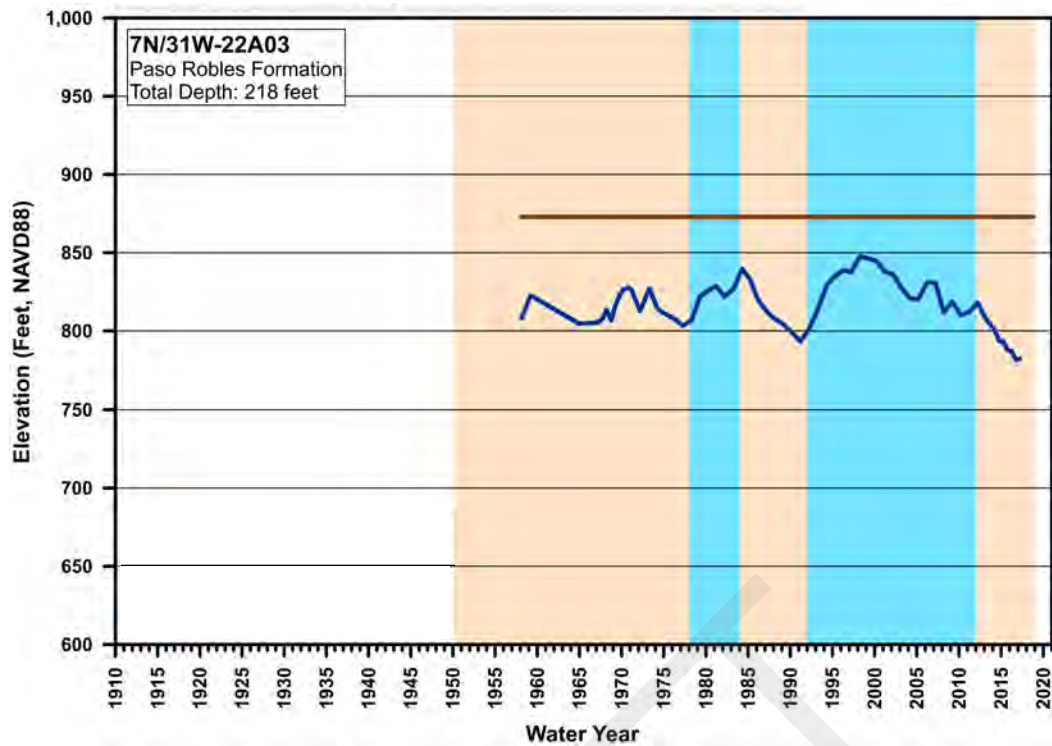
- ▭ Los Olivos Special Problem Area
- ▭ Eastern Management Area Basin Boundary
- ▭ Major Road
- ▭ Watercourse
- ▭ Waterbody

**NOTES**

ft bgs: feet below ground surface  
 NWIS: National Water Information System



Date: April 20, 2021  
 Data Sources: ESRI, DWR, USGS



**LEGEND**

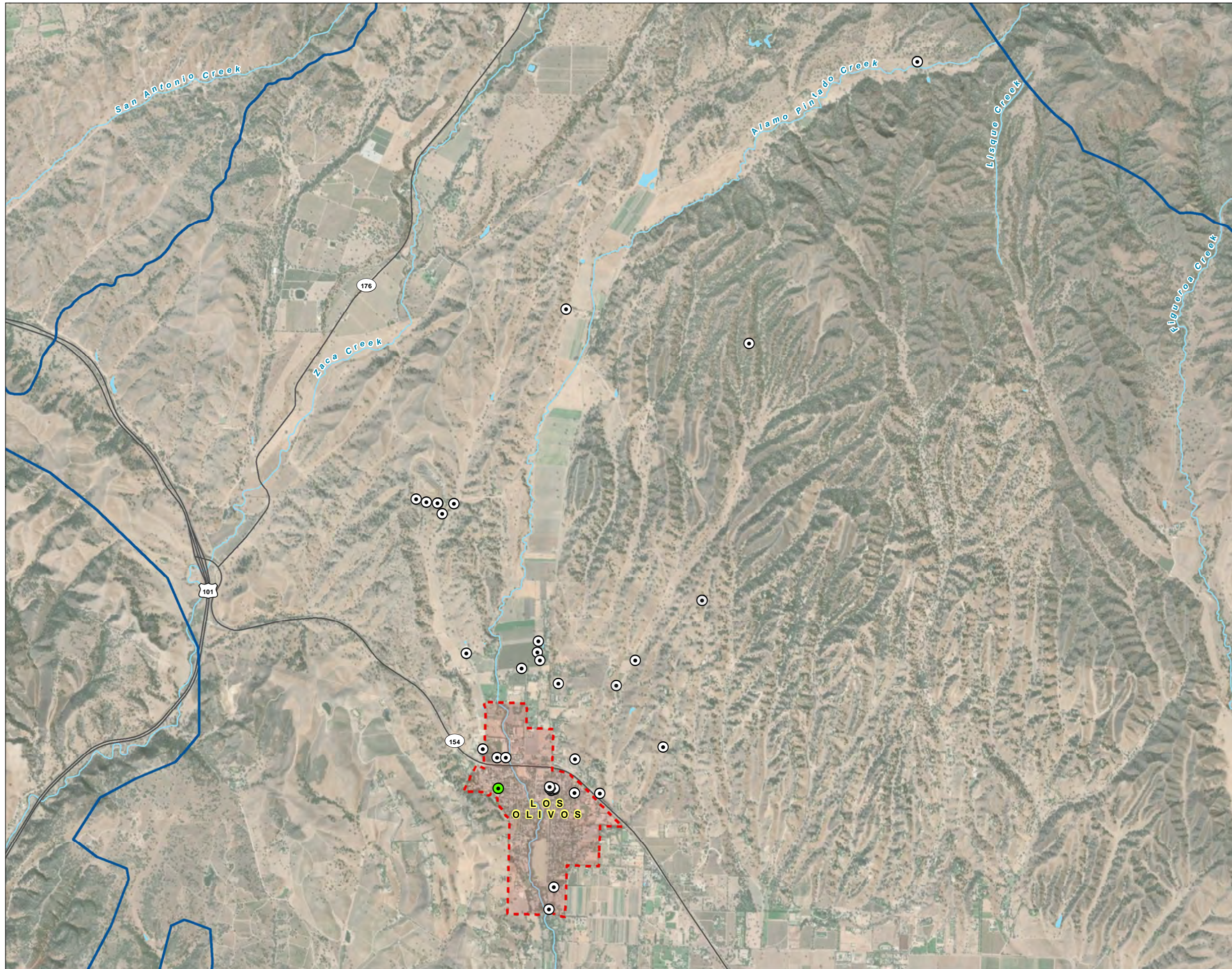
- Ground Surface Elevation
- Groundwater Elevation
- Dry Climatic Cycle
- Wet Climatic Cycle

**FIGURE 4**

**Representative Paso Robles Formation Hydrographs:  
Wells 22A03 and 23P01**  
Los Olivos Groundwater Monitoring Plan



**FIGURE 5**  
**Water Quality Sample Locations**  
 Los Olivos Groundwater Monitoring Plan

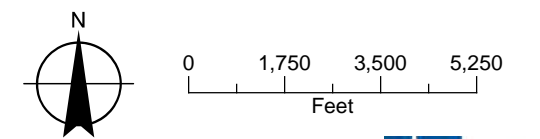


**LEGEND**

- NWIS and GAMA Database Wells**
- Nitrate MCL Exceedance - 1980
  - Well
- All Other Features**
- Los Olivos Special Problem Area
  - Eastern Management Area Basin Boundary
  - Major Road
  - ~ Watercourse
  - Waterbody

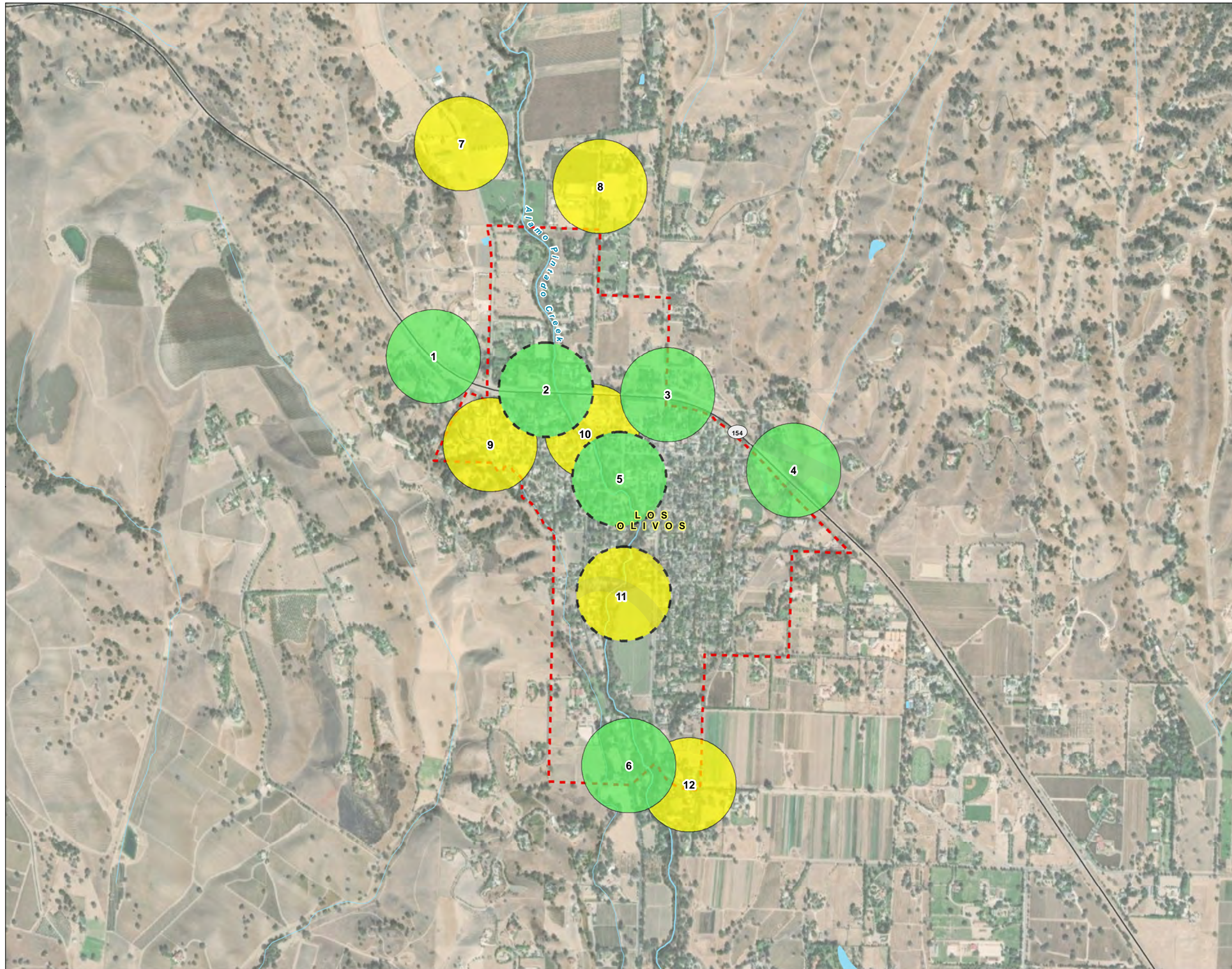
**NOTES**

bgs: below ground surface  
 GAMA: Groundwater Ambient Monitoring and Assessment  
 NWIS: National Water Information System  
 MCL: Maximum Contaminant Level



Date: March 19, 2021  
 Data Sources: ESRI, DWR, USGS

**FIGURE 6**  
**Proposed Monitoring Network**  
 Los Olivos Groundwater Monitoring Plan



**LEGEND**

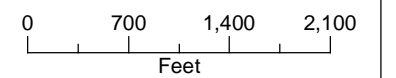
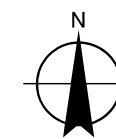
**Proposed New Monitoring Well Zone**

- Phase 1
- Phase 2

- Nested Monitoring Well

**All Other Features**

- Los Olivos Special Problem Area
- Major Road
- Watercourse
- Waterbody



Date: April 20, 2021  
 Data Sources: ESRI, DWR, USGS

**EASTERN MANAGEMENT AREA  
CITIZAN ADVISORY GROUP  
MEMORANDUM**

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**DATE:** February 4, 2022

**TO:** EMA GSA Committee

**FROM:** EMA Citizen Advisory Group (CAG)  
Prepared by CJ Jackson

**SUBJECT:** EMA Workshop and Q & A on Future Governance

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**PRESENT: CAG Members:** CJ Jackson, Gay Infanti, Sam Cohen, Elizabeth Farnum, Kevin Merrill and Tim Gorham, **Staff & Others:** Bill Buelow and Paeter Garcia (ID#1)

**Introduction:**

The EMA Community Advisory Group (CAG) held a meeting on February 4, 2022 via video/teleconference to discuss future governance options for the GSA

**SUMMARY:**

In advance of the meeting, the CAG was provided with an agenda comprising the following elements:

1. Select volunteer to write memo
2. GSP Submittal wrap up
3. Discuss Future Governance
4. Annual Report Status

Mr. Buelow opened the meeting with a welcome and a report on the completion status of the GSP to the California Department of Water Resources triggering a 60 to 75-day comment period on the Plan followed by review and analysis by DWR staff which could take anywhere from six months to two years. In effect, the plan is now live and with its cohort plans from the Western and Central Management areas, now also completed and submitted, now governs the groundwater management of the Santa Ynez Basin.

Mr. Buelow described the closing chapter of the completion of the Plan with thanks to the consultants. CJ Jackson was selected as scribe for the reporting of the meeting and the CAG was invited to discuss any issues posed by the completed plan and the wrap up provided by Mr. Buelow.

There was interest upon the part of some CAG members that some public discussion by the GSA as to how the various mitigation measures, some posing significant implications to pumpers relying on groundwater posed in the GSP might be triggered? Additional questions regarding the

reconciliation of differing responses by adjoining management areas and whether or not mitigations and fees would be born equally in the face of an emergency. The issue of how facile the GSAs might be in providing adequate warning before the initiation of mitigation measures to provide time for pumpers, particularly agriculture to attenuate to the impending mitigations.

It was suggested that perhaps these concerns might best be reconciled through the selection of a governance model for the management of the GSP or GSPs and so the CAG tabled its preceding concerns in favor of a robust discussion of the potential governance options for which staff provided four potential models inclusive of: a.) MOA (Memorandum of Agreement) whereby the management of all three GSA's are managed through an agreement by and between the three management areas; b.) Joint Powers Authority with representation of all agencies within a single GSA, c.) JPA amalgamating representation of the agencies within all three GSAs into one unified JPA or d.) hybrid model of three independent entities working towards a fruitful amalgamation in the future.

We recognized that the operation of one, three or more agencies will generate costs, staffing, legal, consultant fees etc. to name but a few. Each management area poses distinct utilizations, populations, hydrological and geotechnical considerations as well. The capacity to generating economies of scale through shared expenses while attractive from a cost perspective have to address the challenge of levying fees or instigating mitigation measures across three distinct areas. An example of the Santa Ynez Valley's unwillingness to cede authority on regional decision making is the Valley's school system of seven individual districts with individual boards, superintendent and programs, a structure that has been unwilling to unify for decades.

The Committee recognized that along the spectrum from three independent agencies functioning independently as to management and operation to a fully amalgamated Joint Powers Authority representing all agencies within the three management areas make a solution challenging particularly on the following decisions:

- a. Power to Levy Fees
- b. Well Registration and reporting
- c. Overdraft Mitigation Measures
- d. Legal Fees
- e. Coordinated response agreements
- f. Who pays for staff and overhead considerations

Another consideration as to structure is the Santa Ynez Band of Chumash Indians, a potential major pumper of groundwater, is neither obligated to, nor at this time interested in, participation in a Joint Powers Authority.

**In its conclusion**, the CAG tended to favor a hybrid model comprising three independent agencies representing each management area creating an umbrella agency to facilitate and fund the necessary activities to operate the three independent GSPs while building towards a larger Joint Powers Authority model. Perhaps support could continue from the County and the Parent District (Santa Ynez River Water Conservation District) until a stand-alone agency could be crafted going forward.

Respectfully submitted,

Charles "C.J." Jackson