LOS OSOS GROUNDWATER BASIN, BASIN MANAGEMENT COMMITTEE

NOTICE OF MEETING

NOTICE IS HEREBY GIVEN that the Los Osos Groundwater Basin, Basin Management Committee Board of Directors will hold a **Regular Board Meeting** at **1:30 P.M.** on **Wednesday, January 17, 2024** at the **Los Osos Community Services District Boardroom,** located at 2122 9th Street, Suite 106, Los Osos, CA 93402 Members of the public may participate in this meeting in person or via teleconference and/or electronically.

For quick access, go to https://us04web.zoom.us/j/778762508
(This link will help connect both your browser and telephone to the call)
If not using a computer, dial 1 (669) 900-6833 or 1 (346) 248-779 and enter **778 762 508**

All persons desiring to speak during any Public Comment can submit a comment by:

- Email at danheimel@ConfluenceES.com by 5:00 PM on the day prior to the Committee meeting.
- Teleconference by phone at 1 (669) 900-6833 and enter **778 762 508**
- Teleconference by phone at 1 (346) 248-7799 and enter **778 762 508**
- Teleconference meeting at https://us04web.zoom.us/j/778762508
- Mail by 5:00 PM on the day prior to the Committee meeting to:
  Attn: Dan Heimel (Basin Management Committee)
  2122 9th St.
  Suite 110
  Los Osos, CA 93402

Supervisor Bruce Gibson will be appearing at the Wednesday, January 17, 2024 meeting of the Los Osos Basin Management Committee via teleconference pursuant to Government Code, Section 54953. The teleconference location is 1209 L Street Sacramento, California 95814 and members of the public will be able to participate in the meeting from that location. Notice of this location and the entire Los Osos Basin Management Committee agenda will be posted at 1209 L Street Sacramento, California 95814.

Directors: Agenda items are numbered for identification purposes only and may not necessarily be considered in numerical order.

NOTE: The Basin Management Committee reserves the right to limit each speaker to three (3) minutes per subject or topic. In compliance with the Americans with Disabilities Act, all possible accommodations will be made for individuals with disabilities, so they may participate in the meeting. Persons who require accommodation for any audio, visual or other disability in order to participate in the meeting of the BMC are encouraged to request such accommodation 48 hours in advance of the meeting from Dan Heimel at danheimel@ConfluenceES.com.

BASIN MANAGEMENT COMMITTEE BOARD OF DIRECTORS AGENDA

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **PLEDGE OF ALLEGIANCE**
4. **BOARD MEMBER COMMENTS**

Board members may make brief comments, provide project status updates, or communicate with other directors, staff, or the public regarding non-agenda topics.

5. SPECIAL PRESENTATION

No Special Presentation.

6. CONSENT AGENDA

The following routine items listed below are scheduled for consideration as a group. Each item is recommended for approval unless noted and may be approved in their entirety by one motion. Any member of the public who wishes to comment on any Consent Agenda item may do so at this time. Consent items generally require no discussion. However, any Director may request that any item be withdrawn from the Consent Agenda and moved to the "Action Items" portion of the Agenda to permit discussion or to change the recommended course of action. The Board may approve the remainder of the Consent Agenda on one motion.

a. 2023 Budget Update and Invoice Register
b. Approval of Minutes from December 6th, 2023 Special BMC Meeting

7. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA

The Basin Management Committee will consider public comments on items not appearing on the agenda and within the subject matter jurisdiction of the Basin Management Committee. The Basin Management Committee cannot enter into a detailed discussion or take any action on any items presented during public comments at this time. Such items may only be referred to the Executive Director or other staff for administrative action or scheduled on a subsequent agenda for discussion. Persons wishing to speak on specific agenda items should do so at the time specified for those items. The presiding Chair shall limit public comments to three minutes.

8. EXECUTIVE DIRECTOR'S REPORT

9. ACTION ITEMS

a. Appointment of BMC Officers for Calendar Year 2024

Recommendation: For the BMC to review the existing officer positions and appoint officers for CY 2024 or provide alternative direction to staff.

b. Draft Fall 2023 Los Osos Basin Lower Aquifer Water Quality Monitoring Results and Updated Chloride Metric

Recommendation: Receive an update on the Draft Fall 2023 Los Osos Basin Lower Aquifer Water Quality Monitoring Results and Updated Chloride Metric.

10. ADJOURNMENT

TO: **Los Osos Basin Management Committee**

FROM: **Daniel Heimel, Executive Director**

DATE: **January 17, 2024**

SUBJECT: **Item 6 – Approval of Budget Update/Invoice Register and Meeting Minutes**

Recommendations

Staff recommends that the BMC review and consider approval of Budget/Invoice Register and Meeting Minutes or provide alternate direction to Staff.

Discussion

BMC Staff has prepared a summary of costs incurred as compared to the adopted budget and a running invoice register and Meeting Minutes from previous BMC Meetings (see Attachments).

Attachment 1: Cost Summary (January 2023 to Current Date) for Calendar Year 2023 Budget

Item	Description	Budget Amount	Approved Contingency Allocation	Updated Allocated Budget Amount	Costs Incurred	Percent Incurred	Remaining Budget
1	BMC Administration and Facilitation	$70,000		$70,000	$72,030.00	102.9%	-$2,030
2	BMC Legal Counsel	$20,000		$20,000	$1,680.00	8.4%	$18,320
3	Meeting expenses: Audio and video services	$1,000		$1,000	$1,200.00	120.0%	-$200
4	Technical Support/Adaptive Management Services	$15,000		$15,000	$5,347.00	35.6%	$9,653
5	2023 Groundwater Monitoring	$48,500		$48,500	$48,476.46	100.0%	$24
6	2022 Annual Report	$65,000		$65,000	$58,767.60	90.4%	$6,232
7	WRFP Study Peer Review - Year 1	$15,000		$15,000	$4,600.00	30.7%	$10,400
8	New "Skyline" Monitoring Well	$85,000		$85,000	$101,687.60	119.6%	-$16,688
9	Los Osos Creek Stream Gage Rating Curve	$17,000		$17,000	$23,196.00	136.4%	-$6,196
	Subtotal	$336,500		$336,500	$316,985		$19,515
	5% Contingency	$16,825					
	Total	**$353,325**			**$316,985**	**89.7%**	**$36,340**
	LOCSD (38%)	$134,264					
	GSWC (38%)	$134,264					
	County of SLO/SLOCFC&WCD (20%)	$70,665					
	S&T Mutual (4%)	$14,133					

Attachment 2: Invoice Register for Los Osos BMC for Calendar Year 2023

Vendor	Invoice No.	Amount	Month of Service	Description	Budget Item	Date Executive Director Approved	Date BMC Chairperson Approved	Date BMC Approved
CHG	20221205	$2,342.00	Dec-22	Annual Report Preparations	6	Jan-23		
CHG	20230104	$11,508.60	Jan-23	Annual Report Preparations	6	Feb-23		
CHG	20230105	$1,005.00	Jan-23	Technical Support: AEM Survey	4			Feb-23
ConfluenceES	1073	$5,197.50	Jan-23	BMC Executive Director Services	1		Feb-23	
AGP	6252	$200.00	Feb-23	Meeting expenses: Audio and video services	3	Mar-23		
CHG	20230206	$12,688.00	Feb-23	Annual Report Preparations	6	Mar-23		
CHG	20230207	$6,511.00	Feb-23	Los Osos Creek Flow Measurements	9	Mar-23		
ConfluenceES	1083	$6,525.00	Feb-23	BMC Executive Director Services	1		Mar-23	
CHG	20230307	$22,153.50	Mar-23	Annual Report Preparations	6	Apr-23		
CHG	20230308	$8,001.50	Mar-23	Los Osos Creek Flow Measurements	9	Apr-23		
CHG	20230309	$2,422.00	Mar-23	Technical Support: Skyline Monitoring Well	4			May-23
CHG	20230310	$2,437.50	Mar-23	Groundwater Monitoring	5	Apr-23		
ConfluenceES	1085	$7,331.25	Mar-23	BMC Executive Director Services	1		Apr-23	
CHG	20230405	$7,027.50	Apr-23	Annual Report Preparations	6	May-23		
CHG	20230406	$1,120.00	Apr-23	Technical Support: Skyline Monitoring Well	4			May-23
CHG	20230407	$500.00	Apr-23	Los Osos Creek Flow Measurements	9	May-23		
CHG	20230408	$20,348.80	Apr-23	Groundwater Monitoring	5	May-23		
ConfluenceES	1095	$7,606.25	Apr-23	BMC Executive Director Services	1		May-23	
CHG	20230504	$320.00	May-23	Technical Support: Skyline Monitoring Well	4			Jun-23
CHG	20230505	$1,937.50	May-23	Los Osos Creek Flow Measurements	9	Jun-23		
CHG	20230506	$3,421.20	May-23	Groundwater Monitoring	5	Jun-23		
ConfluenceES	1100	$7,670.00	May-23	BMC Executive Director Services	1		Jun-23	
CHG	20230605	$259.50	Jun-23	Annual Report Preparations	6	Jul-23		
CHG	20230606	$480.00	Jun-23	Technical Support: Water Offset Study	4			Aug-23
ConfluenceES	1108	$6,386.25	Jun-23	BMC Executive Director Services	1		Jul-23	
CHG	20230620	$6,450.00	Jun-23	New "Skyline" Monitoring Well	8	Aug-23		
CHG	20230723	$1,288.00	Jul-23	New "Skyline" Monitoring Well	8	Aug-23		
AGP	$9,236.00	$1,000.00	Aug-23	Meeting expenses: Audio and video services	3	Sep-23		
ConfluenceES	1111	$1,825.00	Jul-23	BMC Executive Director Services	1		Aug-23	
CHG	20230838	$2,788.50	Jun-23	Annual Report Preparations	6	Sep-23		
ConfluenceES	1118	$6,755.00	Aug-23	BMC Executive Director Services	1		Sep-23	
RWG	244283	$140.00	Aug-23	BMC Legal Counsel	2	Oct-23		
CHG	20230908	$6,246.00	Sep-23	Los Osos Creek Flow Measurements	9			Dec-23
CHG	20230909	$3,480.00	Sep-23	Groundwater Monitoring	5	Oct-23		

RWG	244677	$175.00	Sep-23	BMC Legal Counsel	2	Oct-23		
ConfluenceES	1126	$3,391.25	Sep-23	BMC Executive Director Services	1		Oct-23	
CHG	20231005	$15,537.46	Oct-23	Groundwater Monitoring	5	Nov-23		
RWG	244677	$630.00	Oct-23	BMC Legal Counsel	2	Dec		
ConfluenceES	1131	$8,770.00	Oct-23	BMC Executive Director Services	1		Dec-23	
CHG	20231104	$3,251.50	Nov-23	Groundwater Monitoring	5	Dec-23		
ConfluenceES	1134	$5,051.25	Nov-23	BMC Executive Director Services	1		Dec-23	
GSI	02136.00-1	$4,600.00	Nov-23	WRFP Study Peer Review - Year 1	7	Dec-23		
RWG	245636	$210.00	Nov-23	BMC Legal Counsel	2	Dec-23		
CHG	20231116	$2,311.70	Nov-23	New "Skyline" Monitoring Well	8	Jan-24		
F&T	37702	$79,191.00	Dec-23	New "Skyline" Monitoring Well	8	Jan-24		
CHG	20231211	$12,446.90	Dec-23	New "Skyline" Monitoring Well	8	Jan-24		
ConfluenceES	1137	$5,521.25	Dec-23	BMC Executive Director Services	1			
RWG	245879	$525.00	Dec-23	BMC Legal Counsel	2	Jan-24		
	2023 Total	**$316,984.66**						To be approved

BASIN MANAGEMENT COMMITTEE BOARD OF DIRECTORS

Agenda Item 6b: Minutes of the Meeting of December 6, 2023

The following is a summary of the actions taken at the Basin Management Committee Board of Directors Meeting. The official record for the meeting is the recording that can be found at:
https://slo-span.org/static/meetings-LOBMC.php

Agenda Item	Discussion or Action
1. Call to Order	Chair Zimmer called the meeting to order at approximately 1:30 PM (0:00:20).
2. Roll Call	Daniel Heimel, Executive Director, called roll to begin the meeting. Director Gibson, Director Cesena, Director Reineke, and Alternate Director Cook were present (0:01:00).
3. Pledge of Allegiance	(0:00:30)
4. Board Member Comments	**Board Discussion** (0:01:30) None. **Public Comment** None.
5. Special Presentation **Public Review Draft Title 19 (Retrofit-to-Build) and Title 8 (Retrofit-Upon-Sale) Amendments Presentation**	**Presenter** (0:02:30) Claire Momberger – San Luis Obispo County Planning Airlin Singewald – San Luis Obispo Environmental Coordinator **Public Comment** Patrick McGibney (0:25:00) Richard Margetson (0:28:20) Becky McFarland (0:31:30) Adrianna Peck (0:34:35) **Board Discussion** (0:37:30)
6. Consent Agenda **6a. Approval of Minutes from October 18th, 2023 BMC Meeting**	**Board Discussion** (0:41:40) **Public Comment** No public comment **Board Action on Consent Agenda** (0:44:00) **Motion**: Director Gibson **Second**: Director Reineke **Ayes**: All **Nays**: None **Abstain**: None
7. Public Comments on Items Not Appearing on the Agenda	**Public Comment** Jeff Edwards (0:43:40) Patrick McGibney (0:47:00) Emily Miggins (0:48:15) Richard Margetson (0:50:40) Becky McFarland (0:52:40)

	Board Discussion (0:55:40)
8. Executive Director's Report	**Board Discussion** (0:57:45) **Public Comment** Jeff Edwards (1:02:00) **Board Discussion** (1:04:00)
9. Action Items	
9a. Sustainable Yield Estimate for 2024	**Recommendation:** Receive information on the Sustainable Yield calculations and approve the proposed Sustainable Yield estimate of 2,380 AFY for Calendar Year 2024; or provide alternate direction to staff. **Board Discussion** (1:06:45) **Public Comment** Patrick McGibney (1:08:30) Becky McFarland (1:11:00) **Board Action** (1:12:30) Approve the proposed Sustainable Yield estimate of 2,380 AFY for Calendar Year 2024. **Motion:** Director Gibson **Second:** Director Reineke **Ayes**: All. **Nays**: None. **Abstain**: None.
9b. Los Osos Creek Stream Gage Rating Curve	**Recommendation:** Receive the Draft Los Osos Creek Rating Curve Development and Stage Data Processing Technical Memorandum. **Board Discussion** Dan Heimel (1:12:45) **Public Comment** Jeff Edwards (1:16:00) Becky McFarland (1:19:10) **Board Discussion** (1:20:00) All members **Board Action** (1:24:20) No Board action required.
9c. BMC Bank Account Authorizing Resolution	**Recommendation:** Approve proposed modifications to the BMC Rules and Regulations to incorporate updated accounting and authorization procedures and a resolution authorizing the Executive Director to open a bank account on behalf of the BMC; or provide alternate direction to staff. **Board Discussion** (1:24:40) **Public Comment** (1:30:00) None.

	Board Action (1:31:00) Approve proposed modifications to the BMC Rules and Regulations to incorporate updated accounting and authorization procedures and a resolution authorizing the Executive Director to open a bank account on behalf of the BMC, with the addition of the language "in compliance with the BMC Rules and Regulations" after the line "Executive Director hereby authorized to open and maintain the bank account or accounts" in the BMC Bank Account Authorizing Resolution. **Motion:** Director Gibson **Second:** Director Reineke **Ayes**: All **Nays**: None **Abstain**: None
9d. Calendar Year 2024 Budget	**Recommendation:** Approve the proposed Calendar Year 2024 BMC Budget and the Calendar Year 2024 BMC Support Services Proposals; or provide alternate direction to staff. **Board Action** (1:32:15) Approve the proposed Calendar Year 2024 BMC Budget and the Calendar Year 2024 BMC Support Services Proposals. **Motion:** Director Gibson **Second:** Alternate Director Cook **Ayes**: All. **Nays**: None. **Abstain**: None.
9e. Public Review Draft Title 19 (Retrofit-to-Build) and Title 8 (Retrofit-Upon-Sale) Amendments Presentation	**Recommendation:** Receive a presentation from County of San Luis Obispo Planning & Building Department on the Public Review Draft Title 19 (Retrofit-to-Build) and Title 8 (Retrofit-Upon-Sale) Amendments and provide direction to staff. This item was moved to the Special Presentation Item 5.
10. Adjournment	Meeting adjourned at approximately 3pm (1:32:44). The next regularly scheduled meeting for Wednesday, January 17, 2024.

TO: **Los Osos Basin Management Committee**

FROM: **Dan Heimel, Executive Director**

DATE: **January 17, 2024**

SUBJECT: **Item 8 – Executive Director's Report**

Recommendations

Staff recommends that the Basin Management Committee (BMC) receive and file the report and provide staff with any direction for future discussions. Sections of the Executive Director's Report that have been updated or significantly changed from the previous meeting's version are underlined and sections of the report that have not had any recent or anticipated updates have been removed.

Discussion

This report was prepared to summarize administrative matters not covered in other agenda items and to provide a general update on staff activities.

Presentations

No recent or planned presentations

Funding and Financing Programs to Support Basin Plan Implementation

WRFP Grant: On February 11th, 2022 the Los Osos Community Services District (Los Osos CSD) submitted an application for a WRFP grant to develop a transient model and analyze recycled water and supplemental water projects to improve the sustainability of the Los Osos Basin (WRFP Study). Los Osos CSD was notified of the award of the grant in January 2023 and all the required documents were signed and fully executed. On May 17th, 2023 the BMC approved Cleath-Harris Geologist (CHG) to complete the WRFP Study and the WRFP Study is underway.

BMC Staff will continue to monitor potential additional grant funding opportunities and bring information on these opportunities to the BMC for consideration as they become available.

Status of BMC Initiatives

BMC Website: On January 10th, 2024, the BMC launched its new website hosted at: wwww.losososbmc.org. This will be the new platform for obtaining information regarding BMC Meetings, Annual Reporting and other initiatives. The interested parties email distribution list from the previous BMC website, hosted by the County of San Luis Obispo, has been transferred to the new website and will continue to be utilized to notify subscribers when information related to BMC Meetings and other initiatives is available.

DWR AEM Survey: On December 2022, BMC Staff were notified that the Los Osos Basin would be included in the Department of Water Resources (DWR) upcoming Statewide Airborne Electromagnetic (AEM) Survey in Spring 2023. To assist DWR in preparing flight lines for the AEM Survey, BMC Staff provided DWR with lithologic information for the Los Osos Basin and prepared an Area of Interest Map. The data collected during the AEM survey will improve DWR and the BMC's understanding of Los Osos Basin hydrogeology and seawater intrusion. The AEM Survey for the San Luis Obispo and Santa Barbara County basins was initiated on April 26th, 2023, however, due to weather conditions and the need to support emergency flood response efforts elsewhere in the State, DWR was not able to complete the survey of the Los Osos Basin. DWR returned to complete the survey in November 2023 and anticipates that the survey results will be available in Q3 2024. Additional information on DWR's Statewide AEM Survey Project can be found here: https://water.ca.gov/Programs/Groundwater-Management/Data-and-Tools/AEM

Sustainable Yield: At its October 27th, 2021 Meeting, the BMC unanimously approved an updated Sustainable Yield estimate of 2,380 Acre-Feet per Year (AFY) for Calendar Year 2022 and at its December 6th, 2024 Meeting, the BMC unanimously approved retaining the current Sustainable Yield estimate of 2,380 AFY for CY 2024 for the following reasons: 1) No new infrastructure, not already considered in the 2022 Sustainable Yield Estimate, has been constructed; 2) estimates for the development of the Broderson Mound and long-term average rainfall were updated and incorporated into the CY 2022 Sustainable Yield Estimate and are not anticipated to change significantly on a year-over-year basis; 3) no significant hydrogeologic investigations have been conducted that would warrant an update to the steady-state groundwater model utilized to develop the Sustainable Yield Estimate.

Los Osos Basin Well Database: Cleath-Harris Geologists (CHG) completed the development of the Los Osos Basin Well Database and it is being utilized to support the development of the Transient Groundwater Model.

Basin Monitoring Program Improvement: In December 2023, construction of the Skyline Monitoring Wells was completed at the east end of Skyline Drive. The construction of these wells will allow the BMC to more accurately monitor seawater intrusion and groundwater conditions in Zones D & E of the Lower Aquifer at this critical location for the basin.

Basin Metric Evaluation: Analysis of potential modifications to the Basin Metric's is currently on hold. Proposed modifications to the metrics were provided to BMC Party Staff for review. However, BMC Party Staff requested that potential improvements to the existing BMC Monitoring Program (i.e. modifications to an existing wells or a new monitoring well) be evaluated prior to modifying the Basin Metrics. The BMC recently completed construction of two new monitoring wells at the eastern end of Skyline Drive. These new wells could be incorporated into the updated Basin Metrics. BMC Staff will develop recommendations on potential modifications to the Basin Metrics and bring them to the BMC for their consideration at a future date.

Transient Groundwater Model: See update under WRFP Grant above.

Lower Aquifer Nitrate Investigation: On October 19th, 2022 the BMC authorized Calendar Year (CY) 2022 funding to perform additional Nitrate Source Investigation to better understand the source of Nitrate impacting lower aquifer production wells. However, due to the inability to obtain well owner permission to sample the desired wells, much of that work was not completed in 2022. Subsequently, the Regional Water Quality Control Board (RWQCB) staff reviewed the investigation information and findings available to date and provided a presentation to the BMC at its March 15th, 2023 Meeting. BMC Party Staff is working with RWQCB Staff to identify potential additional investigations to help better inform the sources of the nitrate in the LA8 Well and additional information will be provided to the BMC, once available.

BMC Initiatives Status Update: In 2020, the BMC completed an Implementation Plan evaluation exercise to identify and prioritize the use of the BMC's limited available staffing and funding resources. The outcome of this exercise was a prioritized list of Planning and Implementation initiatives that the BMC utilized to develop its workplan for 2021, 2022, 2023 and beyond. At the January 17th, 2024 BMC Meeting the Executive Director will provide an update on the progress made toward completing the different initiatives identified in the Implementation Plan. Additional detail regarding the Implementation Plan initiative is provided in the October 21, 2020 Staff Report, included as an attachment to this Executive Director's Report.

Land Use Planning Process Update

Guide to Planning Information for Development in Los Osos:
This website is intended to provide relevant planning information and an outline of what type of development is currently allowed within Los Osos:
https://www.slocounty.ca.gov/Departments/Planning-Building/Grid-Items/Community-Engagement/Communities-Villages/Los-Osos.aspx.

Topics covered include but are not limited to:

- Types of permit applications currently being accepted for processing
- Status of the building moratorium and waitlist for undeveloped parcels in the sewer service area (still in place)
- Status of the Communitywide Habitat Conservation Plan

Los Osos Retrofit-to-Build Program (Title 19 Water Offset Requirement) Update:
On October 17th, 2023 the County Board of Supervisors requested that the Planning & Building Department bring for hearing a draft of ordinance amendments to Title 19, where the Los Osos Retrofit to Build program (also known as the 2:1 offset program) is codified. The amendments to Title 19 require an according update to the Title 8 Retrofit Upon Sale program requirements. The Department will recommend amendments to the offset program based on the findings of the program audit, completed

by Maddaus Water Management, Inc. in June 2023. The published audit document can be found at: Los Osos Water Offset Study - County of San Luis Obispo (ca.gov)

The Public Review Draft of ordinance amendments can be accessed here: Los-Osos-Water-Offset-Update-Title-19-and-Title-8-.pdf (ca.gov)

Public comments are due December 31st, 2023 *and can be submitted via email (to Claire at cmomberger@co.slo.ca.us) or by mail, addressed to the Department of Planning & Building, San Luis Obispo County Government Center, 976 Osos Street, San Luis Obispo, CA 93408.*

The ordinance amendments are tentatively scheduled for public hearing before the County Board of Supervisors on February 27th, 2024.

The Los Osos Basin Water Purveyors submitted a joint comment letter to the County on 12/14/23. This letter is included as an attachment to this Executive Director's Report.

Los Osos Community Plan:
The Los Osos Community Plan (LOCP) is being reviewed by the California Coastal Commission (Commission) and a hearing date has not yet been scheduled by the Commission. In the meantime, the County is meeting with BMC and BMC Party Staff to discuss potential policy changes considering ongoing basin monitoring and Basin Plan program implementation efforts. The Los Osos Community Plan ("LOCP") update and Final Environmental Impact Report ("FEIR") considered by the Board on December 15, 2020 are available at: https://www.slocounty.ca.gov/LosOsosPlan-1.aspx.

LOCP Background
The Board authorized preparation of this update on December 11, 2012. A series of community outreach meetings to unveil the Community Plan were conducted in the Spring of 2015. The plan was prepared to be consistent and coordinated with the draft groundwater basin management plan and the draft Habitat Conservation Plan ("HCP"). The draft Environmental Impact Report was released on September 12, 2019; comments were due December 11, 2019. A Community Meeting on the Draft Environmental Impact Report for the LOCP, HCP, and associated Environmental Documents was held on October 28, 2019. The Final Environmental Impact Report and Public Hearing Draft were released on June 8, 2020. The Planning Commission held hearings on July 9, 2020, August 13, 2020, and October 8, 2020. At the October 8, 2020 hearing, the Planning Commission recommended approval of the Plan to the Board of Supervisors (BOS).

Los Osos Habitat Conservation Plan (HCP):
On August 2nd, 2023 the Planning & Building Department submitted the Los Osos Communitywide Habitat Conservation Plan (LOHCP) to the U.S. Fish and Wildlife Service (USFWS) for approval. The USFWS will review the LOHCP and determine whether to issue an Incidental Take Permit for impacts to Morro Shoulderband Snail, Morro Bay Kangaroo Rat, Morro Manzanita, and Indian Knob Mountainbalm species to the County. The USFWS has 60 days to respond to the submitted plan. In the coming months, the Department will be going to the Board of Supervisors to ask for a General Fund loan to begin implementing the LOHCP through land acquisition and habitat restoration projects. This will allow the

Department to accrue LOHCP credits and that can be issued as "certificates of inclusion" to mitigate against infrastructure and development project habitat impacts.

Los Osos Water Recycling Facility Project Update

The following table summarizes flows from the LOWRF based on the available data.

LOWRF Wastewater and Recycled Water Flows (Acre Feet)

Year	Month	Influent	Broderson	Bayridge	Sea Pines	Ag Users	Effluent
2023	Jan	46.78	50.82	1.45	0.03	0.00	55.24
2023	Feb	41.07	41.90	1.10	1.26	0.00	42.92
2023	Mar	62.28	52.37	1.19	0.02	0.00	53.58
2023	Apr	55.94	42.44	1.16	2.35	0.14	46.09
2023	May	55.07	40.84	1.23	0.21	0.34	42.62
2023	Jun	50.97	21.81	1.23	18.31	0.38	41.74
2023	Jul	53.67	40.14	1.32	4.11	0.46	47.05
2023	Aug	58.03	28.85	1.39	10.58	0.72	41.55
2023	Sept	56.67	24.48	0.92	6.23	0.75	32.49
2023	Oct						
2023	Nov						
2023	Dec						
Total		261.14	228.37	6.13	3.87	0.48	240.45

LOWRF Project Updates:

- The County is preparing recycled water connection plans for the four school sites in Los Osos and the Los Osos Community Park. The County has 100% plans for Los Osos Middle School, 100% plans for Los Osos Community Park, and 90% plans for Baywood Elementary. The County will submit the final plans to the State for review and approval. Contracts between the County, the water purveyors and the San Luis Coastal Unified School District are required prior to going out to bid for construction. Historically, the priority site for the Basin has been Los Osos Middle School and the connection will be dependent on contract negotiations and available funding. The County has received some funding through the ARPA grant program.
- The Broderson Flow Meter Project was awarded by the Borad of Supervisors and the notice to proceed is expected to be given in October. The project includes a flow meter and two isolation gate valves for maintenance. The current method for calculating the volume of water at Broderson Leach Field is a calculation based on other meters in the recycled water distribution system. The flow meter will improve the accuracy of water discharged here and will be connected to the LOWRF's SCADA system through the existing local control panel. The project is funded by ARPA grant money.

- The County has completed the Recycled Water Distribution Model that evaluates existing and future uses within the recycled water system. The model identified setpoints for the future effluent pump station VFDs at the LOWRF that will result in energy savings.
- The County worked with a consultant to prepare design plans for installing VFDs on the LOWRF's effluent pumps. The project is expected to go out to bid in October. This will allow the pumps to ramp up and down based on the need in the recycled water distribution system and the plant return water supply. Currently the pumps only have the capability to run at one speed and that leads to increased wear and tear on the motor and impellers. The VFDs will be set to specific pressure setpoints that will be determined using the recycled water distribution model. The expected outcome from installing the VFDs is decreased energy consumption and recirculated water within the system.
- The County is working with PG&E and AESC on an energy audit that reviews existing energy use and operations to identify potential energy savings. The final Energy Action Plan identified two projects that could reduce energy usage at the site. A Project Feasibility Study is underway to evaluate the selected project. Implementation of the chosen project will be in Winter 2023.

Enforcement: A list of properties that were not connected were transferred to County Code Enforcement and Notice of Violations were issued last year in Feb. 2019. That list was about 70 properties. As of 5/12/2021, the sewer service area has a 99.4% connection status with a total of 36 properties not yet connected. Of those, one is not required to connect because there is no structure (demolished), 18 have expired building permits, and the rest have an open Code Enforcement case.

The County has assigned staff in code enforcement to Los Osos. Expired permits did not receive a Code Enforcement case because those properties have their own noticing process through the Building Department which, if not corrected, could result in a Notice of Violation.

Sustainable Groundwater Management Act (SGMA)

SGMA Overview: SGMA took effect on January 1, 2015.[1] SGMA provides new authorities to local agencies with water supply, water management or land use responsibilities and requires various actions be taken in order to achieve sustainable groundwater management in high and medium priority groundwater basins. Los Osos Valley Groundwater Basin (Los Osos Basin) was subject to SGMA based on the 2014 Basin Prioritization by the California Department of Water Resources (DWR) that listed the Los Osos Basin as high priority and in critical conditions of overdraft.[2]

Basin Prioritization: On December 18, 2019, DWR released the SGMA 2019 Basin Prioritizations. Basins or subbasins reassess to low or very low priority basins or subbasins are not subject to SGMA regulations.

[1] On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), collectively known as SGMA

[2] SGMA mandates that all groundwater basins identified by DWR as high- or medium-priority by January 31, 2015, must have groundwater sustainability agencies established by June 30, 2017. The act also requires that all high- and medium-priority basins classified as being subject to critical conditions of overdraft in Bulletin 118, as of January 1, 2017, be covered by groundwater sustainability plans, or their equivalent, by January 31, 2020. Groundwater sustainability plans, or their equivalent, must be established for all other high- and medium-priority basins by January 31, 2022.

A summary of DWR's Final SGMA Prioritizations for the Los Osos Area Subbasin and Warden Creek Subbasin are listed below:

- Los Osos Area Subbasin is listed as **very low** priority for SGMA[3] and in critical conditions of overdraft [4]
- SGMA does not apply to the portions of Los Osos Basin that are adjudicated provided that certain requirements are met (Water Code §10720.8).
- Warden Creek Subbasin is listed as **very low** priority for SGMA[3]

For more information on DWR's basin boundary modification and prioritization process, please visit: https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization

Additional Attachments:

1. Updated Status of Basin Plan Programs
2. Implementation Plan Preliminary Scoring and Ranking Staff Report_10/21/20 BMC Meeting Agenda Packet
3. Joint Purveyor Letter regarding proposed Title 19 Amendments_12/14/23

[3] As noted by DWR, the priority for the subbasin has been set to very low (0 total priority points) as a result of conditions being met under sub-component C of the Draft SGMA 2019 Basin Prioritizations.

[4] Critical conditions of overdraft have been identified in 21 groundwater basins as described in Bulletin 118 (Water Code Section 12924). Bulletin 118 (updates 2003) defines a groundwater basin subject to condition of critical overdraft as: "A basin is subject to critical conditions of overdraft when continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts."

Update on Status of Basin Plan Infrastructure Projects

Program Name	Project Name	Parties Involved	BMC Budgeted Amount	Funding Status	Anticipated Planning/Pre-Construction Cost	Anticipated Capital Cost	Status/Notes
Program A – Shift groundwater production from Lower Aquifer to Upper Aquifer	Water Systems Interconnection	LOCSD/ GSWC	NA	NA	NA	NA	**Completed**
	Upper Aquifer Well (8th Street)	LOCSD	NA	Fully Funded	NA	$307,000	**Completed**
	South Bay Well Nitrate Removal	LOCSD	NA	NA	NA	NA	**Completed**
	Palisades Well Modifications	LOCSD	NA	NA	NA	NA	**Completed**
	Blending Project (Skyline Well)	GSWC	NA	NA	NA	NA	**Completed**
	Water Meters	S&T	NA	NA	NA	NA	**Completed**
Program B - Shift groundwater production from Lower Aquifer to Upper Aquifer	LOCSD Wells (Upper Aquifer)	LOCSD		Not Funded	TBD	BMP: $2.7 mil	Project not initiated
	GSWC Wells (Upper Aquifer)	GSWC		Not Funded	TBD	BMP: $3.2 mil	Project not initiated
	Community Nitrate Removal Facility	LOCSD/GSWC/S&T	TBD	Partial, GSWC portion funded	TBD	GSWC: $1.23 mil	GSWC's Program A Blending Project might be capable of expanding to be the first phase of the Program B Community Nitrate Removal Facility.
Program C - Shift production within the Lower Aquifer from the Western Area to the Central Area of the Basin	Expansion Well No. 1 (Los Olivos)	GSWC	NA	NA	NA	NA	**Completed**
	Expansion Well No. 2 (Lower Aquifer)	LOCSD		LOCSD	TBD	BMP: $2.5 mil	The well construction is complete and the water transmission main construction activities are currently underway. Completion of all phases of the project is estimated to occur in late 2024.
	Expansion Well 3 (Lower Aquifer) and LOVR Water Main Upgrade	GSWC/LOCSD		Cooperative Funding	TBD	BMP: $1.6 mil	
	LOVR Water Main Upgrade	GSWC		May be deferred	TBD	BMP: $1.53 mil	Project may not be required, depending on the pumping capacity of the drilled Program C wells. It may be deferred to Program D.
	S&T/GSWC Interconnection	S&T/ GSWC		Pending	TBD	BMP: $30,000	Currently on hold pending further evaluation of the project.
Program D - Shift production within the Lower Aquifer from the Western Area to the Eastern Area of the Basin							Currently being considered for deferment through Adaptative Management. BMC to review on an annual or semi-annual basis.
Program M – Groundwater Monitoring Plan	New Zone D/E lower aquifer monitoring well in Cuesta by the Sea	All Parties	NA	NA	NA	NA	**Completed**

Program Name	Project Name	Parties Involved	BMC Budgeted Amount	Funding Status	Anticipated Planning/Pre-Construction Cost	Anticipated Capital Cost	Status/Notes
Program U - Urban Water Reinvestment Program	Creek Discharge Program	All Parties				TBD	These activities are currently on hold.
	8th and El Moro Urban Storm Water Recovery Project	All Parties				TBD	These activities are currently on hold.

TO: **Los Osos Basin Management Committee**

FROM: **Dan Heimel, Executive Director**

DATE: **October 21, 2020**

SUBJECT: **Item 7a – Implementation Plan Preliminary Scoring and Ranking**

Recommendations

Review preliminary findings from the Implementation Plan planning and implementation initiative scoring and ranking and provide direction to staff.

Discussion

Background

During the development of the CY 2020 BMC Budget, it was identified that the BMC could benefit from an updated evaluation of the water resource initiatives potentially available to the BMC parties. This evaluation is described as an Implementation Plan and is intended to help the BMC build consensus around how to focus its efforts and funds for future water resources initiatives, provide a structure for developing future BMC budgets, and to aid in the further implementation of the Basin Plan.

At the June 2020 BMC Meeting, the BMC directed the Executive Director to initiate the initial phases of the Implementation Plan development, which included summarizing roles and responsibilities for the BMC, and coordinating with BMC Party Staff to develop a list of initiatives and initiative scoring criteria.

At the August 2020 BMC Meeting, the BMC reviewed the initial list of initiatives and preliminary scoring criteria and authorized the Executive Director to work with BMC Party Staff to refine the list of initiatives, develop brief summary descriptions of each initiative, and populate the scoring criteria framework.

At the September 2020 BMC Meeting, the BMC reviewed the updated lists of planning and implementation initiatives and proposed scoring criteria and authorized BMC Party Staff to initiative the scoring and ranking evaluation.

Additional detail regarding the information provided at these meetings can be found in the Staff Reports.

Current Status

Provided below are the planning and implementation initiatives and scoring frameworks that the BMC and BMC Party Staff utilized for the scoring and ranking evaluation. The lists below include modifications from the previously provided lists based on changes that were identified as beneficial by BMC Party Staff during the scoring and ranking evaluation, including: renaming the Jurisdiction Alignment planning initiative scoring criteria to Multi-Agency Benefits; adding

Supplemental Water Supply implementation scoring criteria; separating of the Program D wells into two separate initiatives (w/ and w/o Agriculture Exchange) and addition of the Upper Aquifer Capture and LOWRF Treatment implementation initiative.

Planning Initiatives

Initiatives (Planning)	Description
Recycled Water Beneficial Use Evaluation	Updated modeling evaluation to analyze benefits of discharging recycled water to Broderson, Bay Ridge, Sea Pines and/or other future locations (e.g. ag reuse, school landscape irrigation, etc.).
Pumping Management/Intertie Utilization Evaluation	Study to evaluate opportunities to increase sustainable yield and reduce the threat of seawater intrusion through coordinated pumping management program and/or use of interties between water purveyors.
Evaluation of Growth Allowance Criteria	Evaluation of existing metrics and potential growth rates and development of BMC recommendations for threshold criteria and adaptive management provisions associated with new growth.
Funding & Organization Studies	Study to evaluated potential funding mechanism for BMC Programs B & D, other potential water resource resiliency improvement projects (e.g. AB1600 Study, etc.) and ongoing BMC administration.
Basin Monitoring Metric Evaluation	Evaluation of existing metrics and potential for additional metrics to track the threat of seawater intrusion, Nitrate contamination and the overall status of the basin.
Monitoring Well Network Improvements Study	Study to evaluate potential modifications to existing wells and/or new monitoring wells to improve the basin monitoring program.
Rating curve for Los Osos Creek stream flow sensor	Field study to develop correlation between flow rate and water depth to improve ability to measure flow rate in Los Osos Creek.
Metering of Private Wells	Investigation of opportunities for voluntary or mandatory monitoring of pumping from private wells in the basin.
Formalize adaptive management procedures	Develop formal BMC procedures and approval requirements for modifying Basin Plan Programs through Adaptive Management.
Broderson Mound Transducer Installation	Installation of groundwater level and/or water quality transducers in existing wells near the Broderson disposal site to collect additional data on the formation of the groundwater mound.
Transient Groundwater Model	Development of a transient model to provide an improved toolset for evaluating different water resource scenarios.
Model Improvements and Peer Review of Existing Groundwater Model	Implement recommendations from previous Peer Review and procure an outside consultant to peer review the updated basin groundwater model.
Climate Change Assessment	Updated modeling evaluation of impacts of climate change on the sustainable yield of the basin, accounting for sea level rise, changing temperatures, and variations in precipitation patterns that incorporates latest estimates/assumptions of climate change impacts.
Water Supply Resiliency Study	Alternatives evaluation of different projects available to the BMC for increasing water supply resiliency.

Planning Initiatives Scoring Criteria Framework

Cost	1- >$100,000 2- $50,000 - $100,000 3- $25,000 - $50,000 4- $10,000 - $25,000 5- <$10,000
Multi Agency Benefits	1- Individual BMC Party 2- 3- Multiple BMC Parties 4- 5- Entire BMC
Resiliency Improvement	1- Limited resiliency improvement benefits 2- 3- Moderate resiliency improvement benefits 4- 5- Significant resiliency improvement benefits
Water Quality Improvement	1- Limited water quality benefits 2- 3- Moderate water quality benefits 4- 5- Significant water quality benefits
Enhanced Management	1- Limited water resource management benefits 2- 3- Moderate water resource management benefits 4- 5- Significant water resource management benefits
Grant Funding Opportunities	1- Limited grant funding opportunities 2- 3- Moderate grant funding opportunities 4- 5- Significant grant funding opportunities
Legally Required	1- Requires modification of Basin Plan/Stipulated Judgement/BMC Rules and Regulations 2- 3- Not required and doesn't require modification of Basin Plan/Stipulated Judgement/BMC Rules and Regulations 4- 5- Required by Basin Plan/Stipulated Judgement/BMC Rules and Regulations
Timeline to Implementation	1-> 5 years 2- 3- 2 years 4- 5- 0-6 Months
Feasibility/Complexity	1-Significant regulatory, environmental, political, or social challenges 2- 3- Potential significant regulatory, environmental, political, or social challenges 4- 5- Limited regulatory, environmental, political, or social challenges

Implementation Initiatives

Implementation Strategic Initiatives	Description
Creek Discharge Program	Treatment and distribution infrastructure improvements to allow for disposal/recharge of water from the Los Osos Water Reclamation Facility to Los Osos Creek.
Enhanced Water Conservation Programs	Increased investment in water conservation programs to reduce water demand.
Surface Water Intertie (Drought Resiliency)	Construction of an intertie pipeline to connect the purveyors to the regional water conveyance infrastructure to provide access to State Water and/or other water supplies to enable conjunctive use opportunities and improve water supply resiliency for the community.
Urban Stormwater Capture	Low Impact Development and/or other infrastructure improvements to improve stormwater capture and recharge.
Warden Creek Stormwater Capture	Capture of surface water runoff from Warden Creek, delivering to the Wastewater Reclamation Facility and increasing recycled water flows.
Community Nitrate Removal Facility	Community Nitrate Removal Facility to treat water from the upper aquifer and distribute it to Los Osos water purveyors.
Program D Expansion Wells w/o Ag Exchange Program	New potable water wells in the Lower Aquifer in the Eastern Area of the Basin without the Agriculture Exchange Program.
Program D Expansion Wells w/ Ag Exchange Program	New potable water wells in the Lower Aquifer in the Eastern Area of the Basin with the Agriculture Exchange Program.
Program C Expansion Wells	New (third) potable water wells in the Lower Aquifer in the Central Area of the Basin.
Sewer Area Expansion	Expansion of sewer collection system to capture wastewater discharges from septic users to reduce nitrate load on the basin and provide additional water for the recycled water program.
Upper Aquifer Capture and Treatment at WRF	Pumping nitrate contaminated upper aquifer water to the collection system for delivery and treatment at the LOWRF.

Implementation Initiatives Scoring Criteria Framework

Improves Resiliency	1- < 50 AFY Sustainable Yield 2- 50-100 AFY Sustainable Yield 3- 100-250 AFY Sustainable Yield 4- 250-500 AFY Sustainable Yield 5- > 500 AFY Sustainable Yield
Supplemental Water Supply	1- Does not provide access to additional water supply or enhance access to water within the Los Osos Basin watershed 2- 3-Enhances ability to access water within Los Osos Basin watershed 4- 5- Provides access to a supplemental water supply outside Los Osos Basin watershed
Beneficiaries	1- Individual Purveyor 2- 3- Multiple Purveyors 4- 5- All Basin Pumpers
Capital Cost	1->$5M 2- 3- $2.5M 4- 5- $0
O&M Cost	1- >$2,000/AF 2- $1,000 - $2,000/AF 3- $500 - $1,000/AF 4- $100 - $500/AF 5- < $100/AF
Grant Funding Opportunities	1- Limited grant funding opportunities 2- 3- Moderate grant funding opportunities 4- 5- Significant grant funding opportunities
Timeline to Implementation	1- > 10 years 2- 7 years 3- 5 years 4- 3 years 5- <1 year
Feasibility/Complexity	1- Significant regulatory, environmental, political, or social challenges 2- 3- Potential significant regulatory, environmental, political, or social challenges 4- 5- Limited regulatory, environmental, political, or social challenges

Utilizing the planning and implementation scoring criteria frameworks, BMC and BMC Party Staff (including a designated representative from each BMC Party) performed a preliminary

scoring and ranking of the planning and implementation initiatives. To develop the scores for each of the initiatives relative to the scoring criteria, the BMC and BMC Party Staff utilized findings from previously completed analyses or studies, information from comparable projects and the collective knowledge of the participating individuals. The BMC and BMC Party Staff were able to reach consensus agreement for the scores presented in the preliminary scoring and ranking tables, but did recognize that some of the initiatives could benefit from further definition or analysis to more accurately score relative to the scoring criteria. The results of this preliminary scoring and ranking are included in the following tables.

The Implementation Plan initiative scoring and ranking is not intended to be a prescriptive roadmap for the future of the BMC. However, it is intended to be a framework for the BMC Parties to discuss and evaluate different potential planning and implementation initiatives, identify areas of alignment and help build consensus on how the BMC and BMC parties want to invest their staff and funding resources to improve the sustainability of the Los Osos Basin.

Additionally, while presented below, there is a defined or absolute score for each initiative, the value of the scoring and ranking exercise is in the development of a general ranking of the initiatives relative to the other initiatives. As such, it is more appropriate to group initiatives into tiers of high-ranked, medium-ranked and low-ranked initiatives rather than focusing on the small differentiations in total score for each of the initiatives. To aid in this, conditional color coding was applied to group the initiatives into the top (green), middle (orange) and lower (red) third ranked initiative groupings.

Planning Initiative Preliminary Scoring and Ranking

Planning Strategic Initiatives	Cost	Multi Agency Benefits	Resiliency Improvement	Potential to Improve Water Quality	Potential to Enhance Management	Grant Funding Opportunities	Legal Requirements	Timeline to Implementation	Feasibility/ Complexity	Total
Recycled Water Beneficial Use Evaluation	4	5	4	3	5	4	3	5	5	**38**
Basin Monitoring Metric Evaluation	4	5	5	3	4	2	4	5	5	**37**
Broderson Mound Transducer Installation	5	5	5	3	4	2	3	5	5	**37**
Climate Change Assessment	5	5	4	2	4	4	3	5	5	**37**
Monitoring Well Network Improvements Study	5	5	4	3	4	2	3	5	5	**36**
Pumping Management/Intertie Utilization Evaluation	3	5	4	3	5	3	3	4	5	**35**
Model Improvements and Peer Review of Existing Groundwater Model	3	5	4	3	3	3	4	5	5	**35**
Water Supply Resiliency Study	3	5	5	3	4	3	3	4	4	**34**
Metering of Private Wells	5	5	3	1	4	2	3	5	4	**32**
Transient Groundwater Model	1	5	4	4	5	3	3	3	4	**32**
Rating Curve for Los Osos Creek Stream Flow Sensor	4	5	3	1	3	1	3	4	5	**29**
Evaluation of Growth Allowance Criteria	5	5	3	1	3	1	3	4	2	**27**

Implementation Initiative Preliminary Scoring and Ranking

Implementation Strategic Initiatives	Improves Resiliency	Supplemental Water Supply	Beneficiaries	Capital Cost	O&M Cost	Grant Funding Opportunities	Timeline to Implementation	Feasibility/ Complexity	Total
Enhanced Water Conservation Programs	2	1	5	5	3	4	3	4	**27**
Surface Water Intertie (Drought Resiliency)	4	5	5	2	1	4	2	2	**25**
Community Nitrate Removal Facility	4	1	5	2	3	3	4	3	**25**
Upper Aquifer Capture and LOWRF Treatment	3	1	5	4	1	4	4	3	**25**
Program C Expansion Wells	1	1	5	4	4	2	4	3	**24**
Program D Expansion Wells w/o Ag Exchange Program	3	1	4	3	4	2	4	2	**23**
Program D Expansion Wells w/ Ag Exchange Program	4	1	5	1	4	4	2	2	**23**
Urban Stormwater Capture	2	3	3	2	4	3	3	2	**22**
Warden Creek Stormwater Capture	3	3	4	3	1	3	2	1	**20**
Creek Discharge Program	2	1	3	1	1	4	3	2	**17**
Sewer Area Expansion	2	1	5	1	1	3	2	2	**17**

Implementation Plan Findings and Next Steps

Findings

As the BMC Staff worked through the Implementation Plan scoring and ranking, there were numerous key findings that were identified and are described below:

Essential Initiatives – The Funding and Organizational Studies and Formalized Adaptative Management Procedures planning initiatives were identified by BMC Party Staff as critical for the ongoing operation of the BMC and the implementation of the Basin Plan and are recommended for inclusion in the BMC's efforts moving forward.

Cost Sharing – The planning and implementation initiatives included criteria that looked to differentiate between projects that would benefit one party, multiple parties or all parties. However, at this point the characterization of the initiatives does not include identification of a cost share structure. The intent of the scoring and ranking evaluation was to identify which initiatives may have the greatest benefits to the sustainability of the basin and the BMC Parties. If there is alignment amongst the parties on which initiatives the BMC and/or the individual BMC Parties want to move forward with, then it is envisioned that the cost share structure for each initiative will be evaluated and negotiated amongst the BMC parties as the plan to implement the initiatives (Implementation Plan) is further developed.

Weighting Factors – The scoring and ranking results presented were developed utilizing equally weighted criteria for the planning and implementation initiatives. However, based on direction from the BMC, the weight of the scoring criteria could be adjusted to emphasize certain criteria if they are of significant importance to the BMC or BMC Parties. The updated scoring and ranking, with the weighted scoring criteria, could be evaluated to determine if it impacts how the initiatives are ranked and may better align with the priorities of the BMC and the BMC Parties.

Updated Recycled Water Estimates – There is a need to develop updated estimates of recycled water availability. Flows to the Los Osos Water Recycling Facility (LOWRF) and the amount of recycled water available for disposal, recharge and/or offsetting irrigation demands are lower than anticipated in the Basin Plan and other previous evaluations. To better evaluate potential implementation initiatives, updated estimates of current and future recycled water availability are needed to help identify the highest and best use of this critical resource.

New Implementation Initiative – Through the scoring and ranking evaluation process a new implementation initiative was identified that could warrant further investigation. The Upper Aquifer Capture and LOWRF Treatment initiative would include pumping high nitrate groundwater from the upper aquifer to the collection system for treatment at the LOWRF to provide additional recycled water for disposal, recharge and/or offsetting irrigation demands. This initiative could utilize existing well, pipeline and treatment infrastructure to provide an additional high-quality water source for the basin. However, there are a number of constraints that require further investigation (e.g. pumping capacity, conveyance capacity, treatment compatibility, etc.) before this initiative could be determined to be viable. Regardless, this

initiative warrants further evaluation as it could potentially achieve the objectives for Program B (i.e. upper aquifer nitrate removal and provide additional sustainable yield) with existing infrastructure and without the development of a brine waste stream.

Enhanced Project Definition – Several of the implementation initiatives (i.e. Morro Bay Intertie, Urban Stormwater Capture, Warden Creek Stormwater Capture, Sewer Area Expansion, Upper Aquifer Capture and LOWRF Treatment) were challenging to evaluate utilizing the implementation initiative scoring criteria because of the limited project definition at this time. To better evaluate these implementation alternatives requires additional study and conceptual project development.

Next Steps

Based on the scoring and ranking evaluation results and the findings above, the next steps for the Implementation Plan could include:

1. BMC provides input and direction to staff on the scoring and ranking of the planning and implementation initiatives.
2. BMC Staff utilizes the planning and implementation initiative scoring results to help inform recommendations regarding future investments of BMC staff time and funding investments. Funding evaluation to include not only evaluation of which are the best projects to invest in, but also what are the appropriate costs share structures or arrangements for each of the projects to help ensure alignment between costs and benefits.
3. BMC Staff to prepare a draft Calendar Year 2021 BMC Budget and present it at the next BMC Meeting.
4. BMC Staff to begin development of longer term plan for the implementation of mutually agreed upon initiatives that lays out how the BMC and the BMC Parties will invest its staff and funding resources in time (multi-year budget) to aid in future budgeting for the BMC Parties.

S & T
Mutual Water Company
Los Osos, CA

LOS OSOS COMMUNITY SERVICES DISTRICT

Golden State
Water Company
A Subsidiary of American States Water Company

December 14, 2023

San Luis Obispo County
Department of Planning and Building
ATTN: Los Osos Ordinance Amendments/ Claire Momberger
976 Osos Street, Room 300
San Luis Obispo, CA 93408

Subject: Los Osos Groundwater Basin Water Purveyor Comments re: County of San Luis Obispo's Title 19/ Los Osos Water Offset Program Ordinance Amendments

Dear Ms. Momberger,

Thank you for the opportunity to comment on the County's effort to update and amend Title 19 and the Los Osos Water Offset Program ("Title 19 Amendments"). As you are aware, Golden State Water Company ("GSWC"), S&T Mutual Water Company (S&T) and Los Osos Community Services District ("LOCSD") (jointly, "Purveyors") provide water to the Los Osos community. Los Osos overlies the Los Osos groundwater basin, which is the community's sole source of potable water.

The Purveyors are submitting this joint letter to express our shared apprehensions in response to the most recent proposed iteration of, and amendment to, the Title 19 Amendments. As you know from our months of discussion on these proposed amendments, the Purveyors are engaged and committed to ensuring the implementation of an accurate, fair, and verifiable water offset program in order to balance the pressure to allow additional development with our responsibility to protect the drinking water supply for the community. To that end, the Purveyors' separate governing boards and management, as well as members of the community, have endorsed the comments and requests presented in this correspondence.

Though the Purveyors' initial comments are being provided with this letter, we respectively request that the public comment period be extended through the end of January 2024 to allow time for additional comments to be submitted once the holiday season (and all of the associated travel and other constraints on time) has come to a close. Without prior communication, the public review draft of the Title 19 Amendments was released to the Purveyors late in the afternoon (4:42pm) on Monday, November 27th, which was after the Thanksgiving holiday. The deadline for comments of December 31, 2023 (New Year's Eve) barely allows time for Purveyor staff to review the proposed amendments in detail and formulate responses before the Christmas and New Year holidays arrive. Please seriously consider an extension to allow for adequate public input from both the Purveyors and the public.

The following comments are directed at the processes outlined and discussed with County Planning and the Basin Management party staff over the past year:

- Lack of Robust Water Savings Verification. The water savings verification process to ensure the savings are being realized is not adequately addressed in the Title 19 Amendments. In the Water Offset study, Maddaus recommended more actions and provided examples in Section 6.3 (pages 27-29) of the study to assist in the verification process. Mechanisms to evaluate community-wide water use on a periodic basis need to be included to verify that the groundwater basin is not being negatively impacted by new development.

- Postpone Outdoor Measures. The Purveyors are opposed to including outdoor measures in the Title 19 Amendments until a time that the County can explicitly demonstrate the verifiable, reliable and long-term water savings of any measure being considered are accurate. The analysis in Section 5.1 of the Water Offset Study (page 18) is vague and lacks data to support the three suggested programs to achieve the outdoor water savings suggested. The Title 19 Amendment's proposed pilot program should be reviewed and agreed upon by the Purveyors prior to additional action.

- Prohibition Zone Offsets. After over a year of dialogue with the County, a tentative agreement was reached to allow retrofits in the Prohibition Zone (PZ). This was based on making amendments to the Growth Management Ordinance to allow limited development community-wide including the PZ. The agreement would be that retrofits would be within the water purveyor boundary based on where the new development is being planned. As stated, this was an issue thoroughly discussed at the County planning and Basin Management Committee (BMC) staff level.

- Inaccurate Calculation of Water Savings. As discussed at the staff level, using the person per household number for single family residences (2.4 people per dwelling) to calculate retrofit water savings multi-family and, in particular, mobile homes will inflate the savings on paper versus the actual water savings that can be achieved. Mobile home occupancy data is available for the mobile home parks in Los Osos.

The following comments are either questions for clarification or identify errors in the Title 19 Amendments that should be corrected:

- Section 8.91.020 (4)d. - Aerator definition 1.0 gpm; 19.07.042 (8)a.3. and 19.07.042 (8)c.2. – 1.2 gpm. Please correct all references to read 1.0 gpm for consistency; no aerators rated at 1.2 gpm are available in the marketplace.

- Section 19.07.042 (8)b.4. – Please explain the meaning of and process associated with the text "or through other projects as authorized by the Department director". Planning staff commented at a BMC meeting that the retrofit values would be evaluated by County staff. The Purveyors request examples be provided for better understanding of the proposal.

- Section 19.07.042 (8)b.5. – Assuming that County staff is including this text to avoid having to go through an ordinance amendment to make changes, which is understandable, is there going to be a process where the water purveyors or the public can review and comment on those changes prior to implementation. Please provide a written explanation of this process the proposed process.

- On page 3 of 11 in the table for the LO Groundwater Basin Retrofit-to-Build Requirements for single-family self-sourced development, it appears that using the parcel size as the denominator in the equation reduces the offset requirement substantially as the size of the parcel increases; the larger the parcel, the less the offset requirement. Was this the intent of the equation?

- On page 7 of 11, the table for average water savings for toilets, the number in the column for 6.0 to 1.0 gpd for 3 toilets needs to be corrected. The value should be 23 and not 12.

- On page 9 of 11 for clothes washers, either formula at the top of table is in error or the example is incorrect.

- Section 19.07.042 (8)a1 – Note that dual flush toilets as allowed are not currently available for purchase rated at 1.0 gpm. Duel flush toilets are available for 0.6 to 0.8 gpm on low flow flush and 1.0 to 1.2 gpm on high flow flush. In addition, if flappers (or gaskets in dual flow toilets) are not properly inspected and replaced due to wear, additional water use will occur. Information should be provided to the property owner regarding the maintenance and consequences if the toilet flapper mechanism not changed every two years.

Sincerely,

DocuSigned by:
Mark Zimmer
FA92E4E6E2A0454...
Mark Zimmer, General Manager-Coastal District
Golden State Water Company

DocuSigned by:
2776C6C5DA04438...
Julie McAdon, President of the Board
S&T Mutual Water Company

DocuSigned by:
Charles Cesena
7F77C5A67D414C7...
Charles Cesena, President of the Board
Los Osos Community Services District

TO: **Los Osos Basin Management Committee**

FROM: **Dan Heimel, Executive Director**

DATE: **January 17, 2024**

SUBJECT: **Item 9a: Appointment of BMC Officers for Calendar Year 2024**

Recommendations

For the BMC to review the existing officer positions and appoint officers for CY 2024 or provide alternative direction to staff.

Discussion

The adopted Rules and Regulations (January 2016) for the BMC require appointment of the Committee's officers as noted in the excerpt below from Section 4.2:

> *Appointment of Officers. The officers shall be appointed annually by, and serve at the pleasure of, the Basin Management Committee. Officers shall be elected at the first Basin Management Committee meeting, and thereafter at the first Basin Management Committee meeting following December 1 of each year. An Officer may serve for multiple consecutive terms. Any Officer may resign at any time upon written notice to the Basin Management Committee. The Secretary or Treasurer may be removed and replaced by an affirmative decision of the Basin Management Committee*.

The current BMC officers are as follows:

Director Zimmer: Chairperson
Director Cesena: Vice Chairperson
Director Reineke: Secretary
Director Gibson: Treasurer

TO: **Los Osos Basin Management Committee**

FROM: **Dan Heimel, Executive Director**

DATE: **January 17, 2024**

SUBJECT: **Item 9b – Draft Fall 2023 Los Osos Basin Lower Aquifer Water Quality Monitoring Results and Updated Chloride Metric**

Recommendations

Receive an update on the Draft Fall 2023 Los Osos Basin Lower Aquifer Water Quality Monitoring Results and Updated Chloride Metric.

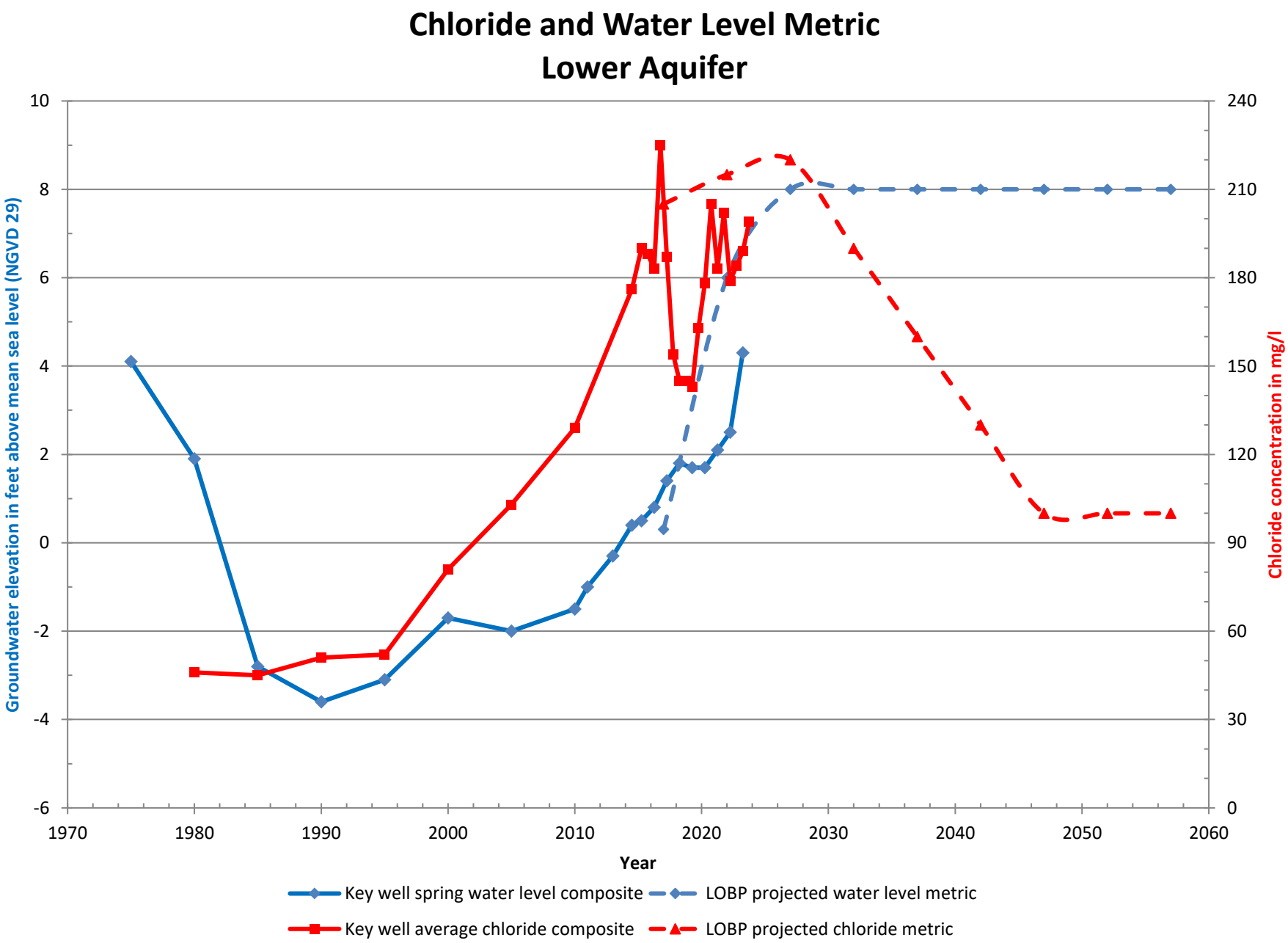
Discussion

Please find the attached Draft Fall 2023 Los Osos Basin Lower Aquifer Water Quality Monitoring Results and Updated Chloride Metric for the Los Osos Basin. As described in Section 5.14 of the Stipulated Judgment and Chapter 7 of the Basin Plan, the Basin Management Committee (BMC) established a groundwater monitoring program to provide the BMC, parties to the adjudication, private Basin water users and public agencies with updated information on groundwater resources in the Los Osos Basin. The final results, including water levels and results from the First Water and Upper Aquifer monitoring, will be included in the 2023 Annual Report.

Attachments

Draft Fall 2023 Los Osos Basin Lower Aquifer Water Quality Monitoring Results and Updated Chloride Metric for the Los Osos Basin

Fall 2023 DRAFT



Los Osos BMC Water Quality Results - Lower Aquifer Monitoring

Station ID	Well Name	Basin Plan Well ID	Aquifer Zone	Date	HCO3	Total Hardness	Cond	pH	TDS	Cl	NO3-N	SO4	Ca	Mg	K	Na
					mg/l	mg/l	µmhos/cm		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
30S/10E-11A2	Sand Spit #1 East	LA2	D	3/14/2005	180	4600	16000	7.3	8900	5400	ND	430	770	640	20	1300
				10/21/2015	150	6640	17700	7.4	13100	6300	ND	740	1030	990	31	1560
				11/5/2020	220	6700	18000	7.7	15300	5890	ND	777	1140	936	38	1560
30S/10E-12J1	MBO5 DWR Obs.	LA11	E	2/14/2005	350	370	1300	8.1	840	77	ND	190	51	58	6.1	110
				11/20/2009	300	360	1150	7.5	732	83	ND	190	51	58	4.4	95
				7/24/2014	360	489	1290	7.7	780	105	ND	212	69	77	5	88
				4/22/2015	360	475	1290	7.8	810	112	ND	189	65	76	5	88
				10/1/2015	250	486	1280	7.3	840	117	ND	188	68	77	4	85
				4/20/2016	330	524	1370	n/a	840	151	ND	193	73	40	5	83
				10/10/2016	350	497	1370	7.1	930	173	ND	189	69	79	4	81
				4/11/2017	350	541	1380	7.5	880	167	ND	186	75	86	4	81
				10/4/2017	300	543	1370	7	850	162	ND	191	76	86	5	90
				4/10/2018	350	595	1390	7.6	820	173	ND	192	85	93	5	97
				10/2/2018	350	497	1340	7.4	870	160	ND	160	69	79	3	87
				4/9/2019	350	539	1430	7.4	860	196	ND	189	76	85	4	85
				10/2/2019	250	290	1520	7.6	1000	187	ND	189	80	90	5	91
				4/14/2020	350	667	1580	7	950	222	ND	187	81	113	5	83
				10/1/2020	350	763	1650	7.1	1040	242	ND	183	85	134	5	88
				4/5/2021	345	612	1630	7.6	1050	256	ND	192	88	96	5	91
				10/6/2021	340	569	1710	7.3	1020	258	ND	176	83	88	5	82
				4/13/2022	330	620	1800	7.3	1020	287	ND	183	90	96	4	87
				10/6/2022	350	633	1720	7.7	1220	279	ND	195	89	100	5	93
				4/13/2023	350	653	1840	7.2	1040	346	ND	188	92	103	5	89
				10/4/2023	340	715	1910	7.4	1300	**350**	ND	188	102	112	5	93
30S/10E-13Bb	Lupine Zone D	LA41	D	11/7/2019	210	312	1310	7.7	760	136	3.1	188	69	34	4	140
				4/8/2020	310	204	943	7.1	560	68	0.3	109	44	23	2	101
				10/8/2020	340	263	920	7.1	490	52	0.1	89.4	51	33	2	72
				4/14/2021	333	289	855	7.9	505	66	ND	86	53	38	2	60
				10/11/2021	340	309	812	7.2	460	48	ND	80	58	40	2	64
				4/12/2022	330	309	818	8.3	500	47	ND	67	58	40	2	58
				10/11/2022	340	315	766	7.6	470	48	ND	71	62	39	2	57
				4/11/2023	340	260	764	7.5	440	51	ND	58	48	34	2	47
				10/23/2023	340	281	754	7.0	460	**48**	ND	57	50	38	2	50

Los Osos BMC Water Quality Results - Lower Aquifer Monitoring

Station ID	Well Name	Basin Plan Well ID	Aquifer Zone	Date	HCO3	Total Hardness	Cond	pH	TDS	Cl	NO3-N	SO4	Ca	Mg	K	Na
					mg/l	mg/l	µmhos/cm		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
30S/10E-13Ba	Lupine Zone E	LA40	E	11/6/2019	210	2090	5330	7	4750	1460	1.3	224	388	272	6	182
				4/7/2020	240	3300	7360	7.6	6340	2190	0.3	202	569	458	7	203
				10/7/2020	270	4100	8220	6.9	7930	2220	ND	192	720	560	8	217
				4/15/2021	274	3760	8590	7.4	6760	2510	ND	217	558	576	7	210
				10/13/2021	270	3540	8930	7.4	7430	2910	ND	201	544	530	6	190
				4/14/2022	270	3780	8790	7.3	6790	2410	ND	187	523	601	6	178
				10/12/2022	280	3860	8860	7.5	8340	2900	ND	221	569	594	7	186
				4/12/2023	280	4570	9020	7.3	5870	2820	ND	232	575	762	7	198
				10/24/2023	280	4450	9200	6.9	9610	**3200**	ND	259	764	619	6	201
30S/10E-13J1* Highlighted chloride values have been adjusted for wellbore leakage	GSWC Rosina	LA10	D,E	12/20/2004	72	230	720	7.1	410	150	1.6	14	38	33	1.4	29
				1/14/2010	35	260	778	6	435	200	1.6	13	41	38	1.5	33
				7/24/2014	80	418	1200	7.3	910	303	1.7	16	67	61	2	39
				4/22/2015	80	431	1230	7.1	750	331	1.9	20	69	63	2	39
				10/5/2015	70	460	1280	7	950	329	1.7	19	74	67	2	41
				4/26/2016	80	412	1170	7.1	840	299	1.8	18	66	60	2	37
				10/12/2016	60	509	1430	6.8	1100	389	1.8	26.7	82	74	2	44
				4/10/2017	80	327	957	6.9	720	300	2.6	14.7	52	48	2	35
				10/12/2017	80	245	702	6.9	510	220	3.4	12.5	39	36	2	33
				4/24/2018	70	188	620	7.4	400	190	4.3	12.3	29	28	1	29
				10/9/2018	70	265	730	7.1	450	210	3.2	12.7	42	39	2	34
				4/15/2019	80	251	744	7	600	174	1.9	10.4	38	38	2	31
				10/14/2019	80	332	961	7.1	830	229	2	12.7	54	48	1	33
				4/21/2020	80	353	1310	6.4	970	250	2.1	14.2	59	50	2	32
				10/7/2020	70	183	618	7.6	430	310	4.6	11.3	29	27	1	33
				4/6/2021	81	405	1110	7.6	815	258	2.1	16.1	66	58	2	36
				10/8/2021	80	413	1180	7.2	790	289	2.1	16.8	65	61	2	37
				4/18/2022	70	192	612	7.1	420	220	5.8	14.9	29	29	1	37
				12/5/2022	90	327	911	7.7	690	235	2	13.4	52	48	2	33
				5/8/2023	80	303	892	7.1	690	211	2	12.5	49	44	2	51
				10/10/2023	80	277	805	7.6	610	**235**	3.2	13.2	45	40	2	35

Los Osos BMC Water Quality Results - Lower Aquifer Monitoring

Station ID	Well Name	Basin Plan Well ID	Aquifer Zone	Date	HCO3	Total Hardness	Cond	pH	TDS	Cl	NO3-N	SO4	Ca	Mg	K	Na
					mg/l	mg/l	µmhos/cm		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
30S/10E-13M2 4/1/2021 sample results show Upper Aquifer influence due to reduced pumping	Howard East	LA31	C,D	11/22/2004	51	810	2900	7.3	1500	810	0.5	140	60	120	4.7	210
				12/9/2009	55	1100	3740	7.1	2170	1100	0.5	220	160	160	4.8	370
				8/4/2014	60	757	3340	7.1	2450	990	0.6	178	117	113	5	382
				4/21/2015	60	739	3430	7.3	1930	950	0.6	178	117	113	5	382
				10/6/2015	30	756	3370	7.1	2140	960	0.5	185	115	114	5	342
				4/20/2016	50	726	3520	7.2	2190	941	0.7	179	113	108	5	400
				10/19/2016	70	722	3420	7.4	2190	943	0.6	182	113	107	4	398
				4/17/2017	60	733	3380	6.8	2060	907	0.6	178	114	109	4	413
				10/5/2017	60	738	3350	7.5	2190	960	0.7	160	116	109	5	411
				4/24/2018	70	664	3370	7.2	2020	946	0.6	2.8	103	99	4	367
				10/17/2018	60	740	3400	7.3	2180	834	0.6	153	115	110	5	414
				4/3/2019	70	640	3290	7.8	2010	940	0.6	179	103	93	4	341
				10/3/2019	70	574	3120	7.4	2120	827	0.7	169	90	85	4	340
				4/9/2020	70	519	2970	7.8	1740	738	0.6	152	86	74	4	258
				10/1/2020	70	774	3330	8	2080	844	0.7	169	94	131	5	495
				4/1/2021	218	187	1010	8.3	581	161	2.9	47	31	27	20	113
				11/4/2021	70	509	2780	7.9	1700	629	0.6	124	77	77	4	305
				5/11/2022	70	388	2550	7.6	1540	578	0.6	134	60	58	3	303
				10/6/2022	70	506	2520	8.3	1840	636	0.7	145	79	75	4	268
				4/4/2023	70	352	2180	7.1	1370	599	0.6	121	52	54	4	272
				11/7/2023	70	425	2340	8.0	1440	**600**	0.7	131	68	62	3	247
30S/10E-13N	S&T #5	LA8	D	11/23/2004	42	80	390	6.9	200	67	5.9	9.2	13	12	1.7	38
				11/19/2009	41	89	386	6.8	267	73	6.1	11	15	13	1.4	38
				7/24/2014	50	100	438	7.4	270	76	7	10	17	14	2	38
				4/21/2015	50	98	445	6.9	280	77	7.7	11	16	14	2	38
				10/6/2015	40	98	422	7.2	310	75	6.8	10	16	14	1	38
				4/20/2016	20	97.5	446	7	320	76	7.2	12	16	14	1	38
				10/13/2016	50	104	470	8	320	79	7.2	12	17	15	1	40
				4/11/2017	50	100	434	7.4	270	77	7.3	12.4	17	14	1	38
				10/2/2017	30	95	438	7.2	290	78	7.6	13.2	15	14	1	36
				4/11/2018	60	104	440	7	260	79	7.9	13.5	17	15	1	39
				10/3/2018	60	107	430	6.5	340	66	6.7	12.9	18	15	2	40
				4/3/2019	50	100	434	6.3	250	75	7.3	12.7	17	14	1	36
				10/7/2019	60	95	446	7.6	250	77	7.7	14.4	15	14	1	37
				4/13/2020	60	104	443	8	300	75	7.4	14.5	17	15	2	37
				10/1/2020	60	108	464	7.9	300	76	7.5	14.4	17	16	1	40
				4/6/2021	63	103	438	7.4	302	78	7.8	13.1	17	15	1.4	38
				10/8/2021	60	108	443	7.8	290	77	7.5	13.3	17	16	2	41
				4/13/2022	60	106	449	8.1	270	76	7.3	12.8	16	16	1	40
				10/4/2022	60	108	432	7.4	280	77	6.6	13.1	17	16	2	38
				4/13/2023	60	139	443	8.0	250	80	7.3	13.2	21	21	1	41
				10/4/2023	60	108	455	7.6	310	**81**	7.3	13.1	17	16	2	40

Los Osos BMC Water Quality Results - Lower Aquifer Monitoring

Station ID	Well Name	Basin Plan Well ID	Aquifer Zone	Date	HCO3	Total Hardness	Cond	pH	TDS	Cl	NO3-N	SO4	Ca	Mg	K	Na
					mg/l	mg/l	µmhos/cm		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
30S/10E-24C1	GSWC Cabrillo	LA9	D	12/20/2004	64	130	610	7	310	110	4.5	19	22	19	1.6	50
				11/20/2009	60	150	611	7.1	347	130	4.1	22	23	22	1.6	52
				7/24/2014	40	69	339	7.6	240	46	8.4	6	11	10	1	32
				4/22/2015	70	117	530	7.3	320	95	5.5	16	19	17	2	45
				10/5/2015	50	75	349	7.6	270	50	7.6	7	12	11	1	34
				4/26/2016	70	115	499	7	300	90	5.6	16	18	17	2	44
				10/12/2016	70	111	506	7.1	320	93	5.5	15.1	18	16	1	44
				4/10/2017	70	111	490	7	310	89	5.7	15.9	18	16	1	43
				10/12/2017	70	117	484	7	270	89	6	16.3	19	17	2	46
				4/24/2018	70	115	486	7.8	300	90	6.2	16.7	18	17	1	43
				10/9/2018	60	135	477	6.9	280	76	5.8	17.2	21	20	2	50
				4/15/2019	70	112	488	7.1	310	92	5.7	15.6	17	17	2	45
				10/14/2019	no sample (off-line)											
				4/21/2020	300	75.2	674	6.71	370	37	0.2	28.4	3	35	2	42
				10/7/2020	60	102	460	7.4	270	75	6.6	13.1	16	15	1	40
				4/6/2021	63	98.6	443	7.89	287	78	6.8	12.2	16	15	1	39
				10/8/2021	60	112	490	7.7	280	86	6.4	16	17	17	2	44
				4/18/2022	70	126	533	7.23	330	93	6.2	16.2	19	19	2	46
				10/19/2022	70	126	502	7.4	310	93	6.5	15.6	19	19	2	48
				4/11/2023	80	117	518	7.5	330	98	6.8	17.3	19	17	1	43
				10/10/2023	70	128	545	7.58	380	**96**	6.8	17.4	20	19	2	47
30S/11E-7Q3	LOCSD 8th St.	LA12	D	11/18/2004	250	270	790	7.5	410	73	ND	39	44	40	2.3	48
				11/19/2009	220	290	782	7.4	465	92	ND	46	46	42	1.9	53
				7/23/2014	290	303	876	7.6	460	91	ND	43	49	44	2	54
				4/21/2015	290	305	897	7.7	500	101	ND	55	48	45	2	59
				10/6/2015	280	298	828	7.4	490	91	ND	46	47	44	2	55
				4/20/2016	190	307	907	7.7	520	91	ND	49	49	45	2	54
				10/11/2016	280	278	827	4.9	490	93	ND	46.2	44	41	2	52
				4/10/2017	300	294	839	7.3	480	91	ND	49.5	47	43	2	54
				10/4/2017	220	305	826	6.5	470	92	ND	45	48	45	2	56
				4/10/2018	300	319	814	7.7	440	93	ND	46.2	52	46	2	56
				10/2/2018	290	283	822	7.3	470	78	ND	50.1	46	41	1	53
				4/9/2019	300	301	844	7.5	480	94	ND	49.7	48	44	2	53
				10/2/2019	290	312	877	8	530	91	ND	50.9	49	46	2	56
				4/16/2020	310	301	883	7.8	500	94	ND	54.7	48	44	2	52
				10/5/2020	300	321	891	7.9	510	89	ND	49.6	51	47	2	57
				4/5/2021	305	297	849	7.7	504	94	ND	54.1	48	43	2	54
				10/6/2021	300	283	874	7.5	510	95	ND	55	46	41	2	51
				4/13/2022	300	276	879	7.4	490	94	ND	51.5	43	41	2	50
				10/4/2022	310	285	839	7.9	500	94	ND	51.5	45	42	2	52
				4/5/2023	310	317	842	7.1	490	98	ND	51.9	48	48	3	72
				10/11/2023	310	298	849	7.4	520	**95**	ND	52.1	47	44	2	53

Los Osos BMC Water Quality Results - Lower Aquifer Monitoring

Station ID	Well Name	Basin Plan Well ID	Aquifer Zone	Date	HCO3	Total Hardness	Cond	pH	TDS	Cl	NO3-N	SO4	Ca	Mg	K	Na
					mg/l	mg/l	µmhos/cm		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
30S/11E-17E8	So. Bay Obs. Middle	LA22	D	1/14/2005	150	150	440	7.5	290	34	2.2	11	24	22	1.4	28
				11/20/2009	120	160	455	7.3	255	42	4.3	12	25	23	1.3	29
				7/23/2014	150	166	500	7.6	270	43	6.3	10	27	24	2	28
				4/21/2015	150	157	481	7.6	270	49	7.1	13	25	23	1	28
				10/1/2015	120	164	475	7.4	290	44	6.6	10	26	24	1	28
				4/19/2016	150	164	476	6.9	290	45	6.9	12	26	24	1	29
				10/13/2016	140	161	521	7.3	290	46	6.9	11.9	25	24	1	29
				4/13/2017	150	164	466	7.3	300	46	6.7	13.2	26	24	1	29
				10/11/2017	150	168	476	7.7	260	47	7.2	14	26	25	1	29
				4/16/2018	150	165	473	6.4	310	47	6.7	14.2	25	25	1	29
				10/10/2018	150	160	471	7.5	250	43	6.1	15	26	23	1	28
				4/10/2019	180	153	466	7.2	290	46	5.8	13.6	25	22	1	28
				10/9/2019	150	155	485	7.3	270	49	7	14.9	24	23	1	28
				4/14/2020	160	164	482	8	280	48	6.3	14.9	26	24	1	27
				10/6/2020	160	181	506	7.5	340	47	6.7	14.7	28	27	1	30
				4/8/2021	159	154	470	7.5	329	46	5.8	12.5	24	23	1	27
				10/19/2021	170	181	480	7.4	310	41	5.8	14.9	28	27	1	29
				4/20/2022	160	178	518	7.6	320	43	7.4	14.6	27	27	1	29
				10/17/2022	180	213	485	7.4	300	45	7	16.5	31	33	2	32
				4/6/2023	200	176	496	7.7	300	41	5.5	14.9	26	27	1	26
				10/17/2023	170	169	465	7.0	290	**45**	6.1	13.7	25	26	2	28
30S/11E-17N10	GSWC So. Bay #1	LA20	C,D,E	Jan 2003	250	--	510	7.1	290	37	ND	21	41	25	1.3	35
				11/20/2009	230	220	638	7.3	357	41	0.5	30	35	33	1.7	37
				7/24/2014	280	232	646	7.7	370	37	0.5	24	37	34	2	41
				4/22/2015	290	234	653	7.4	360	43	0.6	27	36	35	2	42
				10/5/2015	280	227	614	7.2	370	38	0.5	23	35	34	2	41
				4/26/2016	230	227	629	7.1	360	39	0.6	27	35	34	2	40
				10/12/2016	290	221	631	7	370	40	0.6	25.2	34	33	2	40
				4/10/2017	280	227	624	7.2	380	39	0.6	26.7	35	34	2	40
				10/12/2017	260	240	583	6.6	320	41	0.7	27.9	37	36	2	43
				4/24/2018	200	166	515	7.4	330	43	3.2	23.2	27	24	2	31
				10/9/2018	290	273	632	7.2	340	38	0.6	29.2	42	41	3	47
				4/15/2019	200	181	559	7.4	310	42	3.1	21.7	28	27	2	34
				10/14/2019	290	221	626	7.2	380	41	0.7	29	34	33	2	40
				4/21/2020	300	230	705	7	400	50	0.7	26.9	36	34	2	42
				10/7/2020	290	227	654	7.5	350	40	0.7	27	35	34	2	42
				4/6/2021	204	178	529	7.9	329	43	3	21.1	29	26	2	33
				10/7/2021	290	245	633	6.8	340	40	0.7	27.8	37	37	2	43
				4/18/2022	280	242	636	7.4	360	39	0.7	26.6	36	37	2	42
				10/19/2022	300	245	616	7.6	330	40	0.7	26.4	37	37	2	43
				4/11/2023	200	173	515	7.8	290	43	3.4	21.8	28	25	2	33
				10/10/2023	220	193	538	7.7	320	**43**	3	23.4	31	28	2	36

Los Osos BMC Water Quality Results - Lower Aquifer Monitoring

Station ID	Well Name	Basin Plan Well ID	Aquifer Zone	Date	HCO3	Total Hardness	Cond	pH	TDS	Cl	NO3-N	SO4	Ca	Mg	K	Na
					mg/l	mg/l	µmhos/cm		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
30S/11E-18K8	10th St. Obs. East (Deep)	LA18	E	1/19/2005	260	290	650	7.5	370	33	ND	38	62	33	2.5	28
				11/20/2009	230	220	620	7.5	378	32	ND	40	51	24	1.8	23
				7/24/2014	290	271	647	7.5	380	28	ND	34	56	32	2	27
				4/21/2015	290	265	634	7.7	400	33	ND	39	55	31	2	27
				10/19/2015	230	256	621	7.3	370	29	ND	33	53	30	2	26
				4/20/2016	190	265	700	7.5	390	31	ND	38	55	31	2	26
				10/18/2016	290	256	615	6.8	370	31	ND	35.9	53	30	2	26
				4/12/2017	290	274	616	7.5	450	31	ND	38	57	32	2	27
				10/10/2017	220	271	619	7.8	350	30	ND	35.5	56	32	2	27
				4/17/2018	290	260	625	7.3	390	33	ND	39.9	53	31	2	27
				10/10/2018	290	254	608	7.5	360	31	ND	39.8	54	29	2	26
				4/10/2019	290	245	620	7.6	380	32	ND	37.4	52	28	2	25
				10/9/2019	290	253	647	7.9	390	33	ND	40.5	52	30	2	26
				4/14/2020	290	269	629	7.5	400	33	ND	40.2	55	32	2	26
				10/22/2020	300	247	669	7.5	370	32	ND	38.2	51	29	3	26
				4/12/2021	298	267	621	7.6	389	32	ND	41.2	54	32	2	27
				10/19/2021	300	287	657	7.4	400	32	ND	38.4	59	34	2	28
				4/15/2022	290	257	638	8.3	420	31	ND	36.5	52	31	2	25
				10/10/2022	310	278	613	8.0	400	33	ND	39.3	57	33	2	29
				4/6/2023	310	252	623	7.9	410	32	ND	38.7	50	31	2	26
				10/17/2023	310	264	622	7.1	430	**31**	ND	37.7	53	32	2	26
30S/11E-18K9	LOCSD 10th St.	LA32	C,D	May 2002	250	--	550	6.9	320	37	0.2	26	31	32	--	39
				11/20/2009	180	160	539	7.2	307	36	1	27	27	24	1.3	32
				7/23/2014	220	190	546	7.7	300	32	1	20	30	28	1	35
				4/21/2015	190	108	504	7.6	270	38	1.6	20	17	16	1	27
				10/6/2015	50	62	248	7.2	190	31	5.9	3	10	9	ND	21
				4/20/2016	130	121	382	7.5	220	32	3.3	12	19	18	1	27
				10/11/2016	200	168	511	6.6	270	36	1.2	21.5	26	25	1	34
				4/10/2017	190	155	461	7.3	270	35	1.9	19.1	24	23	1	31
				10/9/2017	200	168	493	7.6	270	36	1.4	23.1	26	25	1	33
				4/10/2018	50	75.2	256	7.7	150	35	6.5	28.6	12	11	ND	23
				10/2/2018	210	168	492	7.3	270	36	1.3	22	26	25	ND	33
				4/9/2019	200	172	474	7.6	270	34	1.6	21.5	26	26	1	33
				10/2/2019	200	185	531	7.4	310	36	1.4	24.7	28	28	1	35
				4/16/2020	60	72.7	272	8.1	190	35	6	5.4	11	11	ND	20
				10/6/2020	60	68.6	246	8	180	30	4	4.9	11	10	ND	21
				4/5/2021	143	128	390	7.8	247	34	2.1	15.7	20	19	1	27
				10/6/2021	60	68.6	255	7.7	150	30	3.9	5.7	11	10	ND	20
				4/13/2022	70	66.1	262	7.6	150	30	3.8	5.2	10	10	ND	20
				10/6/2022	200	211	461	7.7	260	38	1.4	23.5	32	32	2	58
				4/5/2023	190	169	465	7.2	290	38	1.4	22.8	25	26	1	33
				10/10/2023	200	168	482	7.6	290	**38**	1.3	21.4	26	25	2	32

Los Osos BMC Water Quality Results - Lower Aquifer Monitoring

Station ID	Well Name	Basin Plan Well ID	Aquifer Zone	Date	HCO3	Total Hardness	Cond	pH	TDS	Cl	NO3-N	SO4	Ca	Mg	K	Na
					mg/l	mg/l	µmhos/cm		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
30S/11E-18K	GSWC Los Olivos #5	LA39	D	4/15/2019	290	230	619	8.1	350	38	ND	27.4	33	36	2	41
				10/14/2019	300	225	628	7.2	370	37	ND	28.6	34	34	1	41
				4/21/2020	300	236	674	6.9	370	37	0.2	28.4	37	35	2	42
				10/7/2020	300	227	657	7.4	360	37	ND	28.2	35	34	2	43
				4/6/2021	301	226	629	8.0	382	38	ND	25.8	34	34	2	40
				10/8/2021	300	253	638	7.4	360	37	ND	29.3	37	39	2	45
				4/18/2022	250	209	561	7.6	330	34	ND	17.8	31	32	2	34
				10/19/2022	310	236	617	7.6	330	37	ND	28	37	35	2	44
				4/11/2023	310	214	626	7.5	340	38	ND	30.1	33	32	1	40
				10/10/2023	310	245	632	7.4	370	**37**	ND	29.4	37	37	2	42
30S/11E-18L2**	LOCSD Palisades	LA15	D,E	11/18/2004	220	330	880	7.3	420	120	ND	31	54	48	2.2	40
				11/19/2009	200	590	1460	7.2	890	360	0.4	39	94	86	2	44
			D	7/23/2014	250	293	783	7.8	390	90	0.4	26	48	42	2	40
				4/29/2015	80	78	348	7.4	230	43	5	10	13	11	ND	30
				10/28/2015	230	288	782	7.4	420	104	0.6	29	46	42	ND	36
				4/27/2016	230	264	796	7.3	450	93	0.9	28	43	38	2	43
				10/11/2016	200	221	694	7	380	91	1.7	25.5	36	32	1	35
				10/5/2017	180	306	768	7.6	400	102	0.7	27	50	44	2	40
				4/10/2018	250	311	767	7.3	420	100	0.8	32.4	52	44	2	40
				10/23/2018	250	288	772	7.7	440	83	0.6	30.7	48	41	1	38
				4/9/2019	250	301	774	7.4	460	102	0.8	29.2	48	44	1	38
				11/14/2019	210	303	806	7.8	430	107	0.7	32.9	49	44	2	39
				4/16/2020	260	299	832	7.7	460	109	0.8	32.5	49	43	2	37
				10/5/2020	250	319	841	7.8	450	109	0.7	29.7	52	46	2	41
				4/6/2021	234	290	780	7.7	444	108	1	27.2	47	42	2	38
				10/6/2021	250	295	856	7.3	490	107	0.5	32.8	49	42	2	37
				4/13/2022	250	330	876	7.3	470	116	0.5	30.3	53	48	2	43
				10/4/2022	250	326	885	7.7	610	138	0.8	31.2	53	47	2	40
				4/11/2023	250	282	877	8.2	470	142	0.8	31.4	47	40	2	37
				10/9/2023	270	331	898	7.6	570	**130**	0.5	31.1	55	47	2	40
30S/11E-18F2	LOCSD Ferrell	LA13	D	4/5/2023	190	132	668	8.3	310	77	ND	62.1	15	23	2	76
				10/11/2023	280	168	656	7.7	400	**50**	ND	39.7	23	27	2	70
30S/10E-14B2	Sand Spit #3 Deep	LA3	D	3/15/2005	100	3600	30000	8	17000	8500	ND	960	1200	130	34	4300
				10/21/2015	ND	7140	29500	11	24700	10000	ND	530	2830	20	80	4040

ND = Not Detected

Chloride Metric Wells in Green (13J1 weighted x2); current chloride concentrations in red

*Chloride concentrations at 13J1 can vary seasonally by 100+ mg/l and are affected by well production and borehole leakage, so fluctuations are exp

**Water from 18L2 affected by wellbore leakage/upper aquifer influence when inactive

Legend and Detection Limits

Constituer	Description	Practical Quantitation Limit*
HCO3	Bicarbonate Alkalinity in mg/L HCO3	10.0
Total Hardı	Total Hardness in mg/L CaCO3	--
Cond	Electrical Conductance in μmhos/cm	1.0
pH	pH in pH units	--
TDS	Total Dissolved Solids in mg/L	20.0
Cl	Chloride concentration in mg/L	1.0
NO3-N	Nitrate as Nitrogen concentration in mg/L	0.1
SO4	Sulfate concentration in mg/L	2.0
Ca	Calcium concentration in mg/L	1.0
Mg	Magnesium concentration in mg/L	1.0
K	Potassium concentration in mg/L	1.0
Na	Sodium concentration in mg/L	1.0

*where dilution not required