

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 20, 2021**. Based on the threat of COVID-19 as reflected in the Proclamations of Emergency issued by both the Governor of the State of California and the San Luis Obispo County Emergency Services Director, as well as the Governor's Executive Order N-29-20 issued on March 17, 2020 relating to the convening of public meetings in response to the COVID-19 pandemic, this meeting will be conducted as a phone-in/web-based meeting only. There will be no physical meeting location for this BMC Meeting. Members of the public can participate via phone or by logging into the web-based meeting.

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 dheimel@wsc-inc.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 HeimeI (Basin Management Committee)
2122 9th St.
Suite 110
Los Osos, CA 93402

Additional information on how to submit Public Comment is provided on page 3 of this Agenda

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 and Executive Order N 29-20, 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 HeimeI at dheimel@wsc-inc.com.

BASIN MANAGEMENT COMMITTEE BOARD OF DIRECTORS AGENDA

1. CALL TO ORDER

2. ROLL CALL

3. 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.

4. 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. **Approval of Minutes from December 16, 2020 Meeting**
- b. **Budget Update and Invoice Register through December 2020**
- c. **Approval of Proposal from Water Systems Consulting for Professional Services as Executive Director for the Basin Management Committee**

5. EXECUTIVE DIRECTOR'S REPORT

6. ACTION ITEMS

a. Draft 2020 Fall Lower Aquifer Groundwater Basin Monitoring

Recommendation: Receive an update on early findings for the Fall 2020 Lower Aquifer Groundwater Monitoring results.

b. Proposals from Cleath Harris Geologist to provide Professional Services for the 2020 Annual Monitoring Report and Additional Management Tasks, the 2021 Groundwater Monitoring Program and the Recycled Water Beneficial Use Evaluation

Recommendation: Approve the proposed scope and fee for hydrogeologic services for calendar year 2021, to be provided by Cleath Harris Geologists (CHG), in an amount not to exceed \$123,000.

c. BMC Agenda Restructuring

Recommendation: Review the proposed new agenda structure for BMC Meetings and provide direction to staff.

d. Formalizing the Process for Implementation of Adaptive Management Plan

Recommendation: Approve the proposed approach and resolution for formalizing the process of implementing the Adaptive Management Plan or provide alternate direction to staff.

e. Wild Coast Farms Water Offset Program

Recommendation: Receive a presentation from County Planning Staff on the Wild Coast Farms Water Offset Program and provide direction to staff.

f. Update on Status of Basin Plan Programs

Recommendation: Receive report and provide input to staff on future direction.

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. ADJOURNMENT

Notice of Meeting
**LOS OSOS GROUNDWATER BASIN, BASIN MANAGEMENT
COMMITTEE**

*****CONFERENCE CALL/WEBINAR ONLY*****

Wednesday, January 20, 2021 at 1:30 PM

Important Notice Regarding COVID-19: Based on guidance from the California Department of Public Health and the California Governor's Office, in order to minimize the spread of the COVID-19 virus, please note the following:

1. The meeting will only be held telephonically and via internet via the number and website link information provided on the agenda. After each item is presented, Committee Members will have the opportunity to ask questions. Participants on the phone or on the computer will then be provided an opportunity to speak for 3 minutes as public comment prior to Committee deliberations and/or actions or moving on to the next item. If a participant wants to provide public comment on an item they should select the "Raise Hand" icon on the Zoom Online Meeting platform or press *9 if on the phone. The meeting host will then unmute the participant when it is their turn to speak and allow them to provide public comment.
2. The Committee's agenda and staff reports are available at the following website:
[https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Los-Osos-Basin-Management-Committee-\(BMC\).aspx](https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Los-Osos-Basin-Management-Committee-(BMC).aspx)
3. If you choose not to participate in the meeting and wish to make a written comment on any matter within the Committee's subject matter jurisdiction, regardless of whether it is on the agenda for the Committee's consideration or action, please submit your comment via email or U.S. Mail by 5:00 p.m. on the day prior to the Committee meeting. Please submit your comment to Dan Heibel at dheibel@wsc-inc.com. Your comment will be placed into the administrative record of the meeting.
4. If you choose not to participate in the meeting and wish to submit verbal comment, please call (805) 457-8833 x104 and ask for Dan Heibel. If leaving a message, state and spell your name, mention the agenda item number you are calling about and leave your comment. The verbal comments must be received by no later than 9:00 a.m. on the morning of the noticed meeting and will be limited to 3 minutes. Every effort will be made to include your comment into the record, but some comments may not be included due to time limitations.

Mailing Address:
Attn: Dan Heibel
Basin Management Committee
2122 9th St.
Suite 110
Los Osos, CA 93402

All Americans with Disabilities Act (ADA) accommodations shall be promptly reviewed and resolved. Persons who require accommodations for any audio, visual or other disability in order to review an agenda, or to participate in the meeting of the Basin Management Committee per the ADA, are encouraged to request such accommodation 48 hours in advance of the meeting from Dan Heibel at (805) 457-8833 x104.

BASIN MANAGEMENT COMMITTEE BOARD OF DIRECTORS

Agenda Item 4a: Minutes of the Meeting of December 16, 2020

Agenda Item	Discussion or Action
1. CALL TO ORDER	Chairperson Ochylski called the meeting to order at 1:30 pm.
2. ROLL CALL	Mr. Dan Heimel, acting Clerk, called roll to begin the meeting. Chairperson Marshall Ochylski, Director Bruce Gibson, Director Charlie Cote, and Vice Chairperson Mark Zimmer were all present.
3. BOARD MEMBER COMMENTS	<u>Board Comments</u> Gibson : Board took Action on LO Community Plan Dec. 15, 2020 Zimmer: Purolite – nitrate removal resin technology – Agendize presentation for next meeting
4. CONSENT AGENDA	
4a. Minutes of the Meeting of October 21, 2020	Review of minutes from October 21, 2020 Meeting <u>Public Comment</u> Linde Owen
4b. Approval of Warrants, Budget Update and Invoice Register through December 2020	<u>Board Action</u> The Board of Directors approved Items 4a and 4b Ayes: Chairperson Ochylski, Director Gibson, Director Cote, and Vice Chairperson Zimmer Nays: None Abstain: None Absent: None
5. EXECUTIVE DIRECTOR’S REPORT	Staff recommends that the Committee receive and file the report and provide staff with any direction for future discussions. <u>Public Comment</u> Jeff Edwards Julie Jagger Linde Owen <u>Board Direction</u> None
6. SPECIAL PRESENTATION	
6a. Onsite Wastewater Treatment Systems – Local Agency Management Program Presentation	Michael Berg, Environmental Health Specialist County of SLO Planning and Building presenting recent transfer of regulatory power from Regional Board to County to for onsite wastewater treatment systems and local agency management program. <u>Public Comment</u> Linde Owen

	<p>Julie Tacker Jeff Edwards Lynette Tornatsky</p> <p><u>Board Direction</u> None</p>
7. ACTION ITEMS	
7a. Review and Approval of Proposed CY 2021 BMC Budget	<p>Recommendation: Staff recommends that the BMC review and approve the proposed Calendar Year (CY) 2021 BMC Budget or provide alternate direction to staff.</p> <p><u>Public Comment</u> Jeff Edwards Linde Owen</p> <p><u>Board Action</u> The Board of Directors approved Item 7a 2021 BMC Budget</p> <p>Ayes: Chairperson Ochylski, Director Gibson, Director Cote, and Vice Chairperson Zimmer Nays: None Abstain: None Absent: None</p>
7b. Appointment of BMC Officers for Calendar Year 2021	<p>Recommendation: Staff recommends that the BMC review the existing officer positions and appoint officers for CY 2021 or provide alternative direction to staff.</p> <p><u>Public Comment</u> Jeff Edwards Julie Tacker Chuck</p> <p><u>Board Action</u> Keep Officers in current positions</p> <p>Ayes: Chairperson Ochylski, Director Gibson, Director Cote, and Vice Chairperson Zimmer Nays: None Abstain: None Absent: None</p>
7c. Update on Status of Basin Plan Infrastructure Projects	<p>Recommendation: Receive report and provide input to staff on future direction.</p> <p><u>Public Comment</u> <u>Todd Davidson</u> <u>Jeff Edwards</u></p> <p><u>Board Comments</u> None</p>

8. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA	<u>Public Comment</u> Lindy Owen Jeff Edwards Julie Tacker Chuck Cesena <u>Board Comments</u> None
9. ADJOURNMENT	Meeting was adjourned at approximately 3:18 PM. The next regularly scheduled meeting is on January 20, 2020 at 1:30 PM.

TO: Los Osos Basin Management Committee

FROM: Dan Heimel, Executive Director

DATE: January 20, 2021

SUBJECT: Item 4b – Approval of Budget Update and Invoice Register through December 2020

Recommendations

Staff recommends that the Committee review and approve the report.

Discussion

Staff has prepared a summary of costs incurred as compared to the adopted budget through December 2020 (see Attachment 1). A running invoice register is also provided as Attachment 2. The adopted CY 2021 Budget is included as Attachment 3.

Attachment 3

CY 2021 BMC Budget			
Item	Description	Cost	Comments
1	BMC Administration and Facilitation	\$70,000	
2	Meeting expenses: Facility rent	\$1,500	Costs will be reduced if BMC Meetings continue to be virtual
3	Meeting expenses: Audio and video services	\$6,000	Costs will be reduced if BMC Meetings continue to be virtual
4	Technical Support/Adaptive Management Services	\$15,000	
5	Semi annual seawater intrusion monitoring	\$52,000	Includes Broderson Mound Transducer Installation
6	2020 Annual Report	\$56,000	Includes Formalized Sustainable Yield and Basin Metric Review and Update tasks
7	Grant Pursuit Contingency	\$5,000	Contingency budget for potential pursuit of Grant Opportunities
8	Funding and Organization Studies	\$40,000	Study to evaluate potential funding mechanism for BMC Programs B & D, other potential water resource resiliency improvement projects (e.g. AB1600 Study, etc.) and ongoing BMC administration.
9	Recycled Water Beneficial Use Evaluation	\$15,000	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.) and opportunities to increase amount of water sent to the LO WRF.
10	Implementation Initiative Evaluation	\$25,000	Technical evaluation support to assist BMC Parties in further evaluating Implementation Initiatives and identifying preferred alternatives for improving basin sustainability.
	Subtotal	\$285,500	
	10% Contingency (rounded to nearest \$100)	\$28,600	
	Total	\$314,100	
	LOCSD (38%)	\$119,358	
	GSWC (38%)	\$119,358	
	County of SLO/SLOCFC&WCD (20%)	\$62,820	
	S&T Mutual (4%)	\$12,564	

TO: Los Osos Basin Management Committee

FROM: Dan Heimel, Executive Director

DATE: January 20, 2021

SUBJECT: Item 4c: Approval of Proposal from Water Systems Consulting for Professional Services as Executive Director for the Basin Management Committee

Recommendations

Staff recommends that the BMC approve the proposed scope and fee for Executive Director Professional Services for Calendar Year 2021, to be provided by Water Systems Consulting, in an amount not to exceed \$69,940.

Discussion

The budget for Executive Director Professional Services is included in Budget Item 1 (\$70,000) in the approved CY 2021 BMC Budget. Notice to Proceed will be contingent on approval of the BMC Committee budget by each of the member agencies. Once each of the member agencies approves the budget, Notice to Proceed will be provided.

Financial Considerations

The approved CY 2021 BMC Budget includes specific line items for the proposed work as described above.

Scope of Work

TASK 1.0 BMC ADMINISTRATION

Budget based on an assumption of 132 hours for this task.

1.1 BMC Administration

- Perform BMC administrative tasks necessary for facilitate BMC activities, including but not limited to:
 - (1) Coordination with BMC Board Members, Stipulating Parties, and the public
 - (2) Coordinate with San Luis Obispo County staff so that documents and agenda packages are published to the BMC website in a timely and accurate manner
- Prepare and provide monthly invoices and progress reports describing activities of the Executive Director.

1.2 Financial Oversight

- Oversee financial operation of the BMC, including recommending an annual budget and processing invoices.
- Coordinate with the law office of Brownstein Hyatt Farber Schreck (BHFS) which performs the accounting function for the BMC, including the payment of approved invoices.

Deliverables: Updated BMC financial updates and proposed budgets.

1.3 BMC Representation

- Represent the BMC as directed to other entities, including DWR, RWQCB, and other agencies, as needed.

TASK 2.0 BMC MEETINGS

Budget based on an assumption of 136 hours for this task.

2.1 Meeting Coordination

- In consultation with the BMC Chair, coordinate up to 8 public BMC meetings.
- Coordinate with Audio/Video Consultant to ensure that the BMC meeting venue and audio/visual services properly performed.

2.2 Agenda Preparation

- In consultation with the BMC Chair, prepared agenda packets for up to 8 public BMC meetings.

Deliverables: BMC Meeting agenda packets

2.3 Meeting Attendance

- Function as staff (including clerk) during BMC public meetings, including providing appropriate technical input on questions from both Directors and the public.

- Oversee the BMC's compliance with the Brown Act, with input from legal counsel provided by the BMC parties.

2.4 Meeting Minutes

- Prepare detailed minutes of all public meetings.

Deliverables: BMC Meeting minutes

TASK 3.0 PROGRAM MANAGEMENT

Budget based on an assumption of 70 hours for this task.

3.1 Annual Report Management

- Provide program management for the BMC on the Annual Report, including management of scope, schedule and budget, collection and incorporation of BMC and other comments, and publishing of approved work products.
- Participate in coordination meetings with the Annual Report consultant to provide work direction, receive project updates, and review consultant interim work products and deliverables.
- File required information to DWR's website by the April 1st deadline.

3.2 BMC Project Management

- Provide program management for the BMC on other projects, including management of scope, schedule and budget, collection and incorporation of BMC and other comments, and publishing of approved work products.
- Participate in coordination meetings with BMC consultants to provide work direction, receive project updates, and review consultant interim work products and deliverables.

Fee Estimate

Based on the scope outlined above, WSC developed the following fee estimate for providing services as the Executive Director for the Los Osos Basin Management Committee. The fee estimate was based on the assumed hours for each of the tasks outlined in the scope of work.

Los Osos Basin Management Committee
 Executive Director
 Cost Proposal
 1/15/2021



Task No.	Task Description	WSC							ALL FIRMS	
		Executive Director	Technical Advisor	Engineering/Admin Support	Project Administration	WSC Labor Hours	WSC Labor Fee	Expenses	WSC Fee	Total Fee
		Daniel Heime	Michael Cruikshank	Kendall Stahl	Kay Merrill					
	<i>Billing rates, \$/hr</i>	\$230	\$230	\$160	\$125					
1	BMC Administration									
	SUBTOTAL	96	0	24	12	132	\$ 27,420	\$ 500	\$ 27,920	\$ 27,920
2	BMC Meetings									
	SUBTOTAL	80	0	40	16	136	\$ 26,800	\$ 500	\$ 27,300	\$ 27,300
3	Program Management									
	SUBTOTAL	42	4	24	0	70	\$ 14,420	\$ 300	\$ 14,720	\$ 14,720
	COLUMN TOTALS	218	4	88	28	338	\$ 68,640	\$ 1,300	\$ 69,940	\$ 69,940



TO: Los Osos Basin Management Committee

FROM: Dan Heimel, Executive Director

DATE: January 20, 2021

SUBJECT: Item 5 – Executive Director’s Report

Recommendations

Staff recommends that the Committee 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.

Discussion

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

Funding and Financing Programs to Support Basin Plan Implementation

Prop 1 GWGP: As indicated in the January 2018 meeting, the State Board confirmed that sea water intrusion mitigation projects under Program C are eligible for low interest loans but are not currently eligible for grants under the Proposition 1 Groundwater Grant Program (GWGP). New wells in the upper and lower aquifer are viewed as aquifer management, not aquifer clean-up as defined by the State, therefore we will need to look for future funding rounds and other opportunities. Round 3 of the Prop 1 GWGP is anticipated to be released in July of 2021. If aquifer clean-up projects (e.g. Community Nitrate Facility, Upper Aquifer Capture and Treatment) are proposed for further implementation of the Basin Plan the BMC could consider pursuing grant funding through this program.

IRWM: The Program A upper aquifer well at 8th Street was submitted by Los Osos CSD to the local IRWM process in 2019 and was subsequently selected to be a part of the application for the current funding opportunity. The application for this grant was submitted in December 2019 and the Project was included in the Department of Water Resource’s July 2020 Final Funding Award List for the full grant request (\$238,000). Additional details regarding status are included in the Basin Plan Status Update.

Prop 1 SWGP: The concept of urban storm water recovery at 8th and El Moro was ranked in the County Stormwater Resource Plan, and a grant opportunity may be available through the Prop 1 Storm Water Grant Program (SWGP). The application period for Round 2 of SWGP funding has closed. The Stormwater Resource Plan can be found here:

<https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Stormwater-Resource-Plan.aspx>

And information about the Storm Water Grant Program can be found here:

https://www.waterboards.ca.gov/water_issues/programs/grants_loans/swgp/prop1/

WRFP: The State Water Resource Control Board (SWRCB) recently increased the amount for Water Recycled Program Planning (WRFP) grants from \$75k to \$150k. This could provide a grant funding opportunity to advance Basin Plan initiatives, with a reduced cost to the community of Los Osos, through preparation of a Recycled Water Facilities Planning Study (RWFPS). Potential scope items for the RWFPS could include:

- Transient Groundwater Model Development
- Soil Aquifer Treatment (SAT) Assessment
- Broderson/Creek Discharge Scenario Analysis
- Stormwater and Perched Water Recovery Project – Feasibility Study
- Adaptive Management Groundwater Modeling
- RWFPS Report Development

Status of Basin Plan Implementation and Funding Plans

The BMC has requested an integrated funding plan for project implementation and BMC monitoring and administration. BMC Staff and BMC Party Staff have formed a Funding and Organizational Working Group to identify and evaluate potential future funding and organization structures for the BMC and implementation of the Basin Plan. Consistent with the Basin Plan, the Working Group is identifying and evaluating funding and organizational structures that will provide a long-term mechanism for funding BMC Administration and Basin Plan Implementation costs and that allocate costs equitably amongst all who benefit from the Basin's water resources.

The Working Group is reviewing previously completed analysis on BMC funding and organization structures, documenting the different alternatives and identifying data/information gaps that may required outside technical support. It is envisioned that the Working Group will prepare a summary of the different funding and organization structures, an outline scope of work for the Funding and Organization Study and recommended next steps for the BMC to consider for future funding of BMC Administration and Basin Plan Implementation costs.

JPA Formation: Staff level discussions continue to focus on the need for, and benefits of, forming a JPA, see table below, to assist with implementation of the Basin Plan.

Table 1. JPA Formation Considerations

Pros	Cons
• Common ownership of basin assets	• Complexity and community perception
• Ability to contract for services as an entity	• Potential for more difficulty in formal proceedings - less nimble
• GSWC can participate as a director	• More difficult to exit/change if needed
• Could cover entire limits of basin for funding	
• If carefully done, incremental costs could be limited to insurance and up-front legal expenses	
• Ability to carry-over funds from one budget year to another	

As indicated in previous meetings, it was determined that GSWC could serve as an appointed JPA director without forming a separate Mutual Water Company entity, which would simplify the process.

Discussions with BMC Party Staff indicate that the BMC Parties would like to execute the Implementation Plan initiative to first develop a roadmap for the BMC and then evaluate the potential formation of a JPA or other governance structure once there is a more defined plan for future BMC initiatives.

Program B Implementation Process and Funding: The existing nitrate removal facility owned by GSWC is intended to serve existing development, so it is likely that a Program B facility intended for future development would be jointly owned by either a JPA or by one of the public agencies.

- Likely next steps for the implementation of Program B projects include:
 - Technical Studies to validate and update cost estimates
 - Siting Studies to identify project locations
 - AB 1600 analysis to evaluate funding options relative to future development in coordination with the Los Osos Community Plan
 - Environmental Review (CEQA)
 - Land Use Permitting (e.g. Coastal Development Permits, etc.)

Land Use Planning Process Update

Los Osos Community Plan:

Update

On December 15, 2020, the County Board of Supervisors adopted the Los Osos Community Plan ("LOCP") update and Final Environmental Impact Report and tentatively adopted amendments to the Growth Management Ordinance that would establish a residential growth rate for the Los Osos urban area. The LOCP policies are still subject to change based on California Coastal Commission review. A Coastal Commission hearing date has not been

scheduled yet. The LOCP and Growth Management Ordinance policies considered by the Board on December 15 are available at: <https://agenda.slocounty.ca.gov/iip/sanluisobispo/agendaitem/details/12683>. A video of the hearing and the staff report are available at: <https://www.slocounty.ca.gov/Home/Meetings-Calendar.aspx>

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.

Habitat Conservation Plan: The public review draft HCP and the associated Environmental Impact Report and Environmental Assessment was released on October 2, 2019 and the comment period ended on November 18, 2019. A Community Meeting on the HCP and associated Environmental Documents as well as the Draft Environmental Impact Report for the Los Osos Community Plan was held on October 28, 2019. Staff is currently working on finalizing the Environmental Documents and the Management Plan for the Preserve system. The Board of Supervisors will consider the Memorandum of Understanding between the County and the California Department of Fish and Wildlife to allow enhanced management and restoration activities at the Morro Dunes Ecological Reserve.

Resource Summary Report: Submittal of a revised 2016-2018 Resource Summary Report that includes the District 2 sections that were previously extracted, with an updated assessment of the Los Osos water supply to reflect the most recent annual monitoring reports prepared for the Los Osos Basin Management Committee and clarification of agricultural and rural water supply and demand estimates. Recommends maintaining a Level of Severity III for the Los Osos Groundwater Basin water supply. The Board of Supervisors will consider the submittal of the revised report on December 15, 2020.

Accessory Dwelling Units (ADU):

On January 28, 2020, the Board of Supervisors considered and adopted a resolution to amend Title 22 and 23 for the replacement of the Secondary Dwelling Ordinance with a new ordinance for Accessory Dwelling Units (ADUs). The Board of Supervisors adopted amendments to Table "O" of the Coastal Framework on June 16, 2020. These amendments would allow ADUs to be established in the Community of Los Osos. It is anticipated that the amendments to Title 23 and Table "O" of the Coastal Framework for Planning will be going before the California Coastal Commission for approval later this year. Until such amendments are approved by the California

Coastal Commission, the County will review ADU applications for consistency with State ADU law, which would allow for the construction of ADUs in the Coastal Zone.

Los Osos Wastewater Project Flow and Connection Update

The following table summarizes flows from the LOWRF based on the available data. Cells highlighted in yellow indicate data that was not available at the time the Executive Director's Report was developed.

LOWRF Wastewater and Recycled Water Flows

Year	Month	Influent	Broderson	Bayridge	Sea Pines	Giacomazzi	Discharge/Recycled Water Delivery Total (AF)
2020	Jan	45.1	41.2	0.0	1.9	0.0	43.1
2020	Feb	42.1	37.2	0.0	4.3	0.1	41.6
2020	Mar	47.8	45.8	0.0	3.5	0.1	49.3
2020	Apr	45.7	35.8	1.0	7.2	0.1	44.1
2020	May	47.9	33.0	1.1	12.2	0.0	46.3
2020	Jun	45.8	31.5	1.0	10.4	0.0	42.9
2020	Jul	47.6	33.2	1.0	10.4	0.0	44.6
2020	Aug	47.6	37.8	1.0	5.6	0.0	44.4
2020	Sept	45.6	37.0	0.9	5.7	0.0	43.6
2020	Oct	46.2	41.6	1.0	2.4	0.0	45.0
2020	Nov		41.0	1.0	1.7	0.0	43.7
2020	Dec						0.0
Total		461.5	415.0	8.0	65.3	0.3	488.5

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 10/1/2020, the sewer service area had a 99.2% connection status with a total of 44 properties not yet connected. Of those, one is not required to connect because there is no structure (demolished), 24 have expired building permits, and the rest have an open Code Enforcement case. 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.

The County has assigned new staff in code enforcement to Los Osos. They will be reviewing the status of cases that were issued earlier last year.

Water Conservation Update

Rebate Update: Average indoor water usage for 2019 was estimated to be 40 gpd per person and remains at that number currently.

Cannabis and Hemp Information

Hemp: According to the Ag Commissioners Office there is no hemp cultivation currently registered in Los Osos.

Cannabis: The County is processing DRC2018-00215 a Development Plan to establish a cannabis cultivation site. The County is requiring the applicant to offset the increased water use for the project, and the current proposal is to retrofit neighboring property irrigation systems. The total proposed offset volume is 3.5 acre feet per year. The project is scheduled for Planning Commission consideration on January 28, 2021 and there will be a presentation on the project from County Staff during this month's BMC Meeting.

Sustainable Groundwater Management Act (SGMA)

SGMA Overview: The 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. 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 SGMA³ and in critical conditions of overdraft⁴
 - 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 SGMA³

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

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.

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."

TO: Los Osos Basin Management Committee

FROM: Daniel Heimel, Executive Director

DATE: January 20, 2021

SUBJECT: Item 6a – Draft 2020 Fall Lower Aquifer Groundwater Basin Monitoring Results

Recommendations

Receive an update on early findings for the Fall 2020 Lower Aquifer Groundwater Monitoring results.

Discussion

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 continuously updated information on groundwater resources in the Basin. The BMC retained Cleath Harris Geologists (CHG) to perform the groundwater monitoring program for 2020. The following attachments include a Technical Memorandum describing the draft results from the Fall 2020 lower aquifer groundwater monitoring and updated Water Level and Chloride Metrics. Final results, including water levels and results from the first water and upper aquifer monitoring, will be included in the 2020 Annual Report.

Financial Considerations

Budget items 5 in the adopted calendar year 2020 budget address monitoring. At this time, no budget adjustments are recommended.

DRAFT

Cleath-Harris Geologists, Inc.
75 Zaca Lane, Suite 110
San Luis Obispo, CA 93401
(805) 543-1413



Memorandum

Date: January 15, 2021

From: Spencer Harris, HG 633

To: Dan Heimel, PE, Executive Director
Los Osos Basin Management Committee

SUBJECT: Preliminary results of Fall 2020 Lower Aquifer water quality monitoring.

Dear Mr. Heimel:

As is customary, Cleath-Harris Geologists provided the BMC with a table of preliminary results for the Fall 2020 Lower Aquifer water quality monitoring, along with a draft water level and chloride metric graph for 2020 (attached). Typically, this information would be further interpreted in the Annual Report. Per your request, this memorandum provides a brief discussion of the Chloride Metric results and trends through 2020.

The Chloride Metric rose from 163 mg/L to 205 mg/L between Fall 2019 and Fall 2020, and is close to the Fall 2016 record high of 225 mg/L. The metric has been rising through 2020, which represents a deterioration of basin conditions.

Chloride Metric Trends

Fluctuations in the Chloride Metric since 2014 have been largely driven by chloride results at Lower Aquifer well LA10, which is double-counted in the metric calculation to add sensitivity for that location. As discussed in Appendix J of the 2018 Annual Report, reductions in annual production at LA10 have magnified the effects of Upper Aquifer influence (due to borehole leakage) on water quality. Upper Aquifer influence at LA10 decreases chloride concentrations and increases nitrate concentrations of the produced water. LA10 draws water from Lower Aquifer Zones D and E, each of which have different chloride concentrations.

Well construction makes it difficult to manage the blend of water entering LA10 and provide “apples to apples” sampling results for understanding metric trends. Nevertheless, the overall trend of a rising Chloride Metric through 2016, followed by declining metric through 2018, and then renewed rise in the metric through 2020 is also supported by data from metric well LA12, which is a monitoring well.

Seawater Intrusion Mitigation

With respect to the Los Osos Basin Plan (LOBP) goal of seawater intrusion mitigation and verified progress toward this goal, the increasing Chloride Metric trend in 2020 shows that seawater intrusion has not yet been mitigated. However, the anticipated trendline for the

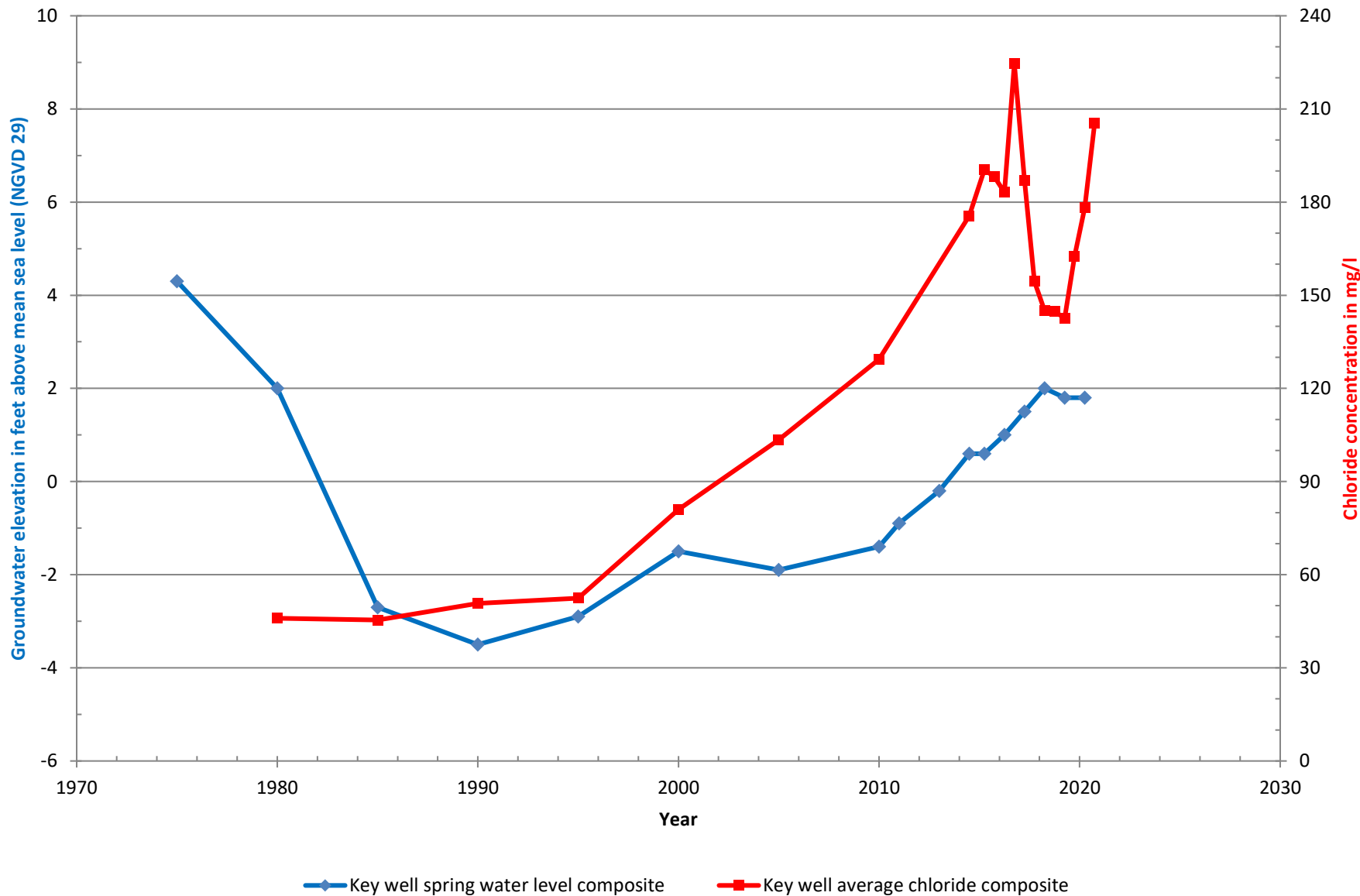


Chloride Metric as presented in the LOBP was a continued rise in the metric for a period of 10 years following completion of the sewer project and implementation of the various management programs. Development of the groundwater mound beneath the Broderson disposal site is continuing through 2020 and is expected to raise water levels in the Lower Aquifer that will lead to stabilization and reversal of seawater intrusion.

This year, additional water level transducers are proposed to be installed to help track the progress of the groundwater mound. The Chloride Metric will also be further evaluated to address the problem of obtaining representative results from LA10. Until field verification of mitigation is observed, however, there should always be a cautious level of concern with respect to the rising Chloride Metric and seawater intrusion.

DRAFT

Chloride and Water Level Metric Lower Aquifer



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	umhos/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				
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
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
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				

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	umhos/cm		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
30S/10E-13M2	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	160	4.8	370
				8/4/2014	60	757	3340	7.1	2450	990	0.6	178	117	113	113	5	382
				4/21/2015	60	739	3430	7.3	1930	950	0.6	178	117	113	113	5	382
				10/6/2015	30	756	3370	7.1	2140	960	0.5	185	115	114	114	5	342
				4/20/2016	50	726	3520	7.2	2190	941	0.7	179	113	108	108	5	400
				10/19/2016	70	722	3420	7.4	2190	943	0.6	182	113	107	107	4	398
				4/17/2017	60	733	3380	6.8	2060	907	0.6	178	114	109	109	4	413
				10/5/2017	60	738	3350	7.5	2190	960	0.7	160	116	109	109	5	411
				4/24/2018	70	664	3370	7.2	2020	946	0.6	2.8	103	99	99	4	367
				10/17/2018	60	740	3400	7.3	2180	834	0.6	153	115	110	110	5	414
				4/3/2019	70	640	3290	7.8	2010	940	0.6	179	103	93	93	4	341
10/3/2019	70	574	3120	7.4	2120	827	0.7	169	90	85	85	4	340				
4/9/2020	70	519	2970	7.8	1740	738	0.6	152	86	74	74	4	258				
10/1/2020	70	774	3330	8	2080	844	0.7	169	94	131	131	5	495				
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					
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	
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					

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	umhos/cm		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
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				
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				
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				

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	umhos/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				
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				
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

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	umhos/cm		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
30S/11E-18L2**	LOCS D 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

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 expected.

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

Legend and Detection Limits

Constituent	Description	Practical Quantitation Limit*
HCO3	Bicarbonate Alkalinity in mg/L CaCO3	10.0
Total Hardness	Total Hardness in mg/L CaCO3	--
Cond	Electrical Conductance in umhos/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

TO: Los Osos Basin Management Committee

FROM: Dan Heimel, Executive Director

DATE: January 20, 2021

SUBJECT: Item 6b: Proposals from Cleath Harris Geologist to provide Professional Services for the 2020 Annual Monitoring Report and Additional Management Tasks, the 2021 Groundwater Monitoring Program and the Recycled Water Beneficial Use Evaluation

Recommendations

Approve the proposed scope and fee for hydrogeologic services for calendar year 2021, to be provided by Cleath Harris Geologists (CHG), in an amount not to exceed \$123,000.

Discussion

At the December 16th, 2020 BMC Meeting the BMC approved the CY 2021 BMC Budget, which included the items included in the table below.

Item	Description	Cost	Notes
5	Semi annual seawater intrusion monitoring	\$42,000	
6	2020 Annual Report	\$41,000	Includes formalized evaluation of Sustainable Yield
9	Recycled Water Beneficial Use Evaluation	\$15,000	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.) and opportunities to increase amount of water sent to the LO WRF.
10	Basin Monitoring Metric Evaluation	\$15,000	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.
11	Broderson Mound Transducer Installation	\$10,000	Installation of groundwater level transducers in existing wells near the Broderson disposal site to assist in early detection of groundwater mounding in the Lower Aquifer.
	Total	\$123,000	

To support the BMC in completing the items above, CHG prepared the attached proposals. The proposals combine several of the additional tasks identified by the BMC as a priority for CY 2021 with the baseline hydrogeologic services. This was done to streamline the invoicing process and a summary of the proposal costs and description of tasks are included below.

Item	Description	Cost	Notes
5	Semi annual seawater intrusion monitoring	\$52,000	Includes Broderson Mound Transducer Installation
6	2020 Annual Report	\$56,000	Includes Formalized Sustainable Yield and Basin Metric Review and Update tasks
9	Recycled Water Beneficial Use Evaluation	\$15,000	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.) and opportunities to increase amount of water sent to the LO WRF.
	Total	\$123,000	

Semi annual seawater intrusion monitoring - The annual groundwater monitoring will be completed per the Basin Plan monitoring schedule (April and October). Additionally included in this year's monitoring program will be installation and monitoring of 5 pressure transducers to monitor lower aquifer water levels in proximity to the Broderson groundwater mound.

2020 Annual Report - The Draft Annual Report will be completed in approximately 4 months from Notice to Proceed. This year's Annual Report will additionally include a formalized evaluation of Sustainable Yield, as required by the Interlocutory Stipulated Judgement, and an updated evaluation of the Basin Yield Metrics.

Recycled Water Beneficial Use Evaluation - 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.) and opportunities to increase amount of water sent to the LO WRF.

While the BMC may choose to consider the proposals separately, staff is recommending that both be approved concurrently, and if approved, a single contract would be prepared for the work, similar to last year. Notice to Proceed will be contingent on approval of the BMC Committee budget by each of the member agencies. Once each of the member agencies approves the budget, Notice to Proceed will be provided to CHG.

Financial Considerations

The approved CY 2021 BMC Budget includes specific line items for the proposed work as described above.



December 23, 2020

Los Osos Basin Management Committee
c/o Mr. Daniel Heimel, P.E.
Water Systems Consulting
805 Aerovista Lane, Suite 201
San Luis Obispo, CA 93401

SUBJECT: Proposal for Los Osos Basin Plan 2021 Groundwater Monitoring.

Dear Mr. Heimel:

Cleath-Harris Geologists (CHG) proposes to perform hydrogeologic services related to groundwater monitoring for the Los Osos Basin Plan (LOBP). This proposal describes existing monitoring data collection and presents a scope of work, schedule, and estimated costs for monitoring, including costs for installing additional pressure transducers in Lower Aquifer wells as recommended in the 2019 Annual report.

BACKGROUND

The groundwater monitoring program in Chapter 7 of the LOBP included 73 monitoring well locations within the basin. Nineteen locations have been added to the network (summary tables attached).

There are two existing, ongoing monitoring programs that historically overlapped with the LOBP monitoring program: the San Luis Obispo County Water Level Monitoring Program and the Los Osos Water Recycling Facility (LOWRF) Groundwater Monitoring Program. Beginning in winter 2016, the LOWRF monitoring schedule was shifted from spring and fall monitoring to summer and winter monitoring. As a result, data from the LOWRF monitoring program no longer coincides with the monitoring schedule adopted in the LOBP. A total of 22 network wells, including all five nitrate metric wells, were switched to the summer and winter monitoring schedule.

CHG plans to continue measuring water levels in April and October at those LOBP network wells that were shifted to summer and winter monitoring under the LOWRF monitoring program. Water quality testing, however, will not be duplicated in the schedule, and data from the LOWRF program in June and December 2021 will be used for reporting purposes.

Additional pressure transducers for water level measurements will also be added to Lower Aquifer wells, and costs for deployment, data collection and processing are included herein. Pressure transducers measure water levels automatically at pre-determined intervals. They are installed below the water surface inside of a well and use water column pressure to generate water level readings, which are then used to create hydrographs. Installation of additional



pressure transducers in Lower Aquifer wells was recommended in the 2019 Annual Report to assist in early detection of groundwater mounding in the Lower Aquifer due to Broderson community leach field operations, and for assisting in interpretation of Water Level Metric trends.

Geophysical logging at LA4, LA14, and LA40 is also scheduled for 2021.

SCOPE OF WORK

CHG will perform the following tasks for the LOBP Groundwater Monitoring Program:

- Conduct/coordinate semi-annual water level monitoring in April and October 2021 at up to 55 well locations.
- Download and process pressure transducer data from up to 12 well locations.
- Conduct/coordinate groundwater sampling in April 2021 from up to 15 wells for general minerals analyses.
- Conduct/coordinate groundwater sampling in October 2020 from up to 20 wells for general mineral analyses.
- Conduct groundwater sampling in October 2020 for up to three wells for CEC analyses.
- Conduct geophysical logging (induction and natural gamma) at up to three Lower Aquifer wells.

CHG will also perform the following tasks for the installation of additional pressure transducers for monitoring water levels in the Lower Aquifer:

- Review Lower Aquifer wells in the Los Osos Basin Program that would be strategically located to monitor development of the Broderson groundwater mound.
- Coordinate with well owners, as needed, and visit the wells to determine their suitability for transducer installation.
- Select up to five locations for continuous water level monitoring and install the pressure transducers.
- Data from the units would be collected and processed as part of the BMC groundwater monitoring program.

Deliverables:

Tables with results of Lower Aquifer seawater intrusion monitoring will be provided upon completion of the April and October 2021 monitoring events. Data interpretation and reporting is not included in this scope of work, but will be performed during 2021 Annual Report preparations.



SCHEDULE

The scope of work will be completed per the Basin Plan monitoring schedule (April and October monitoring).

FEES AND CONDITIONS

CHG proposes to perform the above scope of work on an hourly rate plus expenses basis in accordance with the hourly rates schedule and attached terms of fees and conditions. Laboratory analytical services, geophysical logging, pump equipment, and CEC sample shipping are estimated at \$15,300. The cost for hydrogeologic services related to water level monitoring, groundwater sampling, transducer downloading, geophysical logging, and coordinating with private well owners is estimated to be \$26,700. The estimated costs for siting and installing up to five new pressure transducers in lower aquifer wells is estimated at \$10,000. Total estimated costs for the 2021 groundwater monitoring scope of work with additional pressure transducer installations are estimated to be **\$52,000**.

SCHEDULE OF HOURLY RATES

Principal Hydrogeologist	\$165
Senior Hydrogeologist	\$155
Project Geologist	\$140
Environmental Scientist	\$125
GIS Specialist	\$125
Staff Geologist II	\$125
Staff Geologist I	\$110

EXPENSES

Mileage	\$0.58/mile
Other expenses at cost plus 10 percent handling	



AGREEMENT

If the above described work scope and fees and conditions are acceptable, this proposal will serve as the basis for agreement.

Respectfully submitted,

CLEATH-HARRIS GEOLOGISTS, INC.

Spencer J. Harris, Vice President

attachment



TERMS OF FEES AND CONDITIONS

1. Invoices will be submitted monthly. The invoice is due and payable upon receipt.
2. In order to defray carrying charges resulting from delayed payments, simple interest at the rate of ten percent (10%) per annum (but not to exceed the maximum rate allowed by law) will be added to the unpaid balance of each invoice. The interest period shall commence 30 days after date of original invoice and shall terminate upon date of payment. Payments will be first credited to interest and then to principle. No interest charge would be added during the initial 30 day period following date of invoice.
3. The fee for services will be based on current hourly rates for specific classifications and expenses. Hourly rates and expenses included in the attached schedule are reevaluated on January 1 and July 1 of each year.
4. Documents including tracings, maps, and other original documents as instruments of service are and shall remain properties of the consultant except where by law or precedent these documents become public property.
5. If any portion of the work is terminated by the client, then the provisions of this Schedule of Fees and Conditions in regard to compensation and payment shall apply insofar as possible to that portion of the work not terminated or abandoned. If said termination occurs prior to completion of any phase of the project, the fee for services performed during such phase shall be based on the consultant's reasonable estimate of the portion of such phase completed prior to said termination, plus a reasonable amount to reimburse consultant for termination costs.
6. If either party becomes involved in litigation arising out of this contract or the performance thereof, the court in such litigation shall award reasonable costs and expenses, including attorney's fees, to the party justly entitled thereto. In awarding attorney's fees the court shall not be bound by any court fee schedule, but shall, if it is in the interest of justice to do so, award the full amount of costs, expenses, and attorney's fees paid or incurred in good faith.
7. All of the terms, conditions and provisions hereof shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns, provided, however, that no assignment of the contract shall be made without written consent of the parties to the agreement.



December 23, 2020

Los Osos Basin Management Committee
c/o Mr. Daniel Heimel, P.E.
Water Systems Consulting
805 Aerovista Lane, Suite 201
San Luis Obispo, CA 93401

SUBJECT: Proposal for preparing the 2020 Annual Monitoring Report and additional management tasks for the Los Osos Groundwater Basin.

Dear Mr. Heimel:

Cleath-Harris Geologists (CHG) proposes to perform hydrogeologic services for completing the 2020 Annual Monitoring Report for the Los Osos Basin Plan (LOBP) Groundwater Monitoring Program, along with two additional management tasks. This proposal includes a scope of work, schedule, and estimated cost.

SCOPE OF WORK

The scope of work has been separated into annual report tasks and additional basin management tasks. The additional tasks address specific recommendations or comments based on the prior year reporting and on the requirements of the Interlocutory Stipulated Judgement.

2020 Annual Report

Annual Report tasks include:

- Update databases with 2020 groundwater level and quality data for LOBP monitoring network wells.
- Prepare the draft 2020 Annual Monitoring Report for Basin Management Committee (BMC) review. The report will include data reporting and interpretation for the period from January 1, 2020 through December 31, 2020. The report shall follow the 2019 Annual Monitoring Report format as a template, with updates for changed conditions.
- Receive BMC comments and incorporate into a final 2020 Annual Monitoring Report.
- Assist BMC with preparing CASGEM datasets.

Two additional basin management tasks are proposed. These tasks are described as follows:



Management Task 1: Formalize Sustainable Yield

The Interlocutory Stipulated Judgement (ISJ), adopted in 2015, includes requirements to the effect that the Basin Management Committee (BMC) shall annually establish the sustainable yield of the Basin, based on the conservation implemented and Basin Plan infrastructure then developed in the Basin and simulated in the model. The following task are proposed to comply with this requirement:

- Update constraints on the production capacity of each community supply well in consultation with the respective purveyor.
- Update the anticipated use and distribution of recycled water in consultation with the County.
- Estimate sustainable yield for 2021 using the Basin model and incorporate into the Annual Report.
- Prepare a brief technical memorandum presenting the 2021 sustainable yield estimate for consideration and adoption by the BMC.

Management Task 2: Basin Metrics Review and Update

Basin metrics were established for the 2015 Los Osos Basin Plan. The purpose of metrics is to allow the Basin Management Committee, regulatory agencies and the public to evaluate the status of nitrate levels and seawater intrusion in the Basin through objective, numerical criteria that can be tracked over time.

The 2019 Annual Report and prior reports include recommendations to re-evaluate the Water Level Metric following the wellhead elevation survey. Twin Cities Surveying recently completed the first phase of the elevation survey.

The Nitrate Metric was developed for the Upper Aquifer only, but current trends indicate adverse impacts from nitrate are expected on Lower Aquifer water quality in some locations. A new metric or methodology for tracking Lower Aquifer nitrate will be considered.

CHG will perform the following tasks for the Basin Metric Review and Update:

- Review Basin Metric methodology and issues of concern with the existing metrics, based on five years of application.
- Analyze available monitoring data and run Basin Model scenarios as needed to re-assess monitoring locations.
- Propose updates to the methodology that can mitigate potential issues of concern and better represent the objective, numerical criteria that metrics are designed for. This includes potentially adding or removing existing metric wells.



- Select new metric target values, if appropriate. Any new thresholds and new methodology would be compared to the current metrics.
- Propose a Lower Aquifer Nitrate Metric or similar mechanism for tracking nitrate concentrations in the Lower Aquifer.
- Prepare a draft technical memorandum for review and a final. If feasible, the recommendations of the metrics review and update can be incorporated into the 2020 Annual Report.

SCHEDULE

The draft Annual Report and management task technical memorandums will require approximately four months to complete. The final report would be available approximately 2-3 weeks following receipt of BMC comments.

FEES AND CONDITIONS

CHG proposes to perform the above scope of work on an hourly rate plus expenses basis in accordance with the hourly rates schedule and attached terms of fees and conditions. The estimated cost for hydrogeologic services to complete 2020 annual report tasks is estimated at \$38,000. Management Task 1 is estimated to cost \$3,000 and Management Task 2 is estimated to cost \$15,000. The total estimated cost for 2020 Annual Report preparations and the two additional management tasks is **\$56,000**.

SCHEDULE OF HOURLY RATES

Principal Hydrogeologist	\$165
Senior Hydrogeologist	\$155
Project Geologist	\$140
Environmental Scientist	\$125
GIS Specialist	\$125
Staff Geologist II	\$125
Staff Geologist I	\$110

EXPENSES

Mileage	\$0.58/mile
Other expenses at cost plus 10 percent handling	



AGREEMENT

If the above described work scope and fees and conditions are acceptable, this proposal will serve as the basis for agreement.

Respectfully submitted,

CLEATH-HARRIS GEOLOGISTS, INC.

A handwritten signature in black ink, reading 'Spencer J. Harris'. The signature is fluid and cursive, with the first name 'Spencer' and last name 'Harris' clearly legible.

Spencer J. Harris, Vice President

attachment



TERMS OF FEES AND CONDITIONS

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5. If any portion of the work is terminated by the client, then the provisions of this Schedule of Fees and Conditions in regard to compensation and payment shall apply insofar as possible to that portion of the work not terminated or abandoned. If said termination occurs prior to completion of any phase of the project, the fee for services performed during such phase shall be based on the consultant's reasonable estimate of the portion of such phase completed prior to said termination, plus a reasonable amount to reimburse consultant for termination costs.
6. If either party becomes involved in litigation arising out of this contract or the performance thereof, the court in such litigation shall award reasonable costs and expenses, including attorney's fees, to the party justly entitled thereto. In awarding attorney's fees the court shall not be bound by any court fee schedule, but shall, if it is in the interest of justice to do so, award the full amount of costs, expenses, and attorney's fees paid or incurred in good faith.
7. All of the terms, conditions and provisions hereof shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns, provided, however, that no assignment of the contract shall be made without written consent of the parties to the agreement.



December 23, 2020

Los Osos Basin Management Committee
c/o Mr. Daniel Heimel, P.E.
Water Systems Consulting
805 Aerovista Lane, Suite 201
San Luis Obispo, CA 93401

SUBJECT: Proposal for Recycled Water Beneficial Use Evaluation, Los Osos Groundwater Basin.

Dear Mr. Heimel:

Cleath-Harris Geologists (CHG) proposes to perform hydrogeologic services related to evaluating recycled water reuse options. This proposal presents a background, scope of work, schedule, and estimated costs.

BACKGROUND

Recycled water is a major component of Basin management. To date there have been several studies for disposal options and seawater intrusion mitigation that have evaluated recycled water use in the Basin using historical flow models or the current Basin Model. Options for recycled water use include:

- Broderson Community Leach Field
- Bayridge Estates Leach Fields
- Urban Reuse (Schools, Community Park)
- Sea Pines Golf Course
- Los Osos Valley Memorial Park
- Creek Discharge
- Agricultural irrigation (in-lieu recharge, ag exchange, or new crops)

Recycled water can benefit seawater intrusion mitigation through Basin recharge and offsetting water demand that would otherwise require groundwater pumping. The quantity of recycled water available for use is less than Los Osos Basin Plan projections due to conservation, and there is currently not enough recycled water to supply all the potential uses. Comparing the potential seawater intrusion mitigation for various recycled water uses will help determine the preferred distribution of the available supply. Some of the strategic planning initiatives include augmenting recycled water with Upper Aquifer groundwater or stormwater runoff. Discussion with County staff indicates recycled water augmentation with Upper Aquifer groundwater is more feasible than using stormwater, and would be further explored under this proposal.



SCOPE OF WORK

CHG will perform the following tasks for the Recycled Water Beneficial Use Evaluation:

- Develop recycled water use scenarios in consultation with BMC.
- Analyze and compare the potential seawater intrusion mitigation for various recycled water uses and rank the preferred distribution of recycled water.
- Assess the feasibility of augmenting recycled water with Upper Aquifer groundwater.
- Prepare a draft technical memorandum for BMC review and incorporate comments in the final memorandum.

SCHEDULE

The scope of work can be completed in approximately three months.

FEES AND CONDITIONS

CHG proposes to perform the above scope of work on an hourly rate plus expenses basis in accordance with the hourly rates schedule and attached terms of fees and conditions. The estimated cost of the work is \$15,000.

SCHEDULE OF HOURLY RATES

Principal Hydrogeologist	\$165
Senior Hydrogeologist	\$155
Project Geologist	\$140
Environmental Scientist	\$125
GIS Specialist	\$125
Staff Geologist II	\$125
Staff Geologist I	\$110

EXPENSES

Mileage	\$0.58/mile
Other expenses at cost plus 10 percent handling	



AGREEMENT

If the above described work scope and fees and conditions are acceptable, this proposal will serve as the basis for agreement.

Respectfully submitted,

CLEATH-HARRIS GEOLOGISTS, INC.

Spencer J. Harris, Vice President

attachment



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7. All of the terms, conditions and provisions hereof shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns, provided, however, that no assignment of the contract shall be made without written consent of the parties to the agreement.

TO: Los Osos Basin Management Committee

FROM: Dan Heibel, Executive Director

DATE: January 20, 2021

SUBJECT: Item 6c: BMC Agenda Restructuring

Recommendations

Review the proposed new agenda structure for BMC Meetings and provide direction to staff.

Discussion

The current agenda structure for the BMC Meetings is outlined below.

1. CALL TO ORDER
2. ROLL CALL
3. BOARD MEMBER COMMENTS
4. CONSENT AGENDA
5. EXECUTIVE DIRECTOR'S REPORT
6. ACTION ITEMS
7. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA
8. ADJOURNMENT

To allow for public comment on items not on the agenda earlier in the meeting, the proposed new structure for the BMC Meeting Agenda would move this item earlier on the agenda, as shown below.

1. CALL TO ORDER
2. ROLL CALL
3. BOARD MEMBER COMMENTS
4. CONSENT AGENDA
5. PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA
6. EXECUTIVE DIRECTOR'S REPORT
7. ACTION ITEMS
8. ADJOURNMENT

Financial Considerations

There is are no anticipated financial impacts associated with this item.

TO: Los Osos Basin Management Committee

FROM: Dan Heibel, Executive Director

DATE: January 20, 2021

SUBJECT: Item 6d: Formalizing the Process for Implementation of Adaptive Management Plan

Recommendations

Recommendation: Approve the proposed approach and resolution for formalizing the procedures of implementing the Adaptive Management Plan or provide alternate direction to staff.

Discussion

Section 16.2.4 of the Basin Plan provides a generalized description of how Adaptive Management can be utilized to ensure that the overall objectives of the groundwater basin are met. However, it does not outline the specific process that the BMC would utilize to make changes to the Basin Plan Programs and/or strategies otherwise set forth in the Basin Plan.

To provide additional structure and formalize the process for implementing Adaptive Management, BMC Staff developed the following procedure and the attached resolution for the BMC's consideration.

Proposed Process for implementing Adaptive Management modifications to Basin Plan

1. BMC directs BMC Executive Director, contract Hydrogeologist or other consultant (BMC Staff) to perform an evaluation of a potential Basin Plan Adaptive Management modification to a Basin Plan program or strategy as part of an appropriately described item on a BMC meeting agenda.
2. BMC Staff performs the requested evaluation and prepares an Adaptive Management modification recommendation for BMC review and approval.
3. BMC reviews and adopts, if approved, the Adaptive Management modification.
4. Status of Basin Plan Infrastructure Projects and Basin Plan Description in Annual Report is modified to reflect the Adaptive Management modification.

This proposed process for implementing Adaptive Management modifications to the Basin Plan is described in more detail in the attached resolution. Developing more formalized processes for utilizing Adaptive Management to modify elements of the Basin Plan has been identified as beneficial for the following reasons:

Formalizes Existing Procedures – Historically, the BMC has performed Adaptive Management as outlined in the Basin Plan and the proposed resolution confirms and clarifies the procedure for utilizing Adaptive Management to modify elements of the Basin Plan.

Coordination with Land Use Planning Documents – The Los Osos Community Plan, which includes the framework for potential new development in Los Osos, ties the timing for allowing new development to key Basin Plan Program implementation milestones. Formalizing the process for implementing the Adaptive Management Plan will assist in clarifying the status of the different Basin Plan Programs.

Financial Considerations

Performing the requested evaluation of potential modifications to Basin Plan Programs through Adaptive Management is not included in the base scope of work for hydrogeologic services. However, the approved CY 2021 BMC Budget includes a specific line item for Technical Support/Adaptive Management Services. It is anticipated that this budget item will be utilized to fund the evaluation of modifications to Basin Plan Programs, as requested by the BMC.

IN THE BOARD OF DIRECTORS

Los Osos Basin Management Committee

_____ day _____, 20__

PRESENT: Directors

ABSENT:

RESOLUTION FORMALIZING THE PROCESS FOR IMPLEMENTING THE ADAPTIVE MANAGEMENT PLAN WITHIN SECTION 16.2.4 OF THE BASIN PLAN FOR THE LOS OSOS GROUNDWATER BASIN

The following Resolution is now offered and read:

WHEREAS, on October 14, 2015, Judge Martin J. Tangeman of the San Luis Obispo Superior Court (“Court”) signed an order approving the integrated Stipulated Judgment and Basin Plan for the Los Osos Groundwater Basin (“Basin Plan”) agreed to by the four parties to *Los Osos Community Services District v. Golden State Water Company, et al.* (CV 040126), namely the Los Osos Community Services District, Golden State Water Company, S&T Mutual Water Company and the County of San Luis Obispo (collectively, “Parties”); and

WHEREAS, the Stipulated Judgment creates the Los Osos Groundwater Basin Management Committee (“Basin Management Committee”) to implement the Stipulated Judgment and the Basin Plan and to engage in such other activities as may be necessary or appropriate to ensure their successful implementation; and

WHEREAS, various provisions of the Stipulated Judgment and Basin Plan require regular review and reporting, to wit: Section 7.6.2 of the Basin Plan requires preparation of an annual report as part of the Groundwater Monitoring Program that includes monitoring results and recommended changes to said Program; Section 16.2.3 of the Basin Plan requires periodic review to determine if, among other things, additional data collection or technical analyses are necessary, whether the Basin Plan metrics should be modified pursuant to the Adaptive Management Plan described in Section 16.4.2 and whether the Basin Plan programs have been implemented as planned and have had the predicted impact; and Section 5.8.3 of the Stipulated Judgment similarly requires preparation of an annual report which includes an update on the status of the Parties’ efforts to implement the Basin Plan; and

WHEREAS, consistent with the above requirements, each year since its inception, the Basin Management Committee has retained a consultant to prepare an annual report that describes the results of the Groundwater Monitoring Program (and previously adopted updates thereto) and recommended changes to said Program as well as a description of the status of implementation of the Basin Plan programs more generally (and previously adopted modifications thereto pursuant to the Adaptive Management Plan); and

WHEREAS, given the generality of the description of the Adaptive Management Plan in the Basin Plan and the need to provide other agencies with information regarding the status of implementation of the various Basin Plan programs or any modifications thereto or to the strategy otherwise set forth in the Basin Plan, the purpose of this resolution is to formalize the manner in which the Basin Management Committee will implement the Adaptive Management Plan consistent with past practice.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED by the Board of Directors of the Basin Management Committee, that the Adaptive Management Plan will be implemented and documented in accordance with the following process:

- Section 1. First Step. The Basin Management Committee shall direct the Executive Director, or approve a contract for a hydrogeologist or other consultant, to perform an evaluation of a potential modification to a Basin Plan program or strategy as part of an appropriately described item on a Basin Management Committee meeting agenda, subject to the following limitation: separate authorization shall not be required for the consultant previously retained by the Basin Management Committee to prepare the annual report to propose modifications to the Groundwater Monitoring Program therein.
- Section 2: Second Step. The Executive Director, or hydrogeologist or other consultant, as applicable shall prepare a written recommendation in response to the direction described in Section 1 for consideration by the Basin Management Committee during a subsequent meeting. The written recommendation or accompanying staff report shall address whether the modification requires an amendment to the Basin Plan. The Basin Management Committee shall not proceed with a modification that requires an amendment without simultaneously adopting said amendment consistent with the requirements set forth in Stipulated Judgment, including the approval requirements for material changes to the Basin Plan.
- Section 3: Step 3. Any adoption of a modification to a Basin Plan program or strategy and any related amendment to the Basin Plan shall be documented in the next annual report.

Upon motion of Director _____, seconded by Director _____, and on the following roll call vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAINING:

the foregoing Resolution is hereby adopted on the ___ day of _____, 20 ____.

ATTEST:

By: _____
Secretary

DRAFT

TO: Los Osos Basin Management Committee
FROM: Dan Heibel, Executive Director
DATE: January 20, 2021
SUBJECT: Item 6e – Wild Coast Farms Water Offset Program

Recommendations

Recommendation: Receive a presentation from County Planning Staff on the Wild Coast Farms Water Offset Program and provide direction to staff.

Discussion

The County of San Luis Obispo Department of Planning and Building (County) will provide a presentation on the Wild Coast Farms proposed Water Offset Program. The Wild Coast Farms project will be going to the County Planning Commission for consideration on 1/28/2021.

TO: Los Osos Basin Management Committee

FROM: Dan Heimel, Executive Director

DATE: January 20, 2021

SUBJECT: Item 6f – Update on Status of Basin Plan Infrastructure Projects

Recommendations

Receive report and provide input to staff on future direction.

Discussion

The Basin Management Plan for the Los Osos Groundwater Basin (Plan) was approved by the Court in October 2015. The Plan provided a list of projects that comprise the Basin Infrastructure Program (Program) that were put forth to address the following immediate and continuing goals:

Immediate Goals

1. Halt or, to the extent possible, reverse seawater intrusion into the Basin.
2. Provide sustainable water supplies for existing residential, commercial, community and agricultural development overlying the Basin.

Continuing Goals

1. Establish a strategy for maximizing the reasonable and beneficial use of Basin water resources.
2. Provide sustainable water supplies for future development within Los Osos, consistent with local land use planning policies.
3. Allocate costs equitably among all parties who benefit from the Basin's water resources, assessing special and general benefits.

The Program is divided into five parts, designated Programs A through D and Program M. Programs A and B shift groundwater production from the Lower Aquifer to the Upper Aquifer, and Programs C and D shift production within the Lower Aquifer from the Western Area to the Central and Eastern Areas, respectively. Program M was established in the Basin Management Plan for the development of a Groundwater Monitoring Program (See Chapter 7 of the BMP), and a new lower aquifer monitoring well in the Cuesta by the Sea area was recommended in the 2015 Annual Report and completed in December 2019. Program U is the Urban Water Reinvestment Program that addresses the use of recycled water within the Basin. The attached table provides a comprehensive project status and summary.

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 (8 th Street)	LOCSD	NA	Fully Funded	NA	\$250,000	Well was drilled and cased in December 2016. Budget remaining \$250,000 to equip the well. The well equipping was included in an IRWM Grant Application that was approved by the Department of Water Resources in July 2020. Executed agreements are anticipated in Spring 2021 and construction to be completed Summer 2021.
	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 is currently leading the project with potential GSWC and S&T involvement, depending on final location		LOCSD is currently leading the project with respect to funding	TBD	BMP: \$2.0 mil	On November 5 th , the LOCSD BOD reviewed and approved the selection of Site E (Bay Ridge) as the preferred location for the second Program C Expansion Well. The next steps for Expansion Well are to move forward with the Phase 2 CEQA Analysis.
	Expansion Well 3 (Lower Aquifer) and LOVR Water Main Upgrade	GSWC/LOCSD		Cooperative Funding	TBD	BMP: \$1.6 mil	This project has been deferred under Adaptive Management.
	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 the completion of S&T's water meter cellular updates.

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