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LANDSCAPE ARCHITECTURE + PLANNING

08 June 2020

Kylie Hensley, Planner

COUNTY OF SAN LUIS OBISPO DEPARTMENT OF PLANNING & BUILDING

976 Osos Street, Room 300

San Luis Obispo, CA 93408

via email only khensley@co.slo.ca.us

RE: WATER-REALTED PLANNING DOCUMENTS *for* LOS OSOS

- 2016-2018 Resource Summary Report (RSR) – Los Osos Water Supply Update
- Growth Management Ordinance – proposed Los Osos Growth Rate
- Advisory Memo – Los Osos Growth Rate Calculations.

Dear Ms. Hensley, et al.

We have reviewed the draft water-related planning documents for Los Osos. We are concerned that those documents may unintentionally mislead the public and other agencies about what Special Condition 6 of the County's CDP for the LOWWP specifically prohibits.

Special Condition No. 6 of the CDP states, as follows: "Wastewater service to **undeveloped properties** within the service area shall be prohibited unless and until the Estero Area Plan is amended to identify appropriate and sustainable buildout limits, and any appropriate mechanisms to stay within such limits, based on conclusive evidence indicating that adequate water is available to support development of such properties without adverse impacts to ground and surface waters, including wetlands and all related habitats" (emphasis added).

Thus, Special Condition No. 6 applies only to "undeveloped" properties. However, the Los Osos planning documents state that the prohibition applies to "vacant" properties. "Vacant" covers many more lots than "undeveloped." A "vacant" lot is one that has no home on it, but that may be otherwise "developed," because it has basic infrastructure in place—for example, water meters, retaining walls, underground utilities, roads, landscaping, etc. The Coastal Act and County LCP broadly define "development" to refer to such infrastructure installed on land. In addition, the California Coastal Commission itself has characterized as "substantially developed" lots in Los Osos have that basic infrastructure, but that are otherwise vacant because they have no homes built on them yet. Special Condition No. 6 would not bar homebuilding on those lots, because the lots are not "undeveloped."

In the interest of accuracy, and to ensure the County does not unnecessarily concede that Special Condition No. 6 has broader application than the text justifies, we request that you substitute "undeveloped" for "vacant," wherever the term is used in the Los Osos planning documents. Thank you for the consideration.

Respectfully,
OASIS ASSOCIATES, INC.

C.M. Florence, AICP
Principal Planner

c: Molnar/Shea
16-0124

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June 26, 2020

San Luis Obispo County
Department of Planning and Building
Attention: Kylie Hensley

**RE: Los Osos Community Plan; 2016-2018 Resource Summary Report
Water Supply Section/Title 26 Residential Growth Management**

Dear Ms. Hensley,

Please find the following comments as they pertain to the Los Osos Community Plan; 2016-2018 Resource Summary Report Water Supply Section/Title 26 the County Residential Growth Management Ordinance and water conservation.

Los Osos Water Conservation

The community of Los Osos has done a tremendous job of conserving water since 2008. The original, January 30, 2015 public review draft of the LOCP contemplated elimination of the Title 19 Retrofit-to-Build program. The Title 19 Retrofit-to-Build program has been very successful and should be refined and extended to achieve additional conservation since there is a substantial amount of water conservation available from urban residential and commercial use.

It should be noted that the water purveyors have administered water conservation programs with limited results. While the Title 19 Retrofit-to-Build program has demonstrated the ability to conserve water on a 2:1 basis and may continue to conserve into the future.

Please find the attached December 2, 2016 Water Conservation Implementation Plan for the Los Osos Wastewater Project memorandum(attached), authored by former Basin Management Committee Executive Director, Rob Miller, a principle in the Wallace Group. As identified in the memo, the indoor conservation remaining available in the Prohibition Zone is conservatively 230 AFY. Outdoor conservation programs have the potential to conserve another 120 AFY. The LOCP estimate projected demand for new dwelling units is 63 AFY; with a 2:1 conservation ratio it equals of 126 AFY of conservation. Clearly, available water conservation in Los Osos is alone sufficient to offset demand from 5 years' worth of new development at a 1.3% residential growth cap.

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Basin Management Plan Programs

With regard to the LOCP referenced Basin Management Plan (BMP) Water Programs;

- a. Program "M" –Groundwater Monitoring
- b. Program "E" –Urban Efficiency
- c. Program "U" –Urban Water Reinvestment
- d. Program "A" –Infrastructure Program A
- e. Program "C" –Infrastructure Program C
- f. Program "P" –Wellhead Protection

Completion of the above six (6) programs is supported, including two (2) fundamental water resource development projects outstanding.

- a. The Los Osos Community Services District (LOCS D) Program A expansion well at 8th Street.
- b. The joint LOCS D/ Golden State Water Company (GSWC) Program C No. 2 well.

Both new wells have been funded:

- Program A well is pending construction.
- Program C well is pending permits.

Unsupported Basin Management Programs are B (Community Nitrate Removal), D (New Well East of Los Osos Creek), G (Agricultural Water Exchange) or S (Supplemental or Imported Water). It is generally accepted, programs B and D have been deferred and Program S is not supported by the community at this time.

Title 26 Growth Management Ordinance

Currently, the residential growth rate for the Prohibition Zone of Los Osos is zero (0%). It is recommended the amendment to Title 26 Residential Growth Management Ordinance for Los Osos should be set a 1% growth rate now; to be elevated to a 1.3% growth rate upon completion of the two above mentioned expansion wells as recommended by the staff report.

Consideration of an increase in the maximum growth rate to 1.5% could occur with evidence of further reductions in demand and/or in combination with, additional Basin Plan programs that maintain a Basin Yield metric of 70 or less.

2016-2018 Resource Summary Report Water Supply Section Level of Severity for Water Supply in the Los Osos Groundwater Basin

In the fall of 2007, the litigation between the water purveyors was settled by way of an Interlocutory Stipulated Judgement (ISJ) (Case No. GIN 040126). In paragraph C of the ISJ expressly discussed the county's Resource Management System, now

P.O. Box 6070, Los Osos, CA 93412 (805)235-0873 jhedwardscompany@gmail.com
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known as the "Resource Summary Report". As the ISJ notes, the Severity Level for water supply in Los Osos was certified LOS III on March 27, 2007. The court recognizes LOS III as indicating groundwater basin deficiencies as follows:

1. "Unavoidable Resource Deficiency" exists which is defined as "the most critical level of concern". Given urban water demand reductions, the basin no longer represents a deficient resource. Other basin plan metrics for water level and chlorides have also trended toward improvement as indicated in the 2019 Annual Report.
2. The ISJ also provides, "Level III occurs when the capacity (maximum safe yield) of a resource has been met or exceeded." Also as evidenced by the 2019 Annual Report. The total demand is 69% of the basin safe annual yield, also expressed as a Basin Yield Metric of 69.
3. Given current demand relative to safe annual yield there is no deficiency, let alone "a deficiency of sufficient magnitude that drastic actions may be needed to protect public health and safety."

Please find link to 2019 BMC Annual Report (pages 65-346 of the pdf) here:

[https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Los-Osos-Basin-Management-Committee-\(BMC\)/Agendas/2020-Agendas/2020-06-17-LOBMC-Agenda-Packet.aspx](https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Committees-Programs/Los-Osos-Basin-Management-Committee-(BMC)/Agendas/2020-Agendas/2020-06-17-LOBMC-Agenda-Packet.aspx)

It is recommended the LOS for the Los Osos water supply be established at LOS II. It is clear, based upon the metrics established by the BMP and reflected in the most recent 2019 annual report, that the water supply criteria for the coastal zone indicates the "timeframe for remaining dependable water supply is 7 years", which equates to LOS II.

In summary, the community of Los Osos through BMP Programs have addressed water supply limitations relative to the groundwater basin over the past 10+ years. Additional water conservation pursuant to Title 19 is adequate to accommodate limited new residential development subject to Title 26. The severity level for water supply in the Los Osos Prohibition Zone should be set at LOS II. A 1% growth rate in the Prohibition Zone should become effective upon Board of Supervisors adoption on August 18, 2018.

Please let me know if you have any questions.

Sincerely,

Jeff Edwards

Jeff Edwards

Attachment:

Water Conservation Memorandum- Rob Miller, BMC -- ED

MEMORANDUM

WATER CONSERVATION IMPLEMENTATION PLAN LOS OSOS WASTEWATER PROJECT



Date: December 2, 2016
To: Basin Management Committee
From: Rob Miller, PE
Wallace Group
Subject: Addendum 1 – BMC Water Conservation Measures

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WATER RESOURCES

The following memorandum is an addendum to the current Water Conservation Implementation Plan for the Los Osos Wastewater Project (WCIP), adopted by the County of San Luis Obispo (County) on October 23, 2012. The WCIP was prepared by Wallace Group, in coordination with the development of the Los Osos Groundwater Basin Management Plan (BMP), which was adopted by the County in January 2015. Both plans share a common goal: to protect the sustainability of the Los Osos Groundwater Basin (Basin) as a source of potable water supply for the Los Osos community.

The BMC began monthly meetings on December 14, 2015. Of the items discussed in the meetings, focus initiated on existing and proposed conservation measures for the Basin. Several measures identified by the BMC were proposed as additional or supplemental measures to the ones outlined in the 2012 WCIP. The BMC recognized that further water savings could be seen with newer technology with lower flow values than were available at the time the original WCIP was prepared. In addition, the BMC wanted to add new measures to the plan, as they could provide for additional water savings not recognized in the initial WCIP report. This addendum provides a description of the modified or additional measures proposed by the BMC. It is desired that these measures be included in the program currently being implemented by the County. Table 1, located at the end of this memo, outlines the eight proposed BMC conservation measures.

The BMC conservation measures are separated into two categories: indoor and outdoor. Indoor conservation measures are supplemental programs to the Category 1 Residential measures discussed in the WCIP. The proposed outdoor conservation measures are new, as there were no comparable measures included in the WCIP.

BMC Indoor-1: Hot Water Recirculation System

This conservation measure would provide for a \$350 rebate for installing a hot water recirculation system inside the home. The water recirculation system is designed to minimize water waste while residents wait for tap water to heat up. Annual savings estimates vary, but using EPA Water Sense estimates, it is assumed that approximately 7,000 gallons per year per unit could be conserved, resulting in an overall Basin water savings of 50 to 100 acre-feet/year if full implementation is

WALLACE GROUP
A California Corporation

612 CLARION CT
SAN LUIS OBISPO
CALIFORNIA 93401

T 805 544-4011
F 805 544-4294

www.wallacegroup.us



achieved. The plan is assumed to have a 10 year life span, which would cost approximately \$1,600/acre-ft saved.

BMC Indoor-2: High Efficiency Clothes Washer

This measure would provide for a \$350 rebate to residents who replace their existing clothes washer with a new high-efficiency clothes washer. The current WCIP Measure 1B includes a clothes washer rebate program which offers \$150 per eligible washer. This measure would increase the washer rebate by \$200.

Estimates assume that approximately 400 washers per year would be replaced and that 3,300 gallons per year per unit in potential savings could be realized, assuming 20 to 30 gallons per washing load. With full implementation of this program, total Basin water savings are estimated to reach 40 to 60 acre-ft/year. Rebate costs are estimated to be close to \$7,000/acre-ft saved.

BMC Indoor-3: Replace 1.6 GPF Toilets

The current WCIP Measure 1A provides property owners with a rebate for replacing inefficient toilets. The current program goal is to replace all toilets flushing more than 1.6 gallons per flush with ones that use 1.28 gpf or less, with a rebate amount of \$160 per unit. The proposed modification would provide a rebate of \$250 for homes that replace a 1.6 gpf toilet with a toilet that flushes 1.28 gpf or less, or install a dual flush model.

The water savings for this measure is estimated to be 1,500 gallons per year per unit, corresponding to a 30 to 50 ac-ft/year Basin water savings, at a cost of approximately \$2,500/acre-ft saved.

BMC Indoor 4: Replace 2.0 GPM Showerheads

Similar to BMC Indoor-3, this measure would be a supplement to the current WCIP Measure 1A for the replacement of showerheads. The current program provides a \$30 rebate for replacement of showerheads that use more than 2.0 gpm with fixtures that use no more than 1.5 gpm.

The proposed BMC Indoor 4 program would provide a rebate for all showerheads flowing 1.5 gpm or more to be replaced with ones that flow less than 1.5 gpm. The proposed program would be voluntary and provide a rebate of \$40 per unit. The estimated average savings water savings is 1,500 gallons/year per unit, which would equate to approximately 30 to 50 ac-ft/year in total Basin savings. The program is estimated to cost approximately \$900/acre-ft saved.

BMC Outdoor 1: Septic Tank Repurpose

This measure includes a rebate of \$500 per household for the conversion of an existing septic tank (assumed abandoned as part of the wastewater project) into a rain water capture basin for roof runoff or for recycled water storage. Water would either be captured through gutters on the roof and piped to the septic tank for storage and re-use as irrigation supply, or recycled water could be pumped into the tank from a recycle water fill station. It is envisioned that a simple access riser and mobile pump assembly would provide for easy application of re-used water, making the rebate attractive.



Since some residents have already backfilled their septic tanks as part of the wastewater project, this measure would offer a \$500 rebate to anyone who implements more than 1,000 gallons of capacity for rainwater catchment/recycled water storage on the property, and a \$400 rebate to anyone who implements storage of 500 gallons up to 1,000 gallons.

This measure is to coincide with the County's wastewater program, which includes a recycled water fill station at a location on 10th Street in Los Osos, to be monitored by Los Osos CSD or County staff during designated periods. The recycled water from the fill station is proposed to be used for dust abatement, construction activity, or irrigation, so long as the beneficial use is in conformance with California Title 22 regulations. It is suggested that local hauling programs be developed to minimize hauling costs.

Annual water savings for this program are estimated to be 4,500 gallons per year per unit, depending on the number of participants and irrigation events. The cost of this measure is estimated to be approximately \$1,800/ac-ft for a Basin savings of approximately 100 to 140 ac-ft/year if widely implemented.

BMC Outdoor 2: Gray Water System

BMC Outdoor 2 measure involves a \$500 rebate for the installation of a gray water recycling system on the property. Gray water is the combination of waste water from showers, baths, sinks, and washing machines. Gray water is typically all the wastewater from the home with the exception of toilets and kitchen sinks. It is envisioned that graywater from the home would be diverted to an on-site pre-treatment and storage unit, or to be directly plumbed to a below-ground watering station, such as a flowerbed or near trees, to be used as irrigation or for other beneficial reuse purposes. Installation of a graywater system would be subject to code and permit requirements, and would require homeowners make sure the system meets those requirements. Gravity flow systems will be eligible for this rebate. Proposed Basin savings, with full implementation, could reach 70 – 90 ac-ft/year with a rebate cost of around \$1,400/ac-ft.

BMC Outdoor 3 – Laundry to Landscape Program

This measure, similar to BMC Outdoor 2, would provide residents with a \$50 rebate for installation and implementation of a laundry-only gray water system. As described above, gray water is the combination of wastewater from house drains, with the exception of toilets and kitchen sinks. This measure would be for systems that are installed to reuse water from the washing machine only. Diverting the drain line from a washing machine is substantially easier than re-routing all of the drains from inside the home, therefore the rebate amount is less than BMC Outdoor 2. Recipients who receive a rebate for the BMC Outdoor 2 measure would not qualify for this laundry-only program. Current code allows for permit exemption for gravity discharge of laundry water to landscape area with a minimum of 2 inches of mulch provided at the discharge location. Diaper washing or pumped flow from the washing machine are not allowed. Proposed Basin water savings are estimated to be 10 – 20 ac-ft/year, with an estimated rebate cost of \$2,600/ac-ft.



BMC Outdoor 4 – LID Landscape

This measure would provide a rebate of up to \$400 for the installation of low water-use landscaping, especially landscaping that includes Low Impact Development (LID) measures, which capture and infiltrate storm water runoff.

Similar to BMC Outdoor 1, it is estimated that approximately 3,000 gallons per year per unit, where approximately 50 – 70 ac-ft/year of water might be saved. The rebate cost is estimated to be approximately \$1,358/ac-ft saved.

TABLE 1. BMC CONSERVATION MEASURES

Item No.	Conservation Measure Name	Draft Rebate Amount	Water Savings Potential and Assumptions (ac-ft/year)	Estimated Savings per Unit (gal/yr)	Fixture or Program Estimated Lifespan	Cost of rebate per acre-ft saved	Approximate Savings Potential (AFY) ⁴
Indoor-1	Hot water recirculation system	\$350	EPA Water Sense estimates > 10,000 gal/year, assume 5,000 to 10,000 gal/year	7,000	10	\$1,629	50 to 100
Indoor -2	High efficiency clothes washer	\$450	3,000 to 5,000 gal/year, depending on household size	3,300	5	\$6,911	40 to 60
Indoor - 3	Replace 1.6 gpf toilets with 1.28gpf or less	\$250	1,000 to 2,000 gal/year, depending on use	1,500	20	\$2,545	30 to 50 (See Note 5)
Indoor - 4	Replace 2.0 gpm showerheads with 1.5 gpm	\$40	1,000 to 2,000 gal/year, depending on use	1,500	10	\$869	30 to 50 (See Note 5)
Outdoor - 1	Septic tank repurpose	\$500 (see Note 3)	Assume 3 to 4 tank volumes, at 1,000 gallons each	3,500	20	\$2,327	110 to 150 (See Note 1)
Outdoor - 2	Gray water system	\$500 (see Note 3)	Potentially eliminate outdoor potable usage	6,000	20	\$1,358	70 to 90 (See Note 1)
Outdoor - 3	Laundry to landscape program	\$50 (see Note 3)	1,000 to 1,500 gallons per year, depending on use	1,250	5	\$2,606	10 to 20 (see Note 1)
Outdoor – 4	Low Water Use Landscape	\$100 - \$400	1,000 to 3,500 gallons per year, depending on use.	3,000	20	\$1,358	50 – 70 (see Note 6)
Notes:	<p>1. Total savings for outdoor programs are not additive. For example, outdoor use can be addressed through gray water or hauled recycled water.</p> <p>2. All estimates depend on use patterns and other factors. Values are stated for comparison.</p> <p>3. Only one \$500 rebate will be provided per property under programs Outdoor -1, 2, and 3. Participants in these programs are not eligible for program Outdoor - 4. Property owners who have already backfilled their septic tank will receive a rebate of \$500 for implementation of an alternative storage tank/basin with a minimum of 500 gallons of capacity.</p> <p>4. Approximate Savings Potential assumes total 4,500 unit participation.</p> <p>5. Assumes 2 replacement fixtures per household unit.</p> <p>6. Rebate amount to vary between \$100 - \$400, depending on landscape area. Savings value calculated assuming average of \$250/unit.</p>						

Subject: LOSG Comments on the Draft Growth Management Ordinance (GMO) and Resource Summary Report (RSR) pertaining to Los Osos.

Kylie Hensley
Department of Planning & Building
976 Osos Street, Room 300
San Luis Obispo, CA 93408

Dear Ms. Hensley,

Thank you for answering our questions and clarifying the intent of the proposed GMO revisions, the RSR, and related polices and documents. We are very appreciative of the time and effort staff has spent drafting these documents, but our main concern is, and has always been, conclusive evidence of a sustainable water supply.

First, it is clear to us that the proposed changes to the Growth Management Ordinance (GMO) for Los Osos would trigger a supplemental or subsequent EIR under CEQA for the Los Osos Community Plan, which is currently undergoing environmental review. This is because the proposed GMO represents a major change in the original Community Plan that could result in significant undisclosed and unaddressed adverse impacts.

A quick comparison of the “redline” version of the “Community Standards” section of the most recent draft of the Community Plan and the original Community Plan makes the degree of change in the language, which is reflected in the proposed GMO, abundantly clear. By exempting affordable housing, accessory dwelling units (ADUs), and farm worker housing from growth rate provisions, the new Community Plan language and proposed GMO significantly modify the criteria for determining how and when new development is approved. In the original Community Plan, the completion of certain Basin Plan programs--and a determination that the programs are successful and effective—must precede changes in a GMO and approval of all new residential housing, not just non-exempt housing.

Old language--

Amendments to Title 26.

Development of new dwelling units that use water from the Los Osos Groundwater basin shall be prohibited until 1) a growth limitation for the Los Osos Groundwater Basin is established in Section 26.01.070.k of the Growth Management Ordinance to reflect

current basin conditions and the successful completion of the programs identified in the Basin Plan and 2) the Board of Supervisors determines that the specific programs identified in the Basin Plan and required by these standards as a prerequisite for additional development have been successfully completed and implemented and are effective, as follows.

New language with cross outs--

Amendments to Title 26.

2. Residential Development. The Growth Management Ordinance, Title 26 of the County Code shall be amended to establish an annual growth rate for new residential units in the Los Osos Urban Area consistent with the available sustainable water supply. Residential units exempt from Title 26 are exempt from this standard (e.g., affordable housing, accessory dwelling units ~~that use water from the Los Osos Groundwater basin shall be prohibited until 1) a growth limitation~~); (Chapter 7, p. 7-2, pdf page 2 of 82, redline version)

We understand that new affordable housing may not be a significant percentage of new housing in most unincorporated communities of the County. However, the Los Osos Community Plan indicates that Los Osos could accommodate “60% of all very low and low-income housing potential in unincorporated areas.” The Community Plan further adds that “Los Osos could nearly provide all (remaining) needed affordable housing Countywide (404 units out of 407 units required)...” Other incorporated communities would supply 277 units of the total of 681 units. (See Chapter 4-10, pdf pages 4 & 5 of 19).

We understand from the response to our questions, that there is no upper limit on the number of exempt housing units that can be approved, even with a Level of Severity III designation for Los Osos, and that exempt housing can be approved in addition to the non-exempt housing, which is subject to the growth rate of 1.3% per year. Thus, total water use of the new housing in Los Osos could be two, three, four or more times the 63 AFY of water use estimated over five years for non-exempt housing. To address the potential adverse impact of unsustainable water use, the Community Plan language states:

*iii **Non-Residential Usage Trends.** If the data from the Basin Plan annual monitoring reports, individual purveyors, or private wells, indicate a significant increase in water demand for non-residential uses (e.g., commercial, agricultural, public facilities) or for residential uses not subject to the growth limitation standards in Title 26 (e.g., affordable housing, accessory dwelling units) that the Basin Plan*

adaptive management is not mitigating, then the residential growth rate shall be decreased (Chapter 7, p. 7-4, pdf page 4 of 82, redline version)

By the time a “significant increase in water demand for non-residential uses” occurs, and the purveyors and others realize that “adaptive management is not mitigating” the overdraft, it will be too late to prevent permanent harm to the Basin. Even when overdraft is known, per the new Community Plan language, the growth rate for non-exempt residential development would only be “decreased,” not stopped, and exempt housing, apparently, could continue to be approved without any limit.

The most recent Adaptive Management Memorandum completed for the Basin Management Committee, the “marginal yield,” for further development is 150 AFY. The estimate, based on modeling, is supposed to account for adaptive management modifications to Program C (e.g., two expansion wells instead of three and less recycled water discharged at Brodersion leach fields). Thus, the new language in the Community Plan and proposed GMO could easily result in water use exceeding modeled “sustainable yields.”

As the above clearly shows, the changes in Community Plan language, including the changes reflected in the proposed GMO, require CEQA review to disclose, analyze, and address potential adverse impacts. Therefore, we are requesting that a subsequent or supplemental EIR for the Community Plan is conducted to address the impacts, with appropriate notification and time given to the public and other stakeholders to comment.

In addition to our objection to the proposed GMO and Resource Summary Report (RSR) documents on the basis of inadequate CEQA review, we are concerned that the documents do not protect the Los Osos Water Basin and the current homeowners of Los Osos, who rely on the Basin for their sole source of water. This is because the documents confirm a major shortcoming and concern we expressed in our comments on the Los Osos Habitat Conservation Plan and the Los Osos Community Plan: that decisions regarding whether the Los Osos Basin can sustainably support further development will not be based on enough reliable, empirical data (well tests over time) to conclusively determine that the Basin can sustainably support that development.

The documents confirm our earlier concerns, in part, by showing that development decisions will be based on a cursory review of actual Basin conditions and untested modeling predictions that Basin Plan programs (e.g., Program C--moving well inland) will result in additional yield to support added development. We explain some of the

reasons for our concerns below—and request that we are able to submit further comments on the proposed GMO and Resource Summary Report and Level of Severity designation in the future as needed.

What the Resource Summary Report (RSR) fails to mention

The Public Review Draft of the 2016-2018 Resource Summary Report (RSR), which we downloaded from the Los Osos Basin Management Committee (BMC) website (part of the June 17, 2020, BMC agenda packet), includes several incomplete, inaccurate, or misleading statements regarding the condition of the Basin, all of which suggest that Basin conditions are improving.

The RSR leaves out significant contrary evidence showing that Basin conditions are not improving and may be getting worse. The draft RSR states: “The 2017, 2018, and 2019 annual reports show the seawater intrusion front moving back towards the coast from its position in 2016” (p. 4). Yes, the 2017 and 2018 Chloride Metric, Water Level Metric, and seawater intrusion front mapping indicated that the seawater front receded in those years in the lower aquifer, Zone D, and that water levels came up some—good signs.

However, the most recent 2019 Annual Report shows seawater again moving inland and water levels going down (pdf pp. 60, 70, and 72). So there is no clear trend established. Further, the 2016 through 2019 Annual Reports all acknowledge considerable variability (unreliability) in the data used for the metrics, and the Annual Reports acknowledge an intentional confirmation bias in the Chloride Metric. Chloride data from the Rosina Well is double weighted “to increase the sensitivity of the metric to management actions,” i.e., to show a reduction in chlorides at the well with reduced pumping (see 2019 Annual Report, pdf p. 71). The seawater intrusion front mapping also relies heavily on Rosina data.

The RSR also fails to mention that seawater intrusion continues to move inland in the deep aquifer, Zone E, in a northern location where it has not been previously observed, and Zone E seawater intrusion appears to be moving inland along a wider front than originally observed. These conditions were confirmed in a November 2019 Adaptive Management Tech Memo, which includes data from a new monitoring well (see December 2019 BMC Agenda Package, pdf pages 48-54). The tech memo warns that the Zone E intrusion could threaten a key LOCS D supply well by upconing into the well (pdf page 49). Since Zone E seawater intrusion extends over a mile inland to a point past the Community Center, and underlies several Zone D supply wells, Zone E seawater intrusion could also threaten other Zone D wells with upconing. Further, Zone E seawater

intrusion is likely destroying substantial Basin capacity.

The 2019 Draft Annual Report states that there are not enough data to represent the seawater front in Zone E in plan view (from above), and the Report recommends modifying three existing monitoring wells to monitor Zone E seawater intrusion (pdf p. 55 & 67 of 273). In lieu of a verifiable front, the report provides a “generalized plan view interpretation” of the front, showing seawater intrusion extending throughout most of the Western Area of the Basin (see Appendix D, pdf p. 194-196). The actual advance of seawater intrusion in Zone E could, in fact, be further inland over a wider area than estimated since there is only one Zone E monitoring well in the entire northern part of the Basin (western part of the Central Area) where Zone E seawater intrusion is now known to be advancing. Furthermore, Basin studies have established that seawater intrusion in the lower aquifers (Zones D and E) can move along preferred pathways at different rates, advancing further in some areas than others along relatively narrower pathways.

The upper aquifer has several monitoring wells in the northern Basin (western half of the Central Area) (see Figure 10, pdf p. 50 of 273). To accurately track seawater intrusion and monitor water levels in lower aquifers, significantly more monitoring wells are needed for Zones D and E.

The Public Review Draft of the RSR also mentions that recycled water from the Los Osos Water Recycling Facility (LOWRF) is mounding down gradient from Broderson Leach fields, which suggests that it will eventually help push back seawater intrusion in the lower aquifers. The RSR does not mention that the November 2019 tech memo states that the mounding (in the Upper Aquifer) is estimated to take 5-7 more years to fully form before it begins to push through the 50-foot thick clay layer and raise water levels in lower aquifers, which then could influence the seawater intrusion front (see December 2019 BMC Agenda Package, pdf page 53 of 63). The RSR also fails to mention that the tech memo states,

The sustainability of the 2017 infrastructure and pumping distribution depends in large part on discharges to the Broderson community leachfield, which over time will create a groundwater mound to push water through the regional aquitard and into the Lower Aquifer. Basin Model scenarios operate under steady-state flow conditions, where the Broderson site has a fully developed mound, even though the mound will take several years to develop.

The tech memo adds:

Until a known rate of increase in the Lower Aquifer attributable to Broderson mounding is measured, the timing of recovery (rise of lower aquifer water levels) will be uncertain. (pdf p. 53 of 63).

Thus, the memo acknowledges that modeled yield estimates and the benefits of Basin Plan programs depend on Broderson leach field effectiveness and the timing of the benefits are uncertain. The memo further acknowledges that Broderson leach field benefits won't happen for at least 5 years, sometime after the mound is fully formed and begins pushing through the clay layer. By acknowledging this uncertainty in the modeling and program benefits, the memo acknowledges that the estimated yields for currently implemented Basin Plan programs will not occur for at least five years—i.e., not within the 5-year span of the proposed GMO. The tech memo estimates that water levels in the lower aquifers will rise to the Water Level Metric target of 8 feet above mean sea levels by 2033, but the estimate is based on one year of Water Level Metric data (2016 to 2017), which is not consistent with 2019 Water Level Metric data. Thus, the timing of the leach field benefits on seawater intrusion is uncertain and may not occur within the 20-year horizon of the Community Plan, if at all.

Further, the RSR fails to mention that the November 2019 tech memo finds that nitrates from septic systems outside of the sewer service area are likely to be polluting production wells in the Western Area of the Basin. The memo estimates nitrate levels at the wells will rise to above allowable limits within 20 to 30 years, and possibly much sooner.

Conclusion and further comment in the future

The above provides just a few of the examples we could cite showing why the proposed GMO, draft Resource Summary Report, and Level of Severity designation for Los Osos do not adequately protect the sole source of water for the community.

As the examples show, one basic way the proposed documents do not protect the Basin is that they do not base decision-making relating to Basin sustainability and future development on sufficient reliable, empirical data to conclusively show the Basin is sustainable for the current population or additional population. More well tests from more monitoring sites over a longer period of time and a review of metric reliability are needed to be confident that seawater intrusion has reversed and a sustainable water supply exists for the current population. In keeping with a First Immediate Goal of the Basin Plan, the first priority must be to "Provide sustainable water supplies for existing

residential, commercial, community and agricultural development within Los Osos.” (p. 19).

Currently, the above documents base critical decisions on Basin sustainability and development almost exclusively on modeling estimations of future yields. These modeling estimations are untested and have significant levels of uncertainty.

Finding out in the future—after development is in place -- that Basin metrics were not reliable, the model has exaggerated sustainable yields, and the added water demand from development is unsustainable, would be disastrous for Los Osos and the high value natural resources that depend on the Basin for survival.

As previously stated, we request that you conduct a subsequent or supplemental EIR to afford stakeholders the time and opportunity to fully understand and comment on impacts of proposed Community Plan changes and proposed related documents.

We incorporate by reference all earlier comments we’ve submitted to the County relating to the Los Osos Basin, the Los Osos HCP, and the Los Osos Community Plan, and we also incorporate by reference comments submitted by other stakeholders on these topics that support a cautious and protective approach to Los Osos Basin Management and the approval of further development in Los Osos.

We look forward to providing more information and comments at the Planning Commission hearing, and we thank you again for your response to our questions.

Sincerely,

Board of Directors : Los Osos Sustainability Group (LOSG)

Patrick McGibney

Elaine Watson

Larry Raio

Keith Wimer

Chuck Cesena

Kerry Brown

From: Ramona Hedges
Sent: Tuesday, June 23, 2020 3:37 PM
To: Kerry Brown
Subject: FW: [EXT]Water for Los Osos is limited

Ramona Hedges
(805) 781-5612
Supervising Administrative Clerk II
Clerk to the Planning Commission
Custodian of Records



COUNTY OF SAN LUIS OBISPO
PLANNING AND BUILDING DEPARTMENT

From: Kylie Hensley <khensley@co.slo.ca.us>
Sent: Tuesday, June 23, 2020 3:06 PM
To: Kerry Brown <kbrown@co.slo.ca.us>; Ramona Hedges <rhedges@co.slo.ca.us>
Subject: Fw: [EXT]Water for Los Osos is limited

Hello,

Please see comment below to add to the 7/9 PC record for Los Osos Community Plan.

Kylie

From: Michael Raphael <jmichaelraphael@yahoo.com>
Sent: Tuesday, June 23, 2020 3:03 PM
To: Kylie Hensley <khensley@co.slo.ca.us>; Eve Gruntfest <evegruntfest@gmail.com>; Stephanie Raphael <stephanieraphael228@gmail.com>
Subject: [EXT]Water for Los Osos is limited

ATTENTION: This email originated from outside the County's network. Use caution when opening attachments or links.

June 23, 2020

Attn: K. Hensley

To allow additional growth in Los Osos puts pressure on people who already live here to find ways to go elsewhere when we run out of potable water.

The county's report on water is already outdated, and as near as I can tell does not consider the effects of global warming and a rise in sea level that will add further pressure on the aquifer and thus exacerbate seawater intrusion.

Also not taken into consideration is that the population of California has, in effect, leveled off, as a recent report showed the population went up .01 percent last year. Another report, made public earlier this year, showed that there was more migration out of state in the years 2000 through 2008 than there was immigration into California.

If all of the statistics prove out, there is less pressure on communities to add housing, which, presumably, is the county's reason for adding population in Los Osos.

This is a statement of opposition to any additional housing for the community of Los Osos. That includes 900 family units and additional spaces for Morro Shores Mobile Home Park.

James Michael Raphael
Morro Shores Mobile Home Park
633 Ramona Ave., Spc 20
Los Osos, CA 93402