



January 2, 2019

TO: LOCSD Board of Directors
FROM: Chuck Cesena, Chairperson, Utilities Advisory Committee
SUBJECT: **Agenda Item 12H – 1/10/2019 Board Meeting**
Review of Letter Concerning County's Sale of Reclaimed Water to Dryland Farmers

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BACKGROUND:

The Coastal Development Permit (CDP) for the Los Osos Wastewater Project requires that no less than 10% of the recycled water from the project be used in an "agricultural exchange" program with area farmers. The intent was to use recycled water for irrigation rather than potable well water as a form of seawater intrusion mitigation. The current contracts would provide recycled water to new crops not currently irrigated, which has zero seawater intrusion mitigation benefit.

When the CDP was issued in 2010, and as late as 2012 when the County prepared the Recycled Water Management Plan, it was thought there would be about 750 Acre Feet per Year (AFY) to dispose of. Given that the planned urban reuse and leach field disposal would be less than 650 AFY, it made sense to have an agricultural reuse option available. But with the level of water conservation occurring the treatment plant is only producing about 560 AFY and 96% of the community is connected to the project. It is questionable whether an agricultural reuse program is necessary at all and certainly not one that does not meet the intent of the CDP conditions to prioritize recycled water disposal to reduce seawater intrusion.

Last June our Board sent the attached letter to the County requesting an update on the status of the contracts. To date, we have had no response from the County (at least none that has been shared with the Board). Now that the County has finalized the remainder of the recycled water distribution contracts with the water purveyors, it is time to follow up regarding the status of the dryland farm contracts.

Possible Options Include:

- 1) A follow-up letter to the County;
- 2) A request for a meeting with County staff to discuss the issue;
- 3) A public request at an upcoming Board of Supervisors meeting with a representative authorized by our Board to represent the LOCSD;
- 4) Other options considered feasible by members of our Board.

Attachment



June 11, 2018

Honorable John Peschong
Chair, San Luis Obispo County Board of Supervisors
1055 Monterey Street, Suite D430
San Luis Obispo, CA 93408

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Dear Mr. Peschong,

The Los Osos Community Services District (District) is deeply troubled regarding the proposed sale of reclaimed water from the Los Osos Wastewater Reclamation Facility (LOWRF) to agricultural properties on the eastern fringe of the Los Osos Groundwater Basin. Four contracts are in place that would allow the sale of up to 81 Acre Feet per Year (AFY) – approximately 16% of the total water available from the LOWRF - to uses that would have zero seawater intrusion mitigation values for our critically over-drafted basin. Deliveries are scheduled to begin sometime this summer.

As seen in the attached memos, this discussion has been unfolding before the Los Osos Basin Management Committee (BMC) for some time now. Water conservation efforts within the community have resulted in a much lower output from the LOWRF than was anticipated at the time the project permits were issued. As detailed in the November 15, 2017 memo from BMC Interim Executive Director Rob Miller, at the time the County prepared the Recycled Water Management Plan (RWMP) – a requirement of the Coastal Development Permit (CDP) - it was thought that the LOWRF would produce approximately 748 AFY with all currently developed properties connected to the facility. However, with 96% of the community now connected, average flows are 450,000 GPD and peak at 500,000 GPD. The peak flows translate to about 560 AFY, well short of the 748 AFY predicted in the RWMP.

As a result of this over-estimate, when the permits were issued it was thought that the planned leach fields and other urban reuse opportunities within town might not be able to handle all of the recycled water to be disposed of and that agricultural properties east of town would be a necessary disposal option. This led to the requirement in CDP Condition 97 that "Total agricultural reuse shall not be less than 10% of the total treated effluent". At the time this condition was drafted, it was envisioned that the reclaimed water would be replacing potable water uses so that the potable water could remain in the groundwater basin to mitigate seawater intrusion. The current contracts under discussion would ship water to currently non-irrigated parcels, an act that has zero seawater mitigation value.

Anticipating changed circumstances, the CDP also contains language in Special Condition 5 which calls for a Reporting and Adaptive Management Program so that changes to the RWMP could be accomplished without having to amend the CDP. As noted in the November 15, 2017 memo, "...given the lower volumes currently reaching the WWRF (LOWRF), amendments to the CDP may be warranted to maximize basin benefits". The November memo also includes a discussion of a May 2015 study prepared for the BMC by Cleath-Harris Geologists, Inc., which evaluated three options for discharge of the LOWRF

effluent: to Los Osos Creek, to the Broderson leach field, and to agricultural reuse. That study concluded that "the greatest potential benefit to purveyor wells would occur when moving water from new crop agricultural reuse to creek discharge". New crop agricultural reuse is exact intent of the four contracts under question.

In response to these conclusions, on January 17, 2018, the County released to the BMC the attached memo from Mark Hutchinson, Deputy Director of Public Works. It listed four reasons for continuing with the contracts under the guise that agricultural reuse would have "benefits for the Los Osos Wastewater Project". We will address these one by one but would like to begin by stating that actions that "benefit" the wastewater project but harm the groundwater basin do not benefit the citizens of Los Osos in any way.

The first benefit listed in the January memo is Permit and Funding Compliance. As noted above, adaptive management is also a requirement of the CDP and given the changed circumstances we believe it not be necessary to amend the CDP to make these changes to the RWMP. We believe that the delivery of water under these contracts could be viewed as being out of compliance with the CDP given that they have zero seawater mitigation value and the other disposal options do. The Judge contract is particularly troublesome as it would deliver water to a polo field east of Los Osos Creek, which is the designated Urban Reserve Line for Los Osos. Condition 97 of the CDP specifically states that "No amount of treated effluent may be used to satisfy, or offset water needs that result from non-agricultural development outside the Urban Reserve Line of the community of Los Osos". Aside from being east of the Urban Reserve Line, a polo field is a questionable agricultural use. As for the obligations to the funding agencies, are these more important than the obligations to the residents of Los Osos who depend upon the groundwater basin? Would the funding partners not understand this need for a change to the RWMP?

The second benefit is listed as Operational Flexibility. As noted in Public Works' January memo, "The Los Osos facility has ample on-site treated effluent storage, a 4x safety factor at the Broderson leach field, agricultural recycled water delivery agreements and is moving forward with urban reuse agreements". But given the reduced flows to the LOWRF, the agricultural reuse option - especially to new users - is not needed. Onsite storage, the Broderson and Bayridge leach fields and urban reuse options provide the operational flexibility needed. Given the conclusions of the 2015 Cleath-Harris study, a creek disposal option should be considered rather than the current agricultural reuse contracts.

The third benefit listed in the January memo is Project Integrity. Is this more important than the integrity of the groundwater basin? The memo states "individuals have planned their future business operations, and to some degree have invested in on-site infrastructure, looking forward to the delivery of recycled water". The District would like any information as to the value of those plans and investments so that they might be compared against the value of the plans and investments our residents have made in their homes. The January memo then goes on to justify the contracts by stating that the currently produced 500+ AFY of recycled water is enough to meet all of the "agricultural users, all urban reuse options, potential environmental needs (Bayridge at 33 AFY), and still provide flow to the Broderson leach field", as though that were the preferred order of disposal options. Given that the leach fields have a seawater intrusion migration factor of 0.22 and the agricultural contracts a mitigation value of zero, the contracts seem to be contrary to the CDP language requiring recycled water disposal to prioritize seawater intrusion mitigation. The Broderson leach field alone has the capacity to take nearly all of the recycled water produced by the LOWRF, the agricultural uses are not needed.

The fourth benefit listed in the January Public Works memo was a Foundation for Future Water Supply Options. Here the memo admits that the intent of the agricultural reuse program was to exchange recycled water for ground water being pumped to irrigate crops but notes the reluctance of those farmers to enter into these exchanges given the abundant supply of groundwater and the uncertainties surrounding the quality of the recycled water. The current contracts are intended to demonstrate the "real-world potential of recycled water for commercial agricultural irrigation". This potential has already been proven in places like the Salinas Valley in Monterey County, where the farmers had an incentive

to join exchange programs because their own wells were being affected by seawater intrusion. The need to prove the potential of such a program is not needed here, especially when the contracts designed to provide that proof could have a detrimental impact upon our groundwater basin and are possibly out of compliance with the project's CDP conditions.

Given the above, the District requests that the County Board of Supervisors direct Public Works staff to begin the Adaptive Management process referenced in Special Condition 5 of the CDP to reflect the actual flows from the LOWRF and that you prioritize disposal of the recycled water to maximize seawater intrusion mitigation values. Given the urgency of halting seawater intrusion into our groundwater basin, we request that no agricultural deliveries take place until an Adaptive Management Plan has been approved by the Coastal Commission and that you begin that coordination now.

Respectfully,



Vicki L. Milledge
President of the Board
Los Osos Community Services District

Attachments:

11.05.17 BMC Memo

01.17.18 BMC Memo

Copy to:

Dan Carl, Deputy Director, California Coastal Commission

Dr. Jean-Pierre Wolff, Chair, Central Coast Regional Water Board

Wade Horton, Administrative Officer, San Luis Obispo County

Rita Neal, County Counsel, San Luis Obispo County

Mark Hutchinson, Deputy Director, San Luis Obispo County Public Work Department

Board of Directors, Los Osos Groundwater Basin, Basin Management Committee

TO: Los Osos Basin Management Committee

FROM: Rob Miller, Interim Executive Director

DATE: November 15, 2017

SUBJECT: Item 7d. Review and Discussion of Recycled Water Management

Recommendations

Receive report and provide input to staff for future action.

Discussion

In September 2017 the BMC received a draft report on the estimate cost and process for accomplishing the Los Osos Creek Replenishment and Recharge Project. The next step that was discussed is the prudent allocation of limited recycled water volumes to combat seawater intrusion. Staff will provide a brief presentation during the meeting to summarize historical information, and then receive Committee input to inform future budgets and strategy. The information below provides historical context on the topic of recycled water management, including the following:

- 2010 Coastal Development Permit for the Los Osos Wastewater Project, which set initial standard and expectations for recycled water volumes and management.
- 2012 Recycled Water Management Plan, which refined the volumes and informed the Basin Plan (Chapter 9)
- 2015 Creek Discharge Memo and subsequent studies
- 2017 Flow data from the Wastewater Reclamation Facility (WWRF).

Coastal Development Permit Requirements

The California Coastal Commission issued a Coastal Development Permit for the Los Osos Wastewater Project on September 7, 2010, to the County of San Luis Obispo. The Permit included the following requirements for Recycled Water Management:

- Prepare a Recycled Water Management Plan prior to construction
- Disposal shall be prioritized to reduce seawater intrusion and return/retain water to/in the Los Osos groundwater basin. Highest priority shall be given to replacing potable water uses with tertiary treated effluent consistent with Water Code Section 13550.
- Broderson leach field not to exceed 448 AFY on an average annual basis
- Bayridge leach field to receive approximately 33 AFY or the amount shown to be necessary for maintaining Willow Creek and downstream resources. Condition 97 requires an environmental reservation of 10% of the total volume of treated effluent.
- Urban re-use within the urban reserve line shall be provided, including schools
- Agricultural re-use overlying the Los Osos Groundwater Basin shall not be less than 10% of the total treated effluent.

It should be noted that given the lower volumes currently reaching the WWRF, amendments to the CDP may be warranted to maximize basin benefits.

Recycled Water Management Plan

In May 2012, the County approved the Recycled Water Management Plan (RWMP). The RWMP was prepared in coordination with the overall Basin Plan and was a requirement of Special Condition No. 5 of the Coastal Development Permit (CDP). The purpose of the RWMP was to identify the quantity of recycled water available at start-up and at build-out. In addition, the RWMP outlined the intended uses.

Estimated quantities at the time of the development of the RWMP are as follows:

- With water conservation, the projected indoor water use was estimated to be 0.7 mgd (748 AFY) with all developed properties connected.
- At full build-out, the indoor water use within the Service Area was estimated to be less than 1.0 mgd (1,120 AFY).

Disposal volumes included:

- Broderson up to 448 AFY
- Bayridge Estates Leach Fields up to 33 AFY
- Offset largest consumers of potable irrigation water (schools) up to 56 AFY (total for all 4 schools)
- Offset community park up to 2 AFY
- Sea Pines Golf Course up to 40 AFY
- Cemetery up to 50 AFY
- Agriculture Irrigation of remaining available effluent

Creek Discharge Memorandum

In May 2015, Cleath-Harris Geologists, Inc. prepared a technical memorandum, Recycled Water Discharges to the Los Osos Creek that characterized the interaction between the Los Osos Creek and the underlying groundwater basin. The memorandum evaluated the discharge to the Los Osos Creek versus Broderson discharge and agriculture reuse. The conclusions stated that the greatest potential benefit to purveyor wells would occur when moving water from new crop agricultural reuse to creek discharge.

Current Conditions

As of November 1, 2017, 94.5% of the lateral connections have been tied over to the wastewater project. Water conservation efforts and drought restrictions over the past five years have resulted in significantly lower flows than what was anticipated in 2012. The October 2017 flows to the wastewater treatment plant were 43 AF or 1.39 AF per day, which equates to 506 AFY. It is anticipated that wastewater flows will vary throughout the year and an additional 5% of the system still needs to connect to the wastewater treatment plant. Therefore, it is estimated that the average annual volume will be between 500 and 550 AFY.

Committee Discussion Topics

Staff recommends that the Committee engage in the following topics during the meeting:

1. Establish priority order for recycled water options.
2. Discuss status and timing of agricultural contracts that have been executed, given limited volumes of recycled water that are available.
3. Discuss the benefits of the Los Osos Creek Replenishment and Recharge Project, particularly during prolonged periods of drought. Clarify next steps.
4. Briefly discuss methods of enhancing recycled water volumes. Other communities have recaptured storm water where collection capacity exists.
5. Discuss metrics and monitoring for assessing the effectiveness of the Broderson disposal site.
6. Discuss the impact of the 10% CDP reservations for agriculture and environmental needs.

TO: Los Osos Basin Management Committee

FROM: Mark Hutchinson, Deputy Director of Public Works

DATE: January 17, 2018

SUBJECT: Item 7e - Update on Recycled Water Agreements for Agricultural Users

Introduction

The Stipulated Judgment includes the following regarding the use of recycled water for agricultural irrigation:

"If an agricultural user desires to purchase recycled water from the LOWWP, it may do so on such terms and conditions as the County (or the then current owner of the LOWWP) shall determine from time to time, subject to review and comment by the Basin Management Committee."

This report describes the background, status, intended benefits, and next steps for the agricultural recycled water delivery agreements. The Basin Management Committee may wish to provide comments to the Board of Supervisors regarding the information provided in this update.

Background

In 2009, when it was first proposed, the Los Osos Wastewater Project relied on secondary treatment of wastewater followed by spray irrigation on grazing lands as the method for disposal of treated effluent. As the project progressed through the Coastal Development Permit process at the County Planning Commission level, the treatment level was raised from secondary to tertiary at the "unrestricted reuse" level. At the same time the County agreed to reserve 10% of the now high-quality recycled water for agricultural uses, given that the revised project location was on a parcel designated for agriculture with active agriculture on adjacent parcels. The reservation for agricultural uses was included in a revised project description and formalized in the project's conditions of approval *"Total agricultural re-use shall not be less than 10% of the total treated effluent"*. The project then moved through appeals to the Board of Supervisors and the California Coastal Commission with both tertiary treatment and a 10% reservation for agriculture as part of the project description (there is also a 10% reservation for environmental purposes). In addition, and because of the change in the treated water disposal method, funding agencies required assurance that the new plant would be able to reach full operation. That is, confidence that a lack of suitable reuse sites and methods would not reduce the ability of the

project to operate at full capacity. In response, recycled water agreements were negotiated with agricultural users and the school district.

Current Status

The Los Osos Wastewater Project has entered into four agricultural recycled water delivery agreements (Three fully executed and one pending Board of Supervisors action) as shown in the table below. The total subscribed amount is 81 acre-feet, or approximately 16% of the current recycled water output of the water reclamation facility. No recycled water has been delivered to agricultural users to date. However, deliveries are anticipated to begin in summer 2018, pending issuance of the Recycled Water Permit by the Regional Water Quality Control Board. The amount of water delivered is dependent on the agreements, use site needs, and action by the recycled water users to complete the end user requirements for the Recycled Water Permit.

Contractor	Assessor Parcel Number	Annual Amount in Acre-Feet
May	074-225-021	5
Goodwin	074-225-019	10
Judge	067-171-085	50
Michener	074-225-022	16
Total Amount		81

Benefits of Agricultural Reuse

The agricultural reuse component has four clear benefits for the Los Osos Wastewater Project:

Permit and Funding Compliance

At the most basic level, the delivery of water to agricultural operations ensures that the project will remain in compliance with its Coastal Development Permit and with the spirit and intent of its funding agreements. The importance of operating the project in compliance with these requirements cannot be over-stated. The consequences of failing to fulfill obligations to regulatory and funding agencies can not only impact the Los Osos project but, because these obligations are understood to be agency-agency partnerships, can also impact the County's ability to develop and fund other projects for the benefit of Los Osos and other communities throughout the County.

Operational Flexibility

All wastewater treatment facilities operate with a common constant: the flow of wastewater will not stop regardless of any operational issues with the treatment plant. Consequently, wastewater treatment operations must have operational redundancy, emergency storage, and multiple options to respond to unforeseen situations. These

requirements extend to reuse options for treated effluent in both the short and long terms. The Los Osos facility has ample on-site treated effluent storage, a 4x safety factor at the Broderson leach field, agricultural recycled water delivery agreements, and is moving forward with urban reuse agreements. Because future conditions cannot be fully predicted, maintaining the full spectrum of reuse options is important to the continued operational resilience of the facility.

Project Integrity

The Los Osos Wastewater Project has entered into recycled water delivery agreements with four area farmers. These individuals have planned their future business operations, and to some degree have invested in on-site infrastructure, looking forward to delivery of recycled water. Although the agreements contain provisions that would allow the project to cancel the agreements with six months' notice, the status of recycled water reuse within the community does not warrant invoking this provision. The current volume of recycled water produced by the plant is estimated at 500 acre-feet/year, growing to 550 AFY in the near term (2 years). With full urban reuse (less than 100 acre-feet/year including the golf course) and agricultural agreements totaling 81 acre-feet/year, the current and near-term amount of recycled water is sufficient to supply the agricultural users, all urban reuse options, potential environmental needs (Bayridge at 33 acre-feet per year), and still provide flows to the Broderson leach field.

Foundation for Future Water Supply Options

During development of the Los Osos project the concept of exchanging recycled water for groundwater currently being used by the farmers along Los Osos Creek was proposed as a method to supplement the community's water supply. However, these farmers have been reluctant to utilize recycled water given the abundant supply of groundwater and uncertainties surrounding the quality of the recycled water. The current agricultural recycled water delivery agreements are intended in part to demonstrate the real-world potential of recycled water for commercial agricultural irrigation. If successful, the program has the potential to facilitate future water supply agreements between farmers and the community.

Moving Forward

Current efforts to deliver recycled water include:

- Finalize the recycled water permit through the Regional Water Quality Control Board
- Execute recycled water agreements with Golden State Water Company, the Los Osos Community Service District, and Sea Pines Golf Course
- Amend the Tri-Party Agreement among the County, Monarch Grove and Sea Pines Golf Course to change the source of recycled water
- Transfer 1 Agricultural Recycled Water Delivery Agreement to a new owner

- Finalize 1 previously negotiated Agricultural Recycled Water Delivery Agreement
- Establish a construction water program using recycled water (in lieu of potable water)
- Support "end users" as they prepare the necessary permit documents and modify current irrigation systems to meet recycled water requirements
- Formalize a recycled water line easement along Blue Heron Lane

Although these efforts are both complex and time consuming, recycled water should be flowing to end users over the Los Osos Groundwater Basin by the summer of 2018.

File: 310.87.04 LOWWP Los Osos Wastewater Project - General

Reference: