

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
895 Aerovista Place, Suite 101  
San Luis Obispo, California 93401**

**PROPOSED WASTE DISCHARGE REQUIREMENTS ORDER  
NO. R3-2019-0042**

Waste Discharger Identification No. 3 420114004

**FOR  
MISSION HILLS COMMUNITY SERVICES DISTRICT  
WASTEWATER TREATMENT PLANT  
SANTA BARBARA COUNTY**

**May 17, 2019**

This Order contains Findings and Requirements (this document), a Monitoring and Reporting Program (Attachment I), and Standard Provisions and Reporting Requirements for Waste Discharge Requirements (Attachment II).

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- I. Monitoring and Reporting Requirements Order No. R3-2019-0042 for Mission Hills Community Services District Wastewater Treatment Plant
- II. Standard Provisions and Reporting Requirements for Waste Discharge Requirements, December 2013

**A. FINDINGS** – The Central Coast Regional Water Quality Control Board (Central Coast Water Board) finds that:

**A.1 SITE/FACILITY OWNER AND LOCATION**

1. Mission Hills Community Services District (“MHCS D” or “Discharger”) operates a wastewater treatment plant located at 1550 East Burton Mesa Boulevard, Lompoc, in Santa Barbara County.

**A.2 PURPOSE OF ORDER**

2. This Waste Discharge Requirements Order No. R3-2019-0042 (Order) for MHCS D prescribes waste discharge requirements to authorize the discharge of treated domestic wastewater. This Order reflects current conditions at the WWTP. The revisions also include a description of the updated WWTP, revised effluent limits, revised groundwater limits, and an updated monitoring and reporting program.
3. The Central Coast Water Board has regulated the discharge from MHCS D WWTP since 1978. Waste Discharge Requirements Order No. 97-35, issued to the Discharger and adopted by the Central Coast Water Board on October 24, 1997, authorizes MHCS D to discharge treated wastewater into the Lompoc Upland sub-basin.
4. The Discharger filed a report of waste discharge (ROWD) on March 3, 2016, in accordance with section 13260 of the California Water Code. The Discharger filed the ROWD for authorization to discharge within the Santa Rita Hydrologic Area and to land overlying the Lompoc Plain groundwater sub-basin, a different groundwater basin than that identified in Order No. 97-35.
5. On November 18, 2016, in response to a Central Coast Water Board request for additional information on ongoing violations, the Discharger submitted an update to the ROWD. The updated ROWD describes upgrades to the WWTP over the last twenty years.
6. On November 18, 2017, the Discharger submitted an addendum to the requested ROWD including information regarding new repairs and upgrades to the WWTP, updated nitrogen management strategies, and updated groundwater monitoring data.
7. In 2017, MHCS D performed the following plant repairs and upgrades listed below:
  - Inspected liner condition of Pond 1.
  - Removed sludge from Pond 1.
  - Replaced the liner in Pond 1.
  - Added baffles to Pond 1.
  - Repaired the valve between Pond 1 and Pond 2.
  - Replaced three valve actuators between Pond 1 and Pond 2.
  - Inspected the liner condition of Pond 2.
  - Replaced six valve actuators between Pond 2 and Pond 3.

- Repositioned aerators to optimize hydraulic retention time and optimize oxygen transfer.
  - Replaced a damaged flow meter.
  - Purchased a backup flow meter.
8. The Discharger's consultants performed and submitted to Central Coast Water Board staff a groundwater evaluation, *Hydrologic Documentation Prepared for Mission Hills Community Services District, Request for Amending RWQCB Water Discharge Requirements Order No. 97-35, Rick Hoffman and Associates, July 2014*, to determine which groundwater basin receives the treated wastewater discharge.
  9. On June 15, 2015, the Discharger submitted an Addendum Report to the *Hydrologic Documentation Prepared for Mission Hills Community Services District, Request for Amending RWQCB Water Discharge Requirements Order No. 97-35*, containing additional hydrologic information and updated graphics.
  10. On March 3, 2016, the Discharger submitted additional water quality data to assess the potential impacts to shallow groundwater from the discharge at the MHCSW wastewater treatment plant (WWTP).
  11. On March 4, 2016, the Discharger submitted an updated summary of *Hydrologic Documentation Prepared for Mission Hills Community Services District, Request for Amending RWQCB Water Discharge Requirements Order No. 97-35, Rick Hoffman and Associates, July 2014*.
  12. On March 29, 2018, the Discharger submitted updated shallow groundwater monitoring data.
  13. The groundwater analysis confirmed that the MHCSW wastewater discharge percolates to the Lompoc Plain sub-basin, not the Lompoc Upland sub-basin.
  14. This Order supersedes and replaces Order No. 97-35.

### A.3 SITE/FACILITY DESCRIPTION

15. **Facility** – MHCSW owns and operates a 21-acre WWTP as shown in Figures 1 and 2, that currently discharges approximately 250,000 gallons per day (gpd) of treated wastewater to the Lompoc Plain groundwater sub-basin in Santa Barbara County.
16. **Discharge Type** – Domestic wastewater from 1,265 residences.
17. **Design** – The WWTP includes a headworks facility (e.g., screen and comminution<sup>1</sup>) and two lined biological treatment ponds (facultative<sup>2</sup> lagoons with aerators (Pond 1 with

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<sup>1</sup> Comminution is mechanical reduction of solid materials by grinding solids found in wastewater into smaller average particle sizes.

<sup>2</sup> A facultative lagoon is used to treat wastewater. The upper layer of a facultative pond is aerobic (aerobic = available dissolved oxygen), while the lower layer is anaerobic (anaerobic = no available dissolved oxygen). Each pond layer supports different types of biologic organisms used to process the wastewater.

baffles<sup>3</sup> and Pond 2 no baffles). The wastewater discharges to eight evaporation/percolation ponds (La Purisima ponds 3 through 7 and Rucker ponds<sup>4</sup> 8 through 10) as shown in Figures 3 and 4.

18. **Current Flow Capacity** – The WWTP treats up to 400,000 gpd<sup>5</sup> of domestic wastewater daily. The facility has a disposal capacity of 570,000 gpd<sup>6</sup> of domestic wastewater daily. On average, the facility is operating at 68 percent of the available flow capacity (Table 1).

**Table 1 – Treatment Pond Influent Average Annual Flow**

Year	Influent Average Annual Flow (gallons per day)
2011	241,473
2012	279,050
2013	303,742
2014	300,556
2015	307,054
2016	267,199
2017	230,000
2018	220,000
<b>Average for 2011-2018</b>	<b>273,322</b>

19. **Treatment System Water Quality** – Table 2 shows the average Pond 2 effluent concentrations for various constituents analyzed from samples collected in 2016 and 2017.

**Table 2 – Treatment Pond Water Quality**

Constituent	Average Influent	Average Effluent	Average Percent Reduction 2016/2017
Biochemical Oxygen Demand (mg/L)	282 <sup>A</sup>	33 <sup>B</sup>	88
Total Suspended Solids (mg/L)	278 <sup>B</sup>	92 <sup>C</sup>	67
Total Nitrogen (mg/L)	73 <sup>B</sup>	16 <sup>B</sup>	78
Total Dissolved Solids (mg/L)	1,187 <sup>B</sup>	876 <sup>B</sup>	26
Sodium (mg/L)	224 <sup>B</sup>	171 <sup>B</sup>	24
Chloride (mg/L)	390 <sup>B</sup>	254 <sup>B</sup>	35

<sup>A</sup> 2016-2017 (11 samples)

<sup>B</sup> 2016-2017 (24 samples)

<sup>C</sup> 2016-2017 (21 samples)

20. **Wastewater Treatment System Design Objectives** – The May 1985 Operation and Maintenance Manual for the MHCSD documents the facilities design objectives (Table 3). The wastewater treatment plant is designed to treat 400,000 gpd and dispose of

<sup>3</sup> Baffles are similar to floating curtains and are designed to create serpentine hydraulic flow patterns, increase hydraulic retention time (the time it takes wastewater to travel from the inlet of the pond to the outlet of the pond), enhance flow characteristics to eliminate dead zones, and create biologic conditions in that improve treatment efficiency.

<sup>4</sup> Rucker pond site is on a separate parcel from 21-acre WWTP site, is located approximately 1.5 miles southwest of the treatment facility, and is approximately 15 acres in size.

<sup>5</sup> 1985 Operation and Maintenance Manual for the Mission Hills Community Services District.

<sup>6</sup> 1991 request from MHCSD to increase disposal capacity from 400,000 gpd to 570,000 gpd.

570,000 gpd. At 400,000 gpd, the hydraulic retention time for treatment Ponds 1 and 2 is 6.9 and 9.8 days, respectively.

**Table 3 – Treatment Pond Design Objectives**

	Biochemical Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)	Settleable Solids (ml/L)
Influent	250	250	--
Effluent	30	30	0.3
Percent Reduction	88	88	None Calculated

The 1985 designs for the WWTP do not include treatment considerations for nitrogen, total dissolved solids, sodium, or chloride.

21. **Collection System** – The WWTP collects domestic wastewater from 1,265 residences across approximately 800 acres. The Discharger must comply with the requirements of State Water Resources Control Board (State Water Board) Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, including monitoring and reporting requirements as amended by State Water Board Order WQ 2013-0058-EXEC and any subsequent order.
22. **Wastewater Disposal** – The Discharger's wastewater disposal system consists of two sets of ponds: (a) Ponds No. 3 through 7 at the La Purisima Canyon site (Figure 3), and (b) Ponds No. 8 through 10 at the Rucker site (Figure 4). The five La Purisima Canyon ponds are located adjacent to the wastewater treatment facility; the three Rucker ponds are located approximately 1.5 miles southwest of the treatment facility, adjacent to the Santa Ynez River (there is approximately 120 feet between the river and the Rucker ponds). A sewer pipe between the La Purisima Canyon pond site and the Rucker pond site is maintained through periodic discharges of potable water. Both the La Purisima Canyon and Rucker ponds percolate into the Lompoc Plain sub-basin.
23. **Solid Waste Disposal** – The Discharger intermittently removes sludge from the ponds and hauls the sludge to a facility approved to receive biosolids.
24. **Recharge** – The wastewater in the La Purisima Canyon and Rucker ponds provide groundwater recharge through percolation.
25. **Geology** – The 21-acre WWTP is physically located 9.5 miles inland from the Pacific Ocean and approximately 325 feet above sea level, above both the Lompoc Plain sub-basin and the Lompoc Upland sub-basin. The La Purisima ponds are situated on relatively level topography (less than three percent slope) consisting of moderately low permeability, sandy-silt soils to a depth of 25 feet. The remainder of the soil profile is low to moderate permeability sandy material to a depth of approximately 200 feet, where a sandy-clay layer is present. A blue clay is found at approximately 200 feet below ground surface (bgs) and “sits” over the Lompoc Upland sub-basin and is considered an “aquitar” that restricts the flow of groundwater between the Lompoc Plain sub-basin (upper basin) and the Lompoc Upland sub-basin (lower basin) as shown in Figures 5, 6, and 7.

The Rucker ponds are located on a separate parcel approximately 1.5 miles southwest of the treatment facility and approximately 120 feet from the Santa Ynez River above the Lompoc Plain sub-basin. The Rucker ponds are located on relatively level topography (less than three percent slope) with high permeability sandy soil.

Drinking water for the area comes from three supply wells that extract water from the Lompoc Upland sub-basin (MHCSD #5, #6, and #7) located as shown on Figure 6.

26. **Surface Water** – There is an intermittent unnamed tributary (locally referred to as Los Berros Creek) in Purisima Canyon that drains to the Santa Ynez River. The creek is adjacent to the eastern edge of the La Purisima Canyon ponds, approximately 70 feet east of the evaporation/percolation ponds and flows in a southerly direction (Figure 2).

The Santa Ynez River is adjacent to the southern edge of the Rucker ponds, approximately 120 feet south of the evaporation/percolation ponds and flows in a westerly direction.

27. **Groundwater**

- a) The MHCSD La Purisima Canyon ponds and the Rucker ponds discharge to the Lompoc Plain sub-basin (Figure 5). The depth to groundwater underneath the La Purisima Canyon ponds is approximately 180 feet and underneath the Rucker ponds is approximately 40 feet. Groundwater beneath both sets of ponds flows generally in a southwest direction. Red arrows on Figure 6 show the general direction of groundwater flow.
- b) The groundwater monitoring well in the area around the La Purisima Canyon ponds site includes:
  - i. Downgradient groundwater monitoring well (MHCSD MW#1) is approximately 1,000 feet to the southeast of the ponds.
- c) Water supply wells in the area around the Rucker ponds site include:
  - ii. Two private wells approximately 1,000 feet southeast of the site;
  - iii. An irrigation well approximately 600 feet southwest of the site;
  - iv. An irrigation well approximately 1,500 feet northeast of the site; and
  - v. The City of Lompoc municipal supply well No. 8 approximately 2,500 feet southwest of the site.
- d) MHCSD constructed MW#1 in 2011 (Figure 6). The bottom of well MW#1 is at 220 feet bgs with the well screened from approximately 160 to 220 feet bgs in the Lompoc Plain sub-basin. From 2011 through 2018, MHCSD collected and analyzed groundwater samples from MW#1. Table 4 shows the range, average, and median concentrations for the samples analyzed:

**Table 4 – Monitoring Well No. 1 Water Quality Data**

	<b>Total Dissolved Solids (mg/L)</b>	<b>Chloride (mg/L)</b>	<b>Sodium (mg/L)</b>	<b>Total Nitrogen (mg/L)</b>
<b>Average</b>	533	160	95	2.6
<b>Range</b>	250-870	61-270	39-150	1.2-7.6
<b>Median</b>	430	145	96	1.8

Results based on 30 to 26 samples depending on constituent (Total Dissolved Solids = 30, Chloride

and Sodium = 28, Total Nitrogen = 26)

- e) MHCS D currently pumps groundwater from three active wells (MHCS D #5, #6, and #7) in the Lompoc Upland sub-basin (Figure 6). Well #5 is 540 feet deep and screened from 280 to 530 feet bgs. Well #6 is 590 feet deep and screened from 290 to 590 feet bgs. Well #7 is 585 feet deep and screened from 305 to 585 feet bgs. Table 5 shows the groundwater quality for these active wells:

**Table 5 – MHCS D Groundwater Data for Wells #5, #6, and #7**

	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sodium (mg/L)	Nitrate (NO <sub>3</sub> as N) (mg/L)
<b>Average</b>	525 <sup>A</sup>	108 <sup>A</sup>	95 <sup>B</sup>	1.4 <sup>B</sup>
<b>Range</b>	380-640 <sup>A</sup>	60-134 <sup>A</sup>	77-120 <sup>B</sup>	ND-3.92 <sup>B</sup>
<b>Average</b>	634 <sup>C</sup>	162 <sup>C</sup>	82 <sup>C</sup>	2.1 <sup>C</sup>
<b>Range</b>	603-710 <sup>C</sup>	132-210 <sup>C</sup>	79-95 <sup>C</sup>	0.6-3.5 <sup>C</sup>
<b>Median</b>	622 <sup>C</sup>	159 <sup>C</sup>	80 <sup>C</sup>	2.2 <sup>C</sup>

<sup>A</sup> Boyle 2004 Report (data from 1993-2003)/ MHCS D Analytical Data (data from 2004-2013)

<sup>B</sup> MHCS D 2016 Consumer Confidence Report

<sup>C</sup> MHCS D 2016-2018, WWTP Annual Reports (eight samples)

ND = Non-detect

28. **Stormwater** – Overland stormwater flows do not flow into the ponds. The Discharger is not required to enroll in the Industrial General Permit (NPDES CAS) for stormwater discharges unless the stormwater discharge exceeds 1 million gallons per day or the Discharger is required to have an approved industrial pretreatment program (title 40 Code of Federal Regulations section 403).

29. **Land Uses** – In the area surrounding the La Purisima Canyon ponds discharge, land is used for housing, school buildings, La Purisima Mission State Historic Park, open areas (e.g., woods, shrubs, etc.), sports fields, and agriculture areas. The La Purisima Canyon ponds are more than a quarter mile from the nearest residence.

In the area surrounding the Rucker ponds discharge, land is used for agriculture. The Rucker ponds are more than two miles from the nearest residence.

#### A.4 BASIN PLAN BENEFICIAL USES AND WATER QUALITY OBJECTIVES

30. The Central Coast Water Board has adopted the *Water Quality Control Plan for the Central Coastal Basin* (Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters within the Central Coast Region. This Order includes prohibitions and discharge requirements to protect existing and potential beneficial uses of waters of the State, in the surrounding area of the Discharger’s wastewater treatment plant and its operations, as well as to protect public health and the environment.

31. The Discharger discharges the final effluent onto land, specifically to evaporation/percolation ponds the overlie the Lompoc Plain sub-basin. The existing and potential beneficial uses of the Lompoc Plain sub-basin groundwater, as set forth in the Basin Plan, are:

- a. Municipal and Domestic Water
- b. Agricultural Water Supply
- c. Industrial Use

32. The groundwater quality objectives for the Lompoc Plain sub-basin as provided in in Table 3-6 of the Basin Plan are shown in Table 6:

**Table 6 – Lompoc Plain Sub-Basin Median Groundwater Quality Objectives**

Constituent	Units	Concentration
Total Dissolved Solids	mg/L	1,250
Chloride	mg/L	250
Sulfate	mg/L	500
Boron	mg/L	0.5
Sodium	mg/L	250
Nitrogen	mg/L	2

#### **A.5 RECYCLED WATER**

33. The State Water Resources Control Board (State Water Board) adopted the Recycled Water Policy on February 3, 2009, and then amended the Policy on January 22, 2013. The State Water Board approved a second amendment to the Recycled Water Policy on December 11, 2018, with an effective date of April 8, 2019. This Order implements the Recycled Water Policy.
34. It is the intent of the Recycled Water Policy that salts and nutrients from all sources be managed on a basin-wide or watershed-wide basis in a manner that ensures attainment of water quality objectives and protection of beneficial uses. The State Water Board found that the appropriate way to address salt and nutrient management is through developing regional or sub-regional salt and nutrient management plans rather than through imposing requirements solely on individual projects.
35. The Central Coast Water Board finds that a combination of regional management plans and individual or programmatic project requirements are necessary to protect beneficial uses.
36. The Recycled Water Policy calls for the development of locally driven and controlled collaborative processes open to all stakeholders that will prepare salt and nutrient management plans for each basin/sub-basin in California.
37. A large number of technical reports and data contained within Central Coast Water Board files document widespread and increasing salt and nutrient impacts within the groundwater basins throughout the Central Coast Region, including the Lompoc Plain sub-basin.
38. MHCSD is involved in the development of the Santa Ynez River Valley Conservation District (SYRWCD) and the Sustainable Groundwater Management Act (SGMA) for the Santa Ynez Groundwater basin. Therefore, MHCSD does not need to prepare an individual analysis of salts and nutrients and management practices to address salts and nutrients in groundwater.

## A.6 ANTIDegradation ANALYSIS

39. State Water Board Resolution No. 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*) requires regional water quality control boards, in regulating discharges of waste, to maintain high quality waters of the state unless it is demonstrated that any change in quality will be consistent with the maximum benefit to the people of the state, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in a regional water quality control board's policies (i.e., quality that exceeds applicable water quality standards). Resolution No. 68-16 also requires that any activity which produces wastes and discharges waste to existing high quality water(s) be required to meet WDRs that will result in the best practicable treatment or control of the discharge necessary to ensure that pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the State will be maintained. Resolution No. 68-16 prohibits degradation of water quality as it existed in 1968, or at any time thereafter that water quality was better than in 1968, other than degradation that was previously authorized. An antidegradation analysis is required for regulatory actions that result in a significant increase in pollutant loadings.
40. The authorized discharge to land will not unreasonably affect present and anticipated beneficial uses of the groundwater or nearby surface waters and will not result in water quality less than that prescribed in the Antidegradation Policy.
- a. **Protection of Surface Waters.** This Order prohibits discharges either directly or indirectly to surface waters, so existing and potential beneficial uses of nearby surface waters will not be affected. The wastewater treatment and disposal system includes: a headworks facility; two lined facultative lagoons for treatment with surface aeration and mixing; and eight unlined disposal ponds used for effluent polishing and evaporation/percolation. The wastewater treatment system is configured to prevent any direct discharges to surface waters, and there is no reason to believe that existing water quality of nearby surface waters will be reduced due to the implementation of this Order. Therefore, an antidegradation analysis for surface waters is not required.
  - b. **Protection of Groundwater.** The only authorized effluent discharge is to the evaporation/percolation ponds. The wastewater system treats domestic wastewater. Treated effluent discharged to the evaporation/percolation ponds is either infiltrated into the ground or evaporated.

Water quality objectives<sup>7</sup> have been established for Lompoc Plain sub-basin (e.g., municipal and domestic supply, and agricultural supply) and the objectives serve as a water quality baseline for evaluating water quality management in the sub-basin. The MHCSD effluent discharge will maintain the high-quality water in the Lompoc Plain sub-basin.

The total dissolved solids and sodium in the effluent discharge are below the water quality objectives in the Lompoc Plain sub-basin and will not degrade the

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<sup>7</sup> Water Quality Control Plan for the Central Coastal Basin (Basin Plan), 2017, Section 3.3.4 Objectives for Groundwater

high-quality water in the Lompoc Plain sub-basin.

Although both chloride and total nitrogen in the effluent discharge are currently above the water quality objectives in the Lompoc Plain sub-basin, samples collected and analyzed from groundwater monitoring well MW#1, downgradient of the discharge ponds, show that groundwater is not significantly impacted by the effluent discharge. The median concentration of chloride in MW#1 is 145 mg/L, well below the water quality objective of 250 mg/L. Similarly, the median concentration of total nitrogen in MW#1 is 1.8 mg/L and below the water quality objective of 2 mg/L. To ensure continued protection of groundwater, the Discharger will be placed under a Time Schedule Order to implement management practices to reduce chloride and total nitrogen in the effluent discharge and as such will not degrade the high-quality water in the Lompoc Plain sub-basin.

No data for sulfate or boron has been collected. The Basin Plan contains water quality objectives for sulfate and boron. To determine compliance with water quality objectives, data must be collected. The proposed Order includes requirements for the sampling and analysis for sulfate and boron in the water supply, effluent, and groundwater.

The data shows that the MHCSD effluent discharge will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the Basin Plan.

#### **A.7 ENVIRONMENTAL SUMMARY**

41. The action to update waste discharge requirements for this existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resource Code section 21000, et seq., and the CEQA guidelines, in accordance with title 14, section 15301.

#### **A.8 HUMAN RIGHT TO WATER**

California Water Code section 106.3, subdivision (a): This Order promotes the State of California Human Right to Water policy, which states, "It is hereby declared to be the established policy of the State that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitation purposes."

42. State Water Board Resolution No. 2016-0010: Resolution No. 2016-0010 identifies the human right to water as a top priority and core value of the State and Regional Water Boards and affirms the Water Boards' commitment to consider how its activities impact and advance the human right to safe, affordable and clean water to support basic human needs. This Order is consistent with the Resolution 2016-0010.

#### **A.9 DISADVANTAGED COMMUNITIES**

43. The Mission Hills service area and the ponds are not located in areas identified as a disadvantaged community (DAC) on the California Department of Water Resources DAC Mapping Tool as either a place, tract, or block group per 2016 census data.

#### **A.10 CLIMATE CHANGE ADAPTATION**

44. MHCSO WWTP is situated 9.5 miles inland from the Pacific Ocean and approximately 325 feet above sea level. The WWTP is not susceptible to sea-level rise or flooding hazards from rising sea levels. In addition, the treatment plant is not located near any major rivers that may be subjected to increased flooding from highly variable precipitation as a result from climate change. However, the wastewater collection system, regulated under State Water Board Order No. 2006-0003-DWQ, does have the potential to be affected (e.g., increased inflow and infiltration) by highly variable precipitation that may result from climate change. Central Coast Water Board staff will work with State Water Board staff to ensure Order No. 2006-0003-DWQ addresses climate change issues when it is revised.

The three Rucker ponds are located approximately 120 feet from the Santa Ynez River and could be susceptible to river flooding associated with extreme rain events. Currently the ponds do not pose a risk of discharging treated wastewater into the river during extreme rain events as no treated wastewater is disposed at the Rucker pond site.

Prior to the discharge of any treated wastewater to the Rucker ponds, this Order requires MHCSO to submit a proposed operation and maintenance program for the Rucker ponds for review and approval by the Central Coast Water Board Executive Officer. Any proposed operation and maintenance program for the Rucker ponds would need to address flooding potential at the site.

#### **A.11 MONITORING AND REPORTING PROGRAM**

45. Monitoring and Reporting Program No. R3-2019-0042 includes additional constituents for the water supply monitoring, influent monitoring, effluent monitoring, groundwater monitoring, and biosolids monitoring.
46. Water Code section 13267(b)(1) states:

*In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region ... shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.*

47. The need for the technical and monitoring reports required by this Order and the attached Monitoring and Reporting Program No. R3-2019-0042 are based on the Report of Waste Discharge and other information in the Central Coast Water Board's files for the facility. The technical and monitoring reports are necessary to ensure compliance with these

waste discharge requirements. The burden, including costs, of providing the technical reports required by this Order bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

#### A.12 GENERAL FINDINGS

48. Discharge to the waters of the state is a privilege, not a right, and authorization to discharge is conditional upon the discharge's complying with provisions of Division 7 of the California Water Code and any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should ensure this and mitigate any potential adverse changes in water quality due to the discharge.

#### A.13 PUBLIC PARTICIPATION

49. On February 11, 2019, the Central Coast Water Board notified the Discharger and interested persons of its intent to issue waste discharge requirements for the discharge and has provided them with a copy of the proposed Order. The Board has also provided them with an opportunity to submit written comments.

50. After considering all comments pertaining to this discharge during a public hearing on May 15-17, 2019, this Order was found consistent with the above findings.

51. Any person aggrieved by this action of the Central Coast Water Board may petition the State Water board to review the action in accordance with Water Code section 13320 and title 23 California Code of Regulations (CCR). sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of this Order at the following address, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

Or by email at [waterqualitypetitions@waterboards.ca.gov](mailto:waterqualitypetitions@waterboards.ca.gov)

For instructions on how to file a petition for review, see  
[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality/wqpetition\\_instr.shtml](http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml)

## B. REQUIREMENTS

**THEREFORE, IT IS HEREBY ORDERED** pursuant to the authority in California Water Code sections 13263 and 13267, MHCSD and its agents and successors shall comply with the following:<sup>8</sup>

The following requirements include superscripts to indicate the source of the requirements. Requirement superscripts are defined as follows:

ROWD = Report of Waste Discharge  
CWC = California Water Code  
BP = Basin Plan (Water Quality Control Plan for the Central Coastal Basin)

Requirements without superscripts are based on Central Coast Water Board staff's best professional judgment.

### B.1 PROHIBITIONS

1. Discharge to areas other than disposal areas shown in Figures 3 and 4 is prohibited.<sup>CWC</sup>
2. Direct or indirect discharge of any waste to surface waters, including overflow, bypass seepage, overspray and runoff from transport, treatment, or disposal systems to adjacent properties, adjacent drainage ways, or to waterways is prohibited.<sup>CWC</sup>
3. Discharge of untreated or partially treated wastewater is prohibited.<sup>CWC</sup>
4. Bypass of the wastewater treatment system and discharge of untreated or partially treated wastes directly to the evaporation/percolation ponds is prohibited.
5. Discharge of wastes other than domestic wastewater is prohibited.
6. Discharge of wastes other than those described in the Findings of this Order is prohibited.<sup>CWC</sup>
7. Discharge or storage of waste in a manner promoting nuisance and vector development is prohibited.
8. Discharge of any wastewater within 100 feet of any domestic, agricultural, industrial or commercial water supply well is prohibited.
9. Discharge to Rucker Ponds is prohibited without an Executive Officer approved operations and maintenance plan (see section B.3 Provisions, Item 32 of this Order).

### B.2 SPECIFICATIONS

#### B.2.1 Effluent Limitations

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<sup>8</sup> General permit conditions, definitions and the method of determining compliance are contained in "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated December 2013, referenced in section B.3 Provisions, Item 33 of this Order.

10. Daily flow averaged over each month shall not exceed 400,000 gpd.<sup>ROWD</sup>
11. Effluent discharged to the disposal system shall not exceed the following limitations (Table 7):

**Table 7 – Effluent Limitations**

Constituent	Units	25-Month Rolling Median	30-Day Monthly Average	Sample Maximum
Biochemical Oxygen Demand (BOD), 5-Day	mg/L	—	80 <sup>A</sup>	120
Total Suspended Solids (TSS)	mg/L	—	80 <sup>A</sup>	120
Settleable Solids	ml/L	---	0.3 <sup>B</sup>	0.5
Total Nitrogen (as N)	mg/L	---	10 (May-Sep) <sup>C</sup>	20 (May-Sep) <sup>C</sup>
		---	15 (Oct-Apr) <sup>C</sup>	30 (Oct-Apr) <sup>C</sup>
Total Dissolved Solids	mg/L	990 <sup>D</sup>	---	1,250 <sup>BP</sup>
Sodium	mg/L	200 <sup>D</sup>	---	250 <sup>BP</sup>
Chloride	mg/L	250 <sup>BP</sup>	---	300 <sup>E</sup>
		<b>Range</b>		
pH	units	less than 6.5 or greater than 8.4 <sup>BP</sup>		

<sup>A</sup> Central Coast Water Board Order No. 84-76 established this effluent limit in 1984 based on four samples collected and analyzed for BOD and TSS.

<sup>B</sup> May 1985 Operation and Maintenance Manual for the MHCSD.

<sup>C</sup> Central Coast Water Board Order No. 97-35 established these effluent limits in 1997 based on six samples collected and analyzed for total nitrogen.

<sup>D</sup> 25-Month rolling median consistent with the 2014/2018 effluent median concentration.

<sup>E</sup> Highest average value derived from MHCSD effluent data for composite samples (Ponds 3-7) from 2014-2017.

### B.2.2 Groundwater Limitations

Groundwater quality is affected by many factors, some unrelated to the discharge. This Order considers these factors and is designed to minimize the influence of the discharge to groundwater.

12. The discharge shall not cause groundwater to contain taste or odor producing substances in concentrations that adversely affect beneficial uses. <sup>BP</sup>
13. The discharge shall not cause concentrations in groundwater downgradient of the disposal area to exceed the median groundwater objectives for the Lompoc Plain sub-basin as set forth in Basin Plan Table 3-6 and shown in Table 8 below:

**Table 8 – Lompoc Plain Sub-basin Median Groundwater Objectives**

Constituent	Units	5-Year Rolling Median <sup>A</sup>
Boron	mg/L	0.5 <sup>BP</sup>
Chloride	mg/L	250 <sup>BP</sup>
Sodium	mg/L	250 <sup>BP</sup>
Sulfate	mg/L	500 <sup>BP</sup>
Total Dissolved Solids	mg/L	1,250 <sup>BP</sup>

Nitrogen as (N)	mg/L	2 <sup>BP</sup>
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<sup>A</sup> Median water quality limitations must be determined using a five-year rolling median with a minimum of 12 sample points.

14. The discharge shall not cause groundwater to contain concentrations of organic chemicals in excess of the maximum contaminant levels for primary drinking water standards specified in CCR, title 22, division 4, chapter 15, article 5.5, section 64444, Table 64444-A. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. <sup>BP</sup>
15. The discharge shall not cause groundwater to contain concentrations of inorganic chemicals in excess of the maximum contaminant levels for primary drinking water standards specified in CCR, title 22, division 4, chapter 15, sections 64431 and 64433.2. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. <sup>BP</sup>
16. The discharge shall not cause groundwater to contain concentrations of radionuclides in excess of the limits specified in CCR, title 22, division 4, chapter 15, Article 5, section 64443. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. <sup>BP</sup>
17. The discharge shall not cause groundwater to contain concentrations of chemical constituents in amounts that adversely affect the agriculture beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-1 of the Basin Plan.

No controllable water quality factor shall degrade the quality of any groundwater resource or adversely affect long-term soil productivity. The salinity control aspects of groundwater management will account for effects from all sources. <sup>BP</sup>

18. The discharge shall not cause a statistically significant increase in mineral constituent concentrations in underlying groundwater, as determined by comparison of samples collected from wells located upgradient and downgradient of the disposal area. <sup>BP</sup>

**B.2.3 System Operations Specifications (e.g., standby power, backup pumps, alarms, etc.)**

19. Power system alarms and lift station alarms shall be serviced on a regular schedule to confirm operation.
20. Backup generator shall be serviced on a regular schedule to confirm operation.

**B.2.4 Solids/Solid Waste Control (Biosolids<sup>9</sup>)**

<sup>9</sup> **Biosolids** - Sewage sludge that has been treated, tested, and meets:

1. The Ceiling Concentration Limits in Table 1 of title 40 Code of Federal Regulations section 503.13;
2. The Class A or Class B pathogen control requirements in title 40 Code of Federal Regulations part 503.32(a) or (b); and
3. One of the Vector Attraction Reduction requirements in title 40 Code of Federal Regulations part 503.33(b)(1—8).

## 21. Sampling Plan

Prior to discharge of accumulated, previously untested biosolids, the Discharger shall develop a representative sampling plan, including number and location of sampling points, and collect representative samples and submit the information to the Central Coast Water Board for Executive Officer review and approval.

Before removal and disposal of sludge begins and before any change in sludge disposal practices (location, process, frequency), the Discharger is to submit all sludge disposal site information to the Central Coast Water Board for Executive Officer review and approval.

## 22. Biosolids Management

- i. The handling, treatment, use, management, and disposal of sludge and solids derived from wastewater treatment must comply with applicable provisions of Clean Water Act section 405 and USEPA regulations at title 40 Code of Federal Regulations parts 257, 258, 501, and 503, including all monitoring, record keeping, and reporting requirements.
- ii. Sludge and wastewater solids must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with title 40 Code of Federal Regulations parts 258 and 503 and title 23, chapter 15 of the CCR. If the Discharger desires to dispose of solids and/or sludge in a different manner, a request for permit modification must be submitted to the USEPA and to the Central Coast Water Board at least 180 days prior to beginning the alternative means of disposal.
- iii. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of title 40 Code of Federal Regulations part 258 pertaining to providing information to the public. In the annual self-monitoring report, the Discharger shall include the amount of sludge placed in the landfill as well as the landfill to which it was sent.
- iv. All requirements of title 40 Code of Federal Regulations part 503 and title 23, chapter 15 of the CCR are enforceable whether or not the requirements of those regulations are stated in an NPDES permit or any other permit issued to the Discharger.
- v. The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.
- vi. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
- vii. The solids and sludge treatment and storage site shall have adequate facilities to divert surface water runoff from adjacent areas to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection, at the minimum, from a 100-year storm and protection from the highest possible tidal stage that may occur.
- viii. The discharge of sewage sludge and solids shall not cause waste material to be in position where it is, or can be, conveyed from the treatment and storage sites and deposited in waters of the State.

- ix. The Discharger shall submit an annual report to the Central Coast Water Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by title 40 Code of Federal Regulations part 503. The Discharger shall also report the quantity of sludge removed from the Facility and the disposal method.

### **B.2.5 Disposal Area**

23. The treatment, storage, and disposal facilities shall be managed to exclude the public and posted to warn the public of the presence of wastewater.
24. Discharge of treated wastewater shall not occur within 100 feet of any water well.<sup>BP</sup>
25. Extraneous surface drainage shall be excluded from all wastewater treatment and evaporation/percolation ponds.<sup>BP</sup>
26. Freeboard shall exceed two feet in all evaporation/percolation ponds and one foot in all treatment ponds. Ponds 1 and 2 are treatment ponds. Ponds 3, 4, 5, 6, 7, 8, 9, and 10 are evaporation/percolation ponds.
27. Any potable water discharge to the Rucker ponds for line maintenance must be reported in quarterly monitoring reports.
28. Prior to discharging wastewater to Rucker ponds, MHCS D must submit a proposed operation and maintenance program for the Rucker ponds for review and approval by the Executive Officer. No discharge of wastewater to Rucker ponds shall occur prior to Executive Officer written approval.

### **B.3 PROVISIONS**

29. The requirements prescribed by this Order No. R3-2019-0042 supersede requirements prescribed by Order No. 97-35, adopted by the Regional Board on October 24, 1997. Order No. 97-35, Waste Discharge Requirements for the MHCS D, is hereby terminated except for enforcement purposes.
30. The Discharger shall comply with Monitoring and Reporting Program No. R3-2019-0042, as specified by the Executive Officer.
31. All reports/documents and laboratory data must be submitted electronically to the State Water Board's GeoTracker database.
32. Within 36 months from the date of adoption of this Order and prior to discharging to Rucker Ponds, MHCS D must submit a proposed operation and maintenance program for the Rucker Ponds for review and approval by the Executive Officer.
33. The Discharger shall comply with all items of "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated December 2013 (and any updates to the Standard Provisions), except Items Provisions, A.6. and General Reporting Requirements, C.8. A copy of Standard Provisions and Reporting Requirements for Waste Discharge Requirements is available electronically at the following link:

[https://www.waterboards.ca.gov/centralcoast/board\\_decisions/docs/wdr\\_standard\\_provisions\\_2013.pdf](https://www.waterboards.ca.gov/centralcoast/board_decisions/docs/wdr_standard_provisions_2013.pdf)

34. A copy of this Order, the MRP, and Standard Provisions shall be kept at the discharge facility for reference by operating personnel. Key operating and site management personnel shall be familiar with their content.
35. The Discharger shall operate and maintain all wastewater facilities in accordance with an Operations Manual for the treatment facility that is subject to the approval of the Executive Officer. The Operations Manual, including expected performance criteria and a copy of as-built plans, shall be kept on site and periodically updated whenever there is a change in operational procedures or an expansion of the system.
36. The Discharger shall properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) to achieve compliance with this Order. Proper operation and maintenance practices include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems and alarms when necessary to achieve compliance with this Order.
37. Wastewater treatment system repairs and expansions shall be made in accordance with the Basin Plan.
38. The Discharger shall take all reasonable steps to prevent any discharge in violation of this Order.
39. The Discharger shall furnish the Central Coast Water Board, within a reasonable time, any information that the Central Coast Water Board may request to determine compliance with this Order.
40. The Discharger shall allow the Central Coast Water Board or its authorized representatives to:
  - a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records pertinent to this permit are kept;
  - b. Inspect and photograph any facilities, equipment (including monitoring and control equipment), practices, or operations pertinent to this Order;
  - c. Have access to and copy any records pertinent to this permit; and
  - d. Sample or monitor for the purposes of assuring permit compliance.
41. All reports or other documents required by this Order, and other information requested by the Central Coast Water Board shall be signed by either a principal executive officer or ranking elected official.
42. Any person signing a document makes the following certification, whether written or implied:

“In accordance with the Standard Provisions and Reporting Requirements, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. “

43. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Executive Officer.
44. This Order does not authorize commission of any act causing injury to the property of another, does not convey any property rights of any sort, and does not remove liability under federal, state, or local laws.
45. Requirements of this Order are severable. If any requirement of the Order is found invalid, the remainder of the Order shall not be affected.
46. The Central Coast Water Board may review this Order at any time and may modify or terminate this Order as appropriate.

#### **B.4 MONITORING AND REPORTING PROGRAM**

47. Monitoring and Reporting Program No. R3-2019-0042 is a part of this Order.
48. The Executive Officer may review the Monitoring and Reporting Program at any time and may modify or terminate the Monitoring and Reporting Program as appropriate.

#### **B.5 ENFORCEMENT**

49. Violations of these waste discharge requirements may result in enforcement actions as authorized under the California Water Code.
50. All technical and monitoring reports submitted pursuant to this Order are required pursuant to section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order or attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer, may subject the Discharger to enforcement action pursuant to section 13268 of the California Water Code.

#### **B.6 EFFECTIVE DATE OF THE ORDER**

51. This Order takes effect upon Central Coast Water Board adoption.

I, John M. Robertson, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region on May 17, 2019.

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John M. Robertson  
Executive Officer



Figure 1 - Location of the Mission Hills Community Service District

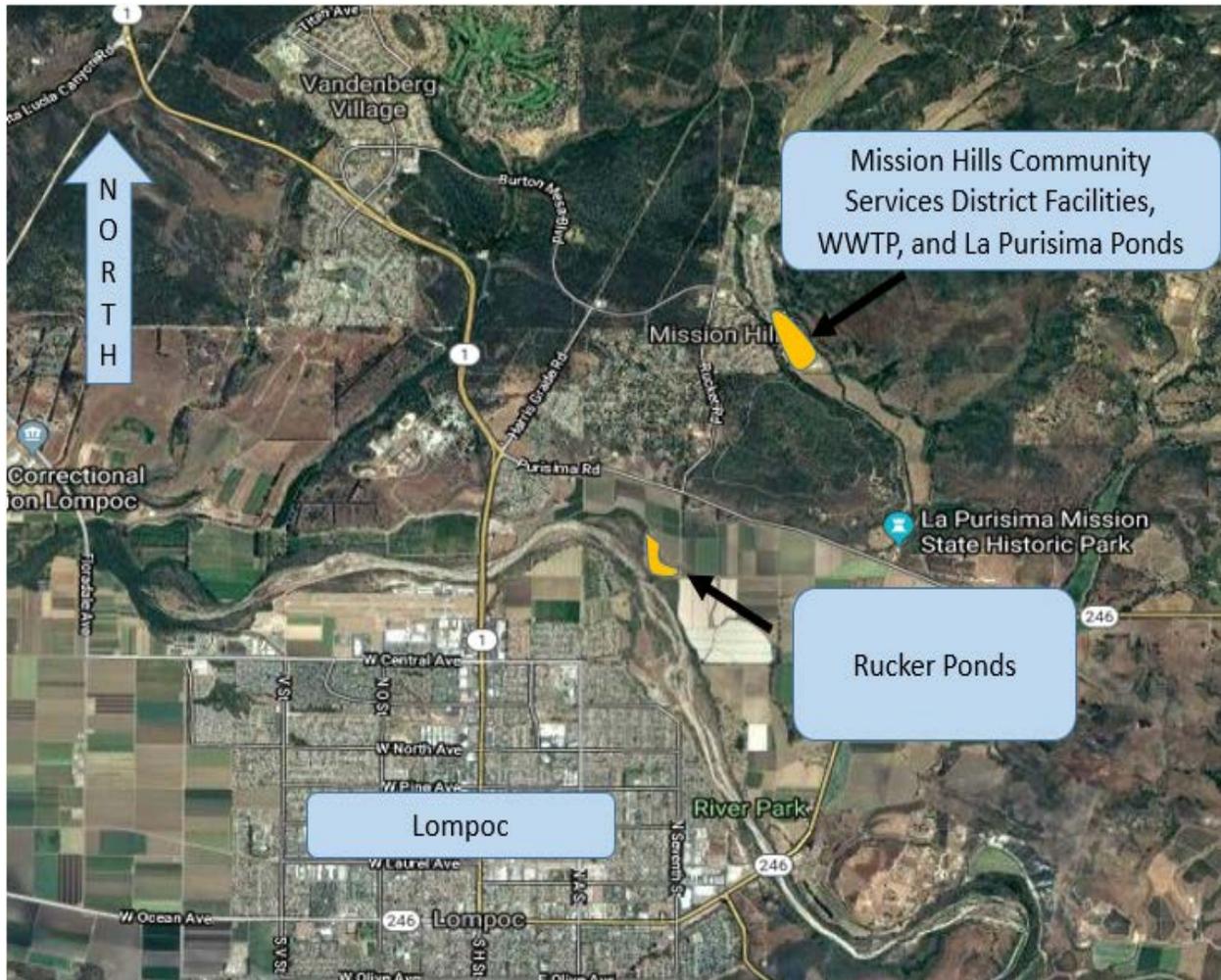


Figure 2 - Location of the Mission Hills Community Service District Facility and Rucker Ponds

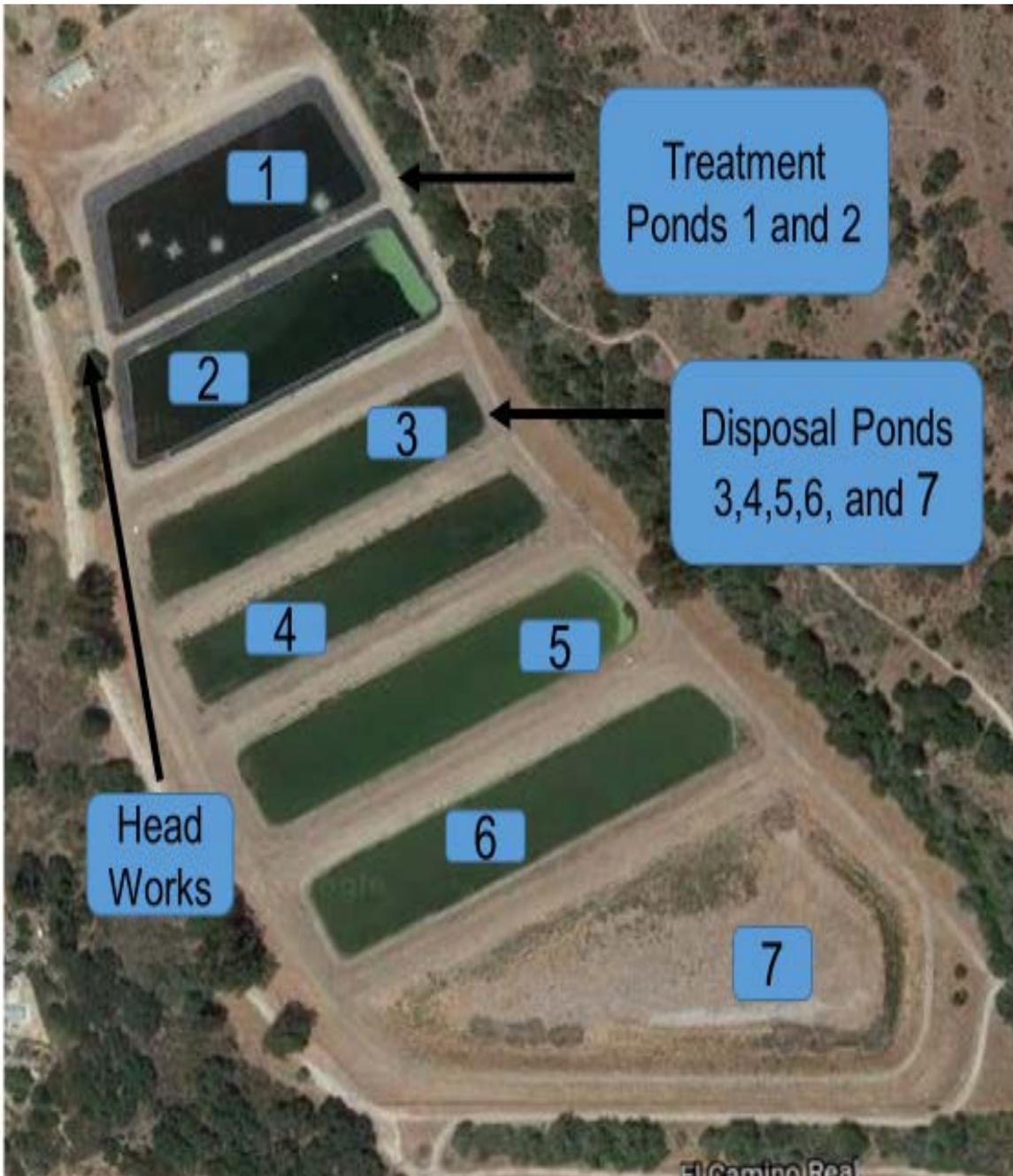


Figure 3 - Mission Hills Community Service District Wastewater Treatment and Disposal System. Treatment Ponds 1 and 2, Disposal Ponds 3, 4, 5, 6, and 7

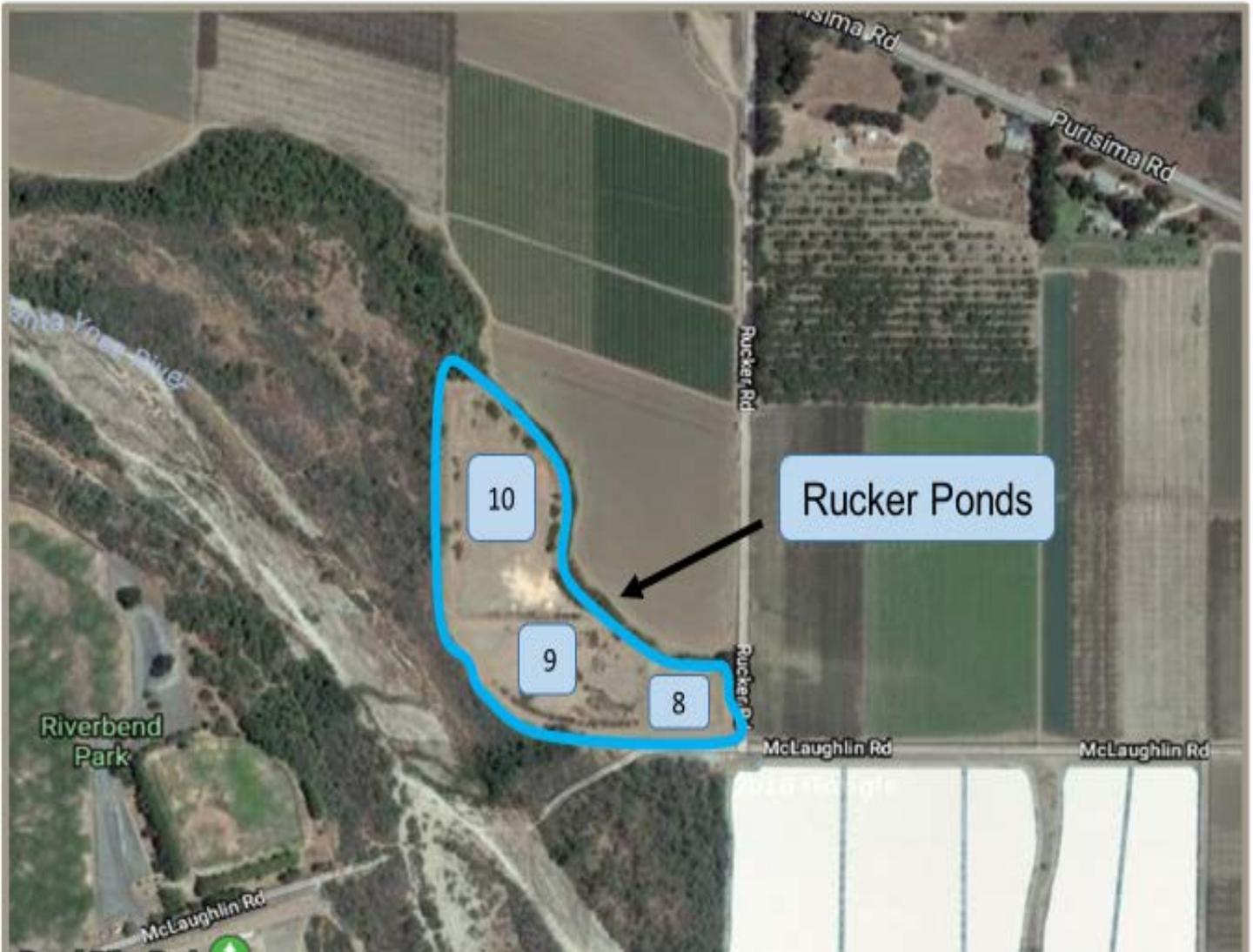
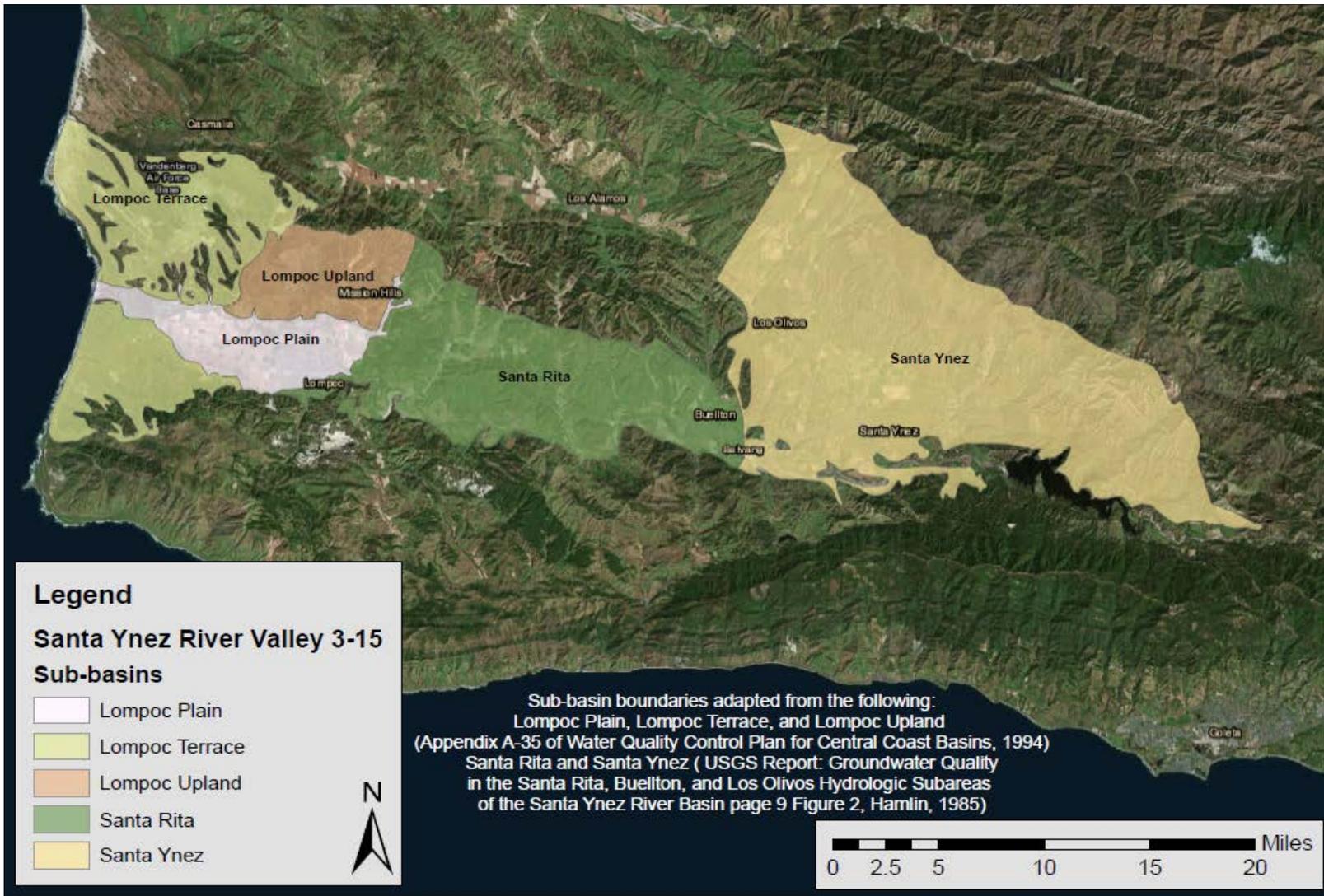


Figure 4 - Mission Hills Community Service District Wastewater Disposal Rucker Ponds 8, 9, and 10



**Figure 5 - Lompoc Plain and Lompoc Upland Sub-Basins**

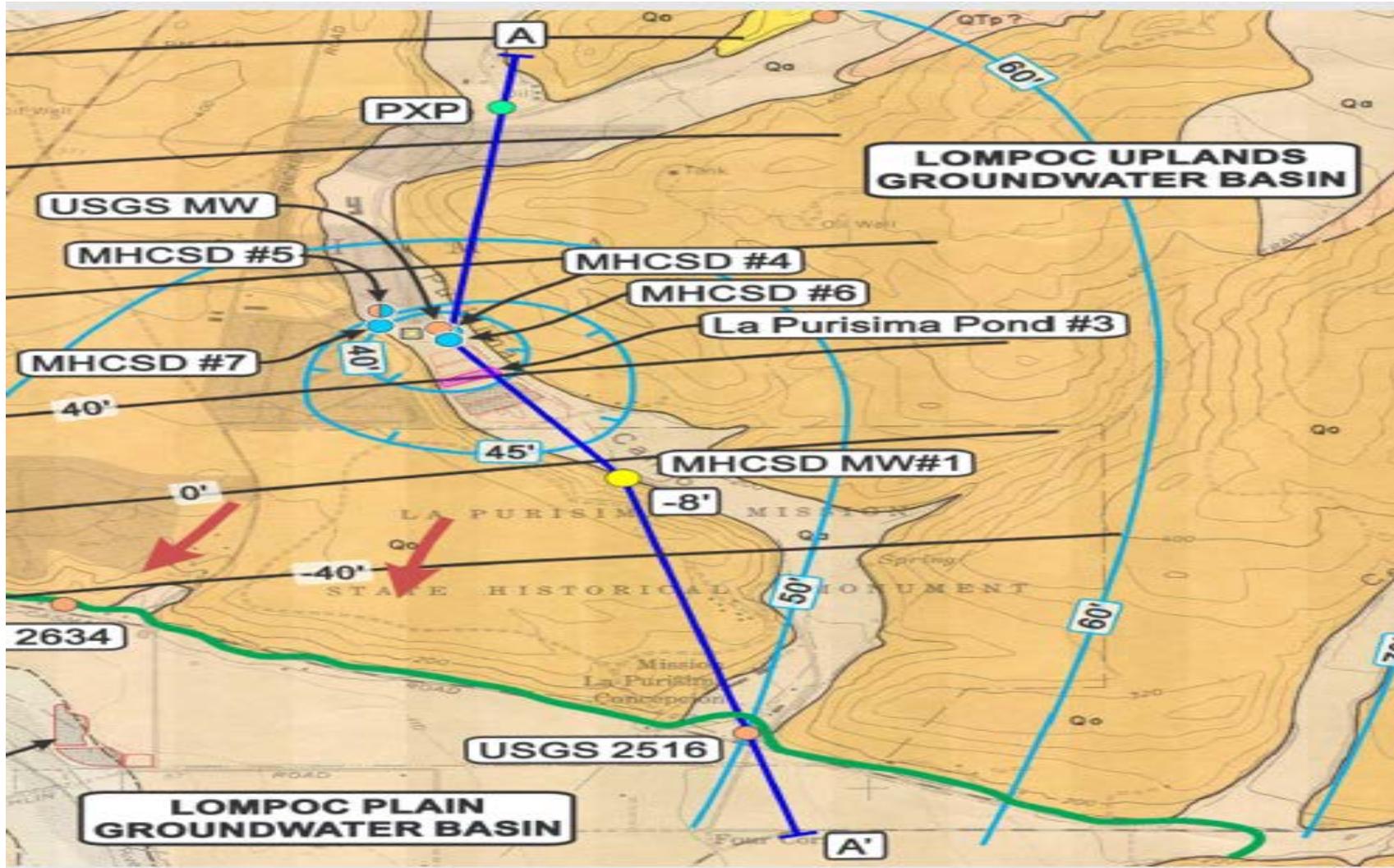


Figure 6 - Cross Section Location, A- A', Location of Mission Hills Community Service District (MHCSD) Water Supply Wells MHCSD #5, #6, and #7, and Location of Groundwater Monitoring Well (MW #1). Red Arrows show the inferred subsurface flow direction

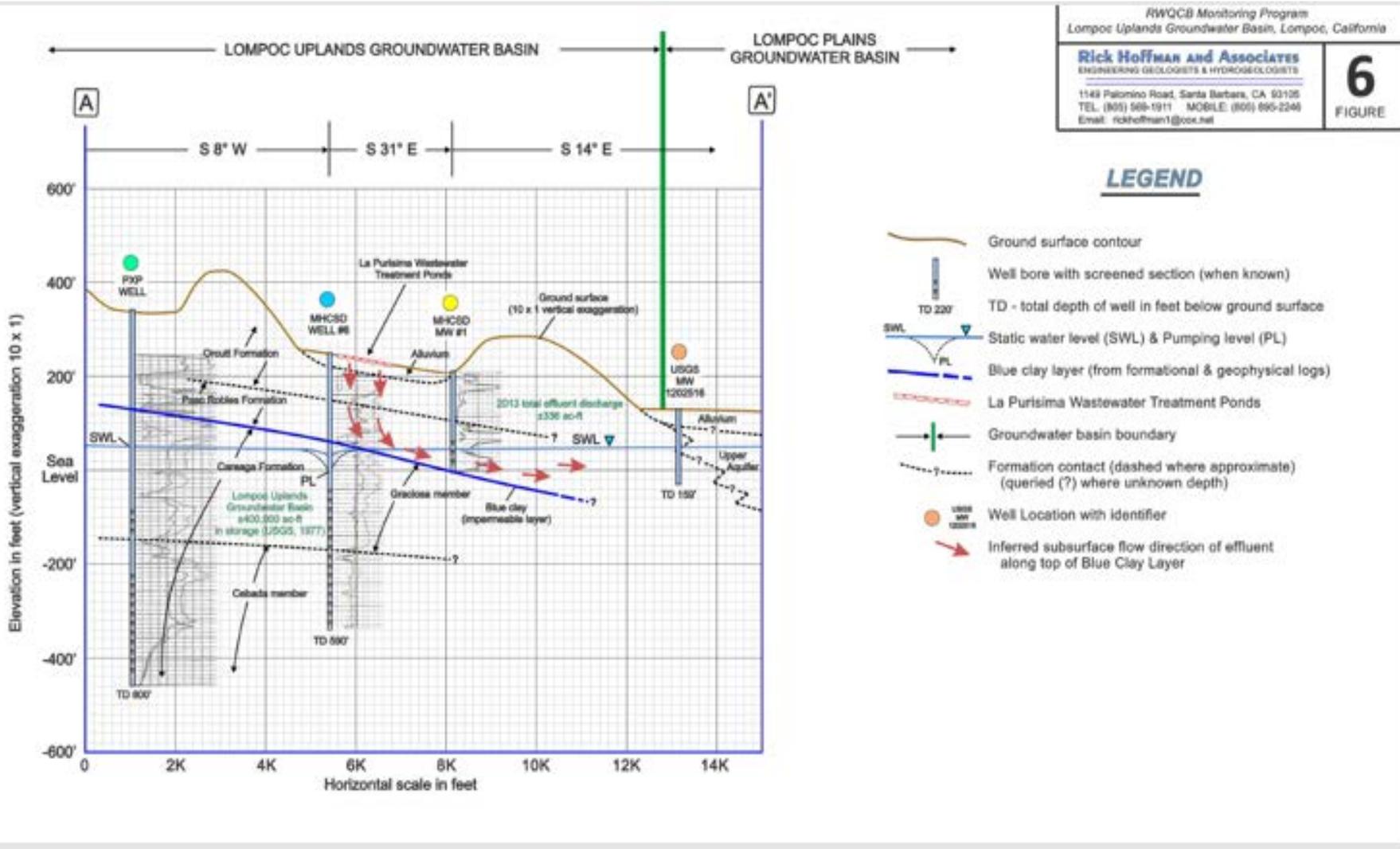


Figure 7 - Cross Section Lompoc Plain Sub-basin (upper basin) and the Lompoc Upland Sub-basin (lower basin)

HEK  
WDR Program  
Charge Code = A32000  
ECM Subject Name = Mission Hills CSD Order No. R3-2019-0042  
ECM/CIWQS Place ID = 240951  
GeoTracker No. = WDR100033210  
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