

REPORT TO CITY COUNCIL

DATE: MARCH 22, 2023

TO: HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL

FROM: NATHAN HAMBURGER, CITY MANAGER

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SUBJECT: UPDATE ON STORM WATER COMPLIANCE

This report serves as an update on several Storm Water Compliance documents and implementation measures. It is meant to serve as a high level update to the City Council regarding the City's efforts across the discipline and to describe how our current plans have come to be.

The Water Quality Act of 1987 added Section 402(p) to the Federal Clean Water Act, requiring the United States Environmental Protection Agency (USEPA) to establish regulations related to storm water discharges. The Clean Water Act authorized the USEPA to permit the State of California as the National Pollutant Discharge Elimination System (NPDES) permitting authority in lieu of the USEPA. In California, regional storm water permits are developed and enforced under Regional Water Quality Control Boards. The City of Agoura Hills is assigned to the Los Angeles Regional Water Quality Control Board – Region 4 (Regional Board) and is located in the Malibu Creek Watershed (MCW). The Regional Board permits Cities for discharges to open waters using Municipal Separate Storm Sewer System (MS4) permits.

On November 8, 2012, the Regional Board adopted the 2012 NPDES Permit for Los Angeles County, the Los Angeles Flood Control District, and 82 of the 86 incorporated cities within Los Angeles. This Permit Order (No. R4-2012-0175) established water quality monitoring requirements for storm water and non-storm water discharges within the coastal watersheds of Los Angeles County

The permit became effective on December 28, 2012, and contains many provisions, including the option to develop integrated planning and monitoring plans to address many of the Permit's water quality and programmatic requirements. The permit was updated in 2021 (Order No. R4-2021-0105), but maintained most of the provisions from the previous permit. The new Permit Order became effective on September 11, 2021.

The City of Agoura Hills teamed up with other MCW agencies who drain to Malibu Creek and were subject to the same Total Maximum Daily Loads (TMDLs). On June 23, 2013 the group submitted a Notice of Intent to the Regional Board electing to develop an Enhanced Watershed Management Plan (EWMP) for the watershed, as a means of MS4 permit compliance. Upon filing the NOI, the "MCW EWMP Group" was formed, consisting

of the Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village, and the County of Los Angeles Public Works Department and Flood Control Districts.

The MS4 Permit, which is a highly complex document, also allows the flexibility to coordinate and streamline monitoring efforts to meet compliance requirements through development of a Coordinated Integrated Monitoring Program (CIMP). The MCW EWMP Group elected to prepare a CIMP in parallel to the development of the EWMP for water quality monitoring and testing, progress on the development of each plan, as well as the development of a Nutrient Study that was born from some of the areas monitoring data, is detailed below.

The MCW EWMP Group currently has a contract with Larry Walker Associates (LWA) for the implementation of the coordinated integrated monitoring program (CIMP), Nutrient Special Study, CIMP Update, EWMP Update, as-needed technical assistance, and reporting associated with the MCW EWMP Group. The City of Agoura Hills acts as the MCW EWMP Group lead, and responsibilities include management and administration of the Group's contracts, agreements, accounting, and authorization of Group submittals to regulatory agencies. Staff represents the group to the Regional and State Boards and their staff, regularly.

The City's fair share for the development of the 2016 EWMP and 2021 EWMP were \$95,783.94 and \$61,468.57 respectively.

The City's total estimated fair share for four years of CIMP implementation and three years of Nutrient Study development is \$736,197.52. It should be noted the cost includes a 10% contingency, and the other EWMP group members contribute a 5% project administrative fee, which is paid to the City for managing the compliance monitoring program. The breakdown of the CIMP and Nutrient Study costs are shown in matrices later in this report.

The City's ongoing NPDES compliance largely consists of MS4 Permit minimal control measure implementation, which includes activities associated with public information and public participation, industrial/commercial facilities, planning and land development, development construction, public agency activities, and illicit discharge detection and elimination management. Additionally, the City's compliance includes water quality monitoring with the MCW EWMP Group and City of Los Angeles, annual and semi-annual reporting to the Regional Board, and implementation of EWMP Projects, funding activities, and coordination with the MCW EWMP Group. The City's NPDES programs cost approximately \$226,000 per year.

General Fund and Measure W local return dollars are used to comply with NPDES, including implementation of the EWMP, CIMP, and Nutrient Study. The City has a contract with Willdan Engineering for assistance with the implementation of its NPDES programs, which include Measure W and Integrated Regional Water Management Plan (IRWMP) funding assistance. These funding program activities include, but are not limited to meeting attendance, technical guidance, and report writing.

EWMP Progress

On April 27, 2016, the MCW's first EWMP was approved by the Regional Board. The document outlined best management practices (BMPs) and implementation measures for the watershed to meet water quality objectives. The report used a Watershed Management Modeling System (WMMS) to distribute the BMPs and included both financial and adaptive management strategies describing how the EWMP could be modified in response to monitoring data, changes in regulations, and updated modeling results.

In July 2019, the EWMP group embarked on a EWMP update and corresponding reasonable assurance analysis. These documents were submitted to the Regional Board as a Watershed Management Plan (WMP) on June 30, 2021, per the requirements of the 2021 NPDES Permit. The Regional Board submitted comments on February 6, 2023, and staff will submit a final WMP to the Regional Board on April 6, 2023.

The elements of the updated document that closely affect the City of Agoura Hills include:

- 1) An update to the EWMP's reasonable assurance analysis (RAA) was completed
 - a. This effort used the latest version of the Watershed Management Modeling System (WMMS2) to more accurately model water quality in the MCW.
 - b. This effort will guide the selection of watershed control measures and associated implementation costs.
 - c. An updated inventory of watershed control measures was included in the EWMP.
- 2) The City removed Reyes Adobe Park from EWMP.
 - a. The removal of this project was found beneficial as an alternative project was identified with fewer environmental impacts and greater financial viability.
- 3) The City added the following projects to the EWMP:
 - a. Citywide Low-flow Diversion Project for dry weather compliance and;
 - b. Lindero Canyon Capture Facility for wet weather diversion.
- 4) Overall, the City is expected to construct a combination of Regional Projects, Low Impact Development, and Regional Green Streets.
 - a. 2021 EWMP: totals 35.73 acre feet BMP capacity and with an approximate implementation cost of \$38.01 million.
 - b. 2016 EWMP: totaled 37.8 acre feet and \$85.23 million approximate implementation cost
 - c. This results in a reduced cost of implementation by nearly \$50 Million Dollars.

CIMP Progress

The CIMP was approved by the regional board on January 21, 2016, and outlined the testing and monitoring requirements of the watershed. On April 13, 2016, the City Council approved a Memorandum of Understanding (MOU) with the other MCW EWMP group agencies, to define fair share costs for the implementation of the monitoring. In addition

to the shared costs, it was agreed that the City of Agoura Hills (City) would administer the CIMP on behalf of the MCW EWMP group.

On October 23, 2019, the City Council approved a new MOU which included estimated costs for monitoring over the next four years (through June 2023). The implementation of the CIMP is budgeted at \$3 Million across all MCW EWMP agencies. A breakdown of the CIMP annual costs as approved on June 9, 2021, is shown below.

Estimated CIMP Costs

Agency	Acres	Percent of Area	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23
County of Los Angeles	19,228	58.3%	\$427,191.86	\$622,192.21	\$324,003.66	\$325,871.40
City of Agoura Hills	5,178	15.7%	\$99,765.40	\$145,305.34	\$102,527.63	\$110,003.24
City of Calabasas	4,941	15.0%	\$94,567.21	\$137,734.32	\$98,466.75	\$105,888.64
City of Westlake Village	3,540	10.7%	\$66,317.00	\$96,588.74	\$71,982.99	\$77,955.94
City of Hidden Hills	105	0.3%	\$2,139.26	\$3,115.77	\$1,962.86	\$2,061.40
LA County Flood Control District	-	-	\$36,314.78	\$52,891.39	\$31,523.36	\$32,725.30

The City accepts, as revenue, the fair share of the other agencies, including a small administrative fee, and pays Larry Walker and Associates (LWA) for the ongoing monitoring and testing program.

The CIMP was recently updated, pursuant to the MS4 permit requirements, and submitted to the Regional Board on Monday, March 13, 2023. It is worthwhile to mention that a new MOU will need to be put into place by July 1, 2023, in order to continue the region's mandated monitoring, consistent with the MS4 permit.

Nutrient Study Progress

The MS4 Permit and TMDLs developed for the MCW require that the MCW EWMP group address sources of nutrients to minimize nuisance algae and improve stream ecosystem condition, as represented by benthic macroinvertebrates. The EWMP identified the water volumes that need to be treated or retained in order to achieve compliance and determined that meeting these requirements are a primary driver of implementation costs.

Studies existing at the time of EWMP preparation indicated that natural sources of nutrients exist in the MCW and that these sources may make compliance with TMDL and Permit requirements unattainable in some areas. Studies also indicated that addressing nutrients may not result in the intended improvements for stream ecosystems and that

requirements designed to protect Malibu Lagoon may no longer be needed following restoration.

Based on this information, the MCW EWMP Group determined that it would be prudent to conduct a special study (the Nutrient Study) to further explore these new findings. The goal of the Nutrient Study is to support changes to the TMDL and permit that would set realistic goals for the watershed and allow the MCW EWMP Group to more effectively and efficiently address concerns relating to algae and stream ecosystem condition.

To accomplish this, the nutrient study has undertaken the following steps:

- 1) Completion of a literature review to understand relevant studies conducted in the MCW, southern California, and elsewhere.
- 2) Compilation and synthesis of data and reports from historic and existing monitoring programs in the MCW.
- 3) Analysis of available data to investigate:
 - a. Drivers of stream ecosystem condition (as represented by benthic macroinvertebrates)
 - b. Impacts of geologic (Monterey-Modelo Formation) impacts on nutrient concentrations
 - c. Conditions in Malibu Lagoon following restoration and whether the Lagoon is impacted by sediment and nutrients from upstream
- 4) Identification of recommended TMDL and permit changes that may be appropriate based on the findings of the previous steps and that would support more effective and efficient implementation.
- 5) Identification of an approach to gathering additional information needed to support the recommended changes.

The October 2019 MOU, for cost sharing of the CIMP implementation, also included the Nutrient Study described above, in order to fully consider the attainability of the numerical limits required by the MCW Nutrient and Benthic Community TMDLs.

The Nutrients Study cost-share was based on a combination of a flat fee and a weighted cost formula that takes into consideration the land uses within each agency's high, medium, and low nutrient contribution risk areas. On June 9, 2021, the First Amendment to the MOU redistributed overall costs between agencies based on adjusted land use categorizations, and maintains LACFCD's fixed 5% cost contribution per the original MOU.

A breakdown of the Nutrient Study annual costs as approved on June 9, 2021, is shown below.

Fiscal Year Invoicing for Nutrient Study

Agency	FY 2019/20	FY 2020/21	FY 2021/22	Total
County of Los Angeles	\$849,881.88	\$0	(\$24,672.57)	\$825,209.31
City of Agoura Hills	\$53,720.38	\$107,440.76	\$117,434.77	\$278,595.91
City of Calabasas	\$51,827.96	\$103,655.92	\$114,119.50	\$269,603.38
City of Westlake Village	\$40,782.42	\$81,564.84	\$85,666.19	\$208,013.45
City of Hidden Hills	\$21,845.37	\$43,690.73	\$43,804.36	\$109,340.46
LA County Flood Control District	\$17,797.50	\$35,595.00	\$35,595.00	\$88,987.50

The first phase of the nutrient study was completed in late 2022, and the modeling predicts that nutrient targets are unattainable even if all urban loading were to be removed. The study also found that nutrients and algae are not likely to be the primary cause of lower stream ecosystem condition scores, and further, that sediment and nutrients from the watershed are not impacting Malibu Lagoon.

Representatives from LWA, the City of Agoura Hills, and the Regional Board met on January 30, 2023, to review the findings of the first phase and are currently in discussions for the appropriate next steps. The proposed schedule for numerical TMDL modifications to be approved by the State Board and USEPA is shown below.

Color Code: Additional Monitoring; Development of Technical and Regulatory Documents; Applicable Water Board-led Processes

Type	2022		2023				2024				2025				2026			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Finalize Phase 1 Report and Planned Phase 2 Actions			✓															
Additional Monitoring: Reference Reach nutrients, CSCI, and algae								✓										
Additional Monitoring: CSCI Expectations in Developed Landscapes and Modified Channels																		
Prepare Draft Basin Plan Amendment and supporting Technical Report								✓				✓						
Evaluation of Modifications to Watershed Management Program																		
Regional Board TMDL Modification Adoption Process																		
State Board/USEPA Approval Process																		
Compliance Deadline: WLAs for MS4s in Los Angeles County ^[1]																		

✓ Key milestones and check in point with Regulatory Agencies, Stakeholders, and/or Technical Advisors to seek input and feedback on the Study and the development of technical and regulatory documents.

[1] The final deadline for compliance with WLAs is 7/15/2026 for MS4 Permittees in Los Angeles County. An extension may be considered during the TMDL modification, if warranted.

In conclusion, the MS4 permit is highly complex. The entire MCW EWMP group has diligently worked to stay within compliance, to prepare and submit required monitoring and planning documents prior to deadlines, and to openly and assertively discuss the regional challenges presented by the permit to the Regional Board and its staff. The City's leadership, as well as the leadership of all of the cooperating agencies is commended for their investment of the time and resources to the improvement of our watershed.

RECOMMENDATION

Staff respectfully submits this information for the City Council's records, and welcomes any questions or comments.