STAFF REPORT

Meeting Type:	Planning Committee/Board of Directors
Title:	2025 Public Health Goals Triennial Report
From:	Paul Sellier, Director of Water Resources
Through:	Ben Horenstein, General Manager
Meeting Date:	October 28, 2025

TYPE OF ITEM: Approve X Review and Comment

RECOMMENDATION: Conduct public hearing to review and comment on the Public Health Goal Report

SUMMARY: Over the past three years, Marin Municipal Water District's drinking water has continued to meet or exceed all state and federal drinking water health standards. The Public Health Goals Report, published every three years, is a brief, written report in plain language that gives information on the detection of any contaminants above the Public Health Goals (PHGs) published by the California's Office of Environmental Health Hazard Assessment (OEHHA). The report must also list the detection of any contaminant above the Maximum Contaminant Level Goals (MCLGs) set by United States Environmental Protection Agency (U.S. EPA) for all other contaminants until such time as OEHHA has published PHGs for those contaminants.

The Public Health Goals Report differs from the Annual Water Quality Report (also referred to as the Consumer Confidence Report), the latter of which summarizes regulatory drinking water standards established by the U.S. EPA and/or California State Water Resources Control Board (SWRCB). PHGs and MCLGs are not regulatory standards, they are distinct from enforceable regulations like Maximum Contaminant Levels (MCLs) because they are based solely on health risk and do not consider technological or economic feasibility. Hexavalent chromium and *E. coli* were detected at levels below the regulatory standard (MCL) but exceeded the PHG and/or MCLG.

DISCUSSION: The California Health and Safety Code Section 116470(b) requires public water utilities with more than 10,000 service connections to prepare a brief written report every three years if a regulated drinking water contaminant is detected with levels that exceed the Public Health Goal (PHG) or the Maximum Contaminant Level Goal (MCLG). Both PHGs and MCLGs are the level of a chemical contaminant in drinking water that does not pose a significant risk to health and are non-enforceable. PHGs and MCLGs are not regulatory standards, they are distinct from enforceable regulations like Maximum Contaminant Levels (MCLs) because they are based solely on health risk and do not consider technological or economic feasibility. The State Water Resources Control Board

(SWRCB) sets drinking water standards for contaminants as close to the corresponding PHG or MCLG as is economically and technologically feasible. In some cases, it may not be feasible for SWRCB to set the drinking water standard for a contaminant at the same level as the PHG because the technology to treat the contaminant may not be available, or the cost of treatment may be very high. The SWRCB must consider these factors when developing drinking water standards. PHGs are established by the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA), and MCLGs are health-based goals adopted by the U.S. EPA. This report is unique to California, and only contaminants with established primary drinking water standards and a PHG and/or MCLG as of December 31, 2024 are addressed in this report.

Maximum Contaminant Levels (MCLs) are enforceable drinking water standards established by the United States Environmental Protection Agency (USEPA) and/or California State Water Resources Control Board (SWRCB) and are set at conservative levels to provide protection to consumers. MCLs are required to be set at levels as close to the corresponding PHGs as technically and economically feasible, with the primary focus on protection of public health. PHGs and MCLGs, unlike MCLs, do not take into account the practical risk-management factors, including analytical detection capability, treatment technology availability, benefits and cost.

The District last prepared a Public Health Goal Triennial Report in 2022 for the prior three-year period. The
2025 Public Health Goal Triennial Report covers contaminants detected in the District's water supply during the 3-year period of January 1, 2022 through December 31, 2024 where the detected level of a contaminant exceeded the corresponding PHG or MCLG.

E. coli

From 2022 through 2024, the District collected an average of 152 Total Coliform/*E.Coli* samples a month, with a total of 5,478 samples collected over the 3 year period. Of these, one sample tested positive for *E.coli*. Follow-up resampling was negative for *E.Coli*, and therefore did not exceed the regulatory Maximum Contaminant Level (MCL). It is likely that the sample was inadvertently contaminated during the sample collection process.

The MCL for *E.Coli* was not exceeded as the follow-up investigation and sampling did not confirm the initial positive result. Therefore, no violation of the MCL for *E.Coli* occurred. OEHHA does not have an established PHG for *E.Coli*. The MCLG for *E.Coli* is zero (0). Exceeding zero *E.Coli* bacterial one time in the three-year period does not indicate the need for changes in the treatment process or other corrective action as there can be an occasional positive due to sampling or analytical error.

The District has already implemented Best Available Technology as outlined in California Code of Regulations Title 22, Section 64447 to achieve compliance with the *E.Coli* MCL. These practices include disinfection and filtration of source water, maintenance of disinfectant residual throughout the distribution system, and maintenance of the distribution system, such as pipe replacement and repairs, flushing the distribution system, having a cross-connection program and maintaining positive pressure in the distribution system.

Hexavalent Chromium

Hexavalent chromium is a heavy metal that is found naturally occurring throughout the environment in rocks, plants, soil, and volcanic dust, and the major sources of hexavalent chromium in drinking water are erosion of natural deposits, transformation of naturally occurring trivalent chromium by natural processes and human activities such as discharges from electroplating factories, leather tanneries, wood preservation, chemical synthesis, and textile manufacturing factories. The MCL for hexavalent chromium is 10 micrograms per liter (ug/L) and went into effect in California on October 1, 2024. The PHG for hexavalent chromium in drinking water is set at 0.02 ug/L. The category of health risk for hexavalent chromium is carcinogenic. Carcinogenic risk means capable of producing cancer. Cancer risk at the PHG level is one excess cancer case per million population and, at the California MCL, is five excess cancer cases per ten thousand population, where the water is consumed daily for 70 years.

During the calendar years 2022 through 2024, the District collected annual compliance samples at the San Geronimo Treatment Plant (SGTP) Clearwell Effluent (CWE), Bon Tempe Treatment Plant (BTTP) CWE, and Ignacio Pump Station, which are considered entry points to the distribution system. A summary of hexavalent chromium results is shown in Table 1. Hexavalent chromium values for SGTP ranged from 0.15 to 0.41 ug/L. Values for BTTP ranged from 0.13 to 0.18 ug/L. Hexavalent chromium values for Ignacio Pump Station ranged from 0.38 to 0.5 ug/L.

Table 1: Summary of Hexavalent Chromium Detected

Sample Location	PHG (ug/L)	MCL (ug/L)	DLR (ug/L)	Detected Range (ug/L)	Average Detected Value (ug/L)
San Geronimo Treatment Plant	0.02	10	0.1	0.15 – 0.41	0.3
Bon Tempe Treatment Plant	0.02	10	0.1	0.13 – 0.18	0.16
Ignacio Pump Station	0.02	10	0.1	0.38 - 0.5	0.42

DLR: Detection Limit for purposes of Reporting

The Best Available Technology (BAT) for removal of hexavalent chromium to levels at or below the MCL of 10 ug/L are reduction/coagulation/filtration, ion exchange, and reverse osmosis. For hexavalent chromium, the BAT is demonstrated to reduce the level to below the MCL, not the PHG. Verifying additional reduction (lower than the detection limit) is not possible, therefore, cost estimates would be highly speculative and possibly misleading. No changes to the treatment process are planned.

Summary

The District's drinking water quality meets all federal and state drinking water standard. The levels of constituents identified in this report are significantly below the MCLs established by EPA to provide safe drinking water.

ENVIRONMENTAL REVIEW: Not applicable.

FISCAL IMPACT: None.

ATTACHMENT(S):

1. Table of MCLs, DLRs, and PHGs for Regulated Drinking Water Contaminants (ACWA 2025/SWRCB, November 2024)