



(760) 878-0001  
FAX: (760) 878-2552

P.O. Box 337  
135 South Jackson Street  
Independence, CA 93526  
WEB: <http://www.inyowater.org>

## COUNTY OF INYO WATER DEPARTMENT

May 20, 2021

Ryan Smith, P.G., C.Hg  
VP Resource Management and Regulatory Compliance  
CG Roxane LLC  
1210 South Highway 395  
PO Drawer A  
Olancha CA 93549

Subject: Recommendation for reduced water quality monitoring according to the GMMRP for Crystal Geyser Roxanne, Cabin Bar Ranch, Inyo County, California

Dear Mr. Smith,

The Inyo County Water Department (ICWD) has reviewed TEAM's bi-monthly groundwater monitoring report for January-February 2021 which recommended reduced water quality monitoring for the Cabin Bar Ranch Project's EIR in Olancha. Over the previous five years, we have been pleased with the monitoring and reporting by the consultants in compliance with the Groundwater Monitoring, Mitigation and Reporting Plan (GMMRP) for this project. Sections 6 and 9 of the GMMRP allow the ICWD to review the monitoring program two years after the start of pumping for the project and consider recommendations from the monitoring team for future monitoring requirements. The ICWD has ultimate authority in any decision to revise the monitoring and reporting to comply with the GMMRP. This letter contains the ICWD decision regarding monitoring requirements.

During the three-years of implementation, project pumping has increased from 155 acre-feet per year (AF/yr) in 2018-19, to 263 AF/yr in 2019-20, to 279 AF/yr in 2020-21. The project's maximum allotment is 360 AF/yr, yet it is a positive indication that no triggers contained in the GMMRP have been met. Because the annual amount of pumping could increase in the future,

groundwater and biological monitoring for the project should continue to assess the long-term effects of the project.

Water level trends in project monitoring wells have a seasonal pattern along with a response to varying annual runoff. Based on present trends there is no immediate threat of exceeding a groundwater level drawdown trigger. The dataloggers over the last five years in the 14 monitoring wells (CMW-2, MW-3, P-10, P-15, PAT-1, OW-7u, OW-7m, OW-8us, OW-9u, OW-10u, RP-1, and SS-1A) have been reliable, recording multiple groundwater level reads per day with minimal drift over time from the manual measurements. In October 2020, the ICWD recommended that the manual DTW reads and reports be reduced to bi-monthly (six visits per year) with CGR staff providing pumping totalizer reads during the months TEAM is not onsite. The manual water level measurement procedures, the transducer logging interval, and the procedure to correct for transducer drift are sufficient and should continue at this bi-monthly interval.

Given the hydrologic setting of the project, the water quality triggers must be carefully monitored and understood to identify and prevent impacts from brine migration caused by pumping. The water quality sampling methods and data collected by the consultants are sound. Baseline water quality data were collected in 2016, and quarterly samples have been collected from the first quarter (Q1) of 2018 through Q1 2021.

TEAM's recommendation for semi-annual groundwater quality sampling is based on trend analysis conducted on specific water quality constituents of concern showing no potential trigger exceedances for a predicted three-year period through Q1 2024 and few statistically significant increasing trends. Groundwater constituent concentrations have varied during the past three years; likely in response to annual runoff ranging from 50% to 200% of long-term averages. Notable increases in TDS and other constituents occurred in a few wells in early 2020, but concentrations declined to more levels similar to 2018-2019 levels in subsequent sampling events. Peak constituent concentrations during the year have been observed most often in the second or fourth quarter sampling events. Given the lack of significantly increasing constituent trends and the ability to detect maximum concentrations in Q2 or Q4 sampling events, ICWD agrees with TEAM's recommendation that semi-annual water quality monitoring is consistent with the GMMRP and will protect groundwater-related resources. ICWD would like the semi-annual events to occur in second and fourth quarters, approximately mid May-June and October-November periods beginning in May-June of 2021.

If either groundwater level or quality data trends change, Inyo County reserves the right to continue to adaptively manage the project and increase groundwater level or quality monitoring if deemed necessary.

The Water Department recommends no changes to the biological monitoring procedures and schedule in the GMMRP.

If you have any questions please contact the Water Department at 878-0001.

Sincerely,

A handwritten signature in blue ink that reads "Aaron S". The signature is written in a cursive style and is positioned above a horizontal line.

Aaron Steinwand, Ph.D,  
Water Director  
Inyo County Water Dept.

Cc: Richard Shore, TEAM Engineering