



MEMORANDUM

TO: City Council

FROM: Bill Robeson, Assistant City Manager/Public Works Director

BY: Shane Taylor, Utilities Manager

SUBJECT: Calendar Year 2022 Water Supply and Demand Update

DATE: January 24, 2023

SUMMARY OF ACTION:

The update reports the City's total water supply and demand for Calendar Year 2022. Current Lopez Reservoir level and projected levels are provided in the attachments.

IMPACT ON FINANCIAL AND PERSONNEL RESOURCES:

Approximately two (2) hours of staff time is required to prepare the report.

RECOMMENDATION:

Receive and file the Calendar Year 2022 Water Supply and Demand Update.

BACKGROUND:

On October 12, 2021, the City Council adopted a Resolution declaring a Stage 1 Water Shortage Emergency, and implementing emergency water conservation measures and restrictions as a result of the extreme drought conditions.

In 2022, the City's water use was 1,994.1 acre-feet with an overall per capita use of 99 gallons per day/per person. The residential per capita use was 79 gallons per capita per day.

ANALYSIS OF ISSUES:

The United States Drought Monitor, as of January 12, 2022, shows San Luis Obispo County in a moderate drought. Rainfall for Calendar Year 2022 was 11.1 inches at the Corporation Yard rain gauge. Lopez Lake, as of January 12, 2023, is at 44.9% capacity (22,156 acre-feet of storage).

The new water year began on April 1, 2022, and the City's annual Lopez contract supply is 2,290 acre-feet. On August 24, 2021, the San Luis Obispo County Board of Supervisors (Board) enacted the Low Reservoir Response Plan (LRRP) for Lopez Lake. On September 8, 2021, the Zone III Technical Advisory Committee endorsed the action of

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reducing contract deliveries by 10%. The City began reducing the flow of Lopez Lake deliveries on September 15, 2021, to 1.9 million gallons per day, compared to the normal flow of 2.2 million gallons per day.

On July 21, 2022, the Zone III Advisory Board approved the Technical Advisory Committee's recommendation to reduce contract deliveries by 20% prior to Lopez Lake reaching 10,000 acre-feet. As a result, the City began reducing the flow of deliveries on July 26, 2022 to 1.7 million gallons per day. Current deliveries from the Water Treatment Plant are at 1.3 million gallons per day. The ground water deliveries in 2022 were 172.1 acre-feet. The Santa Maria Basin provided 170.3 acre-feet and the Pismo Formation provided 1.8 acre-feet. The water entitlement from the Santa Maria Basin is 1,323 acre-feet per year and the Pismo Formation can provide 160 acre-feet per year.

The deep well index for the First Quarter of 2023 has been delayed due to recent storm events and will be completed after access to all of the monitoring wells is returned.

The recent rainfall has raised Lopez Lake from 22% to 45% full, however the LRRP remains in effect, along with Stage 1 Water Shortage emergency reductions. The projected water use for the City in calendar year 2023 is 2,100 acre-feet based on current rainfall.

ALTERNATIVES:

Not applicable at this time.

ADVANTAGES:

This report provides the City Council and the public with the current and projected conditions of our water supply and demand.

DISADVANTAGES:

No disadvantages noted at this time.

ENVIRONMENTAL REVIEW:

No environmental review is required for this item.

PUBLIC NOTIFICATION AND COMMENTS:

The Agenda was posted at City Hall and on the City's website in accordance with Government Code Section 54954.2.

Attachments:

1. Lopez Monthly Operations Report for December 2022
2. Lopez Reservoir Storage Projection
3. Yearly Water Use Comparison
4. Monthly Monitoring Report for December 2022