

MEMORANDUM

TO: City Council

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

BY: Shane Taylor, Utilities Manager

SUBJECT: Monthly Water Supply and Demand Update

DATE: March 22, 2022

SUMMARY OF ACTION:

The update reports the City's total water supply and demand for February, 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 monthly Water Supply and Demand Report.

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 February, the City's water use was 155.2 acre-feet with a per capita use of 102 gallons per day/per person. There was a total of 0.10 inches of rainfall in the City in February, 2022.

ANALYSIS OF ISSUES:

The United States Drought Monitor, as of March 7, 2022, shows San Luis Obispo County in a moderate drought. Rainfall to date for the period July 1, 2021, through February 28, 2022, is 7.33 inches at the Corporation Yard rain gauge. Lopez Lake, as of March 7, 2022, is at 29.4% capacity (14,516).

The new water year began on April 1, 2021, and the City's annual Lopez contract supply was 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.

Item 8.f.

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On September 8, 2021, the Zone III Technical Advisory Committee endorsed the action of 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. Currently, the deliveries from the Water Treatment Plant are at 1.6 million gallons per day. In addition, the City has 1,323 acre-feet of ground water entitlement from the Santa Maria Basin, and wells within the Pismo Formation that produce approximately 160 acre-feet per year. The first quarter monitoring for the Santa Maria Basin sentry wells was completed on January 4, 2022. The deep well index was 9.36 feet above sea level, which is 1.86 feet higher than the deep well index threshold value of 7.5 feet and 0.08 feet higher than the index value one year ago. The recent rainfall in December did raise Lopez Lake from 28% to 30% full, however the LRRP remains in effect, along with Stage 1 water shortage emergency mandatory reductions. The projected water use for the City of Arroyo Grande for water year 2021/22 is 2,300 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:

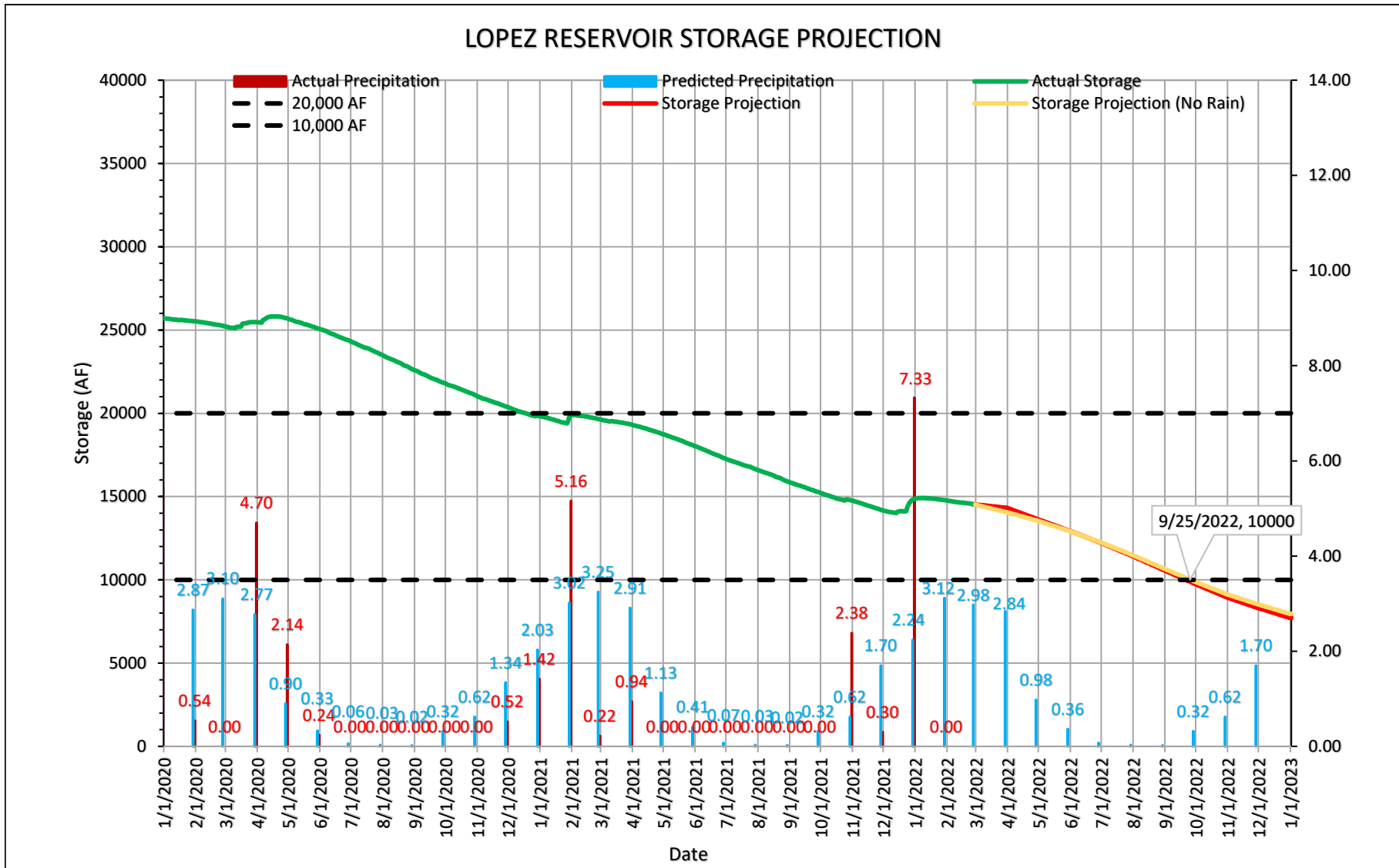
No environmental review is required for this item.

PUBLIC NOTIFICATION AND COMMENTS:

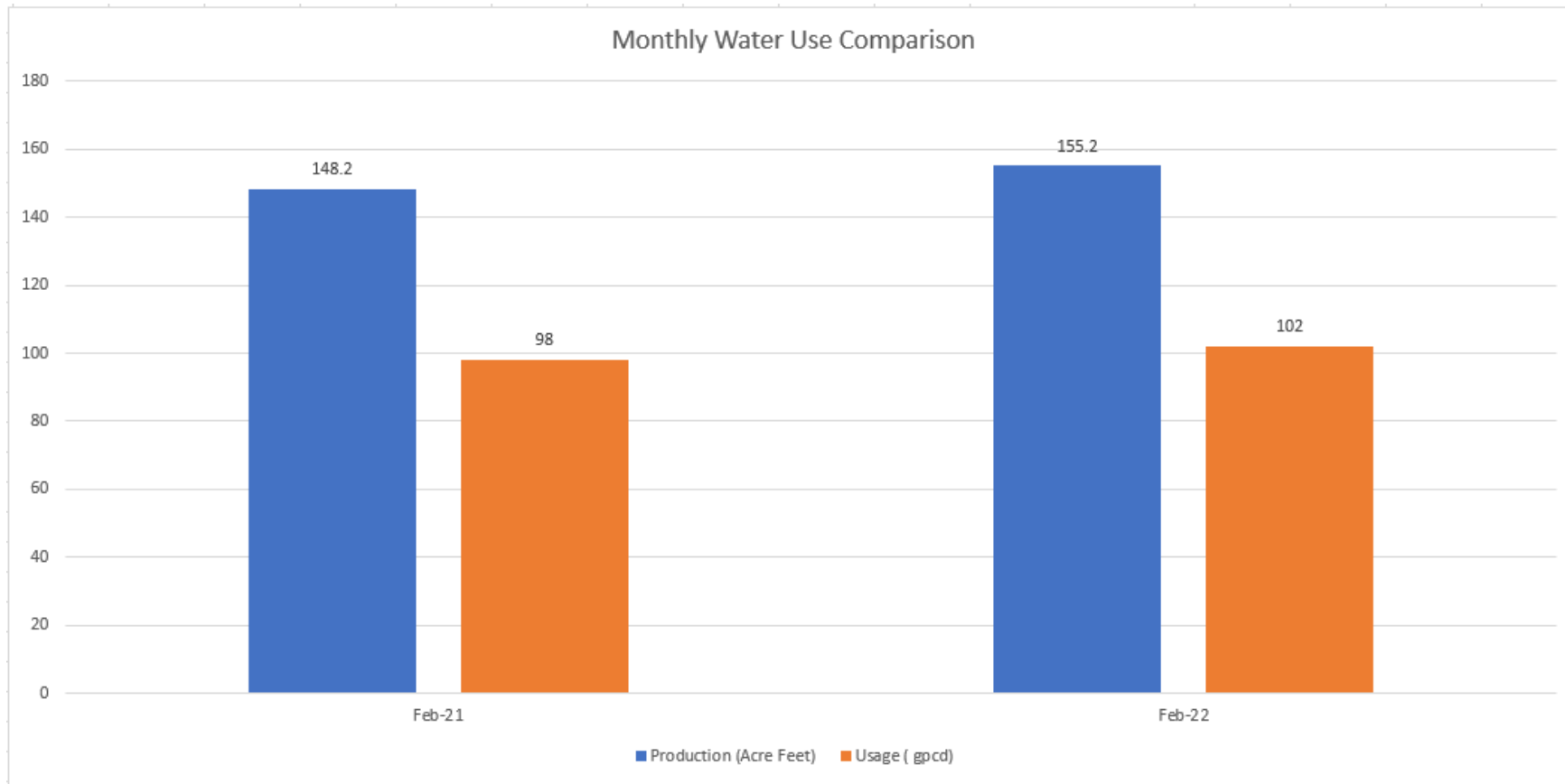
The Agenda was posted at City Hall and on the City's website in accordance with Government Code Section 54954.2

Attachments:

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



1. Storage projection is based on predicted rainfall from longrangeweather.com, inflow based on predicted rainfall, 20-21 downstream release requests, and municipal usage.
2. Municipal Usage is based on Jan 2010- Dec 2020 average monthly deliveries.
3. Predicted inflow is based off of historical precipitation and storage data. Antecedant moisture conditions are factored into the model. The first rainstorms after months without rain will cause less inflow than rainstorms during the rainy season. If the average daily rainfall for the previous three months is below 1 inch the model will multiply the predicted inflow by 0.1, if the average is above 1 inch the inflow is multiplied by 1.25.



Below is the information you have submitted for the month of February 2022. We use your most recently submitted monthly report in our calculations

Reporter	Shane Taylor
Urban Water Supplier(Number)	Arroyo Grande City of (608)
Public Water System ID(s)	CA4010001
Reporting Month	0222
County/Counties	San Luis Obispo
County Under Drought Declaration	Yes
Water Shortage Contingency Plan	1
Water Shortage Level	Yes
Population	17641
Total Potable Water Production	155.2 AF
Commercial Agricultural Water	0 AF
Residential Use Percentage	80 %
CII Water	17.1 AF
Recycled Water	0 AF
Non-revenue Water	AF
Estimated R-GPCD	81.91
Qualification	
Emergency Response Section Revealed?	Yes

State Water Resources Control Board Office of Research, Planning & Performance