



MEMORANDUM

TO: City Council

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

BY: Shane Taylor, Utilities Manager

SUBJECT: 2023 Annual Report for the Northern Cities Management Area

DATE: August 27, 2024

RECOMMENDATION:

Receive and file the 2023 Northern Cities Management Area (NCMA) Annual Report.

IMPACT ON FINANCIAL AND PERSONNEL RESOURCES:

Expenditures associated with the 2023 Annual Report in the amount of \$106,600 are budgeted in the Water Fund, which is paid as part of water rates.

BACKGROUND:

A 2008 California Superior Court Judgment After Trial (Judgment) adjudicated the rights to the Santa Maria River Groundwater Basin (SMRGB) to various parties. That ruling established three management areas within the SMRGB, including the Northern Cities Management Area (NCMA), the Nipomo Mesa Management Area (NMMA) and the Santa Maria Valley Management Area (SMVMA). The City of Arroyo Grande is part of the NCMA, along with the Cities of Grover Beach, Pismo Beach, and the Oceano Community Services District. Further, the Judgment mandated that “a monitoring program be established in each of the three Management Areas to collect and analyze data regarding water supply and demand conditions,” and an annual report be filed with the court within 120 days after the end of each calendar year.

In 2009, a technical group of the NCMA jurisdictions was formed to meet on a monthly basis to coordinate water sampling and preparation of the annual report required by the Court’s ruling in the SMGB Adjudication. The NCMA Technical Group (NCMA TG) jointly selects consultants to provide engineering and water resource technical services in order to meet the Court ordered requirements for the Santa Maria River Groundwater Basin, as well as for overall water resource planning.

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The 2005 Stipulation for the Santa Maria River Groundwater Basin Adjudication, later affirmed in the 2008 Judgment, requires that each of the monitoring areas identified in the adjudication develop a monitoring program that is sufficient to determine:

- Land and water uses in the basin;
- Sources of supply to meet those uses;
- Groundwater conditions (including water levels and water quality);
- Amount of disposition of developed water supplies; and
- Amount of disposition of other sources of water supply in the NCMA.

The Stipulation additionally requires that each of the Management Areas prepare an annual report, to be submitted to the Court, which summarizes the results of the monitoring program, changes in groundwater supplies, and any threats to groundwater supplies.

In 2009, the NCMA TG selected Todd Engineers to initiate the NCMA monitoring program which included collection of water quality samples from coastal sentry wells, and to begin development of the 2009 NCMA Annual Report. GEI Consulting Engineers and Scientists performed the monitoring and prepared reports for 2010-2012, Fugro Consultants for 2013-2015, and GSI since 2016; all of which have been successfully submitted to the court.

Through the NCMA TG, member agencies work together to manage the SMRGB and meet the annual reporting requirements of the Judgment. The 2023 NCMA Annual Report, prepared by GSI Water Solutions, Inc. (GSI), was filed with the Court in April 2024 after being reviewed by the City's special water counsel.

ANALYSIS OF ISSUES:

The NCMA TG is currently facilitated by Water Systems Consulting, Inc. (WSC). Together, the NCMA TG and WSC hired GSI to compile the data gathered during quarterly groundwater monitoring and to create the 2023 NCMA Annual Report. A copy of the full report is provided in Attachment 1 and is available for public viewing at the Arroyo Grande Public Works Corporation Yard, 1375 Ash Street, and on the [City's website](#). The following list is a summary of the report's highlights and important information.

1. During 2023, water elevations generally increased throughout the NCMA.
2. The total water used in the NCMA in 2023 (surface, State water, groundwater, and other water), including applied irrigation and private pumping by rural water uses, was 7,403 Acre Feet (AF) compared to 8,577 AF in 2020, and is summarized below in **Table 1**. Total groundwater pumping was 2,697 AF, which is 28% of the "available" groundwater entitlement.

Table 1: Total Water Used in the NCMA in 2023 in Acre-Feet (AF)

	Lake Lopez	State Water	Ground Water	Other Supplies	Total
Arroyo Grande	1,867	0	69	0	1,936
Grover Beach	793	0	373	0	1,162
Pismo Beach	433	1,037	39	0	1,509
OCSD	400	176	53	0	629
Total Urban Use	3,493	1,213	534	0	5,240
Applied Irrigation	0	0	2,045	0	2,045
Rural Water Users	0	0	80	0	80
Non-potable irrigation by Arroyo Grande	0	0	38	0	38
Grand Total Used	3,493	1,213	2,697	0	7,403

3. During 2023, there were no indications of seawater intrusion.
4. Rainfall for the 2023 calendar year was approximately 150% of the long-term average rainfall, with 23.75 inches of rain.
5. In 2023, the Deep Well Index started above the trigger valve with an index value of more than 9 feet in January. The index valve continued to climb through early April, peaking at over 12 feet, and then generally declined through early September, reaching a low point just over 10 feet. Since September 2023, the index valve has increased steadily, finishing the year at 12 feet.
6. Groundwater levels in the Basin increased in 2023, which represents a net increase in groundwater storage. This increase from April 2022 to April 2023 was approximately 3,610 Acre-Feet compared to 270 Acre-Feet the previous year. This is the largest single-year increase in groundwater storage since tracking began in 2016.
7. There still is a reduction of subsurface inflow to the NCMA due to the pumping depression near Black Lake Canyon in the NMMA. This has caused the development of a landward gradient in the southern portion of the NCMA, which creates conditions that could result in seawater intrusion.

ALTERNATIVES:

The following alternatives are provided for the Council’s consideration:

1. Receive and file the 2023 NCMA Annual Report; or
2. Provide other direction to staff.

ADVANTAGES:

The NCMA Annual Report is required by the Judgment entered in the Santa Maria Groundwater Adjudication and includes important monitoring information pertinent to the City’s groundwater supply.

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DISADVANTAGES:

No disadvantages have been identified.

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. NCMA 2023 Annual Report