



City Council Agenda Item

City Council Meeting Date: June 15, 2021

TO: Jim Throop, City Manager

FROM: Kristin Worthley, Administrative Analyst
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SUBJECT: Adoption of Resolution No. 6422(21) Adopting the 2020 Urban Water Management Plan and Water Shortage Contingency Plan

Recommendation:

Staff recommends that the City Council hold a public hearing and adopt Resolution No. 6422(21), which adopts the 2020 Urban Water Management Plan and Water Shortage Contingency Plan and authorizes the Utilities Director or designee to file the Plan with the Department of Water Resources (attached).

Background:

The City prepared the Urban Water Management Plan (UWMP) to evaluate the current water supply and delivery systems and to plan for current and future water use trends in the community, describe the sources of water supply and the water system, and document the water demand management measures in place to balance supply and demand through the year 2045. The purpose of the UWMP is to evaluate long-term resource planning and establish management measures to ensure adequate water supplies are available to meet existing and future demand. The UWMP provides a framework to help water suppliers maintain efficient use of urban water supplies, promote conservation programs and policies, ensure that sufficient water supplies are available for future beneficial use and provide a response mechanism during drought conditions or other water shortages. New legislation in 2018 created a Water Shortage Contingency Plan (WSCP) mandate replacing the water shortage contingency analysis under former law and California Water Code. The purpose of the WSCP is to document the process used by the City to anticipate water supply disruptions and describe how the City intends to address a water shortage.

The UWMP and WSCP were prepared in accordance with the Urban Water Management Planning Act (Act). The Act is defined by California Water Code sections 10610 through 10657. The Act was codified with the passage of Assembly Bill 797 during the 1983-1984 regular session of the California legislature. The Act requires every urban water supplier that provides water for municipal purposes to more than 3,000 connections, or supplies more than 3,000 acre-feet of water annually, to adopt and submit a UWMP and WSCP

every five years to the California Department of Water Resources (DWR). Subsequent assembly bills have amended the Act. As the City had approximately 9,800 active water connections and supplied 4,100 acre-feet of water to its customers in calendar year 2020, it is subject to the Act.

The City's 2020 UWMP includes the following sections: Introduction, Plan Preparation, System Description, Water Use Characterization, SBX 7-7 Baseline and Targets, Water Supply Characterization, Water Service Reliability and Drought Risk Assessment, WSCP, and Demand Management Measures. The WSCP is included as a chapter of the UWMP but is a stand-alone document that can be adopted and amended separately from the UWMP.

The UWMP and WSCP must be submitted to DWR by July 1, 2021

Discussion:

Some of the significant differences between the 2015 UWMP and the 2020 UWMP are listed below:

- Section 5 of the UWMP discusses required per capita water reduction. Senate Bill X7-7 (SB7) was incorporated into the Act in 2009. SB7 requires all water suppliers to increase water use efficiency with the overall goal to decrease per-capita water consumption within the State by 20% by the year 2020. The 2010 and 2015 UWMPs determined the City's 2020 target of 117 gallons per capita per day (GPCD). The City met its 2020 target with a 2020 compliance usage of 86 GPCD. Based on water use trends and water supply projections, the City is expected to meet or exceed the projected water use targets by maintaining the current conservation strategy and programs.
- Section 7 of the UWMP discusses the City's water supply reliability during three climate related water scenarios: normal water year, single dry water year, and five consecutive dry years. This section has been updated since the 2015 UWMP. The climate related water scenarios are defined by DWR as follows:
 - Normal Year: A year, or an averaged range of years that most closely represents the median water supply available to the agency.
 - Single Dry Year: The single dry year is the year that represents the lowest water supply available to the agency.
 - Five-consecutive Dry Years: The multiple dry years is the time period that represents the lowest average water supply availability to the agency for a consecutive multiple year period (five years or more).

The available supplies during a normal year are based on an analysis of historical well production records, static well levels and pump performance. Section 7 of the

UWMP demonstrates that the City's supplies are consistently above projected demands, even during multiple-dry year conditions.

- Section 8 of the UWMP is the Water Shortage Contingency Plan (WSCP). This section was substantially revised and will require the City Council to adopt the WSCP in addition to the UWMP. The City's current WSCP was originally adopted in 1992 and updated in 2010. The current WSCP consists of mandatory water waste prohibitions in all four stages. The WSCP also consists of voluntary water conservation for Stage 1 to achieve up to 15% reduction; and mandatory reduction through block tiered pricing and the use of the City's water conservation programs and strategies to achieve up to 30% reduction for Stage 2, up to 40% reduction for Stage 3, and up to 50% reduction for Stage 4. The WSCP was updated in 2010 to include additional emergency equipment and procedures that the City would use in an emergency.

In response to the severe drought of 2012-2016, new legislation in 2018 created a WSCP mandate replacing the water shortage contingency analysis under former law. While overlapping aspects of the prior law, the new requirements have several prescriptive elements a Supplier's WSCP must now include, such as:

- Key attributes of its Water Supply Reliability Analysis conducted pursuant to Water Code Section 10635 [Water Code Section 10632(a)(1)];
- Six standard water shortage levels corresponding to progressive ranges of up to 10%, 20%, 30%, 40%, and 50% shortages and greater than 50% shortage [Water Code Section 10632 (a)(3)(A)];
- Locally appropriate "shortage response actions" for each shortage level, with a corresponding estimate of the extent the action will address the gap between supplies and demands [Water Code Section 10632 (a)(4)];
- Procedures for conducting an annual water supply and demand assessment with prescribed elements. Under Water Code Section 10632.1, urban water Suppliers are required to submit, by July 1 of each year, beginning in the year following adoption of the 2020 UWMP, an annual water shortage assessment report to DWR [Water Code Section 10632 (a)(2)];
- Communication protocols and procedures to inform customers, the public, and government entities of any current or predicted water shortages and associated response actions [Water Code Section 10632 (a)(5)];
- Monitoring and reporting procedures to assure appropriate data is collected to monitor customer compliance and to respond to any state reporting requirements [Water Code Section 10632(a)(9)];
- A reevaluation and improvement process to assess the functionality of its WSCP and to make appropriate adjustments as may be warranted [Water Code Section 10632(a)(10)];

The 2020 proposed WSCP describes five stages of water shortage levels that may be invoked during water supply shortages. A fifth shortage level for a greater than 50% shortage was added to the previous four to address new requirements. If the supplier's water shortage levels do not correspond with the six standard levels,

then a crosswalk between the supplier’s levels and the standard levels is required for compliance. The crosswalk between the City’s five levels and the standard water shortage levels is shown in Figure 8.1 below.

CITY OF LOMPOC SHORTAGE LEVEL	PERCENT SHORTAGE RANGE		STANDARD WSCP LEVEL	PERCENT SHORTAGE LEVEL
1	0 - 15%	→	1	10%
2	15 - 30%	→	2	20%
3	30 - 40%	→	3	30%
4	40 - 50%	→	4	40%
5	>50%	→	5	50%
		→	6	>50%

Figure 8 1. Water Shortage Levels Crosswalk

Each stage includes a water reduction objective, conditions and percent of shortage, which may vary based on the nature of the water supply shortage. A combination of shortage response actions would be used to reduce the water shortage in the event of water shortages.

Declarations of water supply shortage conditions may occur periodically after evaluation by City staff and the approval by the City Council. The respective water supply condition dictates the degree at which water shortage response actions are implemented at any particular time in the City. Shortage response actions proposed in the WSCP may be selected for implementation in any combination deemed necessary to address the assessed water shortage.

Fiscal Impact:

Development of the 2020 UWMP and WSCP and the current programs described in the 2020 UWMP and WSCP are a part of the City’s normal operation and are included in the City’s Water Utility Division budget. Three possible future water projects are discussed in the UWMP: drilling of deeper wells to provide the City with an additional source of water; integrated facilities operations within the Lompoc groundwater basins of the City, Mission Hills Community Services District, and Vandenberg Village Community Services District to supply water during emergencies or water supply interruptions, and indirect potable reuse of the City’s recycled water to augment the City’s water supply. These project costs have not been determined; however, if staff recommends these projects in the future, they will be brought to the City Council as part of future budget requests for approval.

Conclusion:

Resolution No. 6422(21) adopts the City’s Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). The City’s 2020 UWMP and WSCP are

available on the City website, and hard copies are available in the public lobby of City Hall, located at 100 Civic Center Plaza, Lompoc, California 93436.

Respectfully submitted,

Kristin Worthley, Administrative Analyst

APPROVED FOR SUBMITTAL TO THE CITY MANAGER:

Charles Berry, Utility Director

APPROVED FOR SUBMITTAL TO THE CITY COUNCIL:

Jim Troop, City Manager

Attachment: Resolution No. 6422(21)