



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: December 15, 2020

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Enhanced Urban Water Management Plan Update and Draft Water Supply Recommendations

RECOMMENDATION: That Council:

- A. Receive an update on the supply planning analyses and recommendations for the Enhanced Urban Water Management Plan; and
- B. Provide policy direction on the draft water supply recommendations.

DISCUSSION:

Background

The Enhanced Urban Water Management Plan (EUWMP) will replace the City's 2011 Long Term Water Supply Plan and meet California Department of Water Resources (DWR) requirements for its 2020 Urban Water Management Plan. Since commencing the project in February 2020, the project team has completed a significant amount of the analyses and planning for the EUWMP. Major work efforts include: development of projected water demands through 2050, analysis of the City's existing water supply portfolio and its performance under potential future risks, and analysis of potential future themed water supply portfolios. The in-depth analyses were used to create an adaptive water supply and management plan for the next 30 years. The State-mandated deadline for submission of the Urban Water Management Plan to DWR is July 1, 2021.

This report and accompanying presentation provide a broad summary of the EUWMP work effort, including results, and making recommendations for the City's future water supply. The attached supplemental report provides more details of the work effort. More detailed summaries of all aspects of the analytical work performed to date, including seven different technical memorandums on topics including cost basis, State Water Project supplies, groundwater management, climate change/Lake Cachuma/Gibraltar Reservoir, demand projections, communication and engagement, and the future portfolio analysis, can be found on the EUWMP project website: www.SantaBarbaraCA.gov/WaterVision.

Stakeholder Engagement

The EUWMP development included a deliberate and inclusive approach to community involvement and transparency that aligns with the City's One Water approach to water management. A goal of the stakeholder engagement process, branded "Water Vision Santa Barbara" (WVSB), is to engage a diverse group of water users and uses within the community in the planning process. To achieve this goal, an appointed group of community leaders representing the diverse issues, challenges, needs, and uses of water within the City were invited to participate in five virtual stakeholder workshops.

To date, results of the stakeholder engagement efforts have directly informed the EUWMP. The Five Pillars of Water Vision Santa Barbara (Five Pillars), developed by the WVSB stakeholder group, directly inspired future water supply portfolio themes for evaluation, as well as the evaluation criteria for the future portfolio analysis. The Five Pillars are:

1. The cost of water is affordable, equitable, and just.
2. Access to water is reliable and resilient.
3. Minimize the impact of water decisions on the environment and community.
4. The community's water is valued and conserved.
5. Our water decisions responsibly support quality of life.

Example portfolio themes inspired by The Five Pillars include Maximize Reliability, Minimize Cost, Minimize Environmental Impact, and Maximize Local Control.

All members of the public were encouraged to participate in Water Vision Month during October by attending Lunch and Learn presentations, watching self-paced videos on the project webpage, and recording their thoughts and ideas on the project's Social Pinpoint ideas board. Detailed information on the WVSB stakeholder group workshops and Water Vision Month resources are on the project's website: www.SantaBarbaraCA.gov/WaterVision.

Existing Portfolio Analysis

The first major EUWMP work effort was analyzing the City's current water supply. The analyses found that the City's current water supply adequately meets demands under current supply/demand conditions. However, the analyses concluded that the City's ability to meet demands during extended droughts becomes increasingly challenging as demands increase and/or supplies are reduced because of threats or risks. The EUWMP includes several near term recommendations specific to the City's water supplies. Please refer to the attached supplemental report for the complete list of recommendations.

Future Portfolio Analysis

The final major EUWMP work effort was to develop and analyze a diverse range of water supply portfolios, nine portfolios in total, using a triple bottom line (TBL) approach. A TBL analyses is a broadly accepted method for measuring a portfolio's performance against social, environmental, and financial criteria. In summary Portfolio 8 scored the highest in the TBL analysis and was the best performing new future supply portfolio. This option was one of three options that looked to optimize the best attributes of the City's diverse water supply options. Portfolio 8 is an adaptive management approach that prioritizes the

City leveraging water conservation and the City's current supplies in a scenario where demands have significantly increased, or existing supplies have been diminished before considering expansion of the Desal Plant to 5,000 acre-feet per year (AFY). Portfolio 7, which included potable reuse, also scored well, but given the lack of regulations and higher costs, it is recommended to re-evaluate potable reuse when the plan is next updated and regulations have been established. The EUWMP includes an Adaptive Implementation Plan, which outlines supply/demand triggers and corresponding next-steps to guide the City with adapting to future water supply and demand changes.

Water Supply Policy Recommendation

In addition to identifying the best performing new water supply portfolio for the City that balances all three TBL criteria – social, environmental, and financial - the EUWMP makes recommendations to help ensure the City can adapt to future changes in water supply conditions. One notable recommendation supported by results of both the existing portfolio analysis and the future portfolio analysis is to change desalination operations from an emergency/drought supply to a regular element of the City's water supply portfolio, whereby desalination would serve as a drought preparedness, drought response, and drought recovery supply. The desal plant would not necessarily operate each year. Rather, the desal plant would be put into standby mode in the event that the proposed minimum water reserve thresholds are met, allowing the City to remain strongly positioned to meet demands, even in a dry year. Using desalination in this new manner would bolster the City's ability to prepare for a drought and sustain through an extended drought by optimizing the use of the City's other water sources. Although the EUWMP looks at the City's water supply needs for the next 30 years, it is recommended that the EUWMP be revisited every 10-15 years to ensure the recommendations reflect the current state of the City's water supplies and demands, as well as the climate and current regulations.

Water Commission

Water Commission held two work sessions on the EUWMP on November 12 and 19, 2020. Commissioners highlighted that water supply planning needs to continue to be an adaptive management approach, whereby the City would actively work to minimize the need for future desal expansion through optimization of existing supplies and demand reductions through conservation efforts. They also noted that the portfolios with Potable Reuse scored well, but the lack of available regulations and the steep cost should be revisited in the next EUWMP update.

Next Steps.

In January 2021, the Water Commission will receive a presentation and will be asked to provide final policy feedback on the future portfolio analysis and triple bottom line analysis. In February 2021, Council will receive a similar presentation and will be asked to provide final policy direction. This policy direction will form the basis for the drafting of the Urban Water Management Plan, which will be brought to Council in May 2021 for review, and again in June 2021 for adoption, to meet the July 1, 2021 DWR due date.

ATTACHMENT: Enhanced Urban Water Management Plan Supplemental Report

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APPROVED BY: City Administrator's Office