



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: June 14, 2011

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Adoption Of Long Term Water Supply Plan And Urban Water Management Plan

RECOMMENDATION: That Council:

- A. Hold a Public Hearing regarding adoption of the City's updated Long-Term Water Supply Plan (LTWSP) and the 2010 update of the City's Urban Water Management Plan (UWMP);
- B. Adopt the City's updated LTWSP as the policy basis for management of the City's water supply for the period through approximately 2030; and
- C. Adopt and authorize the Public Works Director to transmit the City's updated UWMP to the California Department of Water Resources, such adoption to include modifications as may be approved by the Public Works Director to ensure compliance with State UWMP requirements, provided that any such modifications are not inconsistent with the updated LTWSP.

DISCUSSION:

Over the past two years, staff and the Water Commission have conducted an extensive assessment of the City's water supply in conjunction with the City's *Plan Santa Barbara* process to update the General Plan. This analysis has been used to support the *Plan Santa Barbara* process, and also as the basis for updating the City's 1994 Long Term Water Supply Program, and the State mandated update of the City's UWMP. The updated LTWSP is written as a policy document to inform and guide management of the City's water supply through 2030. The updated UWMP fulfills California Water Code requirements mandating certain reporting obligations and, most recently, specific water conservation targets. Key issues addressed in the plans are summarized below and discussed in depth in the LTWSP.

Water Supply and Demand Projections: From a water supply perspective, a conservative current demand estimate of 14,000 acre-feet per year (AFY) of total potable and recycled water production was used, based on the range of demands over the past five years. A 10% safety margin was added to this for unanticipated supply

shortfalls or demand increases. The result is a water supply target of 15,400 AFY. While the supply perspective is appropriately conservative on the high side, the demand perspective aims to determine our best estimate of actual future customer demand. This has important implications for revenue management and compliance with mandated water conservation targets enacted into law by the Water Conservation Act of 2009. A sophisticated demand management model was used to analyze the City's customer base, the ongoing effects of plumbing codes and appliance standards, and savings from a cost effective package of water conservation measures that essentially matches the current City Water Conservation Program. The model projects that the City is on target to meet the State water conservation targets, while minimizing the need to develop additional water supplies. Staff expects increased conservation over the next twenty years to offset demand from new development.

Drought Planning and the Role of Desalination: Supply planning is modified to manage water supplies in anticipation of a six-year drought, rather than the historical five-year period. This recognizes the potential for longer duration droughts as a result of climate change and aims to reduce costs by deferring the need to reactivate the desalination facility until the sixth year of a critical drought period, rather than the fifth year under prior planning assumptions. Banked water, primarily resulting from available State Water in excess of planned deliveries, and water purchases are identified as potential means of deferring desalination reactivation. In a declared drought, demand reductions of up to 15% will be required to cost effectively manage the infrequent critical drought period through extraordinary conservation measures on the part of our customers.

Sedimentation Management at Reservoirs: The ongoing effect of sedimentation at local reservoirs is recognized. An updated sedimentation management study at Gibraltar Reservoir is planned, along with implementation of the "pass through" provisions of the 1989 Upper Santa Ynez River Operations agreement. The City will promote development of a long term strategy to minimize sedimentation at Lake Cachuma in conjunction with Cachuma Project Member Units, as well as State and Federal agencies.

Groundwater Management: The important role of groundwater is recognized as an annual contribution to supply, for use in offsetting depleted surface supplies during drought, and as an emergency supply source in the event of sudden loss of deliveries from the Santa Ynez River. Modeling will be used to minimize seawater intrusion, assess potential new well locations, and investigate recharge opportunities. Development of a groundwater management plan is an identified goal.

Recycled Water: The plan anticipates expanding the use of recycled water by connecting additional sites. New demand of 300 AFY is targeted, for a total of 1,100 AFY. A contingency plan to eliminate use of potable water for blending is to be developed for implementation based on economic, regulatory, or water supply requirements, with a goal of being able to deliver recycled water without blending by the end of the planning period.

Water Supply Reliability: In addition to extensive planning for drought, an updated emergency water supply plan will be developed to address catastrophic interruption of City water supplies due to earthquakes, South Coast Conduit failure, or other disasters.

The City Council and the Water Commission held a joint work session on April 7, 2011, to hear a detailed presentation on the proposed LTWSP update. At that time, staff received the following feedback:

- A six-year drought period for planning purposes is appropriate.
- Water banking and purchased water should be pursued where feasible to help defer the use of desalination until year six of a drought.
- A 10% safety margin is prudent, given water supply uncertainties in California.
- Expansion of recycled water connections should continue where cost effective, and to the extent capacity is available.
- Elimination of blending of potable water with recycled water is a good goal, subject to identifying cost effective means of doing so.
- Sedimentation management at Gibraltar Reservoir, including vegetation management through controlled burns, is worth investigating even with implementation of “pass through” of the City’s Gibraltar water to Lake Cachuma. A multi-agency effort to manage sedimentation at Lake Cachuma should include recognition of the benefit of allowing sediment to continue down the river to nourish beaches.
- A policy about maintaining reliability of the water delivery infrastructure should be included in the plan.
- An ongoing conservation program will be needed to maintain reductions achieved to date and to achieve further reductions.
- Extraordinary conservation measures of up to 15% during an occasional severe drought are reasonable, remembering that citizens will respond effectively during a drought period to help meet the goal.

Since the joint work session, staff has worked to edit the LTWSP to reflect the above discussion, draft the UWMP update to meet State requirements, and maintain consistency between the two documents. The draft plans have been posted on the City’s Internet site and key community organizations have been notified to give the opportunity to provide comments for consideration prior to preparation of the final drafts.

The City Environmental Analyst has determined that the adoption of the proposed 2011 LTWSP and the updated 2010 UWMP qualify for a Statutory Exemption from environmental review under the California Environmental Quality Act (CEQA), as established by the State Legislature and specified in the California Water Code (Urban Water Management Planning Act, Section 10652), and the CEQA Guidelines (Section 15282(v)). It is also noted that the Program Environmental Impact Report certified in September 2010 for the *Plan Santa Barbara* General Plan update recently provided a thorough evaluation of updated water supply information, projections, and policies included in the proposed water plan updates, and identified no significant environmental impacts associated with them.

Note: The draft 2011 Long Term Water Supply Plan and the draft 2010 Urban Water Management Plan update have been provided to Mayor and Council under separate cover, and are available for review at the City Clerk's Office. Copies are also available at the Water Resources Division, Public Works Department, 630 Garden Street, and can also be viewed online at: www.SantaBarbaraCA.gov

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APPROVED BY: City Administrator's Office