



THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: July 29, 2013

TO: Honorable Councilmember David Alvarez, Chair, Natural Resources & Culture Committee

FROM: Marsi A. Steirer, Deputy Director, Public Utilities Department, Long-Range Planning and Water Resources Division

SUBJECT: 2012 Long-Range Water Resources Plan – Alternative Recommendation

We would like to request that an alternative motion be added to the adoption of Council Action - Resolutions R-2014-11 and R-2014-12 (attached) to adopt the Final Draft of the 2012 Long-Range Water Resources Plan (LRWRP).

The LRWRP has been a lengthy process that utilized various studies, including the Recycled Water Study and the Demonstration Project Report, to identify water resource options that were included in the report. The LRWRP report was finalized earlier this calendar year, and it contains the following implementation recommendation:

Near Term Actions (2013 – 2020):

Additional Active Conservation - 20,900 Acre-Feet a Year (AFY)/ 18.7 million gallons a day (mgd)

Rainwater Harvesting – 420 AFY/ .38 mgd

Groundwater Supply – up to 4,000 AFY/ 3.57 mgd

Indirect Potable Reuse (IPR) – 16,800 AFY/ 15 mgd

Long-Term Measures (if warranted) 2020- 2035

Indirect Potable Reuse Phases 2 & 3 –76,160 AFY/ 68 mgd

Additional groundwater – 10,000 AFY/ 8.93 mgd

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Given the length of time necessary to plan, design and construct Potable Reuse facilities, combined with the City Council direction on April 23, 2013 to determine a preferred implementation plan and schedule that considers potable reuse options for maximizing local water supply and reduces flows to Point Loma Wastewater Treatment Plant, the Public Utilities Department is recommending the City Council consider an alternative motion that would grant planning level approval to pursuing all three Phases of IPR. This motion contains the same water resource options listed above under "Near Term Actions," although it increases the amount of IPR from 15 to 83 mgd.

Alternative Motion for the 2012 LRWRP:

Additional Active Conservation - 20,900 Acre-Feet a Year/ 18.7 mgd

Rainwater Harvesting - 420 AFY/ .38 mgd

Groundwater Supply - up to 4,000 AFY/ 3.57 mgd

Indirect Potable Reuse (IPR) - 92,960 AFY / 83 mgd (for all 3 phases)

Should the City Council vote to approve the proposed Alternative Motion, the final 2012 LRWRP document will be modified to reflect this action.

Should you have any questions or concerns, I can be reached at (619) 533-4112, or by email at msteirer@sanidiego.gov.



Marsi A. Steirer
Deputy Director

SB/tm

cc: Honorable NR&C Committee members
Honorable City Attorney Jan Goldsmith

Attachments: 1. Resolution R-2014-11
2. Resolution R-2014-12

**COUNCIL ACTION
EXECUTIVE SUMMARY SHEET
CITY OF SAN DIEGO**

DATE: 06/07/2013

ORIGINATING DEPARTMENT: Public Utilities - Water

SUBJECT: 2012 Long-Range Water Resources Plan (LRWRP)

COUNCIL DISTRICT(S): All

CONTACT/PHONE NUMBER: George Adrian/619-533-4680, M.S. 906

DESCRIPTIVE SUMMARY OF ITEM:

This action is to adopt the 2012 Long-Range Water Resources Plan (LRWRP) in fulfillment of the Council action regarding the LRWRP in 2009. This previous action included elements that directed staff to update the 2002 LRWRP and revisit its water resources strategy.

STAFF RECOMMENDATION:

Approve the requested action.

EXECUTIVE SUMMARY OF ITEM BACKGROUND: The City Council adopted the Strategic Plan for Water Supply (Strategic Plan) on August 12, 1997 which included a water resources strategy to meet future water demands through 2015. A changing water supply situation led to a decision by the Public Utilities Department (Department) to update the Strategic Plan and develop a more comprehensive strategy. On December 9, 2002, the City Council adopted the 2002 Long-Range Water Resources Plan (LRWRP), which updated the City's water resources strategy providing direction to pursue additional conservation, recycled water, groundwater, and other water supply options through the planning horizon of 2030. The Department moved forward to update the LRWRP and prepare the 2010 Urban Water Management Plan (UWMP) in 2009. The City Council approved an agreement with Brown and Caldwell, who sub-contracted with CDM Smith, to update the 2002 LRWRP. The Department initiated work on the 2012 LRWRP after the 2010 UWMP was final, and the majority of the work on the Recycled Water Study (RWS), commissioned in 2009 to review maximizing wastewater reuse, was complete as data and technical analyses from both documents were foundational components of the 2012 LRWRP.

Like the 2002 LRWRP, the 2012 LRWRP was developed using an open participatory planning process, with input from an 11-member Stakeholder Committee who met over fifteen months. This committee defined key planning objectives, provided insights and input on planning-level options, reviewed evaluation results, provided suggestions for refinement, and reviewed and provided comments on the final recommendations and report.

The 2012 LRWRP is a high-level look at our water supply options (options), and it evaluates key planning objectives which serve as the major goals or reasons "why" the 2012 LRWRP was undertaken. The new options came from a variety of sources including the 2002 LRWRP, 2010 UWMP, annual Water Conservation Update, technical groundwater studies and the RWS. Because no one option would be capable of meeting all of the City's water demands, eight portfolio options were developed and the top three portfolios are:

1. Hybrid 1- groundwater, conservation and rainwater harvesting options along with Indirect Potable Reuse (IPR) supply at 16,800 acre-feet per

- year (AFY) or 15 million gallons per day (MGD)
2. Hybrid 2 - Additional groundwater, additional IPR supply in two phases at 16,800 AFY (15 MGD) and 56,200 AFY (50 MGD), and rainwater harvesting
 3. Maximize Water Use Efficiency - options that increase the efficiency of how water is used in the City's water service area, including conservation, reuse, graywater, and rainwater/ stormwater harvesting

The three top-scoring portfolios were evaluated for timing and trade-offs in terms of water supply reliability benefits versus costs. The analysis showed that the resource options included in Hybrid 1 should be prioritized as "near-term actions" within the 2012-2020 timeframe, and the remaining options under Hybrid 2 should be viewed as long-term actions (2020-2035). These top portfolios were further evaluated regarding their adaptive capabilities in reducing water shortages caused by climate change. The analysis indicated that Hybrid 1 reduces the City's vulnerability by including more locally sourced water options. Hybrid 2, while costlier, would significantly increase the City's water supply reliability in a changing climate. To provide a flexible strategy that will allow the City to adapt to the future events, the long-term actions identified uncertainty "risk triggers" such as the Bay-Delta fix, direct potable reuse regulations, and groundwater viability. These risk triggers would indicate when and if the City should move forward with some of the additional options included in the Hybrid 2 portfolio.

The 2012 LRWRP concludes with the following recommendations which summarize the direction the City should take to enhance our water supply reliability:

1. Implement additional water conservation, initial groundwater projects, rainwater harvesting, and IPR at 16,800 AFY (Hybrid 1 portfolio).
2. Implement water supply options from the Hybrid 2 portfolio for the long-term, if uncertainty risk triggers warrant them.
3. Re-assess all uncertainty risk triggers in concurrence with the City's UWMP schedule (2015, 2020, 2025, 2030, and 2035).
4. Update the entire LRWRP in ten year cycles, starting in 2020.

FISCAL CONSIDERATIONS: Not applicable at this time. A planning level cost analysis of each of the supply options recommended is presented in the 2012 LRWRP Report.

EQUAL OPPORTUNITY CONTRACTING INFORMATION (IF APPLICABLE): Not applicable at this time.

PREVIOUS COUNCIL and/or COMMITTEE ACTION (describe any changes made to the item from what was presented at committee): On August 12, 1997, the City Council adopted Resolution (R-289102) approving the Strategic Plan for Water Supply. On December 9, 2002, the City Council adopted Resolution (R-297484) approving the 2002 LRWRP. On March 20, 2009, the City Council adopted Resolution (R-304714) authorizing the preparation of the 2012 LRWRP.

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS: The stakeholders who participated in the development of the 2012 LRWRP represented many diverse interests. The stakeholders in the 2012 LRWRP included representatives from the Independent Rates

Oversight Committee, American Planning Association, American Society of Landscape Architects, Building Industry Association, San Diego Regional Chamber of Commerce, San Diego County Taxpayers Association, San Diego Coastkeeper and a City representative to the San Diego County Water Authority Board. The Department plans to add presentations on the 2012 LRWRP to its Speakers Bureau offerings.

KEY STAKEHOLDERS AND PROJECTED IMPACTS: City of San Diego citizens and ratepayers, and members of the 2012 LRWRP Stakeholder Committee.

Sasaki, Ann
Originating Department

Deputy Chief/Chief Operating Officer