THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: September 8, 2010

TO: Council President Ben Hueso and Members of the City Council

FROM: Mayor Jerry Sanders
Council Member Donna Frye, Council District 6

SUBJECT: Water Budget Based Billing

In June 2009 the City implemented mandatory water use restrictions for fiscal year 2010 to achieve the County Water Authority's target water reduction level of 8%. At the conclusion of the fiscal year, City water consumption had declined by over 11%, successfully conserving well over the 8% reduction in water deliveries.

At my direction and the suggestion of Councilwoman Frye, as Chair of the Natural Resources and Culture Committee, the Public Utilities Department (Department) continued to research commodity based pricing to incentivize water conservation without inadvertently penalizing our customers who have already been using water efficiently. The Department staff focused on an alternative form of allocation and pricing based on a water budget that factored in landscape area, weather conditions, number of residents, and other factors which would be specific to the property. The Department recently completed research to determine the potential for implementing such a year-round water pricing and allocation structure, with favorable results.

City staff examined a water budget based approach and identified existing data sources within the City that, when combined with an assumption on the number of persons per household, can be used to calculate water budgets for single-family residence (SFR) similar to models used by other agencies in California. This research effort also considered parcel size and percentage of landscaped area per parcel, water usage data per parcel, and applicable EvapoTranspiration (ET) factors. As a reference, City staff analyzed the Irvine Ranch Water District method which uses 4 persons per household and 1,300 square feet of landscaping as initial assumptions in calculating water budgets, allowing residents to call in actual figures if those differed from the assumed values.

The pilot water budget research effort was tested on three zones within in the City of San Diego – representing coastal, central, and inland communities. It calculated water budgets and compared them to a 4-year average water usage to show how many customers have usage that

would be considered in excess of water budgets if this methodology were put in place. In addition, the research sought to confirm whether or not, for the three communities investigated, there was a reliable correlation between parcel size and the percentage of irrigated landscape. The research showed that, except for the very smallest of parcel size (<1/8 acre), there was a good correlation for the three communities.

The next step in determining the feasibility of instituting water budget based billing citywide is to expand the initial research effort to determine its applicability to the City's entire customer base, and to validate the initial results and conclusions. This next step will also seek to determine the hurdles, if any, that need to be overcome in order to establish a water budget billing program in San Diego.

Additionally, with the potential of implementing water budget based billing, the Public Utilities Department will also analyze rate structure alternatives, including rate, tier structure and revenue requirements that would be required in support of water budgets. This includes addressing revenue requirements and estimates based on projections regarding the degree to which customers adherence to water budgets at given price points. The department will also consider how implementation of water budgets may align with the development and implementation of the new utility billing system, currently underway and scheduled for completion September 2011.

The Department will return to the Natural Resources and Culture Committee with a report of the research findings including the applicability of the methodology and the feasibility of implementing water budget based billing.

If you have questions about this study, please contact Alex Ruiz, Interim Public Utilities Director, at (858) 292-6418.

Jerry Sanders
Mayor

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LSG/lsg

cc: City Attorney Jan Goldsmith
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