TO: HONORABLE CITY COUNCIL

FROM: CITY MANAGER

DATE: OCTOBER 20, 2008

REPORT TYPE: INFORMATIONAL

SUBJECT: San Francisco Planning Commission’s Release of the Final Program Environmental Impact Report on the San Francisco Public Utilities Commission’s Water System Improvement Program

This is an informational report and no Council action is required. This item is provided as background information in conjunction with the study session on October 20, 2008.

BACKGROUND
The San Francisco Public Utilities Commission (SFPUC) operates the regional water system, which supplies water to Palo Alto and the 26 other member agencies of the Bay Area Water Supply and Conservation Agency (BAWSCA). The regional water system is in need of repairs and upgrades to ensure that it can reliably deliver high quality water to meet the region’s water supply needs. A report released in January 2000 indicated that the regional water system could suffer damage from a large earthquake so severe that water supplies would be cut off for up to two months. In response, the SFPUC developed the Water System Improvement Program (WSIP) comprised of 37 capital improvement projects to address the deficiencies of the regional water system.

Palo Alto and the other BAWSCA agencies have worked with the SFPUC since early 2003 to prepare for the environmental review phase of the WSIP. Since the environmental review would evaluate the impact of delivering additional water supplies to San Francisco and the BAWSCA agencies, BAWSCA and the SFPUC coordinated on the establishment of the future water supplies needs for the region. Water supply demands for 2030 were calculated for each agency after incorporating cost-effective water conservation measures. The BAWSCA agencies committed to a total of 15 million gallons per day (MGD) of conservation, groundwater and recycled water to meet future water supply needs. Palo Alto’s long-term demand projections incorporated a savings of 4% from all measures found to be feasible and cost-effective at the time. These measures and natural conservation from improved efficiency standards for water-
using fixtures and appliances resulted in no increased demand for water from the regional system for Palo Alto.

Despite the 15 MGD committed to by the BAWSCA agencies, San Francisco and the BAWSCA agencies indicated a need for 35 MGD of additional water by 2030 from the regional water system. On June 27, 2007, the San Francisco Planning Department released the Draft Program Environmental Impact Report (PEIR) on the SFPUC’s WSIP for public review and comment. The WSIP proposed that the additional water supply needs for 2030 be met with 10 MGD of additional conservation, water recycling and groundwater supply programs in the City and County of San Francisco and 25 MGD from increased use of Tuolumne River water.

The Draft PEIR described the proposed WSIP, identified the environmental consequences associated with implementation of the WSIP, specified mitigation measures to reduce significant and potentially significant impacts, and analyzed and compared the environmental effects of alternatives to the proposed program as required by the California Environmental Quality Act. The Draft PEIR also included an analysis of three variants to the WSIP as requested by the SFPUC.


**DISCUSSION**

On September 30, 2008, the San Francisco Planning Department released the Final PEIR on the SFPUC’s WSIP. The Final PEIR consists of the Draft PEIR, comments and recommendations received on the Draft PEIR, the responses of the lead agency to significant environmental points raised in the review and consultation process and any other information added by the lead agency.

Since publication of the Draft PEIR in June 2007, the SFPUC has proposed revisions to the WSIP in three areas, either in response to comments received on the Draft PEIR or as part of its ongoing system operations and planning. These revisions include: (1) changes in the project descriptions of two WSIP facility improvement projects (both of which help reduce impacts associated with the projects as originally proposed) which affect overall system operations; (2) updated water system assumptions and corresponding updates in the system modeling and results; and (3) development of the Phased WSIP Variant, a “hybrid” program that is a combination of the proposed program and one of the alternatives analyzed in the Draft PEIR.

The “Phased WSIP Variant” was developed by the SFPUC as an option that would involve full implementation of the proposed WSIP facility improvement projects to ensure that the public health, water quality, seismic safety, and delivery reliability goals are achieved as soon as possible, but a phased implementation of water supply delivery through 2030. Phasing the water supply element of the WSIP would allow the SFPUC and its wholesale customers to focus first on implementing additional local recycled water, groundwater, and demand management actions while minimizing additional diversions from the Tuolumne River. Under this variant, the SFPUC would establish an interim, mid-term planning horizon—the year 2018. If the SFPUC
adopts this variant, it would make a decision about future water supply for its customers through 2018 only and defer a decision regarding long-term water supply until after 2018.

Under this variant, the SFPUC would limit average annual water deliveries supplied from its watersheds to 265 million gallons per day (mgd), which represents the base-year level of supply delivered from the SFPUC watersheds through the regional water system to both the retail and wholesale customers analyzed in the Draft PEIR. The SFPUC would maintain the 265 mgd average annual delivery of surface water from the SFPUC watersheds to existing levels through 2018. At the same time, through 2018, the SFPUC would implement the delivery and drought reliability element of the WSIP, which would increase average annual diversions from the Tuolumne River by about 2 mgd over the existing conditions.

By 2018, the demand on the SFPUC regional water system is projected to be 285 mgd, consisting of 91 mgd for San Francisco and 194 mgd for the BAWSCA agencies. To satisfy the remaining 20 mgd of demand on the regional system through 2018 while holding deliveries from the SFPUC watersheds to 265 mgd, the SFPUC proposes development of local conservation, recycled water, and groundwater projects within its service area. As proposed under the WSIP, the Phased WSIP Variant would develop 10 mgd of local supply and supply offsets through conservation, recycled water and groundwater projects in San Francisco. The SFPUC also proposes to develop an additional 10 mgd of local conservation, recycled water, and groundwater within the service area.

By 2018, the SFPUC would reevaluate the delivery amount and consider whether to maintain these delivery limitations from the SFPUC watersheds through 2030 or increase them, and whether and how to provide additional supply to the BAWSCA agencies.

The Final PEIR determines that the potential environmental effects of the Phased WSIP Variant fall within the range of impacts already evaluated in the Draft PEIR for the WSIP and the alternatives. Although the Phased WSIP Variant does not include a specific water supply proposal beyond 2018, for purposes of environmental impact analysis and comparison to the proposed WSIP and other alternatives evaluated in the PEIR, the PEIR does assess the range of water supply that could be provided under this variant through 2030.

Table 13.1 in the Final PEIR, reproduced below, summarizes the SFPUC average annual water deliveries to its retail (San Francisco) and wholesale (BAWSCA agencies) customers under the Phased WSIP Variant. In that variant, the SFPUC proposes to establish an interim delivery amount through the year 2018, and then to either maintain this same delivery amount through 2030 or increase it, possibly up to the level proposed under the WSIP.
As explained in the Final PEIR, although the SFPUC would only make a decision regarding water supply through 2018 under the Phased WSIP Variant, after 2018 and through 2030 it is possible that average annual deliveries to the wholesale customers could range from 184 mgd to 209 mgd, as shown in Table 13.1 (or 199 mgd, on the high end if it is an assumed additional 10 mgd of local conservation, recycled water and groundwater programs is implemented by 2018). If, after 2018, the SFPUC decides to maintain the 184 mgd average annual limit on SFPUC watershed deliveries to the wholesale customers, then by 2030 the SFPUC regional water system deliveries to the wholesale customers could be up to 25 mgd less than their 209 mgd purchase request amount. It is possible that, in combination with the additional local conservation, recycled water, and groundwater already developed during the first phase of this variant, the wholesale customers could receive up to their full 2030 purchase request amount of 209 mgd with no shortfall.

Impact on Palo Alto
The impact on Palo Alto of the Phased WSIP Variant is not completely clear. Since Palo Alto did not project and does not anticipate growth in water supply needs, the stricture to limit future water deliveries from the regional water system of the variant may not negatively impact Palo Alto. However, Palo Alto will need to re-examine its water needs and potential to implement additional water efficiency programs along with all the BAWSCA agencies to ensure that all

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### TABLE 13.1

<table>
<thead>
<tr>
<th>Supply Source</th>
<th>SFPUC Regional System Average Annual Water Deliveries (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing Condition 2005</td>
</tr>
<tr>
<td>SFPUC Watersheds</td>
<td></td>
</tr>
<tr>
<td>Retail customers</td>
<td>91</td>
</tr>
<tr>
<td>Wholesale customers</td>
<td>174</td>
</tr>
<tr>
<td>Total</td>
<td>265</td>
</tr>
<tr>
<td>Local Conservation, Recycled Water, and Groundwater (not included in purchase requests)</td>
<td></td>
</tr>
<tr>
<td>Retail customers</td>
<td>0</td>
</tr>
<tr>
<td>Wholesale customers</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
</tr>
<tr>
<td>Total from all sources</td>
<td>265</td>
</tr>
</tbody>
</table>

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a The SFPUC retail customer deliveries include 1 mgd delivered to Castletown in the Pleasanton area that is supplied by local groundwater rather than from the regional system. Thus, although this delivery amount is included in the SFPUC retail customer delivery total, 80 mgd represents the current and future deliveries to retail customers that are and will continue to be made from the regional system.

b A range is provided because 10 mgd may be provided by SFPUC in partnership with BAWSCA and wholesale customers or BAWSCA and wholesale customers may choose to separately develop this 10 mgd.
water supplies are used as efficiently as possible. It is also true that Palo Alto residents use more water per capita than most of the BAWSCA agencies. Additional efficiency programs, perhaps related to water used on landscaping, may need to be evaluated. In addition, Palo Alto will need to seriously evaluate expanding the recycled water distribution system to new users in the search for solutions to the regional water supply issues.

The Final PEIR contains responses to Palo Alto’s comments on the Draft PEIR (Attachment D). Many of the comments were acknowledged and additional information was provided as appropriate. On the request for the PEIR to address the concept of an intertie with the Santa Clara Valley Water District (SCVWD) the response was that the SCVWD does not have excess water to transfer and, therefore, would not be a dependable future water source for the regional water system. The Final PEIR also revised a paragraph describing Palo Alto’s parklands.

NEXT STEPS
The San Francisco Planning Commission is scheduled to certify the Final PEIR (if it is determined to fulfill all requirements under the California Environmental Quality Act) on October 30, 2008. On that same day, the SFPUC is expected to adopt the WSIP, including the Phased WSIP Variant.

BAWSCA and its member agencies have already begun a study to update the estimates for future water demand and the potential for efficiency measures that were developed in 2003 and 2004 for the Draft PEIR. This study is expected to identify additional water efficiency programs and recycled water projects that can be completed to meet the water supply restrictions that are expected to be adopted. One part of the study is the development of a plan to implement the identified programs and projects.

ATTACHMENTS
A. September 30, 2008 Memorandum from Ed Harrington, SFPUC General Manager regarding Staff Recommendation for WSIP Adoption
B. CMR: 370:07 – Approval of Palo Alto’s Comments on Draft Program Environmental Impact Report Concerning San Francisco Public Utilities Commission’s Water System Improvement (Hetch-Hetchy) Program (without attachment)
C. September 25, 2007 Letter from the City of Palo Alto Mayor to San Francisco Planning Department Regarding Comments on the Draft PEIR for SFPUC’s WSIP
D. Response in the Final PEIR to City of Palo Alto Comments on Draft PEIR

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