

QUARTERLY WATER ISSUES UPDATE
June 2007

Issues related to Palo Alto's water supplier, the San Francisco Public Utilities Commission (SFPUC), and the agency representing the wholesale customers of SFPUC, the Bay Area Water Supply and Conservation Agency (BAWSCA), are discussed below.

I. Water Supply Issues

Water Availability

SFPUC's latest Hydrological Conditions Report contains information about the regional system's water supply reliability. The Hetch Hetchy precipitation index (computed using six Sierra precipitation stations indicating wetness of the basin) for the 2007 water year to date (October 1, 2006 through April 30, 2007) was 21.9 inches, or 62% of the average season-to-date precipitation. The April precipitation was 2.26 inches.

The water received in the SFPUC's Tuolumne Basin reservoirs (Hetch Hetchy, Eleanor and Cherry Lakes and the New Don Pedro Water Bank) from inflows and precipitation for the 2007 water year to date was about 64,000 acre-feet as of April 30. San Francisco's total entitlement for the 2006 water year (October 1, 2005 through September 30, 2006) was 1,970,000 acre-feet (compared to 1,600,000 acre-feet for the 2005 water year).

San Francisco's water bank in New Don Pedro Reservoir was 85% full at 486,000 acre-feet as of May 1, 2007. The regional water system's total water in storage in New Don Pedro, the mountain system and the local systems was about 1,221,000 acre-feet as of May 1, 2007, leaving about 237,000 acre-feet of available storage capacity in the system.

On April 12, SFPUC called for its customers to voluntarily reduce water consumption by 10%. The request was made due to concern about this year possibly being the first year of a drought. The cautious step was taken even as local and mountain reserves are plentiful and the Hetch Hetchy Reservoir is expected to fill this spring. The call for voluntary conservation was made to avert potential imposition of mandatory limits this summer and fall. Mandatory rationing was last required during the 1987 – 1992 drought.

II. Water Quality

Annual Water Quality Report

In June, the 2006 Annual Water Quality Report will be distributed to Palo Alto water consumers through the monthly utility bills. This report, mandated by the State of California and prepared each year according to the Safe Drinking Water Act requirements, provides important information about the drinking water supplied by the City of Palo Alto Utilities and the major infrastructure improvements needed to ensure a reliable and high quality water supply for Palo Alto in the future.

III. SFPUC Issues

Water System Improvement Program (WSIP)

SFPUC issued its quarterly report for the quarter ending December 2006 on February 8, 2007. The overall program scope, schedule, and budget remain unchanged since adopted by the Commission in November 2005. Only one project has yet to be initiated – the Watershed and Environmental Improvement Program (WEIP) – which is scheduled to be initiated next quarter. As of June 30, 2006, there are 22 projects in the planning phase, with 15 projects currently undergoing environmental review, and 14 projects in the design phase. Of the 14 projects in design phase, 3 projects went into bid and award. 7 projects are in the construction phase.

The overall regional program (and every phase) is slightly behind schedule, but the program is still in the very initial stages overall with 5.8% of the program complete (compared to the planned 6.0% complete). The environmental review phase is behind schedule (27.1% complete compared to the planned 29.8% complete).

WSIP Program Environmental Impact Report (PEIR)

The Draft PEIR for the WSIP has been significantly delayed from SFPUC's original expectation. The notice to proceed on the PEIR was issued in September 2005. The Draft PEIR is now expected to be released in June 2007, when a 60-90 day public review period will begin. The next steps are issuance of the Final PEIR followed by certification that the PEIR is complete by the San Francisco Planning Commission.

After certification, the SFPUC can take action on the WSIP. However, an appeal questioning the adequacy of the PEIR and the SFPUC's action on the WSIP may be initiated. The first step in an appeal would be to the SFPUC and a final appeal would be to the San Francisco Board of Supervisors.

As soon as the Draft PEIR is issued, BAWSCA will review it for the larger, programmatic issues, characterization of BAWSCA agencies, adequacy of the document for planning purposes, and how the alternatives analyzed address the goals of the WSIP. BAWSCA agencies are expected to review the document for issues relevant to their individual agencies.

IV. Bay Area Water Supply and Conservation Agency Activities

New Water Services Contract

In December 2006, BAWSCA officially contacted SFPUC to begin the negotiations for a new water services contract. Letters outlining BAWSCA's interest in components of a new water contract were sent to the General Manager and the President of the SFPUC and to Mayor Newsom. Letters supporting BAWSCA's position were sent to Mayor Newsom from Assembly Members Ira Ruskin and Sally Leiber and State Senator Elaine Alquist urging the mayor to provide his leadership in the contract negotiations and noting that they expect a fair agreement for their constituents.

On January 3, 2007, the Bay Area Water Stewards (BAWS) sent a letter to SFPUC and BAWSCA indicating that it supports many of the contract elements BAWSCA also desires, including:

- Completing the WSIP on time and on budget
- Fair treatment following a major disruption of the regional system
- “Water first” operating principle
- Specifying firm water entitlements for each agency and allowing agencies to transfer those entitlements among themselves
- Allowing BAWSCA to wheel water through the regional system
- Achieve mutually established water conservation goals
- Limiting the cost of water to facilities that benefit the wholesale customers
- Continuing the annual accounting and crediting of over- and under-payments

Additionally, BAWSCA wants BAWSCA to act responsibly to ensure environmental and public trust resources are protected. BAWSCA wants “explicit articulation of this responsibility” in the new agreement and wants BAWSCA “to minimize the extraction of water from the natural environment.” The letter notes that there is “significant untapped potential for cost-effective conservation and recycling.” BAWSCA also want BAWSCA to actively support SFPUC’s Environmental Stewardship Policy goals of environmental protection, mitigation and restoration activities. They further ask BAWSCA to closely monitor the implementation of the Watershed and Environmental Improvement Program, noting that the WSIP can only be completed if that work is also done.

In April 2007, BAWSCA issued its first progress report on negotiations for a new water services agreement. Such progress reports will be issued on a quarterly basis. Highlights include:

- Results during last quarter (January-March 2007):
 - Originally, the negotiations were waiting until the release of the WSIP PEIR, but SFPUC has now delayed the release of the PEIR until June 2007. The BAWSCA team met with Michael Carlin, SFPUC’s Assistant General Manager for Water Operations in January, February, and April.
 - Agreement was reached on the schedule for completing negotiations: A draft agreement should be available in late fall of 2008. San Francisco would act first in January 2009.
 - The time to date has been spent on procedural and negotiation process issues so that content issues can proceed. All agreements should be formally adopted by all agencies by June 30, 2009 (this is the expiration date of the current contract).
- Progress expected in the next quarter (April-June 2007): Reliability objectives will be the discussion topic for May. Opportunities to simplify contract administration will be addressed in late May. In June, the subject will be capital cost repayment methodologies.

Annual BAWSCA Survey

BAWSCA published its survey of its member agencies for FY 2005-06 in March 2007. The survey can be found on the BAWSCA web site (www.bawasca.org). The survey contains an overview of BAWSCA; Past, Current, and Projected Purchases from SFPUC; Total Water Supply and Demand; Current Water Use by Class of Customer; Current and Projected Population; Current Water Use Per Capita; Current Residential Water Bills; Conservation BMPs; and Agency Profiles. The survey shows that Palo Alto’s residential per capita water use is 112.5 gallons per capita per day (gpcpd) compared to the BAWSCA average of 88.8 gpcpd. The average residential water bill for Palo Alto is \$58.17/month compared to the BAWSCA average

of \$46.60/month. A residential water bill for customers using 14 CCF/month is \$58.17/month for Palo Alto compared to the BAWSCA average of \$52.10/month.

Economic Impact of Water Supply Shortages

BAWSCA and SFPUC jointly conducted a study of the economic impact of drought-time water shortages. The report was prepared by the Bay Area Economic Forum and SFPUC’s consultant, Public Financial Management (PFM) and was released on May 3, 2007. The study assessed the response of key economic sectors to various forms of drought mitigation policies and evaluated mitigation policies with respect to economic impact. The study evaluated droughts that would result in water consumption cutbacks of 10%, 20%, and 30%.

The study concluded that the most effective drought mitigation policies are: 1) drought-contingency pricing to reduce consumption; 2) public education and advertisement; 3) increased regional cooperation among water agencies; 4) expanded program to purchase and bank water; and 5) improved coordination among BAWSCA agencies and SFPUC with respect to drought planning.

Some of the key findings of the study include:

- Residential demand is not very responsive to prices.
- Residential demand “hardening” is real.
- Water is a relatively small cost factor for most commercial and industrial customers.
- Tiered pricing is effective and appropriate to influence water use by business customers.

The study also concluded that how agencies allocate water in a drought has an effect on the overall regional economic impact of drought. For example, if a 20% cutback is required, it could be applied equally to all customer classes (proportional rationing) or applied differently to customer classes in order to minimize overall economic impact using pricing (drought-contingency pricing). Further the water available to the region could be allocated between agencies and customers classes to minimize the total economic impact – this would require that trading of allocations between agencies would allow water to go to customers who value it the most. The table below shows the regional welfare losses given each of these allocation schemes for 10%, 20%, and 30% cuts.

Annual Welfare Losses for 10%, 20%, and 30% Drought Scenarios

Scenario	Proportional Rationing	Drought-Contingency Pricing	Regional Water Markets
10% Drought	\$31.9 million	\$28.3 million	\$15.2 million
20% Drought	\$98.4 million	\$83.1 million	\$51.3 million
30% Drought	\$201.2 million	\$166.2 million	\$108.8 million

Note that the welfare losses more than double when cutbacks double from 10% to 20%. Getting additional cutbacks beyond 10% and 20% are very costly.

V. City of Palo Alto Utilities Issues

Recycled Water Facility Plan

The Council approved a contract to prepare a facility plan for expanding the use of recycled water in the City on April 16. The contract was awarded to RMC Water and Environment for a not to exceed amount of \$242,700. The cost was higher than staff's expectation of \$150,000 as the contract also includes preparation of environmental documents. This work is expected to put the project in a state of readiness to successfully compete for construction funding from the state and/or federal governments and other regional partners. The City received a state planning grant of \$75,000 to complete the facility plan. The facility plan is expected to be complete by the end of FY 07-08.

Emergency Water Supply and Storage Project (WS – 08002)

This project consists of these major components:

- A. Reservoir, Pump Station, and Phase 1 Well – the new reservoir, pump station and well, which were recommended in the report entitled “Water Wells, Regional Storage, and Distribution System Study” (1999 Study), will help bring the City's system in compliance with the CDHS recommended supply criteria of meeting at least 8-hours of maximum day demand while maintaining fire suppression reserves; and
- B. Existing and New Wells and Mayfield Pump Station – rehabilitating the City's existing wells to enhance the supply reliability for on-going demands during a shutdown of the SFPUC Hetch-Hetchy aqueduct system. This project also includes augmenting the Mayfield pump station to deliver water to the urban residential, commercial, and industrial areas in the event of such a shutdown and two new wells.

City Council held a public hearing on March 5, 2007 and certified the adequacy of the Final EIR for the Emergency Water Supply and Storage Project, including the reservoir, 3 new wells, the Mayfield upgrade and the rehabilitation of 5 existing wells. Council has made future passage of the Park Improvement Ordinance for El Camino Park contingent on an advisory vote of the people set for November 2007.

Pre-Rinse Spray Valve Program

The City of Palo Alto recently partnered with the Santa Clara Valley Water District and Honeywell to install commercial kitchen Pre-Rinse Spray Valves (PRSV) in Palo Alto restaurants and food service establishments. This short-term program replaced old, inefficient valves with new high-efficiency models, all at no cost to the customer. With over 70 PRSVs installed in just three months, the City has helped customers save 7,613 CCF per year in water and wastewater in addition to 34,923 therms per year in gas savings.