

**Meeting Date:** 9/10/2013

**Report Type:** Staff/Discussion

**Report ID:** 2013-00691

**Title:** Water Workshop

**Location:** Citywide

**Issue:** Water Workshop to discuss the City's water supply and Delta issues.

**Recommendation:** Informational workshop presented to Council for information, discussion, and direction.

**Contact:** Dave Brent, Director, (916) 808-1420; Jim Peifer, Supervising Engineer, (916) 808-1416, Department of Utilities

**Presenter:** Jim Peifer, Supervising Engineer, (916) 808-1416, Department of Utilities

**Department:** Department Of Utilities

**Division:** Government Affairs - Utilities

**Dept ID:** 14001071

**Attachments:**

1-Description/Analysis

2-Background

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**City Attorney Review**

Approved as to Form

Joe Robinson

9/4/2013 3:19:28 PM

**City Treasurer Review**

Reviewed for Impact on Cash and Debt

John Colville

8/29/2013 9:59:12 AM

**Approvals/Acknowledgements**

Department Director or Designee: Dave Brent - 9/3/2013 4:43:49 PM

## Description/Analysis

**Issue Detail:** Staff will make a workshop presentation for Council information and discussion regarding the City's water supply and various issues and activities related to the City's water supply, including the Bay Delta Conservation Plan and other relevant Delta programs.

**Policy Considerations:** General Plan policy U 2.1.1 provides that the City shall exercise and protect its water rights and entitlements in perpetuity.

**Economic Impacts:** None

**Environmental Considerations:** Not Applicable

**Sustainability:** Not Applicable

**Commission/Committee Action:** Not Applicable

**Rationale for Recommendation:** Not Applicable

**Financial Considerations:** Not Applicable

**Emerging Small Business Development (ESBD):** Not Applicable

## **Background**

Significant efforts relating to the Sacramento-San Joaquin Delta could affect the City's water supply including:

- The Bay Delta Conservation Plan
- The Bay Delta Water Quality Control Plan

## **Bay Delta Conservation Plan**

A significant effort that is funded by Delta water exporters is the Bay Delta Conservation Plan (BDCP) and environmental impact report. When complete, the BDCP will provide the basis for the issuance of endangered species permits for the operation of the state and federal water export projects implemented over the next 50 years. A result of the BDCP will likely be significant structural changes such as new pump stations on the Sacramento River, and new tunnels to deliver water to the state and federal water projects for use outside the Delta watershed. In addition, the BDCP proposes various habitat restoration projects. Funding for a portion of the habitat restoration projects is provided in part from a statewide water bond, set for the ballot in November 2014, but under consideration within the state legislature. It is not clear how habitat restoration projects will be funded if the water bond fails to pass.

The heart of the BDCP is a long-term conservation strategy that sets forth actions needed for a healthy Delta and to allow exporters to increase the amount of water taken from the Delta.

- Draft BDCP and Draft EIR/EIS will be released together, perhaps in February; administrative draft chapters are being batched and released to responsible, trustee, and cooperating agencies.
- BDCP adoption is anticipated in 2014.
- The key project being proposed by the Plan is a water conveyance (tunnels) to redirect up to 9,000 cubic feet per second (cfs) of water flow. Water will be diverted from the Sacramento River through three intakes south of Sacramento.

A significant concern to the City is that diversions by the new infrastructure could lead to inadequate water supplies for the City. A second concern is that the exporters will have an Endangered Species Act (ESA) permit to operate the facility, and that environmental water may need to be made up by upstream water agencies including the City.

## **Bay Delta Water Quality Control Plan**

The Water Board currently is engaged in the process of determining the appropriate Delta Outflow and Sacramento River inflow. It is not clear how this may affect the Sacramento region at this time. The Bay Delta Water Quality Control Plan (BDWQCP) may affect future development if the Water Board determines that insufficient water exist to provide for all of the Delta's needs.

A concern of the BDWQCP is the potential for reduced access to and increased cost of surface water.

## **Summary of the City's Water Rights**

The City of Sacramento's municipal water supply consists of surface water and groundwater. The City's surface water diversions from the American and Sacramento Rivers are authorized under a "pre-1914" water right, and five appropriative water right permits, which are backed up by a water rights settlement contract. Collectively, these water rights and contract provide the City with an extremely reliable and secure water supply. Each is described in more detail below.

- *"Pre-1914" right:* The City has a so-called "pre-1914 right" to divert up to 75 cubic feet per second (cfs) of Sacramento River water. This right is based on Sacramento River diversions that began when the City's first pumping plant was constructed in 1854. At that time, the right to appropriate surface water was obtained simply by diverting and using the water. The City is reported to have the oldest publicly-owned water supply in the State. Such rights are called "pre-1914" rights because they are based on surface water diversions initiated before adoption of the State Water Commission Act in 1914 created mandatory and exclusive procedures for obtaining a State-issued right to appropriate surface water. Pre-1914 rights are senior in priority to post-1914 rights issued by the State – the latter rights also are governed by a priority system based on the date that an application for a State-issued right was filed.
- *Sacramento River Permit:* The City has one State-issued permit to divert up to 225 cfs of Sacramento River water, up to 81,800 acre feet annually (afa). This permit has a priority date of 1920. Water diverted under this permit can be served within the City limits, as these change from time to time. The current points of diversion are located at the

Sacramento River Water Treatment Plant, and at the Pioneer Reservoir, which is a component of the City's combined sewer system (water is used only for O&M purposes at the facility).

- *American River Permits:* The City has four State-issued permits to divert American River water. These permits have priority dates ranging from 1947 to 1954.
  - Two of these permits authorize the City to divert water directly from the American River at the City's E.A. Fairbairn Water Treatment Plant. For these two permits the combined maximum allowable rate of diversion is 675 cfs.
  - The other two permits are based on water right applications originally filed by the Sacramento Municipal Utility District (SMUD) and then assigned to the City. These permits authorize the City to "redivert" American River water previously utilized for non-consumptive purposes by SMUD's Upper American River power generation project (UARP), which is located in the American River basin upstream of Folsom Reservoir. These rediversions of American River water can be made at the Fairbairn Plant, and at the City's Sacramento River Water Treatment Plant located just below the confluence of the American and Sacramento Rivers. The combined maximum allowable diversion under these two permits includes rediversion of up to 1510 cfs of water diverted, but not stored, by the UARP, and up to 589,000 acre feet per year of stored water.
  - Water diverted under the City's American River permits can be served within the City and within specified areas adjacent to the City (collectively referred to as the City's American River Place of Use). The City's American River permits include provisions that recognize a priority for diversions to meet reasonable upstream needs within the American River watershed.
  - In 2001, pursuant to the Water Forum Agreement, the City agreed to add conditions to its American River water right permits that became effective after expansion of the Fairbairn

Plant, limiting use of the Fairbairn Plant diversion capacity when American River flows at the Fairbairn Plant fall below specified thresholds, referred to as the Hodge Flow Criteria.

- The Water Forum Agreement conditions do not restrict diversion under the City's American River water right permits from a Sacramento River diversion point, such as the Sacramento River Water Treatment Plant.
- *Settlement Contract:*
  - In 1957, the City entered into a permanent water rights settlement contract with the U.S. Bureau of Reclamation. The State Water Rights Board was at the time deciding how to allocate water rights on the American River among numerous competing applicants, including the City and Reclamation, and this contract settled the protests filed by the City and Reclamation. This removed a significant potential impediment to Reclamation's planned operation of Folsom Reservoir.
  - The City agreed to limit its total diversions of American River water to a maximum of 675 cfs, up to a maximum amount of 245,000 afa in the year 2030 – this was less than the total "face value" of the City's American River water right permits. The City agreed to limit its diversions of Sacramento River water to a maximum of 225 cfs and a maximum amount of 81,800 afa. The contract's total annual diversion limit from both rivers in the year 2030 is 326,800 acre feet.
  - In return, Reclamation agreed to operate its American River and Sacramento River Central Valley Project (CVP) storage facilities so as to make available in the rivers sufficient water for the City's diversions, thus providing the City assurances of a firm water supply even during periods when water availability might otherwise be limited under the City's water rights standing alone.
  - The contract requires an annual payment to Reclamation for Folsom Reservoir storage capacity used to meet Reclamation's

obligations under the contract, beginning with payment of \$9 per acre foot for 8,000 acre feet of storage capacity in 1963, and incrementally building up to payment of \$9 per acre foot for the use of 90,000 acre feet of storage capacity in 2030. The contract provides for the regulation and delivery of the City's water rights water, not CVP water (i.e., the City is not categorized as a CVP water supply contractor and is not subject to fees and other requirements that apply to CVP contractors).

- The contract is permanent and not subject to deficiencies. In critically dry years the City agreed not to divert more than 75 percent of its surface water from any point of diversion on the American River; the difference can be diverted from the Sacramento River downstream of the confluence of the two rivers. Because the contract is permanent, the very low payment for Folsom Reservoir storage capacity is fixed and cannot be increased, and the contract cannot be reopened or changed without City approval. This stands in contrast to virtually all other Bureau of Reclamation water supply contracts, which have a fixed term and may be subject to amendment on renewal.
- The City's water rights settlement contract allows the City's American River water to be diverted at either the Fairbairn Water Treatment Plant, or at the Sacramento River Water Treatment Plant, which is located just below the confluence of the American and Sacramento Rivers.

## **Water Workshop Agenda**

1. Opening Remarks [Vice Mayor Ashby] (5 minutes)
2. Introduction (10 minutes)
  - a. Framing the Issue/the City's Interest [Shirey/Brent]
3. Describe the Water Supply Assets (20 minutes)
  - a. City Water Assets [Brent/Robinson]
  - b. Conservation Efforts and Accomplishments [Peifer]
4. Delta Efforts [Peifer](20 minutes)
5. State and Federal Policy Update [Knott] (10 minutes)
6. Next Steps (15 minutes)
  - a. Public Affairs Effort [Knott]
  - b. We are asking for [Brent]
  - c. Items to be brought forward to the City Council [Brent]
7. Q&A/Council Direction