



CITY OF HAYWARD
AGENDA REPORT

AGENDA DATE 10/01/02
AGENDA ITEM _____
WORK SESSION ITEM WS 3

TO: Mayor and City Council
FROM: Director of Public Works
SUBJECT: Review of Issues Involving Hayward Water System

RECOMMENDATION:

It is recommended that Council review and comment on this report.

BACKGROUND:

This report will discuss issues of interest to Hayward regarding the City of San Francisco's ownership, operation, and maintenance of the Hetch Hetchy Regional Water System. Recent legislation, just signed by the Governor, provides for State oversight of needed capital improvement projects and to give wholesale customers, including Hayward, a stronger voice in regional water supply planning. The report concludes with a discussion of a potential new regional emergency intertie to be located in Hayward.

San Francisco Public Utilities Commission (SFPUC) owns and operates the Hetch Hetchy regional water system, which is the largest utility in northern California and one of the largest water utilities in the state. In addition to serving 700,000 people in the City of San Francisco, it has as wholesale customers 29 cities and water agencies in the Bay Area, serving 37 municipalities with over 1.6 million customers. On average, the SFPUC, which is part of San Francisco's city organization, delivers over 260 million gallons of water to the area each day.

Most of the Hetch Hetchy water system was built between 1920 and the late 1930s, and as such, is over 70 years old. The system includes the O'Shaughnessy Dam, which collects the snow melt of Tuolumne River in Yosemite, and a series of tunnels and pipelines over 160 miles long that brings the water to the Bay Area by gravity without the use of pumps. The regional system also includes local reservoirs and dams, and a water treatment plant in the Easy Bay and on the Peninsula.

Bringing the Hetch Hetchy System to acceptable modern standards could cost in the billions of dollars. Numerous studies, reviews, and audits have shown that the system has not been maintained to the necessary level. A state audit in 2000 found that SFPUC had failed to do the required work on the system, and that the system was vulnerable to failure that could cause severe and unacceptable disruption of water service to the region.

As mentioned above, SFPUC supplies water on a wholesale basis to 29 large and small agencies, including one large investor-owned water company and Stanford University. Despite the fact that they purchase over two thirds of the Hetch Hetchy supplies, these so-called suburban agencies have no say in governance of the regional water system. In order to have a means of communication among themselves and with San Francisco, the suburban agencies formed an association many years ago called the Bay Area Water Users Association or BAWUA. BAWUA representation is comprised of staff from the various agencies. A seven-member board of directors governs BAWUA. Additionally, there is another entity within BAWUA, referred to as the Suburban Representatives, which is a five-member body created for the purpose of direct communication with San Francisco. BAWUA currently has a General Manager who, along with a staff of four and a legal counsel, manages the affairs of BAWUA. Hayward is a member of the Board of Directors of BAWUA and is also one of the five Suburban Representatives. BAWUA has traditionally been involved in monitoring water rate issues and other financial and technical issues with SFPUC, as opposed to governance issues. For example, BAWUA staff reviews, and has its consultants perform annual audits of the SFPUC rate setting process, including the costs that are included in the rate base, the amount of water available, and the like.

In recent years, BAWUA members have experienced some frustration with SFPUC, particularly related to its slow implementation of maintenance and improvement projects that are needed to ensure reliability of the water system in the event of unforeseen emergencies. Although BAWUA has made its concerns very clear to the SFPUC, the overwhelming feeling among BAWUA members is that the response has been unsatisfactory. Recently, SFPUC has taken steps to address some of the problems associated with the Hetch Hetchy system. For instance, earlier this summer, SFPUC adopted, for the first time, a Capital Improvement Program (CIP) for the regional water system. In November, San Francisco voters will vote on Proposition A, a bond measure that, if approved, would provide for the issuance of \$1.6 billion in bonds to pay for the portion of Hetch Hetchy improvements that would be the obligation of the San Francisco customers. There are also proposed City Charter amendments on the November ballot to make it easier for SFPUC to sell revenue bonds.

DISCUSSION:

This last summer, Assembly Member Lou Papan and State Senator Jackie Speier, sponsored three pieces of legislation to address the issue of regional water supply reliability, to ensure that the regional water system receives the attention that it needs, and to give suburban water users a stronger voice in regional water resource planning and conservation. None of the bills change the ownership or governance of the Hetch Hetchy water system, which remains under the control of the SFPUC. All three bills were approved by the State Assembly and Senate and have been signed into law by Governor Davis.

AB 1823 – Wholesale Regional Water System Security and Reliability Act

AB 1823 (Papan) addresses regional concerns about the reliability of the Hetch Hetchy water system and requires State oversight of the implementation of the approved CIP and to upgrade

and improve the seismic performance of the system in the event of an earthquake. The legislation also requires San Francisco to prepare an emergency response plan and develop supplemental water supplies for use in droughts.

The cornerstone of AB 1823 is the requirement that the SFPUC adopt and implement a Capital Improvement Program (CIP) that includes nine key projects, which have been identified as critical to improving system reliability. The CIP must include a financing plan and an implementation schedule. The legislation specifically requires that projects representing 50 percent of the total CIP costs be completed by 2010, with 100 percent completion by 2015. The State shall be kept apprised of progress made through annual reports submitted to the Joint Legislative Audit Committee, the State Seismic Safety Committee, and State Department of Health Services.

Because of the potential for a severe interruption in water service after an earthquake or other disaster event, San Francisco must adopt, by September 2003, an Emergency Response Plan, detailing plans to restore water after an event and to distribute water as equitably as possible throughout its service area during an emergency. In addition, AB 1823 calls for the development of supplemental water supplies. Since much of the region is dependent on Hetch Hetchy, there is concern about adequate water supplies to sustain the Hetch Hetchy service area during drought years. To address this, San Francisco must develop a plan to augment existing supplies and report on its progress annually to the Department of Health Services.

The final requirement in AB 1823 concerns the ongoing maintenance of the Hetch Hetchy water system. The Department of Health Services will perform a maintenance audit of the system to ascertain the adequacy of procedures, resources, project scheduling and record keeping. A field investigation of major facilities to determine the condition and adequacy of maintenance will be also conducted.

There is no required action on the part of the suburban customers, including Hayward, related to AB 1823.

AB 2058 – Bay Area Water Supply and Conservation Agency Act

AB 2058 (Papan) gives agencies outside of the City and County of San Francisco a voice in regional water planning issues, including water supply reliability in the event of an earthquake and during dry weather years. The Bay Area Water Supply and Conservation Agency (Agency), when formed, would consist of purchasers of water from SFPUC who choose to join, at least 15 and potentially 28 members. The act provides for allowing SFPUC to join the agency after certain conditions are met. This agency could eventually replace the existing BAWUA organization by performing the current BAWUA functions, such as monitoring wholesale water rates set by San Francisco and representing the interests of member agencies to the SFPUC, along with the new responsibilities granted by AB 2058.

The major functions of the Agency would be to acquire and construct facilities for the treatment, storage and transmission of potable water and for water recycling and conservation. The agency could acquire water rights and sell wholesale water. The Agency would be

empowered to issue revenue bonds to finance the construction or improvements projects to benefit members. The Agency would be prohibited from getting into the business of selling retail water or providing water distribution service to end-users. That responsibility would remain with local municipalities and water districts.

AB 2058 is an enabling legislation; that is, it provides for the formation of a new agency if certain conditions are met. Entities that elect to join the Agency must approve a resolution of intent, conduct a public hearing, and take a final vote of approval. The Agency is formed by declaration when at least 15 entities, representing 60 percent of suburban water usage, agree to join. Appropriate fees would be charged to each member to pay for Agency costs and debt service obligations.

A Board of Directors, consisting of a representative from each member entity, would govern the Agency. Each entity would appoint a representative, who may be an elected official from the member entity, within 60 days of the Agency being formed. Two present BAWUA members, California Water Services (an investor owned utility) and Stanford University (a private utility), would be represented by an employee or officer of each entity, to be appointed by the Board of Supervisors of San Mateo County and Santa Clara County respectively. Agency decisions will generally be made by a majority vote of the total membership; however, AB 2058 provides for weighted voting that must be used to approve the issuance of revenue bonds, and may be utilized for other issues at the request of a board member. Under the weighted voting scenario, the total number of votes is 100 and each member is assigned a number of votes commensurate with its water purchases from SFPUC in 2000-01, but not less than one vote. Because Hayward is the second largest purchaser of Hetch Hetchy water, if the City decides to join the Agency, it would be second only to California Water Services in its number of votes. When weighted voting is in place, approval of an action will require an affirmative vote of both the majority of members and the majority of weighted votes.

SB 1870 – San Francisco Bay Area Regional Water System Financing Authority Act

SB 1870 (Speier) creates the San Francisco Bay Area Regional Water System Financing Authority, which enables suburban purchasers of the Hetch Hetchy water system to raise any amount of funds and make them available to the SFPUC for capital improvement projects. It is estimated that the suburban users will be responsible for about \$2 billion of the total cost of improving the seismic reliability of the water system.

All agencies that purchase water from the Hetch Hetchy water system, a total of 28, are represented on the Authority by legislation. A Board of Directors, consisting of one member from each represented agency, will govern the Authority. Appointments to the Board, including Hayward's representative, must be made by March 1, 2003, and elected officials from the represented entity may be appointed. California Water Services and Stanford University will be represented by a resident of each service area, but not affiliated with either entity, to be appointed by the Boards of Supervisors of San Mateo and Santa Clara respectively.

The Authority will be responsible for issuing revenue bonds to fund improvements to the Hetch Hetchy water system. Debt service will be paid by each member agency, through a surcharge on water purchased by SFPUC. A 2/3 majority (19 votes) of all voting members is needed to issue bonds. Unlike the Bay Area Water Supply and Conservation Agency, there is no provision within SB 1870 for weighted voting. Therefore, in theory, the 19 lowest water users (currently representing about 28% of total suburban water usage) could approve the issuance of bonds. Conversely, 10 agencies, regardless of size, could block the passage of bond measures.

Rate Impact on Hayward Customers

It is too early to speculate on the impact of the legislation on Hayward water rates, as it is not known what will be implemented. However, it is reasonable to anticipate that Hayward residents will see a substantial increase in their water rates over the next ten years. Hayward purchases about 10% of all water used by the suburban users. Assuming that the total obligation for suburban users is about \$2 billion for upgrading and improving the Hetch Hetchy system, Hayward's share could approach \$200 million. Again, assuming that 50% of the improvements projects are completed in the next eight to ten years, sufficient funds will need to be raised through rate increases during that period of time to cover the City's obligations for repayment of the bonds. Modifications to the City's rate structure will need careful consideration and will be presented to the Council once more information has been obtained.

SFPUC/EBMUD/Hayward Regional Water Intertie

One of the ongoing concerns of the BAWUA member agencies has been the lack of alternative sources of water available to BAWUA during emergencies and scheduled and unscheduled maintenance periods where the supply of water from Hetch Hetchy or local reservoirs (Calaveras and San Antonio) may be limited. To that end, and after years of negotiations, SFPUC entered into an agreement in 2000 with the Santa Clara Water District (SCWD) for an emergency intertie between the two systems to provide 40 million gallons of water a day from one system to another as necessary.

Earlier this year, SFPUC contacted Hayward staff to discuss the concept of a regional water system Intertie with East Bay Municipal Utilities District (EBMUD). Hayward is the only SFPUC customer that borders the EBMUD system. They pointed out that Hayward, as well as SFPUC and EBMUD, could benefit from the regional intertie project. Hayward's two transmission mains connect to two SFPUC transmission mains (Bay Division Pipelines #1 and #2) of SFPUC in Fremont and Newark. (See Exhibit A) These two transmission mains (a 24 inch main located on Mission Blvd. and a 42 inch main located in Hesperian Blvd.) continue as far north as Winton Avenue. EBMUD, which serves points north of Hayward, has two transmission mains also in Mission Blvd. and Hesperian Blvd., approximately one and a half miles from the City transmission mains.

After the initial meetings between the management and technical staff from SFPUC, EBMUD, Hayward, and Alameda County Water District (which serves Fremont, Union City, and Newark), a consulting engineer was hired by EBMUD and SFPUC to initially assess the

feasibility of an intertie. The consultant has reviewed the systems and concluded that an intertie would be feasible. During the winter months, the intertie could transmit 30 million gallons of water from SFPUC to EBMUD and vice versa, using Hayward's water system.

In order for the Intertie to work, the following major improvements are required:

1. Construction of the planned Hesperian pump station, a large 40 million gallons a day pump station, which is being currently designed by Hayward and will be constructed at Hesperian and Industrial in order to meet City needs. This pump station along with the City's existing Decoto pump station would be used to transmit water to EBMUD.
2. Construction of a second, 30 million gallons a day pump station to be constructed in the vicinity of A Street and Hesperian Boulevard to pump the water from EBMUD to SFPUC system.
3. Construction of an 8,000-foot long 36-inch diameter pipeline on Hesperian Blvd., from Winton Avenue to Bartlett Avenue in San Lorenzo, to connect the City's 33-inch transmission main to EBMUD's 36-inch transmission main.

It is estimated that the intertie would cost \$16.5 million to construct. It is proposed that SFPUC, EBMUD and Hayward share in the cost of constructing the intertie since all agencies would benefit; however, no cost split has been determined at this point. Also, grants may be available for a regional intertie. It is expected that SFPUC will include the cost of the intertie in the base rate, as was the case with the SFPUC/SCWD intertie. As such, all suburban water users, including Hayward, will pay a share of the cost through wholesale water rates. To the extent that it is determined that there is a unique benefit to Hayward beyond the benefits to all wholesale customers, the City might need to pay a portion of the total cost directly.

Both EBMUD and SFPUC have indicated that they would want Hayward to take the lead for the design and constructions of the facilities that would be located in Hayward, namely the new intertie pump station on A Street (close to Hesperian) and the pipeline segment located in Hayward (from Winton to A Street). SFPUC would design and build the modifications to their pipelines and EBMUD would design and build the pipeline segment in San Lorenzo.

Benefits to Hayward:

Currently Hayward has emergency interties with both water agencies bordering the City, namely EBMUD to the north and ACWD to the south. We are able to get about 9 million gallons of water a day from ACWD, and approximately 9 million gallons of water through two interties with EBMUD. The two interties with EBMUD, one located on Foothill Blvd. at City Center Drive, and the other on A Street at Hathaway, require the use of portable pumps. The City has purchased two portable pumps, and secured the necessary piping to enable set up and use of the interties.

Under the new regional intertie, the City would be able to get between 15 and 30 million gallons of water a day through the Intertie, depending on circumstances. Fifteen million

gallons per day is equivalent to the City's current average winter month usage. The advantages for the City are that it would be easier to run a regional intertie as opposed to the portable local ones, and we could get more water than currently available through the local interties, thereby providing increased redundancy and reliability.

There is, of course, regional benefits resulting from the project. The 30 million gallons coming from EBMUD would enable SFPUC to take 30 million gallons of water which would have been taken by Hayward and ACWD from the SFPUC system, and use it elsewhere, including the South Bay and the Peninsula.

Necessary Next Steps:

The implementation of any regional water system Intertie project is envisioned to be a three-step process. The first step would involve the preparation of a CEQA document. Assuming that the results of the CEQA analysis were satisfactory to all the involved agencies, a decision would then be made to proceed to the second step, which would be the design and construction of the facility. The third step would involve the maintenance and operation of the intertie.

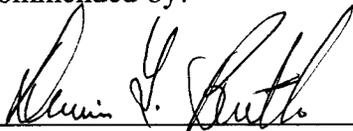
At its meeting of October 8, the Council will be asked to authorize the City, acting as the lead agency, to commence the CEQA process. At a later date, the Council will be asked to consider agreements related to steps two and three.

Prepared by:



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Recommended by:



Dennis L. Butler, Director of Public Works

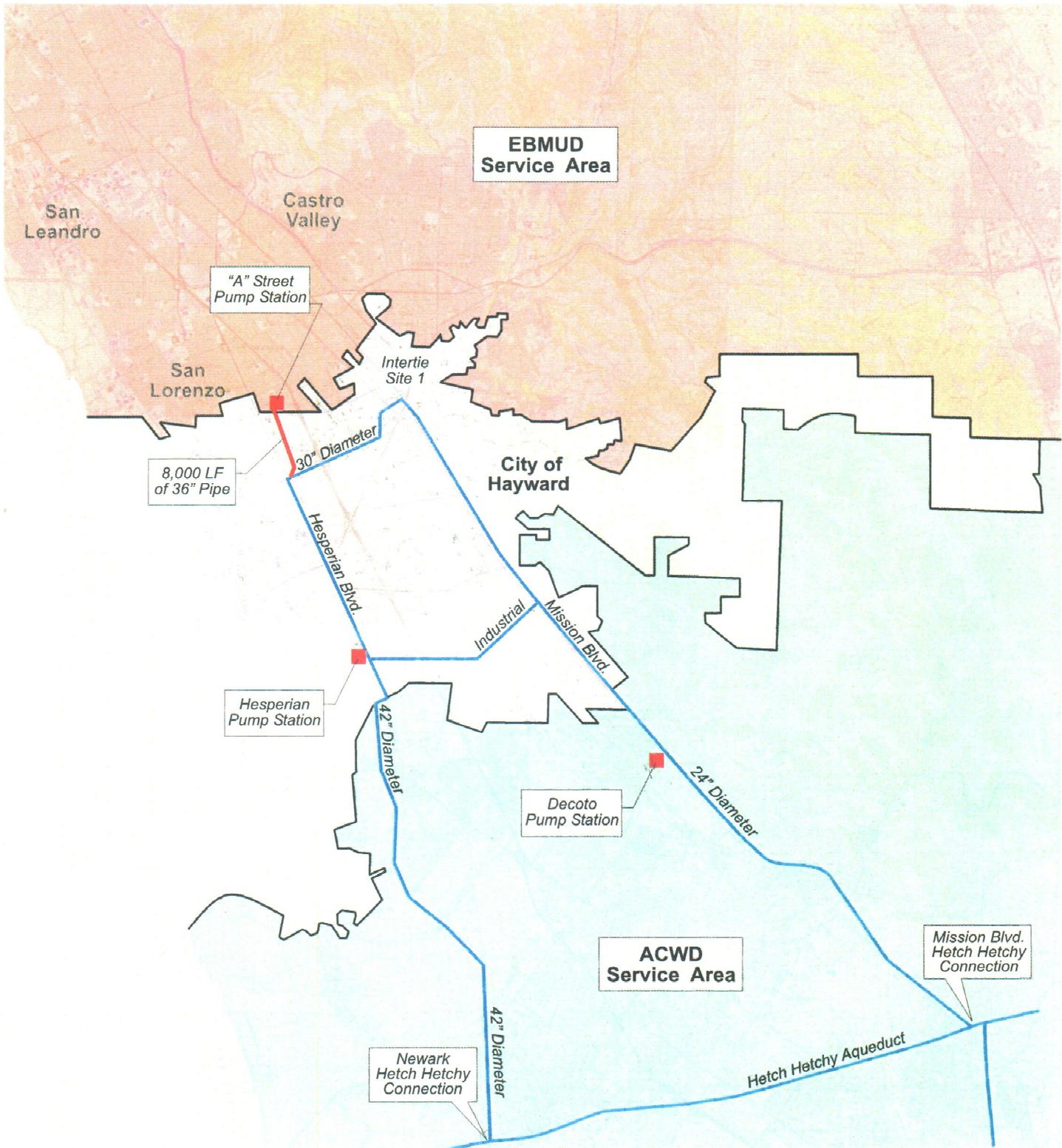
Approved by:



Jesús Armas, City Manager

Attachment:

Exhibit A - Water system Interties and Improvements



**WATER SYSTEM INTERTIES
AND IMPROVEMENTS
CITY OF HAYWARD**