

**BAY AREA WATER SUPPLY AND CONSERVATION AGENCY
BOARD OF DIRECTORS MEETING**

January 12, 2012

Media coverage of interest between November 14, 2011 and January 12, 2012.

Attached documents are being provided to you for your information and are not in the agenda for discussion.

Correspondence

Date: January 12, 2012
From: Arthur Jensen, Chief Executive Officer
To: BAWSCA Board of Directors
Re: Chief Executive Officer's Letter

Date: November 14, 2011
From: Ed Harrington, General Manager, San Francisco Public Utilities Commission
To: The Hon. Diane Feinstein, Senator
Re: H.R. 1837 – San Francisco Hetch Hetchy Regional Water System

Media Coverage

Water Supply

Date: January 9, 2012
Publication: Stanford Daily
Opinion: Area Lacks concern over snow

Water Transfer

Date: January 10, 2012
Publication: Modesto Bee
Article: MID keeps alive proposal to sell water to San Francisco

Date: January 7, 2012
Publication: Modesto Bee
Article: MID not ready yet for vote on sale of Tuolumne River Water

Date: January 2011
Source: Modesto Irrigation District
Material: MID Water Transfer – FAQ

Hetch Hetchy

Date: January 4, 2012
Publication: San Francisco Chronicle
Article: Dan Lungren's critics wary of Hetch Hetchy plan

Date: December 15, 2011
Publication: Sacramento Bee
Article: Editoria: Lungren picks a good crusade – Hetch Hetchy

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Bay Area Water Supply & Conservation Agency

155 Bovet Road, Suite 302
San Mateo, California 94402
(650) 349-3000 tel. (650) 349-8395 fax

MEMORANDUM

TO: BAWSCA Board of Directors
DATE: January 12, 2012
FROM: Arthur R. Jensen, Chief Executive Officer
SUBJECT: Chief Executive Officer's Letter

SFPUC Water Line Break in South San Francisco On November 25, 2011 a 12-inch diameter service connection failed in South San Francisco. The service connection was one connection between the SFPUC regional water system and the local water distribution system owned and operated by Cal Water. The facility that failed had recently undergone renovations as part of the SFPUC's Water System Improvement Program (WSIP).

Water service to the community was not disrupted. The SFPUC began addressing the needs of residents who experienced flooding or displacement due to the leak. The SFPUC also commissioned an independent review of the incident by Exponent, an engineering and science consulting firm, which provided a forensic analysis of the event.

A copy of a December 27 letter to Mayor Garbarino of South San Francisco is attached. A copy of the report by Exponent will be provided upon request.

BAWSCA met with SFPUC managers to discuss their investigation and the potential ramifications to the WSIP. The SFPUC took appropriate actions in the aftermath of the event. The cause of the break was a design flaw in the connection to the regional water system. Other factors may or may not have contributed to the event. The SFPUC has reviewed similar plans and specifications and is correcting or has corrected designs having the same flaw. The SFPUC has revised its Quality Control and Quality Assurance procedures to ensure such designs are not approved in the future. The SFPUC has revised its communication protocols to reduce response time during holiday periods and to ensure closer communication with affected community leaders.

Revenue Bond Oversight Committee Report:

The San Francisco Public Utilities Commission Revenue Bond Oversight Committee (RBOC) commissioned an independent panel of construction management experts to review certain aspects of the SFPUC's construction management program as it applies to the Water System Improvement Program (WSIP). The RBOC was established by SF voters in 2002 and is comprised of seven members, one of which is appointed by the Bay Area Water Users Association (BAWUA).

An Independent Review Panel (IRP) of four experts, comprised of current and former construction industry experts, has completed its review and will be presenting its findings and recommendations to the RBOC the week of January 23. Concurrent with the release of the panel's report is a separate report by RBOC's Peer Reviewer, an independent consultant hired by the RBOC to oversee the Panel's work. This report will also be presented to the RBOC the week of January 23.

Lungren and Feinstein Letters to the Secretary of the Interior

On December 7, 2011, Congressman Dan Lungren wrote a letter to Secretary of the Interior Ken Salazar urging an investigation of whether or not San Francisco is in compliance with the Raker Act. On December 16, 2011, Senator Diane Feinstein wrote a letter to Secretary Salazar citing San Francisco's record of compliance with the Raker Act and stating that Congressman Lungren's request should not be taken seriously. Copies of both pieces of correspondence are attached.

The correspondence packet contains copies of news articles related to this exchange of letters.

Proposed Water Transfer from MID to SFPUC

The Modesto Irrigation District (MID) Board of Directors held a workshop on January 10, 2012 on a proposed transfer of 2 mgd of water to the SFPUC. MID clarified that water, but not water rights would be transferred if a satisfactory agreement were reached. The Board did not vote on a transfer agreement, but did vote to continue negotiations with San Francisco.

The correspondence packet contains copies of news articles related to the possible water transfer and the MID meeting.

FY08-09 Settlement Agreement

The SFPUC and BAWSCA have settled outstanding issues raised in connection with the FY2008-09 compliance audit of the wholesale revenue requirement. *(The wholesale revenue requirement represents our member agencies' share of operating and maintaining the regional water system and serves as the basis for setting wholesale water rates.)* The Wholesale Customers will receive a credit of \$1,008,397.

The Water Supply Agreement with San Francisco requires the SFPUC to conduct an independent "compliance" audit of wholesale revenue requirement every year. BAWSCA independently reviews the work papers associated with the compliance audit. It is during this review that BAWSCA sometimes finds expenses that have been inadvertently or incorrectly allocated to the Wholesale Customers.

BAWSCA discovered 13 expense items associated with the FY2008-09 wholesale revenue requirement that were incorrectly classified. The largest dollar item involved the misclassification of expense surrounding the Pacifica Recycled Water Program. When these types of errors are found, the SFPUC is requested to remove them from the wholesale revenue requirement and credit the Wholesale Customers accordingly.

Since 1995-96, BAWSCA has conducted this annual review on behalf of the wholesale customers. To date, BAWSCA has identified errors totaling in excess of \$15M for which credit adjustments were made. BAWSCA is currently in the process of settling outstanding issues involved with the FY2009-10 wholesale revenue requirement and hopes to reach agreement by April 1.

Attachments:

1. Copy of December 27, 2011 letter to Mayor Garbarino of So. San Francisco
2. Copy of December 7, 2011 letter from Congressman Lungren to Secretary of the Interior, Ken Salazar
3. Copy of December 16, 2011 from Senator Diane Feinstein to Secretary Salazar



San Francisco
Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

1155 Market Street, 11th Floor
San Francisco, CA 94103
T 415.554.3155
F 415.554.3161
TTY 415.554.3488

December 27, 2011

Mayor Richard Garbarino
City of South San Francisco
400 Grand Avenue
South San Francisco, CA 94080

Dear Mayor Garbarino:

Enclosed please find the results of the independent investigation of the failure of the 12-inch diameter service connection in South San Francisco on November 25, 2011. This connection was recently upgraded and placed back into operation as part of the Crystal Springs Pipeline #2 (CSPL2) Replacement Project. This project is part of the Water System Improvement Program (WSIP) being implemented to retrofit the Hetch Hetchy Regional Water System.

The analysis and investigation was conducted by Exponent, an independent and established engineering and science consulting firm whose services we retained. Along with all other interested parties, we desired an unbiased assessment of the cause of the incident. Their preliminary report identifies several possible contributing factors leading to the separation of the 12-inch connection that caused the water release, including the lack of sufficient restraint of a 12-inch bolted coupling. According to Exponent's analysis, the "insufficient restraint resulted in the separation of the incident bolted coupling and caused the bulk of the damage." Other possible factors that may have contributed to the incident are also listed in the report but to what degree these other factors played a role in the pipeline failure is unclear.

We have made a comprehensive review of all similar types of coupling connections in service connections that have been or will be made through the WSIP. There are 35 such service connections. Only the failed connection and six other future connections that had not been installed yet as part of the CSPL2 project lacked the recommended restraints. Those six future connections will be re-designed. In addition, we have reconfirmed that the other connections were designed appropriately, and those that have been constructed are in fact operating without incident.

We have implemented new and improved engineering and construction management protocols to prevent a similar recurrence, including:

1. Quality Control review of all design drawings and calculations will be performed by appropriate Senior Engineers.
2. The procedures for both Design Calculations and Design Drawings will be revised to clarify the requirement for Quality Control review of plans.

Edwin M. Lee
Mayor

Francesca Vietor
President

Anson Moran
Vice President

Ann Moller Caen
Commissioner

Art Torres
Commissioner

Vince Courtney
Commissioner

Ed Harrington
General Manager



3. We will develop an electronic library for capturing design lessons learned on capital projects that will be managed and updated by the discipline design managers and made available for all design engineers and technical staff.
4. We will update communication and coordination protocols between the Construction Management team and contractors when individual service connections are activated.

We believe that these additional protocols and others that we implement will help ensure that a similar incident does not occur.

We sincerely regret the damage and inconvenience caused by the pipe failure and will continue working with everyone who was affected to expedite any claims or repair work. We appreciate your patience and the patience of others as we completed our investigation. In addition to sharing this report, we will be responding via letter to the questions raised at the December 14 City Council meeting and will be happy to appear before the City Council at future meetings. A copy of the report is available on our agency website, <http://sfwater.org>.

We are proud to serve as the water utility for your city through California Water Service Company and for much of the Bay Area and will continue to move forward with improvements to ensure the reliability of the Hetch Hetchy Regional Water System.

Sincerely,



Steven R. Ritchie
Assistant General Manager, Water

Enclosure

cc: SFPUC Commissioners
Assemblyman Jerry Hill
Art Jensen, BAWSCA
Rob Guzzetta, California Water Service Company

DANIEL E. LUNGREN
3RD DISTRICT, CALIFORNIA

COMMITTEE ON
HOUSE ADMINISTRATION
CHAIRMAN

COMMITTEE ON
HOMELAND SECURITY
Subcommittee on Cybersecurity,
Infrastructure Protection, &
Security Technologies
Chairman

COMMITTEE ON
THE JUDICIARY

Congress of the United States
Washington, DC 20515

December 7, 2011

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WASHINGTON, DC 20515
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FAX: (202) 226-1298

DISTRICT OFFICE
2339 GOLD MEADOW WAY, SUITE 220
GOLD RIVER, CA 95670
(916) 859-9906
FAX: (916) 859-9976

E-MAIL: VISIT OUR WEBSITE
www.lungren.house.gov

Secretary Ken Salazar
Department of the Interior
1849 C Street, N.W.
Washington, DC 20240

Dear Secretary Salazar:

I respectfully request the Department of Interior investigate what appears to be a violation of federal law by the City and County of San Francisco (hereafter "San Francisco" or "City"). The specific question to be addressed is whether the City's current municipal water practices, including those related to its use and disposal of water captured from the Tuolumne River, without first exhausting all local water resources, are in direct violation of the Raker Act. These Raker Act provisions pertain to San Francisco's use of Tuolumne river supplies diverted under their water rights but do not pertain to potential purchases from other users on the Tuolumne River or elsewhere.

The Raker Act, 38 Stat. 242 (1913), granted authorization to San Francisco to construct a series of dams, reservoirs and pipelines within the Yosemite National Park and the Stanislaus National Forest. This included authorizing the construction of the O'Shaughnessy Dam, which resulted in the ecological destruction of the Hetch Hetchy Valley and the submergence of 8-9 miles of the wild and scenic Tuolumne River. This authorization was intended to permit the City to then utilize the water captured in those reservoirs for domestic and other municipal purposes.

As part of the Raker Act grant, Congress predicated the City's use of Tuolumne River water on its satisfaction of conditions specifically imposed by the Act, ostensibly to ensure that water of the Tuolumne River was not unnecessarily exploited. **As part of the conditions imposed on San Francisco is a requirement that the City first fully develop and use other available water resources before it begins to export water it captures from the Tuolumne River.** Specifically, section 9 (h) provides:

That the said grantee shall not divert beyond the limits of the San Joaquin Valley any more of the waters from the Tuolumne watershed than, together with the waters which it now has or may hereafter acquire, shall be necessary for its beneficial use for domestic and other municipal purposes.(emphasis added.)

Thus, in order for the City to continue to enjoy the benefits of the grant enshrined in the Raker Act, the City must export no more water than is "necessary" to meet its domestic and other municipal purposes "together with the waters which it now has or may hereafter acquire." However, San Francisco currently engages in a variety of non-sustainable practices which

demonstrate a failure to satisfy that requirement. Specifically, it is my understanding the City of San Francisco ignores the terms of the Raker Act in the following manner:

A. Lack of Water Recycling. As water recycling technology has emerged over the last 25 years, the City has failed to adequately invest in systems to recycle the water extracted from the Tuolumne River. Currently, San Francisco does not use recycled water but does hope to use 4 MGD by 2035.¹ Comparatively, the City of Los Angeles currently uses 28 MGD of recycled water and projects to use 79 MGD by 2035²; Orange County uses 35 MGD³ of recycled water and projects to use 53 MGD by 2035.

B. Lack of Use of Groundwater. Since the completion of the Hetch Hetchy system San Francisco has virtually abandoned use of all local groundwater supplies. In 1930 San Francisco utilized 14.5 MGD of local groundwater compared to just 2.2 MGD today. San Francisco's current plans to extract an additional 4MGD by the end of 2020 is still less than half of what San Francisco utilized prior to the diversion of Tuolumne River water in 1930.

C. Lack of Rainwater Harvesting. San Francisco receives on average 20 inches of rain each year, the equivalent of 55,000 acre feet of water or approximately 49MGD. Given the City has failed to invest in modern technologies that would capture this water and/or implement policies that would facilitate its absorption into the aquifer, virtually all of this water is discarded into the San Francisco Bay or Pacific Ocean.

It is my belief that by transporting and using the water captured from the Tuolumne River, without first fully utilizing these local resources, the City is failing to satisfy the clear mandate of the Raker Act that all local resources be exhausted before drawing water from the Tuolumne.

A review of the legislative history associated with the Raker Act shows that the plan was approved with an emphasis on the full utilization of the resources included as part of that grant. (See *Hetch Hetchy Dam Site: Hearing Before the House Committee on the Public Lands* 63rd Cong.(1913)).

In fact, Colonel Biddle from the Army Corps of Engineers stated that the development of the Hetch Hetchy plan, as well as other, ultimately rejected alternatives were developed with an understanding that San Francisco would develop their local water supplies:

“in all of our estimates here I have supposed that San Francisco will develop to a reasonable extent its present water supply.” (*Id.* at p. 67.)

That history likewise indicates that the Public Lands Committee was concerned not only with the situation at the time of the grant, but well into the future, as estimations used for determining water-usage amounts were based on estimations through the year 2000. (*Id.* at p.89.)

¹ 2010 Urban Water Management Plan for the City and County of San Francisco.

² 2010 Urban Water Management Plan for the Los Angeles Department of Water and Power

³ 2010 Urban Water Management Plan for the Municipal Water District of Orange County

Secretary Ken Salazar

December 7, 2011

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Given these facts, I request the Department of Interior take action to investigate and further address these issues. As you no doubt know, Congress specifically charged the Department of Interior with enforcement of the Raker Act's provisions. Specifically, the Raker Act states:

...in the exercise of the rights granted by this act the grantee shall at all times comply with the regulations herein authorized, and in the event of any material departure there from the Secretary of the Interior or the Secretary of Agriculture, respectively, may take such action as may be necessary in the courts or otherwise to enforce such regulations. (Raker Act, § 5.)

Likewise, the Act provides that the City is required to comply "at all times" with the conditions specified in the act, and where the City fails to satisfy those conditions, the Secretary of the Interior is to request action to be taken by the Attorney General of the United States. (Raker Act, § 9 (u).)

Based on that authority, I respectfully request that you undertake an investigation to evaluate the City's compliance with the Raker Act's provisions in light of the above-discussed issues. Likewise, I further respectfully request that any violations found by your department be addressed through expeditious action in order to bring San Francisco's water policies and practices into compliance with the Raker Act.

In the alternative, should the Department of Interior determine either that no investigation is necessary or that the City's current practices are not in violation of the Raker Act, I respectfully request a response to this letter indicating the reasons why no further action is required at this time.

I appreciate your prompt attention to this matter and thank you for your time.

Sincerely,



Daniel E. Lungren
Member of Congress

*P.S. Great to see you at
the White House Christmas
Ball. I hope you
appreciate my special
fondness for Yosemite*



United States Senate

WASHINGTON, DC 20510-0504

<http://feinstein.senate.gov>

December 16, 2011

The Honorable Ken Salazar
Secretary
U.S. Department of Interior
1849 C St. NW
Washington, DC 20240

Dear Mr. Secretary:

You recently received a letter from one of my colleagues, Congressman Lungren, urging an investigation as to whether the City and County of San Francisco is in compliance with the Raker Act based on an assertion that "the City must first fully develop and use other available water resources before it begins to export water it captures from the Tuolumne River." Based on the facts stated below I would respectfully suggest that the City is fully and completely in compliance with the Act and therefore any such investigation is completely unwarranted.

The legislative history of the Raker Act is abundantly clear. During Congressional consideration of the Act, San Francisco proposed to immediately construct the Hetch Hetchy Project to its maximum capacity, offsetting project costs by serving irrigated agriculture in the Bay Area with Project water until such time as domestic and municipal demands grew to require its use for those purposes. This proposal outraged San Joaquin Valley agricultural interests who were already concerned that San Francisco would divert water they believed should be used to bring new San Joaquin Valley lands under cultivation. In response, Congressman John Raker of Modesto inserted Section 9(h) into the Act to limit San Francisco's use of Hetch Hetchy Project water in the Bay Area to domestic and other municipal purposes only.

At no time was there any suggestion that San Francisco was required to exhaust use of local water resources before diverting from the Hetch Hetchy Project to the Bay Area for purposes of meeting municipal needs. San Francisco

and the communities that it serves are leaders in water conservation among major metropolitan areas in the State. On average, the City diverts 250,000 acre feet of water from the Tuolumne River—this from an annual average flow of 1,800,000 acre feet. These diversions represent only 0.7% of all Delta watershed diversions. With those, the City serves 2.6 million customers, or 7% of the entire State's population and a significant portion of the Bay Area's industries. San Francisco's per capita water use is 88 gallons per person per day (gpd), one of the lowest in the state. The City has invested and will continue to invest in sustainable water conservation measures.

Contrary to the Congressman's assertions, the City is aggressively pursuing numerous water supply projects not related to the Tuolumne. As a function of its Water System Improvement Plan (WSIP), a \$4.6 billion rehabilitation of the Hetchy Regional Water System, the City is aggressively augmenting its supply options through two recycled water projects which are currently under construction. The Sharp Park Recycled Water Project and the Harding Park Recycled Water Project are estimated to be complete in the Spring and Summer of 2012, respectively. In addition, the City's Westside Recycled Water Project is currently undergoing environmental review. This proposed project consists of an advanced treatment facility that would deliver up to 2 mgd. The City has completed two pre-planning studies on a proposed Eastside Recycled Water Project which would deliver an additional 2 mgd. The City is actively partnering with its wholesale customers to undertake recycled water projects in Daly City, Colma, South San Francisco and Woodside.

In addition to recycled water, the City is aggressively pursuing a number of alternative supply options in the region. The City, in conjunction with several of its wholesale customers, is pursuing the Regional Groundwater Storage and Recovery Project to increase use of groundwater. The project consists of the construction of 16 regional groundwater wells with a total capacity of 7.2 mgd to be used as a regional dry-year water supply.

Since 2003 the City has been actively engaged with other Bay Area water utilities in the Bay Area Regional Desalination Project. This \$193 million project, which received an authorization for a US Army Corps of Engineers feasibility study, could deliver 9 million gallons per day, or 10,080 acre feet per year, of potable water to San Francisco's service area as early as 2020.

In addition to developing new sources, the City continues to maintain storage facilities within its local watersheds in Alameda and San Mateo counties.

As part of the WSIP, the City has begun construction to rebuild and enhance two Bay Area reservoirs that capture local runoff. The City has broken ground on the \$416 million Calaveras Dam Replacement Project on Alameda Creek, and will complete the \$36 million Lower Crystal Springs Dam Improvement Project on San Mateo Creek in September 2012.

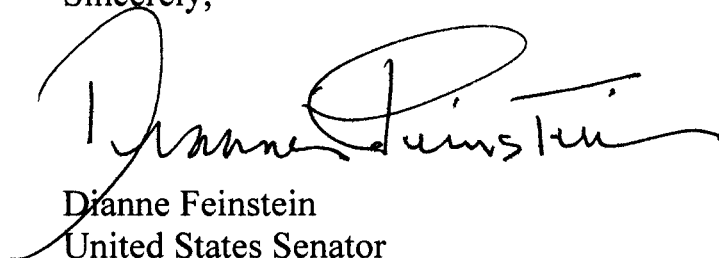
When these facts are taken into account it cannot seriously be contended that San Francisco is not aggressively pursuing every feasible and reasonable water supply alternative in furtherance of the public interest. It is doing so because it is consistent with prudent utility practice and the City's longstanding and wise stewardship of its natural resources; not as Congressman Lungren has asserted, because it is required by the Raker Act.

Mr. Secretary, in light of San Francisco's aggressive pursuit of all legitimate regional water supply options and the undeniably clear legislative history of the Raker Act, I'm sure you will agree with me that an investigation along the lines of that requested by Congressman Lungren is unnecessary and wasteful.

Bottom line, Hetch Hetchy is a vital resource that must not be hampered. Through its energy efficient gravity flow system, it pipes some of the cleanest water in California to more than 2.5 million people and thousands of high tech companies that rely upon its purity. To tear down, or in any way interfere with Hetch Hetchy's continued successful operation simply makes no sense.

Thank you for your consideration of these views.

Sincerely,

A handwritten signature in black ink, reading "Dianne Feinstein". The signature is fluid and cursive, with a large initial "D" and a long, sweeping underline that extends across the name.

Dianne Feinstein
United States Senator



San Francisco Water Power Sewer

Services of the San Francisco Public Utilities Commission

1155 Market Street, 11th Floor
San Francisco, CA 94103
T 415.554.3155
F 415.554.3161
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November 14, 2011

The Honorable Dianne Feinstein
United States Senate
331 Hart Senate Office Building
Washington, DC 20510

Dear Senator Feinstein:

During Congressional consideration of H.R. 1837, various issues have been raised regarding whether the San Francisco Hetch Hetchy Regional Water System has received special treatment. As such, I believe it is important to provide some facts on our water usage and associated costs to better inform the discussions.

As you know, the Hetch Hetchy system serves 2.5 million people in San Francisco and Silicon Valley, including communities in San Mateo, Santa Clara, Alameda and Tuolumne counties. Here are some facts and if necessary we can provide more detailed supporting documents:

- The San Francisco PUC is responsible for less than 0.7% of all Delta watershed diversions. With those diversions we serve 7% of the entire State's population.
- Our retail customers in San Francisco and our wholesale customers in the Bay Area (2.5 million people) use less than half the 155 gallon/per day *average* used throughout the rest of the State. This is the lowest water usage rate for any California region.
- The total Hetch Hetchy diversions in an average year amounts to 250,000 acre feet. To put this into perspective, the Tuolumne River annual average flow is 1,800,000 acre feet.
- Given the nature of our water right, we can only divert all of that water during peak flow periods when ample water is otherwise flowing throughout the watershed.
- We contribute monetary support to fish and wildlife enhancement and mitigation around Hetch Hetchy and other regional watersheds.
- The SFPUC just signed a new contract obligating us to transfer more than \$30 million over the next 5 years to the National Park Service for operations in Yosemite National Park. In addition, we voluntarily created a \$50 million fund to improve watersheds affected by our water system facilities.

Edwin M. Lee
Mayor

Anson Moran
President

Art Torres
Vice President

Ann Moller Caen
Commissioner

Francesca Viator
Commissioner

Vince Courtney
Commissioner

Ed Harrington
General Manager



- The Hetch Hetchy system was paid for by customers and received no federal and state funding.
- We are currently in the midst of a \$4.6 billion seismic upgrade of our water supply and distribution system that receives neither financing nor subsidies from the State or Federal Government for this work.

The Hetch Hetchy Project is already subject to the Endangered Species Act (ESA) to the same extent as any other California water project, including the Central Valley Project and the State Water Project. Rather than creating "equality," H.R. 1837 sets the dangerous precedent of placing greater ESA requirements on a single water agency than those that apply to any other water agency in the State.

San Francisco already contributes our "fair share" within the greater California water community. We pay more for fish and wildlife enhancement than many users pay for their water—water which often benefits from State or Federal subsidies. Given our usage patterns, you can also understand why we would steadfastly resist the notion of surrendering a percentage of our water for consumption by others who will use it less efficiently.

We fully share your belief that Californians must work together in harmonious fashion to meet the perpetual challenges that will confront us on water issues. As we have in the past, we remain unhesitatingly and enthusiastically committed to working with our fellow Californians to achieve a fair and balance approach to sustain and promote the economic and social welfare of our great State. We appreciate your leadership on this vital issue and look forward to working with you to that end.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ed Harrington", followed by a slanted line and the word "for" in a cursive script.

Ed Harrington
General Manager

Area lacks concern over snow

Stanford Daily, Wednesday, January 11th, 2012

By **Nardos Girma**

Over the past week, Stanford students have fretted about the low level of snowfall in the Tahoe area in anticipation of dorm ski trips during the coming weekends. What students have not realized is that beyond inconveniencing skiers and snowboarders, this low snowfall could potentially have a future impact on California's water supply.

The amount of water in the snow of the Sierra Nevada Mountains is currently **83 percent below its Jan. 3 average** and could impact the San Francisco water system, which currently gets about 85 percent of its water from the Sierra Nevadas.

The system, which serves about half of the Bay Area, including San Francisco, the Peninsula and parts of Santa Clara and Alameda County, provides water from the **Hetch Hetchy water system**, which is fed by Sierra runoff.

Although the decreased snowfall in the Sierra may sound alarming, especially considering its link to the Bay Area and Stanford water supplies, there is little reason to be too concerned, according to Steve Ritchie, assistant general manager at the **San Francisco Public Utilities Commission** (SFPUC).

"Basically, coming into this year, the Hetch Hetchy reservoir is full or as close to full as we can have it this time of year," Ritchie said. "So right at the moment, we are not overly concerned; but we are certainly keeping an eye on the amount of snowfall up [in the Sierras]."

Tom Zigterman, **Associate Director and Civil Infrastructure Manager** for Stanford, who manages the water systems here on campus, cited heavy precipitation in the past few years as the main reason for this.

"It isn't as alarming as it might seem that we haven't had as much rainfall this rainy season to date because the reservoirs are quite full in the state from the prior two years of good rainfall," Zigterman said. "It would take two to three years of rainfall below normal to start seriously impacting California's water supply."

This does not mean that a drought is entirely out of the question, but rather that if one did occur, Californians would not feel the effects of it for a few years.

"This could be the beginning of a drought," Ritchie said. "Would we see the effects of it directly? No, because we still have lots of carry-over storage from last year, but that means we have to be extra cautious going into next year."

Additionally, California has reason to remain optimistic about future rainfall.

"While December 2011 was dry, typically January through May account for about two-thirds of the water year precipitation," wrote Margaret Laporte, associate director of **Utilities for Water Resources and Environmental Quality** for Stanford, in an email to The Daily. "In the past two years we have had rains

past May into June. So while precipitation to date is lagging, there are a number of historically wet months ahead of us.”

Even if a dry winter were to occur, the Bay Area would be able to depend on the full reservoirs. Stanford, which receives a majority of its water from the SFPUC, also would not be affected by a dry winter.

The SFPUC is one of three water supplies for Stanford, making up 100 percent of the University’s potable water supply — water that is suitable for drinking. Stanford’s non-potable service water comes from creeks in the foothills, rainfall runoff and ground water, and is used for purposes such as irrigation and toilet-flush.

If a drought were actually declared in the future, customers of the SFPUC could be expected to decrease their water consumption, something that the [Santa Clara Valley Water District](#) has had to mandate in the past.

Water conservation is not new to Stanford. The University has already made immense strides in water conservation, even without a drought, [decreasing average daily potable water use from 2.7 million gallons per day to below 2.2 million gallons per day](#), despite continued campus growth.

Additionally, Stanford is continuing to explore conservation measures such as retrofitting fixtures and converting irrigation from potable water to non-potable water supply.

Although Californians will most likely not experience any effects of a dry winter in the immediate future, the current dry spell does cast a light on California’s water systems.

According to Zigterman, “It continues to indicate that we need to plan long-term in the state and particularly in dry climates like we have in California and the West, to be careful about our water supplies and use them prudently.”

Contact Nardos at ngirma@stanford.edu.

 [Print This Article](#)

Posted on Tue, Jan. 10, 2012

MID keeps alive proposal to sell water to San Francisco

By John Holland jholland@modbee.com

last updated: January 10, 2012 10:03:20 PM

The idea of selling water to San Francisco stayed alive Tuesday at the Modesto Irrigation District board meeting, despite protests from people who want to keep it for farming or fish.

Directors voted 4-1 to have district staff complete negotiations on an initial sale of about 2,200 acre-feet of Tuolumne River water per year.

The detailed agreement, including the price and duration, is expected to return to the board for a final vote in several weeks.

San Francisco ultimately could buy as much as 25,000 acre-feet a year, about a seventh of what the MID delivers to its farmers.

Despite assurances that the sales would not leave farmers short of water, many of the 80 or so people in the boardroom objected.

"My gut feeling here today is that we really shouldn't be doing this," dairy farmer Edwin Genasci said.

Directors Nick Blom, Paul Warda, Glen Wild and Tom Van Groningen voted to continue the talks. Director Larry Byrd was opposed.

"I make a motion that we kill this deal and won't talk about it anymore," Byrd said. He did not get a second.

The board majority did say that the terms, which to this point have been confidential, will get plenty of public review before the final vote.

The MID expects to free up the water thanks to conservation projects on its canal system. San Francisco already diverts Tuolumne water for about 2.5 million customers in four Bay Area counties.

The additional income could allow the MID to pay for an estimated \$110 million in upgrades to the system without a major rate increase for farmers, General Manager Allen Short said.

He added that the sales could ease the burden on the MID's electricity customers, notably the expected \$25 million cost to renew the federal power license at Don Pedro Reservoir.

"We would be able to benefit both the irrigation side of the house and the urban community as well," Short said.

A staff report said the first sale could bring more than \$1.5 million a year. That works out to at least \$682 per acre-foot — 101 times what farmers paid last year — but San Francisco officials said this would be cheaper than desalinization or other alternatives.

Fruit grower Paul Van Konynenburg said he could accept rate increases to pay for the canal improvements if this meant keeping the water in the area.

"We all know that water is a valuable commodity to us as growers," he said. "It's our lifeblood."

Nut grower Jake Wenger said the district should have steadily improved the system over the years rather than proposing major work in the next decade.

"Bottom line, MID is hard up for money and they're looking for easy cash," he said, "but at what expense?"

Several people cited the very dry start to winter, which has prompted the MID to refill its canals for a couple of weeks.

"We're living a perfect example right now of what can happen, how quickly this thing can change," said Ron Peterson, vice president of the Stanislaus County Farm Bureau.

Some critics said they could accept water sales only if they are short term and sustain the San Joaquin Valley economy.

Environmentalists argue that any water conserved by the MID should be released into the lower river to aid its salmon population.

"We need to keep water local for agriculture and the Tuolumne River," said Patrick Koepele, deputy executive director of the Tuolumne River Trust. "Wildlife, fish and other resources have been suffering lately in and along the river."

He also said San Francisco's water consumption has been dropping.

Farmers have opposed increased fishery flows. Some of them said Tuesday that the sale talks give the impression that the MID has a surplus of water that can be taken for this purpose.

At a separate meeting Tuesday, Stanislaus County supervisors decided to take a stand soon and forward their thoughts to the MID.

Supervisors did not show which way they're leaning on the issue, except for Terry Withrow, who called water a public asset and selling it out of the county "a dangerous precedent."

MID officials repeated their assurance that the sales would not involve the underlying water rights. They date to the 1880s and are some of the strongest in the state.

Van Groningen noted that parts of the system are showing their age, including a concrete flume that carries the main canal over Dry Creek.

"A seismic event could rupture the entire system in an instant," he said.

Bee staff writer Garth Stapley contributed to this report.

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MID not ready yet for vote on sale of Tuolumne River water

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The Modesto Irrigation District is approaching a critical juncture in its history with a decision on whether to sell Tuolumne River water to the city and county of San Francisco on an ongoing basis.

For many decades, the response to that suggestion has always been a firm and flat "no."

In the past several months, however, behind the scenes that "no" has turned into a "maybe."

Specifically, early discussions between the staffs of the MID and San Francisco have centered on two possibilities:

- The initial sale of 2,200-acre-feet per year for an unspecified number of years but as part of a long-term contract. San Francisco says it already has environmental clearance as a result of a 2008 environmental review. All sorts of particulars — including when the sale might start and at what price and for how many years — have yet to be worked out.
- A significantly larger sale — of up to 25,000 acre feet per year — also as a long-term contract. This deal would require a major environmental study and a major financial analysis.

After word of these preliminary talks surfaced last fall, the MID held four informal community meetings in October to answer questions.

But the elected MID board has not had a public discussion of the proposed sales — ever.

Thus, we don't believe the five board members — two of whom have been in office less than a month — are ready to vote on anything related to the issue, regardless of whether they are leaning toward or against any water sale.

We say that because the agenda for Tuesday's board meeting includes a vote on whether to move from informal talks to formal negotiations on the initial sale.

In our opinion, such an action would be premature.

Granted, if the majority of directors oppose the sale, then there's no use wasting everyone's time with negotiations.

But we're concerned that an early decision to move forward with negotiations will be interpreted as "yes, let's make a deal" — and that once put in motion, it would be hard to slow and nearly impossible to stop.

It's hard to see that the directors — especially the new ones — have received enough details and enough input from the MID's citizen customer-owners to make such a critical decision so quickly.

Therefore, it is important — actually, imperative — for the elected board to start holding public discussions on what would be a historic shift in practice and philosophy.

We should note that the staff indicated that Tuesday's agenda also might include a vote to start the actual EIR process, but that will not happen until later.

Calling for a delay doesn't necessarily mean that we are opposed to the smaller water sale. Rather, we don't think it should advance without a thorough discussion of a variety of issues.

Most important, like many farmers, we would want absolute guarantees that this long-term contract would not put at risk the MID's rights to Tuolumne River water in the future. These water rights and this water are the lifeblood of agriculture in the Modesto region. Reliable and low-cost irrigation water, available to both the Modesto and Turlock irrigation districts, is one of the reasons why ag is so productive and farmland prices remain strong. Together, ag production and spinoff industries provide thousands of jobs.

The dry winter that we're experiencing — with no rainfall yet in sight — only sharpens our concern about whether ongoing water sales are a good idea and whether a long-term contract can be written to protect the water needs of Modesto farmers in the event of a prolonged drought.

In addition, the board needs to fully identify how the revenue from the water sales would be used.

For the smaller sale, revenue could amount to more than \$1.5 million per year; for a large sale, it could total \$18 million to \$25 million a year.

That would go a long way toward paying for much-needed improvements to the MID canal system and for the district's share of the relicensing of the Don Pedro powerhouse. Without the water sale, those costs will be born by the MID's customers.

Electricity customers already are subsidizing the irrigation customers to some degree, in order to keep the irrigation water costs low. Everyone's rates would have to go up

substantially, affecting both the economics of ag as well as the water bills of urban residents because the city buys water at the same low rate farmers pay.

All those factors, along with environmental impacts, together illustrate the short- and long-term significance of water sales — and the need for a detailed analysis of the pros and cons.

Citizens recently elected two new MID directors, Larry Byrd and Nick Blom, who campaigned in part on being fully engaged leaders. The rap on the MID — somewhat justified, we believe — is that the board has tended to rubber-stamp most of the recommendations from General Manager Allen Short and his assistants.

Unless the board decides to shut down any further discussion of water sales, period, we would expect the issue to be the focus of many discussions and decisions over the next two years or more. The impact will last for decades.

We need to see the directors actively engaged in the policy and financial decisions that would be associated with the proposed sale — and we need to see all the discussions done in public.

The MID board meets at 9 a.m. Tuesday in the board room adjoining the office at 1231 11 St. The agenda is available on the district Web site, www.mid.org.

MID WATER TRANSFER | FAQ

The Modesto Irrigation District (MID) is in the process of considering a proposal to sell water to the City and County of San Francisco (CCSF). The goal of this potential transaction is to generate revenue which will be used to improve MID's irrigation system infrastructure. The cost of these necessary improvements, along with the cost of the Don Pedro relicensing project, are expected to exceed \$140 million. MID will have to pay these costs **whether or not** a water transfer agreement is reached. However, transfers would provide new revenue to MID, relieving the burden of these necessary activities on MID customers. A key outcome of this approach is that these infrastructure improvements will allow MID to improve the efficiency of our system and the water use, using the revenue received from the sale to conserve the water within our system to serve CCSF. This model serves state policy to look at agricultural to urban water transfers as a way to improve the health of California's water resources.

1. Will transferring the water for a long term deal endanger MID's water rights?

The proposal is for selling water. Just water; MID's water rights will be retained by MID; in fact by putting water to beneficial municipal and industrial uses, MID is protecting the water right.

2. Why give the water to CCSF?

MID is **NOT** giving water to CCSF. CCSF is offering an attractive market price in this area and the potential transfer will **NOT** require any new infrastructure. CCSF has a long standing relationship with the MID and has been a good river stewardship partner.

3. Is there a guarantee or "opt out" in drought years?

Any transfer being considered will be designed to protect MID's existing customers, including the agricultural and City of Modesto water users. There are a variety of ways to satisfy this requirement and unless this issue is resolved, there will be no transfer.

4. How will sales revenues be used?

Water sales revenue will be used for water related costs including infrastructure improvements, FERC relicensing and related obligations, water conservation programs and debt retirement. Such use of the revenues will enable MID to keep water rates stable for a number of years and take some of the hydroelectric facility burdens off of electric customers.

5. Why are we considering such a long-term contract?

Long-term water contracts aren't unusual. The domestic water contract with the City of Modesto has an unlimited term. MID has also engaged in contracts for as short as one year. As a rule, a long-term contract ensures reliability for both parties, commands a higher price and allows for built in price increases over the contract term. The terms of this proposal are still under discussion.

6. Will such a transfer impact the efforts to tear down O'Shaughnessy Dam and restore the Hetch Hetchy Valley?

No. The proposal doesn't directly impact that effort. Hetch Hetchy and Don Pedro are independent projects. However, the group leading this effort opposes the water transfer proposal.

Removal of O'Shaughnessy Dam would result in CCSF being unable to serve its customers without construction of new facilities to store and divert water. Don Pedro Reservoir does not have sufficient storage capacity to replace Hetch Hetchy.

7. Will this sale jeopardize MID's ability to serve agricultural customers and recharge groundwater?

No, providing adequate water to MID agriculture customers has always been and will continue to be a priority and will not be impacted by water transfers to CCSF. MID will continue its efforts to maintain and manage groundwater conditions in our service area. In the future, if sufficient revenues are available, property could be purchased to use as groundwater recharge basins.

8. How is MID's water currently distributed?

MID's share of water from Don Pedro Reservoir is 300,000 acre-feet. Each year, approximately 185,000 acre-feet is distributed to agriculture customers and around 35,000 acre-feet to the City of Modesto. The remaining water is distributed in operational outflows, utilized for environmental stewardship, groundwater recharge and some is kept in storage in Don Pedro.

9. Will there be an economic impact analysis discussing the pros and cons of the sale?

Yes. The economic benefits of a proposed transfer and alternative uses of the water will be part of the MID Board of Directors' review process.

10. Is there any loss of hydro generated power? If so, how will this be reconciled?

Any lost hydropower, both long-term and short-term, will be fully reimbursed by the terms of the transfer. Hydropower accounts for only a small percentage – about 10% – of MID's total power generation.

11. Why doesn't MID make this water available for purchase to west side or other nearby agricultural users?

Significant infrastructure, economic and legal hurdles make this an unrealistic option at this time.

12. What is the effect of this sale on the Tuolumne River?

The Tuolumne River won't be significantly impacted by any water transfer by MID. MID remains committed to conservation and its stewardship of the river. CCSF has completed an environmental review of the potential 2,200 acre foot transfer, and before any larger arrangement moves forward a thorough environmental review process, including a full Environmental Impact Report, will be completed. If any concerns are identified, appropriate action will be recommended at that time.

13. Will the purchase price for the water be a set price?

No, the contract will include built-in price increases (escalator clause) to keep pace with market increases.

14. Why not delay a water transfer until after the Federal Energy Regulatory Commission's (FERC) relicensing process for Don Pedro is complete?

The FERC process will last five years or longer. MID can ill-afford to postpone action to improve our infrastructure. Without the needed improvements we face the likelihood of both a loss of water and loss of potential revenue. Water committed for urban use is viewed very favorably in the relicensing process and meets the "beneficial uses" standard.

Also, FERC doesn't have jurisdiction over transfers. The transfer being considered is consistent with the overall objectives of the FERC process.

15. Why has MID changed its position from the 2007 Bee story?

The circumstances around this proposal are considerably different. In this case a willing buyer and a willing seller exist. Proceeds from the transfer will relieve MID customers of hundreds of millions of dollars in improvement expenses and help pay for the Don Pedro relicensing project. The water sent to CCSF under the proposal is recovered water, conserved as a result of infrastructure improvements.

16. How will this impact the economic conditions in our community?

It protects our water rights which are the lifeblood of our community. Additional jobs could be generated by the construction activities of the infrastructure improvements. Domestic, agricultural and industrial water rates could remain stable, and some burden on electric rates could be eased, positively impacting overall job stability throughout the region.

17. What are the next steps?

- A) Negotiate terms and conditions of initial water transfer to CCSF.
- B) Public meeting, discussion and MID Board of Directors' consideration of the 2,200 acre foot transfer.
- C) Direction by MID Board to initiate environmental review and evaluation of larger water transfer subject to:
 - Protection of MID customers against any shortage of deliveries in drought years.
 - Commitment to looking at possibility of funding water conservation programs for urban and agricultural customers with proceeds from water sale.
 - Understanding that as much infrastructure improvement work as possible will be awarded to local contractors.
 - Reimbursement to MID's electric budget for any shortfall in power generation caused by the water sale.

Dan Lungren's critics wary of Hetch Hetchy plan

Carolyn Lochhead, Chronicle Washington Bureau

Wednesday, January 4, 2012

Washington -- Dan Lungren, a Republican member of Congress from Sacramento County, wants to give the world "a second Yosemite Valley." The valley already exists, in Yosemite National Park - buried under 300 feet of water in the Hetch Hetchy Reservoir, which provides San Franciscans and 1.7 million other Bay Area residents with pristine water straight from the Sierra.

All that would be needed would be to blow up the dam, which Yosemite godfather John Muir fought to his dying breath in 1914. The Schwarzenegger administration in 2006 estimated the cost at \$3 billion to \$10 billion.

Lungren said Yosemite holds a special spot in his heart, as it is where he met his wife. But his critics, pointing to his zero rating from the League of Conservation Voters, say Lungren's environmental record is anything but romantic.

They suspect that Lungren is taunting San Francisco liberals or positioning himself for a re-election race in a competitive district against Democratic challenger Ami Bera, who touts a "smart" and "green" relationship with the earth.

"If tomorrow, Disney would announce that they are going to build a second Yosemite Valley for \$2 billion or \$10 billion, people would marvel at it, and they'd say, 'What a great idea, to give us a sense of this beautiful valley,'" Lungren said. "Well doggone it, God's already given it to us. Call me a romantic or whatever you want; if I could leave Congress having given back a valley like that for my kids and my grandkids, I'd consider that successful."

Opponents include two of California's most powerful Democrats, Sen. Dianne Feinstein and House Minority Leader [Nancy Pelosi](#), both residents of San Francisco, along with city and business leaders.

"If the purpose of this is to spend large amounts of money investigating a really dumb idea, then Lungren is on to something," said Jim Wunderman, president of the Bay Area Council, a business group. "I can't tell you what is deep in his heart and mind, but we're suspicious. He represents a region that has the most water consumption per capita of anywhere in California. ... If his issue is conservation and recycling, he certainly could spend more time focused in his own district."

San Franciscans may get to vote on the idea in November if the Restore Hetch Hetchy advocacy group in San Francisco collects 7,500 signatures to get it on the ballot. The city "doesn't recycle a drop" of its Sierra water, said Mike Marshall, the group's executive director. The city uses it once and then "treats it as sewage and dumps it in the bay."

Because the Tuolumne River, not the Hetch Hetchy Reservoir, is the legal source of San Francisco's water, Marshall said it would be feasible to tap the Tuolumne downstream, partly by enlarging the Don Pedro dam.

"If you ask voters on the street, their first reaction is, 'Where will our water come from?'" Marshall said. "Once you tell voters the Tuolumne River is the source of San Francisco's water, they quickly open their ears to restoring the valley."

Supply shortfall

The problem, said Ed Harrington, general manager of the San Francisco Public Utilities Commission, which operates Hetch Hetchy, is that "anyone with a brain knows the river doesn't flow all year long."

A 2004 study by the Environmental Defense Fund called "Paradise Regained" conceded that without Hetch Hetchy storage, the Tuolumne would fall short of meeting San Francisco's needs every fifth year. The reservoir serves 7 percent of the state's population, creates hydroelectric power and sends the water to the Bay Area via gravity-powered pipelines.

"There are better ways to spend money to produce valuable infrastructure rather than destroy it," Wunderman said. "This whole thing is getting tiresome."

Lungren has asked Interior Secretary Ken Salazar to investigate whether San Francisco is violating the 1913 Raker Act, which authorized the dam. Lungren claims that the law requires San Francisco to use other water sources before tapping the Tuolumne. These include toilet-to-tap water recycling, rainwater harvests and groundwater.

Feinstein wrote her own letter to Salazar, insisting that tearing down the dam "makes no sense." Feinstein said the city is pursuing three water-recycling projects and is participating in the \$193 million Bay Area Regional Desalination Project, which includes San Francisco's PUC and other regional agencies and aims to produce freshwater.

Harrington acknowledged that the city currently does not recycle any water. But he said San Francisco uses 55 gallons of water per person per day, a third of the statewide average, which includes lawn watering but not the millions of gallons used to irrigate farms.

Comes up periodically

The battle over restoring the Hetch Hetchy dates back to the Reagan administration. Democrats have always smelled a GOP stunt that forces Democrats to defend a dam in a national park and lets Republicans quote John Muir about the splendor of mountains.

President Ronald Reagan's interior secretary, Donald Hodel, first proposed restoring the Hetch Hetchy Valley in the 1980s, when Feinstein was mayor of San Francisco. The George W. Bush administration again proposed a study when Pelosi was House speaker. House Democrats removed funding for the study and blocked an attempt by Lungren to reinstate the money.

"The most powerful person in the House at the time was the speaker," Lungren said. "All I know is when I was debating it on the floor, I got some rather knowing looks from my friends on the Democratic side, and let's just say we didn't prevail."

Harrington said he can't debate Lungren's personal attachment to the park. "But let's face it," he said. "Everybody who has ever talked about going after Hetch Hetchy has been conservative Republicans who love to push it in San Francisco's face."

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The Sacramento Bee

Editorial: Lungren picks a good crusade – Hetch Hetchy

Published Thursday, Dec. 15, 2011

San Francisco has a special deal granted to no other city in the United States: A dam and reservoir in the middle of a national park that belongs to all of the American people.

With that special deal, approved by Congress in the Raker Act of 1913, came significant restrictions on public use – no touching waters within one mile of the reservoir. No other national park has such a rule.

But Congress also imposed some responsibilities.

Rep. Dan Lungren, R-Gold River, believes that San Francisco is not living up to those responsibilities. In a Dec. 7 letter, he asked Interior Secretary Ken Salazar to investigate San Francisco's compliance with the Raker Act. Get it started, sooner rather than later.

The law, Lungren points out, requires that San Francisco "fully develop and use other available water resources before it begins to export water it captures from the Tuolumne River." The purpose is to ensure that water is not "unnecessarily exploited."

Water is a scarce resource and we should not be using pristine sources unnecessarily.

Specifically, Lungren believes that San Francisco could be doing much more to use recycled water – instead of using Tuolumne River water – for landscaping, toilet flushing, mixing concrete and more. Where Orange County uses 35 million gallons a day of recycled water and Los Angeles uses 28 MGD, San Francisco has no large-scale water recycling. Zero.

By 2035, San Francisco expects to use 4 MGD of recycled water, hardly ambitious. By comparison, Sacramento uses 5 MGD of recycled water today, but expects to expand to 40 MGD in the next 20 years.

Lungren also believes that a city that receives an average of 20 inches of rain each year (equivalent to 49 MGD), could be doing much more to harvest rainwater.

Finally, Lungren points out that San Francisco today "has virtually abandoned use of all groundwater supplies."

An investigation would pin down use of local water supplies. "If San Francisco can show that it is leading the state in recycling and recovery," Lungren told The Bee editorial board, "maybe it can be a model for the state."

But if San Francisco can rely less on Tuolumne River water, that provides an opportunity to restore the national park ideal. "There is only one Sierra," Lungren says. "And only one Yosemite." But part of Yosemite, Hetch Hetchy Valley, is submerged for the benefit of one city. That's got to change.

A start is for San Francisco not to rely unnecessarily on the Tuolumne River.