



# San Francisco Tomorrow

## Working to Protect the Urban Environment

Issue 375

Will you want to live in San Francisco... Tomorrow?

Mar / Apr 2017

### Climate Change – Coming Soon to a Faucet Near You

San Francisco has long been above the fray of California's water wars – both literally, because Hetch Hetchy Reservoir sits at 4000' elevation, and figuratively, as the water conveyed from the reservoir does not go through the Delta and its messy politics. That's about to change

The construction of the federal and state water projects have resulted in the diversion of least half and sometimes up to 65% of the water that once flowed through the Delta and out the Golden Gate. The impact on California's unique biodiversity, particularly our iconic salmon runs, has been devastating.

In 2009, the State Legislature passed the Delta Reform Act, which made several changes in how the Delta was managed. Most significantly for San Francisco, it required the State Water Resources Control Board to develop instream flow needs for both the Delta and its tributaries in order to protect public trust uses.

In 2016, the Board turned its attention to the main tributaries of the San Joaquin River – the Stanislaus, Tuolumne and Merced Rivers. A 2010 science review recommended that 60% of the unimpaired flow remain in the river. Unfortunately, only 21% of Tuolumne River reaches the San Joaquin River currently, with senior water rights holders Modesto and Turlock irrigation districts joining the San Francisco Public Utilities Commission (SFPUC) in diverting from this river. Rather than adopt the scientists' recommendations, the Board chose to require restoration to just 40% of unimpaired flows, with options to lower diversion to 30% or raise them to 50% depending on how the river responds to the additional water and other management actions

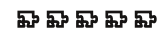
This requirement is easily met in wet years like this one, but could require significant releases from storage during dry years. The impact of this requirement on San Francisco's water supply is unclear because necessary water rights proceedings have yet to happen. However, water use for San Francisco and its wholesale agencies continues to drop and is expected to continue to be flat or lower, as water conservation projects and new supplies (like recycled

water, stormwater capture and groundwater) are brought on line.

San Francisco is joining with Central Valley agricultural users to protest this proposal, claiming it will result in extreme water use restrictions in dry years. This may be a difficult claim to justify, given the continuing reduction in demand.

But a more important question is whether we should fight or accept this proposal. Isn't this kind of tradeoff inevitable? Climate change will decimate our Sierra snowpack and increase the water needs of our forests and fish. Californians – especially urban and ag users - will need to continue to reduce overall water use to sustain our natural systems. This will require changes in how we use and manage water. For San Francisco, which is dependent on the Tuolumne River for 85% of its supplies, the need is even more critical. Hetch Hetchy water may be the best in the world, but we need to start planning on having less of it.

~ Jennifer Clary



### Latest Cell Phone Research

A few years ago, a renowned San Francisco political figure passed away due to a brain tumor. He insisted that he knew the cause: his cell phone. When he started running for office, he bought a cell phone that was indispensable - always pressed to his ear. That's where the tumor developed. Now, scientific research demonstrates the dangers of electromagnetic pulses on animals and humans. The proximity of the cell phone to the body is critical and possibly lethal. Never carry your cell phone next to your chest or near your pelvis and use ear buds instead of pressing it to your head. Like other maladies, individuals have varying levels of susceptibility to random pulses, which is why many countries have regulatory precautions.

You may want to watch this video on YOUTUBE: Cell Phone Dangers | Dr. Devra Davis @ National Institute of Environmental Health Sciences (NIEHS) (1:01 hours)

<https://www.youtube.com/watch?v=wNNSztN7wJc>

~ Howard Wong

## “Transit Equity?” “Balance?”

### What Would Equitable Transit Planning Look Like?

City transit planners and the San Francisco Municipal Transit Board (SFMTA/Muni) often talk about transit equity and balance in how they are approaching the future of transit planning in San Francisco. However, lobbyists who have the ear of our legislators can press for decisions that ignore public benefit for private interests.

BART and SFMTA remind us that transit fare hikes are under consideration again, with MUNI passes tipping \$100.00 soon. Lyft, Uber, and shuttle bus systems now clog the roadways; the old real estate mantra of “location, location, location” rings true as people realize the best place to live is adjacent to transit systems that work.

Idealists ask why our public transit systems aren't free, to encourage transit use and give up commuting by car. Are we not taxing sufficiently auto purchases, gas, and office and institutional developments? How could we make simple solutions (links, loops, transfer points) that improve the circulation systems citywide for the majority of mass-transit users and pedestrians? How can we avoid the more discriminatory “ability to pay,” and not allow privatized and tiered systems to dictate road design and dimensions?

19th Ave and the west side of San Francisco will soon see major new density changes that will trigger new transportation demands: the Parkmerced reconstruction and addition of 5,000 new units; several major San Francisco State University (SFSU-CSU) developments; Macy's at Stonestown recently announced sale to General Growth Properties, with not-yet-divulged plans for another major development on the southwest side of the city.

SFMTA has not yet implemented the proposed Muni M-Line extension to Daly City BART. Traffic on I-280 will only worsen as people take to their cars in desperation. Steps must be taken to involve Daly City and BART in serious station re-planning efforts to develop a future extension from Parkmerced all the way to Daly City's BART station. One idea to alleviate congestion is the creation of a new secondary street system/mass transit plan down to Colma at grade, with street light-rail and improved mass transit connectivity.

Clearly transit needs and costs are ascending more quickly than the housing being built citywide. Will we see plans for the connections needed, or will the build-build-build mentality overwhelm simple solutions and connections that have lagged for decades?

(part 2 of this story will appear in our next newsletter)

~ Aaron Goodman

## Natural Areas will be Managed and Preserved

San Francisco Tomorrow has long supported the Natural Areas Management Plan (NAMP) which San Francisco's Recreation and Parks Department (RPD) has proposed for the management of 32 natural areas in San Francisco. Unfortunately, in 2014 RPD decided to include the redevelopment of Sharp Park Golf Course in Pacifica in the EIR for the NAMP, allowing them to shorten the public hearing and review process for the project. SFT was among several groups, including the Sierra Club, Golden Gate Audubon and the Wild Equity Institute, who protested its inclusion. The same groups opposed the certification of the Final Environmental Impact Report (FEIR) before the Planning Commission in December and appealed the certification to the Board of Supervisors, where it was heard on February 28. SFT did not join the appeal but wrote the following in a letter to the Supervisors:

“I am writing to request that you vote on Tuesday to remove the Sharp Park Golf Course redevelopment project from the Environmental Impact Report for the Significant Natural Areas Management Program. This multi-million dollar development project has been inappropriately inserted into what has for more than a decade been a basic program for managing the City's natural resources.

“When the scope of the Natural Resource Areas Management Plan's EIR was defined - without this project - the Recreation and Park Department (RPD) promised: “Should changes to the Sharp Park Golf Course be proposed, they would undergo a separate regulatory review, including CEQA environmental review.”

This position was by no means unanimous. Many NAMP supporters, having waited more than a decade for the Plan's adoption, were concerned that a successful appeal would send the NAMP back into limbo. On the day of the Supervisors' hearing, the appellants reached an agreement with RPD. The Department agreed not to raise the Sharp Park Golf Course fairways and thus not fill any wetlands. They also agreed to dredge the Laguna Salada to increase wetland habitat for the threatened San Francisco garter snake and red-legged frog; the earlier proposal would have filled parts of the wetland, reducing snake and frog habitat to the areas of the site most vulnerable to sea level rise.

This compromise, while not ideal, removes some of the worst problems of the Sharp Park Golf Course development and allows the NAMP to move forward at long last.

~ Jennifer Clary

## San Francisco's Water: No Longer Pristine?

Soon, San Francisco's pristine water will be blended with groundwater. The program is called the San Francisco Groundwater Supply Project and is part of the San Francisco Public Utility Commission's (SFPUC) effort to develop numerous water supply alternatives to reduce dependence on the Tuolumne River.

Those who support this project believe having San Francisco dependent on one source for 85% of its water leaves us vulnerable to extremes in climate change. Those against blending fear it will negatively affect the water responsible for the good taste of many of our local foods and beverages in San Francisco, including sourdough bread, beer, and coffee.

This is a plan to diversify our water needs to prepare for future extreme weather events, or a disaster such as an earthquake, when water sources are damaged. The plan will allow more water to remain in the streams and rivers we currently divert for our drinking water. San Francisco is required to come into compliance with environmental laws that didn't exist when the system was built. Locally, increased releases are now required in San Mateo and Alameda Creeks that total 7-8 million gallons per day. The Tuolumne River is currently the subject of negotiations at the State Water Board. Currently, about 80% of the river's flow is diverted for agricultural use and 10% for urban uses but the Board wants to increase spring flows, which will require additional releases. To provide streams and rivers with more water is the motivation for the blending of groundwater now imminent.

In addition, reduced snowmelt and increased climate variability will reduce the amount of Tuolumne River water available in the future. The PUC's own studies have shown a 7% reduction in flows by 2050. Sadly, even with these conservation measures, the City has still been using pristine water, the envy of the nation, to clean our City's streets.

The amount of water added in the first year is planned to be 3%. In four years, the amount of blended water will increase to over 15%. Reports of the water's taste vary. In a side-by-side comparison, some recognize no difference in taste, some believe the flavor is improved, and others prefer the original taste of the unblended water. However, no difference is noticed without a side-by-side comparison.

The groundwater will come from an aquifer 400 feet underground, in six different locations on the western part of the City between Golden Gate Park and Lake Merced. Contaminants that exceed state standards of safety have been found in all but two of these wells: nitrate, hexavalent chromium and/or manganese. Rather than treating these at the wellhead, the SFPUC will pump the

groundwater to the Sunset, Sutro and Summit Reservoirs, then blend the ground water with the Hetch Hetchy imported supply. This blended water will be distributed to the whole City, however, most of it will be provided to the west end of San Francisco.

What are these contaminants?

**Nitrate**, which has been regulated since the 1960s, is considered an acute contaminant because it is harmful to infants and fetuses. Nitrate is produced by the leaching of fertilizer or sewage into the groundwater.

**Hexavalent chromium**, colloquially known as the Erin Brockovich chemical, is only regulated in California, which adopted its standard in 2014 because it is a carcinogen. While it has been associated with industrial pollution, hex chrome actually occurs naturally in groundwater throughout California. Golden Gate Park's contamination is also almost certainly naturally occurring.

**Manganese** is what's known as a secondary contaminant: it is regulated not for health issues, but because at high levels, it gives water an unpleasant odor and taste.

Is blending a problem? Blending water supplies is an approved method of meeting drinking water standards. In this case, the blending will be at least 6:1 (actually more, since these chemicals aren't found in every well). So the concentration will be several times below the health standard.

Will these contaminants prevent groundwater from being tapped in an emergency? In the case of the well containing nitrate, yes. However, hexavalent chromium is regulated for its long-term effects. Drinking water containing this chemical during a short-term emergency, while not ideal, should not be hazardous. During an emergency, two wells found to have no contaminants, could be used as an emergency water source.

One of the reasons water is in short supply in California is because farmers are not mandated to conserve water as urban consumers are. Flood irrigation, used by farmers since the dawn of civilization, is still primarily used to irrigate crops (50%). Although this method recharges aquifers and is less effected by evaporation than sprinklers, it is still considered wasteful. Today, the use of drip irrigation has more than doubled since 1991. Many crops, e.g. alfalfa, previously believed to not be suited for drip irrigation, are now successfully irrigating crops with a tremendous savings in water. Tomatoes, now irrigated by drip, produce more fruit per acre and the quality of the tomato is more reliable. By providing more incentives and programs encouraging the use of drip irrigation, which is expensive for farmers initially, the State of California would allow more water to remain in the Tuolumne River.

~ Glenn Rogers, Jennifer Clary



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## Presidio Tunnel Tops

Over the past two decades, the 1,500-acre Presidio of San Francisco has emerged as a great national park transformed from a military post. As the new Doyle Drive makes its way to the Golden Gate Bridge and the elevated road passes through the Presidio, you have probably noticed that new concrete tunnels have been constructed. You may have thought: tunnels through what? There is no massive mountain that the tunnels pass through – right now they are coursing through air! But wait a few more months and the Presidio Tunnel Tops will be landscaped so that you can walk across from the historic Main Post area and the grassy Main Parade to Crissy Field. The Presidio Tunnel Tops will have turf and trails and plants growing out of tons of soil that will be transported there.

Designed by James Corner Field Operations (the landscape firm behind New York's High Line), the Presidio Tunnel Tops will feature scenic overlooks, paths and gardens, a community plaza with food and visitor services, a campfire circle and picnic grounds. From the tunnel tops, there will be 360-degree views of the Bay not available anywhere else in San Francisco.

Twenty-five years ago, visionary Bay Area leaders, urban planners, and citizens were faced with replacing the seismically unsafe highway to the Golden Gate Bridge. Doyle Drive was an above-ground highway that divided the Presidio's waterfront from its historic core. Caltrans required that the highway be rebuilt, not just repaired after the Loma Prieta earthquake. San Francisco landscape architect Michael Painter brought up his idea of the tunnels more than 20 years ago and he has followed the project all the way. More than 10,000 people attended workshops and tours to put in their ideas about how Doyle Drive could best be rebuilt and they were entranced by the idea of tunnels to minimize traffic and noise and afford new usable open space. The design process will conclude in 2017, followed by a two-year construction period.

~ Mary Anne Miller

Don't forget! SFT's annual awards dinner is coming up on Wednesday, May 17. We are working to find a more accessible location, which will be announced soon. Watch our website!

Find us at: [www.sftomorrow.org](http://www.sftomorrow.org) / Facebook: <http://tinyurl.com/pjxffkw> / Twitter: @sftomorrow