



**San Francisco Public Utilities Commission  
 Citizens' Advisory Committee  
 Water Subcommittee**

**MEETING MINUTES**

**Tuesday, February 24, 2026  
 5:30 p.m. – 7:00 p.m.  
 525 Golden Gate Ave., 3<sup>rd</sup> Floor Tuolumne Conference Room**

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**Meeting Recording URL**

[https://sfwater.zoom.us/rec/share/iVSHONnBJb\\_A6sFsnkRCpPg5S5pMy9k2smGpC1y7AWZbAGoBAAtKqg7WcmRnOxnel.I9uelF32wF5N4vLd](https://sfwater.zoom.us/rec/share/iVSHONnBJb_A6sFsnkRCpPg5S5pMy9k2smGpC1y7AWZbAGoBAAtKqg7WcmRnOxnel.I9uelF32wF5N4vLd)

**Meeting Passcode**

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**Mission:** The Water Subcommittee reviews water supply system reliability, water conservation, recycling, regional cooperation efforts, and other relevant plans and policies. ([Admin Code 5.140-142](#))

**Members:**

**Jennifer Clary (Chair) (D11)** Douglas Jacuzzi (D4) Thomas Smegal (M-Reg'l Water Customers)  
 Aaron Hebert (D9)

D = District Supervisor appointed, M = Mayor Appointed, B = Board President appointed

**Staff Liaisons:** Lexus Moncrease and Lupita Garcia  
 Staff Email for Public Comment: cac@sfwater.org

**ORDER OF BUSINESS**

**1. Call to Order and Roll Call at 5:31 pm**

Present (4): Clary, Jacuzzi, Hebert, Smegal

Absent (0):

Staff/Presenters: Jennifer Lee, Manisha Kothari, Mark Shahinian

Members of the Public: Dave Warner, Peter Drekmeier

**2. Approval of the [November 25, 2025](#), Minutes**

**Daniel Lurie**  
Mayor

**Joshua Arce**  
President

**Stephen E. Leveroni**  
Vice President

**Avni Jamdar**  
Commissioner

**Meghan Thurlow**  
Commissioner

**Kate H. Stacy**  
Commissioner

**Dennis J. Herrera**  
General Manager

**OUR MISSION:** To provide our customers with high-quality, efficient, and reliable water, power and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care.



A motion was made (Jacuzzi) and seconded (Hebert) to approve the November 25, 2025,

Minutes pending an edit change on page 3 from “we” and “they” to “BAWSCA”.

The minutes were approved without objection.

Public Comment: None.

**3. Report from the Chair**

- Chair welcomes committee members, staff, and the public

Public Comment: None.

**4. Public Comment:** Members of the public may address the Committee on matters that are within the committee’s jurisdiction and are not on today’s agenda (*2 minutes per speaker*).

Public Comment: None.

**5. Presentation and Discussion:** [Demand Forecasting Update](#), Jennifer Lee, SFPUC Alternative Water Supply Project Manager

*Presentation*

- SFPUC’s Retail Demand Development
- UWMP Overview
- Background on Demand Projections
- What is in the Demand Model?
- New Updates to the 2025 Demand Projections
- Variables Considered in the Sensitivity Analysis
- Housing and Population Growth Projection Sources
- Population is Projected to Increase from 1 to 46%
- Employment Growth Projection Sources
- Employment is Projected to Increase from 17 to 44%
- Water Demand Scenarios
- Retail Demand Projections Change Over Time
- Multiple Demand Scenarios Show a Range of Potential Retail Demands
- Growth Rates Vary Among Housing/Population, Employment, and Waer Demand (UWMP Scenario)
- Growth Rates Vary Among Housing/Population, Employment, and Water Demand (Historical Growth Scenario)
- Growth Rates Vary Among Housing/Population, Employment, and Water Demand (DOF and Moody’s Scenario)
- Total Projected Retail Demands Under the UWMP Scenario
- Total Projected Retail and Wholesale Demands under the UWMP Scenario
- 2020 vs 2025 Total Retail Demands and Wholesale Purchase Requests
- 2025 UWMP Schedule
- Questions?

*Discussion:*

- **Member Hebert** asked if the SF planning projection is a housing projection that is extrapolated into a population projection.

**Staff Lee** responded yes, it's based on housing units.

**Chair Clary** commented this is influenced by State requirements.

**Staff Lee** responded yes, it is based on Master Planned Communities (MPC) and Association of Bay Area Governments (ABAG)

**Member Hebert** commented the new housing element is recent and asked is it something incorporated in the next round of projections.

**Staff Lee** responded the 2022 housing element that was recently adopted is what is included.

**Member Hebert** asked if the 2022 housing element was what was recently adopted.

**Member Smegal** commented it has been going back and forth in terms of State approval.

**Chair Clary** further commented it is a requirement to have it in if submitted before January 2023.

**Member Smegal** further commented it would have been submitted before but is a question of if the State approved it or not.

**Staff Lee** responded she can follow up with them, but this is the latest information received.

**Member Hebert** commented the one recently approved by the City may not be approved by the State. The mayor pushed through a new housing element to keep up with the State housing requirements.

**Staff Lee** responded what the mayor recently passed is related to zoning not housing element which complies with the State's requirement to have enough zones for homes to meet targets.

- **Chair Clary** asked if it is essentially high, medium, low.

**Staff Lee** responded yes.

- **Chair Clary** asked if the demand model projects droughts.

**Staff Lee** responded it does look at past performance and one of the components in the plan is water system reliability and within that component are droughts. It is not shown in the table but there are multiple tables that look at what demands are going to be, what supply will be and the gap between now and 2045. If there was a 5-year

drought starting any time between now and 2045, it is a hypothetical drought based off years 2 through 6 in the design drought and the projections show the where the droughts are taken into consideration.

**Chair Clary** commented maybe it needs to be calculated differently and there is a mismatch between the demand scenarios and what happened and assumes this is why the finance department has a different model and understand the SFPUC cannot predict anything and asks what the SFPUC will do about this.

**Staff Lee** this is a tough question and it hard to put in the graph and the information is more in the tables because the impact of a 5-year drought depends on the starting year. If you start in year 2030, your demands are going to be within a certain range compared to 2050.

**Member Smegal** commented the drought analysis is a scenario that is ran as part of the Urban Management Water Plan and it is not affecting this demand.

**Chair Clary** asked why not.

**Staff Lee** responded it is not a sperate demand scenario, it is integrated into the water supply reliability analysis.

- **Member Hebert** asked if the SFPUC is accounting for the expiration of conservation programs.

**Staff Lee** responded this is why we see a slight decrease because we see more conservation savings in the near-term than long-term not because we are conserving less long-term, but we do not know what the savings will be from a new program that we have yet to come up with.

**Member Hebert** asked if a certain conservation program like a toilet program will exhaust its effectiveness by a certain date.

**Staff Lee** responded yes, they will sunset after some time just because the changes in plumbing code and saturation rate are not considered.

- **Chair Clary** commented that is the same amount of water we were using in 2003.
- **Member Hebert** commented this was a great presentation and asked what else is impacted by these numbers.

**Staff Kothari** responded a big reason SFPUC did the two additional demand scenarios is we know models are models and they generally are not right. We want to get close and do a better job and we know some things are part of the Urban Water Management Plan are necessarily going to be higher and we have to be consistent with planning and there are some assumptions that we do not know how

they will play out so when we prepared the Alternative Water Supply Plan in 2024, one of the recommendations that came out of that plan was the development of additional demand scenarios so that when we use it for other purposes other than the Urban Water Management Plan, we have a more complete picture of what the range may be. The Alternative Water Supply Plan will be updated following the Urban Water Management Plan and it was planned this way because we knew we were going to update demands and the SFPUC will be thinking more about holistically how we use the demand numbers for planning.

- **Member Herbet** commented for the purposes of the Urban Water Management Plan, the numbers make sense since you must accommodate for growth, and we have a historic long-term downward trend in demand and there are reasons it goes up and down as noted and asked if there is any retroactive analysis done on what the drivers are of past demand.

**Staff Lee** responded the SFPUC has a per account level data which is the most granular data. When we train our model based off the per account level data, there is also an output that is what is the per account projection. In a technical memo, for each single-family, multi-family and commercial sector, we have the average consumption for a housing unit. Currently, the average for a single-family average consumption is about 145 gallons per unit per day. As we look at this over time, the efficiency goes up and demand goes down. The SFPUC does not have control over the growth that we are required to use from the San Francisco Planning Department which is going to cause our demands to go up because the Planning Department is estimated an increase in number of jobs and/or housing units. The SFPUC does analyze on a per account level basis to see how we are doing and that's where we see the increase in efficiency over time. Our demands do take into consideration the impacts of rates that is one reasons why accounts over time use less water and it is also because of conservation, behavioral changes, passive savings like plumbing code and fixture improvements.

**Member Hebert** commented showing this narrative in a graph will be impactful.

**Member Smegal** commented in the BAWSCA demand study, there was also a scenario analysis and is a lot more complicated with 26 agencies. BAWSCA had some stakeholders come in and tried a range of variables and they have this in addition to what SFPUC uses to get the overall aggregate demand that was a central estimate, and they also have a higher estimate based on higher growth due to data centers and businesses and a lower growth one based on the similar variables SFPUC discussed.

- **Chair Clary** asked in the 2020 Urban Water Management Plan to this one, if we did not have had the COVID-19 pandemic, would the

SFPUC be closer to their target and how much water used dropped and how much did downtown revival account for increases.

**Staff Lee** responded this is a good question and one that the SFPUC has asked their bottlers, and it is hard to disentangle. We do see a dip in the demand projections because people were leaving the City and on a per capita basis people were more efficient with their water use.

**Member Jacuzzi** commented they were being more efficient because working from home meant showers were not needed as often.

- **Chair Clary** asked if any of this calculation is used for the water supply assessments that SFPUC is asked to do.

**Staff Lee** responded yes, in the water supply assessment we have three conclusions based off three different supply scenarios: with, the Bay Delta Plan, with the Healthy Rivers and Landscapes, and then without the Bay Delta Plan or the Healthy Rivers and Landscapes. Each of those three scenarios, the numbers that are represented are coming directly from the Urban Water Management Plan. There was an interim update done in 2023, so the numbers are slightly different.

Public Comment:

- **Peter Dreke**, Policy Director at Yosemite Rivers Alliance commented he appreciated the comment about there being different projections for different uses and saw the water enterprise projection of regional water system demand being about 222 million gallons per Day (MGD) in 2050 and asked what Finance sales projection for 2050 is and if it is compared to current sales or another benchmark.

**Staff Lee** responded she does not know the exact numbers, but their projection is increasing and if you look at slide 13, it will be within range of the green and purple line. Finance's sales projections are coming from their financial plans, and they have since adopted a new one in February.

6. **Presentation and Discussion: [Using Droughts to Predict Demand: Drought-Demand Model](#)**, Mark Shahinian, Sierra Club San Francisco Bay

*Presentation*

- Improving the problematic accuracy of demand projections: the Drought-Demand Model
- Executive Summary
- Why projections matter: we don't need to sacrifice ecosystems or affordability – but it's how we've always done it
- The SFPUC has over projected demand by 45 to 50% on a 15-year retrospective basis
- In urban water systems across California, including the RWS, drought causes reductions in demand
- The demand models the SFPUC receives from BAWSCA have serious flaws

- Modeling the impacts of droughts on demand gives a tight fit – and shows a projection 50% less than the UWMP
- The model is tested against out-of-sample data and appears to work well in urban and suburban environments

*Discussion:*

- **Member Jacuzzi** asked if the Bay Delta Plan is the Sierra Club's top priority.

**Presenter Shahinian** responded it would be in the top 3 priorities.

- **Member Jacuzzi** asked if the model presented takes in any other considerations aside from past drought and the drought curves.

**Presenter Shahinian** responded that is a good question and the two main inputs are drought and population. The Sierra Club uses the Department of Finance's population stats for Santa Clara, San Mateo and San Francisco counties.

**Chair Clary** asked if it is assumed Hayward is an average of all of those.

**Presenter Shahinian** responded yes since it is not broken down at city-level.

- **Member Hebert** commented he appreciates the future drought simulation in the model and conservation does not seem to be linear since there will be points you cannot replace the toilets and pull out the lawns and the model incorporates past conservation to project future conservation and asked how conservation is figured into the model.

**Presenter Shahinian** responded it is looking at past behavior and running that as a regression and it is finding a fit on the past 40 years of data using conservation and other terms that adjust how much droughts affect current year's behavior. Something the SFPUC and other water agencies like to say is how conservation might get saturated or how we might see something called demand hardening which has never shown to be true. In 2007 or 2008, the SFPUC said demand hardening is real and since then the water use has dropped 25%.

- **Member Hebert** asked how much of the housing projections drive up the overall demand projections in the model.

**Presenter Shahinian** responded even if these numbers were put into the model, we would show declines and growth. Housing is a factor, but it is not the only factor and the housing growth that is being shown in the baseline model has not been seen in San Francisco and in BAWSCA territory has not been seen in the last 30 years.

- **Member Smegal** asked if drought is referent to times with water restriction.

**Presenter Shahinian** responded no, a more technical definition is used, and it is used a bit loosely in this presentation. When the Standardized Precipitation Evapotranspiration Index (SPEI) is negative the model incorporates that into future demand projections. When it is positive, it lets demand float up.

- **Chair Clary** commented one thing she is interested in and would like SFPUC to figure out how to incorporate is the impact of prior year droughts because conservation doesn't just end of a drought and understands SFPUC needs to be conservative but not incorporating the drop residual is a major reason why the numbers continue to be off.

**Member Smegal** commented he does not want to speak for the SFPUC, but we are talking apples to oranges since SFPUC is looking at a specific 5-year period and what is being described would happen after the 5 years.

**Staff Kothari** responded it is based on supply, reliability and this is what is mandated.

- **Chair Clary** asked if the SFPUC is modeling a drought, are they only modeling as far as supply, not demand.

**Staff Kothari** responded it is looking at supply and demand and what happens over the 5 years.

**Chair Clary** commented but it is a 25-year plan, and you have a 5-year drought that permanently affects the trajectory of the 25-year plan and understands it is difficult to model but feels that is a missing piece.

- **Chair Clary** commented the Sierra Club's projections do not help with affordability because using less water does not mean the costs are going to change and knows what is being discussed is the Alternative Water Supply but that is a drop in the bucket compared to the cost of running the system.

**Presenter Shahinian** responded it is a great point, and high-water projections do two things: they give agencies permission to spend a lot such as the Alternative Water Supply Plan, and Water Temples and two it sets the wrong expectations for the public. SFPUC is showing big increases for next 7 to 8 years on their water capital spending plan and these plans get much flatter after 2033.

- **Member Jacuzzi** commented the red drought bars is missing the second half of the droughts from 2005 onward.

**Presenter Shahinian** responded the BAWSCA documentation being referenced, it does not count that drought as a drought, so it is not included.

- **Member Hebert** asked if the graph on page 4 that indicates a drought, is that using the same drought data being used in the model.

**Presenter Shahinian** responded no, its years that were designated as drought years in the Bay Area.

- **Member Jacuzzi** asked if there is any downside to using a drought formula model.

**Staff Kothari** responded SFPUC is planning on meeting with Presenter Shahinian to better understand his model and are scheduling it for next week. Staff Kothari better wants to understand the assumptions that are made in the model and the best way to do it is discuss what is included in the model.

**Member Jacuzzi** asked if there is a way to get a response from SFPUC staff, so SFPUC CAC is not waiting another year to hear what happened.

**Chair Clary** commented the Urban Water Management Plan is coming out this year.

**Staff Kothari** responded yes and does not expect that we would be able to meet the schedule for the Urban Water Management Plan and the purpose of the plan is to make sure we are consistent with land use planning and making a lot of changes to those assumptions will make us inconsistent with what land use agency and planning department wants. It does not mean we shouldn't be thinking beyond that and wants to be sure that SFPUC is using defensible data sources to develop the other scenario and wants to learn more about the assumptions made to predict when future droughts are going to happen for example what climate data is used and making sure SFPUC is not double counting those assumptions.

**Presenter Shahinian** further responded they are scheduled to meet next week and is looking forward to meeting and asked if SFPUC's model can be shared ahead of time and is also happy to share his.

**Staff Kothari** responded SFPUC does not have a shareable version of the model.

**Presenter Shahinian** responded if SFPUC won't share it with the public who pays their rates, it is instructive.

**Staff Kothari** further responded SFPUC has a group of consultants who built the proprietary model and SFPUC does not have the programs to run the models and break it apart. SFPUC has tried to extract the data and put it forward in a way that can share with the public.

**Chair Clary** asked who did the model.

**Staff Lee** responded West Water Research.

Public Comment:

- **Dave Warner** commented this has been an outstanding conversation and Staff Lee and Staff Kothari had a clear, transparent presentation and doing the sensitivity analysis is a nice step forward. BAWSCA is also doing this and looking at incorporating droughts into their demand planning. What Presenter Shahinian is presenting is new and exciting and thanks a big step forward to being closer to reality and thanks everyone for their outstanding questions and comments. The demand projections have a huge impact in so many ways that we may not understand, and one example is the regional water system that can deliver around 300 mgd and we are using at most 65% of it. Maybe if we had a more realistic demand projection, we could look at opportunities to downsize the system at least for the foreseeable future and an example is there are four Moccasin pen stocks that need to be replaced, and it is a huge expense and if people were realistically thinking about this system did not need to provide as much water as it does maybe we could rebuild 3 of the penstocks and there may be other opportunities like this in the system. Former SFPUC Commissioner Ajami would say that we haven't seen anything yet in terms of conservation. No one in 2000 could have imaged where we

are today in terms of how low demand is and we don't have an idea as to how much this may be in 2050.

## 7. Staff Report

- Full CAC meeting is March 24

Public Comment: None

## 8. Future Agenda Items and Resolutions

### *Standing Subjects*

- Groundwater
- Water Quality

### *Specific Subjects*

- Resolution on Salmon Restoration Project - Pending
- Integrating Tribal Leaders into SFPUC Land Management Decisions
- State Board Water Rights
- Water Enterprise Environmental Stewardship Policy Implementation Report
- State of the Regional Water System Report – Bi-annual report
- Drought resilience: 3-year water supply update
- Water Equity and Homelessness
- Water Treatment Plant Tour
- Sunol Watershed Tour
- Capital Plan Update

### *Adopted Resolutions for Follow Up*

- Resolution on Salmon Restoration Project - Pending
- Resolution in Support of a Resilient Water Supply [adopted August 17, 2021](#)
- Resolution in Support of the Southern Skyline Boulevard Ridge Trail Extension Project [adopted April 20, 2021](#)
- Resolution in Support of Interim Emergency Rate Assistance Program and Revised Community Assistance Program [adopted July 21, 2020](#)
- Resolution in Support of Improved Communications Related to the San Francisco Groundwater Supply Project [adopted August 21, 2018](#)
- Resolution in Supporting Stewardship and Public Access in the Redeveloped Lake Merced West Property [adopted in March 15, 2016](#)
- Resolution on Impacts of Drought on System Maintenance and Improvements [adopted January 19, 2016](#)

Public Comment: None

## 9. **Announcements/Comments** Please visit [www.sfpuc.gov/cac](http://www.sfpuc.gov/cac) for final confirmation of the next scheduled meeting, agenda, and materials.

Public Comment: None

## 10. **Adjournment at 7:03 pm**

For more information concerning the agendas, minutes, and meeting information, please visit [www.sfpuc.gov/cac](http://www.sfpuc.gov/cac). For more information concerning the CAC, please contact staff by email at [cac@sfwater.org](mailto:cac@sfwater.org) or by calling (415) 517-8465.

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